iDCS-500

Programming Guide

PREFACE

About This Manual

iDCS 500, Digital Communication System, is a digital telephone system designed for small to medium–sized businesses.

iDCS 500 system provides MMC(Man Machine Communication) program. Users can configure the system using the MMC program at the digital telephone.
This manual describes how to use the MMC program.
This manual consists of the following chapters.

- **Introduction to Programming**

- **Programming Procedures**

- **MMCs (In Numeric Order)**

- **Blank Data Sheets**

Supporting Documents

Further detail on all of the aspects covered in this manual is included in the system General Description and Installation guide. The iDCS 500 system provides the following manuals for more information:

- **General Description Guide**

  This manual provides an overview of the Samsung iDCS 500, Digital Communication System, including system structure and hardware, features and facilities and specifications.

- **Installation Guide**

  This manual provides the information about installation of the Samsung iDCS 500, Digital Communication System, including information about connecting the equipments.

- **Programming Guide**

  iDCS 500 system provides MMC(Man Machine Communication) program. Users can configure the system using the MMC program at the digital telephone. This manual describes how to use the MMC program.

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Introduction to Programming

Chapter 1 Introduction to Programming

Programming Overview

The iDCS 500 system arrives from the factory with default data. Connect it to trunks, stations and power, turn the system on and it is fully operational. The only thing left to do is customize the data to fit the customer's needs. This is called programming the system.

MMC stands for Man Machine Code and each program is assigned a different 3 digits code. These MMC codes are used to view, create or change customer data. Programming is simply deciding what needs to be done and knowing which MMC is used to do it. For example, use MMC 601 to create a station group. System speed dial numbers are entered in MMC 705 and soft keys are assigned to individual keysets using MMC 722.

System programming may be done from any display keyset. The first thing you must do is open system programming. As a security measure, a passcode must be known to do this.

iDCS KEYSETS

This section provides more detailed programming procedures that can be used by experienced display keyset users. These procedures will help explain some of the displays observed as the simpler procedures detailed in the Keyset User Guide are followed.

The diagram below illustrates the keys on a iDCS 28 BUTTON and a iDCS 18 BUTTON keyset that have special functions during programming. When required, these keys will be referred to by the names described below.

Figure 2–1 28 Button iDCS Keyset

The diagram below illustrates the keys on a iDCS 8 BUTTON keyset that have special functions during programming. When required, these keys will be referred to by the names described below.

Figure 2–3 8 Button iDCS Keyset

DCS KEYSETS

This section provides more detailed programming procedures that can be used by experienced display keyset users. These procedures will help explain some of the displays observed as the simpler procedures detailed in the Keyset User Guide are followed.

The diagram below illustrates the keys on a display keyset that have special functions during programming. When required, these keys will be referred to by the names described below.

Figure 2–6 LCD 24B Euro Keyset

Programming Levels

There are three levels of programming: SYSTEM, CUSTOMER and STATION. System and customer levels are under passcode protection while station programming does not require a passcode.

To prevent conflicting data from being entered, only one person at a time can enter programming with the technician or customer passcode. While programming is in progress, normal system operation is not affected. For your convenience, the system displays [xxx IN PGM MODE] when another keyset is in the program mode.

A. System level

This level is entered via MMC 800 and requires the technician level passcode. It allows access to all system programs, station programs and maintenance programs.

B. Customer level

This level is entered via MMC 200 and requires the customer passcode. It allows access to station programs and system programs allowed by the technician in MMC 802. When using the customer passcode to access station programs, data for all stations can be viewed or changed.

> **NOTE** When the system is programmed for multiple tenant use, each tenant has an individual customer passcode enabled in MMC 201. The access for tenant passcode is limited to only certain MMCs. See MMC 201 for more details.

After opening programming with the customer passcode, you must press TRSF to exit. Now press TRSF and the MMC number you wish to access.

C. Station level

All keysets can access station programs 102-117 without using a passcode. Each user can only change station data for his/her own keyset.

When the LCD 24B keyset is in programming, the display shows instructions, prompts and choices. Existing data is always displayed before it can be changed. The keystroke sequence for each MMC is detailed in the following pages.

Before you begin entering customer data, follow this important reminder.

IMPORTANT

When first installing this system, always use MMC 811 to reset and clear memory. This will ensure that you begin with clean default data.

Now begin entering customer data.

Program List in Numerical Order

Station Programs

MMC Number	Function	Default Data	Remark
100:	STATION LOCK	ALL STATIONS UNLOCKED	
101:	CHANGE USER PASSCODE	ALL STATION PASSCODES = 1234	
102:	CALL FORWARD	NONE	
103:	SET ANSWER MODE	ALL KEYSETS RING	
104:	STATION NAME	NONE	
105:	STATION SPEED DIAL	NONE	
106:	STATION SPEED DIAL NAME	NONE	
107:	KEY EXTENDER	NONE	
108:	STATION STATUS	- PORT #:FOLLOWS HARDWARE POSITION - TYPE: DEPENDENT ON CONNECTED KEYSET - PICKUP GROUP: NONE - SGR: NONE - BOSS-SECR: NONE - PAGE ZONE: NONE - COS NUMBER:01 IN ALL RING PLANS	
109:	DATE/TIME DISPLAY	- COUNTRY:WESTERN - CLOCK:12 HOUR - DISPLAY:LOWER CASE	
110:	STATION ON/OFF	- AUTO HOLD OFF - AUTO TIMER ON - HEADSET OFF - HOT KEYPAD ON - KEY TONE ON - PAGE REJOIN ON - RING PREF.ON - CALL COST OFF - AUTO CAMPON OFF - AME BGM OFF - DISP SPDNAMEOFF - CID REVW ALLON - SECURE OHVAON - NOT CONT.CIDON	
111:	KEYSET RING TONE	FREQUENCY: 5	
112:	ALARM REMINDER	ALARMS ARE NOTSET	
113	VIEW MEMO NUMBER	NONE	

114:	KEYSET VOLUME	- RING VOLUME: 4 - OFF-HOOK RING VOLUME: 4 - HANDSET VOLUME: 4 - SPEAKER VOLUME: 13 - BGM VOLUME: 13 - PAGE VOLUME:13
115:	SET PROGRAMMED MESSAGE	NO MESSAGES SELECTED
116:	ALARM AND MESSAGE	ALARMS ARE NOTSET
119:	CLIP DISPLAY	NUMBER FIRST
121:	KEYSET LANGUAGE	ENGLISH

System Programs

MMC Number	Function	Default Data	Remark
200:	OPEN CUSTOMER PROGRAMMING	DISABLE	
201:	CHANGE CUSTOMER PASSCODE	PASSCODE = 1234	
202:	CHANGE FEATURE PASSCODE	- RING PLAN: 0000 - DISA ALARM: 5678 - ALARM CLR: 8765 - AA RECORD: 4321 - DECT REGST: 1234 - DELETE: 9999	
203:	ASSIGN UA DEVICE	NONE	
204:	COMMON BELL CONTROL	CONTINUOUS	
205:	ASSIGN LOUD BELL	UNASSIGNED	
206:	BARGE-IN TYPE	NO BARGE-IN	
207:	ASSIGN VM/AA PORT	NORMAL PORT	
208:	ASSIGN RING TYPE	ICM RING	
209:	ASSIGN ADD-ON MODULE	NONE FOR MASTER	

210:	CUSTOMER ON/OFF PER TENANT	- DISA PAW: DON - LCR ENABLE: OFF - PERI UCD RPT: OFF - CID CODE INS: OFF - DISA MOH: OFF - TRANSFER MOH: OFF - DSP SSPDNAME: OFF - DID BSY ROUT: OFF - CONF TONE: OFF - RECALL PIKUP: OFF - ICM EXT FWD: OFF - SEC 2 BOS AA: ON - DID ERR TONE: OFF - KTS DISC ALM: OFF - OFF HOOK ALM: OFF - SL SELF RING: OFF - SGR INC BUSY: OFF - TRSF CANCEL: OFF - RECALL DISC: OFF - ARD TONE CHK: ON - VPN ENABLE: OFF - IN TOLL CHK: OFF - ISDN PROGCON:OFF - INCLUDE VAT: OFF - LCR DIALTONE:OFF - DSS KEY DPU: OFF - BEGN DGT DSP:OFF - ONE TCH FACC: OFF - SGR ALL OUT: OFF - CHAIN FWD: ON - TRK MONITER: OFF - VOIP MFRALOC: OFF - NTWK AUTOTMR: ON - USE EURO: OFF	
211:	DOOR RING ASSIGNMENT	STATION GROUP: 500	
214:	DISA ALARM RINGING STATION	ALL RING PLAN: 500	
215:	VOICE DIALLER OPTIONS	NONE	
216:	VOICE DIALLER ASSIGNMENTS	NONE	
217:	TRAFFIC REPORT PRINTOUT	NO REPORT	Available in with LAN module only
220:	ISDN SERVICE TYPE	VOICE	
221:	EXTENSION TYPE	NORMAL STATION	Available in Hotel/Motel enabled only
222:	FAX PAIR	NONE	Available in Hotel/Motel enabled only
224:	WAKE-UP ANNOUNCEMENT	- AA GROUP: NONE - MESSAGE NO: NONE - GROUP BUSY: NONE	Available in iDCS 500-L or Hotel/Motel enabled

300:	CUSTOMER ON/OFF PER STATION	- ACCESS DIAL:ON - MICROPHONE:ON - OFF-HOOK RING:ON - SMDR PRINT:ON - TGR ADV.TONE:ON - VMAA FORWARD:ON - INTERCOM SMDR:OFF - FWD DLY USE:OFF	
301:	ASSIGN STATION COS	RING PLANS 1-6 = 01	
302:	PICKUP GROUPS	NO PICKUP GROUPS ASSIGNED	
303:	ASSIGN BOSS/SECRETARY	NONE	
304:	ASSIGN EXTENSION/TRUNK USE	- DIAL= YES - ANS= YES	
305:	ASSIGN FORCED CODE	NONE	
306:	HOT LINE	NONE	
308:	ASSIGN BACKGROUND MUSIC SOURCE	NONE	
309:	ASSIGN STATION MUSIC ON HOLD	TONE	
310:	LCR CLASS OF SERVICE	LEAST COST ROUTING COS 1	
312:	ALLOW CLIP	- RCV: YES - SND: YES	
314:	CONFIRM OUTGOING CALL	NONE	
315:	CUSTOMER SET RELOCATION	NONE	
316:	COPY STN/TRK USE	NONE	
317:	ASSING STATION/STATION USE	DIAL = YES	
318:	DISTINCTIVE RINGING	F-STN FOLLOW STATION SETTING	
319:	BRANCH GROUP	NONE	
320:	PRESET FWD NO ANSWER	NONE	
321:	KEYSET TYPE	NON DISPLAY	Available in iDCS 500-L only
323:	CALLING PARTY NUMBER	EMPTY	
400:	CUSTOMER ON/OFF PER TRUNK	- 1A2 EMULATE: OFF - TRUNK INC DND: OFF - TRUNK FWRD: ON - LCR ALLOW: OFF	
401:	C.O./PBX LINE	ALL TRUNKS C.O. LINE	
402:	TRUNK DIAL TYPE	ALL TRUNKS DTMF	
403:	TRUNK TOLL CLASS	ALL TRUNKS F-STN	
404:	TRUNK NAME	NO NAMES ENTERED	
405:	TRUNK NUMBER	NO NUMBERS ENTERED	

406:	TRUNK RING ASSIGNMENT	ALL TRUNKS RING DEFAULT OPERATOR GROUP (500, 5000)
407:	FORCED TRUNK RELEASE	NONE
408:	ASSIGN TRUNK MOH SOURCE	TONE
409:	TRUNK STATUS READ	FOLLOW TRUNK
410:	ASSIGN DISA TRUNK	ALL TRUNKS NORMAL
411:	ASSIGN T1 SIGNAL TYPE	NONE
412:	ASSIGN TRUNK SIGNAL	IMMEDIATE
413:	VMS CALL TYPE	- AP: NO - AT: NO - AA: YES - VM: NO
414:	PRS SIGNAL	NORMAL(NONE)
415:	REPORT TRUNK ABANDON DATA	ALL TRUNKS REPORT: YES
416:	ASSIGN E&M/DID RINGDOWN	FOLLOW INCOMING DIGIT
417:	E1/PRI CRC4 OPTION	FOLLOW INCOMING
418:	BRI AND PRI CARD RESTART	NONE
419:	BRI OPTION	For BRI Ports programmed as Trunks: - CHANNEL ANY = YES - BRI MODE = P-P DDI - DLSEND = OVERLAP - CLIP TABLE = NONE For BRI Ports programmed as Stations: - CHANNEL ANY = YES - POWER FEED = NO
420:	PRI CONTROL	- ANY CHANNEL: YES - PRI MODE: DDI - DLSEND: OVERLAP - CLIP TABLE: NONE
421:	MSN DIGIT	NONE
422:	TRUNK COS	ALL RING PLANS COS 01
423:	S/T MODE	NONE
424:	BRI S0 MAPPING	NONE
425:	ASSIGN CALLER ID TRUNKS	ALL TRUNKS ARE NORMAL
426:	TRUNK GAIN CONTROL	- TX: +0.0 - RX: +0.0
428:	ASSIGN TRUNK/TRUNK USE	YES
433:	COST RATE	ALL TRUNKS/ALL DIAL PLANS NO COST RATE ASSIGNED
434:	CONNECTION STATUS	NONE

436:	R2MFC SIGNALLING	- CLG CLS REQ: ON - CLG NUM REQ: OFF - CLD STS RESP: ON - CLG CLS RESP: ON - CLG NUM RESP: ON - CLD STS REQ: ON - CLG EXT RESP: OFF	Available in South Africa only
500:	SYSTEM-WIDE COUNTERS	- ALARM REM. CNTER: 5 - AUTO RDL COUNTER: 5 - DISA CALL CNTER: 99 - DISA LOCK CNTER: 3 - NEW CALL COUNTER: 99 - UCDS VISUAL ALARM: 0 - UCDS AUDIO ALARM: 0 - UCD CS LEVEL 1: 0 - UCD CS LEVEL 2: 0	
501:	SYSTEM TIMERS	Turn to MMC 501	
502:	STATION-WIDE TIMERS	- NO ANS FWD: 015 SEC - DTMF DUR: 100 MSEC - F-DGT DELY: 600 MSEC - OFFHK SEL: 015 SEC - EFWD DELAY: 010 SEC	
503:	TRUNK-WIDE TIMER	Turn to MMC 503	
504:	PULSE MAKE/BREAK RATIO	- MAKE/BREAK = 33 MAKE - PULSES PER SECOND = 10 PPS	
505:	ASSIGN DATE AND TIME	FOLLOW SOFTWARE DATE: 00:00	
506:	TONE CADENCE	Turn to MMC 506	
507:	ASSIGN RING PLAN TIME	- START: NONE - END: NONE	
508:	CALL COST	- UNIT COST PER MP: 200 - CALL COST RATE: 100 %	
510:	SLI RING CADENCE	Turn to MMC 510	
511:	MESSAGE WAITING LAMP CADENCE	- INTERRUPT LED1000 MS: ON - 1000 MS: OFF	
512:	HOLIDAY ASSIGNMENT	NO HOLIDAY ASSIGNED FOLLOW RING PLAN 1	
513:	HOTEL TIMER	NONE	Available in Hotel/Motel enabled only
514:	TONE SOURCE	TONE	Available in iDCS 500-L only
515:	DAYLIGHT ASSIGNMENT	NONE	
600:	ASSIGN OPERATOR GROUP	1~6: 500	
601:	ASSIGN STATION GROUP	NORMAL GROUP	Available in iDCS 500-L only
602:	STATION GROUP NAME	NONE	

603:	ASSIGN TRUNK GROUP	- ALL LOOP/ISDN TRUNKS ARE IN TRUNK GROUP: 9 - ALL E&M TRUNKS ARE IN TRUNK GROUP: 800 - ALL VoIP TRUNKS ARE IN TRUNK GROUP: 801	
604:	ASSIGN STATION TO PAGE ZONE	NO STATIONS ASSIGNED	
605:	ASSIGN EXTERNAL PAGE ZONE	NONE	
606:	ASSIGN SPEED BLOCK	- SYSTEM: 200 ENTRIES - STATIONS: 1 BLOCKS ASSIGNED	
607:	UCD OPTIONS	Turn to MMC 607	
608:	ASSIGN REVIEW BLOCK	KEYSETS: 10 BINS	
609:	CALL LOG BLOCK	KEYSETS: 10 BINS	Available in with LAN module only
700:	COPY COS CONTENTS	NONE	
701:	ASSIGN COS CONTENTS	- TOLL LEVEL: 1 - USABLE FEATURES: YES - FEATURES 14, 18, 38, 56, 60, 62, 63, 64, 65 is NO - CALL STATION GROUPS: YES - CALL TRUNK GROUPS: YES - CALL TO BIVMS STN: YES	
702:	TOLL DENY TABLE	ALL ENTRIES ARE SET TO 0	
703:	TOLL ALLOWANCE TABLE	ALL ENTRIES ARE SET TO 0	
704:	ASSIGN WILD CHARACTER	ALL ENTRIES ARE SET TO 0	
705:	ASSIGN SYSTEM SPEED DIAL	NONE	
706:	SYSTEM SPEED DIAL BY NAME	NO NAMES	
707:	AUTHORIZATION CODE	NONE	
708:	ACCOUNT CODE	NONE	
709:	TOLL PASS CODE/SPECIAL CODE TABLE	NONE	
710:	LCR DIGIT TABLE	NONE	
711:	LCR TIME TABLE	NONE	
712:	LCR ROUTE TABLE	NONE	
713:	LCR MODIFY DIGIT TABLE	NONE	
714:	DID NUMBER AND NAME TRANSLATION	NO ENTRIES	

		TEN PROGRAMMED MESSAGES AS DETAILED BELOW
		01.GIVE ME THE CALL
		02.TAKE A MESSAGE
		03.ASK THEM TO HOLD
		04.SEND TO MY VM
		05.TRSF TO MY SECY
		06.LEAVE A MESSAGE
		07.PAGE ME
		08.OUT OF TOWN
		09.IN A MEETING
		10.I WILL CALL BACK
715:	PROGRAMMED STATION MESSAGE	[iDCS 500-M system] MESSAGES 11–18 ARE 16 CHARACTER BLANK MESSAGES 19. RETURN ON : 20. RETURN ON
		[iDCS 500-L system] MESSAGES 11–25 ARE 16 Messages 21-30 are only available on a iDCS500-L system. CHARACTER BLANK MESSAGES 26. RETURN AT 27. RETURN ON MESSAGES 28-30 ARE 9 CHARACTER BLANK MESSAGES
		Messages 21-30 are only available on a iDCS500-L system.
718:	MY AREA CODE	NONE
720:	COPY KEY PROGRAMMING	NONE
721:	SAVE STATION KEY PROGRAMMING	NONE
722:	STATION KEY PROGRAMMING	Turn to MMC 722
723:	SYSTEM KEY PROGRAMMING	Turn to MMC 723
724:	DIAL NUMBERING PLAN	Turn to MMC 724

		- PAGE HEADER: YES
		- LINE PER PAGE: 66
		- INCOMING CALL: YES
		- OUTGOING CALL: YES
		- AUTHORIZE CODE: YES
		- SMDR START TIME: YES
		- IN/OUT GROUP: YES
		- DND CALL: YES
725:	SMDR OPTIONS	- WAKE-UP CALL: YES
		- DIRECTORY NAME: NONE
		- CALLER ID DATA: YES
		- ABANDON CALL: YES
		- NO.DIAL MASK: 00
		- INCOMING ANSWER: YES
		- INTERCOM CALL: YES
		- KEY MMC IN/OUT: NO (iDCS 500-L System only)
		- EXT FOR DN1 = NO
		- TRK FOR DN1 = NO
		- EXT FOR DN2 = NO
		- TRK FOR DN2 = NO
		- SEPARATOR = NO
		- DISCONNECT SIGNAL = C
		- CALL TYPE ID
		DIRECT CALL = *
		ALL FWD CALL = #
		BSY FWD CALL = #
		NOA FWD CALL = #
		RECALL = #
726:	VM/AA OPTIONS	DIR TRK CALL = *
		OVERFLOW = #
		DID CALL = B
		MESSAGE CALL = *
		- PROGRESS TONE ID
		DIAL TONE = BA
		BUSY TONE = 4
		RINGBAK TONE = 5
		DND NO MORE = 6
		HDSET ANSWER = 3
		SPKER ANSWER = 2
		- CALLER ID NUMBER = NO
727:	SYSTEM VERSION DISPLAY	NONE
	CLIP	NONE
728:	TRANSLATION TABLE	
730:	AA RECORD GAIN	0 dB
731:	AA RAM CLEAR	NONE
732:	AA TRANSLATION TABLE	- PLAN 01 ALLOWS TRANSFER TO STN AND GROUP NUMBERS - ALL OTHER PLANS ARE EMPTY
733:	AA PLAN TABLE	Turn to MMC 733
734:	ATTENDANT MESSAGE MATCH	AUTO EACH MESSAGE IS EQUAL TO THE CORRESPONDING RECORDING
735:	AA USE TABLE	ALL PORTS AND AA GROUPS: PLAN 01
736:	ASSIGN AA MOH	NONE

737:	DECT SYSTEM CODE	- AUTH CODE: FFFF - SYSTEM ID: 000 (These values must be changed by the installer)	
738:	DECT CLEAR REGISTRATION	FORCED MODE	
740:	STATION PAIR	NONE	
741:	DBS RESTART	NONE	
742:	BSI STATUS	NONE	
743:	DBS STATUS	NONE	
744:	DECT REGISTRATION ON/OFF	DISABLE	
745	BSI RF CARRIER	1111111111	
746:	COSTING DIAL PLAN	NONE	
747:	RATE CALCULATION TABLE	ALL COST RATES NO DATA	
750:	VM CARD RESTART	- CARD RESTART: NO - DOWNLOAD: NO	
751:	ASSIGN MAILBOX	- ALL STATIONS = YES - ALL GROUPS = NO	
752:	AUTO RECORD	NONE	
753:	WARNING DESTINATION	DEST = 500	
754:	VM HALT	PROC	
755:	VM ALARM	80%	
756:	ASSIGN VM MOH	NOT USE	
757:	VM IN/OUT	IN/OUT	
758:	VM DAY/NIGHT	ALL RING PLANS = DAY	
760:	ITEM COST TABLE	NO ENTRIES	Available in Hotel/Motel enabled only
761:	TAX RATE SETUP	All rates are %	Available in Hotel/Motel enabled only
762:	ROOM COST RATE	All rates are 100%	Available in Hotel/Motel enabled only
800:	ENABLE TECHNICIAN PROGRAM	DISABLE	
801:	CHANGE TECHNICIAN PASSCODE	DEFAULT PASSCODE = 4321	
802:	CUSTOMER ACCESS MMC NUMBER	NONE	
803:	ASSIGN TENANT GROUP	ALL ASSIGNMENTS TENANT 1	

804:	SYSTEM I/O PARAMETER	- SERVICE: PORT 1PCMMC 　　PORT 2SMDR 　　PORT 3-5 NOT USE - BAUD RATE: 19200 BPS - CHAR LENGTH: 8 BITS - PARITY: NONE - RETRY COUNT: 03 - STOP BIT: 1 BIT - WAIT TIME: 03000 MSEC or 30 SEC - DSR CHK: OFF
805:	TX LEVEL AND T-SWITCH GAIN	Turn to MMC 805
806:	CARD PRE-INSTALL	NONE
807:	VOLUME CONTROL	- KEY TONE VOL:1 - SIDETONE VOL:1 - HANDSET TX: 3 - MIC TX LEVEL: 3 - NOISE GUARD: 8 - NOISE THRES: 1 - ALC THRES: 7 - TX/RX THRES: 3 - TX/RX COMP: 5
809:	SYSTEM MMC LANGUAGE	ENGLISH
810:	HALT PROCESSING	NONE
811:	RESET SYSTEM	NONE
812:	SET COUNTRY CODE	According to MCP DIP S/W.
813:	HOTEL OPERATION	DISABLE
815:	CUSTOMER DATABASE COPY	DAILY SAVE 00:00 (no daily save)
818:	PROGRAM DOWNLOAD	NONE
820:	ASSIGN SYSTEM LINK ID	NONE
821:	ASSIGN NETWORKING TRUNK	NORMAL
823:	ASSIGN NETWORKING COS	Turn to MMC 823
824:	NETWORK DIAL TRANSLATION	NONE
825:	ASSIGN NETWORKING OPTION	ADD NUMB TO NAME: YES USE REMOTE VM: NO REMOTE VM NUMBER: NONE
826:	ASSIGN SYSTEM REFERENCE CLOCK	- PRIORITY 1: C1 – S1 - PRIORITY 2: C1 – S2 - PRIORITY 3: C1 – S3 - PRIORITY 4: C2 – S1 - PRIORITY 5: C2 – S2 - PRIORITY 6: C2 – S3 - PRIORITY 7: C3 - S1 - PRIORITY 8: C3 - S2 - PRIORITY 9: C3 - S3

830:	ETHERNET PARAMETER	- LAN IP ADDRESS: 10. 0. 0. 2 - LAN SUBNET MASK: 255.255.255.0 - LAN GATEWAY: 10.0.0.1 - PCMMC ADDRESS: 10.0.0.101 - REMOTE M/A ADDR: 10.0.0.102 - TAPI SERVER ADDR: 10.0.0.103 - TRACE ADDRESS: 10.0.0.116	Available in with LAN module only

831:	VOIP PARAMETERS	- IP ADDRESS: 1.1.1.1
		- SUB MASK: 255.255.255.0
		- GATEWAY: 1.1.1.1
		- STS PERIOD: 00 SEC
		- MAX FAX CH: 0
		- CLIP TABLE: NONE
		- VOIP MODE: FOLLOW DID TRANS
		- ACCESS CODE:
		    00~09: digits 0~9
		    10~62: NONE	

832:	VOIP CODE	- CODE LENGTH: 1 - DELETE LENGTH:1 - INSERT CODE: NONE - IP TABLE 1: 00 - IP TABLE 2: NONE - IP START: NONE	
833:	VOIP IP TABLE	- TB 00 - ENTRY 00: 1.1.1.1 - Others:0.0.0.0	
834:	VOIP OPTION	- PCM COMPANDING: A-LAW - H.323 FAST SETUP: DISABLE - GW CALL ID: 1234 - BILLING TYPE: STANDARD - CALLER ID TYPE: ANI - INCOMING CHANNEL: DISTRIBUTE - DTMF GENERATION: H.245 SIGNAL - FAX SIGNALLING TYPE: T.38 - SWITCH TO H.245: ENABLE - DEFAULT DIL: None - SNMP SERVER: 0.0.0.0 - SIGNALLING PORT: 10000 - STATUS PORT: 20000 - WCS PORT: 20010 - SIGK ACCESS PORT: 20020 - MAKE DEFAULT DB: NO	
835:	VOIP DSP OPTION	- AUDIO CODEC: G.723.1 - ECHO CANCEL: ENABLE - SILENCE SUPPRESS: ENABLE - INPUT FILTER: ENABLE - OUTPUT FILTER: ENABLE - INPUT GAIN: 23 - VOICE VOLUME 34 - MULTI FRAME COUNT: 03 - JITTER OPTION: 07 - VOICE PROMPT SWAP: DISABLE - RTP DELAY LIMIT: 600 - RTP LOSS LIMIT: 10 % - RTP CHECK PERIOD: 10 SEC - RTP OVERCOUNT LIMIT: 1 - DTMF ON: 100 MS - DTMF OFF: 100 MS	

836:	VOIP GK OPTION	- GK CONNECT: DISABLE - GK TYPE: SIGK - GK IP ADDR: 0.0.0.0 - GK NAME: blank - GW:H.323 ID: blank - GW:E164 NO: blank - KEEP ALIVE: 000 sec	
850:	SYSTEM RESOURCE DISPLAY	NONE	
851:	ALARM REPORTING	ALARM BUFFER OVERWRITTEN	Available in with LAN module only
852:	SYSTEM ALARM ASSIGNMENTS	ALL OFF	Available in with LAN module only
853:	MAINTENANCE BUSY	ALL IDLE	
854:	DIAGNOSTIC TIME	NO DIAGNOSTIC TIME SET	Available in with LAN module only
855:	SYSTEM OPTIONS	NONE	
856:	TECH PROGRAMMING LOGS	NONE	Available in with LAN module only
858:	ASSIGN SYSTEM EMERGENCY ALARM	ALL OFF	Available in with LAN module only
859:	HARDWARE VERSION DISPLAY	NONE	
860:	UCD STATUS SERVICE	DISABLE	

Programming Procedures

The following instructions for each MMC assume that you have already opened programming.

When you are finished programming in MMC codes 100~855 and have other programming to do, press SPK to exit the MMC but stay in the programming mode and use one of the following methods.

1. Dial another MMC code directly and continue programming.

2. Press VOLUME UP and DOWN keys to scroll through all MMC codes. When the desired MMC code is reached, press SPK and continue programming.

Pressing TRSF will always save changes and exit the programming mode.

Chapter 2
Special Application

Chapter 2 Special Applications

This part of the technical manual is titled "Special Applications" because it provides information about interfacing with customer-provided equipment or using a feature in a different way than it was intended. Perhaps an application may require a combination of CPE, creative programming, unusual feature operation or all of the above.

Because these applications require installation instructions and a combination of programming sequences, there is no obvious place to put this information; therefore, we created this part of the manual. As additional special applications are reported from the field, we will include them in this section.

Voice Mail/Auto Attendant Integration

Because of the increased popularity of voice mail and auto attendant use, the iDCS 500 system includes many programmable options to address this demand. Obviously the degree of integration that can be achieved depends on the abilities of the voice mail/auto attendant (VM/AA) system as well as the telephone system.

This list details the capabilities provided by the iDCS 500 system for voice mail integration.

Hardware Provisions

a. The VM/AA system must be connected to single line circuits on any SLI card.
b. Each port on a 4 port SLI is equipped with a dedicated DTMF receiver for detecting DTMF signaling from the VM/AA.
c. VMAA ports will also provide an instant break in loop current when the calling party hangs up. This is called a disconnect signal.

Software Provisions

a. SCREENED OR UNSCREENED TRANSFER
There are no special codes needed to transfer a call. Simply hookflash, receive transfer dial tone and dial the destination.

b. DIRECT IN LINES
Any C.O. call can be assigned to ring at an individual station or a station hunt group assigned to the VM/AA.

c. CALLS OR RECALLS TO THE OPERATOR
Dialing 0 will always result in a ringback signal. If the operator is busy, the call continues to ring in queue to the operator. This prevents a caller from dialing 0 and reaching another mailbox because the operator is busy.

d. MESSAGE WAITING
A VM/AA port can leave a message at any station or group of stations. The message waiting indication can be set or canceled at any station or station group with or without the stations ringing.

e. IN BAND SIGNALING
The iDCS 500 system can be programmed to send the calling station's extension number after the voice mail system answers. These DTMF signals may include a leading digit to indicate the type of call and additional information about the original caller. DTMF signals may also be substituted for call progress tones to speed up voice mail call processing. This program allows call forwarding to a mailbox and bypassing of the main greeting for automatic message retrieval. Blind transfers may be performed because the recall will be correctly identified.

> **NOTE** The effectiveness of this program depends on the ability of the voice mail system to make use of this information.

f. STATION HUNT GROUP WITH OVERFLOW
Each station groups can have an individual overflow destination with an individual overflow timer. The overflow destination will ring whenever a call to the group is not answered. If the voice mail system becomes inoperative, calls are automatically routed to the overflow destination.

g. INTERNAL CALL FORWARDING TO VOICE MAIL
    This option in MMC 300 will allow or deny intercom calls from following call forward to voice mail. This feature conserves disk drive space by only storing calls originating outside the iDCS 500 system.

h. ONE TOUCH VOICE MAIL ACCESS
    One Touch speed dial keys can be programmed to automatically dial, log into and retrieve messages from voice mail.

i. CALL PROGRESS TONES
    The only tones sent to a VM/AA port are dial tone, busy and ringback. To eliminate confusion, busy tone is substituted for DND or error tones on voice mail ports only.

Stand-Alone Add-On Module

To make a DCS 32 button add-on module operate as a stand-alone unit, perform the following steps in the order they are listed.

MMC 103   With the technician or customer passcode, assign answer mode as Voice Announce, Auto Answer or ring.

MMC 105   Assign speed dial numbers for the AOM.

MMC 606   Advance to the extension number of the AOM you want to use as stand-alone. Assign blocks of speed dial numbers to the AOM.

NOTE
1. Transferred calls cannot be camped-on to a busy DCS 32 Button AOM. If a station attempts to do so, the transferred call will ring back to the station immediately.

2. Busy station camp-on will not work when calling a busy DCS 32 Button AOM.

Individual Station Page

The system was not designed to permit page announcements to individual keysets. However, a forced auto answer key (FAUTO) can be used to accomplish this objective.

1. Program a keyset for RING in MMC 103.

2. Assign an FAUTO key to each keyset that is allowed to page individual keysets.

3. Call another station. When you hear ringback tone, press the FAUTO key. The ringing will stop and an Auto Answer call is set up.

NOTE
To prevent the use of this feature from getting out of control, only assign FAUTO keys to those keysets needing to page individual keysets.

Caller ID

The iDCS 500 is compatible with both types of Caller ID as defined by BELLCORE. These are the single message format or "Number Only" sometimes referred to as standard Caller ID and the multiple message format or "Name and Number" sometimes referred to as Deluxe Caller ID. In the case of Number Only delivery, there is a translation table available that may be used to add names to the delivered number.

Hardware Provisions

In order to install Caller ID on a iDCS 500 system you must have the following equipment available:

- An RCM daughter board mounted on one of the processor cards.
- A Trunk B1 or Trunk C1 card

Software Provisions

The MMCs related to Caller ID are listed below with a short description of their use. They are listed in the recommended order in which they should be programmed. This sequence is suggested so that the installer gets a better understanding of how the feature works. There is no technical reason to follow this sequence.

- MMC 414 CALLER ID TRUNKS   This MMC is used by the technician to determine which trunks will receive Caller ID data.

- MMC 312 ALLOW CALLER ID   This MMC is used by the technician to determine which keysets are allowed to receive Caller ID displays.

- MMCs 722 and 723   These MMCs have keys related to Caller ID features added to them. It is strongly recommended that all keysets allowed Caller ID in MMC 312 are programmed with a CID key.

- MMC 728 CID TRANSLATION   This MMC allows the technician to create a list of names that correspond to numbers received from the Central Office. These names will be displayed when a call rings in that has NUMBER ONLY data provided by the CO.

- MMC 725 SMDR OPTIONS   The ability to print Caller ID data and abandoned calls is determined by this MMC.

- MMC 119 CALLER ID DISPLAY   This MMC is used by the end user to determine which piece of Caller ID data is displayed when a call rings at the user's station.

- MMC 501 SYSTEM TIMERS   This MMC has two new timers related to Caller ID. The only timer that may need adjustment is the CID DISPLAY TIME. This is the length of time that CID data is displayed after the CID key is pressed.

- MMC 415 TRK. ABANDON   This MMC is used by the technician to determine which trunks will record data in the Call Abandon list and print with an Abandon "A" flag on SMDR.

- MMC 608 ASSIGN REV BLOCK   This MMC is used by the technician to assign CID Review blocks to keysets to allow the user to review CID data for

previous calls.

- MMC 701 ASSIGN COS   All of the Caller ID features have been added to this MMC to enable the technician to allow or deny them.

- MMC 724 NUMBER PLAN   The Caller ID features have been added to this MMC to allow a technician to assign an access code where necessary.

In addition to the above MMCs, it is necessary to have LCR programmed on the system to enable certain features with a DIAL/REDIAL option to be used. This is because the number format provided by the Central Office contains the area code. This area code must be stripped off in the LCR modified digits section to allow a local number to be correctly dialed.

For example, if the system is located in the 305 area code, the LCR digit table points the entry 1305 to a modified digits entry that deletes the first four digits of the CID number. Of course, this is a much simplified LCR scheme. As there are long distance calls to be made within the home area code, additional entries are required to identify these.

For example, if 1305-426 is a local call, the area code has to be stripped, but if 1305-858 is long distance, the area code has to remain to allow the number to be dialed. There are two ways of doing this. You can either enter all of the local office codes and tell the system to strip the area code from them or you can enter the long distance codes and tell them to ignore the modify digits entry.

A list of all of the local office codes can be found at the front of the local telephone directory.

Using LCR To Insert Long Distance Pick Code

One of the more common uses for LCR is to use this feature to automatically insert the long distance access code for long distance calls within your own area code. This will allow these calls to be processed by the selected long distance carrier instead of the local telephone company. The following example is based on an area where all long distance calls must be preceded by 1 + area code as this is the most common scenario.

In MMC 710, program the following entries:

MMC 710	LCR DIGIT TABLE		
INDEX	LCR DIGIT STRING	LENGTH	ROUTE
001	1	11	1
002	2	7	1
003	3	7	1
004	4	7	1
005	5	7	1
006	6	7	1
007	7	7	1
008	8	7	1
009	9	7	1
010	411	3	1
011	911	3	1
012	0	1	1
013	1AAA	11	2

NOTE   AAA is your home area code.

In MMC 711, program the following entries:

MMC 711								
LCR TIME TABLE								
TIME CHANGE BANDS								
	A		B		C		D	
	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT
DAY								
SUN	0001	1						
MON	0001	1						
TUE	0001	1						
WED	0001	1						
THU	0001	1						
FRI	0001	1						
SAT	0001	1						

In MMC 712, program the following entries:

MMC 712				
LCR ROUTE TABLE				
LCR ROUTE	**TIME CHANGE**	**LCRCOS**	**TRK GROUP**	**MOD DIGITS**
1	1	1	80	
2	1	1	80	001

In MMC 713, program the following:

MMC 713			
LCR MODIFY DIGIT TABLE			
INDEX	**NO. OF DELETE DIGITS (15)**	**NO. OF INSERT DIGITS (14)**	**NO. OF APPEND DIGITS (14)**
001		10XXX	

> **NOTE** 10XXX is the access code for the long distance carrier of your choice.

- In MMC 603, move all of the C.O. lines from trunk group 9 to trunk group 80. You will have to delete the line numbers from trunk group 9 as trunks can be in more than one group.
- In MMC 724, assign 9 as the LCR access code. This will delete 9 from the first trunk group automatically.
- In MMC 210, turn on LCR.

Setting LCR up like this will not prevent C.O. lines from being accessed by Direct Trunk (DT) keys but it does mean that speed dial numbers will have to be reprogrammed to allow them to access LCR.

Using LCR With Caller ID

It is necessary to have LCR programmed on systems with Caller ID to enable certain features with a DIAL/REDIAL option to be used. This is because the 10 digit CID number format provided by the Central Office always contains the area code. This area code must be stripped off in the LCR modified digits section to allow a local number to be correctly dialed. To make this task easier, the system inserts a 1 in front of the received digits. This makes it look like a normal 11 digit telephone number so LCR can process the number and modify the digits.

For example, if the system is located in the 305 area code, the LCR digit table points the entry 1305 to a modified digits entry that deletes the first four digits of the CID number. Of course, this is a much simplified LCR scheme. As there are long distance calls to be made within the home area code, additional entries are required to identify these calls. This is illustrated in the sample table for MMC 710 below where entries 013 to XXX are the local area code (305 in the previous example) followed by the local CO prefixes. This will tell the system which calls need to have the first four didits stripped off using the modifiy digits table.

In MMC 710, program the following entries:

MMC 710	LCR DIGIT TABLE		
INDEX	**LCR DIGIT STRING**	**LENGTH**	**ROUTE**
001	1	11	1
002	2	7	1
003	3	7	1
004	4	7	1
005	5	7	1
006	6	7	1
007	7	7	1
008	8	7	1
009	9	7	1
010	411	3	1
011	911	3	1
012	0	1	1
013	1AAALLL	11	2
↓	↓	11	2
XXX	1AAALLL	11	2

> **NOTE** AAA is your home area code and LLL is a local prefix. For example, at STA, AAA= 305 and one LLL = 426. To operate correctly, all of the local prefixes must be entered in this table. These prefixes can be found at the front of the local telephone directory.

In MMC 711, program the following entries:

MMC 711			LCR TIME TABLE					
TIME CHANGE BANDS								
	A		B		C		D	
	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT
DAY								
SUN	0001	1						
MON	0001	1						
TUE	0001	1						
WED	0001	1						
THU	0001	1						
FRI	0001	1						
SAT	0001	1						

In MMC 712, program the following entries:

MMC 712		LCR ROUTE TABLE		
LCR ROUTE	**TIME CHANGE**	**LCRCOS**	**TRK GROUP**	**MOD DIGITS**
1	1	1	80	
2	1	1	80	001

In MMC 713, program the following:

MMC 713		LCR MODIFY DIGIT TABLE	
INDEX	**NO. OF DELETE DIGITS (15)**	**NO. OF INSERT DIGITS (14)**	**NO. OF APPEND DIGITS (14)**
001	4		

NOTE The deleted digits are the 1 + AAA from the LCR digit table in MMC 710.

- In MMC 603, move all of the C.O. lines from trunk group 9 to trunk group 80. You will have to delete the line numbers from trunk group 9 as trunks can be in more than one group.
- In MMC 724, assign 9 as the LCR access code. This will delete 9 from the first trunk group automatically.
- In MMC 210, turn on LCR.

Setting LCR up like this will not prevent C.O. lines being accessed by Direct Trunk (DT) keys but it does mean that speed dial numbers will have to be reprogrammed to allow them to access LCR.

Auto Attendant/Uniform Call Distribution

What is the AA Card?

The AA card is an optional iDCS 500 circuit card capable of answering calls, playing recorded messages to callers and routing calls based on digits dialed by the caller. Because it is integrated, it is important to understand the following.

There is no hook-flash/DTMF process to transfer a call. All switching is done internally. There are no connections on the front of the card and no unnecessary delays during transfer.

The AA card has constant communication with the iDCS 500 system processor. When the AA card answers a call, it has all the information about the call, for example, whether the call is from a station, a C.O. or a transfer. When a port on the AA card answers a call, it can respond differently depending on the call. The same port can play different messages or greetings and respond to differently to dialed options.

The same group of AA ports can answer as auto attendant and UCD, with the appropriate response for each. Or multiple UCD groups can be overflowed to the same AA group and each UCD group will have its own specific messages, timers and routing instructions.

The following step by step examples demonstrate how to create an automated attendant or UCD application.

A sample AA Application(Step by Step)

To set up a simple automated attendant application, you must have at least one AA card installed in the iDCS 500 phone system. The first step is to make the C.O. lines ring the AA card.

1. Decide how many different greetings you need. For this example, we use one. It is "Thank you for calling ABC Company, please dial 1 for sales and 3 for service, or dial an extension number now."
2. Using the method described at the end of this section (Customizing Recordings), record message 01. If you need a different night greeting, record it as message 02. If you need an alternate greeting, record it as 03. The numbers 01, 02 and 03 have been chosen arbitrarily.
3. Decide how many AA ports you want to answer. In this example, we use the first four, 3951–3954.
4. In MMC 601, create a group (we use 528) defined as an AA group and containing 3951, 3952, 3953 and 3954. It is not necessary to program any other options (overflow, next, etc.).
5. In MMC 406, make the C.O. lines that are to be answered by the AA card ring group 529.
6. In MMC 735, assign each port (3951–3954) to answer with Plan 01.

So far, we have made our C.O. lines ring 528, an AA group that answers with Plan 01. In Step 7, we set the AA plan options.

7. Plan Programming: Step through each option in MMC 733.
   DAY MESSAGE: This will be message 01.
   NIGHT MESSAGE: If used, this will be message 02.
   ALTERNATE MESSAGE: If used, this will be message 03.
   OTHER MESSAGES: Assign these as needed; default values are usually sufficient.
   CAMP ON: Assign the camp-on option as required.
   ANSWER DELAY: Program the answer delay for this plan. We have it answer after one ring.
   RETRY COUNT: Set the retry count. Three attempts are normal.
   TRANSLATION TABLE: Select a translation table. In this case, wel use translation table 01 (programmed in step 8).
   DESTINATIONS: Enter destinations for each condition (busy, no answer, etc.).

In Step 8, we program the translation table.

8. Program the translation table in MMC 732. Enter a "secret passcode" if greeting changes are needed (see below). The contents of this table must conform to the instructions in Step 1. Entry number 001 has the first field programmed with a 1 (the digit dialed by the caller) and the second field programmed with the station group number for sales (let's say 525). Entry number 002 is for the service department. The first field is 3 and the second field is the service department station or station group number. Entry number 003 is for station numbers dialed by the caller. The first field is 2ΘΘ (Θ = wild card/any digit). The second field is a "B" (special key B). The B is for "buffer" and transfers the call to the station number dialed. Entry number 004 is for the change greeting option. Enter 4581 in the first field (4581 is the secret passcode) and enter "C" in the second field. C is entered using special key C and represents "change greeting."

For more complex applications, the plan programming destinations and translation table destinations can contain other plans.

A Sample UCD Application(Step by Step)

To set up a simple Uniform Call Distribution application, you must have at least one AA card installed in the iDCS 500 phone system.

1. Decide how many AA ports you are going to use for UCD. In this example, we use the last four of the first card, 3955–3958. Define these ports as an AA group. We call this group 505. The ring type should be sequential. Do not use the overflow, GRP TRSF or NEXT.

2. In MMC 601, create a group (we use 525) defined as an UCD group and containing the station numbers for the UCD agents. Set the group options as follows:
   a. Set the ring type to DISTRIBUTED.
   b. Set the overflow to ten seconds (creates a ten second ringback "grace period" in case all agents are busy before the call overflows to the UCD module).
   c. Set NEXT to 505.
   d. Set the wrapup timer. This is an optional timer to allow UCD agents to finish the work associated with a call before receiving the next call.

3. Decide what C.O. lines are to go to the UCD group and assign them to ring 525 in MMC 406.

> **NOTE** If this example is used in conjunction with the AA example above, callers will also be able to reach the sales UCD group from an auto attendant selection.

4. In MMC 607, program the UCD options. These consist of the following:
   Message 1: This is a recording that informs the caller that all agents are busy. It can be changed by following the instructions in "Customizing Recordings" at the end of this section.
   Message 2: This is a recording that informs the caller that all agents are *still* busy. It can be changed by following the instructions in "Customizing Recordings" at the end of this section. This message will repeat at the UCD recall interval.
   Exit Code: This is an option that allows the caller to exit UCD by dialing this digit.
   Retry Count: This is the maximum number of times that a caller will be recalled to the UCD message before being transferred to the final destination.
   Final Destination: The destination the caller will reach if the exit digit is dialed or the retry count is exceeded.
   Ring Next: This timer determines how long an unanswered call will ring a UCD agent before that station is logged out and the next station in the UCD group rings.
   UCD Recall: This timer determines the interval between UCD messages played to the caller.
   MOH: This determines the MOH source that the caller will be connected to while the UCD recall timer is running.

You have now completed the UCD programming.

Customizing Recordings

Recording Messages

There are 64 messages that can be custom-recorded. The messages are numbered 01–48. Messages 49–64 also exist in the AA card but are stored on ROM and cannot be changed. They are used as default messages for specific call handling conditions.

Customize messages 01–48 by using a keyset programmed with an AAREC (Auto Attendant Record) key. The message input can be either the keyset handset or the BGM source. 120 seconds of custom messages are available. This messaging is stored on non-volatile RAM and is protected during a power outage.

Although adding extra AA cards increases the time for messages, a card can only use the message RAM on its own card. Messages can be combined to create more messages. (See MMC 734, Message Match).

Recoding Using the Handset

1. Press the AAREC key on the designated keyset.
2. At the "enter passcode" display, dial the passcode assigned in MMC 202.
3. Lift the handset.
4. Select the HANDSET option.
5. Enter any AA port number on the card you wish to program.
6. Enter the recording number you wish to record.
7. You will hear a beep.
8. You are now recording. If you pause for more than five seconds, the iDCS 500 will begin to record the next messages (although this will not be apparent from the display).
9. A useful countdown timer shows time remaining. Press the AAREC key to finish recording.

Recoding Using BGM

To record using BGM, you need to have all your recordings on a cassette tape and connect the tape player to the first BGM source. The recordings on the tape must be separated by at least five seconds of silence. When silence is detected, the iDCS 500 will begin recording the next message (although this will not be apparent from the display).

1. Connect a tape recorder containing the message you want to record to the first BGM source on a MISC card.
2. Press the AAREC key on the designated keyset.
3. At the "enter passcode" display, dial the passcode assigned in MMC 202.
4. Select the BGM option.
5. Enter any AA port number on the card you wish to program.
6. Enter the recording number you wish to record.
7. You will hear a beep.
8. You are now recording. A useful countdown timer shows time remaining. Press the AAREC key to finish recording.

Call Status

The Call Status (CS) key may be programmed on each agent keyset to provide an indication of waiting calls at the UCD group.

This key has no effect when pressed, but will flash amber or red to indicate that calls are waiting.

There are two levels that can be programmed for this key, they are CS level 1 and CS level 2.

By default these levels are 05 for level 1 and 10 for level 2. This means that when there are 5 or more calls in queue at the UCD group the CS key will flash amber, when there are 10 or more calls in queue at the UCD group the CS key will flash red. These levels can be changed by your service company.

> **NOTE**
> If you are not using a professionally recorded tape or high quality record/playback unit, you should record each message and play (not record) the tape for at least five seconds. This will ensure the best possible silence level between recordings. If you record all of the AA recordings and simply remain quiet for the five seconds period, it is possible that the tape may pick up some ambient room noise that the AA card will not interpret as silence. This will cause more than one recording to be recorded as a single announcement.
>
> Messages are stored in a linear fashion on the AA card RAM. This means that a message or multiple messages are recorded and then assigned message numbers. Assigning these messages takes a short time, so immediately following a recording session, you may find the AA ports busy when called. This should only last a few seconds.
>
> Because of this storage method, if any message is rerecorded, you will have to record all messages after the newly recorded one. For example, if you have messages 1-10 and rerecord message 7, you will also have to rerecord 8, 9 and 10. Loading messages from a cassette tape helps alleviate this inconvenience.

ISDN Overview

Inroduction

Programming ISDN Basic Rate Interface (BRI) and Primary Rate Interface (PRI) circuits into the iDCS 500 system is different from working with analog facilities but does not have to be overly frightening or complicated to do. To reduce the amount of document study and reading necessary to install ISDN in the iDCS 500 system, this overview section includes flow chart diagrams that show the sequence of operations, with examples, necessary to program BRI and PRI service. Hopefully, this should make working with ISDN in the iDCS 500 easier for the average installation technician.

BRI Programming

1. ISDN BRI boards have four (4) 2B+D circuits. Each individual BRI circuit can be configured as either a trunk or as a station appearance. Figure 1, the BRI Setup Method flow chart, shows the MMCs involved and the correct sequence to apply them in. Next to each MMC box on the flow chart is a list of the parameters in each MMC which must be programmed to make the BRI operate. Detailed explanations of the various parameters is shown in the individual MMC descriptions contained in the Programming Section of the iDCS 500 Technical Manual.

2. It should be understood that in ISDN BRI, there is no relationship between telephone numbers and

"B" channels. This means that either BRI telephone number can be active on either "B" channel at any time (i.e., "B" channels don't have telephone numbers specially assigned to them).

BRI Setup Method

The following shows a step by step approach to programming a BRI circuit as either a trunk or station appearance in the system. Please consult the individual MMCs for specific details on the various parameters used.

```
                              ┌──────────────┐
         ┌──────────┐         │   MMC427     │        ┌──────────┐
         │  STATION │         │   S/T MODE   │        │  TRUNK   │
         └──────────┘         └──────────────┘        └──────────┘

ANY CHANNEL    ┌──────────────┐            ┌──────────────┐   ANY CHANNEL
POWER FEED     │   MMC425     │            │   MMC425     │   BRI MODE
SWH            │  BRI OPTION  │            │  BRI OPTION  │   DLSEND
TIMER          └──────────────┘            └──────────────┘   SWH
                                                              TIMER

TERMINAL NO.   ┌──────────────┐            ┌──────────────┐   SPID
STATION PORT   │   MMC428     │            │   MMC426     │   DN
               │ BRI SO MAPPING│           │  BRI SPID/DN │   RING PLAN 1-6
               └──────────────┘            └──────────────┘   CW
                                                              OPT

                         ┌──────────────┐
                         │   MMC424     │
                         │ CARD RESTART │
                         └──────────────┘
```
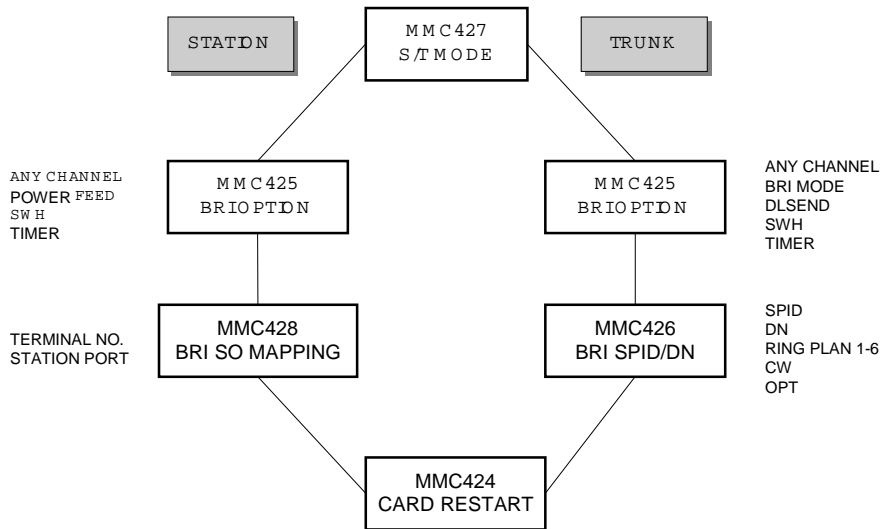
Example 1 : Programming A BRI Trunk

The following shows a step by step approach to setting up a typical BRI trunk circuit. Please note that BRIs are handled as a pair of "B" channels each having a trunk number in the iDCS 500 system. Also, notice that programming incoming call destinations for the BRI trunks is similar to analog or T1 trunks with the exception that destination programming is done in MMC 426 and not MMC 406. Any time changes are made to BRI trunk programming, MMC 424 (Card Restart) must be used to make the changes take effect.

```
┌──────────────┐
│   MMC427     │ ········ 7025 (7026) = TRUNK
│   S/T MODE   │
└──────────────┘

┌──────────────┐        ANY CHANNEL: NO
│   MMC425     │ ······· BRI MODE: P-M MSN
│  BRI OPTION  │        SWH: NI-2
└──────────────┘        TIMER (DON'T CHANGE)

                        SPID: 30547022650100
                        DN1: 4702265
                        RING PLAN: 1 = 2009
┌──────────────┐                   2 = 5002
│   MMC426     │ ······· CW: YES
│  BRI SPID/DN │        OPT: ACEPT
└──────────────┘        SPID2: 30547022540100
                        DN2: 4702254
                        RING PLAN: 1= 2010
┌──────────────┐                   2 = 5002
│   MMC424     │        CW: YES
│ CARD RESTART │        OPT: ACEPT
└──────────────┘
```
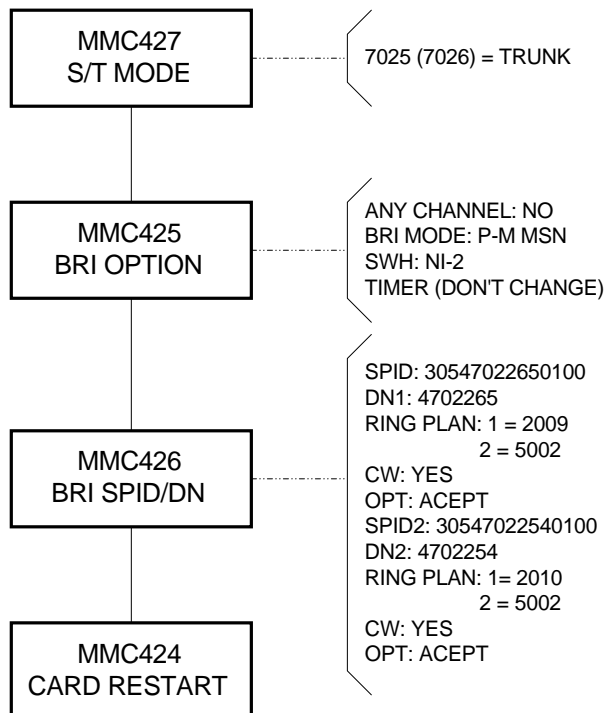
Example 2 : Programming A BRI Station Appearance

The following shows a step by step approach to setting up a typical BRI station appearance. This would normally be done to accommodate connection of an "ISDN Modem" from a desktop PC used to provide Internet access or video teleconferencing service. Again, remember to use MMC 424 once programming is finished to enable these changes to take effect. Since a BRI by default is considered as a trunk, one of the steps of programming a BRI circuit as a station appearance involves assigning a station number to the default trunk number initially assigned to that system port (MMC428). System default station numbers are 7801, 7802, etc. However, these can be changed to 2xxx or 3xxx numbers using MMC724 (Number Plan).

```
┌─────────────────┐
│  MMC427         │ ┄┄┄┄┄  7001 (7002) = STATION
│  S/T MODE       │
└────────┬────────┘
         │
┌────────┴────────┐        ANY CHANNEL: NO
│  MMC425         │ ┄┄┄┄┄  POWER FEED: NO
│  BRI OPTION     │        SWH: NI-2
└────────┬────────┘        TIMER (DON'T CHANGE)
         │
┌────────┴────────┐        TERMINAL NO. = 7801 (7802)
│  MMC428         │ ┄┄┄┄┄  STATION PORT = 7001 (7002)
│  BRI S0 MAPPING │
└────────┬────────┘
         │
┌────────┴────────┐
│  MMC424         │
│  CARD RESTART   │
└─────────────────┘
```
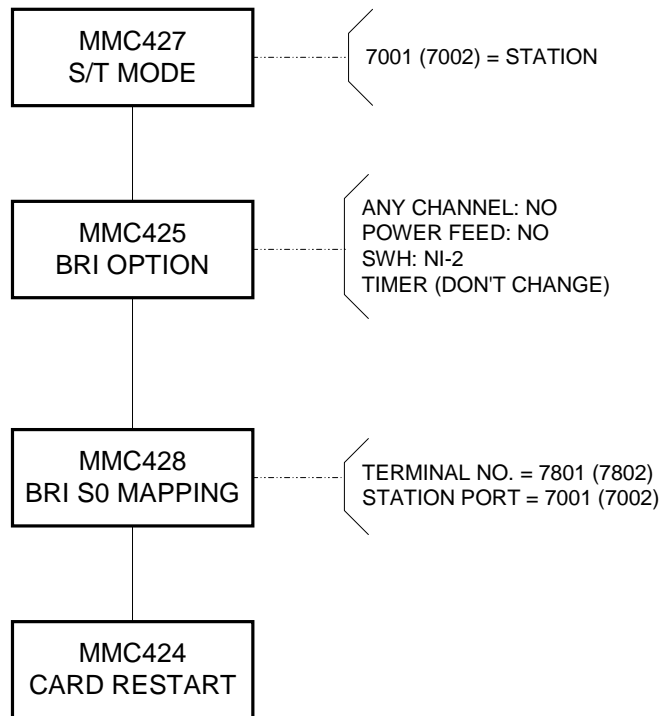
PRI Programming

1. ISDN PRI uses the IDCS 500 T1 capability as the basic transport media. However, unlike a normal T1, signaling for each call is handled on a Common Channel (i.e., the ISDN "D" channel) basis. The PRI uses the 24th T1 channel as the "D" channel with the other 23 channels serving as the "B" or Bearer channels. Then, each ISDN PRI can have from one (1) up to a maximum of twenty-three (23) "B" channels.

2. In ISDN PRI, there is no relationship between telephone numbers and actual "B" channels. Thus, calls to any pre-subscribed PRI telephone number can arrive on any free "B" channel. From this standpoint, PRI acts very similar to T1 Direct Inward Dialing (DID) service. As with DID service, incoming call routing is programmed relative to the received "Called Party" telephone number rather than the "B" channel that the incoming call arrived on. Like DID trunks, the PRI uses MMC 714 to find the ring destination for the dialed telephone number. Therefore each telephone number must be programmed into MMC 714. However, MMC 714 has been modified to accept the longer digit string provided with a PRI call (i.e., the Called Party telephone number) as opposed to the shorter number of DID digits (i.e., typically three or four digits).

3. When making outgoing PRI calls, it is possible to send a "Calling Party" telephone number other than the main billing number for the PRI circuit. The iDCS 500 has two methods to determine the number that is sent.

   METHOD 1: Per Channel Programming The first method is by using MMC 405. MMC 405 is used to program the "Calling Party" telephone number that will be sent on each call on a specific "B" channel of the PRI. Normally, all PRI channels would have the same calling party telephone number (e.g., the facility Billing number) assigned. However, any valid telephone number assigned to this PRI can be used as the calling party number. These telephone numbers are purchased from the Telephone Company. Only numbers purchased for a specific PRI can be used as a calling party number for that PRI (i.e., you can't use numbers from other facilities). The Telephone Company screens the calling party telephone number on all outgoing PRI calls and checks for valid numbers. If an invalid number is found, the Telephone Company will generally send the facility Billing number instead on this call).

   NOTE This policy may vary on a state by state basis.

   METHOD 2: Per Station Programming The second method is to use the CLI tables in MMC 321. These tables allow up to 3 calling party numbers to be assigned to each station on the system. Each table is then assigned to a PRI circuit in MMC 430 and when an outbound call is made over a PRI then the number assigned to that station for that PRI will be sent. Any valid telephone number assigned to this PRI can be used as the calling party number. These telephone numbers are purchased from the Telephone Company. Only numbers purchased for a specific PRI can be used as a calling party number for that PRI (i.e., you can't use numbers from other facilities). The Telephone Company screens the calling party telephone number on all outgoing PRI calls and checks for valid numbers. If an invalid number is found, the Telephone Company will generally send the facility Billing number instead on this call

   NOTE This policy may vary on a state by state basis.

TEPRI Setup Method

The following shows a step by step approach to programming a TEPRI board as either a T1 or as a PRI circuit. Please consult the individual MMCs for specific details on the various parameters used.
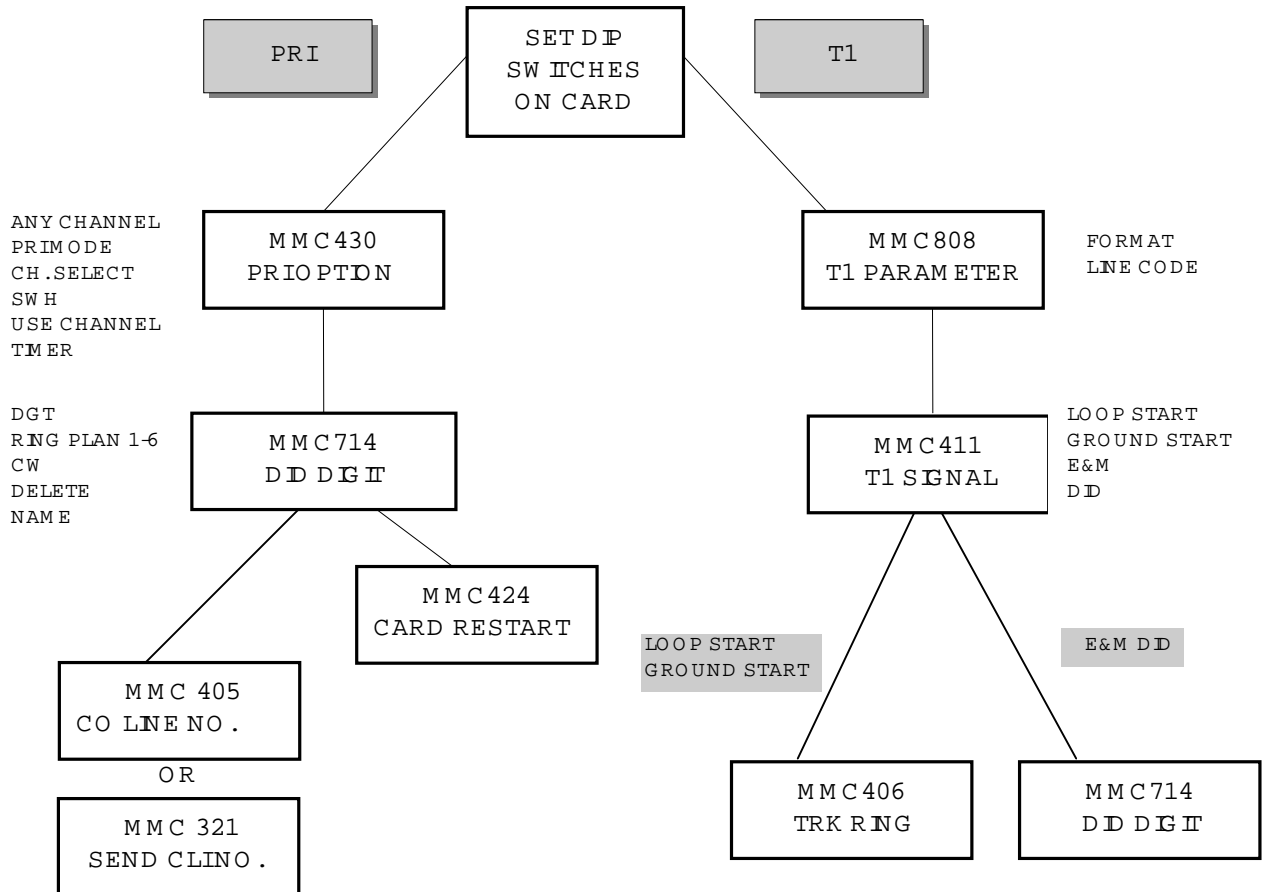
Example 1 : Programming A PRI Trunk

The following shows a typical step by step approach to programming a ISDN PRI.

```
                          ┌─────────────────┐          ANY CHANNEL = NO
                          │   MMC 430       │          PRI MODE = DDI
                          │   PRI OPTION    │ ········  CH.SELECT = LOW
                          └─────────────────┘          SWH = NI-2
                                  │                     USE CHANNEL = 8
                                  │                     TIMER (DON'T CHANGE)
                                  │                     CLI TABLE
                                  │
                                  │                     DGT = 3055998499
                                  │                     RING PLAN :1 = 5000
                          ┌─────────────────┐                        2 = 5028
                          │   MMC 714       │          CW = NO
                          │   DID DIGIT     │ ········  DELETE = 0
                          └─────────────────┘          NAME = ACCTG
                            ╱           ╲
                           ╱             ╲              DGT = 3055135387
                          ╱               ╲             RING PLAN :1 = 5005
 7001 = 3055998499  ⎫    ╱                 ╲                        2 = 5028
 7002 = 3055998499  ⎬   ┌──────────────┐   ┌──────────────┐    CW = NO
       ⋮            ⎬ · │  MMC 405     │   │  MMC 424     │    DELETE = 0
 7008 = 3055998499  ⎭   │  CO LINE NO. │   │ CARD RESTART │    NAME = MKTG
                        └──────────────┘   └──────────────┘
                              OR
                        ┌──────────────┐
                        │  MMC 321     │
                        │ SEND CLI NO. │
                        └──────────────┘
```
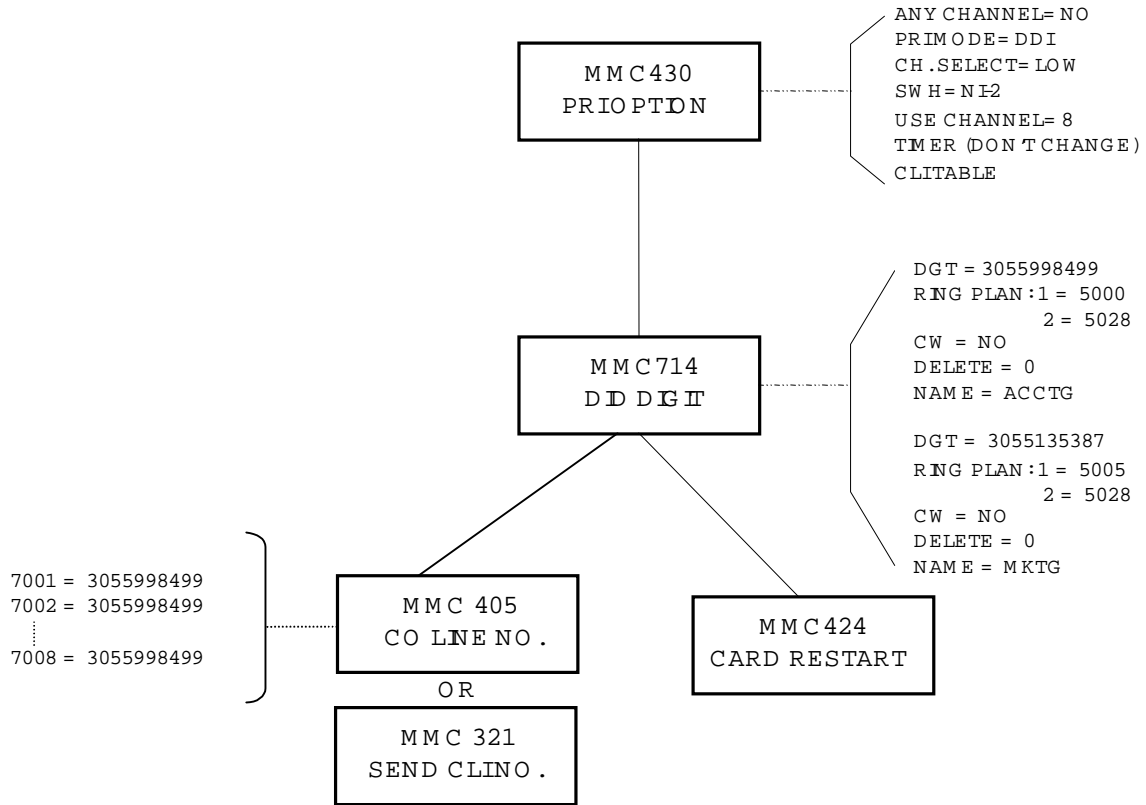
Ordering An ISDN Basic Rate Interface(BRI) Trunk Facility

Ask the Telephone Company Service Order Representative or Customer Account Manager questions to determine the following:

1. What are the various types of BRIs that the Telephone Company can provide service to the desired site with. If you have a choice, tell the Telephone Company that you prefer a National ISDN 1 or 2 (NI-1 or NI-2) BRI. If this is not available, the iDCS 500 will support either the #5ESS Custom or DMS-100 BRI protocols. However, the NI-1 or 2 BRI is most desirable because it is generally the easiest one to work with.

2. Typically, the Terminal Type for the BRI you require should be Type A. Other types (e.g., C or D) are used when connecting to an ISDN telephone set and provide extra functionality called "Supplementary Services" that the simple BRI trunk does not require. The iDCS 500 does not support Central Office based "Supplementary Services" and therefore it is best (and cheaper) if these services are not ordered. However If a Type A circuit is not available then one of the other circuit types will work for incoming and outgoing calls but the suplementary services (call waiting etc.) will not work. The BRI trunk functionality is limited to simple incoming and outgoing calls while the Station side can be used for example for high speed Internet Access (or other forms of dial up networking between computers) and Video Teleconferencing applications. It is the equipment that is connected to a BRI station that determines the use and functionality of the ISDN circuit.

3. The two "B" channels should be requested optioned for switched voice/data service. This will allow both voice and data calls.

4. The iDCS 500 BRI trunk card provides an S/T interface (i.e., 4 wires). The Telephone Company delivers a BRI with a U interface (i.e., 2 wires). Consequently, an NT-1 device must be provided to terminate the U interface and convert it to an S/T interface so that it can be connected to the iDCS 500 BRI interface card.

5. The BRI should be requested provided with two SPIDs (i.e., Service Profile Identifiers) and two telephone numbers. This is automatically provided for a National ISDN BRI but must be requested for a #5ESS Custom or DMS-100 BRI.

6. BRI circuits configured as ISDN trunks will work with normal "trunk hunting" service provided by the Central Office. Hunting may be provisioned by the Telephone Company, at extra cost, between the two "B" channels of a single BRI trunk and/or over a number of "B"channels provided by multiple BRI trunks. Please check with your local telephone company as to whether 1) they provide hunting service for BRI circuits and 2) as to what types of hunting they have available for you to use. Some telephone companies have no problem in properly implementing the Central Office translations for hunting while others do have problems. If you have ordered hunting and your BRI does not work properly, ask the Central Office craftsman to remove hunting. If your BRI works properly with hunting removed, you know that the Central Office did not have their hunting translation installed properly.

Ordering An ISDN Primary Rate Interface(BRI) Trunk Facility

Ask the Telephone Company Service Order Representative or Customer Account Manager questions to determine the following:

1. What are the various types of PRIs that the Telephone Company can provide service to the desired site with. If you have a choice, tell the Telephone Company that you prefer a National ISDN 2 (NI-2) PRI. If this is not available, the iDCS 500 will support either the #5ESS Custom or DMS-100 PRI protocols. However, the NI-2 PRI is most desirable because it is generally the easiest one to work with. In addition to the normal calling party number delivery, the iDCS 500 will support calling party name delivery on a #5ESS Custom or on a NI2 PRI. Name delivery is not supported on a DMS 100 type circuit.

2. The Telephone Company will usually ask about High/Low Selection. Typically, to avoid glare conditions, the Telephone Company and the iDCS 500 need to start searching from opposite ends of the "B" channel list when each attempts to select a "B" channel for call handling purposes. For example, let's say that you have a PRI with eight (8) "B" channels. The channels are numbered 1 through 8. The Telephone Company suggests that in completing incoming calls to the PRI that they will start hunting from the highest numbered "B" channel (i.e., 8) to the lowest numbered "B" channel (i.e., 1) while attempting to find an idle "B" channel to use for a specific call. This means that the system, when looking for an idle "B" channel to service an outgoing call attempt, should start hunting from the lowest "B" channel (i.e., 1) to the highest "B" channel (i.e., 8). This agreement needs to be established between the Telephone Company equipment and the iDCS 500 customer premises equipment for service to be provided.

3. The "B" channels should be requested optioned for switched voice/data service. Thus, they will be able to handle both voice (e.g., speech) and data (e.g., Internet access) traffic.

4. The iDCS 500 presently supports a single "D" channel for from 1 to 23 "B" channels. The iDCS 500 does not presently support NFAS (i.e., Non-Facility Associated Signaling which allows a single "D" channel to control "B" channels on more that one PRI T1 digital span) nor does it presently support a "backup D-Channel".

5. The Telephone Company will ask the number of "B" channels and telephone numbers you want to have provided. There is no relationship between telephone numbers and "B" channels. The number of "B" channels desired is proportional to the facility traffic handling capability similar to a DID trunk group on a T1. The PRI can support any number of telephone numbers since the telephone number simply allows a specific terminating destination in the iDCS 500 when a call is placed to that specific telephone number. Again, this is similar to DID service on a T1. Typically, the Telephone Company charges for both the number of "B" channels provided and for each telephone number provided.

6. As indicated in item 5, incoming calls on a PRI act in a manner very similar to DID service over a T1. Now, the Telephone Company can send you a 3, 4, 7, or 10 digit telephone number as the "Called Party Number" when an incoming call is received. This information must be known and agreed upon by both the Central Office (CO) and Customer Premises equipment (CPE) since the "Called Party Number" must be programmed in MMC714 for routing calls for this number to a specific station, station group, etc. Further, the Telephone Company can transmit a 7 or 10 digit "Calling Party Number" to the premises equipment. This is another point that must be agreed upon by both the CO and CPE so that CPE users can identify where the call was placed from. Typically, a 10 digit "Calling Party Number" is the normal choice of most people.

7. By definition, U.S. ISDN PRI uses B8ZS line code and ESF (i.e., extended superframe) format. This is provided automatically when a PRI is setup and is not a selectable option. The CSU (customer service unit) used to terminate the T1 span supplying PRI service should accommodate this.

8. Prior to cutting the PRI into service, the Telephone Company may ask you to "loop" the CSU (i.e., place the CSU in loopback mode) for test purposes. Only do this if the Telephone Company asks you to do this. You should never loop a PRI with an active "D" channel unless instructed to do so by the Telephone Company since this can cause a problem condition (i.e., the ISDN "D" channel will try to communicate with itself in a "looped" PRI situation).

ITM3 VoIP(Voice over Internet Protocol)

Introduction

The **iDCS 500 ITM3 VoIP**(Voice over Internet Protocol) card is a standards based Voice over Internet Protocol option card that provides toll quality voice and seamless integration in the iDCS 500 via an IP network. VoIP converts voice and signaling into IP packets, which can be transmitted over any TCP/IP network so that voice looks like data. VoIP provides the solution for desktop accessibility in the enterprise business environment. The iDCS ITM3 VoIP option card provides up to eight simultaneous voice conversations over an IP network. An additional eight VoIP channels can be added via a daughterboard installed on the ITM3 card. The easy addition of the ITM3 VoIP board in the iDCS 500 system requires no integration into a server or desktop personal computer. VoIP calls can be established from desktop telephone instruments without complex integration of software or hardware. VoIP eliminates the cost of maintaining a separate network for voice communications in the Intranet environment.

VoIP Overview

VoIP is transported by the iDCS 500 ITM3 card utilizing the ITU standards based H.323 protocol. This standard addresses the means of transferring voice, data, and images through IP (Internet Protocol) networks. IP is the accepted protocol standard for transporting data. With VoIP certain compression standards have also been adopted to represent each second of voice with an amount of bandwidth. The iDCS 500 ITM3 utilizes G.711, G.729A or G.723 standards voice compression codec's. This allows for a selectable 64kbps, 8Kbps or 6.3Kbps bandwidth use when preparing voice compression for IP transport. Compression is used to reduce the digitized voice into a smaller bandwidth that can be carried in smaller packets. The ITM3 H.323 gateway determines the compression method for each call setup. There is also a certain amount of frame/packet overhead in each compression channel. 64K of bandwidth can support 6~7 calls simultaneously. This can vary depending on efficiency features like Silence Suppression and multiframe counts. Unlike switched networks, VoIP connections consist of a sequence of numbered of data packets. Since voice conversation is usually considered "real time" these packets need to be delivered in a consistent manner with minimal delay. This can be controlled via a Gatekeeper which tracks and monitors voice packets. Gatekeepers are part of the H.323 standard but are not required. The iDCS 500i ITM3 is Gatekeeper compliant.

In any Ethernet environment, packet transfers are subject to delays and/or loss. If these delays are greater than 200ms the voice quality will deteriorate. The Ethernet data traffic and network topology should be a consideration when applying the iDCS 500 ITM3 VoIP feature. Network congestion does affect call quality in any VoIP application.

System Applications

Example 1 shows the topology of a Branch Office application. The iDCS 500 system coupled with the corporate wide area network (WAN) allows branch offices to function as part of the main office network while maintaining a local presence. In this configuration the VoIP (Voice over Internet Protocol) feature can be used to allow voice communications with the main office via the corporate WAN (wide area network) from the desktop stations.

Example 2 is similar to the topology of a Home Office application. The iDCS 500 system coupled with the corporate wide area network (WAN) or a Local Area Network (LAN) allows the home office to function as part of the main office.

Main Office – Branch Office

Example 1

Main Office – Home Office

MAIN OFFICE
IDCS 500sl L

PSTN

PSTN

T
R
K
C
T

I
T
M
3

IP
Network

I
T
M
3

D
L
I

D
L
I

Keysets

HOME OFFICE

Keysets
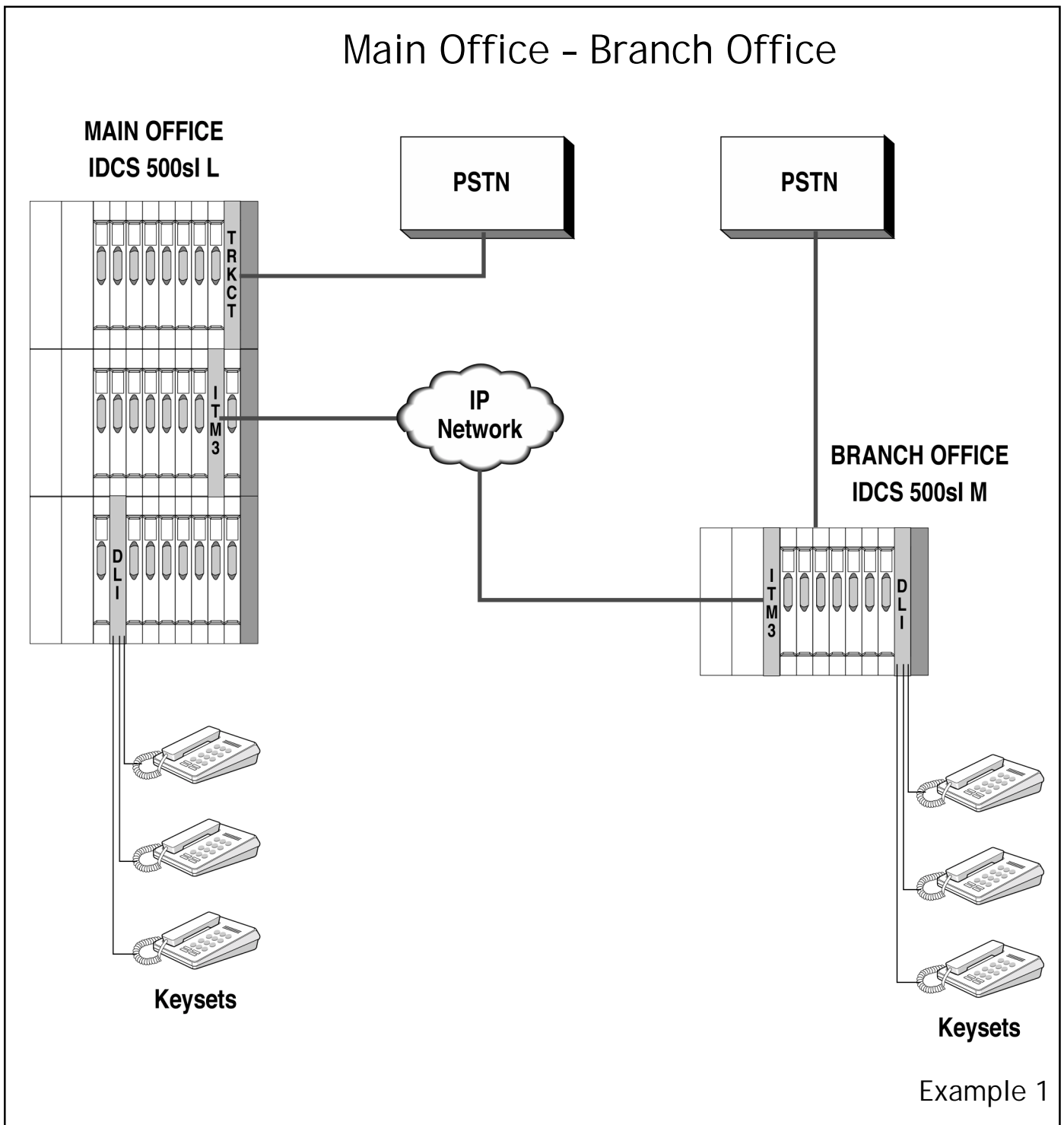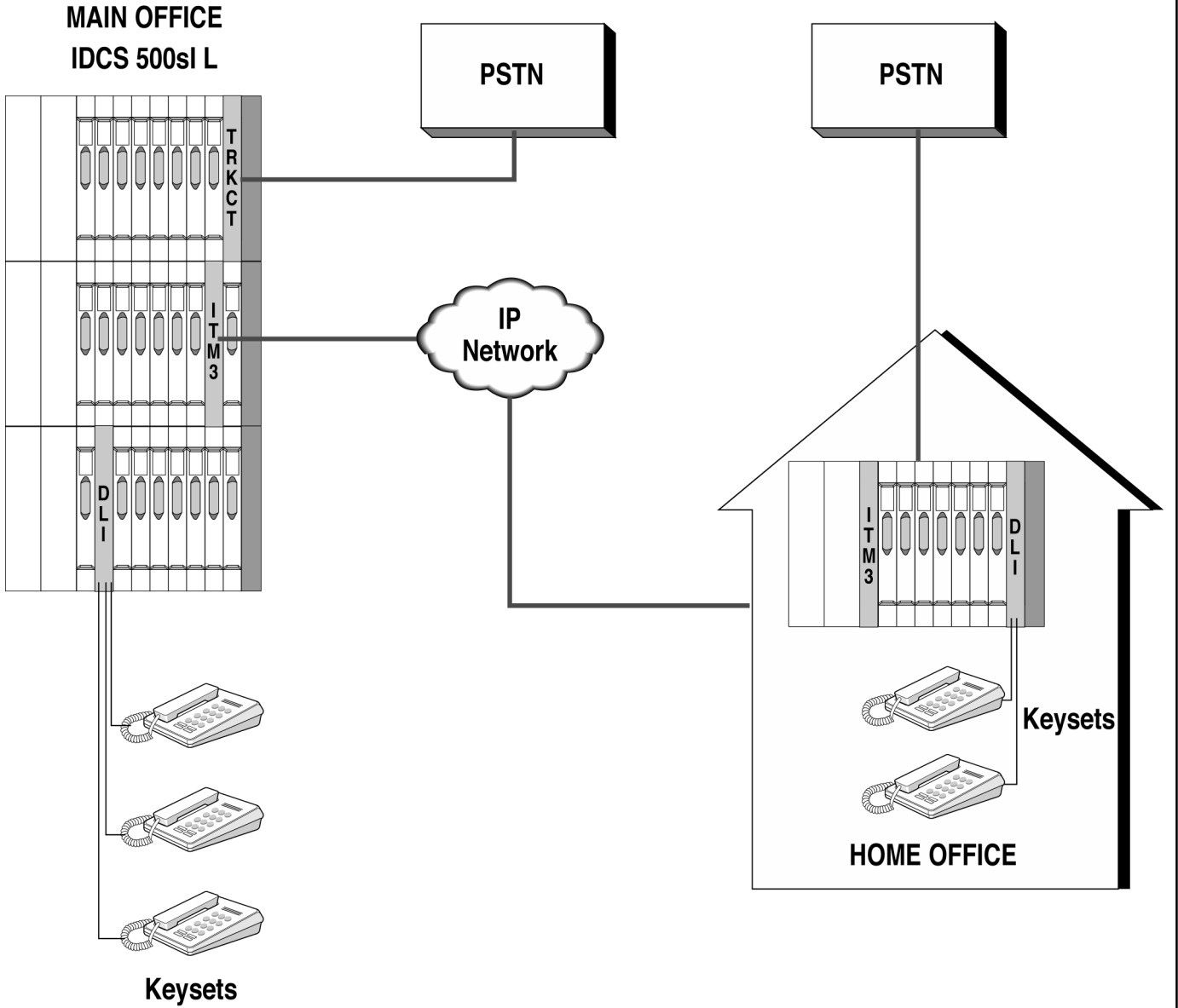
Example 2

ITM3 VoIP Features

- Automatic Number Identification
- Automatic Routing to PSTN
- Access Code Control
- Audio Codec Selection
- Digit Conversion
- DTMF ON/Off Programmable Time Duration
- DTMF Transport Selection
- Echo Cancellation
- Facsimile over IP
- Fast Start
- Gatekeeper Support
- Gatekeeper Alias Name
- Gateway Caller ID
- H.323 V2
- Input Gain Adjustment
- IP Caller ID
- Jitter Optimization Factor
- PCM Input Gain
- RTP Multiframe Counter
- RTP Delay Limits
- RTP Loss Limits
- RTP Packet Loss Check Period
- RTP Over Limit Count
- Silence Suppression
- SMDR Output
- Status Sending
- Voice Gain/Volume Control
- VoIP Address Setting
- Voice Volume Control

Automatic Number Identification

Automatic Number Identification (ANI) provides the calling station number from the calling iDCS 500.

Automatic Routing to the PSTN

When establishing an ITM3 Voice over Internet Protocol type call, if the IP network is busy the iDCS 500 can route the call to the local trunk facilities to complete the call.

Access Code Control

The ITM3 VoIP programming allows control of the digits within the dialing string. This allows the insertion, deletion or modification of digits sent over an IP network.

Audio Codec Selection

The ITM3 VoIP programming allows the selection of three types of audio codec's. These codec's control the amount of voice compression when preparing a voice packet for transport. The three selectable codec standards on the ITM3 card are G.711, G.729A and G.723. The G.711 codec standard compresses the voice into 64Kbps of data. The G.729A codec standard compresses the voice into 8Kbps of data. The G.723.1 codec standard compresses voice 5.3 ~6.3 Kbps of data.

Digit Conversion

The iDCS 500 VoIP programming allows for digit conversion. This method allows users to dial specific codes that are deleted or substituted with other digits to match digits required in an opposite ITM3 gateway. With digit conversion trunk access codes can be inserted to access an outgoing trunk or trunk group at the opposite ITM3 system location.

DTMF On/Off Programmable Time Duration

The ITM3 VoIP programming allows control of the duration of DTMF digits when additional digits are dialed during a VoIP call. When DTMF is used inband, the DTMF digits are recognized as voice packets instead of data packets. These digits sometimes need a longer duration to be recognized by the end equipment. The end equipment may be a voicemail or IVR type system that requires longer duration DTMF digits. The DTMF can also be transported via IP and regenerated at the far end.

DTMF Transport Selection

The ITM3 VoIP programming allows control of the transport method of DTMF digits. DTMF selection permits the use of Inband, Q.931, H.245 signal or H.245 numeric DTMF transport.

Echo Cancellation

Echo cancellation is used on traditional circuit switched system and VoIP packet switched system. Echo Cancellation is a process of removing echo from conversations. Echo Cancellers store a voice sample it sends and extracts the voice from the returned voice in the reverse direction.

Facsimile over IP

T.38 is the accepted H.323 facsimile standard. The iDCS 500 ITM3 uses the T.38 IP facsimile standard. Up to 8 channels of the ITM3 card can be used for facsimile. The number of channels to be used for facsimile can be programmed as needed.

Fast Start

Fast Start can be enabled or disabled in the ITM3 programming to allow compatibility with other VoIP gateway products. H.323 Fast Start exchanges connection information at the connection stage of the H.323 standard and is more widely used that the slow start method. Fast Start uses Q.931 protocol connection to the media. Slow Start uses Q.931 and H.245 protocols to connect to the media.

Gatekeeper Support

The ITM3 VoIP programming allows the support of a Gatekeeper. An H.323 Gatekeeper is usually an additional PC type server connected to the LAN or WAN that monitors and manages VoIP services such as address translations, bandwidth management, authentication, authorization, registration, billing (SMDR type accounting). A Gatekeeper is not required and is most often used in large "managed" networks where large amounts of VoIP traffic is transported.

Gatekeeper Alias Name

Gatekeeper Alias name can be input with a maximum of 15 characters. The Gatekeeper Alias is a name given to each host to distinguish it from another in an H.323 VoIP network. This is used when there are multiple gatekeepers.

Gateway ID

The ITM3 is considered a gateway between the iDCS 500 switched system and the IP network. To determine which node or location is calling the ITM3 can insert a four-digit gateway ID to identify where the call originated. Gateway ID's are used for billing purposes.

H.323

H.323 is a standard approved by the International Telecommunication Union (ITU) in 1996 to promote compatibility in videoconference transmissions over IP networks. H.323 was originally promoted as a way to provide consistency in audio, video and data packet transmissions in the event that a local area network (LAN) did not provide guaranteed quality of service (QoS). Although it was doubtful at first whether manufacturers would adopt H.323, it is now considered to be the standard for interoperability in audio, video and data transmissions as well as Internet phone and voice-over-IP (VoIP) because it addresses call control and management for both point-to-point and multipoint conferences as well as gateway administration of media traffic, bandwidth and user participation. H.323, which describes how multimedia communications occur between terminals, network equipment and services, is part of a larger group of ITU recommendations for multi-media interoperability called H.3x. The H.323 standard is evolving to different versions that improve the standard. H.323 V1 was the first accepted standard. Subsequent standards improve connections and provide services such as call forwarding, call waiting etc. The ITU recommends that each newer version is to be compatible with the earlier versions. The H.323 protocol stack includes many other protocols that support media standards, security, peripherals, transmission, signaling, and speech compression.

Input Gain Adjustment

Input gain control allows adjustment for specific network conditions by adjusting the gain from the iDCS 500 to the ITM3 VoIP DSP's. This is useful in "balancing" network VoIP calls.

IP Caller ID

IP caller ID is a selectable option that will display the calling ITM3 IP address.

Jitter Optimization Factor

Jitter is the deviation of the transmission signal in time or phase. Jitter can cause the degradation of voice quality and loss of signal. The optimization factor on the ITM3 sets the standard for buffering that is required in the PCM voice process when receiving packets from the network.

PCM Input Gain

The PCM input gain allows the adjustment of the PCM value to the ITM3 DSP codec. The range of adjustment is –31dB to +31dB.

RTP Mutiframe Counter

The RTP (Real Time Transport Protocol) multiframe counter on the ITM3 sets the number of frames that do not require the header information. This allows packets with the same header information to not send multiple repeat headers. These packets are buffered and sent as a single packet.

RTP Delay Limit

RTP (Real Time Transport Protocol) delay limit is a "watermark" to determine when there is a network error.

RTP Loss Limit

The RTP (Real Time Transport Protocol) percentage of packet loss that will be considered a network error.

RTP Loss Check Period

The base line period to determine RTP (Real Time Transport Protocol) packet loss.

RTP Over Limit Count

When the RTP delay or RTP loss limits is exceeded this counter sets the accumulated frequency to be used as a basic index to consider network error.

Silence Suppression

Silence suppression detects non-voice periods and prevents the transmission of voice packets that do not contain noise. The average English conversation is idle 50% of the time during the conversation. The non-voice periods do not need to be transmitted. To adjust for the silence suppression period most gateways produce a "comfort" noise to simulate non-voice periods.

SMDR Output

The iDCS 500 reports VoIP calls on the iDCS 500 SMDR report.

Status Sending

Status Sending is a cyclic check of the status of the remote ITM3 card(s) to determine network quality.

VoIP Address

The iDCS 500 permits modification to the ITM3 IP address via KMMC or PCMMC.

Voice Volume Control

The iDCS 500 permits modification to the ITM3 voice volume control when the voice packet is processed to the iDCS 500 system. The adjustments range from –31dB to +31dB.

ITM3 VoIP(Voice over Internet Protocol) Card

The iDCS 500 ITM3 VoIP card supports up to eight voice calls over an IP network connection using the industry standards based H.323 protocol. An additional eight VoIP channels can be added by installing an eight-circuit daughterboard for a total of sixteen channels of VoIP. The ITM3 cards fit into any universal iDCS 500 card slot. The iDCS 500i supports a maximum of two ITM3 cards per cabinet.
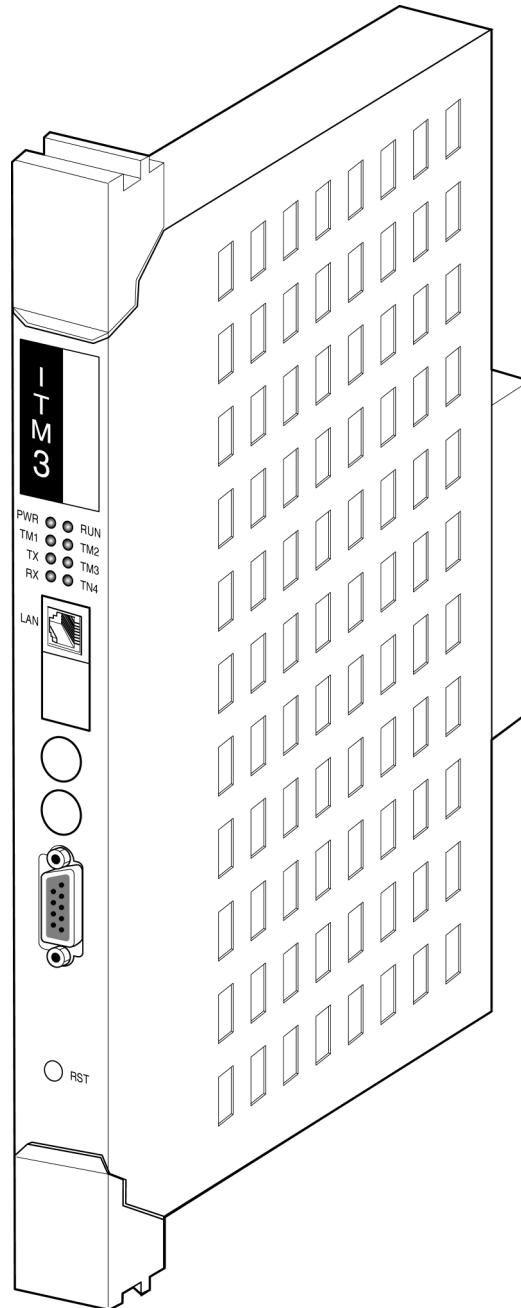
ITM3 Hardware Overview

The iDCS 500 ITM3 VoIP trunk gateway controller is a Motorola MC68EN360 processor. 3 Megabytes of FLASH store the program and 16 Megabyte of DRAM is used for the ITM3 operational database. VoIP is integrated into the system via HDLC (High-level Data Link Control) protocol which is an industry standard of data link communications.

The ITM3 card is encased in a static dissipative ABS plastic shell for added protection during handling.

The iDCS 500 ITM3 has eight LED's on the front of the card to show the operational status of the ITM3. The ITM3 LED's are arranged on the face of the ITM3 card to provide a visual indication of the operational status of the ITM3 card. The LED layout is as follows:

ITM Card Labeling

PWR	LED1	LED2	IP
SW 1	LED3	LED4	SW 2
SW 3	LED5	LED6	SW 4
RX	LED7	LED8	SW 6

LED 1   When is ON when power is applied to the ITM3 card
LED 2   Indicates VoIP traffic.
LED 3   Is ON when booting and will flicker at a very high rate when the ITM3 card is running.
LED 4   Indicates the initialization of the ITM3 DSP's and is ON after initialization is complete
LED 5
LED 6   Is ON when the ITM3 is booting. After booting this LED will turn OFF. When ITM3 initialization is complete this LED will turn ON again.
LED 7   Is labeled RX and indicates an Ethernet connection.
LED 8   Will flicker at a high rate after complete initialization indicating the ITM3 card is running

The RJ 45 10/100BaseT RJ 45 female data jack on the front of the ITM3 card connects to the LAN. A RJ 45 UTP data cable "straight" data cable is used to connect to a LAN.

The ITM3 card has a recessed RESET button that will initialize the ITM3 card manually if required. To load the flash memory of the ITM to the DRAM after power up or after resetting the system takes approximately 3 minutes.

The RS232 DB 9 connector on the face of the ITM3 card allows trace monitoring of the ITM3 functions. This is used for engineering purposes only.

ITM3 Card Installation

The ITM3 card can mount in any iDCS 500 universal card slot. The ITM3 is supported with iDCS 500 M or L version software. There is a processor on the ITM3 card and it is not recommended to insert this card with system power on. Insert up to two ITM3 cards per cabinet. Push firmly in the middle of both card ejectors on each card to ensure that it is fully inserted into the backplane connector.

ITM3 VoIP 8 Channel Expansion Daughterboard

The ITM3 basic 8 channel VoIP Trunk Gateway can be expanded to a total of 16 VoIP channel by adding an 8-channel daughterboard. To install the daughterboard the card ejectors must be removed and the card cage screws removed. A protective anti-static ground strap should always be used when handling electronic printed circuit boards. Remove the ABS plastic cover. With the component side facing up the keyed daughterboard can then be inserted onto the daughterboard connectors.
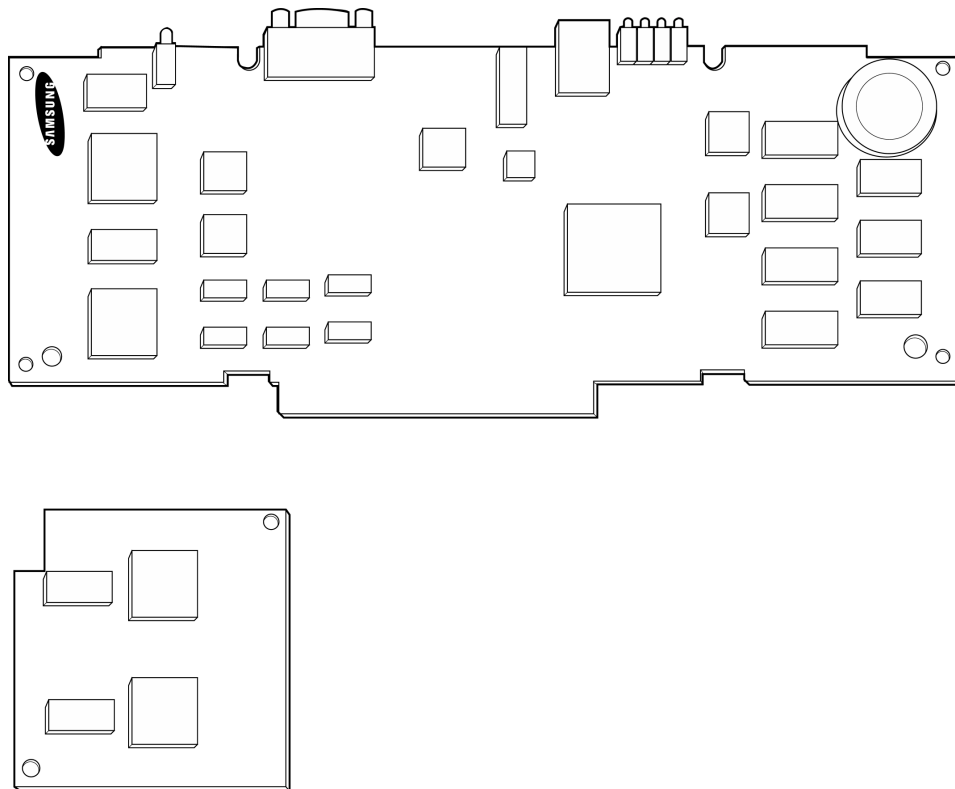
Site Applications

The ITM3 card connects directly to an IP network via the RJ45 UDP jack located on the front of the card. This network can be a local area network (LAN) or a wide area network (WAN). ITM3 applications would more aptly use the WAN application to assist in toll bypass and main office to branch office connectivity. Data traffic on LAN and WAN environments is more predictable as compared to Internet traffic. WAN applications have a gateway that allows computer users to leave the local area network (LAN) to reach another network. The gateway acts as a "bridge" to other networks. Example 3 shows the typical connection of the ITM3 to a WAN with gateway routers.

The cable needed to connect the ITM3 to a LAN is a standard "straight" 8 conductor data cable. This cable is sometime referred to as a LAN UTP category 5 ,4 pair RJ45 male to male data patch cable. Connection to the LAN can be via a patch panel or hub device. The data patch cable is not provided with the ITM3 card and must be purchased separately though a data equipment supplier. Example 3 shows ITM3 connection to a LAN with hub devices.

The ITM3 VoIP programming has several layers that allow greater flexibility to perform tandem VoIP iDCS 500 station to station calls or VoIP iDCS 500 station to trunk calls. Example 4 shows the call paths for these types of calls.

Station call in system B to the PSTN in system A

Station call in system A via ITM to ITM to a station in system B

ITM3 to LAN HUB

Idcs 500sl

ITM3

HUB

HUB

GATEWAY ROUTER
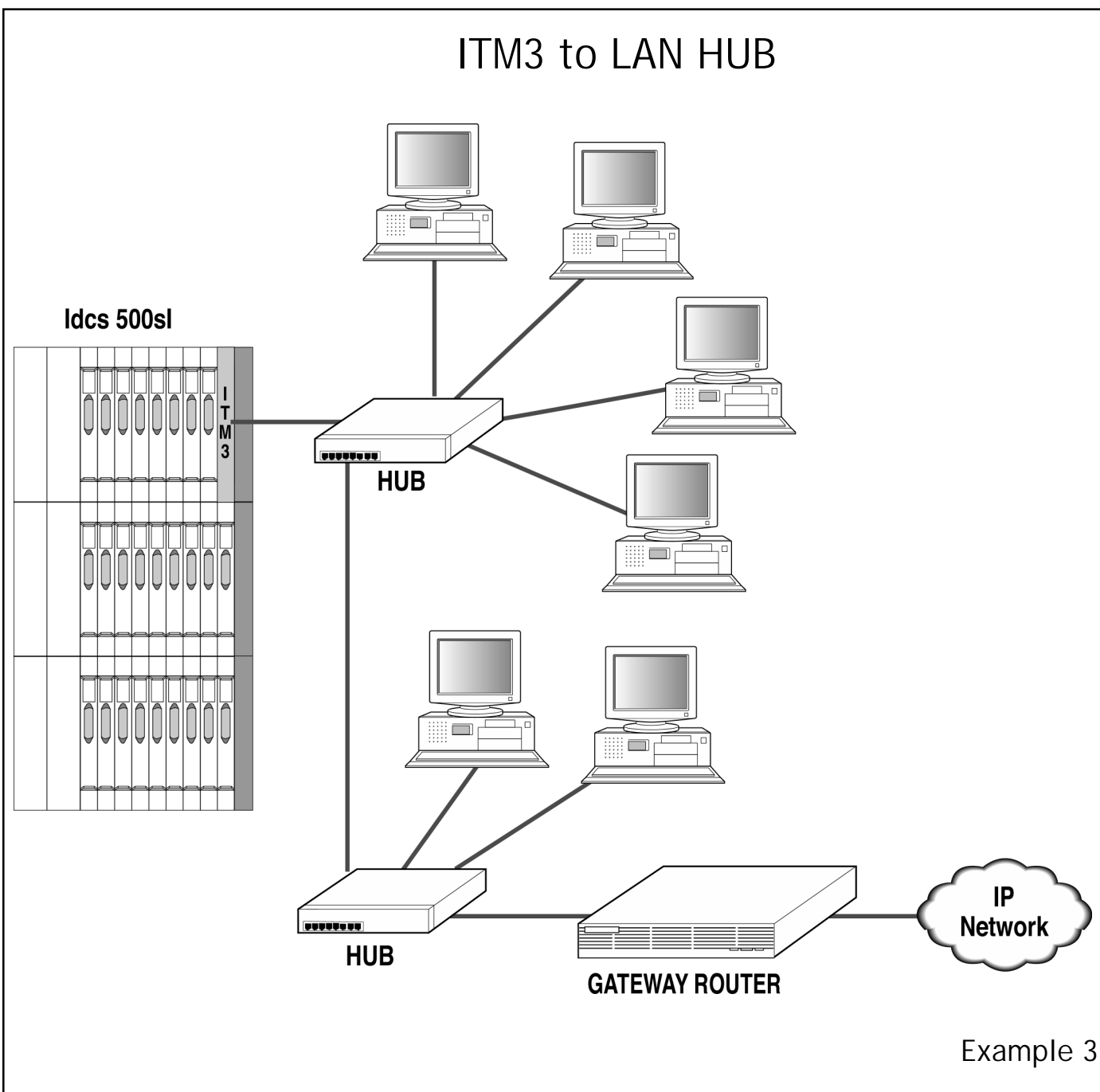
IP Network

Example 3

iDCS 500 ITM3 VoiP Call
to Public Telephone Network
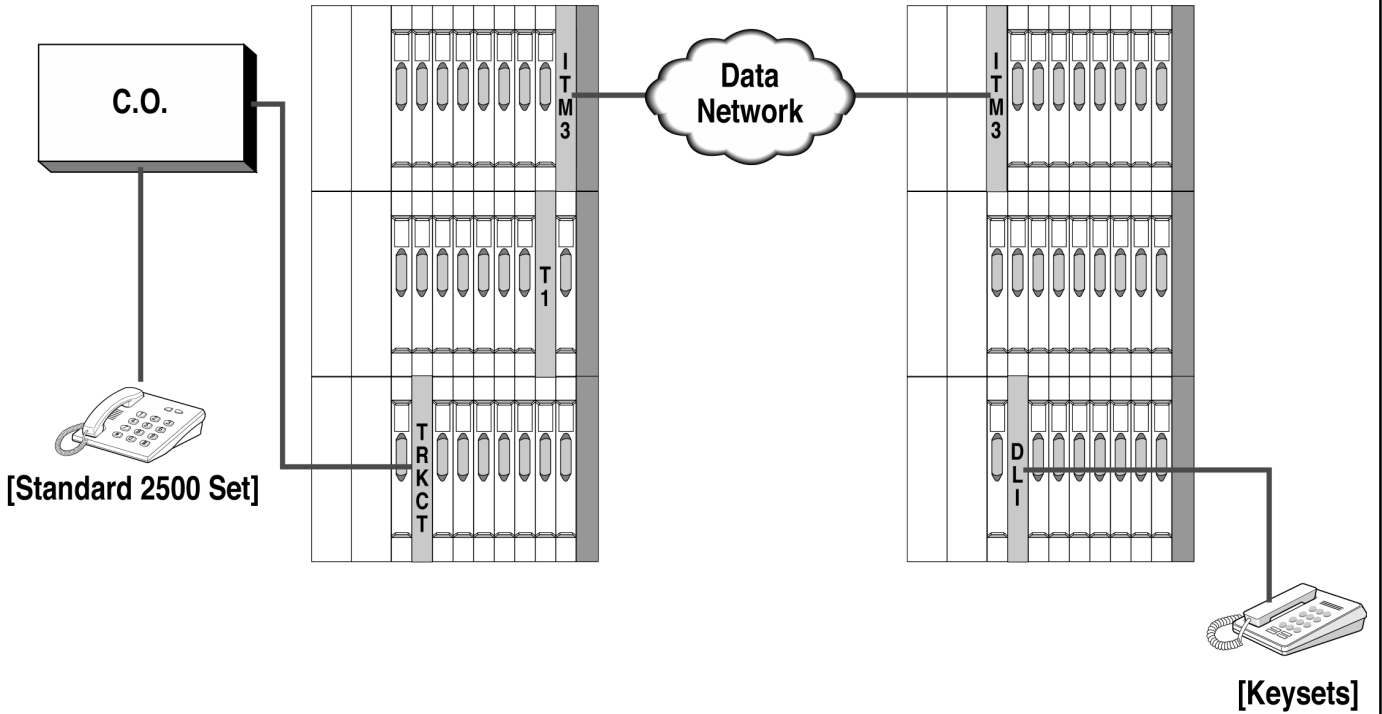
iDCS 500 to iDCS 500 Station Call

Example 4
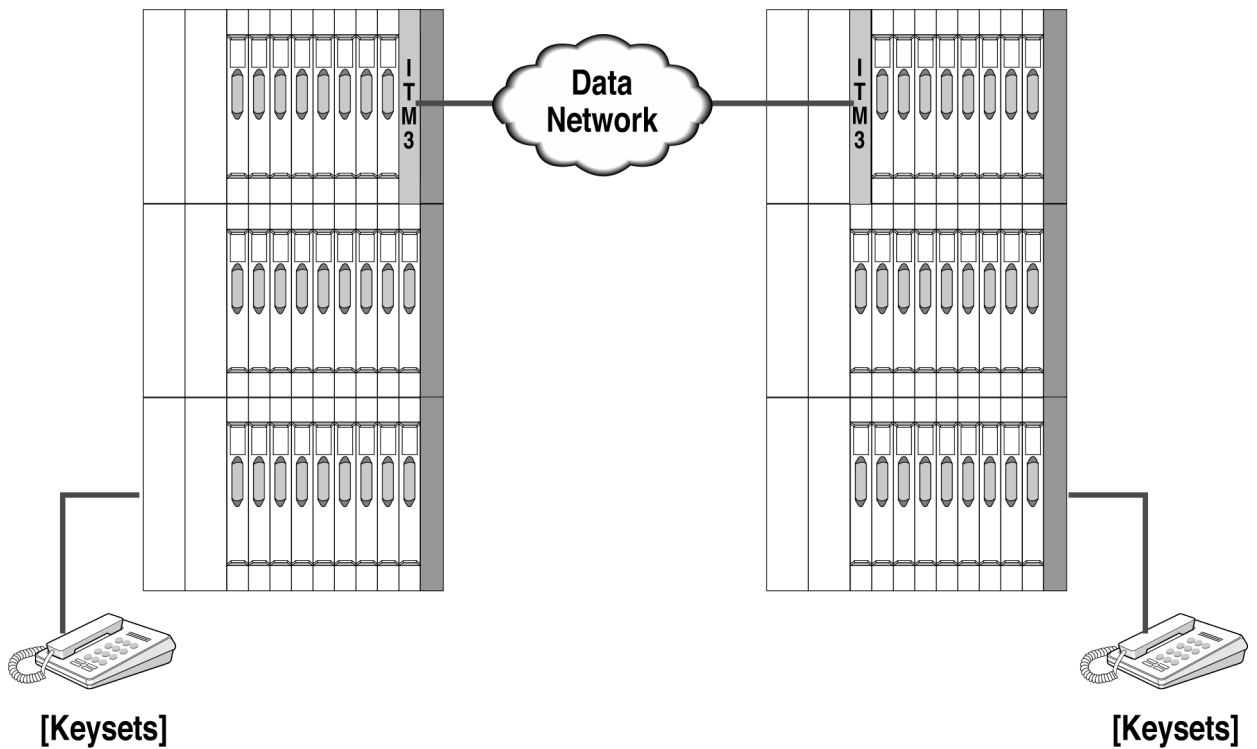
iDCS 500 ITM3 Programming Overview

ITM3 Operational Concept

The iDCS 500 ITM3 functions as a VoIP trunking gateway. The iDCS 500 software considers the ITM3 ports as trunk ports. The iDCS 500 ITM3 card programming is similar to installing or adding other cards in the iDCS 500 system. Each ITM3 card has ports assigned that are comparable to the system trunk ports. In a default system the iDCS 500 will automatically identify that an ITM3 card is present and assign trunk numbers to the available ports. The trunk numbers will be in the 7XX range. If an ITM3 card is to be added to an existing system it is recommended to power off the cabinet that the card is going to be installed in.

Programming ITM3 trunks are similar to programming traditional trunks. The ITM3 VoIP trunks can be in trunk groups (MMC 603 Assign Trunk Groups) or ITM3 VoIP trunks can be individually assign as Direct Trunk Keys (MMC 722, MMC 723 Key Assignments). ITM3 VoIP trunks can also be included in LCR programming to provide alternative routing of outgoing calls. Station calls between iDCS 500 systems via VoIP can also be accomplished via ITM3 trunks. An ITM3 or other compatible VoIP gateway must be present on the LAN or WAN to place VoIP calls to and from the ITM3 card.

VoIP Call Routing Concept

VoIP calls via the ITM3 use routing tables to determine where to route the call based on digits dialed. Digits can be added or removed as part of the call and be transparent to the calling station. The digits dialed then reference a table that has the destination IP address then repeats the digits needed at the far end.

Programming of the ITM3 follows an LCR type of programming where the tables are used to reference the dialed number and send the call to the right IP destination. It is not necessary to have LCR programmed to use the ITM3 VoIP facilities. Incoming calls on the ITM3 perform similarly to DID service where incoming digits are translated to determine the destination in MMC 714, DID Digit Translations or to the operator group.

A basic example of the direct station to station dialing string in an iDCS 500 directing a call over an ITM3 card to another iDCS 500 ITM3 card is as follows:

80   0   201

- 80 is the trunk group access code to the ITM3 trunks.
- 0 is the access code that references an IP address table.
- 201 is a station in the distant 500 system.

In the above example the station caller will hear a second dial tone when 80 is dialed. After dialing 0 and station number 201 the ITM3 program looks up the corresponding IP address with the access code 0. IP communications are established and the access code 0 is deleted then the digits 201 are sent in an IP packet and repeated by the far end ITM3. The caller will hear station ringback tone and is able to converse when the called party answers. The access code can also be imbedded in the sent digit string information allowing more transparent dialing.

Another scenario is where the ITM3 can be optioned via programming to support inband or out of band DTMF transmission. An example is if the far end station is answered by a voice mail system and the calling party wishes to navigate a voice mail system the digits sent can be sent "out of band". These digits are sent as data messages as opposed to transporting via the "voice" connection. The far end receives the DTMF digit data and repeats the received data as analog DTMF. This reduces bandwidth use and possible DTMF digit distortion during transport.

IP(Internet Protocol) Addressing

To program the ITM3 VoIP it must be known where to route IP based calls. A basic knowledge of Internet Protocol (IP) networking should be understood to program IP addresses and IP gateway addressing. The iDCS 500 must have an IP address associated with each ITM3 card installed. This can be programmed only after the ITM3 card(s) are installed in the system. The IP address can match the existing LAN addressing scheme or it can be a totally different IP address level. It is suggested to match the existing LAN IP address plan to permit ease of administration. Also required will be an IP subnet mask and a gateway address.

Subnet addresses allow connectivity in the same network and determines if the data needs be forwarded to a router.

Gateway is a term used as a junctor or the meeting point of two networks. This meeting point can be a router or an ITM3 card. When a request is made by a PC or other IP device (ITM3) and the address is not in the local network the gateway IP address is where the next search is performed. The gateway then looks outside the local network for a response to the request. This all happens within milliseconds. Once a response is obtained the LAN gateway router acts as the bridge between the two networks. The information can be strictly data or it can be voice data. In the iDCS 500 ITM3 programming the gateway is equivalent to the router address to leave the local LAN and access another network.

ITM3 Programming Responses

The ITM3 will not update while programming. The update of ITM3 data changes take effect after programming has been exited and closed. This can be observed by the IPC message activity on the PMCP card.

If the IP address of the ITM3 card is changed the ITM3 must be restarted to update the new IP address information. The update takes about 3 minutes to write to and then retrieve from flash memory. Also during this updating process, if an SCP or LCP is mounted the corresponding LED will flicker as off-line until the card is on-line.

ITM3 Programming MMC's

There are six MMC's directly related to the operation of the ITM3 card.

MMC 831 VoIP Parameters

Assigns IP addresses, Facsimile channels, CLIP tables and VoIP mode.

MMC 832 VoIP Code Programming

Assigns VoIP access codes, access code length, the number of digits to delete or insert, remote end trunk access code and IP selection tables

MMC 833 VoIP Address Table

Allows assignment of IP addresses in specific tables to route calls to remote destinations

MMC 834 VoIP Options

This MMC programs the VoIP companding, call set up and signaling types and other parameters associated with VoIP signaling

MMC 835 VoIP DSP Options

Assigns the individual parameters associated with the VoIP DSP operation. Codec type, filtering, input gain, voice volume and RTP (real time transport protocol) parameters.

MMC 836 VoIP Gatekeeper Options

This MMC allow the setup parameter to allow the ITM3 to operate with a network supported by VoIP Gatekeeper(s).

ITM3 Application Programming

When applying VoIP to an IP network there are several areas that must be taken into consideration. The installation must be looked at fully to first understand the topology and routing of VoIP calls. In this programming example the concept used will be in an Intranet environment for simplicity. This will also allow a better understanding of the ITM3's call capabilities within a corporate environment.

The areas to consider when programming the ITM3 are:

- ITM3 programming. (trunk groups, LCR overflow, etc.)
- ITM3 incoming use. (routing to station or groups)
- ITM3 routing of outgoing calls.
- IP network addresses.
- LAN or WAN utilization before voice is added

In our programming example there will be 3 iDCS 500 systems connected to the network. All sites have distinctive 3 digit numbering plans for easy identification and are on the same WAN network separated by routers. There is a common connection to the Internet via a Firewall which is not shown here. The programming examples shown are DPAP program displays for ease of understanding but the programming can also be accomplished via KMMC. This example is showing the use of individual access codes for each location. Programming can allow transparent station dialing between locations by deleting and inserting digits.

System A:
2XX station numbers
ITM3 IP address: 105.52.10.202
Subnet IP: 255.255.255.0
Router gateway IP: 105.52.10.1
2 ITM3 cards

System B:
3XX station numbers
ITM3 IP address: 105.52.9.203
Subnet IP: 255.255.255.0
Router gateway IP: 105.52.9.1
1 ITM3 cards

System C:
3XX station numbers
ITM3 IP address: 105.52.9.203
Subnet IP: 255.255.255.0
Router gateway IP: 105.52.8.1
1 ITM3 card

Intranet
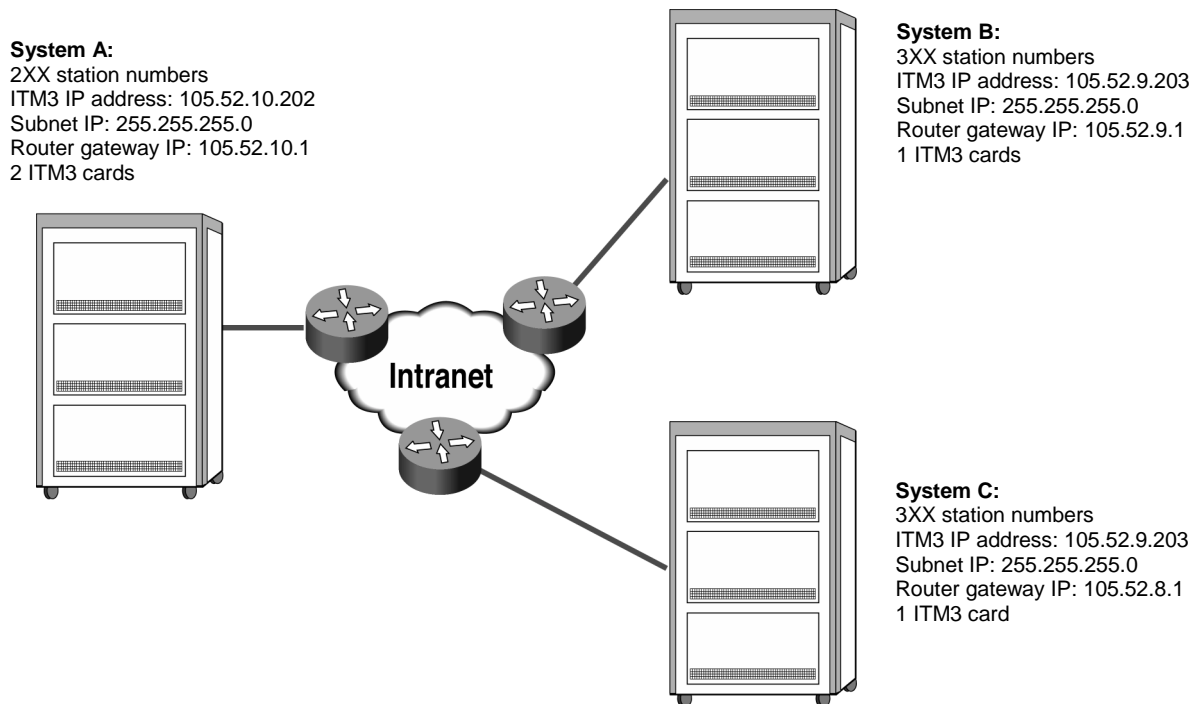
MMC 831: VoIP Parameters, provides a means to apply the Internet Protocol (IP) addresses to the ITM3 card. This MMC also assigns the number of channels that can be used for IP facsimile capabilities. The CLIP tables allow the calling station number to be received at the far end ITM3 location.

- **IP ADDRESS:** Specifies the IP address for the ITM3 card. When changing the address via KMMC three digits must be input for each field. Example (Default: 168.219.76.101).

  NOTE If the ITM3 IP address is changed the ITM3 card must be restarted.

- **SUBNET MASK:** Specifies the IP subnet mask. When changing the address via KMMC three digits must be input for each field. (Default: 255.255.255.0)

- **GATEWAY:** Specifies the LAN gateway address when leaving the local network. When changing the address via KMMC three digits must be input for each field. (Default: 168.219.76.1)

- **STS Period:** Status Send Period designates the timed message cycle to check the remote IP status (Range: 0~60 sec.) STS is related to the RTP overcount limits to determine if a network error exists. STS also determines when the second choice IP routing when first choice network has an error condition.

- **MAX FAC CH:** Maximum facsimile channels. Specifies the maximum number of ITM3 channels that will accept IP T.38 protocol IP facsimiles (Default: 0). Only the first 8 channels on the ITM3 can be selected for fax use.

- **CLIP:** Calling Line Identification Presentation. This provides the calling station number when calling from one ITM3 location to another ITM3 location. Three options are available: NONE, Table 1 or Table 2. MMC 321 Send CLI Number, determines what number identification will be sent.

- **VoIP MODE:** The three options available are Follow Incoming Digits, Follow Trunk Ring or Follow DID Translation Tables. Follow Trunk Ring provides service for VoIP calls that do not have an incoming number associated with the call so the call is sent to the default location.

MMC 831 VoIP PARAMETERS Programming

System A

Cabinet	Slot No	IP Address	Subnet Mask	Gateway	STS Period	Fax Count	CLIP Table	VOIP Mod
1	1	105.52.10.201	255.255.255.0	105.52.10.1	5	0	1	Normal
1	2	105.52.10.202	255.255.255.0	105.52.10.1	5	4	2	DDI

These are the required IP addresses for each ITM3 card

Status Send period (0~60 sec) If an OEM gateway is used this should be set to 0

Maximum number of FAX channels allowed

Assigns which system CLIP table to use on an outgoing ITM call for calling station ID

Determines the type of service on a particular ITM card
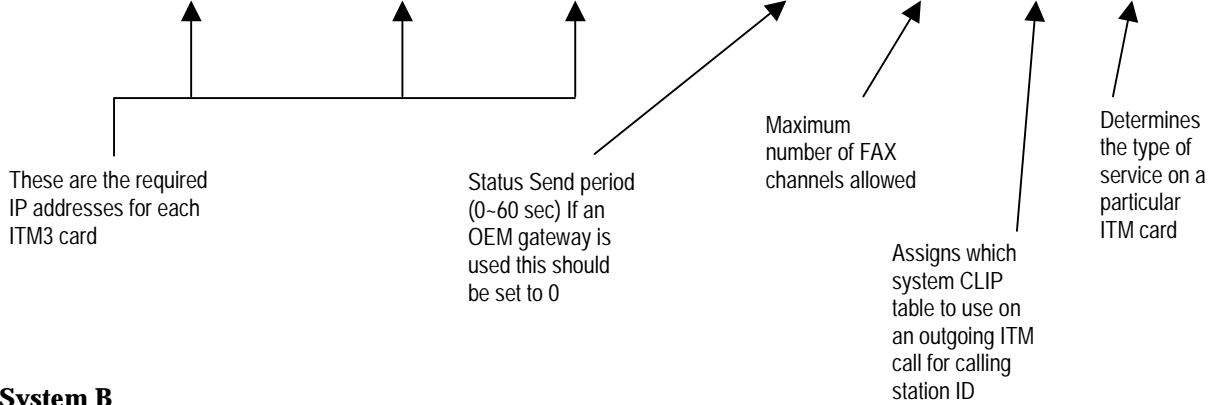
System B

Cabinet	Slot No	IP Address	Subnet Mask	Gateway	STS Period	Fax Count	CLIP Table	VOIP Mod
1	1	105.52.9.203	255.255.255.0	105.5.9.1	5	2	1	DDI

System C

Cabinet	Slot No	IP Address	Subnet Mask	Gateway	STS Period	Fax Count	CLIP Table	VOIP Mod
1	1	105.52.8.204	255.255.255.0	105.52.8.1	5	2	1	DDI

MMC 832: VoIP Code, provides an access code that corresponds to an IP address when the access code is dialed. The access code points toward an IP reference table that has the far ends corresponding IP address. The digits can be modified by deleting or inserting digits to manage the digits sent and received at the far end.

If access codes are not removed they will be sent with the dialed digits. This allows the possibility of transparent dialing to the station user which is used in our example.

- **ACCESS CODE:** This is the access code once the ITM3 is accessed directs a call based on the routing tables. An access code table is references an access code. A maximum of 8 digits are available with 63 access code entries (00~62).

- **CODE LENGTH:** This field requests the number of digits that are expected to be received to make up the access code.

- **DEL LENGTH:** This is the number of digits to delete after receiving the access code. If no digits are deleted the access code will be sent as part of the call to the destination to continue routing at the far end destination.

- **INSERT CODE:** This is the code to insert for routing at the destination. This can be used when different numbering plans exist or if a dial 9 access is needed to be inserted in the dialed digits.

- **IP TABLE 1:** This is the first table referenced for routing the access code to an IP address The 500si has 31 IP tables (00~30) with 32 entries (00~31) in each table.

- **IP TABLE 2:** This is the second table referenced as a look up for an IP address to route the call based on the access code.

- **IP START:** This entry indicates where in a table to start looking for an IP code to associated with the access code. This can be used to manage where to start looking for an IP address in high traffic ITM3 applications. Example: If IP address routing to the desired destination is known to be in the last 7 entries of a table the IP START location would be 25. IP address searching would start looking at table entry 25.

The following is an example of MMC 832 VoIP Code programming:

The access codes here are default and can be changed as needed

This denotes the number of digits in the access code

How many digits to delete from access code to not to sent to remote site

If required, this inserts digits to replace deleted digits

This references which IP table used in MMC 833. For simplicity, it is suggested to use a different IP index for each access code

The Table column is actually an entry number

Table No	Access Code	Length	Delete	Insert Code	IP Index1	IP Index2	IP Start
0	0	1	1		0		0
1	1	1	1		0		0
2	2	1	1		0		0
3	3	1	1		0		0
4	4	1	1		0		0
5	5	1	1		0		0
6	6	1	1		0		0
7	7	1	1		0		0
8	8	1	1		0		0
9	9	1	1		0		0
10			0				
11			0				
12			0				
13			0				
14			0				

This is the second choice IP table look up. If the entries are unavailable in IP Table 1 the system refers IP Table 2. This is normally not used unless there is a very large VoIP network requiring traffic

This table designates where to start looking in the IP Table entries in MMC 833. If all entries are set to start at entry 00 and the network is erred based on the STS conditions the system will look at the next available entry in that table. For simplicity, it is suggested that each IP Index has it's own access code and then a Start entry of 0 is all that is required.

MMC 832 VoIP Code Programming

System A

Table No	Access Code	Length	Delete	Insert Code	IP Index1	IP Index2	IP Start
0	3	1	0		0		0
1	4	1	0		1		0
2	2	1	0		2		0
3		1	0				0
4		1	0				0
5		1	0				0
6		1	0				0
7		1	0				0
8		1	0				0
9		1	0				0
10			0				
11			0				
12			0				
13			0				
14			0				

Access code for same or "self" system included for testing purposes. Suggested to always include for self testing

Note that there are no delete entries. This allows the access code to be included and sent with the dialed digits. Calling party only dials trunk group access code and three digits to reach far end destination.

System B

Table No	Access Code	Length	Delete	Insert Code	IP Index1	IP Index2	IP Start
0	2	1	0		0		0
1	4	1	0		1		0
2	3	1	0		2		0
3		1	0		0		0
4		1	0		0		0

System C

Table No	Access Code	Length	Delete	Insert Code	IP Index1	IP Index2	IP Start
0	2	1	0		0		0
1	2	1	0		1		0
2	4	1	0		2		0
3		1	0		0		0
4		1	0		0		0

MMC 833: VoIP IP Table, provides the IP address destinations in tables that the access code is directed to in MMC 832. There are 31 tables with up to 32 entries each. The destination IP address is required to route dialed digits based on the access code and digits dialed. The IP entry field in the KMMC mode is divided into 4 sections allowing modification of separate IP address fields.

In the examples there are 3 access codes corresponding to 3 Tables (0,1 and 2).

System A

Table No	0

Entry No	Destination IP Address
0	105.52.9.103
1	
2	

Table number referenced in MMC 832 to correspond with an access code

The Entry Number corresponds with the IP Start in MMC 832

IP address destination system B

Table No	1

Entry No	Destination IP Address
0	105.52.8.204
1	
2	

IP address destination system C

Table No	2

Entry No	Destination IP Address
0	105.52.10.202
1	
2	

IP address to system A for self test

System B

Table No	0

Entry No	Destination IP Address
0	105.52.10.202
1	
2	

Destination system A

Table No	1

Entry No	Destination IP Address
0	105.52.8.204
1	
2	

Destination system C

Table No	2

Entry No	Destination IP Address
0	105.52.9.203
1	
2	

Destination system B for self test

System C

Destination system A

Destination system B

Destination system C for self test

MMC 834: VoIP Options, provides various VoIP support options. The options set in this MMC are system wide to all ITM3 cards.

- **PCM COMPANDING:** Select U-law or A-law PCM. Default U-law for the USA. ITM3 cards must have matching companding to the system they are mounted in.

- **H.323 FAST START SETUP:** Enables or disables the H.323 Fast Start call method.

- **GATEWAY CALL ID:** This a numeric entry that identifies the iDCS 500si system via an ITM3 connection. The maximum entry is 4 digits.

- **CALLER ID TYPE:** This option controls the calling party identification type. There are 3 possible selections. ANI which shows the calling station number when the call is an ITM3 to ITM3. IP which shows the calling ITM3 IP address. Gateway ID which is a 4 digit preprogrammed ID.

- **INCOMING CHANNEL SELECTION:** This option selects whether the incoming channel is Sequential or Distributed.

- **DTMF GENERATION:** This option allows 4 different transport types of DTMF. Inband, Q931, H.245 Signal, H.245 Numeric are the available selections.

- **FAX SIGNAL TYPE:** This option selects the facsimile standard to use when transporting facsimiles via the ITM3. Selections are T.38 or the proprietary Samsung formats. Default is the T.38 facsimile standard.

- **SWITCH TO H.245:** This option enables switching to the H.245 protocol at the time of Fast Start

- **DEFAULT DIL:** This allows programming of the default DIL number when a digits are not included on an incoming call.

- **SNMP SERVER ID:** This allows entry of the SNMP server IP address when connected to network management equipment.

- **SIGNALLING PORT:** Indicate the port number for H.323 signaling and sets a range of numbers allowed by firewall equipment. The IP path or port used is 10000

- **STATUS PORT:** Port number for the exchange of status information between ITM3 cards. The IP path or port used is 20000

- **WCS PORT:** Proprietary Samsung Web Call Service. The IP path or port used is 20010

- **SIGK ACCESS PORT:** Samsung Internet Gatekeeper. The IP path or port used is 20020.

- **MAKE DEFAULT DB:** Defaults the ITM3 card(s)**.**

MMC 834 VoIP Options

Item	Value
PCM Coding	¥i-law
Fast Setup	Disable
GW CID	1234
Bill Type	SAMSUNG
CID Type	ANI
Incom Type	Sequential
DTMF Type	INBAND
FAX Signal	T.38
H245 Switch	Disable
DCP Number	
SNMP Server	
Signal Port	10000
Status Port	20000
DTMF Port	20010
TFTP Port	20020

PCM CODING must match coding type of the system the ITM3 card is in. Example: In the USA Mu-law is used in the iDCS 500 and in the UK A-law is used. Subsequently, in the USA the ITM3 should be set for Mu-law

Fast Setup = Q.931→ Connection to media

ID of ITM3 card must be numeric

Billing type Samsung is a proprietary method and should be changed to NORMAL for use in the USA

MMC 503 controls DTMF duration when INBAND is used

H.245 Enable is used when Fast Start is enabled and DTMF generation is set to H.245

DIL number when only an IP address is received

Used when connected to a network with management equipment using SNMP

Port number for H.323 when using firewall equipment

MMC 835: VoIP DSP Options, provides the accessibility to set various ITM options. These setting are system wide and apply to all ITM3 cards in the system. MMC 835 provides the following:

- **AUDIO CODEC:** Selects which audio codec compression to use. Selections are 1. G.711 (64K), 2. G.723.1 (5.3K~6.4K), 3. G.729A (8K). Audio codec settings should match far end ITM3 codec settings.

- **ECHO CANCELLATION:** Enables or disables echo cancellation (0: disable, 1: enable). This function removes echo that is generated by voice reflection and packet delay.

- **SILENCE SUPRESSION:** This parameter determines whether silence suppression is used (0: disable, 1: enable). This prevents transmission during the silence period of a call.

- **INPUT FILTER:** This option select input filtering of the DSP (0: disable, 1: enable). This should be set as ON.

- **OUTPUT FILTER:** This option select output filtering of the DSP (0: disable, 1: enable). This should be set as ON.

- **INPUT GAIN:** PCM input gain value of DSP. The range is −31dB~31dB (0~63). This set the quality of PCM voice from the systems PCM to the VoIP DSP on the ITM3. This is set to the sites environment.

- **VOICE VOLUME:** This selects the voice volume from the ITM3 DSP to the system. This is set to the sites environment. The range is −31dB~31dB (0~63).

- **MULTI FRAME COUNTER:** This option selects the number of frames the ITM3 will consolidate the packet header message. The voice packets are buffered to the set number and sent as a single packet. The range is 1~12.

- **JITTER OPTION:** This selects the dynamic jitter specific value. Value determines whether the focus is on packet loss or packet delay. The range is 00~12.

- **VOICE PROMPT SWAP:** Decides the adjustment of the byte order of the voice announce data. (0:disable ,1:enable)

- **RTP DELAY LIMIT:** This is the value of the delay limit. The status will change when this limit is exceeded. The value is measured in milliseconds (ms). This is used to determine network error with other ITM cards.

- **RTP LOSS LIMIT:** This is the value of the loss limit value. The status will change when this limit is exceeded. The value is measured in percentages (%). The range is 00~25%. This is used to determine network errors with other ITM cards.

- **RTP CHECK PERIOD:** This is the packet loss estimated base period measured in seconds. The range is 00~25 seconds. This is used to determine network errors with other ITM cards.

- **RTP OVERCOUNT LIMIT** This limit /loss limit excess count. The range is 0~3. This is used to determine network errors with other ITM cards.

- **DTMF ON:** The DTMF ON time in milliseconds (ms) when received via H.245.

- **DTMF OFF:** The DTMF OFF time in milliseconds (ms) when received via H.245.

> **NOTE** DTMF ON/OFF duration's affect incoming DTMF when sent via H.245. Changes to these parameters require the ITM3 to be reset to take effect.

MMC 835 VoIP DSP Options default data.

Item	Value
Audio Codec	G.723.1
Echo Cancellation	Enable
Slience Suppression	Enable
High Pass Filter	Enable
Post Filter	Enable
Input Gain	23
Voice Volume	34
Multiframe Counter	3
Jitter Option Factor	7
Voice Prompt Swap	Disable
RTP Delay Limit (ms)	600
RTP Loss Limit (%)	10
RTP Loss Check (sec)	10
DTMF On (100ms)	1
DTMP Off (100ms)	1

Input Gain is the adjustment of gain or loss from the system to the VoIP DSP on the ITM3 and may have to be adjusted depending on the network environment

Voice Volume is the gain or loss as the voice is processed from the VoIP DSP to the system and may have to be adjusted depending on the network environment

RTP options work in conjunction with the STS period and are only used between ITM3 cards

The DTMF duration timers here relate to converting the received IP DTMF messages to audible DTMF to the system when using H.245 DTMF transport

MMC 836: VoIP Gatekeeper Options allows programming of the ITM3 for identification to a network gatekeeper. The settings are selectable for each ITM card installed.

- **GK CONNECT** This determine if the ITM3 is to connect to a gatekeeper. The option are disable or enable.

- **GK TYPE** This determines if connected to a Samsung SIGK or Other type of gatekeeper.

- **GK IP** This is gatekeepers IP address.

- **GK NAME** This is the name identifier of the gatekeeper. The name can be alphanumeric. An entry of 9 alphanumeric character with a space followed by an additional 6 alphanumeric characters can be input.

- **GW H.323 ID** This is the H.323 identifier of the ITM3 that is registered with the gatekeeper. This can be up to 16 characters.

- **GW E.164 NUMBER** This is the E.164 identifier of the ITM3 that is registered with the gatekeeper and can be up to 16 digits in length.

- **KEEP ALIVE** This is the timer that the ITM3 uses to acknowledge the presence of the gatekeeper. The range is 000~999 seconds.

MMC 836 VoIP GK Functions:

Cabinet No	1	1
Slot No	1	2
GK Connect	Disable	Disable
GK Type	SIGK	SIGK
GK Address		
GK Name		
GW H323		
GW E164		
GK Alive		

Chapter 3
MMCs (In Numeric Order)

Chapter 3 MMCs (In Numeric Order)

MMC:100   STATION LOCK

DESCRIPTION:

Allows the system administrator or technician to lock or unlock an individual station or all stations simultaneously. The three options are as follows:

0	**UNLOCKED**	Unlocks a locked station.
1	**LOCKED OUT**	The keyset cannot make calls outside the system. It can however make and receive intercom calls and receive incoming C.O. calls. When in this mode the HOLD key of the keyset will flash slow RED.
2	**LOCKED ALL**	The keyset cannot make or receive any calls. When in this mode the HOLD key of the keyset will light steady RED.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 100
   Display shows

   ```
   [201] STN LOCK
   UNLOCKED
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and use RIGHT soft key to move cursor

   ```
   [205] STN LOCK
   UNLOCKED
   ```

           OR
   Press ANS/RLS to select all stations

   ```
   [ALL] STN LOCK
   ?
   ```

3. Enter 0 to unlock or 1 to lock (e.g. 1)
           OR

   ```
   [205] STN LOCK
   LOCKED OUT
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

4. Press TRSF to save and exit
           OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: ALL STATIONS UNLOCKED

RELATED ITEMS: STATION USER PROGRAMMING

MMC:101   CHANGE USER PASSCODE

DESCRIPTION:

Allows the system administrator or technician to reset any keyset's passcode to its default value of
"1234." This MMC cannot display station passcodes; it can only reset them to default.

Keyset users can set or change their individual passcodes. The passcode is used to lock or unlock the
keyset for toll restriction (call barring) override and to access the DISA feature.

> **NOTE**   Default passcodes cannot be used for toll restriction override or for DISA access.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   ## DISPLAY

1. Press TRSF 101
   Display shows

   ```
   [201] PASSCODE
   PASSCODE:QQQQ
   ```

2. Dial keyset number (e.g., 205)
           OR
   Use UP or DOWN to scroll through keyset numbers and press
   RIGHT soft key to move the cursor right

   ```
   [205] PASSCODE
   PASSCODE:QQQQ
   ```

3. Press HOLD to reset passcode

   ```
   [205] PASSCODE
   PASSCODE:1234
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:ALL STATION PASSCODES = 1234

RELATED ITEMS:MMC 100 STATION LOCK

MMC:102   CALL FORWARD

DESCRIPTION

Allows the system administrator to program the call forward destinations for other station users. This MMC also allows call forward to be set after the destination has been entered.

iDCS 500 allows six types of call forwarding: FORWARD ALL, FORWARD NO ANSWER, FORWARD BUSY and FORWARD EXTERNAL. There is an additional option, FORWARD BUSY/NO ANSWER, that allows both of these options to be activated at the same time, provided that destinations have been entered for both.

0 = FORWARD CANCEL	4 = BUSY/NO ANSWER
1 = ALL CALL	5 = Not Available
2 = BUSY	6 = EXTERNAL FORWARD
3 = NO ANSWER	7 = FORWARD DND

Forwarding options 8, 9 and * are only available on a iDCS 500 system with networking enabled.

8 = CALL FORWARD UNCONDITIONAL (Across Network)
9 = CALL FORWARD BUSY (Across Network)
* = CALL FORWARD NO ANSWER (Across Network)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 102
   Display shows

   ```
   [201] FORWARD
   0:FORWARD CANCEL
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor

   ```
   [205] FORWARD
   0:FORWARD CANCEL
   ```

3. Dial 0 - * to select forward type
           OR
   Press UP or DOWN to select forward type and press RIGHT soft key to move cursor

   ```
   [205] FORWARD
   1:ALL CALL:NONE
   ```

4. Dial destination number (e.g., 201)
           OR
   Press UP or DOWN to select destination and press RIGHT soft key to move cursor

   ```
   [205] FORWARD
   1:ALL CALL:201
   ```

5. Dial 1 for YES, 0 for NO
            OR
    Press UP or DOWN to select YES or NO and press RIGHT soft key
    to return to step 2

```
[205] FORWARD
CURENTLY SET :YES
```

6. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                  MMC 501 SYSTEM TIMERS
                  MMC 502 STATION TIMERS
                  MMC 701 ASSIGN COS CONTENTS
                  MMC 722 STATION KEY PROGRAMMING
                  MMC 723 SYSTEM KEY PROGRAMMING

MMC:103   SET ANSWER MODE

DESCRIPTION

Allows the system administrator to change the answer mode of any keyset. Each keyset can have its answer mode set to one of the following options:

0. RING: The keyset will ring in one of eight custom ring patterns. Calls are answered by pressing the ANS/RLS key or by lifting the handset.

1. AUTO: After giving a short attention tone, the keyset will automatically answer calls on the speakerphone. When a C.O. line is transferred to a keyset in Auto Answer, the screened portion of the call will be Auto Answer, but the keyset will ring when the transfer is complete if the user has not pressed the ANS/RLS key or lifted the handset.

2. VOICE: The keyset will not ring. After a short attention tone, callers can make an announcement but the ANS/RLS key or handset must be used to answer calls.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 103
   Display shows

   ```
   [201] ANS MODE
   RING MODE
   ```

2. Dial keyset number (e.g., 205)
               OR
   Press UP or DOWN to select keyset
   and press RIGHT soft key to move cursor
               OR
   Press ANS/RLS to select All

   ```
   [205] ANS MODE
   RING MODE
   ```

   ```
   [ALL] ANS MODE
   ?
   ```

3. Dial 0, 1 or 2 to change ring mode
               OR
   Press UP or DOWN to select ring mode and
   Press RIGHT soft key to return to step 2 above

   ```
   [205] ANS MODE
   VOICE ANNOUNCE
   ```

4. Press TRSF to store and exit
               OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL KEYSETS RING

RELATED ITEMS: MMC 111 KEYSET RING TONE

MMC:104   STATION NAME

DESCRIPTION

Allows the system administrator or technician to enter an 11-character name to identify an individual station.

Names are written using the keypad. Each key press selects a character. Pressing the dial pad key moves the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message. Pressing the bottom left programmable key will change the letter from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION   ## *DISPLAY*

    1. Press TRSF 104
       Display shows

```
[201] STN NAME
```

    2. Dial station number (e.g., 205)
              OR
       Press UP or DOWN to select station and press RIGHT soft key to
       move cursor

```
[205] STN NAME
_
```

    3. Enter the station name using the procedure described above and
       press RIGHT soft key to return to step 2

```
[205] STN NAME
SAM SMITH
```

    4. Press TRSF to store and exit
              OR
       Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: "A" BUTTON IS BUTTON #19 ON DCS KEYSET AND #21 ON iDCS
                 KEYSET

MMC:105　　　　　　　　　　　　　STATION SPEED DIAL

DESCRIPTION

Allows the system administrator or technician to program the personal speed dial locations assigned to a station. This must be done for single line telephones because these stations cannot access programming. Each station may have up to 50 locations or bins assigned to it in MMC 606 Assign Speed Block. The speed dial bins are numbered 00 ~49. Each speed dial number consists of a trunk or trunk group access code followed by a separator and up to 24 digits to be dialed. These dialed digits may consist of 0 ~9, * and #. If the system recognizes a valid trunk or trunk group access number, it will automatically insert the separator.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
B	Used to insert a flash code "F"
C	Used to insert a pause code "P"
D	Used to insert a pulse/tone conversion code "C"
E	Used to mask/unmask following digits (shows as "[" or "]")
F	Used to enter name for speed dial bin (see MMC 106)

ACTION　　　　　　　　　　　　　　　　DISPLAY

1. Press TRSF 105
   Display shows

```
[201] SPEED DIAL
00 :
```

2. Dial station number (e.g. 205)
   　　　　OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor

```
[205] SPEED DIAL
00 :
```

   If selected station has no speed dial bins, the display will be as shown and a new
   station may be selected.

```
[205] SPEED DIAL
SPDBLK NOT EXIST
```

3. Dial location number (e.g., 05)
   　　　　OR
   Press UP or DOWN to select location and press RIGHT soft key to move cursor

```
[205] SPEED DIAL
05: _
```

4. Enter trunk access code (e.g., 9) followed by the number to be dialed (e.g., 4264100)
   　　　　OR
   Press the RIGHT soft key to return to step 2
   　　　　OR
   Press the LEFT soft key to return to step 3
   Press HOLD button to clear an entry
   If an error is made, use DOWN arrow to step back

```
[205] SPEED DIAL
05 : 9-4264100_
```

5. Press "F" button to access MMC 106 Station Speed Dial Name
          OR
Press TRSF to save and exit
          OR
Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 106 STATION SPEED DIAL NAME
                      MMC 606 ASSIGN SPEED BLOCK

MMC:106   STATION SPEED DIAL NAME

DESCRIPTION

Allows an 11-character name to be entered for each personal speed dial location. This name enables the speed dial number to be located when the directory dial feature is used. The directory dial feature allows the display keyset user to select a speed dial location by viewing its name.

Names are written using the keypad. Each key press selects a character. Pressing the dial pad key moves the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message. Pressing the bottom left programmable key will change the letter from upper case to lower case.

NOTE When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION

1. Press TRSF 106
   Display shows

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor

   If selected station has no speed dial bins, the display will be as shown and a new station may be selected

3. Dial speed dial location (e.g., 01)
           OR
   Press UP or DOWN to scroll through location numbers and press RIGHT soft key to move cursor

4. Enter the location name using the procedure described above and press RIGHT soft key to return to step 2

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DISPLAY

```
[201] SPEED NAME
00:
```

```
[205] SPEED NAME
00:
```

```
[305] SPEED NAME
SPDBLK NOT EXIST
```

```
[205] SPEED NAME
01: _
```

```
[205] SPEED NAME
01: SAM SMITH
```

DEFAULT DATA: NONE

RELATED ITEMS: MMC 105 STATION SPEED DIAL
                  MMC 606 ASSIGN SPEED BLOCK

MMC:107   KEY EXTENDER

DESCRIPTION

Use this program to view the programmable keys assigned to keyset station. In addition, it allows the system administrator to assign key extenders to some keys that will make a general access feature key more specific. The feature keys that can have extenders are listed below.

FEATURE	EXTENDER
AB	Absence (extension number)
ACC	Account code bin (000–999) – Available in iDCS 500-L only
BOSS	Boss and Secretary (1–4)
CR	VM Call Record
CS	UCD Call Status (UCD group number)
DIR	Directory dial by name type (1–3)
DP	Direct Pickup (extension or station group number)
DS	Direct Station Select (station number)
FWRD	Call Forward (0–7)
GPIK	Group Pickup (01–20:M version, 01-99:L version)
IG	IN/Out of Group (station group number)
MMPG	Meet Me Page (0–9, *)
MW	Message Waiting (station group number) – Available in iDCS 500-L only
PAGE	Page (0–9, *)
PARK	Park Orbits (0–9)
RP	Ring Plan (1–6)
RSV	Room Status View (1–5) – Available in Hotel/Motel enabled only
SG	Station Group (500–549)
SP	UCD Supervisor (UCD group number)
SPD	Speed Dial (00–49, 500–999)
VM	VM Memo (extension or station group number)
VG	SVM-800 Group Message (station group number)
VT	Voice Transfer (VM Station Group Number)
PMSG	Programmed Station Text Messaging (01–20)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 107
   Display shows first station

   ```
   [201] EXT (MAST)
   01: CALL1
   ```

2. Dial station number (e.g., 205)
              OR
   Use UP or DOWN to scroll through station numbers and press
   RIGHT soft key to move the cursor

   ```
   [205] EXT (MAST)
   01: CALL1
   ```

3. Press the RIGHT soft key to program the keyset
              OR

   ```
   [201] EXT (MAST)
   01: CALL1
   ```

   Use UP and DOWN to scroll through the keyset and AOM's and
   use the right soft key to move the cursor

   ```
   [201] EXT (AOM1)
   01: DS
   ```

4. Enter key number (e.g., 18)
              OR
   Use UP and DOWN to scroll through keys and use RIGHT soft key
   to move the cursor
              OR

   ```
   [205] EXT (MAST)
   18: DS
   ```

   Press the key to be programmed
   Dial extender according to above table.
   System will return to this step. If no more entries, press LEFT soft
   key to return to step 2

   ```
   [205] EXT (MAST)
   18: DS 207
   ```

5. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 720 COPY KEY PROGRAMMING

MMC 721 SAVE STATION KEY PROGRAMMING

MMC 722 STATION KEY PROGRAMMING

MMC 723 SYSTEM KEY PROGRAMMING

MMC 724 DIAL NUMBERING PLAN

> **NOTE** When the RIGHT soft key will not move the cursor to the right, you are attempting to add an extender to a key that cannot have one.

MMC:108   STATION STATUS

DESCRIPTION

Displays the following attributes of a station port. This is a READ-ONLY MMC:

0	**PORT #**	Cabinet (1~3)/Slot (1~9)/Port (1~16)
1	**TYPE**	Keyset Type
2	**PICKUP GROUP**	None, 01~99
3	**SGR**	Station Group Number
4	**BOSS-SECR**	None, 1-4
5	**PAGE**	None, Page Zone (0 ~4, *)
6	**COS NO**	COS (1-30) per Ring Plan (01-06)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to advance to next MMC

ACTION   ## DISPLAY

1. Press TRSF 108
   Display shows first station

   ```
   [201] STN STATUS
   PORT#: C1-S03-P01
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft
   key to move cursor

   ```
   [205] STN STATUS
   PORT#: C1-S03-P09
   ```

3. Dial 0 ~6 to select station status type
           OR
   Press UP or DOWN to select status and press RIGHT soft
   key to return to step 2

   ```
   [205] STN STATUS
   PICKUP GROUP: 01
   ```

4. Press TRSF to exit
           OR
   Press SPK to advance to next MMC

DEFAULT DATA: PORT #:   FOLLOWS HARDWARE POSITION
      TYPE: DEPENDENT ON CONNECTED KEYSET
      PICKUP GROUP: NONE
      SGR: NONE
      BOSS-SECR: NONE
      PAGE ZONE: NONE
      COS NUMBER: 01 IN ALL RING PLANS

RELATED ITEMS: MMC 301 ASSIGN STATION COS
      MMC 302 PICKUP GROUPS
      MMC 303 ASSIGN BOSS/SECRETARY
      MMC 601 ASSIGN STATION GROUP
      MMC 604 ASSIGN STATION TO PAGE ZONE
      MMC 803 ASSIGN TENANT GROUP

MMC:109   DATE/TIME DISPLAY

DESCRIPTION

Allows the system administrator or technician to select the date and time display mode on a per-station basis or system-wide.

0	**COUNTRY**	Sets overall display format and has two options: 0 = ORIENTALMM/DD DAY HH:MM 1 = WESTERNDAY DD MON HH:MM
1	**CLOCK**	Sets format of clock display and has two options: 0 = 12 HOURDisplays 1 P.M. as 01:00 1 = 24 HOURDisplays 1 P.M. as 13:00
2	**DISPLAY**	Sets format of DAY and MON display and has two options: 0 = UPPER CASEDisplays Friday as FRI and March as MAR 1 = LOWER CASEDisplays Friday as Fri and March as Mar

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 109
   Display shows

   ```
   [201] DAY FORMAT
   COUNTRY: WESTERN
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor
           OR
   Press ANS/RLS for all keysets

   ```
   [205] DAY FORMAT
   COUNTRY: WESTERN
   ```

   ```
   [ALL]DAY FORMAT
   COUNTRY: ?
   ```

3. Dial 0 ~ 2 to select mode
           OR
   Press UP or DOWN to scroll through modes and press RIGHT soft key to move cursor

   ```
   [205] DAY FORMAT
   COUNTRY: ORI ENTAL
   ```

4. Press UP or DOWN to scroll through formats and press RIGHT soft key to return to step 2

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: COUNTRY: WESTERN
                          CLOCK: 12 HOUR
                          DISPLAY: LOWER CASE

RELATED ITEMS: MMC 505 ASSIGN DATE AND TIME

MMC:110   STATION ON/OFF

DESCRIPTION

Allows the system administrator to set any of the keyset features listed below.

00	AUTO HOLD	Automatically places an existing C.O. call on hold if a CALL button, trunk key or trunk route key is pressed during that call.
01	AUTO TIMER	Automatically starts the stopwatch timer during a C.O. call.
02	HEADSET USE	When ON, this feature disables the hookswitch allowing a headset user to answer all calls by pressing the ANS/RLS button.
03	HOT KEYPAD	When ON, this feature allows the user to dial directory numbers without having to first lift the handset or press the SPK button.
04	KEY TONE	Allows the user to hear a slight tone when pressing buttons on keyset.
05	PAGE REJOIN	Allows the user to hear the latter part of page announcements if keyset becomes free during a page.
06	RING PREF.	When OFF, requires the user to press the fast flashing button to answer a ringing call after lifting the handset.
07	CALL COST	When ON, the cost of the call in progress will show in the upper right corner of the keyset display instead of duration of the call.
08	AUTO CAMPON	When ON, keyset users can allow intercom calls to camp-on to other keysets without having to press a CAMP-ON key. - Available in iDCS 500-L only
09	AME BGM	This feature selects whether a station using Answer Machine Emulation will hear their personal greeting or BGM while callers are listening to the personal greeting. A BGM source must be selected for this to work.
10	AME PASSCODE	When ON, station users who have AME set must enter their station password to listen to messages being left.
11	DISP SPDNAME	When ON, the speed dial name associated with a speed dial number is displayed on a keyset equipped a LCD display when using speed dial. - Available in iDCS 500-L only.
12	CID REVW ALL	When ON, saves information on all calls that ring at an extension, When OFF, saves information only on calls that were not answered at the extension or by voice mail. - Available in iDCS 500-L only.
13	SECURE OHVA	When ON, OHVA announcements will be heard on the handset. When OFF, OHVA announcements will be heard over the keyset speaker. - Available in iDCS 500-L only.
14	NOT CONT.CID	When OFF, the Caller ID will be continue display after the keyset user answered call.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

1. Press TRSF 110
   Display shows

2. Dial the option number from above list (e.g., 4)
             OR
   Press UP or DOWN to select the option and
   Press the right soft key to move the cursor

3. Press UP or DOWN to select ON or OFF
   Press the left or right soft key to return to step 2
             OR
   Dial 1 for ON or 0 for OFF

4. Press TRSF to store and exit

DEFAULT DATA:

AUTO HOLD	OFF
AUTO TIMER	ON
HEADSET	OFF
HOT KEYPAD	ON
KEY TONE	ON
PAGE REJOIN	ON
RING PREF.	ON
CALL COST	OFF
AUTO CAMPON	OFF
AME BGM	OFF
DISP SPDNAME	OFF
CID REVW ALL	ON
SECURE OHVA	ON
NOT CONT.CID	ON

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                  MMC 701 ASSIGN COS CONTENTS

DISPLAY

```
[201] STN ON/OFF
AUTO HOLD : OFF
```

```
[201] STN ON/OFF
HOT KEYPAD : OFF
```

```
[201] STN ON/OFF
HOT KEYPAD : ON
```

MMC:111 KEYSET RING TONE

DESCRIPTION

Allows the system administrator or technician to select the ring tone heard at each keyset. There are eight ring tones available at each keyset. A short tone burst of the selection will be heard when the dial keypad is pressed.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 111
   Display shows

   ```
   [201] RING TONE
   SELECTION5
   ```

2. Dial keyset number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor
           OR
   Press ANS/RLS to select All

   ```
   [205] RING TONE
   SELECTION5
   ```

   ```
   [ALL] RING TONE
   SELECTION?
   ```

3. Dial 1~8 to select ring tone
           OR
   Press UP or DOWN to select ring tone and press RIGHT soft key to move cursor

   ```
   [205] RING TONE
   SELECTION5
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: FREQUENCY 5

RELATED ITEMS: MMC 114 KEYSET VOLUME

MMC:112   ALARM REMINDER

DESCRIPTION

Allows the system administrator or technician to set or change the alarm clock/appointment reminder feature for any station. This must be done for single line telephones, as they cannot access programming. Three alarms may be set for each station and each alarm may be defined as a one-time or TODAY alarm or as a DAILY alarm, as described below. The TODAY alarm is automatically cancelled after it rings, while the DAILY alarm rings every day at the same time. Alarm numbers are 1, 2 and 3. In the case of Secondary Pair assignments (MMC 220) the alarm only rings the station that is programmed and does not ring the paired station.

Entry	Alarm Type
Dial 0	NOTSET
Dial 1	TODAY
Dial 2	DAILY

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   ## DISPLAY

1. Press TRSF 112
   Display shows

   ```
   [201] ALM CLK(1)
   HHMM:  eNOTSET
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key

   ```
   [205] ALM CLK(1)
   HHMM:  eNOTSET
   ```

3. Dial 1~3 to select alarm (e.g., 1)
           OR
   Press UP or DOWN to select alarm and press RIGHT soft key

   ```
   [205] ALM CLK(1)
   HHMM:  eNOTSET
   ```

4. Enter alarm time in 24-hour clock format
   (e.g., 1300 for 1pm)

   ```
   [205] ALM CLK(2)
   HHMM:  1300eNOTSET
   ```

5. Dial entry from above list for alarm type (e.g. 2)
           OR
   Press UP or DOWN to select alarm type and press RIGHT soft key
   to move cursor and return to step 2

   ```
   [205] ALM CLK(2)
   HHMM:  1300eDAILY
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALARMS ARE NOTSET

RELATED ITEMS: NONE

MMC:113   VIEW MEMO NUMBER

DESCRIPTION

Allows a station user the ability to view a memo left by the user. A memo can be left by entering it via the dial keypad using the table below. MMC 116(Alarm and Message) can be programmed to remind the user to read the memo. A memo of up to and including 13 characters can be entered. For example, using the dial keypad, press "6" once to enter the letter "M", and press "3" twice for an "E". Pressing the "A" key will change the letters from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset; acts as toggle between upper case and lower case

ACTION

1. Press TRSF 113
   Display shows

2. Press RIGHT soft key to move cursor and add memo via dial
   keypad using procedure above

3. Press TRSF to store and exit
               OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: "A" BUTTON IS BUTTON #19 ON DCS KEYSET AND #21 ON iDCS
                 KEYSET

DISPLAY

```
[201] VIEW MEMO
1:
```

```
[205] VIEW MEMO
1:NEED BREAD
```

MMC:114   KEYSET VOLUME

DESCRIPTION

Allows the station user or system administrator to set the ring volume, off hook ring volume, handset receive volume, speaker volume, background music volume and page volume for any or all keysets.

0   RING VOLUME   This is the volume setting for the keyset ringer. There are eight volume levels: level 1 is the lowest and level 8 the highest.

1   OFF-RING VOL   This is the volume of the alert tone that tells you there is a call camped on to your keyset. There are eight volume levels: level 1 is the lowest and level 8 the highest.

2   HANDSET VOL   This is the volume setting for conversations on the handset receiver. There are eight volume levels: level 1 is the lowest and level 8 the highest.

3   SPEAKER VOL   This is the receive volume setting for conversations on the speaker phone of a keyset. There are 16 volume levels: level 1 is the lowest and level 16 the highest.

4   BGM VOLUME   This is the volume you will hear background music over the keyset speaker at when your keyset is idle and BGM is turned on. There are 16 volume levels: level 1 is the lowest and level 16 the highest.

5   PAGE VOLUME   This is the volume you will hear internal page over the keyset speaker when your keyset is idle and BGM is turned on. There are 16 volume levels: level 1 is the lowest and level 16 the highest.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 114
   Display shows

   ```
   [201] STN VOLUME
   RING VOLUME : 4
   ```

2. Dial keyset number (e.g. 205)

   ```
   [205] STN VOLUME
   RING VOLUME : 4
   ```

3. Press UP or DOWN to select volume type

   ```
   [205] STN VOLUME
   SPKR VOLUME : 12
   ```

4. Press UP or DOWN to select volume

   ```
   [205] STN VOLUME
   SPKR VOLUME : 08
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: RING VOLUME: 4

                             OFF-HOOK RING VOLUME: 4

                             HANDSET VOLUME: 4

                             SPEAKER VOLUME: 13

                             BGM VOLUME: 13

                             PAGE VOLUME: 13

RELATED ITEMS: MMC 111 KEYSET RING TONE

MMC:115   SET PROGRAMMED MESSAGE

DESCRIPTION

Allows the system administrator to set a programmed message at any or all keysets. There are 20 messages available on a iDCS 500-M system and 30 on a iDCS 500-L system. The first ten are pre-programmed and the remaining entries can be customized in MMC 715, Programmed Station Message. On a iDCS 500-L system messages 26-30 are special in that a five digit extender can be added for a date and time.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 115
   Display shows

   ```
   [201] PGMMSG(00)
   CANCEL PGM MSG
   ```

2. Dial station number (e.g., 205)
              OR
   Press UP or DOWN to select station and
   press RIGHT soft key to move cursor
              OR
   Press ANS/RLS to select All

   ```
   [205] PGMMSG(00)
   CANCEL PGM MSG
   ```

   ```
   [ALL] PGMMSG(??)
   ```

3. Dial an entry number to select message number, e.g., 05
              OR
   Press UP or DOWN to select message
   Press RIGHT soft key to return to step 2

   ```
   [205] PGMMSG(05)
   PAGE ME
   ```

4. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO MESSAGES SELECTED

RELATED ITEMS: MMC 715 PROGRAMMED MESSAGE

                   MMC 722 STATION KEY PROGRAMMING
                   MMC 723 SYSTEM KEY PROGRAMMING

MMC:116 ALARM AND MESSAGE

DESCRIPTION

Allows the system administrator or technician to set or change the alarm clock/appointment reminder feature for any station. This must be done for single line telephones because they cannot access programming. Three alarms may be set for each station and each alarm may be defined as a one-time or TODAY alarm or as a DAILY alarm, as described below. The TODAY alarm is automatically cancelled after it rings, while the DAILY alarm rings every day at the same time. It is also possible to set a message to display when the alarm is sounded.

ENTRY	ALARM TYPE
DIAL 0	NOTSET
DIAL 1	TODAY
DIAL 2	DAILY

Names are written using the keypad. Each key press selects a character. Pressing the dial pad key moves the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message. Pressing the bottom left programmable key will change the letter from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on IDCS keyset, acts as toggle between upper case and lower case

ACTION

DISPLAY

1. Press TRSF 116
    Display shows

```
[201] ALM REM(1)
HHMM: eNOTSET
```

2. Dial station number (e.g., 205)
           OR

```
[205] ALM REM(1)
HHMM: eNOTSET
```

    Press UP or DOWN to select station and press RIGHT soft key to
    move cursor
           OR
    Press ANS/RLS to select all stations

```
[ALL] ALM REM(1)
HHMM: eNOTSET
```

3. Dial 1~3 to select alarm (e.g., 2)
           OR

```
[205] ALM REM(2)
HHMM: eNOTSET
```

    Press UP or DOWN to select alarm and press RIGHT soft key to
    move cursor

4. Enter alarm time in 24-hour clock format
    (e.g., 1300 for 1pm)
    Display will automatically advance to step 5

```
[205] ALM REM(2)
HHMM: 1300eNOTSET
```

5. Dial valid entry from above list for alarm type
    (e.g. 2)
           OR
    Press UP or DOWN to select alarm type and press RIGHT soft key
    to move cursor

```
[205] ALM REM(2)
HHMM: 1300eDAILY
```

6. Enter messages using above table and press RIGHT soft key to
    return to step 2

```
[205] ALM REM(2)
Sam SMITH
```

7. Press TRSF to store and exit
           OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: ALARMS ARE NOTSET

RELATED ITEMS: NONE

MMC:119   CLIP DISPLAY

DESCRIPTION

Allows the technician to set the individual station display preference on a per station basis. Caller ID or CLIP can be selected to either show the name, number first, or no display depending on the type of call. Caller ID or CLIP displays have the following options:

0.	**NO DISPLAY**	No Caller ID or CLIP data will be displayed.
1.	**NUMBER FIRST**	The Caller ID or CLIP number received from the Central Office will be displayed first.
2.	**NAME FIRST**	The Caller ID or CLIP name received will be displayed first. In the case of CLIP the number must be programmed in the CLIP translation table (MMC 728). CLIP does not provide names.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPEAKER	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 119
   Display shows first station

   ```
   [201] CLIP DISP.
   NUMBER FIRST
   ```

2. Enter station number (e.g., 205)
        OR
   Press UP or DOWN to scroll through stations and press the RIGHT soft key to select a station
        OR
   Press ANS/RLS to select ALL and press the RIGHT softkey.

   ```
   [205] CLIP DISP.
   NUMBER FIRST
   ```

3. Dial display option 0, 1 or 2 (e.g. 2)
        OR
   Press UP or DOWN to select option and press RIGHT or LEFT soft key to return to step 2

   ```
   [205] CLIP DISP.
   NAME FIRST
   ```

4. Press TRSF to store and exit
        OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NUMBER FIRST

RELATED ITEMS: MMC 312 ALLOW CLIP

                      MMC 425 ASSIGN CID TRUNKS

                      MMC 608 ASSIGN REVIEW BLOCKS
                      MMC 728 CLIP TRANSLATION TABLE

MMC:121   KEYSET LANGUAGE

DESCRIPTION

Allows keyset users the ability to assign an LCD display based on user's own language.

0	**ENGLISH**
1	**GERMAN**
2	**PORTUGAL**
3	**NORSK**
4	**DANISH**
5	**DUTCH**
6	**ITALY**

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 121
   Display shows

   ```
   [201] LANGUAGE
   ENGLISH
   ```

2. Dial station number (e.g., 205)
            OR

   ```
   [205] LANGUAGE
   ENGLISH
   ```

   Press UP or DOWN to select station and use RIGHT soft key to move cursor
            OR
   Press ANS/RLS to select all stations

   ```
   [ALL] LANGUAGE
   ??
   ```

3. Dial 0,1 or 2 for language required
            OR

   ```
   [205] LANGUAGE
   GERMAN
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key

4. Press TRSF to save and exit
            OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: ENGLISH

RELATED ITEMS: Multiple Language

MMC:200   OPEN CUSTOMER PROGRAMMING

DESCRIPTION

Used to open (enable) and close (disable) customer-level programming. If programming is not opened and an attempt is made to access a system MMC, the error message [NOT PERMIT] will be displayed. A four digits passcode is required to access this MMC. Each digit can be 0-9. When opened, this MMC enables access to all MMCs allowed in MMC 802 Customer Access MMC Number.

PROGRAM KEYS

UP & DOWN	Select open or closed
KEYPAD	Used to enter passcode
SPK	Save data and advance to next MMC
TRSF	Exit Programming

ACTION   DISPLAY

1. Press TRSF 200
   Display shows

   ```
   ENABLE CUS. PROG.
   PASSCODE:
   ```

2. Enter passcode

   ```
   ENABLE CUS. PROG.
   PASSCODE:
   ```

   Correct code shows

   ```
   ENABLE CUS. PROG.
   DISABLE
   ```

   Incorrect code shows

   ```
   ENABLE CUS. PROG.
   PASSWORD ERROR
   ```

3. Press UP or DOWN arrow key to select ENABLE or DISABLE and press RIGHT soft key

   ```
   ENABLE CUS. PROG.
   ENABLE
   ```

         OR
   Dial 1 for ENABLE or 0 for DISABLE

4. Press SPK to advance to MMC entry level and press UP or DOWN key to select MMC

   ```
   212: ALARM RING
   SELECT PROG. ID
   ```

         OR
   Enter MMC number and press RIGHT soft key to enter MMC

5. Press TRSF key to exit

DEFAULT DATA: DISABLE

RELATED ITEMS: MMC 201 CHANGE CUSTOMER PASSCODE

                         MMC 501 SYSTEM-WIDE TIMERS
                         MMC 802 CUSTOMER ACCESS MMC NUMBER

MMC:201   CHANGE CUSTOMER PASSCODE

DESCRIPTION

Used to change the passcode allowing access to MMC 200 Open Customer Programming from its current value.

NOTE The passcode is four digits long. Each digit can be 0-9. The current (old) passcode is required for this MMC.

PROGRAM KEYS

KEYPAD   Used to enter passcodes
SPK   Save data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 201

```
CUST. PASSCODE
NEW CODE: _
```

2. Enter new passcode via dial keypad (maximum four digits)

```
CUST. PASSCODE
NEW CODE: ****
```

3. Verify new passcode via dial keypad

```
CUST. PASSCODE
VERIFY : ****
```

     Passcode verified (go to step 4)
            OR
     Passcode failure

```
CUST. PASSCODE
VERIFY : SUCCESS
```

     Return to step 2

```
CUST. PASSCODE
VERIFY : FAILURE
```

4. Press TRSF to store and exit
            OR
     Press SPK to store and advance to next MMC

DEFAULT DATA: PASSCODE = 1234

RELATED ITEMS:MMC 200 OPEN CUSTOMER PROGRAMMING

MMC:202   CHANGE FEATURE PASSCODE

DESCRIPTION

Used to change the passcodes for the following features.

	FEATURES	DESCRIPTION
0	RING PLAN	This is the passcode required to place the system in different ring plans (RP) or change the ring time override (RTO).
1	DISA ALARM	This is the passcode required to clear a DISA ALARM generated when the number of DISA attempts are exceeded.
2	ALARM CLR	This is the passcode required to clear a CONTACT ALARM generated by the alarm sensor on a MISC card. - Available in Hotel/Motel enabled only.
3	AA RECORD	This is the passcode required to record prompts for use with the AA ports on the Auto Attendant card.
4	DECT REGST	This is the passcode required to registration of DECT phone.
5	DELETE	This passcode is used to allow a change to be delelted from a room bill.

NOTE The passcode is four digits long. Each digit can be 0-9.

PROGRAM KEYS

KEYPAD	Used to enter passcodes
SPK	Save data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 202
   Display shows

   ```
   CHANGE PASSCODE
   RING PLAN : 0000
   ```

2. Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor to passcode entry

   ```
   CHANGE PASSCODE
   AA RECORD : 4321
   ```

3. Enter new passcode via digits from dial keypad
   Press RIGHT soft key to return to step 2

   Continue to change other passcodes

   ```
   CHANGE PASSCODE
   AA RECORD : 9999
   ```

4. Press TRSF to store and exit
                OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: RING PLAN   0000

DISA ALARM   5678

ALARM CLR   8765

AA RECORD   4321

DECT REGST   1234

DELETE   9999

RELATED ITEMS: MMC 410 ASSIGN DISA TRUNK

MMC 507 ASSIGN AUTO NIGHT TIME

MMC 722 STATION KEY ASSIGNMENTS

RING PLAN PROGRAMMING

MMC:203   ASSIGN UA DEVICE

DESCRIPTION

Assigns ringing device to be accessed when a Universal Answer (UA) key is pressed or the UA pickup code is dialed. UA assignment is made in MMC 601 Assign Station Group for a group and then the group is entered here. The device type is automatically determined by the directory number (DN) entered.

> **NOTE** Only one of the above options can be selected. If the ability to ring more than one item (e.g., all four external page zones) is required, a station group containing all four zone codes must be created.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter DN of selected device
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 203
   Display shows current assignment

   ```
   ASSIGN UA PORT
   NONE-NO UA
   ```

2. Dial DN of UA device (e.g., 205)
              OR

   Use UP and DOWN keys to scroll through available devices

   ```
   ASSIGN UA PORT
   205 —STATION
   ```

3. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 204 COMMON BELL CONTROL

                  MMC 601 ASSIGN STATION GROUP
                  MMC 605 ASSIGN EXTERNAL PAGE ZONE

MMC:204   COMMON BELL CONTROL

DESCRIPTION

Determines whether the common bell relay contacts have an interrupted or continuous closure when activated. If interrupted is chosen, the relay follows an internal C.O. ring pattern of one second closed followed by three seconds open. By default, all common bell relay pairs are assigned as 380X.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 204
   Display shows current setting

   ```
   [3801]COMMON BELL
   CONTINUOUS
   ```

2. Dial common bell number
           OR

   ```
   [3801]COMMON BELL
   CONTINUOUS
   ```

   Press UP or DOWN key to make selection of common bell numbers and press RIGHT soft key to advance cursor

3. Dial 0 for continuous or 1 for interrupted operation
           OR

   ```
   [3802]COMMON BELL
   INTERRUPTED
   ```

   Use UP or DOWN to scroll through options
   Press RIGHT soft key to return to step 2

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

   DEFAULT DATA: CONTINUOUS

   RELATED ITEMS:MMC 203 ASSIGN UA DEVICE
   **   MMC 601 ASSIGN STATION GROUP**

MMC:205   ASSIGN LOUD BELL

DESCRIPTION

Designates the station that controls the loud bell ring output of a MISC board. Each MISC board can have up to a loud bell outputs. These outputs are given a DN of 390x as a default value to enable them to be assigned.
The loud bell will follow the ring cadence of the designated station. Only a station can be assigned to control the loud bell; a station group cannot be assigned.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Clears previous entry

ACTION

1. Press TRSF 205
   Display shows current setting

2. Dial loud bell number (e.g., 3902)
            OR

   Use UP or DOWN to scroll through loud bell numbers and press RIGHT soft key to move the cursor

3. Enter station number (e.g., 201)
            OR

   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

4. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: UNASSIGNED

RELATED ITEMS: NONE

DISPLAY

```
[3901]LOUD BELL
RING PAIR:NONE
```

```
[3902]LOUD BELL
RING PAIR:NONE
```

```
[3902]LOUD BELL
RING PAIR:201
```

MMC:206   BARGE-IN TYPE

DESCRIPTION

Sets the type of barge-in that is permitted.

	TYPE OF BARGE-IN	DESCRIPTION
0	NO BARGE-IN	Barge-in feature is unavailable regardless of a station's barge-in status.
1	BARGE-IN WITH TONE	Barge-in will have an intrusion tone and display at the barged-in on station.
2	BARGE-IN WITHOUT TONE	Barge-in is allowed. There is no barge-in tone or display at the barged-in on station and the barging-in station will be muted.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 206
   Display shows

```
BARGE IN TYPE
NO BARGE IN
```

2. Dial 0-2 to select barge-in type (e.g., 2)
          OR
   Press UP or DOWN to select barge-in type and press RIGHT soft key

```
BARGE IN TYPE
WITHOUT TONE
```

3. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO BARGE-IN

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                          MMC 701 ASSIGN COS CONTENTS

MMC:207   ASSIGN VM/AA PORT

DESCRIPTION

Enables SLI ports to be designated as NORMAL or VMAA. VMAA ports receive digits designated in MMC 726 VM/AA Options and also receive a true disconnect signal upon completion of a call. Only SLI cards, not key daughter boards, support disconnect signal. Do not make VMAA ports data; this will return them to a single line port and stop voice mail integration. VMAA ports have the equivalent of data protect written in the program and are protected against tones.

> **NOTE** This MMC is not used to assign voice mail card ports. Voice mail card ports are assigned as voice mail ports automatically when the iDCS 500 detects a CADENCE card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 207
   Display shows

   ```
   [209] VMAA PORT
   NORMAL PORT
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor

   ```
   [205] VMAA PORT
   NORMAL PORT
   ```

3. Dial 1 or 0 to select port type (1=VMAA, 0=NORMAL)
   Press UP or DOWN to select option and press RIGHT soft key

   ```
   [205] VMAA PORT
   VMAA PORT
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NORMAL PORT

RELATED ITEMS: MMC 726 VM/AA OPTIONS
                  MMC 601 STATION GROUP

MMC:208   ASSIGN RING TYPE

DESCRIPTION

Provides the flexibility to program single lines to have ICM ringing, C.O. ringing and data secure. With the many types of external ringing devices, all configurations can be met. All devices will also have a positive disconnect signal. Do not make VM/AA ports data; this will return them to a single line port and stop voice mail integration.

ICM RING
CO RING
DATA RING

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 208
   Display shows

   ```
   [209] RING TYPE
   ICM RING
   ```

2. Dial station number (e.g., 205)
   OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor

   ```
   [205] RING TYPE
   ICM RING
   ```

3. Dial 1,2 or 0 to select port type (e.g. 2)
   OR
   Press UP or DOWN to select option and press LEFT or RIGHT soft key to return to step 2 above

   ```
   [205] RING TYPE
   DATA RING
   ```

4. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ICM RING

RELATED ITEMS: NONE

MMC:209 ASSIGN ADD-ON MODULE

DESCRIPTION

Designates to which keyset an add-on module (AOM) is assigned.
There is no limit to the number of AOMs that can be assigned in the system.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
RELEASE	Used to store data and advance to next MMC
HOLD	Clears previous entry

ACTION

DISPLAY

1. Press TRSF 209
   Display shows first AOM

   ```
   [301] AOM MASTER
   MASTER: NONE
   ```

2. Dial AOM number
         OR
   Use UP or DOWN to scroll through AOM numbers and use soft keys to move cursor

   ```
   [301] AOM MASTER
   MASTER: NONE
   ```

3. Enter station number, e.g., 301
         OR
   Use UP or DOWN for selection of stations and press RIGHT soft key to return to step 2

   ```
   [301] AOM MASTER
   MASTER: 201
   ```

4. Press TRSF to store and exit
         OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE FOR MASTER

RELATED ITEMS: NONE

MMC:210   CUSTOMER ON/OFF PER TENANT

DESCRIPTION

Allows the system administrator to set in system features on a per-tenant basis. Each system option has a corresponding dialing number, as listed below. All options toggle ON/OFF.

	OPTIONS	DESCRIPTION
00	DISA PAWD	When ON, a caller must enter extension number and DISA password when they call a DISA trunk. When OFF, extension number and DISA password are not required and the caller has full access to all features allowed on this trunk.
01	LCR ENABLE	This option determines whether the system will or will not route outgoing calls based on the information in the LCR routing tables
03	PERI UCD RPT	Periodic UCD Information provider. Enables UCD Statistics data on a per UCD group basis to print out on the IO port which has been set as PERI UCD in real time (every 3~99 seconds). This allows the information to be interfaced and manipulated by an external package or third party provided software.
04	CID CODE INS	When ON, the system will insert the country code when receiving CID information. This feature can use the CID display call back feature.
05	DISA MOH	When ON, outside parties will hear trunk MOH instead of dial tone from the time the system answers a DISA trunk until the caller dials a digit.
06	TRANSFER MOH	When ON, outside parties will hear trunk MOH instead of ring back tone from the time a transfer is completed until the call is answered by an internal party.
07	DSP SSPDNAME	When ON, the system speed dial name associated with a system speed dial number is displayed on a keyset equipped with an LCD display when using system speed dial. - In case of iDCS 500-L, this option is not available use MMC110. DSP SPD NAME
08	DID BSY ROUT	When ON, a DID call directed to a busy station will re-route to the operator if camp on is set to OFF in MMC 714. If the camp on option is set to ON the call will re route to the destination in MMC 406 for that trunk.
12	CONF TONE	When ON, provides conference tone every conference tone time. - Available in Italy only
13	RECALL PIKUP	When ON, a call recalling to a station can be picked up using Direct Call Pickup, Pickup Group and My Group features. This applies to held calls recalling and transferred calls recalling to a station.
14	ICM EXT FWD	When ON, call forward external is allowed when intercom calls are placed to a station that has Call Forward External programmed and set.
15	SEC 2 BOS AA	This option can stop calls from the secretary to the boss from being auto answered by the boss station. The default setting is ON allowing auto answer when a secretary calls a boss via an assigned boss key.
16	DID ERR TONE	This option was added to provide error tone when an invalid DID number is received.
18	KTS DISC ALM	When ON, generates system alarm when a keyset plug out or in.
19	OFF HOOK ALM	When ON, generates system alarm when a phone maintains off hook condition longer than timer.

20	**SL SELF RING**	When ON, generates ring during 10 seconds when a single line phone dials self number and hang up.
21	**SGR INC BUSY**	When ON, generates busy tone when all station group member busy for group call.
24	**TRSF CANCEL**	When OFF, a single line phone will be able to handle 2 calls simultaneously. Using the hook-flash to toggle between them. When ON, a single line telephone will be able to connect to the second call, but pressing the hook flash will not toggle between the two calls it will disconnect the second call and reconnect the single line telephone to the first call.
26	**RECALL DISC**	When ON, the system disconnects a call when transfer recall.
29	**ARD TONE CHK**	When OFF, the system use time for checking destination is busy when auto retry.
30	**VPN ENABLE**	When ON, the Australia type VPN enabled.
31	**IN TOLL CHK**	When OFF, the system doesn't toll restrict when incoming call.
32	**ISDN PROGCON**	When OFF, the system ignores ISDN progress message.
33	**INCLUDE VAT**	When OFF, not printed VAT total line when Hotel Report. - Available in Hotel/Motel enabled only
34	**LCR DIALTONE**	When ON, generates different dial tone when LCR dial mode.
36	**DSS KEY DPU**	When ON, directed pick-up the call when press ringing DS key.
37	**BEGN DGT DSP**	When ON, an outside call is made via speed dial or LNR where more than 11 digits are dialed then only the first set of digits dialed are shown on the keyset display. - Available in iDCS 500-L only
38	**ONE TCH FACC**	When OFF, the forced account mode user can not use one touch account code (ACC) key. - Available in iDCS 500-L only
39	**SGR ALL OUT**	When ON, the last of station group member can out of group.
40	**CHAIN FWD**	When ON, a call is directed to a station that may be forwarded to another station that is call forwarded to a VMAA, then the caller will be directed to the last station's mailbox it reached. When OFF, the caller will be directed to the first station's mailbox instead of the last.- Available in iDCS 500-L only
41	**TRK MONITER**	When ON, can override to trunk and a call is connected override extension when a original caller hang on. When OFF, can override to extension only and a call is disconnected when a original caller hang on.
42	**VOIP MFRALOC**	When ON, a MFR assigned for VoIP tandem call when a call incoming from VoIP trunk to another trunk outgoing.
43	**NTWK AUTOTMR**	When OFF, a call duration timer disabled via networking intercom call. - Available in Networking enabled only
44	**USE EURO**	When ON, a euro currency unit of 'E' will be shown to keyset when call cost is displayed and shown to SMDR.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

1. Press TRSF 210
   Display shows

2. Dial option number (e.g. 00)
   Press RIGHT soft key to move cursor

3. Dial 1 for ON or 0 for OFF
   OR
   Press UP or DOWN to make selection and press RIGHT soft key

4. Repeat steps 2-3 for other options
   OR
   Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DISPLAY

```
TEN. ON AND OFF
DISA  PSWD : OFF
```

```
TEN. ON AND OFF
DISA  PSWD : OFF
```

```
TEN. ON AND OFF
DISA  PSWD : ON
```

DEFAULT DATA:

DISA PAWD	ON
LCR ENABLE	OFF
PERI UCD RPT	OFF
CID CODE INS	OFF
DISA MOH	OFF
TRANSFER MOH	OFF
DSP SSPDNAME	OFF
DID BSY ROUT	OFF
CONF TONE	OFF
RECALL PIKUP	OFF
ICM EXT FWD	OFF
SEC 2 BOS AA	ON
DID ERR TONE	OFF
KTS DISC ALM	OFF
OFF HOOK ALM	OFF
SL SELF RING	OFF
SGR INC BUSY	OFF
TRSF CANCEL	OFF
RECALL DISC	OFF
ARD TONE CHK	ON
VPN ENABLE	OFF
IN TOLL CHK	OFF
ISDN PROGCON	OFF
INCLUDE VAT	OFF
LCR DIALTONE	OFF
DSS KEY DPU	OFF

BEGN DGT DSP	OFF
ONE TCH FACC	OFF
SGR ALL OUT	OFF
CHAIN FWD	ON
TRK MONITER	OFF
VOIP MFRALOC	OFF
NTWK AUTOTMR	ON
USE EURO	OFF

RELATED ITEMS: LCR PROGRAMMING
MOH PROGRAMMING
CID PROGRAMMING
DID PROGRAMMING
VMAA PROGRAMMING
ALARM PROGRAMMING
MMC 303 ASSIGN BOSS/SECRETARY
MMC 410 ASSIGN DISA TRUNK

MMC:211 DOOR RING ASSIGNMENT

DESCRIPTION

Designates which station or group of stations will ring when a door box button is pressed. If the ring plan destinations are not input the default ring plan 1 is used. Available Ring Plan inputs are 1 through 6.

DEVICE	DEFAULT DN
3 Digit Station	201–349
3 Digit Station group	500–549
4 Digit Station	2001–2150
4 Digit Station group	5001–5049

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Clears previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 211
   Display shows first door phone

   ```
   [229] DOOR RING
   1:500    2:500
   ```

2. Dial door phone number (e.g., 230)
         OR

   ```
   [230] DOOR RING
   1:500    2:500
   ```

   Press UP or DOWN to scroll through door phone numbers and use the RIGHT soft key to move cursor
         OR
   Press ANS/RLS to select All door ring

   ```
   ALL] DOOR RING
   1:500    2:500
   ```

3. Enter new ring plan number selection via dial keypad
         OR

   ```
   [250] DOOR RING
   1:301    2:500
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key

4. Press RIGHT soft key to return to step 2
         OR
   Press LEFT soft key to return to step 3
         OR
   Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: STATION GROUP 500

RELATED ITEMS: NONE

MMC:214 DISA ALARM RINGING STATION

DESCRIPTION

Assigns the DISA alarm to ring at a specific phone. It is recommended that the person who can clear the alarm also receives the notification. There can be two distinct stations for notification. A valid destination can be either a station group or an individual station. The alarm ringing station or group will follow the ring plan time destination.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION   ## DISPLAY

1. Press TRSF 214
   Display shows

```
DISA ALARM RING
1:500    2:500
```

2. Enter in valid destination number for ring plan
   (e.g., 217)

       OR
   Press UP or DOWN key to make selection
   and press RIGHT soft key to advance cursor

```
DISA ALARM RING
1:217    2:500
```

3. Enter in valid destination number for another ring plan (e.g., 249)
       OR

   Press UP or DOWN key to make selection

```
DISA ALARM RING
1:217    2:249
```

4. Press TRSF to store and exit
       OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL RING PLAN :500

RELATED ITEMS: MMC 202 CHANGE FEATURE PASSCODES
                  MMC 410 ASSIGN DISA TRUNK

MMC:215   VOICE DIALLER OPTIONS

DESCRIPTION

Assigns either two (2) channels and seven (7) users or one (1) channel and five (5) users to the VDIAL card. When changing channel size, you will be prompted to 'clear RAM'. This is only for Voice Dialler, not the system.
This will prevent accidental usage of pre-recorded names. It is advised that you clear RAM before assigning users in MMC 216.

2CH-7USER-20BIN (7 USERS)
1CH-5USER-40BIN (5 USERS)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 215
   Display shows

   ```
   [3551]VDIAL OPTN
   2CH-7USER-20BIN
   ```

2. Enter Voice Dialler number (e.g. 3551) via dial keypad
           OR

   ```
   [3551]VDIAL OPTN
   2CH-7USER-20BIN
   ```

   Press UP or DOWN to select Voice Dialler and use RIGHT soft key to move cursor

3. Dial 0 or 1 for Voice Dialler channel select.
           OR

   ```
   [3551]VDIAL OPTN
   1CH-5USER-40BIN
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key

4. Press TRSF to save and exit
           OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 215 VOICE DIALLER OPTIONS
                  MMC 722 STATION KEY PROGRAMMING
                  MMC 723 SYSTEM KEY PROGRAMMING
                  MMC 724 DIAL NUMBER PLAN

MMC:216   VOICE DIALLER ASSIGNMENTS

DESCRIPTION

Allows a station to be assigned to a channel of the VDIAL, card, to dial a personal speed dial number. The number of users assigned to this feature is controlled by MMC215, VOICE DIALLER OPTIONS, which allows either two (2) channels with seven (7) users or one(1) channel with five (5) users.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 216
   Display shows

   ```
   [3551]VDIAL DIAL
   USER 1:NONE
   ```

2. Enter Voice Dialler number (e.g. 3551) via dial keypad
         OR

   Press UP or DOWN to select Voice Dialler and use RIGHT soft key to move cursor

   ```
   [3551]VDIAL DIAL
   USER 1:NONE
   ```

3. Dial 1-7 for user index number.
         OR

   Press UP or DOWN key to make selection and press RIGHT soft key

   ```
   [3551]VDIAL DIAL
   USER 1:NONE
   ```

4. Dial extension number.
         OR

   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 3.

   ```
   [3551] VDIAL DIAL
   USER 1:201
   ```

5. Press TRSF to save and exit
         OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 215 VOICE DIALLER OPTIONS
                        MMC 722 STATION KEY PROGRAMMING
                        MMC 723 SYSTEM KEY PROGRAMMING
                        MMC 724 DIAL NUMBER PLAN

MMC:217 TRAFFIC REPORT PRINTOUT

- Available in with LAN module only

DESCRIPTION

This MMC is used to print a traffic report and select options. The traffic report can be printed upon demand, every hour, at a programmed time of each day, or up to three separate timed shifts. Automatic printing will always clear the totals.

When report MANUAL PRINT OUT is selected, the options are:

PRINT AND CLEAR   A report is printed and all totals are reset to 0.
PRINTOUT ONLY   A report is printed and all the totals are saved.
CANCEL PRINTOUT   The program return to previous menu if no report is ended.

When AUTO PRINT OPTN is selected, the options are:

AUTO PRINT OFF   Automatic print feature is disabled.
DAILY   A report is printed at a programmable time every day and all the totals are reset to "0."
EVERY HOUR   A Traffic report will be printed every hour
TIME SHIFTS   Up to three separate Start and End times may be programmed to report traffic within certain times of a day. A report is printed at the end of each End time and all totals are reset to "0."

When a report is printed, the totals represent call statistics accumulated from the date of the last report stated as BEGINNING: D & T up to the date of this printout stated as ENDING D & T. See the sample report at the end of this MMC.

If there are no trunks in a group, the trunk group report for that group will not print.

PROGRAM KEYS

This MMC programming sequence is designed to be used by the end user and does not require the usual programming key strokes.

ACTION   DISPLAY

1. Press TRSF 217
   Display shows

   ```
   TRAFFIC REPORT
   MANUAL PRINTOUT
   ```

2. Dial 0 for demand or 1 for automatic print
           OR

   Press UP or DOWN to select and press RIGHT soft key

   ```
   TRAFFIC REPORT
   AUTO PRINT OPTN
   ```

3. Dial 0,1,2 or 3 for automatic print option
           OR

   Press UP or DOWN to select option and press RIGHT soft key

   ```
   TRAFFIC REPORT
   DAILY  HHMM:
   ```

4. Enter daily report time (HHMM)

```
TRAFFIC REPORT
DAILY   HHMM: 2359
```

5. Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO REPORT

RELATED ITEMS: MMC 804 SYSTEM I/0

MMC:220   ISDN SERVICE TYPE

DESCRIPTION

Assign the ISDN service type of single line telephone port. Service consist of BC (Bearer Capability) and HLC (High Layer Capability).

	TYPE	DESCRIPTION	BC	HLC
0	VOICE	Voice service	Speech	
1	FAX 3	G3 FAX service	3.1kHz Audio	FAX G2/G3
2	AUDIO 3.1	3.1kHz Audio service	3.1kHz Audio	None
3	MODEM	MODEM service	3.1kHz Audio	Telephony

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 220
   Display shows

   ```
   [209] ISDN SVC
   VOICE
   ```

2. Enter the station number (e.g. 210)
           OR
   Press UP or DOWN to select station and press RGHT soft key

   ```
   [210] ISDN SVC
   VOICE
   ```

3. Select service type (0-3)
           OR
   Press UP or DOWN to select option and press RGHT soft key

   ```
   [210] ISDN SVC
   AUDIO 3.1
   ```

4. Press TRSF button to store and exit.
           OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: VOICE

RELATED ITEMS: NONE

MMC:221 — EXTENSION TYPE

DESCRIPTION

This MMC enables station ports to be defined for a specific use. Each telephone can be designated as being one of the five (5) following types. These types can be changed by dialing the type number or by scrolling through the types and pressing the right soft key to select the type desired.

NORMAL STATION	This is the default setting. The station will operate in the normal manner associated with this type of station. Ports designated as VMAA in MMC 207 must be designated as normal in this MMC.
GUEST SMOKING	When a station is designated as this type it will appear in room status and check in features as a smoking room.
GUEST NO SMOKING	When a station is designated as this type it will appear in room status and check in features as a non smoking room.
MEETING ROOM	Stations designated as Meeting room stations will have the same attributes as guest rooms with regard to cleaning and occupied status but will not show up while scrolling through room status lists.
ADMINISTRATOR	Only stations designated as administrator stations can use the hotel motel features such as check in etc.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION / DISPLAY

1. Press TRSF 221
   Display shows

   ```
   [201] PHONE USE
   NORMAL STATION
   ```

2. Dial station number (e.g., 214)
   OR
   Press UP or DOWN to select station
   and press RIGHT soft key to move cursor

   ```
   [214] PHONE USE
   NORMAL STATION
   ```

3. Dial 1 to 5 to select station type
   OR
   Press UP or DOWN to select option and press RIGHT soft key

   ```
   [214] PHONE USE
   GUEST NO SMOKING
   ```

4. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NORMAL STATION

RELATED ITEMS: HOTEL/MOTEL FEATURE

MMC:222   FAX PAIR

- Available in Hotel/Motel enabled only

DESCRIPTION

Assigns a FAX port to a keyset.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 222
   Display shows

   ```
   [201] FAX PAIR
   NONE
   ```

2. Enter the room station number via dial keypad
   (e.g. 202)
          OR
   Press UP or DOWN to select and press RIGHT soft key

   ```
   [202] FAX PAIR
   NONE
   ```

3. Enter the fax station number via dial keypad
   (e.g. 2902)
          OR
   Press UP or DOWN to select and press RGHT soft key

   ```
   [202] FAX PAIR
   2902
   ```

4. Press TRSF button to store and exit
          OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: HOTEL/MOTEL FEATURE

MMC:224 — WAKE-UP ANNOUNCEMENT

DESCRIPTION

This MMC is a new feature designed to enhance Wake Up feature. The system will play a recorded message when a Wake Up call is answered by the user. The Wake Up Announcement feature will require an Automated Attendant (AA) card be installed in the system. When a Wake Up call is answered, the system will access the customized Wake Up message (1-48) that has been recorded in the AA card. The end user will record this message and have the ability to change it when desired Auto Attendant operation. The Wake Up message will have no default ROM message assigned to it. However a ROM message (49-64) may also be assigned as the Wake Up message if desired.

This MMC has three options.

AA GROUP	Determines which AA group will be connected when a Wake Up call is answered. This destination can be a any AA groups.
MESSAGE NO	Determines which message will be played when a Wake Up call is answered. This destination can be a custom recorded message (1-48) or one of the pre-programmed messages (49-64).
GROUP BUSY	Determines which tone source will be connected when a AA group members are all busy. This destination can be a NONE, TONE or extern music on hold. If NONE set then dial tone connected, if TONE set then hold tone connected.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION / DISPLAY

1. Press TRSF 224
   Display shows

   ```
   WAKE-UP ANNOUNCE
   AA GROUP   : NONE
   ```

2. Dial 0,1 or 2 for option select
   OR
   Press UP or DOWN to select option and press RIGHT soft key

   ```
   WAKE-UP ANNOUNCE
   AA GROUP   : NONE
   ```

3. Enter the AA group number
   OR
   Press UP or DOWN to select and press RGHT soft key to return to step 2.

   ```
   WAKE-UP ANNOUNCE
   AA GROUP   : 520
   ```

4. Press TRSF button to store and exit
   OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: AA GROUP: NONE
                 MESSAGE NO: NONE
                 GROUP BUSY: NONE

RELATED ITEMS: WAKE-UP ANNOUNCEMENT FEATURE

MMC:300   CUSTOMER ON/OFF PER STATION

DESCRIPTION

Allows the following features to be enabled on a per-station basis.

00	**ACCESS DIAL**	Determines whether a user can select a trunk or trunk group by dialling its directory number (DN). This selection should be turned to off when using LCR.
01	**MICROPHONE**	Allows all 12 and 24 button keysets to be used in the speakerphone mode.
02	**OFF-HOOK RING**	Will allow a short burst of ring tone to indicate another call.
03	**SMDR PRINT**	When the station is set for no C.O. calls to and from this station, the station will not print on SMDR. This includes transferred calls or calls picked up from hold or park.
04	**TGR ADV.TONE**	When this feature is set to ON, a warning tone will be heard each time LCR advances to the next route.
05	**VMAA FORWARD**	This feature selects whether C.O. calls can be forwarded to voice mail.
		ON = Permits forward to voice mail.
		OFF = No forward to voice mail.
08	**INTRCOM SMDR**	When the station is set to OFF, the station will not print intercom calls on SMDR.
09	**FWD DLY USE**	When the station is set to ON, if the station has no answer forward number without no answer forward set then a call both ringing original extension and no answer forward number when a incoming call is directed to the station and the station does not answer until no answer forward time.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

1. Press TRSF 300
    Display shows

2. Dial station number (e.g., 205)
            OR
    Press UP or DOWN to select station
            OR
    Press ANS/RLS for all and press RIGHT soft key to move cursor

3. Press UP or DOWN to select feature and press RIGHT soft key to move cursor

4. Dial 1 for ON or 0 for OFF
            OR
    Press UP or DOWN to select and press RIGHT soft key

5. Press LEFT soft key to return to step 2
    Press RIGHT soft key to return to step 1
            OR
    Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DISPLAY

```
[201] CUS.ON/OFF
ACCESS DIAL :ON
```

```
[205] CUS.ON/OFF
ACCESS DIAL :ON
```

```
[ALL] CUS.ON/OFF
ACCESS DIAL :ON
```

```
[ALL] CUS.ON/OFF
ACCESS DIAL :ON
```

```
[ALL] CUS.ON/OFF
ACCESS DIAL :OFF
```

DEFAULT DATA: ACCESS DIAL: ON
                MICROPHONE: ON
                OFF-HOOK RING: ON
                SMDR PRINT: ON
                TGR ADV.TONE: ON
                VMAA FORWARD: ON
                INTERCOM SMDR: OFF
                FWD DLY USE: OFF

RELATED ITEMS: LCR PROGRAMMING

MMC:301   ASSIGN STATION COS

DESCRIPTION

Used to assign class of service to each keyset. There are 30 different classes of service that are defined in MMC 701, Assign COS Contents. There are 6 ring plans based on the Ring Plan Time in MMC 507 that can apply to the COS. Classes of service are numbered 01–30. Default COS is COS 01.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 301
    Display shows first station

    ```
    [201] STN COS
    1: 01  2: 01  3: 01
    ```

2. Dial station number (e.g., 205)
            OR

    ```
    [205] STN COS
    1: 01  2: 01  3: 01
    ```

    Use UP and DOWN to scroll through stations Press RIGHT soft key to advance to step 3
        OR
    Use UP and DOWN to scroll through stations and press LEFT soft key to advance
    to Step 4
            OR
    Press ANS/RLS to select all stations

    ```
    [ALL] STN COS
    1: 01  2: 01  3: 01
    ```

3. Enter new ring plan selection via
    dial keypad

    ```
    [205] STN COS
    1: 01  2: 01  3: 01
    ```

            OR
    Press UP or DOWN key to make selection OR press RIGHT soft key to move cursor

    ```
    [205] STN COS
    1: 01  2: 01  3: 01
    ```

4. Enter ring plan class of service (e.g., 05)
            OR

    ```
    [205] STN COS
    1: 05  2: 01  3: 01
    ```

    Use UP and DOWN to scroll through classes of service and press RIGHT soft key to advance to the next ring plan.
            OR
    Use UP and DOWN to scroll through classes of service and press LEFT soft key to return to step 2

5. Enter the next ring plan class of service (e.g., 05)OR

```
[205] STN COS
1: 05   2: 01   3: 01
```

Use UP and DOWN to scroll through classes of service and press
RIGHT soft key to move cursor to the next ring plan.
        OR
Use UP and DOWN to scroll through classes of service and press
LEFT soft key to return to previous step.

6. Press TRSF to save and exit
        OR
Press SPK to save and advance to next MMC

DEFAULT DATA: RING PLANS 1-6 = 01

RELATED ITEMS: MMC 701 ASSIGN COS CONTENTS
                   MMC 507 ASSIGN RING PLAN TIME
                   MMC 740 SECONDARY STATION

MMC:302 PICKUP GROUPS

DESCRIPTION

Allows the assignment of stations into call pickup groups. There is a maximum of 99 pickup groups. An unlimited number of members can belong to each group. Stations can only be in one pickup group at any given time.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 302
   Display shows

   ```
   [201] PICKUP GRP
   PICKUP GRP : NONE
   ```

2. Dial station number (e.g., 205)
   OR

   Use UP or DOWN to select station number
   and press RIGHT soft key

   ```
   [205] PICKUP GRP
   PICKUP GRP : NONE
   ```

   OR
   Press ANS/RLS key to select all

   ```
   [ALL] PICKUP GRP
   PICKUP GRP : ??
   ```

3. Dial pickup group number (e.g. 05)
   OR

   Press UP or DOWN to select group number

   ```
   [205] PICKUP GRP
   PICKUP GRP : 05
   ```

4. Press RIGHT soft key to return to step 2 to enter more stations
   OR
   Press LEFT soft key to return to step 3
   OR
   Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO PICKUP GROUPS ASSIGNED

RELATED ITEMS: MMC 107 KEY EXTENDER

MMC 722 STATION KEY PROGRAMMING

MMC 723 SYSTEM KEY PROGRAMMING

MMC:303   ASSIGN BOSS/SECRETARY

DESCRIPTION

Assigns BOSS keysets to SECRETARY keysets. One BOSS station can have up to and including four SECRETARY stations and one SECRETARY station can have up to and including four BOSS stations. A dedicated BOSS button must be programmed on the SECRETARY keyset(s). A dedicated BOSS button must also be programmed on the BOSS keyset.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL
F BUTTON	Used to toggle BOSS/SECRETARY field

ACTION   DISPLAY

1. Press TRSF 303
   Display shows

   ```
   BOSS STN: NONE
   SECR 1: NONE
   ```

2. Dial BOSS station number (e.g., 205)
           OR

   ```
   BOSS STN: NONE
   SECR 1: NONE
   ```

   Press UP or DOWN to select station and
   press RIGHT soft key

   ```
   BOSS STN : 205
   SECR 1: NONE
   ```

3. Dial SECRETARY station number (e.g., 201)
           OR

   ```
   BOSS STN: 205
   SECR 1: 201
   ```

   Press UP or DOWN to select station
   Press RIGHT soft key to return to step 3 to
   enter more SECR numbers

   ```
   BOSS STN: 205
   SECR 2: 202
   ```

4. Press LEFT soft key to return to step 2 and continue entries
           OR
   Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 722 STATION KEY PROGRAMMING

MMC:304   ASSIGN EXTENSION/TRUNK USE

DESCRIPTION

Allows trunks on a per-station basis the ability to answer incoming calls, to dial out or to do both. If a station is set to NO Dial, the station will not have the ability to place a call. If the station is set to NO Answer, the station cannot answer an incoming call.

NOTE   MMC 406 Trunk Ring Assignment overrides this MMC for the Answer option.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 304
   Display shows

   ```
   [201] USE [701]
   DIAL: YES ANS: YES
   ```

2. Dial the station number (e.g., 205)
           OR

   Press UP or DOWN key to select station and
   press RIGHT soft key

   ```
   [205] USE [701]
   DIAL: YES ANS: YES
   ```

3. Dial the trunk ID number (e.g., 704)
           OR
   Press UP or DOWN key to select trunk and press RIGHT soft key

   ```
   [205] USE [704]
   DIAL: YES ANS: YES
   ```

4. Press UP or DOWN key to select YES/NO option
           OR

   Dial 1 for YES or 0 for NO and press RIGHT soft key to move cursor to ANS option

   ```
   [205] USE [704]
   DIAL: NO  ANS: YES
   ```

   Press UP or DOWN key to select YES/NO
   Option

   ```
   [205] USE [704]
   DIAL: NO  ANS: NO
   ```

           OR
   Dial 1 for YES or 0 for NO and press RIGHT soft key to return to step 2

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: DIAL= YES
                  ANS= YES

RELATED ITEMS: MMC 406 TRUNK RINGING ASSIGNMENT
                  MMC 722 STATION KEY PROGRAMMING
                  MMC 723 SYSTEM KEY PROGRAMMING

MMC:305   ASSIGN FORCED CODE

DESCRIPTION

This MMC allows only one of the four options to be selected; the assignment of account code with verification, account code without verification, authorization codes, or none on a per-station basis or on an all-station basis. The system supports 500 authorization codes for a iDCS 500-L system and 250 for others system. It has 999 account codes for a iDCS 500-L system and 500 for a others system that are verified when account codes verified is selected. If account codes without verification is selected, then there will be no table used.

0 NONE   No Account or Authorization code required (NOT forced strictly voluntary).

1 AUTHORIZE   Forces user to enter a valid over four digit Authorization code listed in AUTHORIZATION CODE. Table (MMC 707).

2 ACCT VERIFIED   Forces user to enter a valid account code listed in ACCOUNT CODE Table (MMC 708).

3 ACCT NO VERIFIED Forces user to enter an account code but this code is NOT verified. User can make up any code (any account code up to 12 digits including #).

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry
ANS/RLS   Used to select ALL

ACTION   ## DISPLAY

1. Press TRSF 305
   Display shows

   ```
   [201] FORCD CODE
   NONE
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN key to select station and
   press RIGHT soft key to move cursor

   ```
   [205] FORCD CODE
   NONE
   ```

3. Dial a feature option 0-3 (e.g., 2)
           OR
   Press UP or DOWN key to select option
   and press RIGHT soft key to return step 2

   ```
   [205] FORCD CODE
   ACCT VERIFIED
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 707 AUTHORIZATION CODE
                  MMC 708 ACCOUNT CODE

MMC:306   HOT LINE

DESCRIPTION

Allows a station the ability to make a predetermined call similar to a ringdown circuit, upon the expiration of a timer (see MMC 502 STN TIMERS, Off-Hook Selection Timer). The hotline destination can be a station, a station group, a trunk, a trunk group or an external number. There can be a maximum of 18 digits in the dial string for the external number. The access code for the trunk or trunk group access code is not counted as part of the 18.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
B	Used to insert a flash code "F"
C	Used to insert a pause code "P"
D	Used to insert a pulse/tone conversion code "C"
E	Used to mask/unmask following digits—shows as "[" or "]"

ACTION   DISPLAY

1. Press TRSF 306
   Display shows

   ```
   [201] HOT LINE
   ```

2. Dial station number
           OR
   Use UP or DOWN to scroll through stations
   Press RIGHT soft key to move the cursor

   ```
   [205] HOT LINE
   _
   ```

3. Enter the hot line destination ie a station
   or trunk ID (e.g., 9 or 701) with a maximum
   of 18 outgoing digits after the access code for the CO call (see
   above list of options if needed)

   ```
   [205] HOT LINE
   9-1305P4264100_
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 502 STN TIMERS, OFF-HOOK SELECTION TIMER

MMC:308   ASSIGN BACKGROUND MUSIC SOURCE

DESCRIPTION

Assigns a background music source to the keysets. There are 6 possible music selections depending on the number of MISC (daughter) boards that are installed in the system.

You may also select an Auto Attendant (AA) port to provide continuous play of a specific recording. The AA port selected must be the last port on the card. If selected, the BGM source will be the message defined in MMC736 from the port defined in this MMC.

For example, if this MMC selects 201's music source as 3966 (the last port on the second AA card) and MMC 736 selects Message 20 for the second AA card, when extension 201 is placed on hold, 201 will hear message 20 from the second installed AA card.

If you have a CADENCE Voice Mail System installed you may also select a CADENCE recording as a music. The recording must already been defined in MMC 756 and will show up here as the CADENCE port assigned with the recording.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPEAKER	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 308
   Display shows current setting

   ```
   [201] BGM SOURCE
   BGM SOURCE: NONE
   ```

2. Dial keyset number (e.g., 205)
          OR

   ```
   [205] BGM SOURCE
   BGM SOURCE: NONE
   ```

   Use UP or DOWN to scroll through keyset
   numbers and press RIGHT soft key to move the cursor
          OR
   Press ANS/RLS to select all stations

   ```
   [ALL] BGM SOURCE
   BGM SOURCE: ?
   ```

3. Enter source number (e.g., 3701)
          OR

   ```
   [205] BGM SOURCE
   BGM SOURCE: 3701
   ```

   Press UP or DOWN key to make selection and press RIGHT soft
   key to return to step 2

4. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 309 ASSIGN STATION MUSIC ON HOLD
                   MMC 408 ASSIGN TRUNK MUSIC ON HOLD SOURCE
                   MMC 736 ASSIGN AA MOH
                   MMC 756 ASSIGN VM MOH

MMC:309   ASSIGN STATION MUSIC ON HOLD

DESCRIPTION

Assigns Music on Hold source to the iDCS 500 family of keysets. Any BGM source may be selected. Only one external music source is provided per MISC (daughter) board.

In addition to TONE or music a source from a MISC daughter board, you may also select an AA port to provide continuous play of a specific recording. The AA port selected must be the last port on the card. If selected, the Music on Hold will be the message defined in MMC 736 from the port defined in this MMC.

For example, if this MMC selects 201 music source as 3966 (the last port on the second AA card) and MMC736 selects Message 20 for the second AA card, when extension 201 is placed on hold, 201 will hear Message 20 from the second installed AA card.

If you have a CADENCE Voice Mail System installed you may also select a CADENCE recording as a music source. The recording must already been defined in MMC 756 and will show up here as the CADENCE port assigned with the recording.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 309
    Display shows current setting

    ```
    [201] STN MOH
    MOH SOURCE: NONE
    ```

2. Dial keyset number (e.g., 205)
            OR
    Use UP or DOWN to scroll through keyset numbers and press RIGHT soft key to move the cursor
            OR
    Press ANS/RLS to select all stations

    ```
    [205] STN MOH
    MOH SOURCE: NONE
    ```

    ```
    [ALL] STN MOH
    MOH SOURCE: ?
    ```

3. Enter source number (e.g., 3701)
            OR
    Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

    ```
    [205] STN MOH
    MOH SOURCE: 3701
    ```

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: TONE

RELATED ITEMS: MMC 308 ASSIGN BACKGROUND MUSIC SOURCE
                   MMC 736 ASSIGN AA MOH
                   MMC 756 ASSIGN VM MOH

MMC:310   LCR CLASS OF SERVICE

DESCRIPTION

Assigns the LCR class of service allowed on a per-station basis. There are eight classes which may be assigned. LCR class of service allows specific users to trunk advance up to a matching LCR class of service programmed in MMC 712.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 310
   Display shows

   ```
   [201] LCR CLASS
   LCR CLASS 1
   ```

2. Dial station number (e.g., 205)
             OR
   Press UP or DOWN to select station and
   press RIGHT soft key to move cursor

   ```
   [205] LCR CLASS
   LCR CLASS 1
   ```

             OR
   Press ANS/RLS to select All stations

   ```
   [ALL] LCR CLASS
   LCR CLASS ?
   ```

3. Dial 1–8 to select class type (e.g. 3)
             OR

   ```
   [205] LCR CLASS
   LCR CLASS 3
   ```

   Press UP or DOWN to select class type and press RIGHT soft
   key to return to step 2

4. Press TRSF to store and exit
             OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: LEAST COST ROUTING COS 1

RELATED ITEMS: LCR PROGRAMMING

MMC:312 ALLOW CLIP

DESCRIPTION

Allows the system administrator or technician to allow or deny CLIP data to be send or displayed at with LCD keysets.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPEAKER	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 312
    Display shows

    ```
    [201] ALLOW CLIP
    RCV: YES SND: YES
    ```

2. Dial station number (e.g., 205)
            OR
    Press UP or DOWN to select station
    and press right soft key to move cursor
            OR
    Press ANS/RLS to select ALL

    ```
    [205] ALLOW CLIP
    RCV: YES SND: YES
    ```

    ```
    [ALL] ALLOW CLIP
    RCV: YES SND: YES
    ```

3. Dial 0 or 1 to select receive option
            OR
    Press UP or DOWN to select receive option and press right soft key to move cursor

    ```
    [205] ALLOW CLIP
    RCV: YES SND: YES
    ```

4. Dial 0 or 1 to select send option
            OR
    Press UP or DOWN to select send option and press right soft key to return to step 2.

    ```
    [205] ALLOW CLIP
    RCV: YES SND: YES
    ```

5. Press TRSF to store and exit
            OR
    Press SPK to save and advance to next MMC

DEFAULT DATA: RCV: YES
                SND: YES

RELATED ITEMS: MMC 119 CLIP DISPLAY
                 MMC 425 ASSIGN CID TRUNKS

MMC:314   CONFIRM OUTGOING CALL

DESCRIPTION

Allows the outgoing call restricted by call duration time, disconnect or confirm with tone.

0 NONE	No action
1 CONFIRM TONE	When a C.O. confirm tone time expire, a call user heard system confirmation tone and next a C.O. confirm tone time started.
2 DISCONNECT	When a C.O. confirm tone time expire, a call is disconnected.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 314
   Display shows

   ```
   [201] CO CONFIRM
   NONE
   ```

2. Dial station number (e.g., 205)
        OR

   ```
   [205] CO CONFIRM
   NONE
   ```

   Press UP or DOWN to select station and use RIGHT soft key to move cursor

        OR
   Press ANS/RLS to select all stations

   ```
   [ALL] CO CONFIRM
   NONE
   ```

3. Dial a feature option 0-2
        OR

   ```
   [205] CO CONFIRM
   CONFIRM TONE
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

4. Press TRSF to save and exit
        OR
   Press SPK to save and advance to next MMC0

DEFAULT DATA: NONE

RELATED ITEMS : MMC 501 SYSTEM WIDE TIMER

MMC:315   CUSTOMER SET RELOCATION

DESCRIPTION

Customer Set Relocation allows System Administration level or Technician level access to relocate or exchange similar stations in the iDCS 500 without wiring changes (see Allow Table bellow). This program is a one for one exchange with like stations. ie. Single line to single line, 6 button keyset to 6 button keyset, etc. All individual station assignments such as trunk ring, station group, station COS, station speed dial, button appearances, etc. will follow the Customer Set Relocation program. 12 button keysets and 24 button keysets can be exchanged. 48 button modules and 64 button modules can also be exchanged. Single line stations numbers can be exchanged. If incompatible set types are selected the iDCS system will provide an ERROR: NO MATCH message. If 48 or 64 button module units are to be exchanged the Master assignment must be removed prior to using Customer Set relocation. If the 48 or 64 button module Master station is not removed the error code ERROR: NOT ALONE will appear on the LCD display. A station must be in the idle state (on hook) to perform Customer Set Relocation. If a wired location has a station port connected but no telephone instrument the Customer Set Relocation program will allow set relocation as long as the station types are similar.

12 button and 24 button key assignments should be taken in consideration when relocating these types of sets due to the button configurations of the instruments. If a 12 button set and a 24 button set are exchanged using the Customer Set Relocation program the first twelve buttons on the 24 button set will have the button programming of the 12 button set. The 12 button set will then have the programming of the first twelve buttons of the 24 button set. In other words, when exchanging 12 and 24 button set only the first twelve buttons will swapped.

> **NOTE** Customer access to this feature is default OFF in MMC 802.

CUSTOMER SET RELOCATION ALLOW TABLE

	S/L	DCS 6B	DCS 12B	DCS 24B	DCS 48B	IDCS F64B	IDCS F28B	IDCS F18B	IDCS F8B
S/L	**YES**	NO	NO	NO	NO	NO	NO	NO	NO
DCS 6B	NO	**YES**	NO	NO	NO	NO	NO	NO	NO
DCS 12B	NO	NO	**YES**	**YES**	NO	NO	NO	NO	NO
DCS 24B	NO	NO	**YES**	**YES**	NO	NO	NO	NO	NO
DCS 48B	NO	NO	NO	NO	**YES**	**YES**	NO	NO	NO
IDCS F64B	NO	NO	NO	NO	**YES**	**YES**	NO	NO	NO
IDCS F28B	NO	NO	NO	NO	NO	NO	**YES**	**YES**	NO
IDCS F18B	NO	NO	NO	NO	NO	NO	**YES**	**YES**	NO
IDCS F8B	NO	NO	NO	NO	NO	NO	NO	NO	**YES**

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

1. Press TRSF 315
   Display shows

2. Enter first station number (e.g.,202)
   press RIGHT soft key to move cursor

3. Enter second station number (e.g.,210)
   Press RIGHT softkey to enter data

4. Display will return to STEP 1
   Go to STEP 2

   OR

5. Press SPK to advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

DISPLAY

```
SET RELOCATION
EXT _  EXT
```

```
SET RELOCATION
EXT 202 EXT _
```

```
SET RELOCATE
EXT 202 EXT 210
```

```
SET RELOCATION
EXT _  EXT
```

MMC:316   COPY STN/TRK USE

DESCRIPTION

Provides a tool for duplicating station / trunk use assignments in MMC 304 from one station to another. This can be done on a per-station basis or on all stations.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 316
   Display shows

   ```
   [201] CPY USABLE
   FROM: NONE
   ```

2. Enter station number (e.g., 205)
           OR
   Press UP or DOWN keys to make selection and press RIGHT soft key to move cursor

   ```
   [205] CPY USABLE
   FROM: NONE
   ```

3. Enter station number to copy from
   Cursor is returned to step 2

           OR
   Press UP or DOWN key to make selection

   ```
   [205] CPY USABLE
   FROM: 203
   ```

4. Press RIGHT soft key to return to step 2
           OR
   Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 304 EXTENSION TRUNK USE

MMC:317 ASSIGN STATION/STATION USE

DESCRIPTION

This MMC is used to allow or restrict stations from making intercom calls to each other within the same tenant.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry
ANS/RLS   Used to select ALL

ACTION   DISPLAY

1. Press TRSF 317
   Display shows

   ```
   [201]  USE  [201]
   DI AL: YES
   ```

2. Dial the station number (e.g., 205)
            OR
   Press UP or DOWN key to select station and
   press RIGHT soft key
            OR
   Press ANS/RLS to select all stations

   ```
   [205]  USE  [201]
   DI AL: YES
   ```

3. Dial the station number (e.g., 204)
            OR
   Press UP or DOWN key to select station and
   press RIGHT soft key

   ```
   [205]  USE  [204]
   DI AL: YES
   ```

4. Dial 1 for YES or 0 for NO
            OR
   Press UP or DOWN key to select YES/NO
   and press RIGHT soft key to move cursor

   ```
   [205]  USE  [204]
   DI AL: NO
   ```

5. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: DIAL = YES

RELATED ITEMS: MMC 304 ASSIGN EXTENSION/TRUNK USE

MMC:318   DISTINCTIVE RINGING

DESCRIPTION

Allows the technician to select the ring tone heard at a keyset when called by a specific station or when a specific trunk rings that keyset. There is also a cadence control option to perform a similar function for single line sets. There are eight ring tones available along with a Follow Station (F-STN) option for the keysets. There are 5 cadences and a follow station option for SLT's.

TONE OPTIONDESCRIPTION

F-STN   Calls will ring with the keyset users choice of ring frequency.
1 ~ 8   Calls from the programmed station or trunk will ring keysets with this ring frequency.

CADENCE OPTIONDESCRIPTION

F-STN   Calls will ring with the normal SLT ring cadences.
1   Calls from the programmed station or trunk will ring SLT's with the intercom ring cadence.
2   Calls from the programmed station or trunk will ring SLT's with the CO ring cadence.
3   Calls from the programmed station or trunk will ring SLT's with the DOOR ring cadence.
4   Calls from the programmed station or trunk will ring SLT's with the ALARM ring cadence.
5   Calls from the programmed station or trunk will ring SLT's with the CALLBACK ring cadence.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 318
   Display shows first station

   ```
   [201] DIST.RING
   T:F-STN C:F-STN
   ```

2. Dial trunk or station number (e.g., 705)
          OR
   Press UP or DOWN to select trunk or station
   and press RIGHT soft key to move cursor

   ```
   [705] DIST.RING
   T:F-STN C:F-STN
   ```

3. Dial 1–8 to select ring tone
          OR

   Press UP or DOWN to select ring tone and
   press RIGHT soft key to move cursor

   ```
   [705] DIST.RING
   T:5     C:F-STN
   ```

4. Dial 1–5 to select ring cadence
          OR

   ```
   [705] DIST.RING
   T:5     C:3
   ```

Press UP or DOWN to select ring cadence and press RIGHT soft
key to move cursor

5. Press TRSF to store and exit
                OR
    Press SPK to save and advance to next MMC

DEFAULT DATA: F-STN FOLLOW STATION SETTING

RELATED ITEMS: MMC 111 KEYSET RING TONE

MMC:319   BRANCH GROUP

DESCRIPTION

Allows the assignment of stations into branch groups. There is a maximum of 99 branch groups. When CO ring is ringing at station assigned the same branch group can answer the incoming call by off hook. – Not available in U.K.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 319
   Display shows

   ```
   [201] BRANCH GRP
   BRAN GRP : NONE
   ```

2. Dial station number (e.g., 205)
              OR

   ```
   [205] BRANCH GRP
   BRAN GRP : NONE
   ```

   Press UP or DOWN to select station and use RIGHT soft key to move cursor
              OR
   Press ANS/RLS to select all stations

   ```
   [ALL] BRANCH GRP
   BRAN GRP : ??
   ```

3. Dial a branch group number (01 – 99)
              OR

   ```
   [205] BRANCH GRP
   BRAN GRP : 10
   ```

   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

4. Press TRSF to save and exit
              OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:320   PRESET FWD NO ANSWER

DESCRIPTION

Allows a technician to assign a default destination for FNA to each station on the system. These destinations may be different for each station or they may be the same. The preset FNA destination will be temporarily overwritten if the station user enters a different FNA destination. If the user cancels the new destination, the preset destination will once more be in effect. Preset Forward No Answer time follows the station no answer forward timer.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 320
   Display shows

   ```
   [201] PRESET FNA
   NONE
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor
   OR
   Press ANS/RLS to select all stations

   ```
   [205] PRESET FNA
   NONE
   ```

   ```
   [ALL] PRESET FNA
   NONE
   ```

3. Dial valid number via keypad
           OR
   Press UP or DOWN to make selection and press RIGHT soft key to return to step 2

   ```
   [205] PRESET FNA
   202
   ```

4. Press TRSF to save and exit
           OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 102 FORWARDING

                    MMC 502 STATION FWD NO ANS TIMER

MMC:321 KEYSET TYPE

DESCRIPTION

Assigns each keyset as DISPLAY or NON-DISPLAY. The TEXT MESSAGING feature requires that a keyset has a display. A station set for display that dials a station set for non-display will not be prompted with the text softkeys for text messaging.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 321
   Display shows keyset type

```
[201] KTS TYPE
NON DISPLAY
```

2. Dial station number (e.g., 205)
   OR
   Press UP or DOWN to select station and press RIGHT soft key to move cursor
   OR
   Press ANS/RLS to select all stations

```
[205] KTS TYPE
NON DISPLAY
```

```
[ALL] KTS TYPE
NON DISPLAY
```

3. Dial 0 for NON DISPLAY or 1 for DISPLAY
   OR
   Press UP or DOWN to make selection and press RIGHT soft key to return to step 2

```
[205] KTS TYPE
DISPLAY
```

4. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NON DISPLAY

RELATED ITEMS: MMC 715 PROGRAMMED STATION MESSAGE
                  MMC 115 PROGRAMMED STATION MESSAGE NUMBER

MMC:323   CALLING PARTY NUMBER

DESCRIPTION

Allows a maximum 16 digits number to be entered and associated with a station number on a per PRI/BRI basis. When this station makes an outgoing call on this PRI, the maximum 16 digits number entered will be the Calling Party Number sent on this outgoing PRI call. There are 4 tables for a iDCS 500-L system and 2 for others system.

In case of empty, system used MMC 405: CO TRUNK NUMBER for the Calling Party Number.

PROGRAM KEYS

UP & DOWN	Used to scroll through options/move cursor left or right
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 323
   Display shows

   ```
   [201] SEND CLIP
   1:
   ```

2. Dial extension (e.g., 230)
   OR
   Press UP or DOWN to select extension and press RIGHT soft key to move the cursor

   ```
   [230] SEND CLIP
   1:
   ```

3. Dial table number 1 ~ 6.
   OR
   Press UP or DOWN to select table number and press RIGHT soft key to move the cursor

   ```
   [230] SEND CLIP
   2:
   ```

4. Enter the Calling Party Number.

   ```
   [230] SEND CLIP
   2: 3055922900
   ```

5. Repeat Step 3 & 4 to enter other tables and Calling Party Numbers.
   OR
   Repeat Steps 2, 3, & 4 to enter other station and Calling Party Numbers.

6. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: EMPTY

RELATED ITEMS: MMC 405: CO TRUNK NUMBER

                          MMC 419: BRI OPTIONS

                          MMC 420: PRI OPTIONS

                          MMC 831: VOIP PARAMETER

MMC:400   CUSTOMER ON/OFF PER TRUNK

DESCRIPTION

Assigns several options (listed below) on a per-trunk basis.

OPTIONS

0   **1A2 EMULATION**   When this option is set to ON up to 4 internal stations can participate in a conversation on this trunk by pressing the trunk key.

1   **TRUNK INC DND**   When this option is set to ON a trunk that is programmed to ring a specific station (a private line or DIL) will ring at that station if the station is in DND.

2   **TRUNK FORWARD**   When this option is set to OFF this trunk will not follow a ringing stations call forwarding.

3   **LCR ALLOW**   When this option is set to ON this trunk will follow the LCR dial even if normal outgoing dial. – Available in U.K., Australia, New Zealand only.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 400
   Display show

```
[701] TRK ON/OFF
1A2 EMULATE:OFF
```

2. Dial trunk number (e.g. 704)
           OR
   Press UP or DOWN key to select trunk
           OR
   Press ANS/RLS for all trunks and press RIGHT soft key to move cursor to options

```
[704] TRK ON/OFF
1A2 EMULATE:OFF
```

```
[ALL] TRK ON/OFF
1A2 EMULATE :?
```

3. Dial option number from above list (0–4)
           OR
   Press UP or DOWN key to select option and press RIGHT soft key to move cursor

```
[704] TRK ON/OFF
TRK FORWARD :ON
```

4. Dial 1 for ON or 0 for OFF
           OR
   Press UP or DOWN key to select ON/OFF and press RIGHT soft key to return to step 2

```
[704] TRK ON/OFF
TRK FORWARD: OFF
```

5. Press TRSF to store and exit
OR
Press SPK to store and advance to next MMC

DEFAULT DATA: 1A2 EMULATE   OFF
TRUNK INC DND   OFF
TRUNK FWRD   ON
LCR ALLOW   OFF

RELATED ITEMS: NONE

MMC:401   C.O./PBX LINE

DESCRIPTION

Used to select the mode of the C.O. line. If the PBX mode is chosen, this allows PBX access codes to be recognized, thus allowing more complete toll restriction (call barring). This mode is assigned on a per-trunk basis.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 401
   Display shows

   ```
   [701] PBX LINE
   CO LINE
   ```

2. Dial trunk number (e.g., 704)
           OR

   Use UP or DOWN to scroll through trunk

   ```
   [704] PBX LINE
   CO LINE
   ```

   numbers and press RIGHT soft key to move
           OR
   Press ANS/RLS to select ALL

   ```
   [ALL] PBX LINE
   ?
   ```

3. Dial 1 for PBX or 0 for C.O.
           OR
   Use UP or DOWN to scroll through options
   Press RIGHT soft key to return to step 2

   ```
   [704] PBX LINE
   PBX LINE
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL TRUNKS C.O. LINE

RELATED ITEMS: NONE

MMC:402   TRUNK DIAL TYPE

DESCRIPTION

Used to determine the dialling type of each C.O. line. There are two options:
0   **DIAL PULSE (rotary dial)**
1   **Dual Tone Multi-Frequency (DTMF).**

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 402
    Display shows

    ```
    [701] DIAL TYPE
    DTMF TYPE
    ```

2. Dial trunk number (e.g., 704)
            OR

    ```
    [704] DIAL TYPE
    DTMF TYPE
    ```

    Use UP or DOWN to scroll through trunk numbers

    and press RIGHT soft key to move the cursor
            OR

    ```
    [ALL] DIAL TYPE
    ?
    ```

    Press ANS/RLS to select ALL

3. Dial 0 for DTMF, or 1 for PULSE
            OR

    ```
    [704] DIAL TYPE
    DIAL PULSE TYPE
    ```

    Use UP or DOWN to scroll through options
    Press RIGHT soft keys to return to step 2

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: ALL TRUNKS DTMF

RELATED ITEMS: MMC 501 SYSTEM TIMERS

                   MMC 503 TRUNK-WIDE TIMERS

MMC:403   TRUNK TOLL CLASS

DESCRIPTION:

Assigns toll class level assignments on a per-trunk or all-trunk basis in a day or night condition. The options for toll level will follow either the station class or the class of service defined in MMCs 702, Toll Deny Table, and 703, Toll Allowance Table. The toll classes that are available are listed below with their entry numbers.

ENTRY NUMBER	CLASS TYPE	DESCRIPTION
0	F-STN	Follow station toll restriction
1	CLS-A	Follow toll class A (Unrestricted)
2	CLS-B	Follow toll class B
3	CLS-C	Follow toll class C
4	CLS-D	Follow toll class D
5	CLS-E	Follow toll class E
6	CLS-F	Follow toll class F
7	CLS-G	Follow toll class G
8	CLS-H	Follow toll class H (All restricted)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 403
   Display shows

   ```
   [701] TOLL CLASS
   D:F-STN N:F-STN
   ```

2. Dial trunk number (e.g.704)
           OR
   Use UP or DOWN to scroll through trunk numbers and press RIGHT soft key to move the cursor
           OR
   Press ANS/RLS to select ALL

   ```
   [704] TOLL CLASS
   D:F-STN N:F-STN
   ```

   ```
   [ALL] TOLL CLASS
   D:F-STN N:F_STN
   ```

3. Enter day toll class (e.g. 2 for CLS-B)
           OR
   Press UP or DOWN to scroll through toll classes and use RIGHT soft key to move the cursor

   ```
   [704] TOLL CLASS
   D:CLS-B N:F-STN
   ```

4. Enter night toll class (e.g., 2)
           OR
   Press UP or DOWN to scroll through toll classes and use RIGHT soft key to return to step 2

   ```
   [704] TOLL CLASS
   D:CLS-B N:CLS-B
   ```

5.   Press TRSF to store data and exit
          OR
     Press SPK to store data and advance to next MMC

DEFAULT DATA: ALL TRUNKS F-STN

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                  MMC 507 ASSIGN AUTO RING PLAN TIME
                  MMC 701 ASSIGN COS CONTENTS
                  TOLL RESTRICTION

MMC:404   TRUNK NAME

DESCRIPTION:

Allows an 11-character name to be entered to identify an individual trunk.

Names are written using the keypad. Each key press selects a character. Pressing the dial pad key moves the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message. Pressing "A" button will change the letter from upper case to lower case.

NOTE When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION

1. Press TRSF 404
   Display shows

2. Dial trunk (e.g., 704)
                OR
   Press UP or DOWN to select trunk and press RIGHT soft key to move the cursor

3. Enter trunk name using the procedure described above Press RIGHT soft key to return to step 2

4. Press TRSF to store and exit
                OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO NAMES ENTERED

RELATED ITEMS: MMC 104 STATION NAME
                  MMC 405 TRUNK NUMBER

DISPLAY

```
[701] TRUNK NAME
```

```
[704] TRUNK NAME
```

```
[704] TRUNK NAME
TELECOMS
```

MMC:405   TRUNK NUMBER

DESCRIPTION:

Allows an 11-digit number to be entered to identify an individual trunk.

Numbers are written using the keypad. Each press of a key selects a digit. Pressing the desired key moves the cursor to the next position. For example, if the directory number is 426-4100, press the number 4 once to get the number 4. Now press the number 2 once for number 2. Continue selecting characters from the table below to complete your number.

NOTE When the number you want appears on the same dial pad key as the previous number, press the UP key to move the cursor to the right or the DOWN key to move the cursor left. A space can be entered by using these keys.

COUNT	1	2	3	4	5
DIAL 0	0	<	>	.	)
DIAL 1	1	Space	?	,	!
DIAL 2	2	A	B	C	@
DIAL 3	3	D	E	F	#
DIAL 4	4	G	H	I	$
DIAL 5	5	J	K	L	%
DIAL 6	6	M	N	O	^
DIAL 7	7	P	Q	R	S
DIAL 8	8	T	U	V	*
DIAL 9	9	W	X	Y	Z
DIAL *	*	:	=	[	]

The # key can be used for special characters: #, space, &, !, :, ?, ., %, $, -, , , /, =, [,], @, ^, (,), _, +, {, }, |, ;, \, " and ~.

PROGRAM KEYS

UP & DOWN   Used to scroll through options/move cursor left or right
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry
A   Key 19 on DCS keyset and Key 21 on iDCS keyset; acts as toggle between upper case and lower case

ACTION

DISPLAY

1. Press TRSF 405
   Display shows

   ```
   [701] CO TEL NO.
   ```

2. Dial trunk (e.g., 704)
               OR
   Press UP or DOWN to select trunk and press RIGHT soft key to
   move the cursor

   ```
   [704] CO TEL NO.
   ```

3. Enter trunk number using the procedure described above

   ```
   [704] CO TEL NO.
   3054264100
   ```

4. Press RIGHT soft key to return to step 2
               OR
   Press TRSF to store and exit
               OR
   Press SPK to store and advance to next MMC

   DEFAULT DATA: NO NUMBERS ENTERED

   RELATED ITEMS: MMC 404 TRUNK NAME

MMC:406   TRUNK RING ASSIGNMENT

DESCRIPTION

Enables ringing to a specific station or to a group of stations when incoming calls are received. This MMC controls ring plan destinations for ring down trunks. If the ring plan destinations are not input the default ring plan is ring plan 1. Station group 500 is default in Ring Plan 1.

DEVICE	DEFAULT DN
3 Digit Station	201–349
3 Digit Station group	500–5xx
4 Digit Station	2001–2xxx
4 Digit Station group	5000–5xxx

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL (trunks only)

ACTION   DISPLAY

1. Press TRSF 406
   Display shows

   ```
   [701] TRK RING
   1:500   2:500
   ```

2. Use UP or DOWN to scroll through trunk
   numbers and press the RIGHT soft key to
   move the cursor OR press ANS/RLS for ALL OR

   ```
   [All] TRK RING
   1:500   2:500
   ```

3. Dial trunk number (e.g., 704)

   ```
   [704] TRK RING
   1:500   2:500
   ```

4. Dial ring plan number or press the RIGHT softkey to move to
   the next step.

   ```
   [704] TRK RING
   1:500   2:500
   ```

5. Dial station number or station group number
   (e.g., 205)

   ```
   [704] TRK RING
   1:205   2:500
   ```

   OR
   Press UP or DOWN key to select station
   number or station group number and press RIGHT soft key to
   move cursor to the next
   ring plan destination and repeat step 5

   ```
   [704] TRK RING
   1:205   2:501
   ```

   OR
   Press LEFT soft key to return to step 5
   OR
   Press TRSF to store and exit

6.   Press TRSF to store and exit
               OR
     Press SPK to store and advance to next MMC

DEFAULT DATA: ALL TRUNKS RING DEFAULT OPERATOR GROUP (500, 5000)

RELATED ITEMS: MMC 202 CHANGE FEATURE PASSCODES
                   MMC 507 ASSIGN RING PLAN TIME
                   MMC 601 ASSIGN STATION GROUP

MMC:407   FORCED TRUNK RELEASE

DESCRIPTION

Provides a positive forced trunk release to a specific trunk or all trunks in the event of a trunk lock-up.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 407
   Display shows

   ```
   [701] TRK RELS.
   RELEASE?_Y:1,N:0
   ```

2. Dial in trunk number (e.g., 704)
           OR
   Press UP or DOWN key selected trunk and press right soft key

   ```
   [704] TRK RELS.
   RELEASE?_Y:1,N:0
   ```

           OR
   Press ANS/RLS to select all trunks

   ```
   [ALL] TRK RELS.
   RELEASE?_Y:1,N:0
   ```

3. Dial 1 for YES
           OR
   Dial 0 for NO
   (Pressing 1 or 0 will return to step 2)

   ```
   [704] TRK RELS.
   RELEASE?1Y:1,N:0
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:408 ASSIGN TRUNK MOH SOURCE

DESCRIPTION

Allows the system administrator to select which Music on Hold (MOH) source can be heard on each trunk. For the five types of selections, see below.

OPTIONS

TONE:	An intermittent tone is played to the caller.
NONE:	No Music on Hold selection.
37X:	If internal MOH port number, a chime tune is played. If another MOH port number, an external source from a MISC (daughter) board is played.
39XX (when AA is used):	The MOH source is provided by the AA card. See MMC 736.
CADENCE / SVMi PORT NUMBER:	If you have a CADENCE Voice Mail System installed you may also select a CADENCE / SVMi recording as a music source. The recording must already been defined in MMC 756 and will show up here as the CADENCE port associated with the recording.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 408
   Display shows current setting

   ```
   [701] TRK MOH
   MOH SOURCE:TONE
   ```

2. Dial trunk number (e.g., 704)
         OR
   Use UP or DOWN to scroll through trunk

   ```
   [704] TRK MOH
   MOH SOURCE:TONE
   ```

   numbers and press RIGHT soft key to move cursor
         OR
   Press ANS/RLS to select ALL

   ```
   [ALL] TRK MOH
   MOH SOURCE:?
   ```

3. Enter source number (e.g., 371)
         OR
   Press UP or DOWN key to select option
   Press RIGHT soft key to return to step 2 above

   ```
   [705] TRK MOH
   MOH SOURCE:371
   ```

4. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: TONE

RELATED ITEMS: MMC 736 ASSIGN AA MOH
                   MMC 756 ASSIGN VM MOH

MMC:409 TRUNK STATUS READ

DESCRIPTION

Allows the status of trunks to be read in a format that will enable the servicing personnel to quickly identify the ownership and position of a trunk. This is a read-only MMC.

OPTION TABLE

00	Port Number (Cabinet/Slot/Port)
01	Type: LOOP, GND, E&M, DID, BRI, PRI. VOIP…
02	1A2 Emulation On/Off
03	Trunk Forward On/Off
04	Line Type: CO/PBX
05	Dial Type: DTFM/Dial Pulse
06~11	Ring Plan Toll Restriction (1–6)
12~17	Ring Plan Ring Destination (1–6)
18	MOH Source
19	DISA Status

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 409
   Display shows

   ```
   [701] TRK STATUS
   PORT: C1-S5-P01
   ```

2. Enter trunk number via dial keypad (e.g.,704)
   　　　　OR
   Press UP or DOWN key to make selection and press RIGHT soft key to advance cursor

   ```
   [704] TRK STATUS
   PORT: C1-S5-P04
   ```

3. Enter in desired option 00-12 (e.g. 02)
   　　　　OR
   Press UP or DOWN key to make selection

   ```
   [704] TRK STATUS
   TYPE: LOOP TRUNK
   ```

4. Press TRSF to store and exit
   　　　　OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: FOLLOW TRUNK

RELATED ITEMS: MMC 400 CUSTOMER ON/OFF PER TRUNK
                         MMC 401 C.O./PBX LINE
                         MMC 402 TRUNK DIAL TYPE
                         MMC 403 TRUNK TOLL CLASS
                         MMC 404 TRUNK NAME
                         MMC 406 TRUNK RINGING ASSIGNMENT
                         MMC 408 ASSIGN TRUNK MUSIC ON HOLD SOURCE
                         MMC 410 ASSIGN DISA TRUNK

MMC:410   ASSIGN DISA TRUNK

DESCRIPTION

Allows the system the ability to have Direct Inward System Access (DISA). Because there is a possibility that unauthorized calls will be made via this feature, several safeguards have been added. The end user must be informed of these to prevent unnecessary service calls. DISA can lockout when a predetermined number of invalid consecutive calls are attempted. Callers will then receive error tone until the programmable timer has expired. The * key may be used to initiate new dial tone while in a station to station call. The # key may be used to terminate the DISA call and disconnect the central office line. DISA lines must be assigned to the Ring Plan(s).

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL (trunks)

ACTION   DISPLAY

1. Press TRSF 410
   Display shows

   ```
   [701]     123456
   DISA LINE: 000000
   ```

2. Dial trunk number (e.g., 704)
           OR
   Press UP or DOWN key to select trunk and press RIGHT soft key
           OR
   Press ANS/RLS key to select all trunks
           OR

   ```
   [704]     123456
   DISA LINE: 000000
   ```

   ```
   [ALL]     123456
   DISA LINE: 000000
   ```

3. Press VOL key UP or DOWN key to select a Ring Plan (e.g. ring plan 3).
           OR
   Using the dial pad press 1 to apply and 0 not to apply to a particular Ring Plan and press RIGHT soft key to return to step 2

   ```
   [704]     123456
   DISA LINE: 001000
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL TRUNKS NORMAL

RELATED ITEMS: MMC 500 SYSTEM-WIDE COUNTERS

                  MMC 507 ASSIGN RING PLANS

MMC:411 ASSIGN E1 SIGNAL TYPE

DESCRIPTION

Defines the type of signalling for each E1 trunk assigned to the card. There are four kinds of trunks as detailed below. There are three types of signalling associated with E & M and DID. E1 channels (1-30) that are not used should have TYPE programmed as UNUSED.

TRUNK	SIGNALLING	COMMENTS
LOOP	BR_14301_NOT	BRAZIL, L, I, ERICSSON, 1/1914, FOR TEST
	BR_14301_OPT	BRAZIL, L, I, ERICSSON, 2/1914, FOR TEST
	RU_LOOP	RUSSIA, L, I/O, LOOP START
E & M	IMMEDIATE	COMMON, E/D, I/O, IMMEDIATE START
	DELAYED	COMMON, E/D, I/O, DELAY
	ITU_WINK	COMMON, E/D, I/O, WINK START
	ITU_WINK_MPD	COMMON, E/D, I/O, WINK START WITH MPD
	BR_CONTINU	BRAZIL, E/D, I/O, CONTINUE
	BR_PULSED	BRAZIL, E/D, I/O, PULSED
	BR_R2_DIGIT	BRAZIL, E/D, I/O, R2 DIGITAL
	BR_BLD_160	BRAZIL, E, I/O, ERICSSON, 2/1914, 14102_N
	BR_BLD_157	BRAZIL, E, I/O, ERICSSON, 2/1914, 14102_O
	BR_14102_NOT	BRAZIL, E, I/O, ERICSSON, 1/1914
	BR_14102_OPT	BRAZIL, E, I/O, ERICSSON, 1/1914
	RU_ADSE	RUSSIA, E/D, I/O, PABX
	RU_HARRIS_UK	RUSSIA, E/D, I/O, HARRIS, PABX, UK_EM
	RU_USER_ROM	RUSSIA, E/D, I/O, USER ROM
	AR_WINK	ARGENTINA, E/D, I/O, WINK
	AR_WINK_MPD	ARGENTINA, E/D, I/O, WINK-MPD
	CHINA_NO1	CHINA, E/D, I/O, NO.1 OF CHINA
	POL_WINK_MPD	POLAND, E/D, I/O, POLAND WINK MPD
DID	IMMEDIATE	COMMON, E/D, I/O, IMMEDIATE START
	DELAYED	COMMON, E/D, I/O, DELAY
	ITU_WINK	COMMON, E/D, I/O, WINK START
	ITU_WINK_MPD	COMMON, E/D, I/O, WINK START WITH MPD
	BR_CONTINU	BRAZIL, E/D, I/O, CONTINUE
	BR_PULSED	BRAZIL, E/D, I/O, PULSED
	BR_R2_DIGIT	BRAZIL, E/D, I/O, R2 DIGITAL
	RU_ADSE	RUSSIA, E/D, I/O, PABX
	RU_HARRIS_UK	RUSSIA, E/D, I/O, HARRIS, PABX, UK_EM
	RU_USER_ROM	RUSSIA, E/D, I/O, USER ROM
	AR_WINK	ARGENTINA, E/D, I/O, WINK
	AR_WINK_MPD	ARGENTINA, E/D, I/O, WINK-MPD
	CHINA_NO1	CHINA, E/D, I/O, NO.1 OF CHINA
	POL_WINK_MPD	POLAND, E/D, I/O, POLAND WINK MPD
UNUSE		

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   *DISPLAY*

1. Press TRSF 411
    Display shows

    ```
    [701] E1 SIGNAL
    UNUSE
    ```

2. Enter desired trunk number (e.g., 705)
            OR
    Press UP or DOWN key to make selection

    ```
    [705] E1 SIGNAL
    UNUSE
    ```

    Press RIGHT soft key to move cursor
            OR
    Press ANS/RLS to select all trunks

    ```
    [ALL] E1 SIGNAL
    ?
    ```

3. Press UP or DOWN key to trunk type select and press RIGHT
    soft key to move cursor

    ```
    [705] E1 SIGNAL
    E&M: IMMEDIATE
    ```

4. Press UP or DOWN key to signalling select and press RIGHT
    soft key to

    ```
    [705] E1 SIGNAL
    E&M: ITU_WINK
    ```

5. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: TRUNK PROGRAMMING

MMC:412   ASSIGN TRUNK SIGNAL

DESCRIPTION

Allows for the assignment of analog DID or E&M cards for proper signalling. This MMC is only for analog types of DID/E&M trunks. These trunks can also use the translation tables in MMC 714. The signalling condition types are as follows:

> IMMEDIATE
> DELAYED
> WINK

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 412
   Display shows

   ```
   [701] TRK SIGNAL
   IMMEDIATE START
   ```

2. Enter desired trunk number (e.g., 705)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor
           OR
   Press ANS/RLS to select all trunks

   ```
   [705] TRK SIGNAL
   IMMEDIATE START
   ```

3. Enter desired trunk type selection from above list
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key

   ```
   [705] TRK SIGNAL
   WINK START
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: IMMEDIATE

RELATED ITEMS: MMC 416 E&M/DID RINGDOWN

                    MMC 714 DDI NUMBER AND NAME TRANSLATION

MMC:413   VMS CALL TYPE

DESCRIPTION

This program needs when VOICE MAIL/AUTO ATTENDANT (SVM-800) is used.
Defines the type of signalling for voice mail assigned trunk.

AP   ANSWERING PHONE
AT   AUDIO TEX
AA   AUTO ATTENDANT
VM   VOICE MAIL

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 413
   Display shows

   ```
   [701] CTYPE AP:N
   AT:N AA:Y VM:N
   ```

2. Enter desired trunk number (e.g., 702)
           OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor
           OR
   Press ANS/RLS to select all trunks

   ```
   [702] CTYPE AP:N
   AT:N AA:Y VM:N
   ```

3. Enter 1 for YES, or 0 for NO
           OR
   Press UP or DOWN key to make selection
   and press RIGHT soft key

   ```
   [702] CTYPE AP:N
   AT:N AA:Y VM:N
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: APNO

                 ATNO

                 AAYES

                 VMNO

RELATED ITEMS: NONE

MMC:414   PRS SIGNAL

DESCRIPTION

Used on a per-trunk basis to define if a C.O. line is to be either a Metering Pulse (MPD) or a Polarity Reversal Signal (PRS) trunk.

A Meter Pulse Trunk will detect a C.O provided meter pulse. A Polarity Reversal trunk will detect the line reversal signal which may be provided by the C.O. When the other party answers the outgoing call or the outside party clears the call. If the trunk is designated as PRS detection, the call duration timer will be started and the results printed on the SMDR record. PRS detection is also essential for dropping a trunk-to- trunk conversation which is unsupervised by an internal party.

There are three types of PRS mode: PRS 1, PRS 2 and PRS 3.

PRS 1   When first PRS is detected, call duration is started. When second PRS is detected, call duration timer stopped. The call is not released until hanging-on.

PRS 2   When first PRS is detected, call duration timer is started. When second PRS is detected, call duration timer is stopped and call is released.

PRS 3   The call duration timer starts based on the timer. When first PRS is detected, call duration timer is stopped and call is released.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 414
   Display shows

```
[701] TRK PRS
NONE
```

2. Dial desired trunk number (e.g., 705)
   OR
   Press UP or DOWN to select trunk and use RIGHT soft key to move cursor

```
[705] TRK PRS
NONE
```

3. Dial 0 for PRS 1, 1 for PRS 2, 2 for PRS 3 or 3 for MPD or 4 for NORMAL

   OR

   Press UP or DOWN key to scroll through options and use LEFT or RIGHT soft key to return to step 2

```
[705] TRK PRS
PRS 2
```

4. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NORMAL(NONE)

RELATED ITEMS: MMC503 TRUNK-WIDE TIMER

MMC:415 REPORT TRUNK ABANDON DATA

DESCRIPTION

Allows the system administrator or technician to enable or disable the reporting of abandoned C.O. calls for which CLIP information has been collected on a per-trunk basis. There are two options for this MMC as follows:

0 **REPORT: NO** Abandoned call records for incoming calls with CID information will not be printed on SMDR or stored in the system call abandon list. These records will continue to be stored in the station review list.

1 **REPORT: YES** Abandoned call records for incoming calls with CID information will be printed on SMDR and stored in the system call abandon list. These records will also be stored in the station review list.

NOTE In order for these abandoned call records to print on SMDR, MMC 725 SMDR OPTIONS Option 11 Print Abandoned Call Records must be set to YES.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

1. Press TRSF 415
   Display shows

2. Dial trunk number (e.g., 705)
   OR
   Use UP and DOWN to select trunk and press RIGHT soft key to move cursor

3. Dial 1 for YES or 0 for NO
   OR
   Use UP and DOWN to select option and press RIGHT soft key to return to step 2.

4. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DISPLAY

```
[701] TRK ABNDN
REPORT: YES
```

```
[705] TRK ABNDN
REPORT: YES
```

```
[705] TRK ABNDN
REPORT: NO
```

DEFAULT DATA: ALL TRUNKS REPORT :YES

RELATED ITEMS: MMC 725 SMDR OPTIONS

MMC 425 ASSIGN CALLER ID TRUNKS

MMC:416   ASSIGN E&M/DID RINGDOWN

DESCRIPTION

This MMC defines which ring destination table an E&M or DID trunk will follow for incoming calls. There are three options for each trunk as defined below.

0. FOLLOW INCOM DGT When a trunk is set to this option calls will ring at the destination that matches the digits received from the CO. This is the same as the previous UNUSE DID TRANS option.

1. FOLLOW DID TRANS When a trunk is set to this option calls will ring at the destination defined in MMC 714 that matches the digits received from the CO. This is the same as the previous USE DID TRANS option

2. FOLLOW TRK RING If this option is selected, press the right soft key and "NO. RCV DIGIT:" will appear on the display. Here is where the number of incoming digits from C.O. must be entered (0 through 4). When a trunk is set to this option calls will ring at the destination defined in MMC 406 for that trunk. If the destination defined in MMC 406 is a VMAA port or group then the system will repeat the digits received from the CO to the port when it answers.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 416
   Display shows

   ```
   [701] E&M TRANS
   FOLLOW DID TRANS
   ```

2. Enter desired trunk number (e.g., 705)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor
           OR
   Press ANS/RLS to select all trunks

   ```
   [705] E&M TRANS
   FOLLOW DID TRANS
   ```

   ```
   [ALL] E&M TRANS
   FOLLOW INCOM DGT
   ```

3. Press the right softkey and enter the number of incoming digits.

   ```
   [705] E&M TRANS
   NO. RCV DIGIT: 4
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: FOLLOW INCOMING DIGIT

RELATED ITEMS: MMC 714 DID NUMBER AND NAME TRANSLATION

MMC:417   E1/PRI CRC4 OPTION

DESCRIPTION

This option is used to enable/disable CRC4 generation and checking. It is useful with some networks which do not support CRC4 framing but only PCM30 framing. By default, the CRC option is ON.

> **NOTE** After changing this option, MMC 418 must be used to restart the card to make the change effective.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 417
   Display shows

   ```
   [701] E1/PRI CRC
   ON
   ```

2. Enter first trunk number in PRI card (e. g 701) OR
   Press UP or DOWN to select trunk and use RIGHT soft key to move cursor

   ```
   [701] E1/PRI CRC
   ON
   ```

3. Enter 1 for ON 0 for OFF
              OR
   Press UP or DOWN key to select and press RIGHT soft key

   ```
   [701] E1/PRI CRC
   OFF
   ```

4. Press TRSF to save and exit
              OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: FOLLOW INCOMING

RELATED ITEMS: MMC 714 DID NUMBER AND NAME TRANSLATION

MMC:418   BRI AND PRI CARD RESTART

DESCRIPTION

This MMC is used to restart a BRI and a PRI card at the card level. This action is required to update the processor on the BRI and PRI card to any changes in the card setup MMC's and to put these changes into effect.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 418
   Display shows first BRI or PRI circuit

   ```
   [725] RESTART
   CARD RESTART?NO
   ```

2. Dial first trunk on a BRI or PRI card
   (e.g., 733)
           OR
   Press UP or DOWN key to select the first trunk and press
   RIGHT soft key to move the cursor

   ```
   [733] RESTART
   CARD RESTART?NO
   ```

3. Dial 1 for YES
           OR
   Dial 0 for NO
   Pressing 1 will advance to step 4

   ```
   [733] RESTART
   CARD RESTART?YES
   ```

4. Dial 1 for YES
           OR
   Dial 0 for NO
   Pressing 1 or 0 will return to step 2

   ```
   [733] RESTART
   ARE YOU SURE?YES
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 419   BRI OPTION

                   MMC 420   PRI CONTROL

                   MMC 423   S/T MODE

                   MMC 424   BRI S0 MAPPING

MMC:419   BRI OPTION

DESCRIPTION

Assigns several options on a per-BRI basis and there are different options depending on whether the BRI is programmed as a trunk or station in MMC 423.

> **NOTE** If any changes are made in this MMC, the BRI card that is affected by these changes MUST be restarted using MMC 418 in order for the changes to become effective.

OPTIONS FOR BRI PORTS PROGRAMMED AS TRUNKS IN MMC 423

0 ANY CHANNEL   When this option is set to YES, the system will place calls on any free channel of that BRI if the channel chosen by the user is busy. If set to NO, the user will receive a busy signal if they attempt to access a busy channel even if the other channel on that BRI is free.

1 BRI MODE

       P-P DID   Point to Point Direct Inward Dial. This operates in a similar manner to an analog DID circuit with multiple CO numbers pointed to a single channel and translated within the system (MMC714) to a single device.

       P-M NOR   Point to Multi-point NORmal. This type of circuit operates in a similar manner to P-P NORmal but allows multiple devices to be attached to the circuit. Ringing is defined in MMC 406.

       P-M MSN   Point to Multi-point MSN. This setting is used when the line uses the MSN supplementary service. Ringing is defined in MMC 421.

       P-P NOR   Point to Point NORmal. This operates like a standard telephone line with one CO number per channel and ring according to MMC 406.

2 DLSEND

       OVERLAP Digits will be sent as they are dialed by the user.

       ENBLOCK Digits will be collected and sent in a single block similar to a Cell phone.

3 CLIP TABLE   Used to select the Calling Party Number to send to the network.In case of NONE, MMC 405 CO TRUNK NUMBER is sent to the network. In other cases, MMC 323 Calling Party Number entry corresponding with the selected number is sent to the network.

OPTIONS FOR BRI PORTS PROGRAMMED AS STATIONS IN MMC 423

0 ANY CHANNEL When this option is set to YES, the system will place calls on any free channel of that BRI if the channel chosen by the user is busy (i.e., Preferred channel selection). If set to NO, the user will receive a busy signal if they attempt to access a busy channel even if the other channel on that BRI is free (i.e., Exclusive channel selection).

1 POWER FEED This field determines if power to a BRI access will be supplied. (YES or NO)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION

1. Press UP or DOWN key to select BRI trunk and Press RIGHT soft key.

2. Dial BRI trunk number (e.g., 727)
   OR
   Press UP or DOWN key to select BRI trunk and Press RIGHT soft key

3. Select option item.
   OR
   Press UP or DOWN key to select option item and Press RIGHT soft key.

4. Select option.
   OR
   Press UP or DOWN key to select option item and Press RIGHT soft key.

5. Dial BRI station number (e.g., 729)
   OR
   Press UP or DOWN key to select BRI station and Press RIGHT soft key.

DISPLAY

```
[725] BRI-TRK
CHANNEL ANY: YES
```

```
[727] BRI-TRK
CHANNEL ANY: YES
```

```
[727] BRI-TRK
CHANNEL ANY: NO
```

```
[727] BRI-TRK
BRI MODE: P-M MSN
```

```
[727] BRI-TRK
DLSEND  : OVERLAP
```

```
[727] BRI-TRK
CLIP TABLE : NONE
```

```
[727] BRI-TRK
CLIP TABLE: 1
```

```
[729] BRI-STN
CHANNEL ANY: YES
```

6. Select option item.
    OR
    Press UP or DOWN key to select BRI station and
    Press RIGHT soft key.

```
[729] BRI-STN
CHANNEL ANY: YES
```

```
[729] BRI-STN
POWER FEED : NO
```

7. Select option.
    OR
    Press UP or DOWN key to select option item and
    Press RIGHT soft key.

```
[729] BRI-STN
POWER FEED : YES
```

8. Press TRSF to store and exit
    OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: For BRI Ports programmed as Trunks:
                 CHANNEL ANY = YES
                 BRI MODE = P-P DDI
                 DLSEND = OVERLAP
                 CLIP TABLE = NONE

                 For BRI Ports programmed as Stations:
                 CHANNEL ANY = YES
                 POWER FEED = NO

RELATED ITEMS: MMC418 CARD RESTART
                 MMC423 S/T MODE

MMC:420   PRI CONTROL

DESCRIPTION

This MMC allows the technician to program a PRI trunk board. It is allowed ability of DDI/NORMAL access and setting dial send mode to OVERLAP or ENBLOCK.

OPTION TABLE

CHANNEL ANY:
- YES = Preferred channel selection (i.e., another idle channel may be used for this call if this channel is initially selected);
- NO = Exclusive channel selection (i.e., only this channel may be used) for this call if this channel is initially selected)

PRI MODE
- PRI access mode selection (DDI, NORMAL)

DLSEND
Dial sending mode selection (OVERLAP, ENBLOCK)
- OVERLAP   Digits will be sent as they are dialed by the user.
- ENBLOCK   Digits will be collected and sent in a single block similar to a Cell phone.

CLIP TABLE
Used to select the Calling Party Number to send to the network.
In case of NONE, MMC 405 CO TRUNK NUMBER is sent to the network. In other cases, MMC 323 Calling Party Number entry corresponding with the selected number is sent to the network.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

1. Press TRSF 420
   Display shows

2. Dial first PRI trunk number in PRI card (e.g.,730)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key.

3. Enter option number to make selection.
           OR
   Press UP or DOWN key to make selection.

4. Press UP or DOWN key to make selection.
   Then press RIGHT soft key.

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DISPLAY

```
[701] PRI OPTION
CHANNEL ANY: YES
```

```
[730] PRI OPTION
CHANNEL ANY: YES
```

```
[730] PRI OPTION
PRI MODE: DDI
```

```
[730] PRI OPTION
PRI MODE: NORMAL
```

DEFAULT DATA: ANY CHANNEL: YES
                 PRI MODE: DDI
                 DLSEND: OVERLAP
                 CLIP TABLE: NONE

RELATED ITEMS: MMC 323 CALLING PARTY NUMBER
                 MMC 405 CO TRUNK NUMBER
                 MMC 418 CARD RESTART
                 MMC 714 DID NAME AND NUMBER TRANSLATION

MMC:421   MSN DIGIT

DESCRIPTION

Provides a method of assigning an incoming MSN call to a specific station. If any entry in MSN DIGIT TABLE matches an incoming call's called party number, either the specific station is alerted, if it is programmed to accept the call, or the call is cleared if it is programmed to reject the call.

If the incoming called party number does not have a matching entry in the MSN table, MMC 406 ringing destination is alerted or the call is released by option.

You can give each MSN number to a specific station and you can select call waiting option: when a destination is busy, the incoming call must be cleared or camped-on to the station (which is alerted to the call).

There is a total of eight entries on a trunk basis and each entry consists of the following fields:

DIGIT   DIGIT Digits to be received. There is a maximum of 12 digits

1-6   These numbers correspond to the six ring plan destinations for this MSN. The destinations can be either stations or station groups.

CALL WAIT   Toggles YES or NO: if YES then the call will be camped-on at busy destination while NO gives busy indication.

OPTION   Accept: The selected destination party will be alerted.
                Reject: The call will be cleared.

> **NOTE** For each BRI access, two adjacent ports are assigned. You need only change the value for one of the two ports; the value for the other port will be changed automatically

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry
ANS/RLS   Used to select ALL

ACTION

DISPLAY

1. Press TRSF 421
   Display shows

   ```
   [701] MSN DGT (1)
   DGT:
   ```

2. Enter trunk number (e.g., 704)
           OR
   Press UP or DOWN to scroll through ISDN PORT and press
   RIGHT soft key to move cursor

   ```
   [704] MSN DGT (1)
   DGT:
   ```

3. Enter the location 1-8 (e.g. 4)
           OR
   Press UP or DOWN to select location and press RIGHT soft key
   to move cursor

   ```
   [704] MSN DGT (4)
   DGT:
   ```

4. Enter digits to be translated (e. g. 4603881) via dial keypad and
   press RIGHT soft key to
   Move to the destination selection (Max. Digit is 12)

   ```
   [704] MSN DGT (4)
   DGT: 4603881
   ```

5. Enter destinations for 6 ring plan via dial keypad (e.g. 204 for
   ring plan 1)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key

   ```
   [704] MSN DGT (4)
   1: 204    2: NONE
   ```

6. Enter 1 for YES or 0 for NO
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key

   ```
   [704] MSN DGT (4)
   CW: NO   OPT: ACEPT
   ```

7. Enter 1 for ACCEPT or 0 for REJECT
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key

   ```
   [704] MSN DGT (4)
   CW: NO   OPT: ACEPT
   ```

8. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 210   CUSTOMER ON/OFF PER TENANT
                   MMC 419   BRI OPTION
                   MMC 423   S/T MODE

MMC:422   TRUNK COS

DESCRIPTION

Used to assign a class of service to each trunk during one of the 6 different ring plans available. There are 30 different classes of service that are defined in MMC 701 Assign COS Contents. Classes of service are numbered 01–30. Trunk COS applies on Tandem connections.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 422
   Display shows first trunk

```
[701] TRK COS
1: 01  2:    3:
```

2. Dial trunk number (e.g., 705)
   OR

```
[705] TRK COS
1: 01  2:    3:
```

   Use UP and DOWN to scroll through trunks Press RIGHT soft key to advance to step 3
   OR
   Use UP and DOWN to scroll through trunks and press LEFT soft key to advance to step 4
   OR
   Press ANS/RLS to select all trunks

```
[ALL] TRK COS
1: 01  2:    3:
```

3. Enter day class of service (e.g., 05)
   OR

```
[705] TRK COS
1: 05  2:    3:
```

   Use UP and DOWN to scroll through classes of service and press RIGHT soft key to advance to step 4
   OR
   Use UP and DOWN to scroll through classes of service and press LEFT soft key to return to step 2

4. Enter the next ring plan class of service
   (e.g., 05)

```
[705] TRK COS
1: 05  2: 05  03:
```

   OR
   Use UP and DOWN to scroll through classes of service and press RIGHT soft key to return to step 2
   OR
   Use UP and DOWN to scroll through classes of service and press LEFT soft key to return to the previous step.

5. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: ALL RING PLANS COS 01

RELATED ITEMS: MMC 701 ASSIGN COS CONTENTS
                  MMC 507 ASSIGN RING PLANS

MMC:423   S/T MODE

DESCRIPTION

Allows the technician to select whether a BRI circuit is a station port or a trunk port.

OPTIONS

TRUNK   The system will treat the circuit as a trunk port and it will appear as a trunk in MMC's 419.

STATION   The system will treat the circuit as a station port and it will appear as a station in MMC's 419 and 424.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry
ANS/RLS   Used to select all

ACTION   DISPLAY

1. Press TRSF 423
   Display shows first BRI

```
[725] S/T MODE
TRUNK
```

2. Dial trunk number (e.g., 727)
        OR
   Use UP or DOWN to scroll through BRI
   Numbers and press RIGHT soft key to move cursor
        OR
   Press ANS/RLS to select ALL

```
[727] S/T MODE
TRUNK
```

```
[ALL] S/T MODE
TRUNK
```

3. Enter Circuit type
        OR
   Press UP or DOWN key to select option
   Press RIGHT soft key to return to step 2

```
[727] S/T MODE
STATION
```

4. Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 418   BRI AND PRI CARD RESTART
                 MMC 419   BRI OPTION
                 MMC 421   MSN DIGIT
                 MMC 424   S0 MAPPING

MMC:424   BRI S0 MAPPING

DESCRIPTION

This MMC assigns an ISDN terminal number to a BRI station port.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor
SPK   Used to store data and advance to next MMC

ACTION   ## DISPLAY

1. Press TRSF 424
    Display shows first terminal number

```
[8701]S0 MAPPING
NONE
```

2. Dial terminal number
            OR
    Press UP or DOWN key to make selection of
    terminal numbers and press RIGHT soft key to advance cursor

```
[8704]S0 MAPPING
NONE
```

3. Dial BRI port number
            OR
    Use UP or DOWN to scroll through ports
    Press RIGHT soft key to return to step 2

```
[8704]S0 MAPPING
712
```

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 419 BRI OPTION
                  MMC 423 S/T MODE

MMC:425 ASSIGN CALLER ID TRUNKS

DESCRIPTION

Allows the system administrator or technician to activate analog loop trunk Caller ID on a per-trunk basis. Activating Caller ID will delay the incoming ring indication at the operator by two ring cycles to allow for the collection of the calling party data.

Each trunk has the following options:

0   **NORMAL**   **This is not a Caller ID trunk.**
1   **CID TRUNK**   **This is a Caller ID trunk.**

NOTE   iDCS 500 support Bellcore type data only for Caller ID, others type will not supports. – Available in Australia and Israel only.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPEAKER   Used to store data and advance to next MMC
ANS/RLS   Used to select ALL

ACTION   DISPLAY

1. Press TRSF 425
    Display shows

    ```
    [701] CID TRUNK
    NORMAL TRUNK
    ```

2. Dial trunk number (e.g. 705)
            OR
    Press UP or DOWN to select trunk
    and press RIGHT soft key to move cursor

    ```
    [705] CID TRUNK
    NORMAL TRUNK
    ```

            OR
    Press ANS/RLS to select ALL

    ```
    [ALL] CID TRUNK
    ?
    ```

3. Dial 0, 1 or 2 to change options
            OR

    ```
    [705] CID TRUNK
    CID TRUNK
    ```

    Press UP or DOWN to select an option and press
    RIGHT soft key to return to step 2.

    ```
    [705] CID TRUNK
    CID TRUNK
    ```

4. Press TRSF to store and exit
            OR
    Press SPK to save and advance to next MMC

    DEFAULT DATA: ALL TRUNKS ARE NORMAL

    RELATED ITEMS: MMC 501 SYSTEM TIMERS

                       MMC 728 CLIP TRANSLATION TABLE

MMC:426   TRUNK GAIN CONTROL

DESCRIPTION

Allows loss levels to be adjusted on a per trunk basis. There are two adjustments available in this MMC. "TX" is the transmit level adjustment of the trunk to the station. "RX" is the receive level adjustment of the station to the trunk. See the Trunk Gain Setting Tables for level option definitions.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 426
   Display shows

   ```
   [701] TRK GAIN
   RX: +0.0  TX: +0.0
   ```

2. Enter desired trunk number (e.g., 705)
   via the dial pad
           OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

   ```
   [705] TRK GAIN
   RX: +0.0  TX: +0.0
   ```

3. Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

   ```
   [705] TRK GAIN
   RX: +0.0  TX: +0.0
   ```

4. Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor and
   return to Step 1

   ```
   [701] TRK GAIN
   RX: +0.0  TX: -2.5
   ```

5. Press ANS/RLS key to select ALL

   ```
   [ALL] TRK GAIN
   RX: +0.0  TX: +0.0
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: TX : +0.0

                  RX : +0.0

RELATED ITEMS: NONE

TRUNK GAIN SETTING RESULT TABLES

Trunk Gain Setting	TRK to Station (TX)	Station to TRK (RX)
0	+0.0	+0.0
1	+1.9	+1.9
2	-6.0	-6.0
3	-2.5	-2.5

MMC:428   ASSIGN TRUNK/TRUNK USE

DESCRIPTION

Used to control whether a incoming trunk can dial calls for specific trunks.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION

DISPLAY

1. Press TRSF 428
   Display shows

   ```
   [701] USE [702]
   DI AL: YES
   ```

2. Dial station number (e.g., 705)
   OR
   Press UP or DOWN to select trunk and use RIGHT soft key to move cursor
   OR
   Press ANS/RLS to select all stations

   ```
   [705] USE [702]
   DI AL: YES
   ```

3. Dial a trunk number (e.g. 710)
   OR
   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

   ```
   [705] USE [710]
   DI AL: YES
   ```

4. Dial 1 for YES or 0 for NO
   OR
   Press UP or DOWN key to select YES/NO and press RIGHT soft key to move cursor

   ```
   [705] USE [710]
   DI AL: NO
   ```

5. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: YES

RELATED ITEMS: NONE

MMC:433 COST RATE

DESCRIPTION

In this MMC, the TRUNK COST RATE flags are entered for each trunk. DIAL PLANs are defined in MMC 746 Costing Dial Plan. RATE CALCULATION TABLES are defined in MMC 747. Each trunk may be defined with up to eight cost rates. Enter one or more of the eight COST RATES per trunk. If an entry is left blank, no call costing will be calculated for that particular DIAL PLAN.

Call type 8 is fixed for incoming. Apply a cost rate under type 8 only to a trunk if you want incoming call costing.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select all

ACTION DISPLAY

1. Press TRSF 433
   Display shows trunk number
   and Cost Rate table numbers

   ```
   [701]   : 12345678
   CR      : 00000000
   ```

2. Dial trunk number (e.g., 705)
           OR
   Press UP or DOWN to select trunk
           OR
   Press ANS/RLS for all
   Press right soft key to move cursor

   ```
   [705]   : 12345678
   CR      : 00000000
   ```

3. Press UP or DOWN key to move cursor along the line until the
   cursor is under
   the Cost Rate mark (e.g., 2)
   Enter 1 for YES or O for NO and press RIGHT
   soft key to return to step 1
           OR

   ```
   [701]   : 12345678
   CR      : 01000000
   ```

4. Press TRSF to store and exit

DEFAULT DATA: ALL TRUNKS/ALL DIAL PLANS NO COST RATE ASSIGNED

RELATED ITEMS: MMC 746 COSTING DIAL PLAN

MMC 747 RATE CALCULATION TABLE

MMC:434   CONNECTION STATUS

DESCRIPTION

This read only MMC will confirm the connection status of stations or trunks. Display status actually displays the status of a station or trunk at the time requested. If a conference is in progress with the selected trunk or station the display will show one of the conference parties and an arrow ( ). The technician or system administrator can then display the next parties in the conference. If a station or trunk is in an idle state the display will show "IDLE". If the station or trunk selected is not a valid selection the display will show "INVALID DATA". If the station or trunk is made busy by the CPU the display will show "MADE BUSY". If the station is in busy state with no other connection, the display will show "BUSY" only.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to advance to next MMC
TRSF	Exit

ACTION   DISPLAY

Display trunk connection status.

1. Press TRSF 434

```
DISPLAY  STATUS
201  IDLE
```

2. Enter station or trunk number.
   Display show connection status

```
DISPLAY  STATUS
702  227
```

3. Enter another station or trunk OR
   Press transfer to exit.

```
DISPLAY  STATUS
702  227
```

Display station connection status.

1. Press TRSF 434

```
DISPLAY  STATUS
201  IDLE
```

2. Enter station or trunk number.
   Display show connection status

```
DISPLAY  STATUS
235  715
```

3. Enter another station or trunk OR
   Press transfer to exit.

```
DISPLAY  STATUS
235  715
```

Display trunk status in conference.
Example: Trunk 702, stations 227, 215, and 216 in conference.

1. Press TRSF 434

```
DISPLAY STATUS
201  IDLE
```

2. Enter station or trunk number.
    Display shows connection status

```
DISPLAY STATUS
702  227 , 215
```

3. Press RIGHT soft key to display the next station or trunks involved.

```
DISPLAY STATUS
702  216
```

4. Enter another station or trunk OR
    Press transfer to exit.

```
DISPLAY STATUS
216  702 , 227
```

Display status no connection.

1. Press TRSF 434

```
DISPLAY STATUS
201  IDLE
```

2. Enter station or trunk number.
    Display show connection status

```
DISPLAY STATUS
702  NONE
```

3. Enter another station or trunk OR
    Press transfer to exit.

```
DISPLAY STATUS
702  NONE
```

Display connection status with invalid trunk or station number.

1. Press TRSF 434

```
DISPLAY STATUS
201  IDLE
```

2. Enter invalid station or trunk number.
    Display show INVALID DATA

```
DISPLAY STATUS
INVALID DATA
```

3. Enter another station or trunk OR
    Press transfer to exit.

```
DISPLAY STATUS
201  IDLE
```

Display connection status with trunk or station number in maintenance busy.

1. Press TRSF 434

```
DISPLAY STATUS
201  IDLE
```

2. Enter station or trunk number.
    Display show connection status

```
DISPLAY STATUS
725  MADE BUSY
```

3. Enter another station or trunk OR
    Press transfer to exit.

```
DISPLAY STATUS
725  MADE BUSY
```

DEFAULT DATA: NONE

RELATED ITEMS: MMC 108 STATION STATUS
                   MMC 409 TRUNK STATUS

MMC:436   R2MFC SIGNALLING

- Available in South Africa only

DESCRIPTION

Use this MMC to program each trunk's R2MFC signal procedure.
Bellow explain the meaning of each option;

0 CLG CLS REQ   Calling Party Class Request Option about called party wants to ask calling
                        party class or not

1 CLG NUM REQ   Calling Party Number Request Option about called party wants to ask calling
                        party Identification(tel. Number)

2 CLD STS RESP   Called Party status Response Option about called party wants to send his
                        status or not for calling party's class request

3 CLG CLS RESP   Calling Party Class Response Option about calling party wants to send his
                        class or not for called party's class request

4 CLG NUM RESP   Calling Party Number Response Option about calling party wants to reply to
                        called party's calling party number request or not

5 CLD STS REQ   Called Party Status Request Option about calling party wants to ask called
                        party's status or not

6 CLG EXT RESP   Calling Party wants to send his Extension number or not for Called Party's
                        Calling Party Number Request

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
ANS/RLS   Used to select ALL

ACTION

1. Press TRSF 436
   Display shows

2. Dial trunk number (e.g., 704)
   OR
   Press UP or DOWN to select station and use RIGHT soft key to
   move cursor
   OR
   Press ANS/RLS to select all

3. Press UP or DOWN key to make selection and press RIGHT soft
   key to move cursor

4. Dial 1 for ON or 0 for OFF
   OR
   Press UP or DOWN to select ON/OFF and press RIGHT soft key
   to return to STEP 2

5. Press TRSF to save and exit
   OR
   Press SPK to save and advance to next MMC

DISPLAY

```
[701] R2MFC SIG
CLG CLS REQ :ON
```

```
[704] R2MFC SIG
CLG CLS REQ :ON
```

```
[ALL] R2MFC SIG
CLG CLS REQ :ON
```

```
[701] R2MFC SIG
CLG NUM REQ :ON
```

DEFAULT DATA: CLG CLS REQ: ON
                 CLG NUM REQ: OFF
                 CLD STS RESP: ON
                 CLG CLS RESP: ON
                 CLG NUM RESP: ON
                 CLD STS REQ: ON
                 CLG EXT RESP: OFF

RELATED ITEMS: MMC 402 TRUNK DIAL TYPE
                 MMC 501 SYSTEM TIMER

MMC:500   SYSTEM-WIDE COUNTERS

DESCRIPTION

Used to set the values of the system counters. The counters are listed below with a brief description of each.

0 ALARM REM. CNTER The number of times that an alarm reminder will ring a station before cancelling. RANGE = 1-99.

1 AUTO RDL COUNTER The number of times the system will redial an outside number after the auto redial feature has been activated. RANGE = 1-99.

2 DISA CALL CNTER Sets the maximum number of intercom calls that can be made after accessing a DISA line. RANGE = 1-99.

3 DISA LOCK CNTER Number of attempts the system will allow to incorrectly access a DISA line before locking out the DISA line. RANGE =1-99

4 NEW CALL COUNTER Number of times the system will allow a user to signal New Call on a C.O. line during one call. RANGE = 1-99.

5 UCDS VISUAL ALARM Used to set the Visual alarm threshold. It is triggered when the number of calls waiting to be answered in the UCD group reaches this value. RANGE = 0-25.

6 UCDS AUDIO ALARM Used to set the Audio alarm threshold. It is triggered when the number of calls waiting to be answered in the UCD group reaches this value. RANGE = 0-25.

7 UCD CS LEVEL 1 Provides call wait indication level 1 if number of calls waiting to be answered in UCD group reaches this value. RANGE = 0-25.

8 UCD CS LEVEL 2 Provides call wait indication level 2 if number of calls waiting to be answered in UCD group reaches this value. RANGE = 0-25.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

1. Press TRSF 500
   Display shows

2. Enter number from above list (e.g., 6)
              OR
   Press UP or DOWN key to make selection
   and press RIGHT soft key to move cursor

3. Enter in new value via dial keypad
   If entry is valid, system will return to step 2

4. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:
	ALARM REM. CNTER	5
	AUTO RDL COUNTER	5
	DISA CALL CNTER	99
	DISA LOCK CNTER	3
	NEW CALL COUNTER	99
	UCDS VISUAL ALARM	0
	UCDS AUDIO ALARM	0
	UCD CS LEVEL 1	0
	UCD CS LEVEL 2	0

RELATED ITEMS: NONE

DISPLAY

```
ALARM REM.CNTER
05→
```

```
UCDS AUDIO ALARM
00→
```

```
UCDS AUDIO ALARM
00→02
```

MMC:501 SYSTEM TIMERS

DESCRIPTION

Allows the technician to adjust individual timers as necessary.

NOTE Certain timers are disabled when the value is "0".

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 501
   Display shows first timer value

```
AA INT DGT TIME
05 SEC   →
```

2. Press UP or DOWN key to select timer and press RIGHT soft key to move cursor

```
KMMC LOCK OUT TM
060 SEC →
```

3. Enter new value using keypad; if valid, system returns to step 2 with new value

```
KMMC LOCK OUT TM
060 SEC →250
```

4. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: SEE TABLE OF TIMERS AND VALUES

RELATED ITEMS: NONE

TIMER TABLE

TIMER NAME	DEFAULT	RANGE
AA INT DGT TIME	05 SEC	1–25 SEC
AA NO ACT TIME	10 SEC	1–25 SEC
AA TRANS TIME	02 SEC	0-25 SEC
ALARM TIME	0100 MIN	0-2500 MIN
ALERT TONE TIME	1000 MSEC	100–2500 MSEC
ALM REM.INTERVAL	025 SEC	1–250 SEC
ALM REM.RING OFF	10 SEC	1–25 SEC
ATT.RECALL TIME	030 SEC	0-250 SEC
AUTO REDIAL INT.	030 SEC	1–250 SEC
AUTO REDIAL RLS.	045 SEC	1–250 SEC
CALLBACK NO ANS	030 SEC	1–250 SEC
CAMP ON RECALL	030 SEC	0–250 SEC
CLIP DISPLAY TIME	05 SEC	1–25 SEC
CLIP MSG RECEIVE	06 SEC	1–25 SEC
CO CLEAR TIME	030 SEC	0-250 SEC
CO CONFIRM TIME	003 MIN	0-250 MIN
CO–CO DISCONNECT	020 MIN	1–250 MIN
CONFIRM TONE TM	1000 MSEC	100–2500 MSEC
CRD TONE INT TM	030 SEC	0–250 SEC
DIAL PASS TIME	03 SEC	0–25 SEC
DISA DISCONNECT	030 MIN	1–250 MIN
DISA LOCK OUT TM	030 MIN	1–250 MIN
DISA NOANS DISC.	030 SEC	0–250 SEC
DISA PASS CHECK	030 MIN	1–250 MIN
DISPLAY DELAY TM	003 SEC	1–250 SEC
DOOR LOCK RELES.	0500 MSEC	100–2500 MSEC
DOOR RING DETECT	050 MSEC	10–250 MSEC
DOOR RING OFF TM	030 SEC	1–250 SEC
E-HOLD RECALL TM	045 SEC	0–250 SEC
FIRST DIGIT TIME	010 SEC	1–250 SEC
HOK FLASH MAX TM	0120 MSEC	0020–2500MS
HOK FLASH MIN TM	0080 MSEC	0020–2500MS
HOOK OFF TIME	0100 MSEC	200–2500 MSEC
HOOK ON TIME	0200 MSEC	200–2500 MSEC
INQUIRY RELEASE	030 SEC	1–250 SEC
INTER DIGIT TIME	010 SEC	1–250 SEC
ISDN INT DGT TM	07 SEC	1-15 SEC

TIMER NAME	DEFAULT	RANGE
KMMC LOCK OUT TM	030 SEC	10–250 SEC
LCR ADVANCE TIME	005 SEC	1–250 SEC
LCR INTER DIGIT	005 SEC	1–250 SEC
MCL DELAY TIME	4 SEC	1-8 SEC
OFF HOK RING INT	015 SEC	1–250 SEC
OHVA ANSWER TIME	010 SEC	1–250 SEC
PAGE TIME OUT	020 SEC	1–250 SEC
PAGE TONE TIME	0500 MSEC	100–2500 MSEC
PARK RECALL TIME	045 SEC	0–250 SEC
PC-MMC LOCK OUT	05 MIN	1–60 MIN
PERI UCD REPORT	05 SEC	3-99 SEC
POWER DOWN TIME	2000 MSEC	1000–9900 MSEC
RECALL DISCONECT	002 MIN	1–250 SEC
RECALL WAIT TIME	015 SEC	0–250 SEC
SMDR START /DP	030 SEC	1–250 SEC
SMDR START /DTMF	015 SEC	1–250 SEC
SYS HOLD RECALL	045 SEC	0–250 SEC
TRANSFER RECALL	020 SEC	0–250 SEC
UCDS AUDIO ALARM	000 SEC	0–990 SEC
UCDS VISUAL ALAM	000 SEC	0–990 SEC
VOICE DIAL DELAY	08 SEC	5-15 SEC
ROUTE OPTIMISE	010 SEC	0-250 SEC

TIMER DESCRIPTIONS

AA INT DGT TIME	When the AA card is installed, this timer determines the inter digit time for AA call processing. If this timer expires before valid digits are received by the AA card, the call will be routed to the AA invalid digits destination.
AA NO ACT TIME	When the AA card is installed, this timer determines the time that the AA card will wait for a first digit for AA call processing. If this timer expires before a digit is received, the call will be routed to the AA no action destination.
AA TRANS TIME	After this timer, the system will compare received digits from AA card with the AA translation table entry and transfer to the proper destination.
ALARM TIME	This is the time the system alarm key will start ringing after the alarm key has been silenced.
ALERT TONE TIME	This timer sets the duration of the attention tone preceding a call to a keyset in the Voice Announce or Auto Answer mode. This tone will also precede a forced Auto Answer call.
ALM REM.INTERVAL	This timer controls the time length between ring attempts at a station when alarm reminder is set.
ALM REM RING OFF	This timer controls the length of the ring cycle duration when alarm reminder is set at a station.
ATT RECALL TIME	This is the length of time a transfer recall will ring at a station before recalling the operator.
AUTO REDIAL INT	This timer controls the time between attempts after RETRY dialing is set on a station.
AUTO REDIAL RLS	This timer controls the duration of a Ring No Answer condition on a retry number dialed before the auto redial is automatically canceled.
CALLBACK NO ANS	This timer controls the time before the callback is automatically canceled when a callback detects Ring No Answer.
CAMP ON RECALL	This timer controls the duration of time a camped on call will stay at a destination before recalling to the transferring station.
CID DISPLAY TIME	The amount of time that the Caller ID information remains on the keyset's display.
CID MSG RECEIVE	The amount of time that the system will allow a valid message from the C.O.
CO CONFIRM TIME	According to MMC 314 CO CONFIM type, the outgoing call will be disconnected after this timer or the outgoing caller will hear the confirm tone every this time.
C.O. C.O. DISCONNECT	This timer monitors the duration of an unsupervised conference; when it expires, both trunks are disconnected.
CONFIRM TONE TM	The tone heard when a feature is activated or deactivated.
CRD TONE INT TM	This timer controls the timing of intervals between the tone which indicates the call is recorded by Voice Mail Card.
DIAL PASS TIME	This timer monitors the duration of time before connecting the transmit of the keyset to the trunk side of an outgoing call.
DISA DISCONNECT	This timer controls the maximum duration of a DISA call.
DISA LOCK OUT TM	This timer controls the duration of time a DISA call is not allowed to be made after the DISA error counter has expired (MMC 500).

DISA NOANS DISC.	This timer controls the duration of time a DISA call is disconnected by force when called party does not answer.
DISA PASS CHECK	This timer defines the time period before the system clears the incorrect passcode counter.
DISPLAY DELAY TM	This timer controls the duration a display is shown in the LCD display. This timer also controls the duration of time that error tone is heard.
DOOR LOCK RELES.	This timer controls the duration of time the door lock relay will be activated.
DOOR RING DETECT	This timer controls the duration of time before a call is answered by the door phone.
DOOR RING OFF TM	This timer controls the duration of ringing at the door ring destination before automatically canceling.
E HOLD RECALL TM	This timer controls the duration of time a call is held exclusively at a station before recalling.
FIRST DIGIT TIME	This timer controls how long the system will wait for dialing to begin before dropping the dial tone and returning the user to error tone.
HOK FLASH MAX TM	This timer monitors the duration of a hookswitch flash to ensure that the flash is valid and not a line noise or an accidental hookswitch bounce (LONGEST DURATION).
HOK FLASH MIN TM	This timer monitors the duration of a hookswitch flash to ensure that the flash is valid and not a line noise or an accidental hookswitch bounce (SHORTEST DURATION).
HOOK OFF TIME	This timer controls the time before dial tone is sent to a single line station.
HOOK ON TIME	This timer sets the minimum amount of time that the system will recognize as an SLT hang up.
INQUIRY RELEASE	This timer monitors the duration of the interaction of the soft key to determine when to return the LCD back to a normal status. This timer affects only display phones.
INTER DIGIT TIME	This timer controls the grace period between dialing valid digits before dropping the call and returning the user back to error tone.
ISDN INT DGT TM	This timer controls the grace period between dialing valid digits and the end of the dialing string on an ISDN call.
KMMC LOCK OUT TM	This timer controls the grace period between programming actions while in a programming session. The timer automatically returns the system to secure programming status.
LCR ADVANCE TIME	This timer controls the duration of time before selecting the next allowable route when a station is allowed to route advance.
LCR INTER DIGIT	This timer controls the grace period between dialing valid digits before dropping the call and returning the user back to error tone during LCR.
OFF HOOK RING	This timer controls the duration of time between ring bursts to a user who has a camped on call.
OHVA ANSWER TIME	This timer controls the time duration of an OHVA call before automatic rejection.

PAGE TIME OUT	This timer controls the duration of a page announcement.
PAGE TONE TIME	This timer controls the duration of tone burst heard over the page prior to the page announcement.
PARK RECALL TIME	This timer controls the duration of time a call is parked before recalling to the call park originator.
PC MMC LOCK OUT	This timer monitors the PCMMC activity, drops the link if no action is created by PCMMC and returns the system back to secure program status.
PERI UCD REPORT	This timer is the interval that a periodic UCD report is provided to an SIO port.
POWER DOWN TIME	This timer controls the duration of power down when SLT which is assigned to VM/AA port is going to idle status by the call release of opposite party.
RECALL DISCONNECT	This is the time an attendant recall will ring before being disconnected.
RECALL WAIT TIME	This is the time any recall (hold or transfer) continues to recall at your station before it recalls to the operator.
SMDR START /DP	This grace period timer starts SMDR recording for rotary PULSE (ROTARY) dialing. This timer also controls the LCD duration timer on the keysets. The duration time displayed and the SMDR timeduration will be the same.
SMDR START /DTMF	This grace period timer starts SMDR recording for touchtone dialing. This timer also controls the LCD duration timer on the keysets. The duration time displayed and the SMDR time duration will be the same.
SYS HOLD RECALL	This timer determines the time calls can be left on hold before recalling back to the holding station. This is a system wide timer. Setting timer to 0 will defeat this feature and no recalling will take place.
TRANSFER RECALL	This timer determines the time transferred calls ring before recalling. This is a system wide timer.
UCDS AUDIO ALARM	When an AA card is installed and the digital UCD package enabled, this counter determines the maximum number of seconds a call has been waiting at the UCD group before the UCD group's SP key begins to flash along with an audio alarm. For more UCD alarm conditions, see MMC 500.
VOICE DIAL DELAY	This timer monitors the duration of interaction between main software and Voice Dialler. If there is no response from Voice Dial card within this time, the system decide the voice dialing is fail.
ROUTE OPTIMISE	When the call is made via Q-SIG signalling, the route optimization is activated after this time.

MMC:502   STATION-WIDE TIMERS

DESCRIPTION

Allows certain station timer values to be changed on a per-station basis or for all stations.

0 NO ANS FWD   This timer controls how long the station will ring before Forward on No Answer takes place. (Range: 001- 250 sec.)

1 DTMF DUR.   This timer governs the duration of DTMF digits which are transmitted to an external VMS system port. This can be used when a VMS system fails to recognize the default DTMF digit duration being transmitted from the SLT port. (Range: 100-9900 ms)

2 F-DGT DELY   This timer will be valuable for the system administrator to insert a suitable delay before generating DTMF digits for In Band integration. (Range: 100-9900 ms)

3 OFFHK SEL.   This timer controls the grace period before placing an internal/external call as programmed in MMC 306. (Range: 0-250 sec)

4 EFWD DELAY   This timer controls the External Call Forward feature which will allow a station to ring before the call is placed on external call forwarding. (Range: 1-250 sec)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 502
   Display shows

   ```
   [201] NO ANS FWD
   015 SEC →
   ```

2. Dial station number (e.g., 205)
           OR
   Press UP or DOWN key to select station and press RIGHT soft key

   ```
   [205] NO ANS FWD
   015 SEC →_
   ```

           OR
   Press ANS/RLS to select all stations and press RIGHT soft key

   ```
   [ALL] NO ANS FWD
   015 SEC →_
   ```

3. Enter new value (must be three digits) via dial keypad (e.g., 020)
   System will return to step 2

   ```
   [205] NO ANS FWD
   015 SEC →020
   ```

4. Dial timer number from above list (e.g. 1)
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   [205] DTMF DUR.
   0100 MS →_
   ```

5. Enter new timer value (must be four digits, e.g. 0200)
   System returns back to step 2

```
[205] DTMP DUR.
0100 MS →0200
```

6. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO ANS FWD   015 SEC
               DTMF DUR.   100 MSEC
               F-DGT DELY   600 MSEC
               OFFHK SEL   015 SEC
               EFWD DELAY   010 SEC

RELATED ITEMS: MMC 102 CALL FORWARD
                MMC 207 ASSIGN VM/AA PORT
                MMC 306 HOT LINE
                MMC 726 VM/AA OPTIONS

MMC:503   TRUNK-WIDE TIMER

DESCRIPTION

Allows certain trunk timer values to be changed on a per-trunk basis or for all trunks. It is not advisable to change these values, with the exception of trunk Flash Time, without assistance from Technical Support.

TIMER	DESCRIPTION
ANS.BAK TM	ANSwer BAcK TiMe. This timer is used for certain types of E&M signaling and does not affect normal CO lines.
CLEARING	This timer ensures that a call is fully disconnected at the CO by preventing CO access outgoing or receiving incoming ring between a disconnect and the expiration of this timer.
CO SUPV TM	CO SUPerVision TiMe this is the minimum length of loop open disconnect received from the CO that will be seen as a valid hang up on the system.
DTMF DUR.	DTMF DURation This is the length of the DTMF digits that will be sent to the CO on this line.
F-DGT DELY	First DiGiT DELaY This is the length of time the system will wait for CO line conditions to stabilize after seizure before sending DTMF digits.
FLASH TIME	This is the duration of the momentary open sent on a circuit when FLASH key is pressed.
NO RING TM	This is the length of time the system will wait after detecting a ring burst on a line before deciding the call has disconnected.
PAUSE TIME	This is the length of time the system will wait before sending the next digit for a pause in a speed dial bin.
PRS DET TM	This means the duration of PRS signal pulse. If the PRS signal is reversed when opposite party is answered and maintain the status before the opposite party disconnect the call, the PRS DET TM must be set to 0.
RNG DET TM	RiNG DETect TiMe This is the minimum length of ring signal the system will regard as a valid ring.
WINK TIME	This is the duration of the acknowledgement signal that the system will send on an E&M circuit
MF/DP INT	This is the interval between sending digit. In case of DTMF signal, over the 500ms will be serviced as 100 ms.
MFR DLY TM	This is a delay time to allocate the MFR after incoming trunk is detected. This is to prevent the wrong detection of DTMF signal by noise.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   *DISPLAY*

1. Press TRSF 503
    Display shows

    ```
    [701] ANS.BAK TM
    0600 MS
    ```

2. Dial trunk number (e.g., 704)
                OR
    Press UP or DOWN key to select trunk and
    press RIGHT soft key to move cursor
                OR
    Press ANS/RLS to select all trunks and
    press RIGHT soft key to move cursor

    ```
    [704] ANS.BAK TM
    0600 MS  →
    ```

    ```
    [ALL] ANS.BAK TM
    0600 MS  →_
    ```

3. Dial timer number from the list
                OR
    Press UP or DOWN key to select timer and press RIGHT soft
    key to move cursor

    ```
    [704] DTMF DUR.
    0100 MS  →_
    ```

4. Enter new timer value (must be four digits, e.g., 0200)
    System returns to step 2

    ```
    [704] DTMF DUR.
    0100 MS  →_
    ```

5. Press TRSF to store and exit
                OR
    Press SPK to store and advance to next MMC

DEFAULT DATA:SEE BELOW

TIMER NUMBER	TIMER NAME	VALUE	RANGE
00	ANS.BAK TM	0600 MSEC	0–2500 MSEC
01	CLEARING	2000 MSEC	100–9900 MSEC
02	CO SUPV TM	400 MSEC	10–2500 MSEC
03	DTMF DUR.	0100 MSEC	100–9900 MSEC
04	F-DGT DELY	600 MSEC	100–9900 MSEC
05	FLASH TIME	90 MSEC	20–2500 MSEC
06	NO RING TM	04 SEC	1–25 SEC
07	PAUSE TIME	03 SEC	1–25 SEC
08	PRS DET TM	0000 MSEC	0–2500 MSEC
09	RNG DET TM	0050 MSEC	10–2500 MSEC
10	WINK TIME	200 MSEC	100-300 MSEC
11	MF/DP INT	0800 MSEC	100–9900 MSEC
12	MFR DLY TIME	00 SEC	0–25 SEC

RELATED ITEMS: NONE

MMC:504   PULSE MAKE/BREAK RATIO

DESCRIPTION

Allows the ability to change the value of pulses per second and the duration of the make/break time. This will only affect rotary dial trunks.

FEATURE KEYS

Dial 0   **Make/Break Ratio (01–99)**
Dial 1   **Pulse Per Second (10 or 20)**

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 504
   Display shows

   ```
   MAKE/BREAK RATIO
   33 MAKE*
   ```

2. Dial 0 or 1 for option
            OR
   Press UP or DOWN key for selection and press RIGHT soft key
   to move cursor

   ```
   PULSE PER SECOND
   10 PPS *_
   ```

3. Dial new value
   System returns to step 2

   ```
   PULSE PER SECOND
   10 PPS *20
   ```

4. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: MAKE/BREAK = 33 MAKE

                  PULSES PER SECOND = 10 PPS

RELATED ITEMS: MMC 402 TRUNK DIAL TYPE

MMC:505   ASSIGN DATE AND TIME

DESCRIPTION

Allows the system date and time to be set. This will set the system-wide clock.

FEATURE KEYS

YY	Year	00–99
MM	Month	01–12
DD	Date	01–31
W	Day	0–6 (0:SUN, 1:MON, 2:TUE, 3:WED, 4:THU, 5:FRI, 6:SAT)
HH	Hour	00–23
MM	Minute	00–59

PROGRAM KEYS

KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 505
   Display shows

   ```
   OLD: 0111095: 0901
   NEW: YYMMDDW: HHMM
   ```

2. Enter new time and date using above table
   System returns to step 2

   ```
   OLD: 0111095: 0901
   NEW: 0111121: 1445
   ```

3. Verify time and date
   Reenter if necessary

   ```
   OLD: 0111121: 1445
   NEW: YYMMDDW: HHMM
   ```

4. Press TRSF to store and exit
               OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: FOLLOW SOFTWARE DATE 00:00

RELATED ITEMS: NONE

MMC:506   TONE CADENCE

DESCRIPTION

Provides the ability to customize the tone cadence on a system-wide basis. The system can provide eleven types of tone and three types of tones provided from Central Office or PBX system can be detected. Please call Technical Support before changing any cadences as some systems may require default settings.

TONE NAME	DESCRIPTION
BUSY TONE	The called station is busy.
CONFM/BARGE	A feature has been successfully activated/cleared or a Barge In with Tone has been performed.
DIAL TONE	The system is ready to interpret key presses/dialed digits.
DND/NO MORE	The called station is in DND or has no free CALL buttons.
ERROR TONE	An error has been made.
HOLD/CAMPON	This is the system generated hold tone.
MSGWAT TONE	This is the dial tone heard at an SLT with a message waiting.
RGBACK TONE	The called station is ringing.
RING TONE	This is the CO ring cadence.
TRSFER TONE	This is the dial tone heard when the transfer key is pressed or an SLT hook flashes.
DID RGBACK	This is the ringback tone heard by the outside party when they dial a DID number.
CO BUSY TONE	This is used to detect the busy tone provided from Central Office or PBX system.
CO RINGBACK	This is used to detect the ringback tone provided from Central Office or PBX system.
CO DIAL	This is used to detect the dial tone provided from Central Office or PBX system.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 506
   Display shows

   ```
   BUSY TONE
   INTERRUPT TONE
   ```

2. Dial tone number from above list (00-13, e.g., 09)
           OR
   Press UP or DOWN key to select tone, press LEFT soft key and
   advance to step 3

   ```
   TRSFER TONE
   INTERRUPT TONE
   ```

3. Dial tone option 0 for CONTINUOUS or
   1 for INTERRUPT
           OR

   Press UP or DOWN key to select tone control and press RIGHT
   soft key to advance to step 4
           OR
   Press LEFT soft key to return to step 2

   ```
   TRSFER TONE
   INTERRUPT TONE
   ```

4. Dial new value for interrupt times (must be four digits)
   Press RIGHT soft key advances cursor
   Press LEFT soft key retreats cursor
   If valid entry, system returns to step 2

   ```
   TRSFER TONE: 0100
   9900 0100 9900
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: SEE BELOW

	TONE	ON	OFF	ON	OFF
00	BUSY TONE	350	350	350	350
01	CONFIRM/BARGE-IN TONE	50	50	50	50
02	DIAL TONE	CONTINUOUS			
03	DND/NO MORE TONE	250	250	250	250
04	ERROR TONE	100	100	100	100
05	HOLD/CAMP-ON TONE	500	3500	500	3500
06	MESSAGE WAIT TONE	CONTINUOUS			
07	RING BACK TONE	400	200	400	2000
08	RING TONE	1000	3000	1000	3000
09	TRANSFER TONE	100	100	100	100
10	DID RINGBACK TONE	1000	3000	1000	3000
11	CO BUSY TONE	350	350	350	350
12	CO RINGBACK TONE	400	200	400	2000
13	CO DIAL TONE	CONTINUOUS			

> **NOTE**   All times are in milliseconds.

RELATED ITEMS: NONE

MMC:507   ASSIGN RING PLAN TIME

DESCRIPTION

Use this MMC to program Ring Plans time settings. Ring Plans provide six separate ringing destinations based on day of the week and time of day. The start time within a plan is the time the system will switch from one ringing destination to the next. The end time is the time the system will switch from that plan to the previous plan. A RPO (Ring Plan Override) key is not needed as the system will switch automatically; however, it is helpful to have a dedicated button so the status can be manually changed if needed. If a ring plan has no time entry the ring plan defaults to ring plan 1. The ring plans correlate with all MMC's that program ring or termination destinations and station and trunk COS.

Use the following example of assigning Ring Plans:

RING LAN	START TIME	END IME
(MON: 1)	ST: 0000	END: 23:59
(MON: 2)	ST: 0800	END: 2200
(MON: 3)	ST: 1000	END: 2000
(MON: 4)	ST: 1200	END: 1800
(MON: 5)	ST: 1300	END: 1600
(MON: 6)	ST: 1400	END: 1500

Using a 24 hour clock in the example above notice that the END time is within the same 24 hour period. The system will stay in the last active Ring Plan from the previous day until the end time which is 23:59. Monday starts the Ring Plan 1 at 00:00. The system will stay Ring Plan 1 until 08:00 and will stay in Ring Plan 2 until Ring Plan 3 starts. As each ring Plan start it will override the previous Ring Plan. If a Ring Plan ends and there are no additional Ring Plans the system will default to the Ring Plan with time that extends past the expired ring plan time.

NOTE   Ring Plans must be programmed in sequence. IE. RP 1,2,3,4 etc.
A Ring Plan cannot be omitted. IE. RP 1,2,5 etc.
A higher numbered Ring Plan cannot have a START time before a lower numbered Ring Plan.

NOTE   Ring Plan 1 is the default Ring Plan of each day. If no Ring Plan destination is input the operator group is the default destination.

FEATURE KEYS

0	SUN	4	THU
1	MON	5	FRI
2	TUE	6	SAT
3	WED		

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 507
   Display shows

```
RING PLAN (SUN: 1)
ST:      END:
```

2. Dial day number (0–6, e.g., 3)
              OR
   Press UP or DOWN key to select day
   Press RIGHT soft key to advance cursor to step 3

```
RING PLAN (WED: 1)
ST:      END:
```

3. Dial ring plan number (1–6, e.g., 2)
              OR
   Press UP or DOWN key to select day
   Press RIGHT soft key to advance cursor to step 4

```
RING PLAN (WED: 2)
ST: _    END:
```

4. Dial start time, e.g., 1030
   If valid, cursor moves to end time
   Enter end time
   If valid, system returns to step 2
   Begin again

```
RING PLAN (WED: 1)
ST: 1030 END: 1800
```

5. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: START: NONE

                  END: NONE

RELATED ITEMS: MMC 211 DOOR RING ASSIGNMENT

                  MMC 406 TRUNK RING

                  MMC 512 HOLIDAY ASSIGNMENTS

                  MMC 722 STATION KEY PROGRAMMING

                  MMC 723 SYSTEM KEY PROGRAMMING

MMC:508   CALL COST

DESCRIPTION

Allows the system administrator to set the Call Cost attributes generated by the system during a call. This information can be displayed on the keyphone LCD during a call or as an SMDR record.

Attributes are as follows:

0 UNIT COST PER MP When the system is installed to receive MP on a C. O. outgoing call. It is used for generating total call cost by multiplying it by the number of pulses. Allows a maximum value of 9999.

1 CALL COST RATE This generates additional call cost calculated by multiplying this rate by the original call cost. Ranges from 100 through 250.

> **WARNING** Changing this value when there is a call in progress may result in an inaccurate call cost. This MPD facility requires the Meter Pulse Detection version of the trunk card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 508
   Display shows

   ```
   UNIT COST PER MP
   0200
   ```

2. Dial 0, 1 OR 2 (e.g. 1)
          OR
   Press UP or DOWN key to select , and press RIGHT soft key to move cursor

   ```
   CALL COST RATE
   100 %
   ```

3. Enter new value (e.g. 110 for 110 percent)
   System returns to step 2

   ```
   CALL COST RATE
   110 %
   ```

4. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: UNIT COST PER MP: 200

                  CALL COST RATE: 100 %

RELATED ITEMS: MMC 110 CALL COST

MMC:510   SLI RING CADENCE

DESCRIPTION

Provides the ability to customize the ring cadence for single line ports on a system-wide basis. There are 5 cadences available. Please call Technical Support before changing any cadences as some peripheral systems may require default settings.

CADENCE NAME	DESCRIPTION
1:STN RING	This is the cadence intercom calls will ring at.
2:TRK RING	This is the cadence trunk calls will ring at.
3:DOOR RING	This is the cadence doorphone calls will ring at.
4:ALM RING	This is the cadence alarm reminder calls will ring at.
5:CBK RING	This is the cadence callbacks will ring at.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 510
   Display shows

   ```
   1: STN RING : 0400
   0200 0400 3000
   ```

2. Dial cadence number from above list (e.g., 3)
           OR
   Press UP or DOWN key to select , press LEFT soft key and advance to step 3

   ```
   3: DOOR RING: 0400
   0100 0400 2000
   ```

3. Dial new value for interrupt times (must be four digits)
   Press RIGHT soft key advances cursor
   Press LEFT soft key retreats cursor
   If valid entry, system returns to step 2

   ```
   3: DOOR RING: 0100
   9900 0100 9900
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: SEE BELOW

	CADENCE	ON	OFF	ON	OFF
1	STN RING	0400	0200	0400	3000
2	TRK RING	1000	3000	1000	3000
3	DOOR RING	0400	0100	0400	2000
4	ALM RING	0200	0200	0200	2000
5	CBK RING	0200	0200	0200	4000

NOTE All times are in milliseconds.

RELATED ITEMS: NONE

MMC:511   MESSAGE WAITING LAMP CADENCE

DESCRIPTION

This MMC defines the cadence (flash rate) of single line telephone message waiting lamps on phones connected to an 8MWSLI or a 16MWSLI card. There are two main choices for the MW lamp cadence available, these being continuous and interrupted as described below.

OPTION KEYS

0 INTERRUPTED   The MW lamp will flash at a rate determined by the timer settings. The shortest on time is 100ms and the longest on time is 3000ms. The timer is adjusted in 100ms increments.

1 CONTINUOUS   When an 8MWSLI or a 16MWSLI port has a message, the lamp will be lit steady.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPEAKER	Used to store data and advance to next MMC

ACTION

1. Press TRSF 511
   Display shows

2. Press 0 or 1 to select CADENCE
         OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to advance to step 3

3. Dial new values for interrupt times
   (four digits)
   Press RIGHT soft key to move cursor back
   If valid entry, system returns to step 2
   Press LEFT soft key to move cursor back
   If valid entry, system returns to step 2

4. Press TRSF to store and exit
         OR
   Press SPK to save and advance to next MMC

DISPLAY

```
MW LAMP CADENCE
INTERRUPT LED
```

```
MW LAMP CADENCE
INTERRUPT LED
```

```
MW LAMP CADENCE
2000  2000
```

DEFAULT DATA: INTERRUPT LED1000 MS ON

                     1000 MS OFF

RELATED ITEMS: SUPPORTED 16MWSLI AND 8 MWSLI CARDS ONLY

MMC:512   HOLIDAY ASSIGNMENT

DESCRIPTION

This MMC defines up to 60 holiday dates throughout the year. The system will override the normal ring plan for these days and remain in the ring plan associated with the holiday. Dates are entered in a month day format. For example July 4th would be 0704. One ring plan applies to all holidays.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 512
   Display shows the Ring Plan

   ```
   RING PLAN
   FOLLOW 1
   ```

2. Press RIGHT soft key advance cursor. Press UP or DOWN key to select a Ring Plan
          OR
   Use the dial pad to select a Ring Plan (eg. 2)

   ```
   RING PLAN
   FOLLOW 2
   ```

3. Press the RIGHT soft key to enter and advance cursor

   ```
   RING PLAN
   FOLLOW 2
   ```

4. Press UP or DOWN key to scroll to
   Assign Holiday and press RIGHT soft key to advance cursor.

   ```
   ASSIGN HOLIDAY
   01:
   ```

5. Press UP or DOWN key to select entry and press RIGHT soft key enter and advance cursor

   ```
   ASSIGN HOLIDAY
   05:
   ```

6. Dial date using the dial pad for holiday (eg. 0704)

   ```
   ASSIGN HOLLIDAY
   05: 0704
   ```

7. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO HOLIDAY ASSIGNED

                      FOLLOW RING PLAN 1

RELATED ITEMS: MMC 507 ASSIGN RING PLAN TIME

MMC:513 HOTEL TIMER

- Available in Hotel/Motel enabled only

DESCRIPTION

This MMC is where the check out time for guest rooms and the room clean timers are set. These are system wide timers that affects all rooms.

CHECK OUT TIME   If a room is occupied during the checkout time an additional days room charge will be automatically added to the room bill. If a room is flagged as Occupied and HOLD then the additional days room charge will not be added. Setting a room status to hold is how a late check out can be performed.

ROOM CLEAN TIME   This is the time each day that the system will flag all occupied rooms as NEEDS CLEANING.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 513
   Display shows

```
CHECK OUT TIME
HH:MM :    :
```

2. Select the timer using the UP or DOWN keys.

```
ROOM CLEAN TIME
HH:MM :    :
```

3. Enter new time using above 24 hour clock system returns to step 2

```
ROOM CLEAN TIME
HH:MM : 11:30
```

4. Press TRSF to store and exit
           OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:514   TONE SOURCE

DESCRIPTION

This program is assigned external tone source instead of system tone. There are 7 types of tone for external tone source.

0   BUSY TONE
1   DIAL TONE
2   DND/NO MORE
3   TRSFER TONE
4   MSGWAIT TONE
5   ERROR TONE
6   RGBACK TONE

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 514
   Display shows

```
BUSY  TONE
TONE
```

2. Enter the system tone number(0 - 6)
   OR
   Press UP or DOWN to select tone number
   and press RIGHT soft key to move cursor

```
DIAL  TONE
TONE
```

3. Dial a number for external tone source
   OR
   Press UP or DOWN to select tone number
   and press RIGHT soft key to store

```
DIAL  TONE
372
```

4. Press TRSF to store and exit
   OR
   Press SPK to save and advance to next MMC

DEFAULT DATA: TONE

RELATED ITEMS: NONE

MMC:515   DAYLIGHT ASSIGNMENT

DESCRIPTION:

This MMC defines up to 10 summer time period. The system time will be increased a hour on 2 a.m of assigned start date and will be decreased a hour on 3 a.m of assigned end date automatically.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 515

```
NO: YY: START: END
01:    :         :
```

2. Press UP or DOWN key to select a entry
        OR
    Use the dial pad to select a entry

```
NO: YY: START: END
02:    :         :
```

3. Enter the summer time.
    ex) 01:0801 :0910
        Year: 2001
        Start Date: 1 August
        End Date: 10 September.

```
NO: YY: START: END
02: 01: 0801  : 0910
```

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 507 ASSIGN RING PLAN TIME

MMC:600 ASSIGN OPERATOR GROUP

DESCRIPTION

Used to assign an operator group for each ring plan.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION | DISPLAY

1. Press TRSF 600
   Display shows

```
OPERATOR GROUP
1: 500    2: 500
```

2. Dial the ring plan number (1~6)
        OR
   Press the RIGHT soft key to advance the cursor

```
OPERATOR GROUP
1: 500    2: 500
```

3. Dial the group number
        OR
   Press UP and DOWN key to select group and press RIGHT soft key

```
OPERATOR GROUP
1: 501    2: 500
```

4. Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: 1~6 : 500

RELATED ITEMS: MMC 601 ASSIGN STATION GROUP

MMC:601   ASSIGN STATION GROUP

DESCRIPTION

This MMC is used to build all station groups. There are 30 programmable groups available in a iDCS 500-M system and 50 for a iDCS 500-L system.

The options for setting up these groups are as follows: A through F.

A. TYPE: This is the type of group you are creating and can be one of the following:

1. **NORMAL:** Used to assign stations in a ring group. The members can be stations, common bell contacts or Ring over Page relays.

2. **VMAA:** Used to group a number of voice mail port extensions. These must have been defined in MMC 207 as VMAA ports or they cannot be entered here. Check all programming in MMC 726 to ensure that the In band DTMF codes are properly set.

3. **UCD:** Used to build a UCD group. The iDCS 100 will support two methods of UCD:

   - **TYPE 1 UCD**
   The group OVERFLOW/N-ANS destination (see below) is defined as an SLT port to which you must connect some type of announcement device to play to callers while they are on hold.
   Please note that this type of UCD group has the following limitations.

     a) The announcement device must be able to terminate the announcement with a hook flash and a transfer back to the UCD group.

     b) Only one caller at a time can hear the announcement.

     c) Each caller connected to the announcement must hear the announcement in its entirety.

     d) It is possible that a new caller may "jump ahead" in the queue if a previous caller is currently connected to the announcement device.

   - **TYPE 2 UCD**
   The group OVERFLOW/N-ANS destination (see below) is defined as an AA port or group. This will only work if an AA card has been installed in the system.
   The digital announcer in the AA card will supply two recorded announcements to callers in queue. The first announcement is played only once, the second announcement will repeat for as long as the caller is in queue.
   This type of UCD group has the following advantages:

     a) No external device need be installed to provide an announcement.

     b) Multiple callers can hear the announcement(s) simultaneously.

     c) Callers hearing the announcement will be transferred to a free UCD group member (agent) as soon as the agent becomes available.

     d) The callers place in queue is always maintained.

   Additional programming for this type of UCD group is in MMC 607. There is a maximum of 10 UCD groups available on a iDCS 500-M system and 20 for a iDCS 500-L system due to availability of system resources.

4. **AA:** This is used to group a number of AA ports. An Auto Attendant (AA) card must be installed in the system to do this.

5. **CADENCE:** This is the voice mail group for CADENCE (the built in Samsung Voice Mail Card). When a CADENCE card is installed, group 529 must be programmed as a CADENCE group on a iDCS 500-M system and group 549 must be used for a iDCS 500-L system. Group 529 and 549 are fixed for CADENCE use. If CADENCE is not installed in the system, group 529 or 549 can be used as any other group can be used.

6. **MESSAGE:** Used to group a number of extensions to serve as a message desk or message group. When one of the stations in this type of group leaves a message to another station the messaged station will return the message to the message group so any member can answer the call. If a station is a member of more than one message group, then any message indications made by that station would be for the first numerical message group they are a member of. It is not recommended to program stations in to multiple station groups.

B. **RING MODE:** Each group can have one of the following ring modes. This will decide how calls are placed to the group.

1. **SEQUENTIAL:** The stations listed as "members" (see below) will be called on a first available basis. Calls will first go to the first member, if the first member is busy, calls will go to the second member, if the second member is busy, calls will go to the third member etc. This type of group is useful for placing the bulk of the incoming calls to a selected individual, with other members only getting the calls when the first member is busy. The number of members allowed for a sequential group is 48.

2. **DISTRIBUTED:** The first call will go to the first member, the second call will go to the second member, the third call will go to the third member. This type of group is useful for evenly distributing the call among all group members. The number of members allowed for a distributed group is 48.

3. **UNCONDITIONAL:** Calls are placed to all group members simultaneously. This reduces the number of members of the groups to 32. If a group member is busy, they can receive off hook ring if defined in MMC 300. This ring mode option is not available for UCD or VMAA groups. The OVERFLOW/BUSY option is not available for unconditional ring mode.

C. **OVERFLOW:** This is the timer value that will cause unanswered calls to a group to begin also ringing the NEXT PORT (see below) after this timer has elapsed. If set to 000, no overflow will take place.

D. **GRP TRANSFER:** This is a timer that will determine how long C.O. calls transferred to the group will ring at the group before recalling. If set to 000, no recall will take place.

E. **NEXT PORT:** This is the station or group number that callers will also ring at if the OVERFLOW feature has been programmed. The OVERFLOW DESTINATION can be defined as:

1. COMMON BELL There are up to 6 relays available in the iDCS 500 that can be defined as Common bell in MMC 218. (2 on each PMISC card)

2. RING OVER PAGE DN # 362 and 363 (or 3062-3063 depending on SW5 setting on PMCP card) are the default numbers available on the PMCP

3. STATION OR STATION GROUP. Any station or station group can be defined as the NEXT port.

F. MEMBER: List all members that are to be in the group. Up to 48 members are allowed in each group, but stations can be assigned to multiple station groups.

G. NXT HUNT: The length of time a call will ring at a station before it hunts to the next group member.

NOTE When a group is called, or a caller is transferred to a group, ringback is sent to the caller. A busy signal will not be returned even if all group members are busy. Obviously UCD is an exception to this rule.

Calls to a group do not follow the call forwarding instructions of any stations in the group.

FEATURE KEYS

0	**TYPE**	Group type (Normal, VM/AA, UCD, AA, CADENCE, MSG [iDCS 500-L only])
1	**RING**	Ring mode (Sequential, Distributed or Unconditional)
2	**OVERFLOW**	Overflow time (000 - 250 sec)
3	**GRP TRSF**	Group transfer time (000 - 250 sec)
4	NEXT PORT	Group or station number (e.g. group 502, station 221, 244)
5	**MEMBER**	Group members (e.g., station 202, 225, 231)
6	**NXT HUNT**	Hunt time (000 - 250 sec) [iDCS 500-L only]

RING MODES

0	**SEQUENTIAL**	The first idle station listed in the group will ring. If the first is busy, the next idle station will ring.
1	**DISTRIBUTED**	The first call will ring the first station listed in the group. The next call will ring the next station listed in the group.
2	**UNCONDITIONAL**	All the stations listed in the group will ring. Busy stations will receive off-hook ring. MAXIMUM 32 STATIONS RINGING.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

1. Press TRSF 601
   Display shows

2. Dial group number (e.g., 505)
         OR
   Press UP or DOWN key to select group and
   Press RIGHT soft key to move cursor.

3. Dial feature option number (0-6, e.g., 0)
         OR
   Press UP or DOWN key to scroll options and press RIGHT soft
   key to move cursor

4. DIAL group type (e.g., 1)
         OR
   Press UP or DOWN key to make selection
   Press LEFT soft key to move cursor to TYPE

5. Dial feature option number (0-6, e.g., 1)
         OR
   Press UP or DOWN key to scroll options and press RIGHT soft
   key to move cursor

6. Dial ring option (0-2, e.g., 0)
         OR
   Press UP or DOWN key to make selection
   Press LEFT soft key to move cursor
   back to RING or press RIGHT soft key to return to step 2

7. Dial next feature option and continue
         OR
   Press UP or DOWN key to select option and press RIGHT soft
   key
         OR
   Press LEFT soft key to return to step 2

8. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NORMAL GROUP

RELATED ITEMS: MMC 203 ASSIGN UA DEVICE

                 MMC 204 COMMON BELL CONTROL
                 MMC 607 UCD OPTIONS

DISPLAY

```
[501] STN. GROUP
TYPE: NORMAL  GRP
```

```
[505] STN. GROUP
TYPE: NORMAL  GRP
```

```
[505] STN GROUP
TYPE: VMAA  GROUP
```

```
[505] STN GROUP
TYPE: VMAA  GROUP
```

```
[505] STN  GROUP
RING: DISTRIBUTE
```

```
[505] STN  GROUP
RING: SEQUENTIAL
```

```
[505] STN  GROUP
RING: SEQUENTIAL
```

MMC:602   STATION GROUP NAME

DESCRIPTION

Allows the system administrator or technician to enter an 11-character name to identify an individual station group.

Names are written using the keypad. Each press of a key selects a character. Pressing the next key moves the cursor to the next position. For example, if the directory name is SAMSUNG, press the number 7 four times to get the letter S. Now press the number 2 once to get the letter A. Continue selecting characters from the table below to complete your message. Pressing A button changes the letter from upper case to lower case.

> **NOTE** When the character that you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right or the DOWN key to move cursor left. A space can be entered by using these keys.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION

1. Press TRSF 602
   Display shows

2. Dial group number (e.g., 505)
   OR
   Press UP or DOWN key to make selection and press LEFT or RIGHT soft key to move cursor

3. Enter in name using above method and table

4. Press LEFT or RIGHT soft key to return to step 2
   OR
   Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 104 STATION NAME
                  MMC 404 TRUNK NAME
                  MMC 601 ASSIGN STATION GROUP

DISPLAY

```
[500] SGR NAME
```

```
[505] SGR NAME
```

```
[505] SGR NAME
TELECOMS
```

MMC:603   ASSIGN TRUNK GROUP

DESCRIPTION

Allows the assignment of trunks to a specific trunk group or to several trunk groups. This is very useful in the programming of LCR when more than one trunk is to be in several dialing plans. There are two different modes of operation: (1) sequential and (2) distribute. There are 11 programmable trunk groups in a iDCS 500-M system with up to 99 members per group and 50 programmable trunk groups with up to 99 members per group for a iDCS 500-L system.

⚠️ **WARNING**   One trunk can appear in more than one trunk group. If necessary, delete the trunk member from other groups to prevent accidental access.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 603
   Display shows

   ```
   [9]   TRK GROUP
   MODE: SEQUENTIAL
   ```

2. Enter in valid trunk group (e.g., 9)
   OR
   Press UP or DOWN key to make selection and press RIGHT soft key to advance cursor

   ```
   [9]   TRK GROUP
   MODE: SEQUENTIAL
   ```

3. Press RIGHT soft key to change mode
   OR
   Press UP or DOWN key to change mode to member

   ```
   [9]   TRK GROUP
   MEMBER 01: NONE
   ```

4. Press RIGHT soft key to move cursor to number of member and enter valid member
   number (e.g., 05) via dial keypad
   OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   [9]   TRK GROUP
   MEMBER 05: NONE
   ```

5. Enter valid trunk number (e.g., 729)
   OR
   Press UP or DOWN key to make selection and press RIGHT soft key to return to step 2

   ```
   [9]   TRK GROUP
   MEMBER 01: 729
   ```

6. Repeat steps 1-5 to remove trunk from group 9 if necessary

7. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL LOOP/ISDN TRUNKS ARE IN TRUNK GROUP 9
                  ALL E&M TRUNKS ARE IN TRUNK GROUP 800
                  ALL VoIP TRUNKS ARE IN TRUNK GROUP 801

RELATED ITEMS: LCR PROGRAMMING

MMC:604 ASSIGN STATION TO PAGE ZONE

DESCRIPTION

Allows the technician to assign a keyset to any of the five internal paging zones. Each page zone can have up to 99 members. A keyset may be assigned to more than one zone. Page zone (*) will page all external page zones as well as all keysets that are members of page zone 0.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear entry

ACTION   DISPLAY

1. Press TRSF 604
   Display shows

   ```
   INT.PAGE ZONE(0)
   MEMBER 01: NONE
   ```

2. Enter the page zone number (0-4, e.g., 3)
        OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   INT.PAGE ZONE(3)
   MEMBER 01: NONE
   ```

3. Enter index number (e.g., 05)
   via dial keypad
        OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   INT.PAGE ZONE(3)
   MEMBER 05: NONE
   ```

4. Enter station number (e.g., 205) via dial keypad
        OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   INT.PAGE ZONE(3)
   MEMBER 05: 205
   ```

5. Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO STATIONS ASSIGNED

RELATED ITEMS: NONE

MMC:605   ASSIGN EXTERNAL PAGE ZONE

DESCRIPTION

Determines which relays will close when one of the four external page zones is accessed.

> **NOTE** The iDCS 500 system must be equipped with a MISC daughter-board to allow external paging.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 605
   Display shows first page zone

   ```
   EXT. PAGE ZONE: (5)
   MEMBER 1 : NONE
   ```

2. Dial page zone number (e.g., 6)
         OR
   Use UP or DOWN to select desired page zone numbers and press RIGHT soft key to move the cursor

   ```
   EXT. PAGE ZONE: (6)
   MEMBER 1 : NONE
   ```

3. Dial member number (e.g., 3)
         OR
   Use UP or DOWN to select member numbers and press RIGHT soft key to move the cursor
         OR
   Press LEFT soft key to return to step 2 above

   ```
   EXT. PAGE ZONE: (6)
   MEMBER 3 : NONE
   ```

4. Dial relay number via dial keypad (e.g., 362)
   and press RIGHT soft key to return to step 2
         OR
   Press LEFT soft key to return to step 3 above

   ```
   EXT. PAGE ZONE: (6)
   MEMBER 3: 362
   ```

5. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:606 ASSIGN SPEED BLOCK

DESCRIPTION

Provides a means of adding or deleting speed dial blocks to the system or an individual keyset. With the ability to delete a block or blocks of speed dial, it will not be necessary to waste these on such items as voice mail, DPIMs or stations that do not require the ability to use speed dial. The Free List will show how many bins are left to be assigned.

A library of up to 1500 speed dial numbers may be allocated as needed on a iDCS 500-M system and 2500 for a iDCS 500-L system. The system list can have up to 500 numbers and each station can have up to 50 numbers. Speed dial numbers are assigned in blocks of ten. Each speed number may contain up to 24 digits.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPEAKER	Used to store data and advance to next MMC
HOLD	Used to clear entry
TRSF	Used to exit programming

ACTION   DISPLAY

1. Press TRSF 606
   Display shows

   ```
   FREE LIST: 20
   SYSTEM: 20
   ```

2. Press RIGHT soft key to advance to next line.
           OR
   You can view BUSY LIST by pressing UP or
   DOWN key.
   You can view BUSY LIST using UP or DOWN key

   ```
   FREE LIST: 20
   SYSTEM: 20
   ```

   ```
   BUSY LIST: 180
   SYSTEM: 20
   ```

3. Make a selection of SYSTEM or EXT
   using UP or DOWN key
   Press RIGHT soft key to advance cursor

   ```
   FREE LIST: 20
   EXT201: 1
   ```

4. Enter desired extension number via dial keypad (e.g., 205)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to advance cursor

   ```
   FREE LIST: 20
   EXT205: 1
   ```

5. Enter valid number for bins (e.g., 0-5 for EXT or 00-50 for
   SYSTEM)
           OR
   Press UP or DOWN key to make selection
           OR
   Press HOLD key to delete bin(s)

   ```
   FREE LIST: 20
   EXT205: 5
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: SYSTEM: 200 ENTRIES
       STATIONS: 1 BLOCKS ASSIGNED

RELATED ITEMS: MMC 105 STATION SPEED DIAL
       MMC 106 STATION SPD NAME
       MMC 705 ASSIGN SYSTEM SPEED DIAL
       MMC 706 SYSTEM SPEED DIAL BY NAME

MMC:607   UCD OPTIONS

DESCRIPTION

Sets up UCD options when an AA card has been installed. MMC 601 must have already been used to define a UCD group with an overflow destination of an AA port or group. (A group is preferred over a port because a group allows multiple paths into the AA card and therefore has greater traffic handling capabilities.) When a group overflow timer in MMC 601 expires, the caller will be routed to the AA card It is here that the caller is played the UCD "FIRST MESSAGE" and "SECOND MESSAGE" while in queue. This will continue until an agent becomes free or the caller is transferred to a final destination.

This MMC includes options to select messages to play to a caller. These messages can be as follows:

MESSAGES 01–48

These can be created using the AAREC soft key (programmed on keysets by using MMC 722 or 723). A total of two minutes of message time is available and can be divided up into 1 to 48 messages.

MESSAGES 49–64

These are pre-programmed as follows:

49	"Thank you for calling, please dial your party's extension number."
50	"Invalid number, please try again."
51	"I'm sorry, there is no answer."
52	"I'm sorry, that station is busy."
53	"One moment please."
54	"Transferring."
55	"I'll transfer you."
56	"Good-bye."
57	"Thank you."
58	"Please hold for the operator."
59	"Please hold for assistance."
60	"Thank you, good-bye."
61	"I'm sorry, all stations are presently busy."
62	"I'm sorry, all stations are still busy."
63	"Please call back later."
64	"I'm sorry, not a valid selection."

The following program options apply:

FIRST MESSAGE

After the caller has overflowed from the UCD group, the first message will immediately play. For instructions on how to make these recordings, see the User Instructions Section, Auto Attendant and Uniform Call Distribution System Administration. The default message is #61 "I'm sorry, all stations are presently busy."

This message will only be played once for the caller.

SECOND MESSAGE

If no agent has become free after the UCD recall time (see UCD Recall), the caller will be played the second message. For instructions on how to make these recordings, see the User Instructions Section, Auto Attendant and Uniform Call Distribution System Administration. The default message is #62 "I'm sorry, all stations are still busy."

This message will be repeated for as long as the caller is in queue, at an interval specified in the UCD Recall Timer below.

EXIT CODE

While the caller is hearing a message (but not during MOH), the caller may dial the DTMF digit specified here and be transferred immediately to the final destination (see Final Destination). The exit code is optional and does not need to be used. If used, the first and second messages may be modified to provide instructions on its use.

RETRY COUNT

The UCD program is designed to route a caller to a "final destination" after a programmable number of "loops" through the UCD message. The range of this counter is 0 to 99. 00 means that there is no retry counter and the caller will remain in the UCD queue until answered. Any non zero value will route a caller through the UCD loop that many times before going to the final destination. The UCD will route calls to the final destination immediately if all members of the group are either out of group or in DND.

Example: If this counter is set to 02, callers reaching a busy group will hear the first UCD message, be placed on hold, hear the second UCD message, be placed on hold, and finally hear the second message again before being transferred to the final destination.

FINAL DESTINATION

This is the final destination for the caller if not answered by a UCD agent. This destination is only reached if (a) the caller dials an exit digit during a message or (b) the retry count has expired. The final destination can be a station number, a group number, a disconnect or another plan. Plans are entered by pressing A button plus two digits 01-12. A disconnect is entered as a destination of NONE (HOLD key).

If the final destination is a voice mail port, the port will receive a FWD from UCD group integration message. The final destination will forward or overflow. If the forward to destination is a voice mail port the port will receive FWD from UCD group integration message. If the final destination is not forwarded, the call will ring or camp on to the final destination indefinitely.

To ensure that you do not get a situation where all the call buttons are busy on the final destination it is advisable to make the final destination a group (even if the group has only one station in it.)

RING NEXT

This timer must be shorter than the overflow timer in MMC 601. If a higher value is entered, the display will show invalid entry. In the case where a UCD group has the ring next timer set at 000, an unanswered call will rotate evenly among all agents until it is answered. The UCD greetings will be heard during this routing process, but can be removed by defining the UCD messages in MMC 607 as unrecorded message numbers. This will simulate a circular hunt group.

UCD RECALL

After a caller has heard a UCD announcement, he/she will be placed on hold until an agent becomes available or the UCD recall timer expires. When the UCD recall timer expires, the caller will again hear the UCD announcement. The range is 00-99. The default is 10.

MUSIC ON HOLD SOURCE

This option determines what Music on Hold source the callers will be connected to between messages. The choice is either an external source, AA message defined in MMC 736, or a Built-In Voice Mail Card message defined in MMC 756.

WRAP UP

This option will make a UCD agent unavailable to receive additional UCD calls after hanging up from the last one. This is to allow agents to complete work associated with the previous call before the next call begins ringing. The range is 000-250. The default is 010.

AUTO LOG OUT

This YES/NO option determines if a station will automatically log out of the UCD group when the RING NEXT timer expires. This setting will be ignored if the RING NEXT timer is set to 000.

ALLOUT→FINAL

This YES/NO option determines if calls forward to the UCD final destination when all stations are logged out of the UCD group. If no UCD final destination is assigned then the call will disconnect.

ACTION   *DISPLAY*

1. Press TRSF 607
   Display shows

   ```
   [530] UCD OPTION
   FIRST MSG  : 61
   ```

2. Press UP or DOWN to select UCD group or dial group number
            OR

   ```
   [542] UCD OPTION
   FIRST MSG  : 61
   ```

   Press LEFT soft key to position cursor under message number and enter new message

   ```
   [530] UCD OPTION
   FIRST MSG  : 25
   ```

            OR

   Press RIGHT soft key and advance to next option using the UP and DOWN keys to select an option

   ```
   [530] UCD GROUP
   UCD RECALL: 10 SEC
   ```

3. Press RIGHT soft key and advance to next option Use the UP and DOWN keys to make
   a selection.
            OR
   Make a selection using the dial pad.

   ```
   [530] UCD OPTION
   UCD RECALL: 10 SEC
   ```

4. Press the LEFT soft key to ENTER the selection and to return to Step 1

        OR

Press the RIGHT soft key to return to Step 3

```
[530] UCD OPTION
EXIT CODE  : NONE
```

5. Press TRSF to store and exit

        OR

Press SPK to store and advance to next MMC

DEFAULT DATA: SEE ABOVE

RELATED ITEMS: MMC 601 ASSIGN STATION GROUP

                           AA PROGRAMMING

MMC:608   ASSIGN REVIEW BLOCK

DESCRIPTION

Provides means of adding or deleting CLIP review blocks to an individual keyset. With the ability to delete a block or blocks of CLIP review, it will not be necessary to waste these on such items as voice mail, DPIMs or for keysets that do not have displays. The free list will show how many bins are left to be assigned. A iDCS 500-M system has 1000 total bins and 1500 total bins for a iDCS 500-L system. Each keyset may be assigned a maximum of 50 bins.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPEAKER	Used to store data and advance to next MMC
HOLD	Used to clear entry
TRSF	To exit programming

ACTION   DISPLAY

1. Press TRSF 608
   Display shows first station

   ```
   [201] REVIEW BLK
   10: 0060 FREE
   ```

2. Enter desired EXT number (e.g. 205)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key to advance cursor

   ```
   [205] REVW BLOCK
   10: 0060 FREE
   ```

3. Enter valid number for bins (e.g. 5)
           OR
   Press UP or DOWN key to make selection
           OR
   Press HOLD key to delete bin(s)

   ```
   [205] REVW BLOCK
   50: 0010 FREE
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: KEYSETS: 10 BINS

RELATED ITEMS: NONE

MMC:609   CALL LOG BLOCK

DESCRIPTION

Provides means of adding or deleting Call LOG blocks to an individual keyset. With the ability to delete a block or blocks, it will not be necessary to waste these on such items as voice mail, DPIMs or for keysets that do not have displays. The free list will show how many bins are left that be assigned. The system has 1500 total bins for iDCS 500-L system and 1000 total bins for iDCS 500-M system. Each keyset may be assigned a maximum of 50 bins.

> **NOTE**   Outgoing Call Log feature is only present on a iDCS 500 system with a LAN board installed on the MCP card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPEAKER	Used to store data and advance to next MMC
HOLD	Used to clear entry
TRSF	To exit programming

ACTION

DISPLAY

1. Press TRSF 609
   Display shows first station

   ```
   [201] LOG BLOCK
   10: 0070 FREE
   ```

2. Enter desired EXT number (e.g. 205)
        OR
   Press UP or DOWN key to make selection and press RIGHT soft key to advance cursor

   ```
   [205] LOG BLOCK
   10: 0070 FREE
   ```

3. Enter valid number for bins (e.g. 5)
        OR
   Press UP or DOWN key to make selection
        OR
   Press HOLD key to delete bin(s)

   ```
   [205] LOG BLOCK
   50: 0030 FREE
   ```

4. Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: KEYSETS: 10 BINS

RELATED ITEMS: NONE

MMC:700   COPY COS CONTENTS

DESCRIPTION

This MMC allows the technician to duplicate a class of service to make it easier to have multiple similar classes of service.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
"F" KEY	Used to advance to MMC 701

ACTION   DISPLAY

1. Press TRSF 700
   Display shows

   ```
   COPY COS ITEMS
   COS01 → COS01
   ```

2. Dial selected COS to copy (e.g., 05)
   OR
   Press UP or DOWN key to select COS and press
   RIGHT soft key to move cursor and advance to next step

   ```
   COPY COS ITEMS
   COS05 → COS01
   ```

3. Dial target COS (e.g., 06)
   OR
   Press UP or DOWN key to select COS and press
   RIGHT soft key to move cursor back to step 2

   ```
   COPY COS ITEMS
   COS05 → COS06
   ```

4. Press F key to advance to MMC 701 and press RIGHT soft to advance cursor

   ```
   COPY COS ITEMS
   COS05 → COS06
   ```

5. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 701 ASSIGN COS CONTENTS

MMC: 701   ASSIGN COS CONTENTS

DESCRIPTION

Similar to MMC 700 but does not allow a copy command. This MMC is primarily used for creating a new class of service. If the unsupervised conference feature is allowed, a programmed CONF key must be available to allow reentry into a conference call. There are 30 classes of service available.

This MMC is divided into 4 categories.

0	TOLL LEVEL
1	USABLE FEATURES
2	CALL STATION GROUPS
3	CALL TRUNK GROUPS
4	CALL TO BIVMS STN (CADENCE or SVMi-8/16).

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 701
   Display shows

   ```
   COS CONTENTS(01)
   TOLL LEVEL:A
   ```

2. Dial COS number (e.g., 06)
           OR
   Press UP or DOWN key to select COS and press RIGHT soft key to move cursor

   ```
   COS CONTENTS(06)
   TOLL LEVEL:A
   ```

3. Dial 0-3 for category select.
           OR
   Press UP or DOWN to select category and press RIGHT soft key to move cursor

   ```
   COS CONTENTS(06)
   00:AA CALER :YES
   ```

4. Dial COS usable feature option (e.g., 12)
           OR
   Press UP or DOWN key to select option and press RIGHT soft key to move cursor

   ```
   COS CONTENTS(06)
   12:DND     :YES
   ```

5. Dial 0 for NO or 1 for YES
           OR
   Press UP or DOWN key to select option and press LEFT soft key to return to step 4

   ```
   COS CONTENTS(06)
   12:DND     :NO
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

TOLL LEVEL OPTIONS

DIAL DIGIT	TOLL LEVEL	DIAL DIGIT	TOLL LEVEL
0	A	4	E
1	B	5	F
2	C	6	G
3	D	7	H

USABLE FEATURES

	LCD Display	COS Option
00	AA CALER	Auto answer control by caller*
01	ABSENCE	Absence
03	AUTO RDL	Retry on busy
04	CALLBACK	Callback
05	CLIP ABN	Caller ID Abandon*
06	CLIP INQ	Caller ID Inquire*
07	CLIP INV	Caller ID Investigate*
08	CONFER.	Conference
09	DALM CLR	DISA alarm ring clear
10	DIRECT	Directory dial
11	DISA	Allow DISA use
12	DND	Do Not Disturb
13	DND FWRD	Forward Do Not Disturb
14	DND OVRD	Do Not Disturb override
15	DOOR	Door ring answer
16	DSS	Direct station select
17	DTS	Direct trunk select
18	EXT AREC	Intercom call automatic record (SVM-800)
19	EXT FWD	External call forward
20	FEATURE	Feature key
21	FLASH	Trunk flash
22	FOLLOW-ME	Call forward-follow me
23	FORWARD	Call forwarding
24	FWDTOVMS	Call forward to SVM-800
25	GRP I/O	Group in/out
26	HOLD	Hold
27	HOTLINE	Hot line
28	INTERCOM	Intercom call
29	MCID	Malicious call ID control (Australia only)

	LCD Display	COS Option
30	MESSAGE	Message
31	MM PAGE	Meet me page
32	NEW CALL	New call
33	OHVAED	Ohvaed
34	OHVAING	Ohvaing
35	ONEA2	1A2 emulation
36	OPERATOR	Operator
37	OUT TRSF	Outgoing transfer
38	OVERRIDE	Override
39	PAGE 0	Page zone 0 PAGING
40	PAGE 1	Page zone 1 PAGING
41	PAGE 2	Page zone 2 PAGING
42	PAGE 3	Page zone 3 PAGING
43	PAGE 4	Page zone 4 PAGING
44	PAGE 5	Page zone 5 PAGING
45	PAGE 6	Page zone 6 PAGING
46	PAGE 7	Page zone 7 PAGING
47	PAGE 8	Page zone 8 PAGING
48	PAGE 9	Page zone 9 PAGING
49	PAGE *	Page zone * PAGING
51	PICKUP	Call pickup
52	PRB	Privacy Release Bridge (iDCS 500-L only)
53	REM. HOLD	Remote Hold
54	RNG PLAN	Ring Mode
55	SECURE	Override secure
56	SET RLOC	Set Relocation
57	SSPD TOL	System Speed dial toll check
58	STN LOCK	Station Lock
59	SYS SPD	System Speed dial
60	TRK AREC	Trunk call automatic record (SVM-800)
61	TRK EHLD	Trunk call exclusive hold
62	UNCO CNF	Unsupervised Conference
63	VM AREC	Auto Record (Built-In VMS)
64	VM AME	Answer Machine Emulation (Built-In VMS)
65	VM REC	Call Record (Built-In VMS)
66	VMS PSWD	VMS password (SVM-800)
67	VMS REC	VMS Call Record (SVM-800)

CALL STATION GROUPS

	LCD Display	**COS Option**
01–30	STN GROUP 01–30	Station group 01–30 calling
31–50	STN GROUP 31–50	Station group 31–50 calling (iDCS500-L only)

CALL TRUNK GROUPS

	LCD Display	**COS Option**
01–11	TRK GROUP 01–11	Trunk group 01–11 calling
12–50	TRK GROUP 12–50	Trunk group 12–50 calling (iDCS500-L only)

CALL TO BIVMS STN (CADENCE or SVMi-8/16).

	LCD Display	**COS Option**
01–08	BIVMS STN 01–08	Built-in VMS port 01–08 calling
09–16	BIVMS STN 09–16	Built-in VMS port 09–16 calling

DEFAULT DATA: TOLL LEVEL   : 1
                             USABLE FEATURES   : YES
                             FEATURES 14, 18, 38, 56, 60, 62, 63, 64, 65 is NO
                             CALL STATION GROUPS : YES
                             CALL TRUNK GROUPS   : YES
                             CALL TO BIVMS STN   : YES

RELATED ITEMS: MMC 700 COPY COS CONTENTS
                             TOLL RESTRICTION

MMC:702   TOLL DENY TABLE

DESCRIPTION

Provides a way to make toll restriction (call barring) very easy and flexible. There are 250 entries allowed in the deny table for a iDCS 500-M system and 500 entries for a iDCS 500-L system and each entry index can be assigned to a class of service. Each index can have up to 12 digits. With the use of wild cards (MMC 704 Assign Wild Character), more flexibility can be built into toll restriction. Wild cards can be used repeatedly in the dial string, limited only to what is allowed or denied in MMC 704. There are six toll levels, B to G, that are programmable. Toll level A is set as unrestricted by default and toll level H is set as in-house only by default.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

WILD CARD KEY

- DCS KEYSET

BUTTON	WILD CARD
19	X
20	Y
21	Z

- DCS KEYSET

BUTTON	WILD CARD
21	X
25	Y
22	Z

ACTION   DISPLAY

1. Press TRSF 702
   Display shows

```
DENY(001):BCDEFG
        :000000
```

2. Dial index number.(e.g., 005)
           OR
   Press UP or DOWN key to select index and
   press RIGHT soft key to move cursor and
   enter toll pattern via dial pad (e.g., 212)
           OR

```
DENY(005):BCDEFG
        :000000
```

```
DENY(005):BCDEFG
212       :000000
```

Enter wild card (e.g., 21X) from above list and press RIGHT soft
key to move cursor to COS options

```
DENY(005):BCDEFG
21X     :000000
```

3. Press UP or DOWN key to move cursor along line until under
    toll class mark (e.g., E)
    Enter a 1 for YES or 0 for NO and press RIGHT soft key to return
    to step 1
            OR
    Press LEFT soft key to return to step 2

```
DENY(001):BCDEFG
212     :000100
```

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: ALL ENTRIES ARE SET TO 0

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                  MMC 701 ASSIGN COS CONTENTS
                  MMC 703 TOLL ALLOWANCE TABLE
                  MMC 704 ASSIGN WILD CHARACTER

MMC:703   TOLL ALLOWANCE TABLE

DESCRIPTION

Provides a way to make toll restriction very easy and flexible. There are 250 allowable entries in the allow table for a iDCS 500-M system and 500 allowable entries for a iDCS 500-L system and each entry index can be assigned to a class of service. Each index can have up to 12 digits. With the use of wild cards (MMC 704 Assign Wild Character), more flexibility can be built into toll restriction. There are six toll levels, B to G, that are programmable. Toll level A is set as unrestricted by default, and toll level H is set as in-house only by default.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

WILD CARD KEY

- **DCS KEYSET**

BUTTON	WILD CARD
19	X
20	Y
21	Z

- **DCS KEYSET**

BUTTON	WILD CARD
21	X
25	Y
22	Z

ACTION   DISPLAY

1. Press TRSF 703
   Display shows

   ```
   ALOW(001):BCDEFG
           :000000
   ```

2. Dial in index number (e.g., 005)
           OR

   ```
   ALOW(005):BCDEFG
           :000000
   ```

   Press UP or DOWN key to select index and press RIGHT soft key to move cursor and
   enter toll pattern via dial pad (e.g., 212)
           OR

   ```
   ALOW(005):BCDEFG
   212        :000000
   ```

   Enter wild card (e.g., 21X) from above list and press RIGHT soft key to move cursor to COS options.

   ```
   ALOW(005):BCDEFG
   21X        :000000
   ```

3. Press UP or DOWN key to move cursor along line until under toll class mark (e.g., E)
    Enter a 1 for YES or 0 for NO and press RIGHT soft key to return to step 1
          OR
    Press LEFT soft key to return to step 2

```
ALOW(001):BCDEFG
212      :000100
```

4. Press TRSF to store and exit
          OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: ALL ENTRIES ARE SET TO 0

RELATED ITEMS: MMC 301 ASSIGN STATION COS
                        MMC 701 ASSIGN COS CONTENTS
                        MMC 702 TOLL DENY TABLE
                        MMC 704 ASSIGN WILD CHARACTER

MMC:704   ASSIGN WILD CHARACTER

DESCRIPTION

Provides flexibility to toll restriction (call barring) when a specific numbering plan is so desired. There are only three entry tables but more than one digit can be assigned per table if needed.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 704
   Display shows

   ```
   :0123456789*#
    X:111111111111
   ```

2. Press UP or DOWN key to select X, Y, or Z (e.g., Z) and press RIGHT soft key to
   advance cursor to option line

   ```
   :0123456789*#
    Z:000000000000
   ```

3. Press UP or DOWN key to move cursor to option digit desired (e.g., 5) and enter 1 (put under other digits as required)
   Press LEFT soft key to return to step 2
           OR
   Press RIGHT soft key to return to step 1

   ```
   :0123456789*#
    Z:000001000000
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL ENTRIES SET TO 0

RELATED ITEMS: MMC 702 TOLL DENY TABLE
                  MMC 703 TOLL ALLOWANCE TABLE

MMC: 705　　　　　ASSIGN SYSTEM SPEED DIAL

DESCRIPTION

Enables the assignment of system speed dialling numbers. There are up to 500 entries available for programming (see MMC 606). Each speed dial number consists of a trunk or trunk group access code followed by a separator and up to 24 digits to be dialled. These dialled digits may consist of 0-9, * and #. If the system recognises a valid trunk or trunk group access number, it will automatically insert the separator.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
B	Used to insert a flash code "F"
C	Used to insert a pause code "P"
D	Used to insert a pulse/tone conversion code "C"
E	Used to mask/unmask following digits - shows as "[" or "]"
F	Used to enter name for speed dial bin (see MMC 706)

ACTION　　　　　　　　　　　　　　　　DISPLAY

1. Press TRSF 705
   Display shows

```
SYS SPEED DIAL
500:
```

2. Dial speed index desired (e.g., 505)
   OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

```
SYS SPEED DIAL
505:
```

3. Enter access code (e.g., 9/701) plus the phone number up to 24 digits (digits will scroll under)
   and press RIGHT soft key to return to step 2

```
SYS SPEED DIAL
505:9-121223456789
```

4. Press F key to toggle to MMC 706 step 3 to enter name

```
SYS SPEED NAME
505:
```

5. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:　　　NONE

RELATED ITEMS:　　　MMC 606 ASSIGN SPEED BLOCK

　　　　　　　　　　　MMC 706 SYSTEM SPEED DIAL BY NAME

MMC:706   SYSTEM SPEED DIAL BY NAME

DESCRIPTION

Allows an 11-character name to be entered for each system speed dial location. This name enables the speed dial number to be located when using the directory dial feature. The directory dial feature allows the display keyset user to select a speed dial location by scanning its name.

Names are written using the keypad. Each press of a key selects a character. Pressing a different key moves the cursor to the next position. For example, if the directory name is SAM SMITH, press the number 7 four times to get the letter S. Now press the number 2 once to get the letter A. Continue selecting characters from the table below to complete your message. Pressing A key changes the letter from upper case to lower case.

NOTE When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
TRSF	Used to store and exit MMC

ACTION

1. Press TRSF 706
   Display shows

2. Dial system speed entry number (e.g., 505)
   OR
   Press UP or DOWN to select entry number
   and press RIGHT soft key to move cursor

3. Enter name using dial keypad and above table and press RIGHT
   soft key to return to step 2
   OR
   Press the F key to toggle to speed dial number to return to MMC
   705, step 3
   Press RIGHT soft key to return to step 2 above
   OR

4. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DISPLAY

```
SYS SPEED NAME
500:
```

```
SYS SPEED NAME
505:
```

```
SYS SPEED NAME
505:TELECOMS
```

```
SYS SPEED DIAL
505:_
```

DEFAULT DATA: NO NAMES

RELATED ITEMS: MMC 606 ASSIGN SPEED BLOCK

MMC 705 ASSIGN SYSTEM SPEED DIAL

MMC:707   AUTHORIZATION CODE

DESCRIPTION

Enables the authorization feature on a per-class of service selection. There are 250 available entries on a iDCS 500-M system and 500 available entries for a iDCS 500-L system. Authorization codes can be up to 4 digits in the iDCS 500-M system and 4 to 10 digits in the iDCS 500-L system.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 707
   Display shows (e.g.: iDCS 500-L system)

   ```
   AUTHOR.CODE(001)
               C:01
   ```

   Other system shows.

   ```
   AUTHOR.CODE(001)
   CODE:      COS:01
   ```

2. Dial code index number (e.g., 005)
            OR
   Press UP or DOWN key to selected index number and press RIGHT soft key to move cursor

   ```
   AUTHOR.CODE(001)
   CODE:      COS:01
   ```

3. Enter authorization code (minimum of four digits and a maximum of 10 digits for iDCS 500-L system
   And 4 digits for other systems) via dial keypad   (e.g., 1234567890) and press RIGHT soft key to move cursor

   ```
   AUTHOR.CODE(005)
   1234567890  C:01
   ```

4. Enter class of service number 01-30 (e.g., 05)
            OR
   Press UP or DOWN key to select COS and press RIGHT soft key to select and return to step 2

   ```
   AUTHOR.CODE(005)
   1234567890  C:05
   ```

5. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 305 ASSIGN FORCED CODE

MMC:708 ACCOUNT CODE

DESCRIPTION

Enables the account code entry feature. There are 500 available entries for a iDCS 500-M system and 999 available entries for a iDCS 500-L system.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION   ## DISPLAY

1. Press TRSF 708
    Display shows

```
ACCOUNT CODE
001:
```

2. Dial code index number (e.g., 005)
            OR
    Press UP or DOWN key to selected index number and press RIGHT soft key to move cursor

```
ACCOUNT CODE
005:
```

3. Enter account code (maximum 12 digits) via dial keypad (e.g., 1234) and press RIGHT soft key to move cursor back to step 2

```
ACCOUNT CODE
005:1234
```

4. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 305 ASSIGN FORCED CODE

MMC:709 TOLL PASS CODE / SPECIAL CODE TABLE

DESCRIPTION

This MMC provides a means to program three trunk code tables as described below..

PBX CODE
This table contains up to five entries and is used to identify the trunk access codes needed for toll restriction to be properly applied when the system is used either behind a PBX or with CENTREX-supplied dial tone. Toll restriction will only be applied on trunks flagged as PBX in MMC 401 if a trunk access code entered in this table is dialed. Toll restriction will be applied to the digits following the trunk access code.

SPECIAL CODE
This table identifies to the system dialling rules the special feature codes used to activate central office custom calling features such as CID Block and call waiting disable. The special feature codes can be used on a per call basis without affecting LCR or toll restriction programming. There is a maximum of ten (10) entries available each of which may be up to four digits long.

TOLL OVERRIDE
This table of eight entries is used to identify to the system numbers that will bypass all dialing restrictions. This bypass includes Toll restriction, Trunk access and forced authorization or account codes. Each entry in the table can be up to 14 digits long.

OVRD USE TRK GRP
This entry designates the trunk group that override calls will access when selected trunk access protection.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 709
   Display shows

```
PBX ACCESS CODE
1:
```

2. Select PBX , SPECIAL CODE, TOLL OVERRIDE or OVRD USE
   TRK GRP
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to move cursor

```
TOLL OVERRIDE
1:
```

3. Enter index number (e.g., 3)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to move cursor

```
TOLL OVERRIDE
3:_
```

4. Enter via dial keypad the desired access/feature code (e.g., 911)
   Press RIGHT soft key to enter and return
   to step 3 and enter more entries

```
TOLL OVERRIDE
3:911
```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 401 PBX TRUNK

                   MMC 702 TOLL DENY TABLE

                   MMC 703 TOLL ALLOWANCE TABLE

                   MMC 304 ASSIGN EXTENSION/TRUNK USABLE

                   MMC 305 FORCED CODES

MMC:710   LCR DIGIT TABLE

DESCRIPTION

The LCR DIGIT TABLE contains all numerical digits for the completion of outgoing call placement. This table works in conjunction with LCR ROUTE TABLE, LCR TIME TABLE and LCR MODIFY DIGITS TABLE. There is a maximum of 1000 entries on a iDCS 500-M system and 2000 entries for a iDCS 500-L system with a digit string length of 10 numerical digits. This system automatically maintains entered digit strings in numerical order. The characters * and # are also accepted for use with feature codes.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 710
   Display shows

   ```
   LCR DIGIT (0001)
   DIGIT:
   ```

2. Dial LCR entry (e.g., 0005)
           OR
   Press UP or DOWN to select entry and press RIGHT soft key to move cursor

   ```
   LCR DIGIT (0005)
   DIGIT:_
   ```

3. Enter LCR digit string via the dial keypad and press RIGHT soft key
           OR
   Press LEFT soft key to return to step 1

   ```
   LCR DIGIT (0005)
   DIGIT:305426
   ```

4. Enter digit length (max: 31)
   Cursor will move to RT (route selection)
   Enter RT (01-32)
           OR

   ```
   LCR DIGIT  (0005)
   LENGTH:10 RT:01
   ```

5. Press LEFT soft key to return to length value
   Valid entry will return you to step 1
   Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 712 LCR ROUTE TABLE

MMC:711   LCR TIME TABLE

DESCRIPTION

This table gives the flexibility to the system, through the LCR ROUTES, to allow calls placed at any given time of day to use the least cost trunk route that is available. When LCR ROUTE ADVANCE is allowed, it is possible for calls to be placed on more expensive trunks on any given time of day. There are four possible time entries per day; the start time of the next time period is the end time of the previous time period.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

FEATURE KEYS

DAY	VALUE
SUN	0
MON	1
TUE	2
WED	3
THU	4
FRI	5
SAT	6

TIME	BAND
A	0
B	1
C	2
D	3

LCRT	
LCRRT	1
LCRRT	2
LCRRT	3
LCRRT	4

ACTION   DISPLAY

1. Press TRSF 711
   Display shows

   ```
   LCR TIME (SUN:A)
   HHMM:    LCRT:-
   ```

2. Dial day of week (SUN-SAT, e.g., WED)
            OR
   Press UP or DOWN to make day selection and press RIGHT soft key

   ```
   LCR TIME (WED:A)
   HHMM:    LCRT:-
   ```

3. Dial time band (A-D, e.g., B)
            OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   LCR TIME (WED:B)
   HHMM:    LCRT:-
   ```

4. Dial time via keypad (24-hour format, e.g. 0800)
    Cursor moves to LCRT (reference MMC 712)
    Dial entry 1-4

                OR
    Press UP or DOWN to select entry and press
    RIGHT soft key to make entry and return to step 1
                OR
    If entry is dialled, return to step 2

```
LCR TIME (WED:B)
HHMM:0800 LCRT:-
```

```
LCR TIME (WED:B)
HHMM:0800 LCRT:1
```

5. Press TRSF to store and exit
                OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 712 LCR ROUTE TABLE

MMC:712 LCR ROUTE TABLE

DESCRIPTION

The LCR ROUTE TABLE is responsible for selecting a specific trunk group in the completion of an outward bound call. This table works in conjunction with LCR DIGIT TABLE, LCR TIME TABLE, LCR COS TABLE and LCR MODIFIED DIGITS TABLE. After the user dials a valid digit string, the system uses the LCR ROUTE TABLE to select a specific predetermined trunk group. There is a maximum number of 16 routes available on a iDCS 500-M system and 32 routes available on a iDCS 500-L system. If more than one trunk group is available for call completion, the system uses the first designated trunk group and then starts to utilise succeeding trunk groups. If all trunk groups are busy in a selected route, call queue becomes active and allocates trunks as they become available.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 712
   Display shows

   ```
   LCR ROUTE (01:1)
   C:1 G:NONE M:---
   ```

2. Dial LCR ROUTE index number (e.g., 05)
           OR
   Press UP or DOWN to selected index and press RIGHT soft key
   to move cursor

   ```
   LCR ROUTE (05:1)
   C:1 G:NONE M:---
   ```

3. Dial TIME BAND index number 1-4 (e.g., 2)
           OR
   Press UP or DOWN to selected index and press RIGHT soft key
   to move cursor

   ```
   LCR ROUTE (05:2)
   C:1 G:NONE M:---
   ```

4. Dial LCR COS number 1-8 (e.g., 4)
           OR
   Press UP or DOWN to selected COS and press RIGHT soft key
   to move cursor

   ```
   LCR ROUTE (05:2)
   C:4 G:NONE M:---
   ```

5. Dial TRUNK GROUP access code (e.g., 801)
           OR
   Press UP or DOWN to selected access code
   and press RIGHT soft key to move cursor

   ```
   LCR ROUTE (05:2)
   C:4 G:801  M:---
   ```

6. Dial MODIFY DIGITS index number (e.g., 050)
   iDCS 500-L system: 001 –200,
   Other systems: 001-100

   ```
   LCR ROUTE (05:2)
   C:4 G:801  M:050
   ```

           OR
   Press UP or DOWN to selected index number
   and press RIGHT soft key to move cursor

   ```
   LCR ROUTE (05:2)
   C:4 G:801  M:---
   ```

OR
Press RIGHT soft key to enter NO index
Number

7. Press TRSF to store and exit
           OR
Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 310 LCR CLASS OF SERVICE
                   MMC 710 LCR DIGIT TABLE
                   MMC 711 LCR TIME TABLE
                   MMC 713 LCR MODIFY DIGIT TABLE

MMC:713   LCR MODIFY DIGIT TABLE

DESCRIPTION

This program entry is also referred to as Outdial Rules. This will give the system the ability to add or delete a digit string or singular digit if needed to complete a call. A perfect example is the adding of a digit "1." An advantage is to insert a common carrier network access code of 1010288 (ATT®). With these digits inserted, a long distance call will be placed over a local line utilizing the common carrier network. The characters * and # can also be entered. There are 100 modify digit entries available in the iDCS 500-M system and 200 modify digit entries available in a iDCS 500-L system.

OPTION	MAXIMUM NUMBER OF DIGIT ENTRIES
Number of digits to delete	15
Insert (before dialing string)	14
Append (after dialing string)	14

DIGIT STRING KEY
Insert String + Digit String (delete) + Append String

> **NOTE** In case of Italy, the number of modify digit entries is 50 in iDCS 500-M and 100 in iDCS 500-L, and maximum number of digit entries are 30.

PROGRAM KEYS

PROGRAM KEYS
UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 713
   Display shows

   ```
   LCR MODIFY (001)
   NOF DEL DGT:00
   ```

2. Enter index number (e.g., 005)
   OR
   Press UP or DOWN keys to make selection and press RIGHT soft key to move cursor

   ```
   LCR MODIFY (005)
   NOF DEL DGT:00
   ```

3. Enter number of digits to delete
   OR
   Press RIGHT soft key to skip step and move cursor to next step

   ```
   LCR MODIFY (005)
   NOF DEL DGT:01
   ```

4. Enter digits to be inserted (e.g., 10288)
   OR
   Press RIGHT soft key to skip step or to store information and advance to next ste

   ```
   LCR MODIFY (005)
   I:10288_
   ```

5. Enter digits to be appended (e.g., 45678)
   OR
   Press RIGHT soft key to skip step or to store information and return to step 2

   ```
   LCR MODIFY (005)
   A:_
   ```

6. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 710 LCR DIGIT TABLE
                  MMC 712 LCR ROUTE TABLE

MMC:714   DID NUMBER AND NAME TRANSLATION

DESCRIPTION

Assigns an incoming DID call to a specific ring plan destination. It also provides a call waiting option, if needed, so that a second incoming DID call can be received. The table is also used to define which MOH source a caller to that DID number will hear when placed on hold. An 11 character name can be added to the number. There are a maximum of 400 entries in the iDCS 500-M and a maximum of 999 entries in a iDCS 500-L system. If there is no matching number on DID service the call is routed to the operator group when normal incoming call and provides error tone when networking in call.

Definitions of option are as follows:

1. **DGT**:= Digits to be received from CO. Up to 16 digits may be entered.

2. **MOH SOURCE**: Allows the technician to select what the calling party will hear in regards to that DID/DNIS number if the call is placed on hold. There are a total of 6 possible music selections (see below). (Available in iDCS 500-L only.)

    In addition to "TONE" or a music source, you may also select an Auto Attendant (AA) port to provide continuous play of a specific recording. The AA port selected must be the last AA port on the AA card (3958). If selected, the Music on Hold will be the message defined in MMC 736.

    If you have a CADENCE Voice Mail System installed you may also select a CADENCE recording as a music source. The recording must already been defined in MMC 756 and will show up here as the CADENCE port associated with the recording.

OPTIONS

- NONE**:** Follows the setting in MMC 408 for the trunk the call comes in on.

- TONE**:** A repeated tone is played to the outside party.

- INTERNAL CHIME "OLD FOLKS AT HOME"**:** This is entered as the directory number of the music source on the MCP(371).

- EXTERNAL DEVICE**:** Music Source or Digital announcer. This is entered as the directory number of an external music source.

- DIGITAL ANNOUNCEMENT ON AA CARD: This is entered as the directory number of the last AA port of an AA card. For further details on using an AA port as an MOH source please see MMC 736.

- VOICE MAIL SOUND FILE**:** If the iDCS 500 system has an optional CADENCE card installed, up to 100 custom recorded sound files from the Voice Mail card can be used for MOH sources. Select the CADENCE port assigned in MMC 756. For information on creating the sound files see CADENCE System Administrator Manual-Recording greeting by number. If you select this option be advised that each VMMOH source requires a dedicated CADENCE port/channel.

3. **1: XXX, 2: XXX, 3: XXX, 4: XXX, 5: XXX, 6:XXX** = ring plan and destination during each ring plan. The destination can be a station, station group, trunk or trunk group. If trunk or trunk group is selected the trunks must be programmed as E&M trunks to allow the received digits to be re-sent on the facility(s). This is referred to as DID Repeat digits over tie line.

NOTE An entry of the character "B" means to repeat the received digits.

4. **CW**: = Call waiting Yes/No . Allow a second DID call to be received

5. **DELETE**: The number of digits to delete. This is useful with Tandem switching, mixed numbering plans and DID Repeat digits over tie line. Maximum number of digits that can be deleted is 16.

6. **NAME** = Input up to 11 characters to identify call.

Names are written using the keypad. Each press of a key selects a character. Pressing the dial pad key moves the cursor to the next position. For example, if the directory name is "SAM SMITH," press "7" four times to get the letter "S." Press "2" once to get "A." Continue selecting characters from the table below to complete your message. Pressing A key changes the letter from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION

1. Press TRSF 714
   Display shows

2. Enter valid index number, e.g. 005, via dial keypad
         OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

3. Enter digits to be translated (e.g. 5065)
   via dial keypad and press RIGHT
   soft key to move cursor

4. Enter the MOH source for this entry.
         OR
   Press UP or DOWN key to select option
   Press RIGHT soft key to return to step 3 above
   (iDCS 500-L system Only)

5. Enter station or group number for each Ring Plan destination via
   dial keypad (e.g. 530)
         OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to advance to next
   Ring Plan. Press RIGHT soft key to ENTER and move cursor

6. Press UP or DOWN key to make selection or select via dial pad 1
   for YES, 0 for NO
   Press RIGHT soft key to advance to the next step.

7. Enter the number of digits to be deleted and
   Press RIGHT soft key to return to Step 1,
         OR
   Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DISPLAY

```
DID DIGIT  (001)
DGT:
```

```
DID DIGIT  (005)
DGT:
```

```
DID DIGIT  (005)
DGT:5065
```

```
DID DIGIT  (005)
MOH SOURCE:F-TRK
```

```
DID DIGIT  (005)
1:530    2:
```

```
DID DIGIT  (005)
CW:NO  DELETE:0
```

```
DID DIGIT  (005)
CW:YES DELETE:0
```

DEFAULT DATA: NO ENTRIES

RELATED ITEMS: TRUNK PROGRAMMING

MMC:715   PROGRAMMED STATION MESSAGE

DESCRIPTION

Allows custom messages to be programmed or default messages to be changed.

Messages are written via the keypad. Each press of a key will select a character. Pressing a different key will move the cursor to the next position. For example, if the message is "Sunbathing," press the number "7" four times to get the letter "S." Now press the number "8" twice to get the letter "U." Continue selecting characters from the table below to complete your message. Pressing the "A" key will change the letter from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,",→,` , and \.

There are 20 messages in a iDCS500-M system and 30 messages in a iDCS500-L system. They fall in the following categories:

MESSAGES 01-10 (16 character default messages): These are pre-programmed default messages. Any of them can be changed.

MESSAGES 11-18 on a iDCS 500-M system are 16 character blank messages that can be created.

MESSAGES 19-20 on a iDCS 500-M system have a default message for time or date selection. These messages can be changed.

MESSAGES 11-25 on a iDCS500-L system are 16 character blank messages that can be created.

MESSAGES 26-27 (only available on a iDCS500-L system) Nine character default messages with six character user customized day/date extender: These messages are pre-programmed default messages and any of them can be changed.

MESSAGES 28-30 (only available on a iDCS500-L system) Nine character blank messages with six character user customized day/date extender: Any of these can be created.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Toggles from upper case to lower case

ACTION

DISPLAY

1. Press TRSF 715
   Display shows

```
PGM.MESSAGE (01)
GIVE ME THE CALL
```

2. Enter index number (e.g., 11)
          OR
   Press UP or DOWN arrow to make selection
   Press RIGHT soft key to move cursor

```
PGM.MESSAGE (11)
_Blank Message
```

3. Enter message via dial keypad using the above table (maximum 16 characters)
   Use "A" key to toggle upper case/lower case
   Press RIGHT soft key to return to step 2

```
PGM.MESSAGE (11)
SunBathing
```

4. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: TEN PROGRAMMED MESSAGES AS DETAILED BELOW

01. GIVE ME THE CALL
02. TAKE A MESSAGE
03. ASK THEM TO HOLD
04. SEND TO MY VM
05. TRSF TO MY SECY
06. LEAVE A MESSAGE
07. PAGE ME
08. OUT OF TOWN
09. IN A MEETING
10. I WILL CALL BACK

[iDCS 500-M system]
MESSAGES 11–18 ARE 16 CHARACTER BLANK MESSAGES
19. RETURN ON :
20. RETURN ON /

[iDCS 500-L system]
MESSAGES 11–25 ARE 16 CHARACTER BLANK MESSAGES
26. RETURN AT
27. RETURN ON
MESSAGES 28-30 ARE 9 CHARACTER BLANK MESSAGES

> **NOTE**   Messages 01-25 are shared for station to station text messaging, and station programming messages.
> Text Messaging is a feature only available on a iDCS 500-L system.

Messages 21-30 are only available on a iDCS500-L system.

RELATED ITEMS: MMC 115 SET PROGRAMMED MESSAGE
MMC 321 KTS TYPE (iDCS 500-L system only)

MMC:718   MY AREA CODE

DESCRIPTION

This MMC defines the home area code and country code. This information is used for caller ID and ISDN calls in defining the area code on incoming calls. This MMC removes the local area code to allow callback without digit modifications in LCR.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Moves cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 718
   Display shows

   ```
   MY AREA CODE
   AREA   :
   ```

2. Enter 0 for COUNTRY or 1 for AREA.
           OR
   Press UP or DOWN keys to make selection and press RIGHT soft key to move cursor

   ```
   MY AREA CODE
   AREA   :
   ```

3. Enter area code (maximum 4 digits) via dial keypad (e.g., 2) and press RIGHT soft key to move cursor
   back to step 2.

   ```
   MY AREA CODE
   AREA   :2
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: TRUNK PROGRAMMING

MMC:720 COPY KEY PROGRAMMING

DESCRIPTION

Provides a tool for duplicating key assignment from one keyset to another. This can be done on a per-station basis or on all stations, but not on a group of stations. One limitation is that the original and target keysets must be of the same type (i.e. same number of buttons).

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Moves cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 720
   Display shows

   ```
   [201] COPY KEY
   FROM:NONE
   ```

2. Enter the station number to copy to (e.g., 205)
              OR
   Press UP or DOWN keys to make selection and press RIGHT soft key to move cursor

   ```
   [205] COPY KEY
   FROM:NONE
   ```

3. Enter station number to copy from (e.g., 203) and cursor returns to step 2
              OR
   Press UP or DOWN keys to make selection

   ```
   [205] COPY KEY
   FROM:203
   ```

4. Press RIGHT soft key to return to step 2
              OR
   Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 107 KEY EXTENDER

MMC 721 SAVE STATION KEY PROGRAMMING

MMC 722 STATION KEY PROGRAMMING

MMC 723 SYSTEM KEY PROGRAMMING

MMC:721   SAVE STATION KEY PROGRAMMING

DESCRIPTION

Provides a service tool which will minimize the accidental loss of programmable keys on the keysets. The method of operation is simple, first the data is saved and then the station can be replaced with another station type or the keys can be reprogrammed to other features. Once testing or replacement is completed, the data can be restored to the individual station, providing the same type is in place.

> **NOTE**   This program is not to be confused with AUTO SET RELOCATE (MMC 315). This program is for saving and restoring the same electronic device type at that port.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 721
   Display shows

   ```
   [201] SAVE KEY
   RESTORE
   ```

2. Enter desired station number (e.g., 205)
        OR
   Press UP or DOWN key to make selection and press RIGHT soft key

   ```
   [205] SAVE KEY
   RESTORE
   ```

3. Press UP or DOWN key to make function selection (e.g., SAVE)

   ```
   [205] SAVE KEY
   SAVE
   ```

4. Press RIGHT soft key to enter and return to step 2
        OR
   Press TRSF to store and exit
        OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 107 KEY EXTENDER
                             MMC 722 STATION KEY PROGRAMMING
                             MMC 723 SYSTEM KEY PROGRAMMING

MMC:722   STATION KEY PROGRAMMING

DESCRIPTION:

Allows the customizing of programmable keys on specific electronic keysets, AOM, or 64 button module on the system. For keysets, buttons 1 and 2 are set as CALL buttons by default. For AOM's and 64 button DSS box's all buttons are set as DS keys by default. Features are entered via dial pad keys by pressing the dial pad number the required number of steps to select the feature. For example, for OHVA, the number 6 is pressed three times. If the BOSS key is required, press 2 for the first letter B and then use the UP or DOWN key to change the selection from BARGE to BOSS.

DIAL KEYPAD

COUNT	1	2	3	4
DIAL 2	AAPLAY	BARGE	CAD	
DIAL 3	DICT	EP or EXTMIC	FAUTO	
DIAL 4	GPIK	HDSET	IG	
DIAL 5	LANREQ	LANREQ	LANREQ	
DIAL 6	MMPA	NEW	OHVA	
DIAL 7	PAGE	PAGE	RB	SETDND
DIAL 8	TG	UA	VDIAL	
DIAL 9	WAKEUP	XCHIN		

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 722
   Display shows

   ```
   [201] KEY (MAST)
   01:CALL1 →
   ```

2. Enter selected station number (e.g., 205)
            OR
   Press UP or DOWN key to select station
   Press RIGHT soft key to move cursor

   ```
   [205] KEY (MAST)
   01:CALL1 →
   ```

3. Enter selected key number (e.g., 18)
            OR
   Press UP or DOWN key to select key number
   Press RIGHT soft key to move cursor

   ```
   [201] KEY (MAST)
   18:NONE →_
   ```

4. Using above chart, press dial pad key number to make selection
             OR
Press UP or DOWN key to make selection
Press RIGHT soft key to advance cursor to step 5 to enter extender if required or to return to step 2

```
[201] KEY PROG.
18:NONE →GPIK_
```

5. If required, enter extender (e.g.,03)
             OR
Press UP or DOWN key to make selection
Press RIGHT soft key to return to step 2

```
[201] KEY PROG.
18:NONE →GPIK03
```

6. Press TRSF to store and exit
             OR
Press SPK to store and advance to next MMC

DEFAULT DATA: SEE BELOW

RELATED ITEMS: MMC 107 KEY EXTENDER
                      MMC 720 COPY KEY PROGRAMMING
                      MMC 721 SAVE STATION KEY PROGTRAMMING
                      MMC 723 SYSTEM KEY PROGTRAMMING

Default 24 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9
07:NONE	08:NONE	09:NONE	10:NONE	11:NONE	12:NONE
13:NONE	14:NONE	15:NONE	16:NONE	17:NONE	18:NONE
19:CONF	20:MUTE	21:GPIK01	22:PAGE	23:CBK	24:MSG

Default 12 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9
07:CONF	08:MUTE	09:GPIK01	10:PAGE	11:CBK	12:MSG

Default 6 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9

Default 28 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:MSG
06:NONE	07:NONE	08:NONE	09:NONE	10:NONE
11:NONE	12:NONE	13:NONE	14:NONE	15:NONE
16:NONE	17:NONE	18:NONE	19:NONE	20:NONE

21:NONE	25:MSG
22:NONE	26:NONE
23:SPD	27:LNR
24:TRSF	28:SPKR

Default 18 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:MSG
06:NONE	07:NONE	08:NONE	09:NONE	10:NONE

21:NONE	25:NONE
22:NONE	26:NONE
23:SPD	27:LNR
24:TRSF	28:SPKR

Default 8 Button Keyset

01:CALL1	02:CALL2	03:MSG	04:TRSF
05:NONE	06:NONE	07:NONE	08:SPKR

Default 64/48/14-Button DSS Box
64-Button   48-Button   14-Button

01:DS	02:DS	03:DS	04:DS
05:DS	06:DS	07:DS	08:DS
09:DS	10:DS	11:DS	12:DS
13:DS	14:DS	15:DS	16:DS
17:DS	18:DS	19:DS	20:DS
21:DS	22:DS	23:DS	24:DS
25:DS	26:DS	27:DS	28:DS
29:DS	30:DS	31:DS	32:DS
33:DS	34:DS	35:DS	36:DS
37:DS	38:DS	39:DS	40:DS
41:DS	42:DS	43:DS	44:DS
45:DS	46:DS	47:DS	48:DS
49:DS	50:DS	51:DS	52:DS
53:DS	54:DS	55:DS	56:DS
57:DS	58:DS	59:DS	60:DS
61:DS	62:DS	63:DS	64:DS

01:DS	13:DS	25:DS	37:DS
02:DS	14:DS	26:DS	38:DS
03:DS	15:DS	27:DS	39:DS
04:DS	16:DS	28:DS	40:DS
05:DS	17:DS	29:DS	41:DS
06:DS	18:DS	30:DS	42:DS
07:DS	19:DS	31:DS	43:DS
08:DS	20:DS	32:DS	44:DS
09:DS	21:DS	33:DS	45:DS
10:DS	22:DS	34:DS	46:DS
11:DS	23:DS	35:DS	47:DS
12:DS	24:DS	36:DS	48:DS

31:DS
32:DS
33:DS
34:DS
35:DS
36:DS
37:DS
38:DS
39:DS
40:DS
41:DS
42:DS
43:DS
44:DS

Programmable Key Assignments

AAPLAY:	AUTO ATTENDANT PLAY*
AAREC:	AUTO ATTENDANT RECORD*
AB:	ABSENCE
ABAND:	ABANDONED CALL
ACC or ACCT:	ACCOUNT(ACC: iDCS 500-L only)
ALARM:	ALARM
AN/RLS:	ANSWER/RELEASE
BARGE:	BARGE-IN
BILL:	BILL ******
BLOCK:	OHVA BLOCK
BOSS:	BOSS/SECRETARY
CAD:	CALL ACTIVITY DISPLAY****
CALL:	CALL BUTTON
CAMP:	STATION CAMP-ON
CANMG:	MESSAGE CANCEL
CBK:	CALLBACK
CHIN:	CHECK IN ******

CHOUT:	CHECK OUT ******
CID:	CALLER ID/ANI*
CONF:	CONFERENCE
CONP:	CONNECTED NAME DISPLAY *****
CR:	CALL RECORD **
CREDIT:	CREDIT ******
CS:	CALL STATUS
CSNR:	CALLER ID SAVE NUMBER REDIAL
DICT:	DICTATION
DIR:	DIRECTORY
DLOCK:	DOOR LOCK
DND:	DO NOT DISTURB
DNDO:	DO NOT DISTURB OVERRIDE
DP:	DIRECT PICKUP
DROP:	DROP
DS:	DSS KEY
DT:	DTS KEY
EP:	ESTABLISHED CALL PICKUP***
EXTMIC:	EXTERNAL MIC
FAUTO:	FORCED AUTO ANSWER
FLASH:	FLASH
FWRD:	CALL FORWARD
GPIK:	GROUP PICKUP
HDSET:	HEADSET MODE
HLDPK:	HOLD PICKUP
HOLD:	HOLD
HOTEL:	HOTEL ******
IG:	IN/OUT OF GROUP
INQIRE:	INQUIRE
ISPY:	CID SPY
LANREQ:	LAN REQUEST ****
LCR:	LEAST COST ROUTING
LISTN:	GROUP LISTENING
LNR:	LAST NUMBER REDIAL
LOG:	CALL LOGGING****
MMPA:	MEET ME PAGE ANSWER
MMPG:	MEET ME PAGE
MS:	MANUAL SIGNALING ***
MSG:	MESSAGE
MUTE:	MUTE
MW:	MESSAGE WAIT ***
NEW:	NEW CALL
NND:	NAME NUMBER DATE
NXT:	NEXT
OHVA:	OFF-HOOK VOICE ANNOUNCE
OPER:	OPERATOR
PAGE:	PAGE
PAGPK:	PICKUP PAGE HOLD
PARK:	CALL PARK ORBIT
PAUSE:	PAUSE
PMSG:	PROGRAMMED STATION MESSAGE
PRB:	PRIVACY RELEASE BRIDGE***
PROG:	PROGRAM ***
PTHR:	PATH REPLACEMENT *****
RB:	ROOM BILL******
REJECT:	OHVA REJECT

RETRY:	AUTO REDIAL ON BUSY
REVW:	REVIEW
RP:	RING PLAN
RSV:	ROOM STATUS VIEW******
RTO:	RING TIME OVERIDE
SETDND:	SET DO NOT DISTURB***
SETMG:	SET MESSAGE W/O RING
SG:	STATION GROUP
SLOCAT:	STAFF LOCATOR******
SNR:	SAVED NUMBER REDIAL
SP:	UCD SUPERVISOR
SPD:	SPEED DIAL
SPKR:	SPEAKER
STORE:	STORE DISPLAYED NUMBER
SYSALM:	SYSTEM ALARMS****
TG:	TRUNK GROUP
TIMER:	TIMER
TRARPT:	TRAFFIC REPORT****
TRSF:	TRANSFER
UA:	UNIVERSAL ANSWER
VDIAL:	VOICE DIAL
VG:	VMS GROUP MESSAGE
VM:	VOICE MAIL MEMO**
VMADM:	VOICE MAIL ADMINISTRATION**
VMAME:	ANSWER MACHINE EMULATION**
VMMSG:	VOICE MAIL MESSAGE KEY**
VMSCMT:	VMS COMMENT (SVM-800)
VMSMSG:	VMS MESSAGE (SVM-800)
VMSOUT:	VMS OUT CALL (SVM-800)
VMSREC:	VMS RECORD (SVM-800)
VMSVAC:	VMS VACANT (SVM-800)
VREC:	VOICE RECORD
VT:	VOICEMAIL TRANSFER
WAKEUP:	WAKE UP ******
XCHIN:	EXPRESS CHECK IN ******

NOTE Items marked with an asterisk require optional hardware.
Items marked with a double asterisk require a CADENCE card.
Items marked with three asterisks are only accessible on a iDCS500-L system.
Items marked with four asterisks are only accessible with a LAN module.
Items marked with five asterisks are related to Networking Features
Items marked with six asterisks are related to Hotel/Motel Features

MMC:723   SYSTEM KEY PROGRAMMING

DESCRIPTION

This MMC is much like MMC 722, Station Key Programming. The main difference is that this MMC is system-wide rather than on a per-station basis. Features are entered via the dial keypad by pressing numbers as shown in the table. For example, for OHVA the number 6 is pressed three times. If the BOSS key is required, press 2 for the first letter B, and then use the UP or DOWN key to change selection from BARGE to BOSS.

DIAL KEYPAD

COUNT	1	2	3	4
DIAL 2	AAPLAY	BARGE	CAD	
DIAL 3	DICT	EP or EXTMIC	FAUTO	
DIAL 4	GPIK	HDSET	IG	
DIAL 5	LANREQ	LANREQ	LANREQ	
DIAL 6	MMPA	NEW	OHVA	
DIAL 7	PAGE	PAGE	RB	SETDND
DIAL 8	TG	UA	VDIAL	
DIAL 9	WAKEUP	XCHIN		

TYPE OF SET

0   24 BTN SETS
1   12 BTN SETS
3   6 BTN SETS
5   48/64 AOMS
6   20 BTN SETS
7   28 BTN SETS
8   18 BTN SETS
9   8 BTN SETS

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   ## *DISPLAY*

1. Press TRSF 723
   Display shows

   ```
   TYPE:24 BTN SETS
   01:CALL1  →
   ```

2. Enter type of set via dial keypad (e.g.,1)
                OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key

   ```
   TYPE:12 BTN SETS
   01:CALL1  →
   ```

3. Enter key number (e.g., 03)
                OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key

   ```
   TYPE:12 BTN SETS
   03:NONE   →
   ```

4. Using table above, press dial keypad number to make selection
                OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to advance cursor to step 5 to enter extender, if required
                OR
   Press LEFT soft key to return to step 3

   ```
   TYPE:12 BTN SETS
   03:NONE   →GPIK
   ```

5. If required, enter extender (e.g.,03)
                OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to return to step 2

   ```
   TYPE:12 BTN SETS
   03:GPIK    →GPIK03
   ```

6. Press TRSF to store and exit
                OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:

Default 24 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9
07:NONE	08:NONE	09:NONE	10:NONE	11:NONE	12:NONE
13:NONE	14:NONE	15:NONE	16:NONE	17:NONE	18:NONE
19:CONF	20:MUTE	21:GPIK01	22:PAGE	23:CBK	24:MSG

Default 12 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9
07:CONF	08:MUTE	09:GPIK01	10:PAGE	11:CBK	12:MSG

Default 6 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:NONE	06:TG9

Default 28 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:MSG
06:NONE	07:NONE	08:NONE	09:NONE	10:NONE
11:NONE	12:NONE	13:NONE	14:NONE	15:NONE
16:NONE	17:NONE	18:NONE	19:NONE	20:NONE

21:NONE	25:MSG
22:NONE	26:NONE
23:SPD	27:LNR
24:TRSF	28:SPKR

Default 18 Button Keyset

01:CALL1	02:CALL2	03:NONE	04:NONE	05:MSG
06:NONE	07:NONE	08:NONE	09:NONE	10:NONE

21:NONE	25:NONE
22:NONE	26:NONE
23:SPD	27:LNR
24:TRSF	28:SPKR

Default 8 Button Keyset

01:CALL1	02:CALL2	03:MSG	04:TRSF
05:NONE	06:NONE	07:NONE	08:SPKR

Default 64/48/14-Button DSS Box
64-Button   48-Button   14-Button

01:DS	02:DS	03:DS	04:DS
05:DS	06:DS	07:DS	08:DS
09:DS	10:DS	11:DS	12:DS
13:DS	14:DS	15:DS	16:DS
17:DS	18:DS	19:DS	20:DS
21:DS	22:DS	23:DS	24:DS
25:DS	26:DS	27:DS	28:DS
29:DS	30:DS	31:DS	32:DS
33:DS	34:DS	35:DS	36:DS
37:DS	38:DS	39:DS	40:DS
41:DS	42:DS	43:DS	44:DS
45:DS	46:DS	47:DS	48:DS
49:DS	50:DS	51:DS	52:DS
53:DS	54:DS	55:DS	56:DS
57:DS	58:DS	59:DS	60:DS
61:DS	62:DS	63:DS	64:DS

01:DS	13:DS	25:DS	37:DS
02:DS	14:DS	26:DS	38:DS
03:DS	15:DS	27:DS	39:DS
04:DS	16:DS	28:DS	40:DS
05:DS	17:DS	29:DS	41:DS
06:DS	18:DS	30:DS	42:DS
07:DS	19:DS	31:DS	43:DS
08:DS	20:DS	32:DS	44:DS
09:DS	21:DS	33:DS	45:DS
10:DS	22:DS	34:DS	46:DS
11:DS	23:DS	35:DS	47:DS
12:DS	24:DS	36:DS	48:DS

31:DS
32:DS
33:DS
34:DS
35:DS
36:DS
37:DS
38:DS
39:DS
40:DS
41:DS
42:DS
43:DS
44:DS

Programmable Key Assignments

AAPLAY:	AUTO ATTENDANT PLAY*
AAREC:	AUTO ATTENDANT RECORD*
AB:	ABSENCE
ABAND:	ABANDONED CALL
ACC or ACCT:	ACCOUNT(ACC: iDCS 500-L only)
ALARM:	ALARM
AN/RLS:	ANSWER/RELEASE
BARGE:	BARGE-IN
BILL:	BILL ******
BLOCK:	OHVA BLOCK
BOSS:	BOSS/SECRETARY
CAD:	CALL ACTIVITY DISPLAY****
CALL:	CALL BUTTON
CAMP:	STATION CAMP-ON
CANMG:	MESSAGE CANCEL
CBK:	CALLBACK
CHIN:	CHECK IN ******
CHOUT:	CHECK OUT ******
CID:	CALLER ID/ANI*
CONF:	CONFERENCE
CONP:	CONNECTED NAME DISPLAY *****
CR:	CALL RECORD **
CREDIT:	CREDIT ******
CS:	CALL STATUS
CSNR:	CALLER ID SAVE NUMBER REDIAL
DICT:	DICTATION
DIR:	DIRECTORY
DLOCK:	DOOR LOCK
DND:	DO NOT DISTURB
DNDO:	DO NOT DISTURB OVERRIDE
DP:	DIRECT PICKUP
DROP	DROP
DS:	DSS KEY
DT:	DTS KEY
EP:	ESTABLISHED CALL PICKUP***
EXTMIC:	EXTERNAL MIC
FAUTO:	FORCED AUTO ANSWER
FLASH:	FLASH
FWRD:	CALL FORWARD
GPIK:	GROUP PICKUP
HDSET:	HEADSET MODE
HLDPK:	HOLD PICKUP
HOLD:	HOLD
HOTEL:	HOTEL ******
IG:	IN/OUT OF GROUP
INQIRE:	INQUIRE
ISPY:	CID SPY
LANREQ:	LAN REQUEST ****
LCR:	LEAST COST ROUTING
LISTN:	GROUP LISTENING
LNR:	LAST NUMBER REDIAL
LOG:	CALL LOGGING****
MMPA:	MEET ME PAGE ANSWER
MMPG:	MEET ME PAGE

MSG:	MESSAGE
MUTE:	MUTE
MW:	MESSAGE WAIT ***
NEW:	NEW CALL
NND:	NAME NUMBER DATE
NXT:	NEXT
OHVA:	OFF-HOOK VOICE ANNOUNCE
OPER:	OPERATOR
PAGE:	PAGE
PAGPK:	PICKUP PAGE HOLD
PARK:	CALL PARK ORBIT
PAUSE:	PAUSE
PMSG:	PROGRAMMED STATION MESSAGE
PRB:	PRIVACY RELEASE BRIDGE***
PROG:	PROGRAM ***
PTHR:	PATH REPLACEMENT *****
RB:	ROOM BILL******
REJECT:	OHVA REJECT
RETRY:	AUTO REDIAL ON BUSY
REVW:	REVIEW
RP:	RING PLAN
RSV:	ROOM STATUS VIEW ******
RTO:	RING TIME OVERIDE
SETDND:	SET DO NOT DISTURB***
SETMG:	SET MESSAGE W/O RING
SG:	STATION GROUP
SLOCAT:	STAFF LOCATOR******
SNR:	SAVED NUMBER REDIAL
SP:	UCD SUPERVISOR
SPD:	SPEED DIAL
SPKR:	SPEAKER
STORE:	STORE DISPLAYED NUMBER
SYSALM:	SYSTEM ALARMS****
TG:	TRUNK GROUP
TIMER:	TIMER
TRARPT:	TRAFFIC REPORT****
TRSF:	TRANSFER
UA:	UNIVERSAL ANSWER
VDIAL:	VOICE DIAL
VG:	VMS GROUP MESSAGE
VM:	VOICE MAIL MEMO**
VMADM:	VOICE MAIL ADMINISTRATION**
VMAME:	ANSWER MACHINE EMULATION**
VMMSG:	VOICE MAIL MESSAGE KEY**
VMSCMT:	VMS COMMENT (SVM-800)
VMSMSG:	VMS MESSAGE (SVM-800)
VMSOUT:	VMS OUT CALL (SVM-800)
VMSREC:	VMS RECORD (SVM-800)
VMSVAC:	VMS VACANT (SVM-800)
VREC:	VOICE RECORD
VT:	VOICEMAIL TRANSFER
WAKEUP:	WAKE UP ******
XCHIN:	EXPRESS CHECK IN ******

NOTE
Items marked with an asterisk require optional hardware.
Items marked with a double asterisk require a CADENCE card.
Items marked with three asterisks are only accessible on a iDCS500-L system.
Items marked with four asterisks are only accessible with a LAN module.
Items marked with five asterisks are only accessible on a Networking Version

MMC:724   DIAL NUMBERING PLAN

DESCRIPTION

This MMC allows the technician to change directory numbers for stations, trunks, station groups, trunk groups and feature access codes. The iDCS 500 system can be pre-programmed with a default three or four digit numbering for station, station groups and trunk numbers depending on the position of the DIP switches on the MCP card. There is an error message provided to prevent the accidental duplication of a directory number or feature access code.

DIAL	OPTION	DESCRIPTION
00	**STN DIAL NUM**	This is where station directory numbers are changed or assigned.
01	**TRK DIAL NUM**	This is where trunk directory numbers are changed or assigned.
02	**AA DIAL NUM**	This is where AA port directory numbers are changed or assigned.
03	**MISC DIAL NUM**	This is where directory numbers for relays, MOH ports and the alarm sensor are changed or assigned
04	**STNG DIAL NUMBER**	This is where station group numbers are changed or assigned.
05	**TRKG DIAL NUMBER**	This is where trunk group numbers are changed or assigned.
06	**FEAT DIAL NUMBER**	This is where feature access codes are changed or assigned. Dialing codes are entered via the dial pad key by pressing the dial pad number the required steps to select the feature. For example, for OHVA, the number 6 would be pressed three times.

> **NOTE** Please remember that this program is system-wide.Please

DIAL	OPTION	DESCRIPTION
07	**S0 STN DIAL NO.**	This is where directory numbers for BRI station ports. MMC 428 is to assign as stations or trunks.
08	**DECT STN DIAL NO**	This is where directory numbers for DECT terminals.
09	**NTWK LCR DIAL NO**	This is where additional LCR access codes are entered in the case when two or more iDCS 500 system are networked together.
10	**VIRT EXT DIAL NO**	This is where virtual station directory numbers are changed or assigned.

FEATURE NUMBERING DIAL KEY PAD

COUNT	1	2	3	4
DIAL 2	ABAND	BARGE	CAMP	
DIAL 3	DICT	DICT	FAUTO	
DIAL 4	GRPK	HDSET	IG	
DIAL 5	LCR	LCR	LCR	
DIAL 6	MMPA	NEW	OHVA	
DIAL 7	PAGE	PAGE	RB	SELFID
DIAL 8	UA	UA	VDIAL	
DIAL 9	WAKEUP	WAKEUP	WAKEUP	

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF
   Display shows

   ```
   STN DIAL NUM:C1
   S2-P01:201 →
   ```

2. Dial option number to make selection
   (e. g., 06)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to advance cursor

   ```
   FEAT DIAL NUMBER
   ABAND :64  →_
   ```

3. Dial first letter of feature name (e. g., 7)
           AND

   ```
   FEAT NUMBER PLAN
   PAGE :55  →
   ```

   Press UP or DOWN key to make selection
   Then press RIGHT soft key to advance cursor

   ```
   FEAT NUMBER PLAN
   PARK :NONE→_
   ```

4. Enter digits (e.g., 63) via the dial keypad

   ```
   FEAT NUMBER PLAN
   PARK :NONE  →63
   ```

5. Press LEFT soft key to enter change and continue to make
   changes
           OR

   ```
   FEAT NUMBER PLAN
   PARK :NONE  →63
   ```

   Press RIGHT soft key to enter and return to step 2; if an error
   message appears indicating duplication

   ```
   SAME DIAL EXIST
   CHANGE? Y:1,N:0
   ```

   of access code, enter 1 for YES for change or enter 0 for NO for
   no change

6.   Press TRSF to store and exit
OR
Press SPK to store and advance to next MMC

DEFAULT DATA: SEE BELOW

STN DIAL NUM :	201 ~ 2xx
TRK DIAL NUM :	701 ~ 7xx
AA/VD DIAL NO :	AA : 3951 ~
MISC DIAL NUM:	External page: 361 ~
	BGM : 371 ~
	Common bell : 3801 ~
	Loud bell : 3901 ~
	MODEM : 3999
STNG DIAL NUMBER :	500 ~ 5xx
TRKG DIAL NUMBER :	9, 800 ~ 8xx
FEAT DIAL NUMBER :	

ABAND	64
ABS	None
ACCT	47
ALMCLR	57
AUTH	*
BARGE	None
BILL	None (Hotel/Model related)
BLOCK	None
BOSS	None
CAMP	45
CANMG	42
CBK	44
CHIN	None (Hotel/Motel related)
CHOUT	None (Hotel/Motel related)
CONF	46
CONP	None (Networking related)
CR	None
CREDIT	None (Hotel/Motel related)
DICT	None
DIR	None
DIRPK	65
DISALM	58
DLOCK	13

DND	40
NDO	None
FAUTO	14
FLASH	49
FWD	60
GRPK	66
HDSET	None
HLDPK	12
HOLD	11
HOTEL	None (Hotel/Motel related)
IG	53
LCR	#
LISTN	None
LNR	19
MMPA	56
MMPG	54
MSG	43
MYGRPK	28
NEW	None
OHVA	None
OPER	0
PAGE	55
PAGPK	10
PARK	NONE
PMSG	48
PTHR	None (Networking related)
RB	None (Hotel/Motel related)
REJECT	None
RSV	None (Hotel/Motel related)
RTO	None
SELFID	None
SETMG	41
SLOCAT	None (Hotel/Motel related)
SLTMMC	15
SNR	17
SPEED	16
SRELOC	None
UA	67
VDIAL	681
VMADM	None

VMAME	None
VMMEMO	None
VMMSG	None
VMSCMT	None
VMSMSG	None
VMSOUT	None
VMSREC	None
VMSVAC	None
VREC	682
WAKEUP	18 (Hotel/Motel related)
WCOS	59

S0 STN DIAL NO:	8701~87xx
DECT STN DIAL NO:	8801~89xx
NTWK LCR DIAL NO:	None
VIRT EXT DIAL NO:	3501~35xx

MMC:725   SMDR OPTIONS

DESCRIPTION

Allows the system administrator to select the information printed on the SMDR report. The following options may be selected to print on SMDR:

00.	**PAGE HEADER**	This option determines whether a page header will print at the top of each page. This would normally be turned off if SMDR is being sent to a Call Accounting machine.
01.	**LINE PER PAGE**	This option selects the length of each page to determine when to print the SMDR header. The number of lines may be in the range 01–99.
02.	**INCOMING CALL**	This option determines whether incoming calls will print on SMDR..
03.	**OUTGOING CALL**	This option determines whether outgoing calls will print on SMDR..
04.	**AUTHORIZE CODE**	This option determines whether authorization codes will print on SMDR.
05.	**SMDR START TIME**	This option determines whether valid calls will include the minimum call time in total call duration.
06.	**IN/OUT GROUP**	This option allows a message, IN GROUP or OUT GROUP, to be printed in the digits dialed column each time a station enters or leaves a group.
07.	**DND CALL**	This option allows a message, IN DND or OUT DND, to be printed in the digits dialed column each time a station enters or leaves DND.
08.	**WAKE-UP CALL**	This option determines whether stations receiving an alarm reminder call will print on SMDR.
09.	**DIRECTORY NAME**	This option allows the system administrator to enter a 16 character name which will appear on the SMDR header.
10.	**CALLER ID DATA**	This option can be selected to print Caller ID data received from the Central Office on incoming calls. This option requires the use of a 132 column (wide carriage) printer or an 80 column printer set for condensed print.
11.	**ABANDON CALL**	If this option is set to YES, unanswered calls for which CID information was received will print on SMDR.
13.	**NO. OF DIAL MASK**	If this option is set to a numeric value, the selected last digits of the number dialed field will be masked as asterisks (*) on the SMDR print out. Maximum masking digits is 18.
15.	**INCOMING ANSWER**	If this option is set to YES, the duration of calls ringing before answered will print on SMDR. 16. INTERCOM CALL This option determines whether intercom calls will print on SMDR.
16.	**INTERCOM CALL**	This option determines whether intercom calls will print on SMDR.
17.	**KEY MMC IN/OUT**	If set to YES then the SMDR record will show programming being opened and closed. (iDCS 500-L system only)

The DIRECTORY NAME that appears on the SMDR header is programmed as follows:
Names are written using the keypad. Each press of a key selects a character. Pressing the next key moves the cursor to the next position. For example, if the directory name is SAM SMITH, press the number 7 four times to get the letter S. Now press the number 2 once to get the letter A. Continue selecting characters from the table below to complete your message. Pressing A key changes the letter from upper case to lower case.

NOTE When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION

DISPLAY

1. Press TRSF 725
   Display shows

```
PAGE HEADER
PRINT: YES
```

2. Dial the option number (e.g. 01)
   OR
   Use the UP and DOWN keys to scroll through the options and
   press the RIGHT soft key to select an option

```
LINE PER PAGE
60 LINE / PAGE
```

3a Enter the number of lines per page in the range 01-99 (e.g., 50)
   OR

   Use the UP and DOWN keys to change the number of lines
   and press the RIGHT soft key to save
   the data and return to step 2

```
LINE PER PAGE
50 LINE / PAGE
```
OR
```
LINE PER PAGE
50 LINE / PAGE
```
THEN
```
LINE PER PAGE
50 LINE / PAGE
```

3b. If option 00 is selected at step 2
    Use the UP and DOWN keys to change YES or
    NO and press RIGHT soft key to save data and return to step
    2.

```
PAGE HEADER
PRINT:YES
```

16. press TRSF to exit
    OR
    Press SPK to exit and advance to next MMC

DEFAULT DATA:

PAGE HEADER:	YES	
LINE PER PAGE:	66	
INCOMING CALL:	YES	
OUTGOING CALL:	YES	
AUTHORIZE CODE:	YES	
SMDR START TIME:	YES	
IN/OUT GROUP:	YES	
DND CALL:	YES	
WAKE-UP CALL:	YES	
DIRECTORY NAME:	None	
CALLER ID DATA:	YES	
ABANDON CALL:	YES	
NO.DIAL MASK:	00	
INCOMING ANSWER:	YES	
INTERCOM CALL:	YES	
KEY MMC IN/OUT:	NO (iDCS 500-L system only)	

RELATED ITEMS: MMC 300 CUSTOMER ON/OFF PER STATION

MMC:726   VM/AA OPTIONS

DESCRIPTION

This MMC is used to define all in band DTMF codes sent to voice mail ports. These in band codes can be 0-9, A, B or C, and performed two functions.

1. CALL AND TYPE INFORMATION

This is a DTMF signaling string sent to a voice mail port when the voice mail port answers a call. This DTMF information tells the voice mail port what type of call it is receiving and where the call is coming from. e.g. call has forwarded from extension 225

2. CALL PROGRESS TONES

These are sent to the voice mail system to provide information about the progress of the call. e.g. ringback, busy or disconnect.
Most Voice Mail systems can utilize DTMF in band signaling for more efficient call processing. This MMC has many parameters that can be programmed according to the type of automated attendant and/or voice mail system connected.

CALL and TYPE INFORMATION

The format of the DTMF data sent to a VM/AA port is as follows:

[CALL TYPE] + [DN1] + [SEPARATOR] + [DN2]

an example of this would be

[FORWARD ALL] from [225] on trunk [703]

Each field can be programmed individually as follows:

EXTENSION FOR DN1: If set to yes, when the voice mail auto attendant system answers a call the iDCS 500 will send data in the DN1 field indicating that a station is ringing the VMAA port.

If set to no, when the voice mail auto attendant system answers a call the iDCS 500 will not send station data in the DN1 field.

TRUNK FOR DN1: If set to yes, when the voice mail auto attendant system answers a call the iDCS 500 will send data in the DN1 field indicating that a trunk is ringing the VMAA port.

If set to no, when the voice mail auto attendant system answers a call the iDCS 500 will not send trunk data in the DN1 field.

EXTENSION FOR DN2: If set to yes, when the voice mail auto attendant system answers a call the iDCS 500 will send data in the DN2 field indicating the originating station of the call ringing the VMAA port.

If set to no, when the voice mail auto attendant system answers a call the iDCS 500 will not send station data in the DN2 field.

TRUNK FOR DN2: If set to yes, when the voice mail auto attendant system answers a call the system will send data in the DN2 field indicating the originating trunk of the call ringing the VMAA port. If set to no, when the voice mail auto attendant system answers a call the system will not send trunk data in the DN2 field.

SEPARATOR: When both DN1 and DN2 are used, a digit defined here is sent between DN1 and DN2 so the VMAA system can determine where DN 1 stops and where DN 2 starts. The separator can be DTMF 0 through 9, *, #, A, B or C

DISCONNECT: This is the call progress digit sent to the VMAA port in place of a disconnect open. The digit defined here is sent three times.

CALLER ID NUMBER: If set to yes, when the voice mail auto attendant system answers a call the system will send Caller ID data as DTMF tones to the VMAA port.

CALL TYPE ID: This is the DTMF digit that is sent first in the in band digit string and can identify any of the following call types:

0.	**DIRECT CALL**	A call originating directly from another station in the system.0.DIRECT CALL A call originating directly from another station in the system.
1.	**ALL FWD CALL**	This indicates that a call was forwarded to the VM/AA port from a station with CALL FORWARD ALL set.
2.	**BSY FWD CALL**	This indicates that a call was forwarded to the VM/AA port from a station with CALL FORWARD BUSY set.
3.	**NOA FWD CALL**	This indicates that a call was forwarded to the VM/AA port from a station with CALL FORWARD NO ANSWER set.
4.	**RECALL**	A call is recalling the VM/AA port after being transferred and not answered.
5.	**DIR TRK CALL**	A C.O. call has gone directly to VM/AA (e.g., trunk 717 DIL to VM/AA).
6.	**OVERFLOW**	A call has OVERFLOWED to the VM/AA port from a station group.
7.	**DID CALL**	A DID call has called the VM/AA port.
8.	**MESSAGE CALL**	A message button or message reply feature code has been used to call the VM/AA port.

PROGRESS TONES

These are the DTMF codes that is sent to the VMAA port in place of regular progress tones. For example, when a VMAA port goes off hook to originate or transfer a call, instead of hearing normal dial tone, it will hear DTMF " BA ". Progress tones can greatly increase the efficiency of a VMAA system because it is easier and quicker to detect DTMF than a busy, ringback or DND tone. Progress tones can identify any of the following.

TONES	VALUE
0. DIAL TONE	BA
1. BUSY TONE	4
2. RINGBAK TONE	5
3. DND NO MORE	6
4. HDSET ANSWER	3
5. SPKER ANSWER	2

GENERAL RULES

1. 201 is talking to a trunk and presses TRANSFER plus the station number, but the station is forwarded to VM/AA and VM/AA answers. When this happens, if 201 presses TRANSFER again to return to the trunk, the VM/AA port is not on hold. It is disconnected.

2. A VM/AA port leaves a message indication for a station. When the station returns the message, any available port in the VM/AA group should ring, not only the one that left the message.

3. A VM/AA port leaves a message for a station. When the station returns the message, the MESSAGE LED is not automatically turned off. If a VM/AA system turns on the MESSAGE LED, the VM/AA system must turn it off.

4. If DTMF call progress tones are not enabled, the system sends regular call progress tones.

5. When a VM/AA port calls a station that is in the AUTO ANSWER or VOICE ANNOUNCE mode, the keyset will be forced to ring.

6. All calls to a VM/AA port or group ring with C.O. line ringing cadence, not intercom ring cadence.

EXAMPLES OF VM/AA OPERATION (IN BAND DTMF DIGIT STRING)

In the following example, all call and type data is turned on unless otherwise stated. X is the separator digit, all-default values are used in these examples and [ ] is not used.

DIL 701 calls a VM/AA port or group:
[*]+[701]+[ ]+[ ]

In the above example, if C.O. information is not used:
[ ]+[ ]+[ ]+[ ](Nothing is used)

DIL 701 calls a call-forwarded station (205):
[#]+[205]+[X]+[701]

In the above example, if forward information is not used:
[ ]+[205] +[X]+[701]

In the above example, if forward information is not used:
[ ]+[205] +[X]+[701]

DIL 701 calls group 501 that overflows to VM/AA:
[#]+[501]+[x]+[701]

In the above example, if overflow information is turned off:
[ ]+[ ]+[ ]+[ ] (Nothing is sent)

A DID call rings the VM/AA directly:
[B]+[9999]+[   ]+[   ]
9999 are the DID digits from C.O.

In the above example, if did information is turned off:
[   ]+[9999]+[   ]+[   ]

A station transfers (blind or screened) a call (C.O., DID or intercom) to VM/AA group or port. When the transferring station hangs up (blind transfer):
[   ]+[   ]+[   ]+[   ] (Nothing is sent)

A station (202) transfers a C.O. call (702) to a station (225) that is Call Forward All to a VM/AA group or port. When the transferring station hangs up (blind transfer) and the VM/AA group or port answers:
[#]+[225]+[x]+[702]

A station (202) transfers a C.O. call (702) to a group (501) that overflows to a VM/AA group or port:
[#]+[501]+[X]+[702]

In the above example, if overflow information is turned off:
[   ]+[   ]+[   ]+[   ] (Nothing is sent)

A station (205) calls a VM/AA port or group :
[*]+[205]+[   ]+[   ]

In the above example, if direct information is turned off:
[   ]+[   ]+[   ]+[   ] (Nothing is sent

A station (205) calls using MESSAGE key:
[*]+[205]+[   ]+[   ]

In the above example, if message information is turned off:
[   ]+[   ]+[   ]+[   ] (Nothing is sent)

A call (702) recalls back from station 225 to the VM/AA group:
[#]+[225]+[x]+[702]
In the above example, if recall and DN2/CO information are turned off:
[   ]+[   ]+[   ]+[   ] (Nothing is sent)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used in some fields where a value is entered or deleted.
A	Used to input alpha character "A"
B	Used to insert alpha character "B"
C	Used to insert alpha character "C"

ACTION   ## *DISPLAY*

1. Press TRSF 726
    Display shows

    | EXT FOR DN1 |
    | YES |

2. Enter the OPTION number from the
    above list (e.g., 3)
              OR
    Press UP or DOWN key to make selection
    Press LEFT soft key to move cursor

    | TRK FOR DN2 |
    | NO |

3a. Enter 1 for YES or 0 for NO
              OR
    Press UP or DOWN key for selection
    Press RIGHT soft key to return to step 2

    | TRK FOR DN2 |
    | YES |

3b. If option 4 is selected at step 2.(A valid entry consists of digits
    0–9 or alpha characters A–C)

    | SEPERATOR |
    | NO |

3c. If option 5 is selected at step 2.(A valid entry consists of digits
    0–9 or alpha characters A–C)

    | DISCONECT SIGNAL |
    | C |

3d. If option 6 is selected at step 2. (A valid entry consists of digits
    0–9 or alpha characters A–C)
    See above list under the CALL TYPE ID options list

    | CALL TYPE ID |
    | DIRECT CALL : NO |

3e. If option 7 is selected at step 2.(A valid entry consists of digits
    0–9 or alpha characters A–C)
    See above list under the PROGRESS TONE ID

    | PROGRESS TONE ID |
    | DIAL TONE   :B |

4. After all desired options have been selected, press TRSF to exit
              OR
    Press SPK to exit and advance to next MMC

DEFAULT DATA: EXT FOR DN1 = NO

TRK FOR DN1 = NO

EXT FOR DN2 = NO

TRK FOR DN2 = NO

SEPARATOR = NO

DISCONNECT SIGNAL = C

CALL TYPE ID

    DIRECT CALL = *

    ALL FWD CALL = #

    BSY FWD CALL = #

    NOA FWD CALL = #

    RECALL = #

    DIR TRK CALL = *

    OVERFLOW = #

    DID CALL = B

    MESSAGE CALL = *

PROGRESS TONE ID

    DIAL TONE = BA

    BUSY TONE = 4

    RINGBAK TONE = 5

    DND NO MORE = 6

    HDSET ANSWER = 3

    SPKER ANSWER = 2

CALLER ID NUMBER = NO

RELATED ITEMS: MMC 207 ASSIGN VM/AA PORT

MMC:727 SYSTEM VERSION DISPLAY

DESCRIPTION

This MMC is only used for system version display. This is a READ ONLY MMC..

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC

ACTION

DISPLAY

1. PROGRAM KEYS
   Press TRSF 805
   Display shows

```
MCP VERSION
2001.12.01.V1.00
```

2. Press UP or DOWN key to select other card versions
   DLI CARD
   Cabinet and Slot shown
   TEPRI CARD E1 MODE
   Cabinet and Slot shown

```
C1-S2:8 DLI
NO VERSION DATA
```

   TEPRI CARD PRI MODE
   Cabinet and Slot shown

```
C1-S1:TEPRI/E1
2001.08.14 V1.02
```

   AUTO ATTENDANT CARD
   Cabinet and Slot shown

```
C2-S1:TEPRI/EP
2001.08.14.V1.02
```

   LAN BOARD

```
C1-S8:AA
 2000.09.19.V1.00
```

```
LAN VERSION
2001.10.18.V1.04
```

3. Press SPK to save and advance to next MMC
           OR
   Press TRSF to save and exit programming

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:728   CLIP TRANSLATION TABLE

DESCRIPTION

Allows the system administrator or technician to associate a CLIP number received from the central office with a name programmed in this translation table. If there is no match between a received number and a name in this table, "no CLIP name" will be displayed.

The translation table consists of 400 entries for a iDCS 500-M system and 1500 for a iDCS 500-L system. Each entry is comprised of a ten-digit (14 digits allowed) telephone number and a 16-digit name.

Names are written using the keypad. Each press of a key will select a character. Pressing the next key will move the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset, acts as toggle between upper case and lower case

ACTION

1. Press TRSF 728
   Display shows first entry

2. Dial entry number (e.g. 005)
                OR
   Use UP and DOWN to scroll through entries
   Press RIGHT soft key to select entry

3. Enter telephone number and press RIGHT soft key to advance to
   name entry
                OR
   Enter telephone number and press
   LEFT soft key to return to step 2

4. Enter associated name as described
   above and press RIGHT or LEFT soft key
   to return to step 2
                OR
   Press SPK to save and advance to next MMC
                OR
   Press TRSF to save and exit programming

DISPLAY

```
TRANSLATION(001)
DIGIT:
```

```
TRANSLATION(005)
DIGIT:_
```

```
TRANSLATION(005)
DIGIT:3054264100
```

```
TRANSLATION(005)
SAMSUNG TELECOM
```

DEFAULT DATA: NONE

RELATED ITEMS: MMC 312 ALLOW CLIP
                   MMC 608 ASSIGN REVIEW BLOCKS

MMC:730   AA RECORD GAIN

DESCRIPTION

Used to control AA record gain.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC
HOLD   Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 730
    Display shows

    ```
    [3951]AA GAIN
    REC:+0.0 PL:+0.0
    ```

2. Dial AA number (e.g. 3959)
            OR
    Press UP or DOWN to make selection and press RIGHT soft key

    ```
    [3959]AA GAIN
    REC:+0.0 PL:+0.0
    ```

3. Press UP or DOWN to select record gain and press RIGHT soft key

    ```
    [3959]AA GAIN
    REC:+1.9 PL:+0.0
    ```

4. Press UP or DOWN to select play gain and press RIGHT soft key

    ```
    [3959]AA GAIN
    REC:+1.9 PL:+0.0
    ```

5. Press TRSF to store and exit
            OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: 0 dB

RELATED ITEMS: NONE

MMC:731   AA RAM CLEAR

DESCRIPTION

Used for making clear AA RAM on a per-AA card basis. Through this MMC, the system only accepts the first port as a port field and LCD shows its selection. This will erase the whole message that has been programmed previously on the selected card.

ACTION   DISPLAY

1. Press TRSF 731
   Display shows

   ```
   [3951]RAM CLEAR
   CLR RECORDED?NO
   ```

2. Dial AA number (e.g. 3951)
           OR
   Press UP or DOWN to make selection and press
   RIGHT soft key

   ```
   [3951]RAM CLEAR
   CLR RECORDED?NO
   ```

3. Dial 0 (No) or 1 (Yes)
           OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   [3951]RAM CLEAR
   CLR RECORDED?YES
   ```

4. Dial 0 (No) or 1 (Yes) to confirm selection
           OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   [3951]RAM CLEAR
   ARE YOU SURE?NO
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:732   AA TRANSLATION TABLE

DESCRIPTION

AA translation tables are responsible for routing calls based on digits dialed. There are 12 translation tables available. Each table can be assigned to one or more plans in MMC 733 Auto Attendant Plan Programming. A translation table consists of a number of entries. Each entry number has two fields to program: the first field is for the digits received by the caller and the second field is for the destination or action.

Translation tables 1-12 have 100 entries each. The destination field can be a station number, station group or another plan. Plans are entered by pressing special key A plus two digits 01– 12. If a voice mail group is entered, the call will be transferred to the voice mail system with the appropriate in band digit packet to indicate a Forward All call from the station number dialed by the caller.

The digits defined in the first field of this MMC [dialed digits] must be a valid station number.

If the digits programmed as a destination are a voice mail port the voice mail port will receive an in band packet of DTMF equal to [FWD from EXTENSION NUMBER DIALED].

There are a number of special characters that are used in translation tables. They are as follows:

* =   Used to represent any digit.
P =   (Special Key A) Plan. Used to assign a plan as a destination (P01–P12).
B =   (Special Key B) Buffer. When used in the destination field, transfers the call to the same extension as the digits dialed by the caller.
C =   (Special Key C) Change greeting or Ring Plan.

DESTINATION :

Consider the following entry examples.

DIGITS	DEST	COMMENTS
0	0	Caller will be transferred to 0.
2**	B	If a caller dials any three digit extension number beginning with 2, the call will be transferred to the extension number dialed.
48#2	C	If a caller dials 48#2, the current plan's greeting may be changed. 48#2 is essentially a special passcode for changing the current greeting or ring plan.
1	526	If a caller dials 1, the call will be transferred to group 526.
5	P08	If a caller dials 5, the call will be transferred to plan 08.

> **NOTE** Number conflicts like 2 and 23 or 56 and 567 are allowed in translation table programming. In these cases, the system will compare received digits from AA card after AA TRANS time and transfer to the proper destination.

The following applies to the iDCS 500:

Entries in the translation table will also provide the following features which are useful if a mailbox owner does not have a telephone on the system, but does have a CADENCE voice mailbox.

If a caller dials # + nnn he will leave a message directly in the mailbox specified in the destination.

If a caller dials * + nnn he will log into the mailbox specified in the destination.

If the translation table contains an entry like nnn = D (D is selected using the fourth soft key) callers dialing nnn will leave a message directly in the mailbox specified in the destination.

NOTES ABOUT CHANGING RING PLANS AND ALTERNATE GREETING

MANUAL SERVICE

1. When the phone system changes ring plans, the AA greetings will also change as programmed in MMC 733.

2. When the AA alternate greeting passcode is entered the caller may input a digit to change the ring plan. This means that a customer who wants to put the system in a different ring plan can call in remotely and do it.

3. When the alternate greeting passcode is entered, the system will allow to select a ring plan. If a RP (ring plan) key is programmed on the system it will FLASH. The normal status of this light in a ring plan is on steady. A flashing RP key corresponding to the ring plan indicates the remote ring plan has been set. If a RTO key is available it will also flash.

4. If the alternate greeting is not activated but the ring plan is changed the system will remain in the selected ring plan until the next scheduled ring plan change. If the alternate greeting is activated the system will remain in the existing ring plan or the selected ring plan until the alternate greeting is manually deactivated.

5. To implement ring plan changes and / or the alternate greeting the caller must enter the number or "passcode" that implements the special key program. After the passcode is entered the caller must enter 2 digits. The first digit selects the desired ring plan to change to (1-6) or 0 for no change. The second digit activates the alternate message. 0 for no alternate message or 1 for alternate message.

Example: Caller dials into the system and is answered by the AA card. The caller then input the special code or "password" 48#2. The caller then dials 3 to select ring plan 3 and then dials 1 to turn on the alternate greeting. The system now ring according to ring plan 3. Ring plan 3 is directed to the AA card and the caller is now answered by the alternate greeting.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

1. Press TRSF 732
   Display shows

2. Dial TABLE number (01 - 12, e.g. 02)
   OR
   Press UP or DOWN key to select and press RIGHT soft key

3. Dial ENTRY number (001 - 100, e.g. 002)
   OR
   Press UP or DOWN key to select and press RIGHT soft key

4. Enter Dial DIGIT and press RIGHT soft key

5. Enter Destination
   OR
   Press UP or DOWN key to select and press RIGHT soft key

6. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DISPLAY

```
AA TRANS TB (01)
001:0    →500
```

```
AA TRANS TB (02)
001:     →NONE
```

```
AA TRANS TB (02)
001:     →NONE
```

```
AA TRANS TB(02)
002:2    →NONE
```

```
AA TRANS TB(02)
002:2    →201
```

DEFAULT DATA: PLAN 01 ALLOWS TRANSFER TO STN AND GROUP NUMBERS
                 ALL OTHER PLANS ARE EMPTY

RELATED ITEMS: MMC 733 AUTO ATTENDANT PLAN PROGRAMMING
                  MMC 406 TRUNK RING
                  MMC 507 RING PLAN TIME

MMC:733   AA PLAN TABLE

DESCRIPTION

Used to program each AA plan. A plan is a module that processes a call. There are twelve plans available in each AA card. Each plan can route a caller to any group, extension or another plan. Each port can answer calls with a different plan as defined in MMC 735.

This MMC includes options to select messages to play to a caller. These messages can be as follows:

MESSAGES 01–48

These can be created using the AAREC soft key (programmed on keysets by using MMC 722 or 723). A total of two minutes of message time is available.

MESSAGES 49–64

(The announcement may be different according to the AA MSG ROM)
These are pre-programmed as follows:

49	"Thank you for calling, please dial your party's extension number."
50	"Invalid number, please try again."
51	"I'm sorry, there is no answer."
52	"I'm sorry, that station is busy."
53	"One moment please."
54	"Transferring."
55	"I'll transfer you."
56	"Good-bye."
57	"Thank you."
58	"Please hold for the operator."
59	"Please hold for assistance."
60	"Thank you, good-bye."
61	"I'm sorry, all stations are presently busy."
62	"I'm sorry, all stations are still busy."
63	"Please call back later."
64	"I'm sorry, not a valid selection."

PLAN MESSAGE (RING PLANS 01-06)

This is the message that will be heard by the caller when the AA port answers a call if the telephone system is in a particular ring mode or if another message has been selected by the AA administrator. This message has a default selection of AA ROM message number 49 but it can be replaced with a customized message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

ALTERNATE MESSAGE

This is the message that will be heard by the caller when the AA port answers a call if this message has been selected by the AA administrator. This message has a default selection of 49 but it can be replaced with a customized message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

INVALID MESSAGE

Determines what message will play if the caller dials invalid digits repeatedly until the retry counter expires. Invalid digits are digits not contained in the translation table for this plan. The invalid message will repeat for the value contained in the retry counter. This message has a default selection of ROM message 64 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

NO ANSWER MESSAGE

Determines what message will play if the caller is recalled to the AA port because of a no answer. This message has a default selection of ROM message number 51 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

TRANSFER MESSAGE

Determines what message will play if the caller is transferred. This message has a default selection of ROM message number 53 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

BUSY MESSAGE

Determines what message will play if the caller selects a busy station. This message has a default selection of ROM message number 52 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64). For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

NO STATION MESSAGE

Determines what message will play if the caller dials an invalid extension (not installed). This message has a default selection of ROM message number 50 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64). This retry message will repeat for the value contained in the retry counter. See Retry Count. For instructions on how to create these recordings see Special Applications, Auto Attendant/Uniform Call Distribution.

NO ACTION MESSAGE

Determines what message will play if the caller does not act. This message has a default selection of ROM message number 59 but it can be replaced with a customised message (01–48) or with any other ROM message (49–64).

CAMP-ON

Determines if calls will be transferred to busy stations. Calls transferred to busy stations will be camped-on. The default value is OFF.

ANSWER DELAY

Sets how many rings will occur before this plan answers a call. The default value is 01 second.

RETRY COUNT

Determines how many selection errors a caller may make before being transferred to the invalid digits destination. The default value is 3.

TRANSLATION TABLE

Determines what translation table this plan will use. (see MMC 732 Auto Attendant Trans Table).
It is also common for analogue circuits to be Multiplexed on a carrier like a SLC 96 (Subscriber Loop Carrier, 96 channels - Pronounced SLICK 96) These may also lack a positive disconnect. Note that it may not be immediately apparent if an analogue line is delivered over a SLC, as they will look like regular copper tip and rings at the demark. When in doubt verify the disconnect with a meter.

BUSY DESTINATION

Determines the destination for the call if the selected destination is busy. This can be another station, station group or plan. Plans are entered by pressing A key plus two digits 01–12. The default value is 500.

NO ANSWER DESTINATION

Determines the destination for the call if the selected destination does not answer. This can be another station, station group or plan. Plans are entered by pressing A key plus two digits 01–12. The default value is 500.

NO ACTION DESTINATION

Determines the destination for the call if the caller makes no response (this is also the destination for rotary dial callers). This can be another station, station group or plan. Plans are entered by pressing A key plus two digits 01–12. The default value is 500.

INVALID DESTINATION

Determines the destination for the call if the caller dials invalid digits after the retry counter has expired. This destination can be another station, station group or plan. Plans are entered by pressing A key plus two digits 01–12. The default value is 500.

NOTE ABOUT TRUNK SIGNALLING

UCD is designed to hold a call until an agent is available. It is therefore essential that a customer gets a disconnect from the C.O. when a caller hangs up. If not the call may be held in the UCD loop until answered. This could be a long time, and when an agent finally does answer there would be no one there.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
A	Key 19 on DCS keyset and Key 21 on iDCS keyset

ACTION

DISPLAY

1. Press TRSF 733
   Display shows

```
AA PLAN PROG(01)
PLAN MSG1 :49
```

2. Press UP to select plan or use dial pad to select an AA plan
   OR
   Press the RIGHT soft key to move cursor.

```
AA PLAN PROG(05)
PLAN MSG1 :49
```

3. Press UP to select a ring plan or other option. use dial pad to select an ring plan.
   (e.g. 02) Press RIGHT soft key to move cursor.

```
AA PLAN PROG(05)
PLAN MSG3 :49
```

4. Press UP key or use the dial pad to select a message (e.g. 02) and return to Step 2.

   OR

```
AA PLAN PROG(05)
PLAN MSG3 :02
```

5. Press TRSF to store and exit
   OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: AS ABOVE

RELATED ITEMS: MMC 406 TRUNK RING
                   MMC 507 RING PLAN TIME
                   MMC 732 AUTO ATTENDANT TRANS TABLE

MMC:734   AUTO ATTENDANT MESSAGE MATCH

DESCRIPTION

It is possible to make 48 customized recordings on the AA ports of the AA card. For instructions on how to create these recordings, see User Instructions, Auto Attendant and Uniform Call Distribution System Administration.

It is important to understand the difference between recordings and messages. For example, you have customized recording 01 as "Thank you for calling" and you have customized recording #02 as "One moment please." By default, message 01 is recording 01. When message 01 is selected as part of AA or UCD programming, the caller hears "thank you for calling" (recording 01). When message 02 is selected, the caller hears "one moment please" (recording 02). If you need a new message that says "thank you for calling, one moment please," you can record this as recording 03 and play it as message 03 but this uses some of the RAM storage on the AA card. An easier way is to link recordings 01 and 02 to produce message 03.

This is the purpose of this MMC. We simply tell the system that message 03 equals recording 01 plus recording 02. In this MMC, the top line of the keyset display indicates a message number and the bottom line indicates the recording numbers.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 734
   Display shows

   ```
   AA MSG MATCH(01)
   01
   ```

2. Press UP or DOWN to select MSG to program

   ```
   AA MSG MATCH(05)
   05
   ```

3. Press RIGHT soft key and enter one or more recording numbers

   ```
   AA MSG MATCH(05)
   26+14+45+12+02
   ```

4. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: EACH MESSAGE IS EQUAL TO THE CORRESPONDING RECORDING

RELATED ITEMS: MMC 607 UCD OPTIONS

MMC 733 AUTO ATTENDANT PLAN PROGRAMMING

MMC 736 SET AUTO ATTENDANT MUSIC ON HOLD

MMC:735   AA USE TABLE

DESCRIPTION

Determines what plan will answer each call. Each AA is assigned a specific plan and each AA group assigned in MMC 601 is assigned a specific plan. When a call is received by an AA port, the appropriate plan will answer the call depending on the port or group that was called.

> **NOTE** You are not programming what port answers, but what port is called

The following example shows how flexible this system is:

AA PORT OR GROUP	AA PLAN TO ANSWER
3951	PLAN 01
3952	PLAN 02
3953	PLAN 03
AA GROUP 510 (3951, 3952, 3953)	PLAN 04
AA GROUP 511 (3951, 3952)	PLAN 05
AA GROUP 512 (3953, 3954)	PLAN 06

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 735
   Display shows first AA group eg. 510

```
[518] AA PLAN
PLAN NO:01
```

2. Press UP to select AA group or AA ports
                OR
   Dial the group or port using the dial pad.

```
[510] AA PLAN
PLAN NO:01
```

3. Press RIGHT soft key and
   enter plan number to answer with

```
[510]AA PLAN
PLAN NO:04
```

4. Press TRSF to store and exit
                OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL PORTS AND AA GROUPS: PLAN 01

RELATED ITEMS: MMC 601 ASSIGN STATION GROUP
                   MMC 733 AUTO ATTENDANT PLAN PROGRAMMING

MMC:736　　　　　　　　　ASSIGN AA MOH

DESCRIPTION

Used to define what message 01-48 plays as a Music on Hold (MOH) source if selected in MMC 309 or 408. This message will repeat continuously. Only the last AA port on an AA card can be used as a MOH source. This MMC assigns a message number to the last port of each card. This MMC must be programmed before AA/MOH data can be assigned in MMCs 309, 408 and 607.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION　　　　　　　　　　　　　　　DISPLAY

1. Press TRSF 736
   Display shows

   ```
   [3958]SET AAMOH
   MOH MSG :NOT USE
   ```

2. Press UP to select AA port

   ```
   [3958]SET AAMOH
   MOH MSG :NOT USE
   ```

3. Press RIGHT soft key and enter MSG number

   ```
   [3958]SET AAMOH
   MOH MSG :33
   ```

4. Press TRSF to store and exit
   　　　　OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:　　NONE

RELATED ITEMS:　　MMC 309 ASSIGN STATION MUSIC ON HOLD
　　　　　　　　　MMC 408 ASSIGN TRUNK MOH SOURCE
　　　　　　　　　MMC 607 UCD OPTIONS

MMC:737   DECT SYSTEM CODE

DESCRIPTION

Used to identify your DECT system and the handsets your register with your system.

The DECT system Code for your system is actually made up of two fields: the System ID which is three hexadecimal digits in the range 000 to 999; and the Auth Code (short for Authentication Code) which is four hexadecimal digits in the range 0000 to 9999. The default values are 000 and FFFF respectively.

> **WARNING** You must use this MMC to change the default values for the values you have been provided with by your supplier. If you do not change the defaults you will not be able to register handsets.

Once you have entered your new System ID and Auth Code using this MMC you can then begin registering your handsets with the Auth Code. The system checks the Auth Code entered for each handset against the DECT Auth Code. If it is the same, the registration procedure continues; otherwise, the system rejects the registration procedure.

> **WARNING** Only the system administrator and/or installer should be allowed access to change the DECT System Code and register handsets.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 737
   Display shows

   ```
   DECT SYSTEM CODE
   AUTH CODE:FFFF
   ```

2. Press RIGHT soft key to move cursor and enter AUTH CODE via dial keypad (e.g. 1234)

   ```
   DECT SYSTEM CODE
   AUTH CODE:1234
   ```

3. Press RIGHT soft key and press UP or DOWN to change System ID.

   ```
   DECT SYSTEM COD
   SYSTEM ID:000
   ```

4. Press RIGHT soft key to move cursor and enter SYSTEm ID via dial keypad (e.g.567).

   ```
   DECT SYSTEM COD
   SYSTEM ID:567
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: AUTH CODE: FFFF

SYSTEM ID: 000

(These values must be changed by the installer)

RELATED ITEMS: MMC 738 DECT CLEAR REGISTRATION

MMC 741 DBS RESTART

MMC 742 BSI STATUS

MMC 743 DBS STATUS

MMC 744 DECT REGISTRATION ON/OFF

MMC 745 BSI RF CARRIER

MMC:738   DECT CLEAR REGISTRATION

DESCRIPTION

Used for deleting previously registered information of DECT handsets. This MMC has two modes:

FORCED mode: When this mode is programmed, the system clears the registered information by force.

NORMAL mode: Whenever the system wants to clear the registration of a DECT handset, the deletion must be confirmed from the handset. If the confirmation is successful, the system clears the registered information. (If the confirmation fails, the system cannot clear the information)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 738
   Display shows

   ```
   [8801]DECT CLEAR
   MODE:FORCED
   ```

2. Enter the number of DECT handset to clear via dial key pad and press RIGHT soft key to move the Cursor

   ```
   [8801]DECT CLEAR
   MODE:FORCED
   ```

3. Select the de-registration (clear) mode via UP or DOWN (e.g. NORMAL) and press RIGHT soft Key to move cursor

   ```
   [8801]DECT CLEAR
   MODE:NORMAL
   ```

4. Enter 1 for YES or 0 for NO
           OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   [8801]DECT CLEAR
   DECT CLEAR  :NO
   ```

5. Enter 1 for YES or 0 for NO
           OR
   Press UP or DOWN to make selection and press RIGHT soft key.

   ```
   [8801]DECT CLEAR
   CLR RECORDED?NO
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: FORCED MODE

RELATED ITEMS: MMC 737 DECT SYSTEM CODE
                  MMC 741 DBS RESTART
                  MMC 742 BSI STATUS
                  MMC 743 DBS STATUS
                  MMC 744 DECT REGISTRATION ON/OFF
                  MMC 745 BSI RF CARRIER

MMC:740   STATION PAIR

DESCRIPTION

Assigns a secondary station to a keyset. This secondary station can be a keyset or single line port. It is recommended that the extension number for the secondary station should be blocked from receiving direct intercom calls in MMC 31x. STN to STN USE to prevent the secondary station being accidentally called. The secondary station assumes the Call Forwarding, COS (Class of Service), LCR COS, and DND attributes of the primary station.

> **NOTE** If the COS is changed for either station in MMC 301 the change affects both stations. Secondary stations when dialed will also ring the primary extension.
> Message from secondary extension will display that (secondary) extension numbers.
> Callback to extension (secondary) as well.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 740
   Display shows

   ```
   [201] PRIMARY
   SECONDARY:NONE
   ```

2. Enter the primary station number via dial keypad (e.g. 201)
        OR
   Press UP or DOWN to select and press RIGHT soft key

   ```
   [201] PRIMARY
   SECONDARY:NONE
   ```

3. Enter the secondary station number via dial keypad (e.g. 205)
        OR
   Press UP or DOWN to select and press RGHT soft key

   ```
   [201] PRIMARY
   SECONDARY:205
   ```

4. Press TRSF button to store and exit
        OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 102 STATION FORWARDING
                  MMC 301 STATION COS
                  MMC 310 LCR CLASS OF SERVICE

MMC:741   DBS RESTART

DESCRIPTION

Provides a method of restarting DBS and BSI card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 741
   Display shows

   ```
   BSI SLOT:1 DBS:1
   RESTART?     NO
   ```

2. Select the BSI slot via dial key pad
           OR
   Press UP or DOWN to select BSI slot and press
   RIGHT soft key.

   ```
   BSI SLOT:1 DBS:1
   RESTART?     NO
   ```

3. Select the DBS number via dial key pad
           OR
   Press UP or DOWN to select DBS number and
   Press RIGHT soft key.
   If you want to restart BSI card, press [ANS/RLS] key and press
   RIGHT soft key.

   ```
   BSI SLOT:1 DBS:3
   RESTART?     NO
   ```

   ```
   BSI SLOT:1 DBS:A
   RESTART?     NO
   ```

4. Enter 1 for YES or 0 for NO
           OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   BSI SLOT:1 DBS:3
   RESTART?     YES
   ```

5. Enter 1 for YES or 0 for NO
           OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   BSI SLOT:1 DBS:3
   ARE YOU SURE?NO
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 737 DECT SYSTEM CODE

                              MMC 738 DECT CLEAR REGISTRATION

                              MMC 742 BSI STATUS

                              MMC 743 DBS STATUS

                              MMC 744 DECT REGISTRATION ON/OFF

                              MMC 745 BSI RF CARRIER

MMC:742   BSI STATUS

DESCRIPTION

This MMC shows the status of the BSI card.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 742
   Display shows
   If status of BSI card is good, the display shows "SUCC"

```
BSI STATUS
M:SUCC-SUCC-SUCC
```

2. Press TRSF to exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 737 DECT SYSTEM CODE

                        MMC 738 DECT CLEAR REGISTRATION

                        MMC 741 DBS RESTART

                        MMC 743 DBS STATUS

                        MMC 744 DECT REGISTRATION ON/OFF

                        MMC 745 BSI RF CARRIER

MMC:743   DBS STATUS

DESCRIPTION

This MMC shows the status of the DECT base stations (DBS).

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 743
   Display shows

   ```
   DBS 12345678 S:1
   STS:00000000
   ```

2. Select the BSI card via dial key pad
           OR
   Press UP or DOWN to make selection
   The status of each DBS is displayed:
   If the status is good, "1" is displayed.
   If the status is not good, "0" is displayed.

   ```
   DBS 12345678 S:2
   STS:00000000
   ```

3. Press TRSF to exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 737 DECT SYSTEM CODE

MMC 738 DECT CLEAR REGISTRATION

MMC 741 DBS RESTART

MMC 742 BSI STATUS

MMC 744 DECT REGISTRATION ON/OFF

MMC 745 BSI RF CARRIER

MMC:744　　　　DECT REGISTRATION ON/OFF

DESCRIPTION

Allows DECT handset registration to be enabled on a system. If this MMC is not opened and an attempt is made to register a DECT handset, an error message will be displayed. The default passcode can be changed using MMC 202.

PROGRAM KEY

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION　　　　　　　　　　　　　　　　DISPLAY

1. Press TRSF 744
   Display shows

   ```
   ENABLE DECT REG.
   PASSCODE:_
   ```

2. Enter passcode

   ```
   ENABLE DECT REG.
   PASSCODE:****
   ```

   - If the correct code is entered the display shows

   ```
   ENABLE DECT REG.
   DISABLE
   ```

   - If the SYSTEM ID in MMC 737 has not been set, the following message will be displayed

   ```
   ENABLE DECT REG.
   NO REG.SYSTEM ID
   ```

3. Dial 1 for ENABLE or 0 for DISABLE
   　　　OR
   Press UP or DOWN key to select and press RIGHT soft key

   ```
   ENABLE DECT REG.
   ENABLE
   ```

4. Press TRSF to exit
   　　　OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:　　　DISABLE

RELATED ITEMS:　　　MMC 737 DECT SYSTEM CODE
　　　　　　　　　　　MMC 738 DECT CLEAR REGISTRATION
　　　　　　　　　　　MMC 741 DBS RESTART
　　　　　　　　　　　MMC 742 BSI STATUS
　　　　　　　　　　　MMC 743 DBS STATUS
　　　　　　　　　　　MMC 745 BSI RF CARRIER

MMC:745   BSI RF CARRIER

DESCRIPTION

A base station uses one of 10 channels (FDMA technology). This MMC is used to allow or deny the use of each channel (carrier). By default, all carriers can be used by a base station.

Options: 1   Carrier can be used

                 0   Carrier cannot be used

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 745
   The display shows the status of each carrier (0-9):

   If '1' is shown below a carrier then this carrier can be used by the base station

   If '0' is shown below a carrier then this carrier cannot be used by the base station

```
CARS:0123456789
SELS:1111111111
```

2. Dial 1 or 0 for each carrier

3. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: 1111111111

RELATED ITEMS: MMC 737 DECT SYSTEM CODE

                            MMC 738 DECT CLEAR REGISTRATION

                            MMC 741 DBS RESTART

                            MMC 742 BSI STATUS

                            MMC 743 DBS STATUS

                            MMC 744 DECT REGISTRATION ON/OFF

MMC:746   COSTING DIAL PLAN

DESCRIPTION

The COSTING DIAL PLAN is used to analyze the leading dialed digits of a dialed number and determine what DIAL PLAN it is to follow. Data entry for this program is in three fields: ENTRY, DIGITS and COST RATE table reference.

DIGITS

Up to 500 entries may be made. Each entry can be up to ten digits. These are the entries that will be searched to find a match with the digits dialed by the station making the call. This is a leading digits table and the system will look for the exact leading digits in the table that match the number dialed. For example, if a user dials 1305 and the COSTING DIAL PLAN contains 1, 1308 and 1312, the dialed digits will be matched to 1 because 1308 and 1312 do not form a complete match. When this table is created by the technician or when any new entries are added, the system automatically places all entries in numerical order.

Wild cards (*) can be used to represent any digit. The Toll Restriction Wild Character assignment (MMC 704) is common with Call Costing and Toll Restriction. When all entries are used, [LAST ENTRY] is displayed.

DIAL PLAN

This shows in the programming display as DP and represents a pattern (1-7, 8). This pattern is used by MMC 433 TRUNK COST RATE, to determine the correct billing according to MMC 747 RATE CALCULATION TABLE

When the system finds a DIAL PLAN match for the digits dialed, the system checks MMC 747 to see what RATE CALCULATION to use for costing the call.

EXAMPLES

When a station user dials a number, the system will search the COSTING DIAL PLAN to find a match. If 13056 is dialed and this MMC contains entries 1, 13, 1305 and 1401, 1305 is the closest match and this entry will be selected. If 1305 is dialed and this MMC contains entries 1, 13, 13056 and 1401, no action will be taken until the station user dials another digit. If the next digit is 6, the 13056 entry is the closest match and this entry will be selected, but if the next digit is anything other than 6, the 13 entry is the closest match.

Whenever a new entry is added, the system will sort all entries in numerical order because this is the logical order in which the system analyzes digits. Wild cards are checked after exact digits. If 1813 and 18** are entered, the system will check 1813 first. If no match is found, it will check 18**.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select all

ACTION

1. Press TRSF 746
   Display shows

2. Dial CALL COST entry (e.g., 005)
              OR
   Press UP or DOWN to select entry and press
   RIGHT soft key to move cursor

3. Enter digit string via the dial keypad
   And press RIGHT soft key

4. Enter DIAL PLAN (1-8)
   Press LEFT soft key to return to step 3 or
   RIGHT soft key to go to step 2

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DISPLAY

```
COST DP     (001)
DIGIT:
```

```
COST DP     (005)
DIGIT:
```

```
COST DP     (005)
DIGIT:1305
```

```
COST DP     (005)
CALL RATE: NONE
```

DEFAULT DATA: NONE

RELATED ITEMS: MMC 322 CALL COST DISPLAY OPTION
                  MMC 433 COST RATE
                  MMC 747 RATE CALCULATION TABLE

MMC:747   RATE CALCULATION TABLE

DESCRIPTION

The RATE CALCULATION TABLE is used to define the billing charges for each COST RATE. These rate tables correlate with the Trunk Cost Rate and the Costing Dial Plan. There are eight call costing rates. Each rate has the following data fields.

FIRST INTERVAL DURATION: This is the amount of time at the beginning of each call to which a fixed cost is applied. The range is from 0 to 999 seconds, for example, 180 seconds (three minutes).

FIRST INTERVAL COST: This is the dollar cost for the first interval duration. The range is from 0 to 999, for example, 345 ($3.45).

SECOND INTERVAL DURATION: This is the amount of time for the duration of each billing increment after the first interval has expired. The range is from 0 to 999 seconds, for example, 006 seconds (six seconds).

SECOND INTERVAL COST: This is the dollar cost for each billing increment. The range is from 0 to 999, for example 100 ($1.00).

SURCHARGE: This is a one-time charge that is applied to the call over and above the time charges. The range is from 0 to 999, for example 150 ($1.50).

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry
ANS/RLS	Used to select all

ACTION

1. Press TRSF 747
   Display shows COST RATE and FIRST INTERVAL DURATION

2. Dial COST RATE number (1-8, e.g., 3)
            OR
   Press UP or DOWN to select COST RATE
   Press right soft key to move cursor

3. Enter FIRST INTERVAL DURATION in seconds, e.g., 060 (one minute) using the keypad and press UP to advance

4. Enter FIRST INTERVAL COST,
   e.g., 125 ($1.25) using the keypad and press UP to advance

DISPLAY

```
COST RATE (1)
1ST DUR:000
```

```
COST RATE (3)
1ST DUR:000
```

```
COST RATE (3)
1ST DUR :060 SEC
```

```
COST RATE (3)
1ST COST:125
```

5. Enter SECOND INTERVAL DURATION in
    Seconds, e.g., 006 (six seconds) using the
    Keypad and press UP to advance

```
COST RATE (3)
2ND DUR :006 SEC
```

6. Enter SECOND INTERVAL COST,
    e.g., 030 ($0.30) using the keypad and
    press UP to advance

```
COST RATE (3)
2ND COST:030
```

7. Enter SURCHARGE, e.g., 100 ($1.00)

```
COST RATE (3)
SUR CHARGE:100 C
```

8. Press TRSF to store and exit

DEFAULT DATA: ALL COST RATES NO DATA

RELATED ITEMS: MMC 110 STATION ON/OFF OPTION
                  MMC 433 TRUNK COST RATE
                  MMC 746 COSTING DIAL PLAN

MMC:750   VM CARD RESTART

DESCRIPTION

This MMC is only used for the SAMSUNG Plug In Voice Mail Card.

There are two options available in this MMC:

DOWNLOAD
When the VM card starts, part of the power up procedure will download data from the system to determine time, date, what mailboxes to create, and system numbering plan. This must be done at least once, but once done this download feature can be turned OFF to save boot up time.

CARD RESTART
If this option is set to YES the VM card will immediately restart according to the download OPTION specified above.

> **NOTE**   If during any test procedures you need to run the system with a default database and power up with this MMC option set to YES the VM database will be overwritten according to the data in MMC 751 and the default numbering plan. If you plan this type of test, remove CADENCE until the procedure is finished and the customer database is reloaded.

PROGRAM KEYS

UP & DOWN	Changes MMC data between YES and NO
KEYPAD	0 and 1 will change data and advance to other option
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 750
   Display shows

   ```
   VM CARD RESTART
   DOWNLOAD   ? YES
   ```

2. Dial 0 or 1 to set option
            OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   VM CARD RESTART
   CARD RESTART?NO
   ```

3. Dial 0 (No) or 1 (Yes) to confirm selection
            OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   VM CARD RESTART
   ARE YOU SURE?NO
   ```

4. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: CARD RESTART: NO

                          DOWNLOAD: NO

RELATED ITEMS: NONE

MMC:751   ASSIGN MAILBOX

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card. It assigns each station or group as having a mailbox (yes or no). When stations or groups are flagged as YES, during Voice Mail card power up mailboxes will be created for each directory number with a "YES" entry.

Once the Voice Mail database has been created new boxes can be added.

a) Through Voice Mail administration,
b) By adding a new mailbox in this system and cycling system power.

If a mailbox is to be removed it must be done through Voice Mail administration.

If a station that do not have an associated voice mailbox, call the Voice Mail system they will be answered by the Voice Mail system main greeting.

....

NOTE   Mailboxes that are needed for people that do not have an extension must be added through Voice Mail programming.

....

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   ## DISPLAY

1. Press TRSF 751
    Display shows

```
ASSIGN MAIL BOX
[201]  YES
```

2. Dial station number OR
    Press UP or DOWN to scroll the number.

```
ASSIGN MAIL BOX
[202]  YES
```

3. Press RIGHT soft key to move cursor

```
ASSIGN MAIL BOX
[202]  YES
```

4. Change status using UP and DOWN
                 OR
    Dial 0 for NO or 1 for YES.

```
ASSIGN MAIL BOX
[202]  NO
```

5. Press TRSF button to store and exit
                 OR
    Press SPK button to store and advance to next MMC

DEFAULT DATA: ALL STATIONS = YES
                 ALL GROUPS = NO

RELATED ITEMS: NONE

MMC:752   AUTO RECORD

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

Some specific station in the phone system can be assigned to automatically record conversations. When this option is set, all incoming, all outgoing, or all calls (incoming or outgoing) can be recorded.

When this option is selected a specific port can be assigned for each station set to automatic conversation recording or the effectiveness of this feature cannot be guaranteed.

In this MMC you can assign:

1. Which station use this feature. - Station number
2. What mailbox the conversation are recorded in. - Mailbox number
3. What type of conversations are recorded, in, out or both. - I, O or B
4. What port is dedicated to the station. - Voice mail port number

A maximum of 8 stations can this feature in the system.
The same port cannot be assigned to more than one station. Attempts to do this will result in an error message.

When a Voice Mail port is assigned here, it is automatically removed from the Voice Mail group defined in MMC 601.

⚠️ **CAUTION**   Before using this feature make sure that you are not violating any state or federal laws. Some states require that the recorded party be notified. SAMSUNG is not responsible for any illegal use of this feature.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 752
   Display shows

   ```
   AUTO RECORD
   STN:201  MB:NONE
   ```

2. Dial station number
            OR
   Press UP or DOWN to scroll the number.
   Press RIGHT soft key to move cursor

   ```
   AUTO RECORD
   STN:201  MB:NONE
   ```

3. Enter mailbox number using number keys.(e.g.,201).
   Press right SOFT key to move cursor.

   ```
   AUTO RECORD
   STN:201  MB:201
   ```

4. Enter VM port number using keypad or UP or DOWN. Press right SOFT key to move cursor.

```
AUTO RECORD
PORT:NONE CALL:I
```

5. Enter call type, I, O or B.

```
AUTO RECORD
PORT:209  CALL:B
```

6. Press TRSF button to store and exit
         OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:753   WARNING DESTINATION

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

This MMC provides an emergency destination for calls destined for the Voice Mail card, if the Voice Mail card is removed or is offline.

In addition any calls that are forwarded to the Voice Mail card will not forward, they will remain ringing at the "fwd from" station until answered.

This destination can be a station number or a group number.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC
HOLD   Used to delete an entry

ACTION

DISPLAY

1. Press TRSF 753
   Display shows

```
WARNING DEST.
DEST:500
```

2. Dial station number or group number
            OR
   Press UP or DOWN to scroll the number.

```
WARNING DEST.
DEST:501
```

3. Press TRSF button to store and exit
            OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: DEST = 500

RELATED ITEMS: NONE

MMC:754   VM HALT

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

This MMC is used to halt the Voice Mail card (take it offline). It ensures that there is no traffic on the Voice Mail card when it is removed from the system.

NOTE THIS OPERATION SHOULD BE PERFORMED BEFORE REMOVING THE VOICE MAIL CARD FROM THE SYSTEM.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 754
   Display shows

   ```
   VM HALT
   STATUS:PROC
   ```

2. Enter 1 to halt or 0 to process
            OR
   Press UP or DOWN to scroll the selections.

   ```
   VM HALT
   STATUS:PROC
   ```

3. When you select 1 to halt, display shows:
   Press 1 to confirm.

   ```
   VM HALT
   ARE YOU SURE?YES
   ```

4. Display shows:

   ```
   VM HALT
   STATUS:HALT
   ```

5. Press TRSF button to store and exit
            OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: PROC

RELATED ITEMS: NONE

MMC:755 VM ALARM

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

This MMC will generate an alarm message in the mailbox defined in MMC 751 whenever the Voice Mail disk drive reaches a threshold.

The threshold is measured in % full. This means that if the MMC is set for 80, the alarm will be generated when the disk exceeds 80% of the available drive space.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
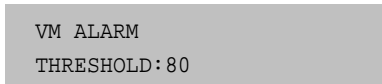
ACTION

DISPLAY

1. Press TRSF 755
   Display shows

```
VM ALARM
THRESHOLD:80
```

2. Enter new threshold level.

```
VM ALARM
THRESHOLD:75
```

3. Press TRSF button to store and exit
   OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: 80%

RELATED ITEMS: NONE

MMC:756   ASSIGN VM MOH

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

This MMC is used to assign each port a Music on Hold source for the system from a sound file located on the VM hard disk drive. The 100 available sound files are defined as numbers 5000 to 5099.

Basically VM card supports various music for numbers 5000 to 5099. If you want to use default VM support music, select the number. Otherwise, make sure you record the sound file first. The next step is to assign the sound file to a VM port. For example, if you record sound file 5025 you would associate 25 with a specific VM port, e.g. 225. This will dedicate the port for use only as MOH and remove it from group 529 or 549. Now 225 will show up as a valid music source in MMC 308, 309 and 408.

Each Music on Hold source assigned here requires one VM port.

> **NOTE** If the first VM port is used for VMMOH, it must be disabled before boot up since VM and the system use port 1 during boot up to exchange critical information. For this reason we suggest you use the last port as VMMOH ports.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   ## DISPLAY

1. Press TRSF 756
   Display shows

   ```
   SET VMMOH
   209  : NOT USE
   ```

2. Press UP or DOWN to select CADENCE port.

   ```
   SET VMMOH
   215  : NOT USE
   ```

3. Move cursor to next field. Press UP or DOWN to select sound file.

   ```
   SET VMMOH
   215  : 25
   ```

4. Press TRSF button to store and exit
           OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: NOT USE

RELATED ITEMS: NONE

MMC:757   VM IN/OUT

DESCRIPTION

This MMC is only used for the SAMSUNG Plug in Voice Mail Card.

This MMC is used to assign each Voice Mail Port as used for incoming, outgoing or both way calls. Note that this MMC must support outgoing calls if off premises notification (beeper, outbound follow me of outbound notification) is used.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 7579
   Display shows

```
VM IN/OUT
209  : IN/OUT
```

2. Enter the CADENCE port number.
        OR
   Press UP or DOWN to select CADENCE port.

```
VM IN/OUT
215  : IN/OUT
```

3. Enter the selections.
        OR
   Press UP or DOWN to scroll options.

```
VM IN/OUT
215  : IN
```

4. Press TRSF button to store and exit
        OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: IN/OUT

RELATED ITEMS: NONE

MMC:758   VM DAY / NIGHT

DESCRIPTION

This MMC is only used for the SAMSUNG Plug In Voice Mail Card.

VM card can operate in either a DAY or NIGHT operating mode. This mode will determine what main menu greetings and options are played to the callers.

This operating mode can change automatically (if enabled in VM card) according to the setting in this MMC.

This MMC containes either a DAY or NIGHT instruction for each Ring Plan.

PROGRAM KEYS

UP & DOWN	Selects YES or NO
KEYPAD	Selects YES or NO
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 758
    Display shows

```
VM DAY/NIGHT
PLAN 1 : DAY
```

2. Press UP or DOWN to select a ring plan

```
VM DAY/NIGHT
PLAN 3 : DAY
```

3. Press RIGHT soft key to move cursor

```
VM DAY/NIGHT
PLAN 3 : DAY
```

4. Press UP or DOWN to select a DAY / NIGHT

```
VM DAY/NIGHT
PLAN 3 : NIGHT
```

5. Press TRSF to store and exit
        OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: ALL RING PLANS = DAY

RELATED ITEMS: MMC 507 RING PLAN TIME

MMC:760   ITEM COST TABLE

- Available in Hotel/Motel enabled only

DESCRIPTION

This MMC provides a means to assign a code to a billable item along with a 10 character name for the item. There are a maximum of 100 entries (00 to 99) in the table with item 00 reserved as the code for room deposits, 01 reserved as the code for phone deposits and items 89 to 99 are reserved for other PMS stream items. These item codes with the exception of codes 93 to 99 will appear on the guests bill at checkout and will serve to identify what each charge on the bill is for. The room bill, when printed will also show telephone calls with an item designation of TEL and the name field will show the number dialed. In addition to the name up to 8 of the tax codes or rates defined in MMC 761 can be applied to each item.

PRE DEFINED CODES

ITEM DESCRIPTION

00 Phone Deposit   This is the code used for pre pay phone deposits
01 Phone Deposit   This is the code used for pre pay phone deposits
02 ~ 88   User Assignable Code
89 W/UP SET   A wake up call was set
90 W/UP ANS   A wake up call was answered
91 W/UP N/ANS   A wake up call was not answered
92 W/UP CANCL   A wake up call was cancelled
93 Check In   A guest has checked into a room
94 Check out   A guest has checked out of a room
95 Available   A room has been flagged as AVAILABLE
96 Occupied   A room has been flagged as OCCUPIED
97 Clean Room   A room has been flagged as NEEDS CLEANING
98 Fix Room   A room has been flagged as NEED MAINTENANCE
99 Hold   A room has been flagged as HOLD

NOTE When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;, ", →, `, and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   *DISPLAY*

1. Press TRSF 760
   Display shows

   ```
   ITEM CODE  (00)
   NAME:RM Deposit
   ```

2. Enter valid code number, e.g., 02, via dial key pad
           OR
   Press UP or DOWN key to make selection and press RIGHT soft
   key to move cursor.

   ```
   ITEM CODE  (02)
   NAME:
   ```

3. Enter in item name(e.g. ROOM COST) via key pad using the
   method described above

   ```
   ITEM CODE  (02)
   NAME:CLASS A
   ```

4. Press RIGHT soft key to move cursor to tax entry step

   ```
   ITEM CODE  (02)
   TAXES:00000000
   ```

5. Enter in the tax rates in MMC 761 that apply to this item and
   press RIGHT soft key to return to step 2

   ```
   ITEM CODE  (02)
   TAXES:11000000
   ```

6. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO ENTRIES

RELATED ITEMS: MMC 221 EXTENSION TYPE
                MMC 761 TAX RATE SETUP

MMC: 761   TAX RATE SETUP

- Available in Hotel/Motel enabled only

DESCRIPTION

This MMC allows the technician to set up the 8 tax rates used in MMC 760. Each tax rate may be defined as a fixed value or as a percentage of the item cost. In addition a 10 character name may be used to define the reason for the tax. The Various options are further detailed below.

TAX RATE   This is the number assigned to this tax rate. The tax rates are numbered 1 to 8 to match the rate field in MMC 760 counting from left to right.

TYPE   This is the type of tax and defines if the VALUE is applied as a percentage (%) of the cost of an item or is added as a fixed dollar value ($) to an item.

VALUE   This is the actual tax rate that will be applied to the item cost.

NAME   This is a 10 character name that will be displayed on the room bill alongside the tax.

Names for the items are written using the keypad. Each press of a key will select a character. Pressing the dial pad key will move the cursor to the next position. For example, if the directory name is "SAM SMITH," press the number "7" four times to get the letter "S." Now press the number "2" once to get the letter "A." Continue selecting characters from the table below to complete your message. Pressing the A button key will change the letter from upper case to lower case.

> **NOTE** When the character you want appears on the same dial pad key as the previous character, press the UP key to move the cursor to the right.

COUNT	1	2	3	4	5
DIAL 0	<	>	.	)	0
DIAL 1	Space	?	,	!	1
DIAL 2	A	B	C	@	2
DIAL 3	D	E	F	#	3
DIAL 4	G	H	I	$	4
DIAL 5	J	K	L	%	5
DIAL 6	M	N	O	^	6
DIAL 7	P	Q	R	S	7
DIAL 8	T	U	V	*	8
DIAL 9	W	X	Y	Z	9
DIAL *	:	=	[	]	*

The # key can be used for the following special characters: #, space, &, !, :, ?, ., ,, %, $, -, <, >, /, =, [,], @, ^, (,), _, +, {, }, |, ;,", →,` , and \.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 761
    Display shows

```
TAX RATE    (1)
TYPE:% VAL:00.00
```

2. Enter valid tax number, e.g.,2 via dial key pad
        OR
    Press UP or DOWN key to make selection and press RIGHT soft
    key to move cursor.

```
TAX RATE    (2)
TYPE:% VAL:00.00
```

3. Dial 0 for ' %', 1 for ' C' or 2 for ' I' (Inclusive VAT)
        OR
    Press UP or DOWN key to make selection and press RIGHT soft
    key to move cursor.

```
TAX RATE    (2)
TYPE:C VAL:00.00
```

4. Enter in the tax rate or value via dial key pad
        OR
    Press UP or DOWN key to make selection
    If valid entry, system advances cursor

```
TAX RATE    (2)
TYPE:C VAL:01.25
```

5. Enter name using above table and press RIGHT soft key to
    return to step 2

```
TAX RATE    (2)
NAME:MIA BED
```

6. Press TRSF to store and exit
        OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: All rates are %

RELATED ITEMS: MMC 760 ITEM COST TABLE

MMC:762   ROOM COST RATE

DESCRIPTION

This MMC allows the technician to set up the cost rates according to week. Each room cost Rate can be assigned with the percentage of the room cost from Sunday to Saturday.

EXAMPLE

If you set SUN: 150 %, 1. MON: 100 %, 2.TUE : 090 % ...

If you set $100 for the room cost in CHECK-IN procedure under above condition.
The real room cost will be $150 on Sunday and $90 on Tuesday.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 762
    Display shows

```
RM COST RAT(SUN)
100% :
```

2. Dial day number(0-6, e.g.,2)
        OR
    Press UP or DOWN key to select day and press RIGHT soft key
    to move cursor.

```
RM COST RAT(SUN)
100% :
```

3. Enter room cost rate (001-999, e.g. 090)

```
RM COST RAT(TUE)
100% :090
```

4. Press TRSF to store and exit
        OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: All rates are 100%

RELATED ITEMS: MMC 760 ITEM COST TABLE

MMC:800   ENABLE TECHNICIAN PROGRAM

DESCRIPTION

Used to open and close technician-level programming. If programming is not opened and an attempt is made to access a system MMC, the error message will be displayed.

A four digits passcode is required to access this MMC. Each character can be digit 0-9. When opened, this MMC enables access to all MMCs.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 800
   Display shows

   ```
   ENABLE TECH.PROG
   PASSCODE:
   ```

2. Enter passcode

   ```
   ENABLE TECH.PROG
   PASSCODE:****
   ```

   Correct code shows

   ```
   ENABLE TECH.PROG
   DISABLE TENANT:1
   ```

   Incorrect code shows

   ```
   ENABLE TECH. PROG
   PASSCODE ERROR
   ```

3. Enter 1 to enable or 0 to disable
             OR
   Press UP or DOWN to select
   Press RIGHT soft key to move to tenant number and enter tenant number (1-2)

   ```
   ENABLE TECH.PROG
   ENABLE TENANT:1
   ```

4. Press SPK to advance to MMC entry level

   ```
   801:TEC.PASSCODE
   SELECT PROG.ID
   ```

5. Enter the MMC desired (e.g., 209)

   ```
   209:AOM MASTER
   AOM NOT EXIST
   ```

6. To log out and return to MMC 800, press UP or DOWN key to select DISABLE
             OR
   Press SPK then TRSF to return to normal display
   Programming option will time out

DEFAULT DATA: DISABLE

RELATED ITEMS: MMC 801 CHANGE TECHNICIAN PASSCODE

MMC:801   CHANGE TECHNICIAN PASSCODE

DESCRIPTION

Used to change the passcode which allows access to MMC 800 Enable Technician Program from its current value.

> **NOTE** The passcode is four characters long. Each character can be digit 0-9. The current or old passcode is required for this MMC.

PROGRAM KEYS

KEYPAD   Used to enter passcodes
SPK   Save data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 801
   Display shows

   ```
   TECH. PASSCODE
   NEW CODE:_
   ```

2. Enter new passcode

   ```
   TECH. PASSCODE
   NEW CODE:****
   ```

3. Enter new passcode again

   ```
   TECH. PASSCODE
   VERIFY  :****
   ```

4. If passcode is correct, press RIGHT soft key to continue and enter desired MMC

   ```
   TECH. PASSCODE
   VERIFY  :SUCCESS
   ```

   If passcode is incorrect

   ```
   TECH. PASSCODE
   VERIFY  :FAILURE
   ```

   System returns to step 2

   ```
   TECH. PASSCODE
   NEW CODE:****
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to advance to MMC

DEFAULT DATA: DEFAULT PASSCODE = 4321

RELATED ITEMS: MMC 800 ENABLE TECHNICIAN PROGRAM

MMC:802   CUSTOMER ACCESS MMC NUMBER

DESCRIPTION

Allows the System Administrator to have access to certain MMCs. For example, it is required that the System Administrator customer have access to MMC 102 Call Forward for call forwarding but it is not required that the System Administrator have access to MMC 710 LCR Digit Table for LCR dial plans. This MMC is for both tenants.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 802
   Display shows

   ```
   CUST.USE MMC :1
   100:STN LOCK:YES
   ```

2. Enter desired tenant number (1-2) via dial keypad
            OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   MMC TENANT:1
   100:STN LOCK:YES
   ```

3. Enter desired MMC number via dial keypad
            OR
   Press UP or DOWN key to make selection and press RIGHT soft key to move cursor

   ```
   MMC TENANT:1
   102:CALL FWD:YES
   ```

4. Enter 1 for YES or 0 for NO via dial keypad
            OR
   Press UP or DOWN key to make selection and press LEFT soft key to return to step 3 to make additional entries

   ```
   MMC TENANT:1
   102:CALL FWD:NO
   ```

5. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: ALL 1xx - 7xx MMCS

MMC:803 ASSIGN TENANT GROUP

DESCRIPTION

Allows the assignment of tenant groups on a per-cabinet, slot and port basis. The simple rule is Cabinet-Slot-Port = Tenant. The simplicity of this program allows for flexible assignments. The only information needed is the correct correlation of entries.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 803
   Display shows

```
TENANT GROUP
C:1 S:1 -01  T:1
```

2. Enter cabinet number if no change press RIGHT soft key to move cursor

```
TENANT GROUP
C:1 S:1 -01  T:1
```

3. Enter slot number if no change press RIGHT soft key to move cursor

```
TENANT GROUP
C:1 S:2 -01  T:1
```

4. Enter port number if no change press RIGHT soft key to move cursor

```
TENANT GROUP
C:1 S:2 -03  T:1
```

5. Enter tenant number if no change press RIGHT soft key to return to step 2

```
TENANT GROUP
C:1 S:2 -03  T:2
```

6. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ALL ASSIGNMENTS TENANT 1

RELATED ITEMS: TENANT GROUP

MMC:804   SYSTEM I/O PARAMETER

DESCRIPTION:

Provides a means of assigning a system I/O port for use with one of the service types detailed below. There are up to five IO ports possibly available on the IDCS 500 with LAN module. When the LAN module is installed, the fifth IO port is used to internal MODEM control. When the LAN module is not installed on the iDCS 500, only three IO ports are available and the third IO port is used to internal MODEM control. It should be noted that system I/O ports cannot be assigned with the same service type option.

PARAMETER OPTIONS

Dial 0	Service	Type of Service
Dial 1	Baud Rate	Speed
Dial 2	Char Length	Character Length
Dial 3	Parity	Parity Bit
Dial 4	Rerty Count	Number of Retries
Dial 5	Stop Bit	Stop Bit
Dial 6	Wait Time	Message Wait Time
Dial 7	DSR Check	DSR Check

SERVICE TYPE

00	NOT USE	Not use
01	PCMMC	PCMMC
02	SMDR	SMDR
03	UCD REPT	UCD report
04	UCD/SMDR	UCD report and SMDR
05	CTI	TAPI 2.1
06	CTI/SMDR	TAPI 2.1 and SMDR (use user defined message)
07	CTI/UCD	TAPI 2.1 and UCD report (use user defined message)
08	CTI/S/U	TAPI 2.1 and SMDR/UCD report (use user defined message)
09	TRAFFIC	Traffic report
10	TRF/SMDR	Traffic report and SMDR
11	ALARM	Alarm report
12	ALM/TRAF	Alarm report and Traffic report
13	PERI UCD	Periodic UCD report
14	NOT USE	Not use
15	NOT USE	Not use
16	HM REPT	Hotel/Motel report
17	PMS	PMS report
18	PMS SMDR	PMS and SMDR
19	BI-PMS	Bi-directional PMS
20	NOT USE	Not use
21	NOT USE	Not use
22	NOT USE	Not use
23	NOT USE	Not use
24	NOT USE	Not use
25	NOT USE	Not use
26	NOT USE	Not use
27	UCD VIEW	UCD View (for Sension, show only 860 UCD View Enabled)
28	UV/SMDR	UCD View and SMDR (show only 860 UCD View Enabled)
29	UV/CTI	UCD View and TAPI 2.1 (show only 860 UCD View Enabled)
30	REMO M/A	Remote M&A (for SPAM package)

BAUD RATE (SPEED)

Dial 0	4800 bps
Dial 1	9600 bps
Dial 2	19200 bps
Dial 3	38400 bps

CHARACTER LENGTH

| Dial 7 | 7 bits |
| Dial 8 | 8 bits |

PARITY

Dial 0	None
Dial 1	Odd
Dial 2	Even

RETRY COUNT

03 (01-99)

STOP BIT

| Dial 1 | 1 bit |
| Dial 2 | 2 bit |

WAIT

0030 sec (0000-3600)

DSR CHECK

OFF

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear entry (when valid)

ACTION

1. Press TRSF 804
   Display shows

2. Enter desired port via dial keypad (e.g., 2)
            OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

3. Enter parameter desired via dial keypad
   (e.g., 1) from the above option list
            OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

4. Select BPS desired via dial kepad
            OF
   Press UP or DOWN key to make selection and
   Press RIGHT soft key to return to step 2

5. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DISPLAY

```
SYS I/O PORT (1)
SERVICE:PC-MMC
```

```
SYS I/O PORT (2)
SERVICE:SMDR
```

```
SYS I/O PORT (2)
BAUD:9600 BPS
```

```
SYS I/O PORT (2)
BAUD:19200BPS
```

DEFAULT DATA: SERVICE   PORT 1PCMMC

                                  PORT 2SMDR

                                  PORT 3-5 NOT USE

                 BAUD RATE   19200 BPS

                 CHAR LENGTH   8 BITS

                 PARITY   NONE

                 RETRY COUNT   03

                 STOP BIT   1 BIT

                 WAIT TIME   03000 MSEC or 30 SEC

                 DSR CHK   OFF

RELATED ITEMS: PCMMC SECTION

                 MMC 725 SMDR OPTIONS
                 CTI TECHNICAL MANUAL

MMC:805   TX LEVEL AND T-SWITCH GAIN

DESCRIPTION

Allows the system administrator to set the base level of the TX volume on keysets system wide. There are eight (8) levels those are able to be controled by the VOL UP and DOWN key on keyset. And maximum controllable levels in the system are ten (10). Keyset station users can vary eight levels. So this MMC gives the most flexibility to the system administrator so he can classify any desired eight (8) levels within eleven (11).

This MMC controls for types level or gain:

0   **TX LEVEL CONTROL**
1   **MISC TSW GAIN**
2   **TSW GAIN CONTROL**

> **NOTE** This MMC should not be changed from the default levels without the assistance of the technical support department

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 805
   Display shows

   ```
   TX LEVEL CONTROL
   LEVEL 0 → 0
   ```

2. Press UP or DOWN key to make selection(0-3)
   After selection is made, press RIGHT soft key to move cursor.

   ```
   TX LEVEL CONTROL
   LEVEL 1 → 1
   ```

3a. (When the TX LEVEL CONTROL is selected)
   Select the desired volume level via dial keypad
        OR
   Press UP or DOWN to the next volume level and press RIGHT soft key.

   ```
   TX LEVEL CONTROL
   LEVEL 1 → 1
   ```

3b. Enter desired volume data via dial pad

   ```
   TX LEVEL CONTROL
   LEVEL 1 → 3
   ```

4. (When the MISC TSW GAIN is selected)
   Enter desired MISC/BGM tsw gain via dial keypad
        OR
   Press UP or DOWN to select desired MISC/BGM tsw gain and press RIGHT soft key.

   ```
   MISC TSW GAIN
   BGM/MOH  :0
   ```

5a.   (When the TSW GAIN CONTROL is selected)
      Select the TX tsw connect type via dial key pad
              OR
      Press UP or DOWN to the next TX TSW connect type and
      press RIGHT soft key.

```
TSW GAIN CONTROL
SLT → DGP :+0.0
```

5b.   Select the RX TSW connect type via dial key pad
              OR
      Press UP or DOWN to the next RX TSW connect type and
      press RIGHT soft key.

```
TSW GAIN CONTROL
SLT → ATRK:+0.0
```

5c.   Enter desired tsw gain control data via dial pad
              OR
      Press UP or DOWN to scroll data and press RIGHT soft key

```
TSW GAIN CONTROL
SLT → ATRK:+1.9
```

6a.   (When the R2 LEVEL CONTROL is selected)
      Select the item via dial key pad (0, 1, 2)
              OR
      Press UP or DOWN to make selection and press RIGHT soft
      key.

```
R2 LEVEL CONTROL
THRESHOLD:5
```

6b.   Enter desired data via dial key pad
              OR
      Press UP or DOWN to scroll data and press RIGHT soft key.

```
R2 LEVEL CONTROL
THRESHOLD:6
```

7.   Press TRSF to store and exit
              OR
      Press SPK to store and advance to next MMC

DEFAULT DATA: TX LEVEL: 0→0, 1→1, 2→2, 3→4, 4→3, 5→5, 6→6, 7→7

                      BGM/MOH GAIN:0

                      TSW GAIN:

DGP→DECT:	- 6.0
SLT→DECT:	- 6.0
ATRK→ATRK:	- 6.0
ATRK→DTRK:	- 6.0
ATRK→DECT:	- 6.0
DECT→ATRK:	- 6.0
ATRK→DECT:	- 6.0
DTRK→SLT:	+1.9
DTRK→ATRK:	+1.9
DTRK→DECT:	- 6.0
DECT→DTRK:	+1.9
DECT→DECT:	- 6.0
VOIP→DECT:	- 6.0
ALL OTHERS:	+0.0

RELATED ITEMS: NONE

MMC:806   CARD PRE-INSTALL

DESCRIPTION

Allows the pre-programming of a card slot for a specific board type. A board inserted into a system will not be recognized by the system until it is ENABLED using this MMC. Cards installed using MMC 806 will NOT be assigned in the system numbering plan. You must then use MMC 724 to assign the desired directory numbers to extensions, trunks, AA, ports or miscellaneous functions. This MMC also shows which PSU is powering the card selected.

> **NOTE** If a card is removed and a different type card is inserted and this MMC is performed, the memory associated with that card (i.e. key programming, etc.) will be erased.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 806
   Display shows

   ```
   C:1-S:1      P:1
   8 DLI  →8 DLI
   ```

2. Press UP or DOWN key to make selection (i.e. Cabinet 1) and press RIGHT soft key

   ```
   C:1-S:1      P:1
   8 DLI  →8 DLI
   ```

3. To select which slot to address press UP or DOWN key to make selection

   ```
   C:1-S:6      P:N
   NONE   →16 DLI
   ```

   OR

   Use the dial pad to make a selection (i.e. Slot 6) and press RIGHT soft key

   ```
   C:1-S:6      P:N
   NONE   →16 DLI
   ```

4. Press UP or DOWN key to make selection or use the DIAL to select (1 = yes 0 = no).

   ```
   C:1-S:6      P:N
   CHANGE NOW ? NO
   ```

5. Press UP or DOWN key to make selection or use the DIAL to select (1 = yes 0 = no). and
   press RIGHT soft key to return to Step 1
   Continue to add cards as shown in step 2
           OR
   Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

   ```
   C:1-S:6      P:N
   ARE YOU SURE?NO
   ```

DEFAULT DATA: NONE

RELATED ITEMS: MMC 724 DIAL NUMBERING PLAN

MMC:807   VOLUME CONTROL

DESCRIPTION

Allows the system administrator to set the level of keyset volume.

0	**KEY TONE VOL**
1	**SIDETONE VOL**
2	**HANDSET TX**
3	**MIC TX LEVEL**
4	**NOISE GUARD**
5	**NOISE THRES.**
6	**ALC THRES.**
7	**TX/RX THRES.**
8	**TX/RX COMP.**

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 807
   Display shows

   ```
   VOL.CONTROL:US24
   KEY TONE VOL:1
   ```

2. Enter phone type via dial keypad
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key.

   ```
   VOL.CONTROL:EU24
   KEY TONE VOL:1
   ```

3. Enter volume number (0-8).
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key.

   ```
   VOL.CONTROL:EU24
   SIDETONE VOL:1
   ```

4. Enter volume data.(1-8)
           OR
   Press UP or DOWN key to make selection and press RIGHT soft key to data save and return to step 3.

   ```
   VOL.CONTROL:EU24
   HANDSET TX  :6
   ```

5. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: KEY TONE VOL :   1

SIDETONE VOL :   1

HANDSET TX :   3

MIC TX LEVEL :   3

NOISE GUARD :   8

NOISE THRES. :   1

ALC THRES. :   7

TX/RX THRES. :   3

TX/RX COMP. :   5

RELATED ITEMS: NONE

MMC:809   SYSTEM MMC LANGUAGE

DESCRIPTION

Allows system programmer to assign a LCD display based on system programming language.

    0.   **ENGLISH**
    1.   **GERMAN**
    2.   **PORTUGAL**

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 809
   Display shows

```
SYS.MMC LANGUAGE
ENGLISH
```

2. Enter desired language number via dial key pad.
         OR
   Press UP or DOWN to make selection and press RIGHT soft key

```
SET COUNTRY CODE
GERMAN
```

3. Press TRSF to store and exit
         OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ENGLISH

RELATED ITEMS: Multiple Language

MMC:810   HALT PROCESSING

DESCRIPTION

Used only in the event that all data processing needs to be stopped either in a single cabinet slot or in the entire system.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
ANS/RLS	Used to select ALL

ACTION   DISPLAY

1. Press TRSF 810
   Display shows

   ```
   HALT/PROCESSING
   C:ALL S:ALL→PROC
   ```

2. Enter cabinet selection via dial keypad
          OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to advance cursor

   ```
   HALT/PROCESSING
   C:1   S:ALL→PROC
   ```

   Press ANS/RLS to select all cabinets
   and slots

   ```
   HALT/PROCESSING
   C:ALL S:ALL→PROC
   ```

3. Enter slot number via dial keypad
          OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to advance cursor

   ```
   HALT/PROCESSING
   C:1   S:2  →PROC
   ```

4. Enter 1 for HALT or 0 to PROC
          OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to enter and return to step 2

5. Press TRSF to store and exit
          OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:811   RESET SYSTEM

DESCRIPTION

Provides two methods of restarting the system. The first method restarts the system and clears all memory. The second method restarts the system only. If clear all memory is selected, only the default data will return. Extreme care should be taken when using this MMC. If the system is restarted, all voice/data connections are dropped. If memory is cleared, all customer data is deleted and the system returns to defaulted status.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right

ACTION   DISPLAY

1. Press TRSF 811
   Display shows

   ```
   SYSTEM RESTART
   RESET SYSTEM?NO
   ```

2. Press UP or DOWN key to make selection
   (RESET SYSTEM or CLEAR MEMORY)
   After selection is made, press RIGHT
   soft key to move cursor to YES/NO option

   ```
   SYSTEM RESTART
   CLEAR MEMORY?NO
   ```

3. Press UP or DOWN key to make selection
   and press RIGHT soft key

   ```
   SYSTEM RESTART
   CLEAR MEMORY?YES
   ```

4. Press UP or DOWN key to make selection
   and press RIGHT soft key
   This erases all data in the system

   ```
   SYSTEM RESTART
   ARE YOU SURE?YES
   ```

5. System will return with default time and
   date and default extension number
                OR
   If system just restarted, it will return to
   normal programmed status

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:812   SET COUNTRY CODE

DESCRIPTION

This MMC must be run by the installer before any other programming is done.

Allows the system installer to select system software country. If you change the country selection, the system will be restart and all customer data returns to defaulted status according to the selected country.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 812
   Display shows

   ```
   SET COUNTRY CODE
   Undefined
   ```

2. Press UP or DOWN key to make selection and press RIGHT soft key

   ```
   SET COUNTRY CODE
   U.K.
   ```

3. Press UP or DOWN key to select Yes or No and press RIGHT soft key
   Warning : if you select YES, this will restart the system

   ```
   DEFAULTING SYSTM
   ARE YOU SURE?NO
   ```

4. Press TRSF to store and exit
              OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:According to MCP DIP S/W.

RELATED ITEMS:All MMC

MMC:813   HOTEL OPERATION

DESCRIPTION:

Allows the system installer to enable the HOTEL feature.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   ## DISPLAY

1. Press TRSF 813
   Display shows

   ```
   HOTEL OPERATION
   DISABLE
   ```

2. Press UP or DOWN key to make selection and press RIGHT soft key

   ```
   HOTEL OPERATION
   ENABLE
   ```

3. Press UP or DOWN key to select Yes or No and press RIGHT soft key

   ```
   HOTEL OPERATION
   ARE YOU SURE?NO
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:DISABLE

RELATED ITEMS:Hotel Related MMC

MMC:815   CUSTOMER DATABASE COPY

DESCRIPTION

Provides a means to copy the customer database to the SMDB (iDCS 500 Smart Media card Data Base). This enables the on board database (SRAM) to be copied to the SMDB and also allows the SMDB database to be copied to the on board database. A daily save can be programmed to automatically save the on board data base to the SMDB. This insures that an up to date database is always available in the case of a catastrophic failure. A daily save time of 00:00 means there are no save performed. It is recommended to CLEAR the SMDB before the SRAM is copied to it. When the SRAM is copied to the SMDB there is no interruption in service. If the SMDB is copied to the SRAM the system will reset to accept the new data.

> **NOTE**   A Smart Media Card of 8 Mega Bytes or above must be installed in order to copy the on board database (SRAM) on to the Smart Media card (SMDB).

DATABASE IDENTIFICATION

SMDB	iDCS 500 Smart Media card database
SRAM	iDCS 500 MCP On-Board database
S:mm/dd/yy hh:mm	Indicates the time the database was saved to the SMDB or the time the SRAM was last saved
DAILY SAVE hh:mm	The time the SRAM will be saved to the SMDB

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 815
   Display shows

   ```
   CUST DBASE:SMDB
   S:12/01/01 00:00
   ```

   If the SmartMedia is used already, the display shows

   ```
   CUST DBASE:SMDB
   SMART IS BUSY
   ```

2. Press RIGHT soft key to move cursor

   ```
   CUST DBASE:SMDB
   S:12/01/01 00:00
   ```

3. Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

   ```
   CUST DBASE:SMDB
   CLEAR SMDB  :NO
   ```

4. Press UP or DOWN to select YES or NO and press RIGHT soft key.

   ```
   CUST DBASE:SMDB
   CLEAR SMDB  :YES
   ```

5. Press UP or DOWN to select YES or NO and press RIGHT soft key.

```
CUST DBASE:SMDB
ARE YOU SURE?NO
```

If you select YES, the display shows

```
CUST DBASE:SMDB
Cleared....
```

6. Press UP or DOWN key to make selection
    Press RIGHT soft key to move cursor

```
CUST DBASE:SRAM
DAILY SAVE:00:00
```

7. Press UP or DOWN key to make selection
    OR

```
CUST DBASE:SRAM
DAILY SAVE:00:00
```

8. Press RIGHT soft key to move cursor
    And input save time
    Press RIGHT soft key to move cursor

```
CUST DBASE:SRAM
DAILY SAVE:23:30
```

9. Press UP or DOWN key to make selection
    Press RIGHT soft key to move cursor

```
CUST DBASE:SRAM
COPY TO SMDB:NO
```

10. Press UP or DOWN key to make selection
    Press RIGHT soft key to make change and
    Return to the next step 9.

```
CUST DBASE:SRAM
ARE YOU SURE?:YES
```

11. Press TRSF to store and exit
    OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: DAILY SAVE 00:00 (no daily save)

RELATED ITEMS: NONE

MMC:818 PROGRAM DOWNLOAD

DESCRIPTION: (need to discuss)

Change the version by downloading new version program stored Smart Media card to MCP, LAN, SCP/ LCP(iDCS 500-L Only), TEPRI card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right

ACTION

DISPLAY

1. Press TRSF 818
   Display shows

```
PGM DOWNLOAD
MCP:MCPLV100.PGM
```

2. Press UP or DOWN key to select program type.

```
PGM DOWNLOAD
LAN:LANV104.PGM
```

3. Press RIGHT soft key to move cursor

```
PGM DOWNLOAD
LAN:LANV105.PGM
```

4. Press UP or DOWN key to select YES
   and press RIGHT soft key to move cursor

```
LAN PGM
DOWNLOAD NOW?NO
```

   If you select MCP program download, the system will restart.

5. Press TRSF to store and exit
             OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:820   ASSIGN SYSTEM LINK ID

DESCRIPTION: (NEEDS FURTHER DISCUSSION)

Allows to assign the system link ID for Q-SIG networking
The Q-SIG networking needs self system link ID only, the other link ID (NO.??) use for display.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC
HOLD   Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 820
    Display shows

```
SYSTEM LINK ID
SELF :
```

2. Enter SELF link ID via dial keypad and press RIGHT soft key..

```
SYSTEM LINK ID
SELF :11
```

3. Press UP or DOWN to select other link ID and press RIGHT soft
    key to mover cursor.

```
SYSTEM LINK ID
NO.01:
```

3. Enter other link ID via dial keypad and press RIGHT soft key.

```
SYSTEM LINK ID
NO.01:22
```

5. Press TRSF button to store and exit.
                OR
    Press SPK button to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 821 ASSIGN NETWORK TRUNK
                  MMC 823 ASSIGN NETWORK COS
                  MMC 824 ASSIGN NETWORK DIAL TRANSLATION

MMC:821   ASSIGN NETWORKING TRUNK

DESCRIPTION: (NEEDS FURTHER DISCUSSION)

Assigns the Q-signalling PRI trunk for networking. It is assigned data on a per-TEPRI card basis.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 821
   Display shows

   ```
   [701] Q-SIG TRK
   NORMAL
   ```

2. Enter first trunk number of PRI card
           OR
   Use UP or DOWN to scroll through PRI card numbers and press
   RIGHT soft key to move cursor

   ```
   [701] Q-SIG TRK
   NORMAL
   ```

3. Enter 0 for NORMAL , or 1 for SIGNALING
           OR
   Press UP or DOWN key to select option and
   Press RIGHT soft key to store data

   ```
   [701] Q-SIG TRK
   Q-SIGNALING
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NORMAL

RELATED ITEMS: Q-SIG NETWORKING

MMC:823 ASSIGN NETWORKING COS

DESCRIPTION

Assigns the class of service for networking.

01	**CALL OFFER**	Call Offer
03	**CC PATH RSV**	CC Path Reservation
04	**CC SIG CONN**	CC Retention of Signal Connection
05	**CC SVC RETN**	CC Service Retention
06	**CCBS**	Call Completion to Busy Subscriber
07	**CCNR**	Call Completion on No Reply
08	**CFB**	Call Forward Busy
09	**CFNR**	Call Forward No Reply
10	**CFU**	Call Forward Unconditional
11	**CI**	Call Intrusion
12	**CI CAPABIL**	Intrusion Capability Level (1 ~ 3)
14	**CI PROTECT**	Intrusion Protection Level (0 ~ 3)
15	**CLIP**	Calling Line Identification Presentation
16	**CLIR**	Calling Line Identification Restriction
17	**CNIP**	Calling Name Identification Presentation
18	**CNIR**	Calling Name Identification Restriction
19	**CNIRO**	Calling Name Identification Restriction Override
20	**COLP**	Connected Line Identification Presentation
21	**COLR**	Connected Line Identification Restriction
22	**CONP**	Connected Name Identification Presentation
23	**CONP LEVEL**	CONP Level (0 ~ 3)
24	**CONR**	Connected Name Identification Restriction
25	**CONRO**	Connected Name Identification Restrction Overfide
26	**CT RE-ROUTE**	Transfer By Rerouting
27	**DND TONE**	DND Announcement
28	**DNDO**	Do Not Disturb Override
29	**DNDO CAPABL**	DNDO Capability Level (0 ~ 3)
30	**DNDO PROTEC**	DNDO Protection Level (1 ~3)
31	**PATH REPL.**	Path Replacement
32	**PATH RETEN**	Path Retention

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 823
   Display shows

```
NETWORK COS (01)
01:CALL OFFER :Y
```

2. Dial the class of service number (01 - 30)
             OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

```
NETWORK COS (02)
01:CALL OFFER :Y
```

3. Dial the feature number
             OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

```
NETWORK COS (02)
03:CC PATH RSV:Y
```

4. Enter 0 for NO, or 1 for YES
             OR
   Press UP or DOWN key to select YES or NO and Press RIGHT soft key to store data

```
NETWORK COS (01)
03:CC PATH RSV:N
```

5. Press TRSF to store and exit
             OR
   Press SPK to store and advance to next MMC

DEFAULT DATA:

CALL OFFER	Y
CC PATH RSV	Y
CC SIG CONN	Y
CC SVC RETN	Y
CCBS	Y
CCNR	Y
CFB	Y
CFNR	Y
CFU	Y
CI	Y
CI CAPABIL	2
CI PROTECT	2
CLIP	Y
CLIR	N
CNIP	Y
CNIR	N
CNIRO	Y
COLP	Y
COLR	N
CONP	Y
CONP LEVEL	3
CONR	N
CONRO	Y
CT RE-ROUTE	N
DND TONE	N
DNDO	N
DNDO CAPABL	2
DNDO PROTEC	2
PATH REPL.	Y
PATH RETEN	Y

RELATED ITEMS: NONE

MMC:824   NETWORK DIAL TRANSLATION

DESCRIPTION

Assigns the digit translation table used for Q-SIG networking. Generally under networking condition, the user must dial the node ID and extension number to call the another node extension. It's not convenient. In this MMC, the system provides the easy digit translation of NETWORK LCR DIAL number. The translated digits are works like as LCR plus translated digits. Using this MMC, the user only dial the another node extension number and call the another node extension simply. The iDCS 500-L system provides 96 entry of network dial translation table and the iDCS 500-M system provides 8 entry of network dial translation table.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 824
   Display shows

   ```
   01:601 →
   SZ:0 MAX:00 MB:N
   ```

2. Dial the entry number
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   01:601 →_
   SZ:0 MAX:00 MB:N
   ```

3. Enter digit string (max. 8digits)
           OR
   Press RIGHT soft key to move cursor

   ```
   01:601 →60201
   SZ:0 MAX:00 MB:N
   ```

4. Enter the entry size
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   01:601 → 60201
   SZ:3 MAX:00 MB:N
   ```

5. Enter the waiting number of dial until LCR is operated
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   01:601 → 60201
   SZ:3 MAX:06 MB:N
   ```

6. Enter YES/NO to assign Mail Box automatically
           OR
   Press UP or DOWN key to select YES/NO and press RIGHT soft key to move cursor

   ```
   01:601 → 60201
   SZ:3 MAX:06 MB:N
   ```

7. Press TRSF to store and exit
        OR
    Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 710 LCR DIGIT TABLE

MMC 724 DIAL NUMBERING PLAN

MMC 820 ASSIGN SYSTEM LINK ID

MMC:825 ASSIGN NETWORKING OPTION

DESCRIPTION

Assigns the options used for networking.

ADD NUMBER TO NAME Assign to includes the extension number in the name field of Q-sig message.
USER REMOTE VM Assign to use remote VM
REMOTE VM NUMBER Assign to access number of remote VM when the Remote VM is used

PROGRAM KEYS

UP & DOWN | Used to scroll through options
KEYPAD | Used to enter selections
SOFT KEYS | Move cursor left and right
SPK | Used to store data and advance to next MMC
HOLD | Used to clear previous entry

ACTION   DISPLAY

1. Press TRSF 825
   Display shows

   ```
   ADD NUMB TO NAME
   YES
   ```

2. Dial the option number
           OR
   Press UP or DOWN key to select and press RIGHT soft key to
   move cursor

   ```
   USE REMOTE VM
   NO
   ```

3. Dial 1(YES) or 0(NO)
           OR
   Press UP or DOWN to select YES/NO and press RIGHT soft key
   to mover cursor

   ```
   USE REMOTE VM
   YES
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: ADD NUMB TO NAME: YES

                  USE REMOTE VM: NO

                  REMOTE VM NUMBER: NONE

RELATED ITEMS: MMC 710LCR DIGIT TABLE

                  MMC 724DIAL NUMBERING PLAN

                  MMC 820ASSIGN SYSTEM LINK ID

MMC:826 ASSIGN SYSTEM REFERENCE CLOCK

DESCRIPTION

The system clock may be synchronized with a external clock source from TEPRI card or use the internal clock source. In this MMC, the user can select to use internal clock source and assign the system clock source priority when the external clock source is used. The external clock source of TEPRI card only can be selected.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SOFT KEYS   Move cursor left and right
SPK   Used to store data and advance to next MMC

ACTION   ## DISPLAY

1. Press TRSF 826
   Display shows

   ```
   REFERENCE CLOCK
   PRIORITY 1:C1-S1
   ```

2. Dial the priority number (1 - 9 or 1 - 3)
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   REFERENCE CLOCK
   PRIORITY 1:C1-S1
   ```

3. Dial the priority data (0 - 9, 0: SELF)
           OR
   Press UP or DOWN key to select and Press RIGHT soft key to store

   ```
   REFERENCE CLOCK
   PRIORITY 1:C1-S1
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: PRIORITY 1: C1 - S1

                 PRIORITY 2: C1 - S2

                 PRIORITY 3: C1 - S3

                 PRIORITY 4: C2 - S1

                 PRIORITY 5: C2 - S2

                 PRIORITY 6: C2 - S3

                 PRIORITY 7: C3 - S1

                 PRIORITY 8: C3 - S2

                 PRIORITY 9: C3 - S3

RELATED ITEMS: NONE

MMC:830   ETHERNET PARAMETER

DESCRIPTION

This MMC assigns the Ethernet parameters for the LAN module that may be installed on the MCP card. The LAN MAC address is available view only. When the LAN IP address, Sub-net Mask or Gateway is changed, the LAN card must be restarted to apply the changed items.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 830
   Display shows

   ```
   LAN :IP ADDRESS
    10.  0.  0.  2
   ```

2. Press UP or DOWN to select option.

   ```
   LAN :IP ADDRESS
   _10.  0.  0.  2
   ```

3. Enter the data.

   ```
   LAN :IP ADDRESS
   168.219. 83.101
   ```

4. Press TRSF button to store and exit
            OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA:	LAN IP ADDRESS	10. 0. 0. 2
	LAN SUBNET MASK	255.255.255.0
	LAN GATEWAY	10.0.0.1
	PCMMC ADDRESS	10.0.0.101
	REMOTE M/A ADDR	10.0.0.102
	TAPI SERVER ADDR	10.0.0.103
	TRACE ADDRESS	10.0.0.116

RELATED ITEMS: NONE

MMC:831   VOIP PARAMETERS

DESCRIPTION

Provides a means to apply the Internet Protocol (IP) address to the ITM3 card. This MMC also assigns the number of channels that can be used for IP faxes. The CLIP tables allow the calling station number to be received at the far end ITM3 location.

> **NOTE** This MMC cannot be accessed unless there is an ITM3 card installed in the system.

IP ADDRESS	Specifies the IP address for the ITM3 card. When changing the address three digits must be input for each field. Example
SUBNET MASK	Specifies the IP subnet mask. When changing the address three digits must be input for each field.
GATEWAY	Specifies the LAN gateway address when leaving the local network. When changing the address three digits must be input for each field.
STS Period	Status Send Period designates the timed message cycle to check the remote IP status (Range: 00~60 sec.)
MAX FAX CH	Maximum facsimile channels. Specifies the maximum number of ITM3 channels that will accept IP T.38 protocol IP facsimiles. (Default: 0)
CLIP TABLE	Calling Line Identification Presentation. This provides the calling station number when calling from on ITM3 location to another ITM3 location. If set to NONE, MMC 405 TRUNK NUMBER will be sent. In other cases, MMC 323 SEND CLIP INFO entry will be sent.
VOIP MODE	Three options are available. (FOLLOW TRK RING, FOLLOW DID TRANS or FOLLOW INCOM DGT)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   DISPLAY

ACTION	DISPLAY
1. Press TRSF 831 Display shows the first trunk on selected ITM3 card.	`[709] IP ADDRESS` `  1.  1.  1.  1`
2. Press RIGHT soft key to move cursor	`[709] IP ADDRESS` `  1.  1.  1.  1`
3. Press RIGHT soft key to move cursor to IP address	`[709] IP ADDRESS` `_ 1.  1.  1.  1`
Enter IP numbers using key pad (e.g.: 105.052.010.001 for 105.52.10.2) Cursor will return to step2 upon completion of IP address entry	`[709] IP ADDRESS` `105.052.010.002`

4. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] SUB MASK
255.255.255.  0
```

Enter subnet mask entry using key pad.
Cursor will return to step2 upon completion of subnet mask entry

```
[709] SUB MASK
255.255.255.000
```

5. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] GATEWAY
  1.  1.  1.  1
```

Enter gateway entry using key pad.
Cursor will return to step2 upon completion of gateway entry

```
[709] GATEWAY
105.052.010.001
```

6. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] STS PERIOD
00 SEC
```

Enter STS PERIOD time using key pad
          OR
Press UP or DOWN to make selection and press RIGHT soft key.

```
[709] STS PERIOD
30 SEC
```

7. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] MAX FAX CH
0
```

Enter MAX FAX CH number using key pad
          OR
Press UP or DOWN to make selection and press RIGHT soft key.

```
[709] MAX FAX CH
2
```

8. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] CLIP TABLE
NONE
```

Enter CLIP TABLE number using key pad
          OR
Press UP or DOWN to make selection and press RIGHT soft key.

```
[709] CLIP TABLE
1
```

9. Press UP or DOWN to make selection and press RIGHT soft key to move cursor

```
[709] VOIP MODE
FOLLOW DID TRANS
```

Enter VOIP MODE using key pad
          OR
Press UP or DOWN to make selection and press RIGHT soft key.

```
[709] VOIP MODE
FOLLOW TRK RING
```

10. Press TRSF button to store and exit
          OR
Press SPK button to store and advance to next MMC

DEFAULT DATA: IP ADDRESS   : 1.1.1.1

                         SUB MASK   : 255.255.255.0

                         GATEWAY   : 1.1.1.1

                         STS PERIOD   : 00 SEC

                         MAX FAX CH   : 0

                         CLIP TABLE   : NONE

                         VOIP MODE   : FOLLOW DID TRANS

RELATED ITEMS: MMC 323 SEND CLIP INFO

                         MMC 405 TRUNK NUMBER

                         MMC 714 DID TRANSLATIONS

                         MMC 832 VOIP CODE

                         MMC 833 VOIP ADDRESS TABLE

                         MMC 834 VOIP OPTIONS

                         MMC 835 VOIP DSP OPTIONS

                         MMC 836 GATEKEEPER OPTIONS

MMC:832   VOIP CODE

DESCRIPTION:

Provides a means to set the ITM3 internal numbering plan for dialing and conversion.

ACCESS CODE This is the access code once the ITM3 is accessed directs a call based on the routing tables. An access code table is references an access code. A maximum of 8 digits are available with 63 access code entries (00 ~ 62)

CODE LENGTH This field requests the number of digits that are expected to be received to make up the access code.

DEL LENGTH This is the number of digits to delete after receiving the access code. If no digits are deleted the access code will be sent as part of the call to the destination to continue routing at the far end destination.

INSERT CODE This is the code to insert for routing at the destination. This can be used when different numbering plans exist or if a dial 9 access is needed to be inserted in the dialed digits.

IP TABLE 1 This is the first table referenced for routing the access code to an IP address. The system has 31 IP tables (00~30) with 32 entries (00~31) in each table.

IP TABLE 2 This is the second table referenced as a look up for an IP address to route the call based on the access code.

IP START This entry indicates where in a table to start looking for an IP code to associated with the access code. This can be used to manage where to start looking for an IP address in high traffic ITM3 applications. Example: If IP address routing to the desired destination is known to be in the last 7 entries of a table the IP START location would be 25. IP address searching would start at entry 25.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC
HOLD   Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 832
    Display shows

    ```
    (00) ACCESS CODE
    0
    ```

2. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

    ```
    (01) ACCESS CODE
    1
    ```

3. Input an access code using dial key pad and press RIGHT soft key.

    ```
    (01) ACCESS CODE
    110
    ```

4. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

    ```
    (01) CODE LENGTH
    1
    ```

5. Input code length using dial key pad and press RIGHT soft key.

    ```
    (01) CODE LENGTH
    3
    ```

6. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

```
(01) DEL.LENGTH
1
```

7. Input delete length using dial key pad and press RIGHT soft key.

```
(01) DEL.LENGTH
2
```

8. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

```
(01) INSERT CODE
```

9. Input insert code using dial key pad and press RIGHT soft key.

```
(01) INSERT CODE
080
```

10. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

```
(01) IP TABLE 1
00
```

11. Input code length using dial key pad and press RIGHT soft key.

```
(01) IP TABLE 1
01
```

12. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

```
(01) IP TABLE 2
```

13. Input code length using dial key pad and press RIGHT soft key.

```
(01) IP TABLE 2
10
```

14. Press UP or DOWN to select an entry and press RIGHT soft key to move cursor

```
(01) IP START
00
```

15. Input code length using dial key pad and press RIGHT soft key.

```
(01) IP START
15
```

16. Press TRSF button to store and exit
        OR
    Press SPK button to store and advance to next MMC

DEFAULT DATA: ACCESS CODE: 00~09: digits 0~9, 10~62: NONE
                  CODE LENGTH: 1
                  DELETE LENGTH: 1
                  INSERT CODE: NONE
                  IP TABLE 1:   00
                  IP TABLE 2:   NONE
                  IP START: NONE

RELATED ITEMS: MMC 831 VOIP PARAMETERS
                  MMC 833 VOIP ADDRESS TABLE
                  MMC 834 VOIP OPTIONS
                  MMC 835 VOIP DSP OPTIONS
                  MMC 836 GATEKEEPER OPTIONS

MMC:833   VOIP IP TABLE

DESCRIPTION

This MMC provides the IP addresses in tables pointed to by the access code entry. There are 31 tables with up to 32 entries each. The destination IP address is required to route dialed digits based on the access code and digits dialed. The IP entry field is divided into 4 sections allowing modification of separate IP address fields.

> **NOTE** All IP address entries must 3 digit entries. For example: IP address 105.52.10.201 must be input as 105.052.010.201.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 833
   Display shows

```
TB(00) ENTRY(00)
   1.  1.  1.  1
```

2. Enter a table number via dial key pad
           OR
   Press UP or DOWN to select a table and press RIGHT soft key.

```
TB(01) ENTRY(00)
   0.  0.  0.  0
```

3. Enter a table entry number via dial key pad
           OR
   Press UP or DOWN to select a table entry and press RIGHT soft key.

```
TB(01) ENTRY(01)
   0.  0.  0.  0
```

4. Enter a IP address via dial key pad.

```
TB(01) ENTRY(01)
105.052.01.201
```

5. Press TRSF button to store and exit
           OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: TB 00 - ENTRY 00:   1.1.1.1

                  Others: 0.0.0.0

RELATED ITEMS: MMC 831 VOIP PARAMETERS

                  MMC 832 VOIP CODE

                  MMC 834 VOIP OPTIONS

                  MMC 835 VOIP DSP OPTIONS

                  MMC 836 GATEKEEPER OPTIONS

MMC:834   VOIP OPTION

DESCRIPTION

This MMC provides various VOIP support options. The options set in this MMC are ITM3 system wide.

PCM COMPANDING:	Select U-law or A-law PCM.
H.323 FAST START SETUP:	Enables or disables the H.323 Fast Start call method.
GATEWAY CALL ID:	This a numeric entry that identifications the system via ITM3 connection. The maximum entry is 4 digits.
CALLER ID TYPE:	This option controls the calling party identification type. There are 3 possible selections. ANI which shows the calling station number when the call is an ITM3 to ITM3. IP which shows the calling ITM3 IP address. Gateway ID which is a 4 digit preprogrammed ID.
INCOMING CHANNEL SELECTION:	This option selects whether the incoming channel is Sequential or Distributed.
DTMF GENERATION:	This option allows 4 different transport types of DTMF. Inband, Q931, H.245 Signal, H.245 Numeric.
FAX SIGNAL TYPE:	This option select the facsimile standard to use when transporting facsimiles via the ITM3. Selections are T.38 or the proprietary Samsung formats. Default is the T.38 facsimile standard.
SWITCH TO H.245:	This option enables switching to the H.245 protocol at the time of Fast Start
DEFAULT DIL:	This allows programming of the default DIL number when a digits are not included on an incoming call.
SNMP SERVER ID:	This allows entry of the SNMP server IP address when connected to network management equipment.
SIGNALLING PORT:	Indicate the port number for H.323 signalling and sets a range of numbers allowed by firewall equipment. The IP path or port used is 10000
STATUS PORT:	Port number for the exchange of status information between ITM3 cards. The IP path or port used in 20000
WCS PORT:	Proprietary Samsung Web Call Service. The IP path or port used is 20010
SIGK ACCESS PORT:	Samsung Internet Gatekeeper. The IP path or port used is 20020.

MAKE DEFAULT DB: This option permits defaulting the ITM3 card program to he default parameters. CAUTION: This option is SYSTEM WIDE and defaults all ITM3 cards in the system!!! Card must be RESTARTED to take affect.

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC
HOLD   Used to delete an entry

ACTION

DISPLAY

1. Press TRSF 834
   Display shows

```
PCM COMPANDING
A-LAW
```

2. Select option number via dial key pad.
              OR
   Press UP or DOWN to make selection and press RIGHT soft key.

```
CALLER ID TYPE
ANI
```

3. Press UP or DOWN to select data and press RIGHT soft key.

```
CALLER ID TYPE
IP
```

4. Press TRSF button to store and exit
              OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: PCM COMPANDING: A-LAW

                  H.323 FAST SETUP: DISABLE

                  GW CALL ID: 1234

                  BILLING TYPE: STANDARD

                  CALLER ID TYPE: ANI

                  INCOMING CHANNEL: DISTRIBUTE

                  DTMF GENERATION: H.245 SIGNAL

                  FAX SIGNALLING TYPE: T.38

                  SWITCH TO H.245:   ENABLE

                  DEFAULT DIL: None

                  SNMP SERVER: 0.0.0.0

                  SIGNALLING PORT: 10000

                  STATUS PORT: 20000

                  WCS PORT: 20010

                  SIGK ACCESS PORT: 20020

                  MAKE DEFAULT DB: NO

RELATED ITEMS: MMC 831 VOIP PARAMETERS

                  MMC 832 VOIP CODE

                  MMC 833 VOIP IP TABLE

                  MMC 835 VOIP DSP OPTIONS

                  MMC 836 GATEKEEPER OPTIONS

MMC:835   VOIP DSP OPTION

DESCRIPTION

This MMC provides various VOIP DSP options. The options set in this MMC are ITM3 system wide.

AUDIO CODEC: Selects which audio codec compression to use. Selections are 1.G.711 (64K), 2.G.723.1 (5.3K ~ 6.4K), 3.G.729A (8K).

ECHO CANCELLATION: Enables or disables echo cancellation (0: disable, 1:enable). This function removes echo that is generated by voice reflection and packet delay.

SILENCE SUPRESSION: This parameter determines whether silence suppression is used (0: disable, 1: enable). This prevents transmission during the silence period of a call.

INPUT FILTER: This option select input filtering of the DSP (0: disable, 1: enable). This should be set as ON.

OUTPUT FILTER: This option select output filtering of the DSP (0: disable, 1: enable). This should be set as ON.

INPUT GAIN: PCM input gain value of DSP. The range is -31dB~31dB (0~63). This set the quality of PCM voice from the VOIP DSP to the site.

VOICE VOLUME: This select the voice volume. The range is -31dB~31dB (0~63).

MULTI FRAME COUNTER: This option selects the number of frames the ITM3 will consolidate the packet header message. The voice packets are buffered to the set number and sent as a single packet. The range is 1~12.

JITTER OPTION: This selects the dynamic jitter specific value. Value determines whether the focus is on packet loss or packet delay. The range is 00~12.

VOICE PROMPT SWAP: Decides the adjustment of the byte order of the voice announce data (0: disable, 1: enable)

RTP DELAY LIMIT: This is the value of the delay limit. The status will change when this limit is exceeded. The value is measured in milliseconds (ms). This is used to determine network error.

RTP LOSS LIMIT: This is the value of the loss limit value. The status will change when this limit is exceeded. The value is measured in percentages (%). The range is 00~25 %. This is used to determine network error.

RTP CHECK PERIOD: This is the packet loss estimated base period measured in seconds. The range is 00~25 seconds. This is used to determine network error.

RTP OVERCOUNT LIMIT: This limit/loss limit excess count. The range is 0~3. This is used to determine network error.

DTMF ON: The DTMF ON time in milliseconds (ms).

DTMF OFF : The DTMF OFF time in milliseconds (ms)

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION / DISPLAY

1. Press TRSF 835
   Display shows

   ```
   AUDIO CODEC
   G.723.1
   ```

2. Press UP or DOWN to select an entry and press RIGHT soft key.

   ```
   ECHO CANCEL
   ENABLE
   ```

3. Enter data via dial key pad
   OR
   Press UP or DOWN to select option and press RIGHT soft key.

   ```
   ECHO CANCEL
   DISABLE
   ```

4. Press TRSF button to store and exit
   OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA:

AUDIO CODEC:	G.723.1
ECHO CANCEL:	ENABLE
SILENCE SUPPRESS:	ENABLE
INPUT FILTER:	ENABLE
OUTPUT FILTER:	ENABLE
INPUT GAIN:	23
VOICE VOLUME	34
MULTI FRAME COUNT:	03
JITTER OPTION:	07
VOICE PROMPT SWAP:	DISABLE
RTP DELAY LIMIT:	600
RTP LOSS LIMIT:	10 %
RTP CHECK PERIOD:	10 SEC
RTP OVERCOUNT LIMIT:	1
DTMF ON:	100 MS
DTMF OFF:	100 MS

RELATED ITEMS:

MMC 831 VOIP PARAMETERS

MMC 832 VOIP CODE

MMC 833 VOIP IP TABLE

MMC 834 VOIP OPTION

MMC 836 GATEKEEPER OPTIONS

MMC:836   VOIP GK OPTION

DESCRIPTION

Provides a means to set the ITM3 Gatekeeper options for identification to a network gatekeeper. The setting are selectable for each ITM card installed.

GK CONNECT:	This determine if the ITM3 is to connect to a gatekeeper. The option are disable or enable.
GK TYPE:	This determines if connected to a Samsung SIGK or other type of gatekeeper.
GK IP:	This is gatekeepers IP address.
GK NAME:	This is name identifier of the gatekeeper. The name can be alphanumeric. An entry of 9 alphanumeric character with a space followed by an gatekeeper. This can be up to 16 characters.
GW H.323 ID:	This is the H.323 identifier of the ITM3 that is registered with the gatekeeper. This can be up to 16 characters.
GW E.164 NUMBER:	This is the E.164 identifier of the ITM3 that is registered with the gatekeeper and can be up to 16 digits in length.
KEEP ALIVE:	This is the timer that the ITM3 uses to acknowledge the presence of the gatekeeper. The range is 000~999 seconds.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC
HOLD	Used to delete an entry

ACTION   DISPLAY

1. Press TRSF 836
   Display shows

   ```
   [701] GK CONNECT
   DISABLE
   ```

2. Press UP or DOWN to select an ITM3 card and press RIGHT soft key to move cursor.

   ```
   [709] GK CONNECT
   DISABLE
   ```

3. Press UP or DOWN to select entry and press RIGHT soft key to move cursor

   ```
   [709] GK TYPE
   SIGK
   ```

4. Press UP or DOWN to select option and press RIGHT soft key

   ```
   [709] GK TYPE
   OTHER GK
   ```

5. Press TRSF button to store and exit
   OR
   Press SPK button to store and advance to next MMC

DEFAULT DATA: GK CONNECT: DISABLE
                 GK TYPE: SIGK
                 GK IP ADDR: 0.0.0.0
                 GK NAME: blank
                 GW:H.323 ID: blank
                 GW:E164 NO: blank
                 KEEP ALIVE: 000 sec

RELATED ITEMS: MMC 831 VOIP PARAMETERS
                 MMC 832 VOIP CODE
                 MMC 833 VOIP IP TABLE
                 MMC 834 VOIP OPTION
                 MMC 835 VOIP DSP OPTION

MMC:850   SYSTEM RESOURCE DISPLAY

DESCRIPTION

This MMC is only used for system resource display. This is displayed the used resources and the free resources. This is a READ ONLY MMC.

0. DTMFR DSP'S
1. CID DSP'S
2. R2MFC DSP'S
3. CONF GROUP'S

PROGRAM KEYS

UP & DOWN   Used to scroll through options
KEYPAD   Used to enter selections
SPK   Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 850
   Display shows

```
DTMFR DSP'S
USE:000 FREE:012
```

2. Enter the option number (0 - 3)
           OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

```
CID DSP'S
USE:000 FREE:014
```

3. Press TRSF to exit
           OR
   Press SPK advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:851   ALARM REPORTING

DESCRIPTION

This MMC is used to view, store, print or clear system alarms. There are two levels of faults displayed via alarm code, major alarms and minor alarms. Major alarms codes are usually service affecting and require a certified technician to determine the fault. A minor alarm indicates a fault that may or may not be service affecting and usually does not seriously degrade the systems operating capabilities. The alarm buffer will hold up to 100 alarms on a first in - first out (FIFO) basis. Alarms will provide a date and time stamp based on the system time. If applicable the hardware cabinet, port, and/or slot will be displayed. If an ALARM SIO port is programmed (MMC 804) alarm information can be printed on demand and also prints as alarm information is provided.

✴ System Alarm Reporting is only available with a LAN module installed on the MCP card.

ALARM REPORTING OPTIONS (Select one of the options)

0	**VIEW ALARM**	View alarm buffer
1	**OVERFLOW CONTROL**	
	OVERWRITTEN	When buffer is full, the oldest entry in buffer overwritten.
	STOP RECORDING	When buffer is full, stop recording alarms.
2	**CLEAR ALARM BUF**	Clears alarm buffer.
3	**PRINT ALARM BUF**	Prints contents of alarm buffer to the assigned alarm IO port.

ALARM CODE LOCATION DEFINITION (See Alarm Code Table)

C: Cabinet number
S: Slot number
P: Port number

> **NOTE** Cabinet, slot and port do not apply to all alarm codes

PROGRAM KEYS

UP & DOWN	Used to scroll through system alarms.
KEYPAD	Used to enter selections
SOFT KEYS	Enter/leave option
SPK	Used to store data and move to next MMC
TRSF	Enter/exit MMC

ACTION

DISPLAY

1. Press TRSF 851
   Display shows

   ```
   SYS ALARM REPORT
   VIEW ALARMS
   ```

2. Enter desired option
   OR
   Press UP or DOWN to make selection and press RIGHT soft key

   ```
   SYS ALARM REPORT
   VIEW ALARMS
   ```

3. System displays the alarm count number, date and time stamp
   (uses station, configuration for display
   format, date, time will be 24 hour format). Alarm type and cause
   code will display.

   ```
   [00] 02/18 14:30
   MNF02 C1-S02
   ```

4. Press UP or DOWN arrows to scroll through other alarms

   ```
   [02] 02/18 14:36
   MNF06 C1-S03-P03
   ```

5. To return to Alarm Options, press left soft key and choose new
   option
   OR
   Press TRSF to exit
   OR
   Press SPK to advance to next MMC

DEFAULT DATA: ALARM BUFFER OVERWRITTEN

RELATED ITEMS: MMC 852 SYSTEM ALARM ASSIGNMENTS

ALARM CODE DEFINITIONS

ALM CODE	ALARM	DEFINITION
MJA01	POR Restart	MCP restart process has been executed via power on restart (POR).
MJA02	Soft Restart	MCP restart process has been executed via button reset.
MJA03	Mem Reset	The system RAM has been cleared via manual programming (PCMMC or KMMC) resulting in a system reset.
MJA04	MCP Reset	The MCP has reset. Alarm data = Reason - BUS ERR: Restart Bus Error - ADDR.ERR: Restart Address Error - ILLEGAL: Restart Illegal opcode - ZERO DIVID: Restart Zero divide - PRIVILEGE: Restart Privilege Violation - VECTOR 1: Restart Auto Vector Level 1 - DTACK RD: Restart Auto Vector Level 2 - DTACK WR: Restart Auto Vector Level 3 - VECTOR 4: Restart Auto Vector Level 4 - VECTOR 5: Restart Auto Vector Level 5 - VECTOR 6: Restart Auto Vector Level 6 - WR PROTECT: Restart Auto Vector Level 7 - ENDL LOOP: Restart Endless Loop

ALM CODE	ALARM	DEFINITION
MJA05	LCP Reset	The SCP or LCP has reset Alarm data = Cabinet (1, 2 or 3)
MJA06	PCM Switching	A fault has occurred in the Switching Control Alarm data = MCP BASE, ESM OPT:1, ESM OPT:2 or ESM OPT:3
MJB01	HDLC Com Error	Communications to Local Control Processor lost or faulty.
MJB02	Memory Alarm 1	A RAM diagnostic check error has occurred in the MCP.
MJB03	Memory Alarm 2	A RAM diagnostic check error has occurred in the SCP.
MJB04	Memory Alarm 3	A RAM diagnostic check error has occurred in the LCP 1.
MJB05	Memory Alarm 4	A RAM diagnostic check error has occurred in the LCP 2.
MJB06	IPC MSGQ Over	IPC TX queue full error has occurred in the MCP. Alarm data = IPC Queue type (MCP-LAN, MCP-SCP, MCP-LCP1, MCP-LCP2)
MJB06	IPC MSGQ Under	IPC TX queue under error has occurred in the MCP. Alarm data = IPC Queue type (MCP-LAN, MCP-SCP, MCP-LCP1, MCP-LCP2)
MJB07	Task MSGQ Over	Task MSG queue full error has occurred in the MCP. Alarm data = Error Task Kind (CNFG, ERRH, NPER, MSGH, DIGH, SMART, CALL, PPER, SMDR, TMMC, IDLE)
MJB07	Task MSGQ Under	Task MSG queue under error has occurred in the MCP. Alarm data = Error Task Kind (CNFG, ERRH, NPER, MSGH, DIGH, SMART, CALL, PPER, SMDR, TMMC, IDLE)
MJC01	DTMF Fault	An abnormal interrupt has occurred in the system DTMF resources. Alarm data = DTMF Receiver number (MCP BASE, MCP OPT:1, MCP OPT:2, MCP OPT:3, C#2 BASE , C#2 OPT:1, C#2 OPT:2, C#2 OPT:3, C#3 BASE, C#3 OPT:1, C#3 OPT:2, C#3 OPT:3)
MJC02	Tone Fault	An abnormal interrupt has occurred in the system tone resources. IE busy, ringback, error, no more calls etc. Alarm data = TONE Receiver number (MCP BASE, MCP OPT:1, MCP OPT:2, MCP OPT:3, C#2 BASE , C#2 OPT:1, C#2 OPT:2, C#2 OPT:3, C#3 BASE, C#3 OPT:1, C#3 OPT:2, C#3 OPT:3)
MJC10	AA-DTMF Fault	An abnormal fault reported in one of the systems AA card DTMF resources. Alarm data = Cabinet, Slot, Port (Cx–Syy-Pzz)
MJC11	AA-MFR Rec	An abnormal fault reported in one of the systems AA card DTMF resources has recovered. Alarm data = Cabinet, Slot, Port (Cx–Syy-Pzz)
MJC12	E911 Restart	The E911 card has restarted. Alarm data = Cabinet, Slot (Cx–Syy)
MJC13	E911 Block	The E911 card has restarted because the system detect the card does not work correctly. Alarm data = Cabinet, Slot (Cx–Syy)

ALM CODE	ALARM	DEFINITION
MJC14	VoIP Restart	The ITM3 card has restarted. Alarm data = Cabinet, Slot (Cx–Syy)
MJC15	VoIP Block	The ITM3 card has restarted because the system detect the card does not work corectly. Alarm data = Cabinet, Slot (Cx–Syy)
MJD01	Sync Failure	Clocking on TEPRI cards has become asynchronous.
MJD02	Sync Recovery	Clocking on TEPRI cards has become synchronous.
MJD03	Red Alarm	Locally detected loss of PCM carrier on TEPRI card for more than 250 ms. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD04	Red Alarm Rec	PCM carrier detected locally on TEPRI cards. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD05	Yellow Alarm	Remotely detected failure transmitted in frame on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD06	Yellow Alarm Rec	Remotely detected failure restored transmitted on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD07	Blue Alarm	All one's being transmitted on facility on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD08	Blue Alarm Rec	A blue alarm condition has been cleared. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD09	Bit Error Alarm	Alarm is activated when the when error rate exceeds $1x10-6$ errors. Note: $1x10-6$ is threshold for minor alarm, $1 x 10-3$ is threshold for major alarm errors on E1,PRI or BRI.. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD10	NTWRK Event	An Implausible event has occurred on the PRI or BRI Network digital line. Protocols do not match or subscriber ID mismatch. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD11	SPID Init Error	The BRI received an error from the network Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD12	SPID Init Rec	The BRI has recovered from an error on the network Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD13	LPBK Error	Internal on demand loopback failed. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD14	LPBK Recovery	Internal on demand loopback test passed. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD15	BRI DL Unavail	A BRI data link is out of service. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD16	BRI DL Recovery	A BRI data link is back in service. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
MJD17	RAM Error	An error has occurred in the TEPRI or BRI card RAM. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD18	E1 Restart	The E1 card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)
MJD19	PRI Restart	The PRI card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)

ALM CODE	ALARM	DEFINITION
MJD20	BRI Restart	The BRI card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)
MJD21	PCM Loss	Loss of PCM coding on a digital facility. Alarm Data = Cabinet, Slot (Cx-Syy)
MJD22	PCM Recovery	Recovery of PCM coding on a digital facility. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF01	Card Out	A circuit card mounted in a universal slot has been removed from service or is not recognized by the system Alarm Data = Cabinet,Slot (Cx-Syy)
MNF02	Card In	A circuit card mounted in a universal slot has been returned to service. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF03	IPC Error	Inter processor communication error has occurred. Alarm Data = Cabinet-Slot (Cx-Syy)
MNF04	Trunk Fault	Out of service trunk detected via loop detect. Internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF05	Trunk Recovery	Out of service trunk detected via loop detected as out of service is now operational. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF06	Trunk Disconnect	Out of service trunk detected via seizure of trunk. External seizure test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF07	Trunk Connect	Out of service trunk recovered via seizure of trunk External seizure test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF08	SIO TxQ Over	SIO Tx Queue full error has occurred in the MCP. Alarm Data = SIO number (SIO:x)
MNF08	SIO TxQ Under	SIO Tx Queue under error has occurred in the MCP. Alarm Data = SIO number (SIO:x)
MNF70	E1 Out Of Srv	E1 Digital line status has been changed to out of service. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF11	E1 In Service	E1 Digital line has been restored to normal service. Alarm Data = Cabinet,Slot (Cx-Syy)
MNF12	SIO Out	IO port has lost DTR Alarm Data = SIO number (SIO:x)
MNF13	SIO In	IO port has regained DTR. Alarm Data = SIO 1 through 6
MNF14	TODC Error	Time of Day Clock in the MCP has erred.
MNF15	TSW Over Alarm	TSW has been requested to exceed the capacity of available time slots. Maximum 192 per cabinet. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF 16	PSU Alarm	Indicates there are over 56 ports in a cabinet with a single PSU and more power is required. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF 17	PSU Alarm Rec	A second PSU has been recognized when added after alarm condition of Alarm Data = Cabinet, Slot (Cx-Syy)
MNF 18	SLI Fault	An SLI card has been detected as out of service via an internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)

ALM CODE	ALARM	DEFINITION
MNF 19	SLI Recovery	An SLI card detected as out of service has been detected as recovered and is in service via internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF 20	PSUB Alarm	Indicates there are over 120 ports in a cabinet with two PSU. Alarm Data = Cabinet, Slot (Cx-Syy)
MNF 21	DSS Alarm	System capacity of 64 button DSS modules has been exceeded.
MNF 22	Phone Disconnect	Indicates the Keyset is disconnected. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF 23	Phone Connect	Indicates the Keyset is connected. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
MNF 24	NOT USED	FUTURE USE
MNF 25	NOT USED	FUTURE USE
MNF26	SIO RxQ Over	SIO Rx Queue full error has occurred in the MCP. Alarm Data = SIO number (SIO:x)
MNF26	SIO RxQ Under	SIO Rx Queue under error has occurred in the MCP. Alarm Data = SIO number (SIO:x)

MMC:852   SYSTEM ALARM ASSIGNMENTS

- Available in with LAN module only

DESCRIPTION

This MMC allows the assignment of system alarms to ring and display the alarms on stations that have the Alarm Key assigned. The System Alarm Key is programmed in Station Key Assignments (MMC 722). System Alarm key programming is tenant wide (tenant 1 and 2). Alarms not programmed to report to the System Alarm key will still be retained in the maintenance alarm buffer for Alarm Reporting (MMC 851). The alarm buffer will hold up to 100 alarms on a First In - First Out (FIFO) basis. Pressing the System Alarm key will silence the audible alarm until another alarm is generated by the system. Alarm conditions that have multiple causes i.e. E1 errors and synchronization loss will print all associated alarm information if an SIO port is programmed as an ALARM port. The specific fault alarm data can be displayed via MMC 851 System Alarm Reporting.

✳ System Alarm Reporting is only available with a LAN module installed on the MCP card.

NOTE Alarm Notification Off/On (0/1) determines if the alarm provides a visual and audible notification to the System Alarm key station(s).
Pressing the System Alarm key and the release key will silence the audible alarm only at the station that pressed the System Alarm key and the release key. See alarm displays table for assignments.

PROGRAM KEYS

UP & DOWN	Used to scroll through system alarms.
KEYPAD	Used to enter selections
SOFT KEYS	Enter/leave option
SPK	Used to store data and move to next MMC
TRSF	Enter/exit MMC

ACTION   DISPLAY

1. Press TRSF 852
   Display shows

   ```
   01:MJA01 ACT:OFF
   POR Restart
   ```

2. Enter desired Alarm Display number (eg. 61)
          OR
   Press the up and down keys to select desired option and press the right soft key and to advance the cursor.

   ```
   61:MNF01 ACT:OFF
   Card Out
   ```

3. To select if the alarm is active press 1 for YES and 0 for NO. An entry will advance the cursor to return to Step 2.

   ```
   61:MNF01 ACT:ON
   Card Out
   ```

4. Press UP or DOWN to select desired option
          OR
   Press TRSF to return to normal display OR press SPK to advance to next MMC

DEFAULT DATA: ALL OFF

RELATED ITEMS   MMC 501 SYSTEM TIMERS

MMC 722 STATION KEY ASSIGNMENT

MMC 723 SYSTEM WIDE KEY ASSIGNMENTS

MMC 851 SYSTEM ALARM REPORTING
MMC 853 MAINTENANCE BUSY

ALARM KEY DISPLAYS

Display Number/ Alm Code	LCD Display	Alarm Notification ON/OFF	Display Definition
01 MJA01	POR Restart	ON/OFF	MCP restart process has been executed via power on restart (POR).
02 MJA02	Soft Restart	ON/OFF	MCP restart process has been executed via button reset.
03 MJA03	Mem Reset	ON/OFF	The system RAM has been cleared via manual programming (PCMMC or KMMC) resulting in a system reset.
04 MJA04	MCP Reset	ON/OFF	The MCP has reset. Alarm data = Reason
05 MJA05	LCP Reset	ON/OFF	The SCP or LCP has reset Alarm data = Cabinet (1, 2 or 3)
06 MJA06	PCM Switching	ON/OFF	A fault has occurred in the Switching Control Alarm data = MCP BASE, ESM OPT:1, ESM OPT:2 or ESM OPT:3
08 MJB01	HDLC Com Error	ON/OFF	Communications to Local Control Processor lost or faulty.
09 MJB02	Memory Alarm 1	ON/OFF	A RAM diagnostic check error has occurred in the MCP.
10 MJB03	Memory Alarm 2	ON/OFF	A RAM diagnostic check error has occurred in the SCP.
11 MJB04	Memory Alarm 3	ON/OFF	A RAM diagnostic check error has occurred in the LCP 1.
12 MJB05	Memory Alarm 4	ON/OFF	A RAM diagnostic check error has occurred in the LCP 2.
13 MJB06	IPC MSGQ Over	ON/OFF	IPC TX queue full error has occurred in the MCP. Alarm data = IPC Queue type (MCP-LAN, MCP-SCP, MCP-LCP1, MCP-LCP2)
14 MJB07	Task MSGQ Over	ON/OFF	Task MSG queue full error has occurred in the MCP. Alarm data = Error Task Kind (CNFG, ERRH, NPER, MSGH, DIGH, SMART, CALL, PPER, SMDR, TMMC, IDLE)
16 MJC01	DTMF Fault	ON/OFF	An abnormal interrupt has occurred in the system DTMF resources. Alarm data = DTMF Receiver number (MCP BASE, MCP OPT:1, MCP OPT:2, MCP OPT:3, C#2 BASE , C#2 OPT:1, C#2 OPT:2, C#2 OPT:3, C#3 BASE, C#3 OPT:1, C#3 OPT:2, C#3 OPT:3)

Display Number/ Alm Code	LCD Display	Alarm Notification ON/OFF	Display Definition
17 MJC02	Tone Fault	ON/OFF	An abnormal interrupt has occurred in the system tone resources. IE busy, ringback, error, no more calls etc. Alarm data = TONE Receiver number (MCP BASE, MCP OPT:1, MCP OPT:2, MCP OPT:3, C#2 BASE , C#2 OPT:1, C#2 OPT:2, C#2 OPT:3, C#3 BASE, C#3 OPT:1, C#3 OPT:2, C#3 OPT:3)
25 MJC10	AA-DTMF Fault	ON/OFF	An abnormal fault reported in one of the systems AA card DTMF resources. Alarm data = Cabinet, Slot, Port (Cx–Syy-Pzz)
26 MJC11	AA-MFR Rec	ON/OFF	An abnormal fault reported in one of the systems AA card DTMF resources has recovered. Alarm data = Cabinet, Slot, Port (Cx–Syy-Pzz)
27 MJC12	E911 Restart	ON/OFF	The E911 card has restarted. Alarm data = Cabinet, Slot (Cx–Syy)
28 MJC13	E911 Block	ON/OFF	The E911 card has restarted because the system detect the card does not work correctly. Alarm data = Cabinet, Slot (Cx–Syy)
29 MJC14	VoIP Restart	ON/OFF	The ITM3 card has restarted. Alarm data = Cabinet, Slot (Cx–Syy)
30 MJC15	VoIP Block	ON/OFF	The ITM3 card has restarted because the system detect the card does not work corectly. Alarm data = Cabinet, Slot (Cx–Syy)
33 MJD01	Sync Failure	ON/OFF	Clocking on TEPRI cards has become asynchronous.
34 MJD02	Sync Recovery	ON/OFF	Clocking on TEPRI cards has become synchronous.
35 MJD03	Red Alarm	ON/OFF	Locally detected loss of PCM carrier on TEPRI card for more than 250 ms. Alarm Data = Cabinet, Slot (Cx-Syy)
36 MJD04	Red Alarm Rec	ON/OFF	PCM carrier detected locally on TEPRI cards. Alarm Data = Cabinet, Slot (Cx-Syy)
37 MJD05	Yellow Alarm	ON/OFF	Remotely detected failure transmitted in frame on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
38 MJD06	Yellow Alarm Rec	ON/OFF	Remotely detected failure restored transmitted on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
39 MJD07	Blue Alarm	ON/OFF	All one's being transmitted on facility on TEPRI card. Alarm Data = Cabinet, Slot (Cx-Syy)
40 MJD08	Blue Alarm Rec	ON/OFF	A blue alarm condition has been cleared. Alarm Data = Cabinet, Slot (Cx-Syy)
41 MJD09	Bit Error Alarm	ON/OFF	Alarm is activated when the when error rate exceeds 1x10-6 errors. Note: 1x10-6 is threshold for minor alarm, 1 x 10-3 is threshold for major alarm errors on E1,PRI or BRI.. Alarm Data = Cabinet, Slot (Cx-Syy)

Display Number/ Alm Code	LCD Display	Alarm Notification ON/OFF	Display Definition
42 MJD10	NTWRK Event	ON/OFF	An Implausible event has occurred on the PRI or BRI Network digital line. Protocols do not match or subscriber ID mismatch. Alarm Data = Cabinet, Slot (Cx-Syy)
43 MJD11	SPID Init Error	ON/OFF	The BRI received an error from the network Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
44 MJD12	SPID Init Rec	ON/OFF	The BRI has recovered from an error on the network Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
45 MJD13	LPBK Error	ON/OFF	Internal on demand loopback failed. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
46 MJD14	LPBK Recovery	ON/OFF	Internal on demand loopback test passed. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
47 MJD15	BRI DL Unavail	ON/OFF	A BRI data link is out of service. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
48 MJD16	BRI DL Recovery	ON/OFF	A BRI data link is back in service. Alarm Data = Cabinet, Slot, Channel (Cx-Syy-czz)
49 MJD17	RAM Error	ON/OFF	An error has occurred in the TEPRI or BRI card RAM. Alarm Data = Cabinet, Slot (Cx-Syy)
50 MJD18	E1 Restart	ON/OFF	The E1 card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)
51 MJD19	PRI Restart	ON/OFF	The PRI card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)
52 MJD20	BRI Restart	ON/OFF	The BRI card has restarted Alarm Data = Cabinet, Slot (Cx-Syy)
53 MJD21	PCM Loss	ON/OFF	Loss of PCM coding on a digital facility. Alarm Data = Cabinet, Slot (Cx-Syy)
54 MJD22	PCM Recovery	ON/OFF	Recovery of PCM coding on a digital facility. Alarm Data = Cabinet, Slot (Cx-Syy)
61 MNF01	Card Out	ON/OFF	A circuit card mounted in a universal slot has been removed from service or is not recognized by the system Alarm Data = Cabinet,Slot (Cx-Syy)
62 MNF02	Card In	ON/OFF	A circuit card mounted in a universal slot has been returned to service. Alarm Data = Cabinet, Slot (Cx-Syy)
63 MNF03	IPC Error	ON/OFF	Inter processor communication error has occurred. Alarm Data = Cabinet-Slot (Cx-Syy)
64 MNF04	Trunk Fault	ON/OFF	Out of service trunk detected via loop detect. Internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
65 MNF05	Trunk Recovery	ON/OFF	Out of service trunk detected via loop detected as out of service is now operational. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
66 MNF06	Trunk Disconnect	ON/OFF	Out of service trunk detected via seizure of trunk. External seizure test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
67 MNF07	Trunk Connect	ON/OFF	Out of service trunk recovered via seizure of trunk External seizure test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
68 MNF08	SIO TxQ Over	ON/OFF	SIO Tx Queue full error has occurred in the MCP. Alarm Data = SIO number (SIO:x)

Display Number/ Alm Code	LCD Display	Alarm Notification ON/OFF	Display Definition
69 MNF08	SIO TxQ Under	ON/OFF	SIO Tx Queue under error has occurred in the MCP. Alarm Data = SIO number (SIO:x)
70 MNF70	E1 Out Of Srv	ON/OFF	E1 Digital line status has been changed to out of service. Alarm Data = Cabinet, Slot (Cx-Syy)
71 MNF11	E1 In Service	ON/OFF	E1 Digital line has been restored to normal service. Alarm Data = Cabinet,Slot (Cx-Syy)
72 MNF12	SIO Out	ON/OFF	IO port has lost DTR Alarm Data = SIO number (SIO:x)
73 MNF13	SIO In	ON/OFF	IO port has regained DTR. Alarm Data = SIO 1 through 6
74 MNF14	TODC Error	ON/OFF	Time of Day Clock in the MCP has erred.
75 MNF15	TSW Over Alarm	ON/OFF	TSW has been requested to exceed the capacity of available time slots. Maximum 192 per cabinet. Alarm Data = Cabinet, Slot (Cx-Syy)
76 MNF 16	PSU Alarm	ON/OFF	Indicates there are over 56 ports in a cabinet with a single PSU and more power is required. Alarm Data = Cabinet, Slot (Cx-Syy)
77 MNF 17	PSU Alarm Rec	ON/OFF	A second PSU has been recognized when added after alarm condition of Alarm Data = Cabinet, Slot (Cx-Syy)
78 MNF 18	SLI Fault	ON/OFF	An SLI card has been detected as out of service via an internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
79 MNF 19	SLI Recovery	ON/OFF	An SLI card detected as out of service has been detected as recovered and is in service via internal CODEC test. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
80 MNF 20	PSUB Alarm	ON/OFF	Indicates there are over 120 ports in a cabinet with two PSU. Alarm Data = Cabinet, Slot (Cx-Syy)
81 MNF 21	DSS Alarm	ON/OFF	System capacity of 64 button DSS modules has been exceeded.
82 MNF 22	Phone Disconnect	ON/OFF	Indicates the Keyset is disconnected. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
83 MNF 23	Phone Connect	ON/OFF	Indicates the Keyset is connected. Alarm Data = Cabinet, Slot, Port (Cx-Syy-Pzz)
84 MNF 24	NOT USED	OFF	FUTURE USE
85 MNF 25	NOT USED	OFF	FUTURE USE
86 MNF26	SIO RxQ Over	ON/OFF	SIO Rx Queue full error has occurred in the MCP. Alarm Data = SIO number (SIO:x)

MMC:853   MAINTENANCE BUSY

DESCRIPTION

This MMC is used to place stations, trunks, and common resources equipment in a maintenance busy condition. This can be used to isolate suspected intermittent problem equipment. Stations placed in maintenance busy will behave like a station in DND when called. The calling stations display (if equipped) will show "MADE BUSY" when called. Stations receiving DID or E&M type calls will receive a DND/ No more calls tone. The station display will still function with station and date. When the busy station is accessed, it will function like a locked out station. Trunks made busy can not originate calls. Ring down type trunks will still ring the programmed destination. Common resource equipment such as DSP's, CID DSP's and miscellaneous equipment such as page ports, AA ports or voice mail card ports can also be placed in a maintenance busy state.

MAINTENANCE BUSY OPTIONS

0. TRK	=	Trunks	
1. STN	=	Stations	
2. PAGE	=	Page Ports	
3. AA	=	Auto Attendant card ports	
4. DTMFR	=	DTMF Receiver (4 / DSP)	
5. CID	=	CID Receiver (14 / DSP)	
6. R2MFC	=	R2MFC Receiver (8 / DSP)	
7. CONF	=	GRP #01-24	

NOTE — Selectable conditions   0=idle state
1=busy state

NOTE — In cases of DTMFR, CID or R2MFC DSP selection when DSP is not mounted display will show NONE. If mounted display will show IDLE by default.

PROGRAM KEYS

UP & DOWN	Scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor or select option
SPK	Used to advance to next MMC
TRSF	Exit

ACTION

DISPLAY

1. Press TRSF 853
   Display shows busy functions

```
MAINTENANCE BUSY
TRK  :NONE  →
```

2. Press UP or DOWN to select function and press RIGHT soft key
   to move cursor

```
MAINTENANCE BUSY
STN  :NONE  →
```

3. Enter station number
   OR

   Press UP or DOWN to select station and press RIGHT soft key to
   move cursor.

```
MAINTENANCE BUSY
STN  :201  →IDLE
```

4. Press 1 to make busy or 0 to make idle
   OR

   Press UP or DOWN to select condition and press RIGHT soft
   key enter and to move cursor

```
MAINTENANCE BUSY
STN  :201  →BUSY
```

5. Press UP or DOWN to select another area
   OR

```
MAINTENANCE BUSY
DTMFR:DSP  →
```

6. Press TRSF to exit Press SPK to advance to the next MMC

DEFAULT DATA: ALL IDLE

RELATED ITEMS: MMC 851 ALARM REPORTING
                  MMC 852 ALARM KEY ASSIGNMENTS

MMC:854   DIAGNOSTIC TIME

DESCRIPTION

Provides a means to set the Diagnostic Time. The system diagnostics tests include memory audits, internal loopback tests on digital trunks, DSP, AA DSP tests. Additional tests include CODEC tests on analog trunk and station cards and tone tests. If the diagnostics cannot complete the tests because of system traffic, the system will abort the test and retry during the next programmed diagnostic time. It is recommended to assign the diagnostic time during non-peak traffic periods.

✳ Diagnostics are only available with a LAN module installed on the MCP card.

DIAL PAD DAY SELECTION:

0= Sunday	2 = Tuesday	4 = Thursday
6 = Saturday	1= Monday	3 = Wednesday
5 = Friday		

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 854
   Display shows

   ```
   DIAGNOSTIC TIME
   SUN:  :
   ```

2. Press RIGHT soft key to move cursor

   ```
   DIAGNOSTIC TIME
   SUN:_ :
   ```

3. Enter military time hour via the dial pad.
   Cursor will advance to next entry.

   ```
   DIAGNOSTIC TIME
   SUN:23:_
   ```

4. Enter military time minutes via the dial pad.
   Cursor will advance to Step 1.

   ```
   DIAGNOSTIC TIME
   SUN:23:30
   ```

5. Press UP or DOWN key to make selection
   Press RIGHT soft key to make change and

   return to step 2.
            OR

   ```
   DIAGNOSTIC TIME
   WED:  :
   ```

6. Press TRSF to store and exit
            OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NO DIAGNOSTIC TIME SET

RELATED ITEMS: MMC 852 MAINTENANCE ALARMS
                  MMC 853 ALARM KEY ASSIGNMENTS

MMC:855   SYSTEM OPTIONS

DESCRIPTION

This MMC provides a means to review the common use hardware that is mounted in the system. System Options show miscellaneous hardware and daughterboards. This enables the technician to review the available hardware without having to dismantle or power down the system to confirm if the hardware is mounted. This is a READ ONLY MMC.

SYSTEM OPTIONS

[iDCS 500-L]

MCP D-BD 1	Shows the Daughter Board #1 of MCP
MCP D-BD 2	Shows the Daughter Board #2 of MCP
MCP D-BD 3	Shows the Daughter Board #3 of MCP
MCP SW	Shows the DIP S/W status of MCP
C1 POWER-B	Shows the second power exist of Cabinet #1
SCP D-BD 1	Shows the Daughter Board #1 of SCP
SCP D-BD 2	Shows the Daughter Board #2 of SCP
SCP D-BD 3	Shows the Daughter Board #3 of SCP
LCP1 ONLINE	Shows the connection status of LCP 1
C2 POWER-B	Shows the second power exist of Cabinet #2
LCP1 D-BD 1	Shows the Daughter Board #1 of LCP1
LCP1 D-BD 2	Shows the Daughter Board #2 of LCP1
LCP1 D-BD 3	Shows the Daughter Board #3 of LCP1
LCP2 ONLINE	Shows the connection status of LCP 2
C3 POWER-B	Shows the second power exist of Cabinet #2
LCP2 D-BD 1	Shows the Daughter Board #1 of LCP2
LCP2 D-BD 2	Shows the Daughter Board #2 of LCP2
LCP2 D-BD 3	Shows the Daughter Board #3 of LCP2
CxSy VPM	Shows the VPM board status of Voice Mail Card.
CxSy SW	Shows the DIP S/W status of TEPRI card.

[iDCS 500-M]

MCP D-BD 1	Shows the Daughter Board #1 of MCP
MCP D-BD 2	Shows the Daughter Board #2 of MCP
MCP D-BD 3	Shows the Daughter Board #3 of MCP
MCP SW	Shows the DIP S/W status of MCP
C1 POWER-B	Shows the second power exist of Cabinet #1
CxSy VPM	Shows the VPM board status of Voice Mail Card.
CxSy SW	Shows the DIP S/W status of TEPRI card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 855
   Display shows

   ```
   SYSTEM OPTIONS
   MCP D-BD 1 :ESM
   ```

2. Press UP or DOWN key to view options

   ```
   SYSTEM OPTIONS
   MCP D-BD 2 :IPM
   ```

3. Press UP or DOWN key to view options

   ```
   SYSTEM OPTIONS
   C1 POWER-B :YES
   ```

4. Press TRSF to store and exit
           OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:856   TECH PROGRAMMING LOGS

- Available in with LAN module only

DESCRIPTION

This MMC lists the date, time and entry location of the last eight times that technician programming was accessed. This will allow a technician to determine if there was unauthorised access to system programming and where this access occurred. The information stored in this log will consist of 2 elements, the date and time it occurred at and the access location.

✳ Tech. Programming Logs is only available with a LAN module installed on the MCP card.

There are 4 types of access location information as described below:

NNNN   This would be the extension number of a keyset that had accessed programming directly.

MODEM   This would indicate that programming was accessed by PCMMC via the integrated V90 modem attached to the IOM board of main cabinet.

LAN   This would indicate that programming was accessed by PCMMC via the LAN connection on the IOM board of main cabinet.

SIOx   This would indicate that programming was accessed by PCMMC via one of the SIO connections on the IOM board of the main cabinet where x is the number (1~4) of the SIO port that was used.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SOFT KEYS	Move cursor left and right
SPK	Used to store data and advance to next MMC
HOLD	Used to clear previous entry

ACTION

DISPLAY

1. Press TRSF 856
   Display shows

```
(1) 11/22 11:03→
201 :11/22 11:27
```

2. Enter index number (e.g., 3)
             OR
   Press UP or DOWN key to make selection
   Press RIGHT soft key to move cursor

```
(3) 11/22 12:30→
203 :11/22 13:30
```

3. Press TRSF to exit
             OR
   Press SPK to store and advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: MMC 200ENABLE CUSTOMER PROGRAMMING
                   MMC 800ENABLE TECHNICIAN PROGRAMMING
                   PCMMC

MMC:858   ASSIGN SYSTEM EMERGENCY ALARM

- Available in with LAN module only

DESCRIPTION

Assigns the alarm for alarm information to send Remote M&A PC via LAN card.

✳ This MMC is only available with a LAN module installed on the MCP card.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   DISPLAY

1. Press TRSF 858
    Display shows

```
01:MJA01 ACT:OFF
POR Restart
```

2. Enter the alarm entry number
            OR
    Press UP or DOWN key to select and press RIGHT soft key to
    move cursor

```
02:MJA02 ACT:OFF
Soft Restart
```

3. Enter YES or NO (1, 0) for alarming
            OR
    Press UP or DOWN key to select and press RIGHT soft key to
    store

```
02:MJA02 ACT:ON
Soft Restart
```

4. Press TRSF to exit
            OR
    Press SPK advance to next MMC

DEFAULT DATA: All OFF

RELATED ITEMS: MMC 851 ALARM REPORTING
                  MMC 852 ALARM ASSIGNMENT

MMC:859   HARDWARE VERSION DISPLAY

DESCRIPTION

This MMC is only used for system H/W EPLD version display. This is a READ ONLY MMC.

[iDCS 500-L]
00. MCP CARD
01. MCP B1
02. MCP B2
03. MCP B3
04. C1 M-BOARD
05. SCP CARD
06. SCP B1
07. SCP B2
08. SCP B3
09. C2 M-BOARD
10. LCP1 CARD
11. LCP1 B1
12. LCP1 B2
13. LCP1 B3
14. C3 M-BOARD
15. LCP2 CARD
16. LCP2 B1
17. LCP2 B2
18. LCP2 B3

[iDCS 500-M]
00. C1 M-BOARD
01. MCP CARD
02. MCP B1
03. MCP B2
04. MCP B3

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION

DISPLAY

1. Press TRSF 859
   Display shows

```
H/W EPLD VERSION
MCP CARD    :V01
```

2. Enter the option number
           OR
   Press UP or DOWN key to select and press RIGHT soft key to
   move cursor

```
H/W EPLD VERSION
MCP B3 :LAN :V05
```

3. Press TRSF to exit
           OR
   Press SPK advance to next MMC

DEFAULT DATA: NONE

RELATED ITEMS: NONE

MMC:860   UCD STATUS SERVICE

DESCRIPTION

This MMC is set to send the information of the UCD queue status or UCD Agent status to the SIO port real time. To use this information, a special PC application is needed.

> **NOTE** We just offer the information data and do not offer the PC Application.

PROGRAM KEYS

UP & DOWN	Used to scroll through options
KEYPAD	Used to enter selections
SPK	Used to store data and advance to next MMC

ACTION   ## DISPLAY

1. Press TRSF 860
   Display shows

   ```
   UCD VIEW SERVICE
   DISABLE
   ```

2. Enter the number (0 - 1)
            OR
   Press UP or DOWN key to select and press RIGHT soft key to move cursor

   ```
   UCD VIEW SERVICE
   DISABLE
   ```

3. Enter ENABLE (1) or DISABLE (0)
            OR
   Press UP or DOWN key to select and press RIGHT soft key to store

   ```
   UCD VIEW SERVICE
   DISABLE
   ```

4. Press TRSF to exit
            OR
   Press SPK advance to next MMC

DEFAULT DATA: DISABLE

RELATED ITEMS: NONE

Appendix
Blank Data Sheets

Appendix Blank Data Sheets

iDCS 500
DATABASE FORMS

CUSTOMER NAME: _____

ADDRESS: _____

_____

_____

_____

TELEPHONE NUMBER: _____

SYSTEM VERSION: _____

SLP: _____

LCP: _____

LAN: _____

DATABASE CONTAINS_____SHEETS

MMC 104 STATION NAME

STATION	NAME										

DEFAULT DATA: NO NAMES

11 CHARACTERS

MMC 105 — STATION SPEED DIAL

STATION	SPEED DIAL NUMBER
BIN 00	

See the bin numbers amount in MMC 606.

MMC 106   STATION SPEED DIAL NAME

STATION#	NAME
BIN 00	

MMC 107   KEY EXTENDER

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

32 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:

32 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:

DCS AND iDCS 64 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:
33:	34:	35:	36:
37:	38:	39:	40:
41:	42:	43:	44:
45:	46:	47:	48:
49:	50:	51:	52:
53:	54:	55:	56:
57:	58:	59:	60:
61:	62:	63:	64:

DCS AND iDCS 64 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:
33:	34:	35:	36:
37:	38:	39:	40:
41:	42:	43:	44:
45:	46:	47:	48:
49:	50:	51:	52:
53:	54:	55:	56:
57:	58:	59:	60:
61:	62:	63:	64:

iDCS 28 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:
11:	12:	13:	14:	15:
16:	17:	18:	19:	20:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 28 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:
11:	12:	13:	14:	15:
16:	17:	18:	19:	20:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

IDCS 18 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 18 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

MMC 119   CALLER ID/ANI DISPLAY

STATION NUMBER	NUMBER	NAME	NO CALLER ID

Default is number only.

MMC 201   CHANGE CUSTOMER PASSCODE

PASSCODE	

MMC 202   CHANGE FEATURE PASSCODE

RING PLANS	
DISA ALARM	
ALARM CLEAR	
AA RECORD	

MMC 203   ASSIGN UA DEVICE

UA DEVICE	DEVICE LOCATION
RING PAGE	
STATION	
COM BELL	
STATION GROUP	

MMC 204   COMMON BELL CONTROL

COMMON BELL	DEVICE NUMBER
INTERRUPTED	
CONTINUOUS	

MMC 205   ASSIGN LOUD BELL

LOUD BELL	DEVICE NUMBER	EXT NUMBER

MMC 206   BARGE-IN TYPE

EXT	BARGE	EXT	BARGE	EXT	BARGE

Barge in options are: NO BARGE IN = 0

WITH TONE = 1

WITHOUT TONE = 2

MMC 207   ASSIGN VM/AA PORT

EXT	VM/AA	EXT	VM/AA	EXT	VM/AA

MMC 208   ASSIGN RING TYPE

EXT	DATA		ICM RING	C.O. RING

MMC 209   ASSIGN ADD-ON/64 B MODULE

AOM/64B	MASTER	AOM/64B	MASTER	AOM/64B	MASTER

Enter AOM station number and MASTER station number, e.g., 288 is the AOM unit and 201 is the MASTER station unit assigned to the AOM.

MMC 210 CUSTOMER ON/OFF PER TENANT

TENANT 1		ON	OFF
	LCR FEATURE		
TENANT 2		ON	OFF
	LCR FEATURE		

MMC 211 DOOR RING ASSIGNMENT

DOOR	DEVICE	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6	NAME

MMC 300   CUSTOMER ON/OFF PER STATION

EXT	ACCESS DIAL	MIC	OFF-HOOK RING	SMDR PRINT	TGR ADV TONE	VM/AA FORWARD

TRKGRP	Dial access to trunk groups
MIC	Keyset microphone on/off
OFHR	Off-hook ring on/off
SMDR	SMDR print on/off
TRKADV	Trunk group advance tone on/off

See also MMCs 114, 710 and 724.

MMC 301   ASSIGN STATION COS

EXT	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6	EXT	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6	EXT	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6

See also MMCs 507 and 701. Enter value of 01–30 for class of service.

MMC 302   PICKUP GROUPS

PICKUP GROUP NO.			

PICKUP GROUP NO.			

PICKUP GROUP NO.			

See also MMCs 107, 722, 723 and 724. There is a maximum of 20 pickup groups in the idcs 500-M system and 99 for the idcs 500-L system. An unlimited number of members can belong to each group.

MMC 303   ASSIGN EXECUTIVE/SECRETARY

	SECRETARY
EXECUTIVE	

	SECRETARY
EXECUTIVE	

	SECRETARY
EXECUTIVE	

	SECRETARY
EXECUTIVE	

	SECRETARY
EXECUTIVE	

	SECRETARY
EXECUTIVE	

One executive can have a maximum of four secretaries. Only one secretary can be assigned to an executive. See also MMCs 107, 722 and 724.

MMC 304　　　　ASSIGN EXTENSION/TRUNK USE

EXT	TRK	DIAL	ANS	EXT	TRK	DIAL	ANS

Enter a value of YES or NO for each station and trunk. Default is set to YES for all stations and trunks.

MMC 305 ASSIGN FORCED CODE

EXTENSION	ACCOUNT	AUTHORIZED	REMARKS

See also MMCs 707, 708, 722, 723 and 724.

Maximum number of account codes: 500 (M Version)999 (L Version)

Maximum number of authorization codes: 250 (M Version)500 (L Version)

MMC 306   HOT LINE

STATION NUMBER	DESTINATION

See also MMC 502. This entry is for hot line calling in the system.

MMC 308   ASSIGN BACKGROUND MUSIC SOURCE

TRK	NONE	TONE	INTERNAL	EXTERNAL

Default is set to NONE.

MMC 309 ASSIGN STATION MUSIC ON HOLD

STN	NONE	TONE	INTERNAL	EXTERNAL

Default is set to NONE.

MMC 310 — LCR CLASS OF SERVICE

EXT	LCRCOS	EXT	LCRCOS	EXT	LCRCOS

See also MMC 712.

DEFAULT DATA: ALL STATIONS SET TO 1. OPTIONS ARE CLASSES 1–8.

MMC 311   ASSIGN SIM PARAMETER

SIM	TYPE	CALL MODE	ANS MODE	AUTO BAUD	DTR CHECK	ECHO	PROCL	SPEED	CHR LNGTH	PRTY	STOP BIT

MMC 312   ALLOW CALLER ID

EXT NUMBER	CID NOT ALLOW	CID ALLOW

MMC 400 CUSTOMER ON/OFF PER TRUNK

TRK NUM	1A2 EMUL	TRK FWD	TRK INC DND

See also MMCs 406, 722 and 723.

DEFAULT DATA: 1A2 EMULATE   OFF
                  TRK INC. DND   ON
                  TRK FORWARD   ON

MMC 401   C.O./PBX LINE

TRK NUM	PBX LINE	CO LINE	TRK NUM	PBX LINE	CO LINE

Enter CO LINE or PBX LINE for one or all trunks. Default is CO LINE.

MMC 402   TRUNK DIAL TYPE

TRK NUM	DTMF	ROTARY	TRK NUM	DTMF	ROTARY

Enter DTMF or DIAL PULSE for one or all trunks.

MMC 403   TRUNK TOLL CLASS

TRK	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6

Default is follow station (F-STN) for all ring plans. Options are F-STN and CLS-A-CLS-H.

MMC 404 TRUNK NAME

TRUNK	NAME										

DEFAULT DATA: NO NAMES

11 characters.

MMC 405   TRUNK NUMBER

TRUNK	NUMBER										

DEFAULT DATA: NO NUMBERS

                       11 characters.

MMC 406   TRUNK RING ASSIGNMENT

TRK NUM	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6

TRK NUM	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6

DEFAULT DATA: STATION GROUP 500
                      RING PLAN 01

MMC 408   ASSIGN TRUNK MUSIC ON HOLD SOURCE

TRK	NONE	TONE	INTERNAL	EXTERNAL

Default is set to TONE.

MMC 409   TRUNK STATUS READ

TRUNK	STATUS		
	00	=	PORT NUMBER
	01	=	TYPE
	02	=	1A2 EMULATION
	03	=	TRK FWD STATUS
	04	=	LINE (C.O./PBX)
	05	=	DIAL (DTMF/DP)
	06	=	TOLL TYPE RP 1
	07	=	TOLL TYPE RP 2
	08	=	TOLL TYPE RP 3
	09	=	TOLL TYPE RP 4
	10	=	TOLL TYPE RP 5
	11	=	TOLL TYPE RP 6
	12	=	RING PLAN 1
	13	=	RING PLAN 2
	14	=	RING PLAN 3
	15	=	RING PLAN 4
	16	=	RING PLAN 5
	17	=	RING PLAN 6
	18	=	MOH SOURCE
	19	=	DISA LINE

MMC 410 ASSIGN DISA TRUNK

TRUNK NUMBER	STATUS	
	NORMAL	
	RING PLAN 1	
	RING PLAN 2	
	RING PLAN 3	
	RING PLAN 4	
	RING PLAN 5	
	RING PLAN 6	
TRUNK NUMBER	**STATUS**	
	NORMAL	
	RING PLAN 1	
	RING PLAN 2	
	RING PLAN 3	
	RING PLAN 4	
	RING PLAN 5	
	RING PLAN 6	
TRUNK NUMBER	**STATUS**	
	NORMAL	
	RING PLAN 1	
	RING PLAN 2	
	RING PLAN 3	
	RING PLAN 4	
	RING PLAN 5	
	RING PLAN 6	

TRUNK NUMBER	STATUS	
	NORMAL	
	RING PLAN 1	
	RING PLAN 2	
	RING PLAN 3	
	RING PLAN 4	
	RING PLAN 5	
	RING PLAN 6	

Enter trunk ID and option desired. Default data is NORMAL.

MMC 411 ASSIGN T1 SIGNAL TYPE

TRUNK NUMBER	T1 SIGNAL TYPE	T1 LINE TYPE

Enter trunk number, e.g. 701, a signal value (immediate, delay, wink, loop, ground, PRI) and a type value (loop, ground, E & M, DID, unused). See also MMC 714.

MMC 412   ASSIGN TRUNK SIGNAL

TRUNK NUMBER	IMMD	WINK	DELAYED

Enter the trunk number, e.g. 701, and a signal value (immediate, delay, wink). See MMC 714 for translation.

MMC 414   ASSIGN CALLER ID TRUNKS

TRUNK NUMBER	CID/ANI TRK	NORMAL

Enter trunk number, e.g., 701, to allow the trunk to use CID/ANI information.

MMC 416　　　　ASSIGN E & M TRANSLATION

TRUNK NUMBER	USE TABLE	NOT USE

Enter trunk number, e.g., 701, to use translation table. Use MMC 714 for translation.

MMC 500   SYSTEM-WIDE COUNTERS

COUNTER	VALUE	NEW VALUE
ALARM REM. COUNTER	5	
AUTO RDL COUNTER	5	
DISA ICM COUNTER	99	
DISA LOCK COUNTER	3	
NEW CALL COUNTER	99	
UCDS VISUAL ALARM	0	
UCDS AUDIO ALARM	0	
UCD CS LEVEL 1	0	
UCD CS LEVEL 2	0	

MMC 501   SYSTEM TIMERS

TIMER NAME	VALUE	RANGE	NEW VALUE
AA INT DGT TIME	05 SEC	1–25 SEC	
AA NO ACT TIME	10 SEC	1–25 SEC	
ALARM TIMER	0100 MIN	0000-2500 MIN	
ALERT TONE TIMER	1000 MS	100–2500 MS	
ALM REM.INTERVAL	25 SEC	1–255 SEC	
ALM REM.RING OFF	10 SEC	1–25 SEC	
ATT.RECALL TIME	30 SEC	1–255 SEC	
AUTO REDIAL INT.	30 SEC	1–255 SEC	
AUTO REDIAL RLS.	45 SEC	1–255 SEC	
CALLBACK NO ANS	30 SEC	1–255 SEC	
CAMP ON RECALL	30 SEC	1–255 SEC	
CID DISPLAY TIME	05 SEC	1–25 SEC	
CID MSG RECEIVE	06 SEC	1–25 SEC	
CO CONFIRM TIME	003 MIN	1-255 MIN	
CO–CO DISCONNECT	20 MIN	0–255 MIN	
CONFIRM TONE TM	1000 MS	100–2500 MS	
DIAL PASS TIME	05 SEC	1–25 SEC	
DISA DISCONNECT	30 MIN	1–255 MIN	
DISA DTMF DETECT	000 SEC	0-255 SEC	
DISA LOCK OUT/TM	30 MIN	1–255 MIN	
DISA PASS CHECK	30 MIN	1–255 MIN	
DISPLAY DELAY TM	03 SEC	1–255 SEC	
DOOR LOCK RELES.	500 MS	100–2500 MS	
DOOR RING DETECT	50 MS	10–250 MS	

TIMER NAME	VALUE	RANGE	NEW VALUE
DOOR RING OFF TM	30 SEC	1–255 SEC	
E-HOLD RECALL TM	45 SEC	0–255 SEC	
EXT.FWD DELAY TM	10 SEC	1–255 SEC	
FIRST DIGIT TIME	10 SEC	1–255 SEC	
HOK FLASH MAX TM	800 MS	0010–2500MS	
HOK FLASH MIN TM	350 MS	0010–2500MS	
HOOK OFF TIME	200 MS	10–250 MS	
HOOK ON TIME	1000 MS	100–2500 MS	
INQUIRY RELEASE	30 SEC	1–255 SEC	
INTER DIGIT TIME	10 SEC	10–255 SEC	
ISDN INTER DIGIT TIMER	05 SEC	03-10 SEC	
KMMC LOCK OUT TM	30 SEC	10–255 SEC	
LCR ADVANCE TIME	05 SEC	1–255 SEC	
LCR INTER DIGIT	05 SEC	1–255 SEC	
MS LED ON TIME	10 SEC	1-10 SEC	
OFF HOK RING INT	15 SEC	1–255 SEC	
OFF HOOK SELECT	05 SEC	000–255 SEC	
OHVA ANSWER TIME	10 SEC	0–255 SEC	
PAGE TIME OUT	20 SEC	1–255 SEC	
PAGE TONE TIME	500 SEC	100–2500	
PARK RCALL TIME	45 SEC	0–255 SEC	
PC-MMC LOCK OUT	5 MIN	5–60 MIN	
PERI UCD REPORT	05 SEC	00-99 SEC	
POWER DOWN TIME	200 MS	100–9000 MS	
RECALL DISCONECT	45 MIN	1–255 SEC	

TIMER NAME	VALUE	RANGE	NEW VALUE
RECALL WAIT TIME	15 SEC	1–255 SEC	
SMDR START/DP	30 SEC	1–255 SEC	
SMDR START/DTMF	15 SEC	1–255 SEC	
SYS HOLD RECALL	45 SEC	0–255 SEC	
TRANSFER RECALL	15 SEC	0–255 SEC	
UCDS AUDIO ALARM	0 SEC	0–255 SEC	
UCDS VISUAL ALAM	0 SEC	0–255 SEC	
CADENCE CARD TONE INT TIME	000 SEC	030-255 SEC	

MMC 503 TRUNK-WIDE TIMER

TRUNK	TIMER	VALUE
	ANS.BAK TM	
	CLEARING	
	CO SUPV TM	
	DTMF DUR	
	F-DGT DELY	
	FLASH TIME	
	NO RING TM	
	PAUSE TIME	
	RNG DET TM	
	WINK TIME	
	MF/DP INT	
	MFR DLY TIME	

TRUNK	TIMER	VALUE
	ANS.BAK TM	
	CLEARING	
	CO SUPV TM	
	DTMF DUR	
	F-DGT DELY	
	FLASH TIME	
	NO RING TM	
	PAUSE TIME	
	RNG DET TM	
	WINK TIME	
	MF/DP INT	
	MFR DLY TIME	

MMC 504   PULSE MAKE/BREAK RATIO

MAKE/BREAK RATIO	
PULSE PER SECOND	

System-wide trunk timer.

MMC 506   TONE CADENCE

TONE	ON	OFF	ON	OFF
BUSY TONE				
CONFM/BARGE				
DIAL TONE				
DND/NO MORE				
ERROR TONE				
HOLD/CAMPON				
MSGWAT TONE				
RGBBACK TONE				
RING TONE				
TRSFER TONE				
DID RGBACK				

See MMC 506 for proper timers.

MMC 600   ASSIGN OPERATOR GROUP

RING MODE	
OVERFLOW	
GRP TRSF	
NEXT PORT	

MEMBERS (MAX 32)			

MMC 601 ASSIGN STATION GROUP

RING MODE	
OVERFLOW	
GRP TRSF	
WRAP-UP	
NEXT PORT	

MEMBERS (MAX 48)			

MMC 602   STATION GROUP NAME

GROUP	NAME

MMC 603   ASSIGN TRUNK GROUP

TRK GROUP	MODE				
MEMBER(S)					

TRK GROUP	MODE				
MEMBER(S)					

Enter valid trunk group number e.g., 9, 801–849. Enter mode type: SEQUENTIAL or DISTRIBUTE. Enter members, e.g., 701.

MMC 604   ASSIGN STATION TO PAGE ZONE

INDEX	STATION	1	2	3	4	Θ

Each page zone can have up to 80 members on a iDCS 500-M system and 99 for a iDCS 500-L system. A keyset may be assigned to more than one zone.

MMC 605   ASSIGN EXTERNAL PAGE ZONE

MEMBER	DN	5	6	7	8

Enter MEMBER 1–20, DN, e.g., 362, and 1 for the zone.

MMC 606   ASSIGN SPEED BLOCK

STATION NUMBER	BIN

MMC 607   UCD OPTIONS

GROUP NO.	
MESSAGE 01	
MESSAGE 02	
EXIT CODE	
RETRY COUNT	
FINAL DEST	
RING NEXT	
UCD RECALL	
MUSIC ON HOLD	
WRAP UP	
AUTO LOG OUT	
ALLOUT→FINAL	

GROUP NO.	
MESSAGE 01	
MESSAGE 02	
EXIT CODE	
RETRY COUNT	
FINAL DEST	
RING NEXT	
UCD RECALL	
MUSIC ON HOLD	
WRAP UP	
AUTO LOG OUT	
ALLOUT→FINAL	

GROUP NO.	
MESSAGE 01	
MESSAGE 02	
EXIT CODE	
RETRY COUNT	
FINAL DEST	
RING NEXT	
UCD RECALL	
MUSIC ON HOLD	
WRAP UP	
AUTO LOG OUT	
ALLOUT→FINAL	

GROUP NO.	
MESSAGE 01	
MESSAGE 02	
EXIT CODE	
RETRY COUNT	
FINAL DEST	
RING NEXT	
UCD RECALL	
MUSIC ON HOLD	
WRAP UP	
AUTO LOG OUT	
ALLOUT→FINAL	

MMC 701-L   ASSIGN COS CONTENTS

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		00	AA CALER		26	HOLD	
		03	AUTO RDL		27	HOTLINE	
		04	CALLBACK		28	INTERCOM	
		05	CID ABND		29	MESSAGE	
		06	CID INQR		30	MM PAGE	
		07	CID INVT		31	NEW CALL	
		08	CONFER		32	OHVAED	
		09	DALM CLR		33	OHVAING	
		10	DIRECT		34	ONEA2	
		11	DISA		35	OPERATOR	
		12	DND		36	OUT TRSF	
		13	DND FWRD		37	OVERRIDE	
		14	DND OVRD		38	PAGE 0	
		15	DOOR		39	PAGE 1	
		16	DSS		40	PAGE 2	
		17	DTS		41	PAGE 3	
		18	NOT USED		42	PAGE 4	
		19	EXT FWD		43	PAGE 5	
		20	FEATURE		44	PAGE 6	
		21	FLASH		45	PAGE 7	
		22	FOLOW-ME		46	PAGE 8	
		23	FORWARD		47	PAGE 9	
		24	NOT USED		48	PAGE Θ	
		25	GRP I/O		49	NOT USED	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		50	PICKUP		76	STNGRP 13	
		51	PRB		77	STNGRP 14	
		52	REM. HOLD		78	STNGRP 15	
		53	RNG PLAN		79	STNGRP 16	
		54	SECURE		80	STNGRP 17	
		55	SET RLOC		81	STNGRP 18	
		56	SSPD TOL		82	STNGRP 19	
		57	STN LOCK		83	STNGRP 20	
		58	SYS SPD		84	STNGRP 21	
		59	NOT USED		85	STNGRP 22	
		60	VMCO CNF		86	STNGRP 23	
		61	VM AREC		87	STNGRP 24	
		62	VM AME		88	STNGRP 25	
		63	VM REC		89	STNGRP 26	
		64	STNGRP 01		90	STNGRP 27	
		65	STNGRP 02		91	STNGRP 28	
		66	STNGRP 03		92	STNGRP 29	
		67	STNGRP 04		93	STNGRP 30	
		68	STNGRP 05		94	STNGRP 31	
		69	STNGRP 06		95	STNGRP 32	
		70	STNGRP 07		96	STNGRP 33	
		71	STNGRP 08		97	STNGRP 34	
		72	STNGRP 09		98	STNGRP 35	
		73	STNGRP 10		99	STNGRP 36	
		74	STNGRP 11		100	STNGRP 37	
		75	STNGRP 12		101	STNGRP 38	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		102	STNGRP 39		128	TRKGRP15	
		103	STNGRP 40		129	TRKGRP16	
		104	STNGRP 41		130	TRKGRP17	
		105	STNGRP 42		131	TRKGRP18	
		106	STNGRP 43		132	TRKGRP19	
		107	STNGRP 44		133	TRKGRP20	
		108	STNGRP 45		134	TRKGRP21	
		109	STNGRP 46		135	TRKGRP22	
		110	STNGRP 47		136	TRKGRP23	
		111	STNGRP 48		137	TRKGRP24	
		112	STNGRP 49		138	TRKGRP25	
		113	STNGRP 50		139	TRKGRP26	
		114	TRKGRP01		140	TRKGRP27	
		115	TRKGRP02		141	TRKGRP28	
		116	TRKGRP03		142	TRKGRP29	
		117	TRKGRP04		143	TRKGRP30	
		118	TRKGRP05		144	TRKGRP31	
		119	TRKGRP06		145	TRKGRP32	
		120	TRKGRP07		146	TRKGRP33	
		121	TRKGRP08		147	TRKGRP34	
		122	TRKGRP09		148	TRKGRP35	
		123	TRKGRP10		149	TRKGRP36	
		124	TRKGRP11		150	TRKGRP37	
		125	TRKGRP12		151	TRKGRP38	
		126	TRKGRP13		152	TRKGRP39	
		127	TRKGRP14		153	TRKGRP40	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		154	TRKGRP41		167	VMSSTN04	
		155	TRKGRP42		168	VMSSTN05	
		156	TRKGRP43		169	VMSSTN06	
		157	TRKGRP44		170	VMSSTN07	
		158	TRKGRP45		171	VMSSTN08	
		159	TRKGRP46		172	VMSSTN09	
		160	TRKGRP47		173	VMSSTN10	
		161	TRKGRP48		174	VMSSTN11	
		162	TRKGRP49		175	VMSSTN12	
		163	TRKGRP50		176	VMSSTN13	
		164	VMSSTN01		177	VMSSTN14	
		165	VMSSTN02		178	VMSSTN15	
		166	VMSSTN03		179	VMSSTN16	

MMC 701-M   ASSIGN COS CONTENTS

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION		ITEM	FEATURE	OPTION
		00	AA CALER			24	HOLD	
		01	AUTO RDL			25	HOTLINE	
		02	CALLBACK			26	INTERCOM	
		03	CID ABND			27	MESSAGE	
		04	CID INQR			28	MM PAGE	
		05	CID INVT			29	NEW CALL	
		06	CONFER			30	OHVAED	
		07	DALM CLR			31	OHVAING	
		08	DIRECT			32	ONEA2	
		09	DISA			33	OPERATOR	
		10	DND			34	OUT TRSF	
		11	DND FWRD			35	OVERRIDE	
		12	DND OVRD			36	PAGE 0	
		13	DOOR			37	PAGE 1	
		14	DSS			38	PAGE 2	
		15	DTS			39	PAGE 3	
		16	NOT USED			40	PAGE 4	
		17	EXT FWD			41	PAGE 5	
		18	FEATURE			42	PAGE 6	
		19	FLASH			43	PAGE 7	
		20	FOLOW-ME			44	PAGE 8	
		21	FORWARD			45	PAGE 9	
		22	NOT USED			46	PAGE Θ	
		23	GRP I/O			47	NOT USED	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		48	PICKUP		74	STNGRP 13	
		49	PRB		75	STNGRP 14	
		50	REM. HOLD		76	STNGRP 15	
		51	RNG PLAN		77	STNGRP 16	
		52	SECURE		78	STNGRP 17	
		53	SET RLOC		79	STNGRP 18	
		54	SSPD TOL		80	STNGRP 19	
		55	STN LOCK		81	STNGRP 20	
		56	SYS SPD		82	STNGRP 21	
		57	NOT USED		83	STNGRP 22	
		58	VMCO CNF		84	STNGRP 23	
		59	VM AREC		85	STNGRP 24	
		60	VM AME		86	STNGRP 25	
		61	VM REC		87	STNGRP 26	
		62	STNGRP 01		88	STNGRP 27	
		63	STNGRP 02		89	STNGRP 28	
		64	STNGRP 03		90	STNGRP 29	
		65	STNGRP 04		91	STNGRP 30	
		66	STNGRP 05		92	STNGRP 31	
		67	STNGRP 06		93	STNGRP 32	
		68	STNGRP 07		94	STNGRP 33	
		69	STNGRP 08		95	STNGRP 34	
		70	STNGRP 09		96	STNGRP 35	
		71	STNGRP 10		97	STNGRP 36	
		72	STNGRP 11		98	STNGRP 37	
		73	STNGRP 12		99	STNGRP 38	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		100	STNGRP 39		126	TRKGRP15	
		101	STNGRP 40		127	TRKGRP16	
		102	STNGRP 41		128	TRKGRP17	
		103	STNGRP 42		129	TRKGRP18	
		104	STNGRP 43		130	TRKGRP19	
		105	STNGRP 44		131	TRKGRP20	
		106	STNGRP 45		132	TRKGRP21	
		107	STNGRP 46		133	TRKGRP22	
		108	STNGRP 47		134	TRKGRP23	
		109	STNGRP 48		135	TRKGRP24	
		110	STNGRP 49		136	TRKGRP25	
		111	STNGRP 50		137	TRKGRP26	
		112	TRKGRP01		138	TRKGRP27	
		113	TRKGRP02		139	TRKGRP28	
		114	TRKGRP03		140	TRKGRP29	
		115	TRKGRP04		141	TRKGRP30	
		116	TRKGRP05		142	TRKGRP31	
		117	TRKGRP06		143	TRKGRP32	
		118	TRKGRP07		144	TRKGRP33	
		119	TRKGRP08		145	TRKGRP34	
		120	TRKGRP09		146	TRKGRP35	
		121	TRKGRP10		147	TRKGRP36	
		122	TRKGRP11		148	TRKGRP37	
		123	TRKGRP12		149	TRKGRP38	
		124	TRKGRP13		150	TRKGRP39	
		125	TRKGRP14		151	TRKGRP40	

COS #	TOLL LEVEL	ITEM	FEATURE	OPTION	ITEM	FEATURE	OPTION
		152	TRKGRP41		165	VMSSTN04	
		153	TRKGRP42		166	VMSSTN05	
		154	TRKGRP43		167	VMSSTN06	
		155	TRKGRP44		168	VMSSTN07	
		156	TRKGRP45		169	VMSSTN08	
		157	TRKGRP46		170	VMSSTN09	
		158	TRKGRP47		171	VMSSTN10	
		159	TRKGRP48		172	VMSSTN11	
		160	TRKGRP49		173	VMSSTN12	
		161	TRKGRP50		174	VMSSTN13	
		162	VMSSTN01		175	VMSSTN14	
		163	VMSSTN02		176	VMSSTN15	
		164	VMSSTN03		177	VMSSTN16	

MMC 702   TOLL DENY TABLE

INDEX	EXT	COS B	COS C	COS D	COS E	COS F	COS G

Maximum number of deny indexes is 250 for a iDCS 500-M system and 500 entries for a iDCS 500-L system. See also MMC 704.

MMC 703   TOLL ALLOWANCE TABLE

INDEX	EXT	COS B	COS C	COS D	COS E	COS F	COS G

Maximum number of allow indexes is 250 for a idcs 500-M system and 500 for a idcs 500-L system. See also MMC 704.

MMC 704   ASSIGN WILD CHARACTER

DIGITS TO BE ALLOWED OR DENIED												
TABLE	0	1	2	3	4	5	6	7	8	9	Θ	#
X												
TABLE	0	1	2	3	4	5	6	7	8	9	Θ	#
Y												
TABLE	0	1	2	3	4	5	6	7	8	9	Θ	#
Z												

See MMCs 702 and 703. Place a (1) in each box for the desired digit.

MMC 705   ASSIGN SYSTEM SPEED DIAL

BIN	SPEED DIAL NUMBER

MMC 706   SYSTEM SPEED DIAL BY NAME

BIN	NAME

MMC 706   SYSTEM SPEED DIAL BY NAME

MMC 707   AUTHORIZATION CODE

INDEX	CODE	COS	INDEX	CODE	COS

Enter authorization codes (four digits maximum in the M version and 4 to 10 digits in the L version)—There are 250 available entries for a iDCS 500-M system and 500 available entries for a iDCS 500-L system.

MMC 708 ACCOUNT CODE

INDEX	ACCOUNT CODE	INDEX	ACCOUNT CODE

Enter account codes (maximum four digits).

There are 500 available entries for a iDCS 500-M system and 999 available entries for a iDCS 500-L system.

MMC 710 LCR DIGIT TABLE

INDEX	LCR DIGIT STRING	LENGTH	ROUTE

There is a maximum of 1,000 entries on a idcs 500-M system and 2,000 entries for a iDCS 500-L system with a digit string length of 10 numerical digits.

MMC 711   LCR TIME TABLE

	TIME CHANGE BANDS							
	A		B		C		D	
	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT	HHMM	LCRT
DAY								
SUN								
MON								
TUE								
WED								
THU								
FRI								
SAT								

Day reflects the day of the week for time change for LCR route selection. HHMM reflects at what time selection will occur for LCR route change. Hours are entered in 24 hour format, e.g., 1:00 P.M. = 13:00 (two digits required). Minutes are entered in normal format (two digits required). LCRT reflects the entry in MMC 712 regarding what time element will be used. Entries are 1-4.

MMC 712   LCR ROUTE TABLE

LCR ROUTE	TIME CHANGE	LCRCOS	TRK GROUP	MOD DIGITS

LCR ROUTE reflects 1–16 (M version) or 1–32 (L version) available routes assigned in MMC 710. TIME CHANGE reflects time entries (LCRT 1–4) in MMC 711. LCRCOS reflects entries in MMC 310. TRKGRP reflects entries in MMC 603. MD reflects the LCR MODIFY DIGITS TABLE entries in MMC 713.

MMC 713   LCR MODIFY DIGIT TABLE

INDEX	NO. OF DELETE DIGITS (15)	NO. OF INSERT DIGITS (14)	NO. OF APPEND DIGITS (14)

There are 100 modify digit entries available in the idcs 500-M system and 200 modify digits entries available in a idcs 500-L system. The number of delete digits is the amount of digits to be removed from the dial plan (maximum 15). The number of insert digits is the amount of digits to be added to the dial plan (maximum 14). The number of append digits, is the amount of digits added at the end of the dial plan (maximum 14).

MMC 714   DID NUMBER AND NAME TRANSLATION

INDEX	DIGITS RECEIVED	RING PLAN 1	RING PLAN 2	RING PLAN 3	RING PLAN 4	RING PLAN 5	RING PLAN 6	CALL WAITING	DELETE	NAME

Enter index (three digits, e.g., 005). Enter C.O. DIGITS RECEIVED from operating company, e.g., 5071. Enter YES or NO for call waiting. Enter station number or station group for day destination. Enter station number or station group for night destination. Enter name for DID trunk.

MMC 715   PROGRAMMED STATION MESSAGE

INDEX	MESSAGE
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	

INDEX	MESSAGE
26.	
27.	
28.	
29.	
30.	

DEFAULT DATA: TEN PROGRAMMED MESSAGES AS DETAILED BELOW

01.   GIVE ME THE CALL

02.   TAKE A MESSAGE

03.   ASK THEM TO HOLD

04.   SEND TO MY SECY

05.   TRSF TO MY SECY

06.   LEAVE A MESSAGE

07.   PAGE ME

08.   OUT OF TOWN

09.   IN A MEETING

10.   I WILL CALL BACK

MESSAGES 11–25 ARE 16 CHARACTER BLANK MESSAGES

26.   RETURN AT

27.   RETURN ON

MESSAGES 28-30 ARE 9 CHARACTER BLANK MESSAGES

NOTE

1. Messages 01-25 are shared for station to station text messaging, and station programming messages.

2. Text Messageing is a feature only available on a 500si-L system.

3. Messages 21-30 are only available on a 500si-L system.

MMC 722 and 723   KEY PROGRAMMING

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 24B OR STD 24B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:
13:	14:	15:	16:	17:	18:
19:	20:	21:	22:	23:	24:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

LCD 12B OR BASIC 12B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:	08:	09:	10:	11:	12:

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

7B KEYSET					
EXT NO.					
01:	02:	03:	04:	05:	06:
07:					

32 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:

32 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:

DCS AND iDCS 64 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:
33:	34:	35:	36:
37:	38:	39:	40:
41:	42:	43:	44:
45:	46:	47:	48:
49:	50:	51:	52:
53:	54:	55:	56:
57:	58:	59:	60:
61:	62:	63:	64:

DCS AND iDCS 64 BUTTON ADD-ON MODULE			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:
09:	10:	11:	12:
13:	14:	15:	16:
17:	18:	19:	20:
21:	22:	23:	21:
25:	26:	27:	28:
29:	30:	31:	32:
33:	34:	35:	36:
37:	38:	39:	40:
41:	42:	43:	44:
45:	46:	47:	48:
49:	50:	51:	52:
53:	54:	55:	56:
57:	58:	59:	60:
61:	62:	63:	64:

iDCS 28 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:
11:	12:	13:	14:	15:
16:	17:	18:	19:	20:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 28 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:
11:	12:	13:	14:	15:
16:	17:	18:	19:	20:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 18 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

IDCS 18 BUTTON KEYSET				
EXT NO.				
01:	02:	03:	04:	05:
06:	07:	08:	09:	10:

21:	25:
22:	26:
23:	27:
24:	28:

IDCS 14 BUTTON
31:
32:
33:
34:
35:
36:
37:
38:
39:
40:
41:
42:
43:
44:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

iDCS 8 BUTTON KEYSET			
EXT NO.			
01:	02:	03:	04:
05:	06:	07:	08:

MMC 724   DIAL NUMBERING PLAN

FEATURE	DEFAULT	NEW VALUE
ABAND	64	
ABS	NONE	
ACCT	47	
ALMCLR	57	
AUTH	Θ	
BARGE	NONE	
BLOCK	NONE	
BOSS	NONE	
CAMP	45	
CANMG	42	
CBK	44	
CONF	46	
CR	NONE	
DICT	NONE	
DIR	NONE	
DIRPK	65	
DISALM	58	
DLOCK	13	
DND	40	
DNDOVR	NONE	
FAUTO	14	
FLASH	49	
FWD	60	
GRPK	66	
HDSET	NONE	

FEATURE	DEFAULT	NEW VALUE
HLDPK	12	
HOLD	11	
IG	53	
LCR	NONE	
LISTN	NONE	
LNR	19	
MMPA	56	
MMPG	54	
MSG	43	
MYGRPK	NONE	
NEW	NONE	
NIGHT	NONE	
OHVA	NONE	
OPER	O	
PAGE	55	
PAGPK	10	
PARK	NONE	
PAUSE	NONE	
PMSG	48	
REJECT	NONE	
RTO	NONE	
SELFID	NONE	
SETMG	41	
SLTMMC	15	
SNR	17	
SPEED	16	
UA	67	

FEATURE	DEFAULT	NEW VALUE
VDIAL	681	
VMADM	NONE	
VMAME	NONE	
VMMEMO	#	
VMMSG	NONE	
VMSCMT	NONE	
VMSMSG	NONE	
VMSOUT	NONE	
VMSREC	NONE	
VMSVAC	NONE	
VREC	682	
WCOS	59	

NOTE 35XX is dedicated to the Dial by Voice card. Avoid using digits 35.

MMC 725   SMDR OPTIONS

OPTIONS	DEFLT	NEW
PAGE HEADER	YES	
LINE PER PAGE	60	
INCOMING CALL	NO	
OUTGOING CALL	YES	
AUTHORIZE CODE	NO	
SMDR START TIME	YES	
IN/OUT GROUP	NO	
INTERCOM CALL	NO	
WAKE-UP CALL	YES	
DIRECTORY NAME	NONE	
CALLER ID DATA	NO	
ABANDON CALL	NO	
NUMBER OF DIAL MASK	00	
DID NUM/NAME	NO	
DND CALL	NO	

MMC 726   VM/AA OPTIONS

OPTIONS	DFLT	NEW
EXT FOR DN1	YES	
TRK FOR DN1	YES	
EXT FOR DN2	NO	
TRK FOR DN2	NO	
SEPARATOR	NO	
DISCONNECT SIGNAL	C	
CALLER ID NUMBER	NO	
CALL TYPE ID	DFLT	NEW
DIRECT CALL	1	
ALL FWD CALL	2	
BSY FWD CALL	3	
NOA FWD CALL	4	
RECALL	5	
DIR TRK CALL	6	
OVERFLOW	7	
DID CALL	8	
MESSAGE CALL	9	
CALL PROGRESS TONE	DFLT	NEW
DIAL TONE	BA	
BUSY TONE	4	
RINGBACK	5	
DND/NO MORE	6	
HANDSET ANSWER	3	
SPEAKER ANSWER	2	

MMC 728   CALLER ID/ANI TRANSLATION TABLE

INDX	DIGITS	NAME

NOTE Only applies when Deluxe Caller ID is not available.

MMC 732   AUTO ATTENDANT TRANS TABLE

TRANS TABLE #	
DIGITS	DEST

TRANS TABLE #	
DIGITS	DEST

TRANS TABLE #	
DIGITS	DEST

TRANS TABLE #	
DIGITS	DEST

TRANS TABLE #	
DIGITS	DEST

TRANS TABLE #	
DIGITS	DEST

MMC 733   AUTO ATTENDANT PLAN PROGRAMMING

AA PLAN			AA PLAN			AA PLAN	
DAY MSG			DAY MSG			DAY MSG	
NIGHT MSG			NIGHT MSG			NIGHT MSG	
ALTER MSG			ALTER MSG			ALTER MSG	
INVALID MSG			INVALID MSG			INVALID MSG	
NO ANS MSG			NO ANS MSG			NO ANS MSG	
TRANSFER MSG			TRANSFER MSG			TRANSFER MSG	
BUSY MSG			BUSY MSG			BUSY MSG	
NO STN MSG			NO STN MSG			NO STN MSG	
NO ACTION MSG			NO ACTION MSG			NO ACTION MSG	
CAMP-ON			CAMP-ON			CAMP-ON	
ANS DELAY			ANS DELAY			ANS DELAY	
RETRY COUNT			RETRY COUNT			RETRY COUNT	
TRANS TABLE			TRANS TABLE			TRANS TABLE	
BUSY DEST			BUSY DEST			BUSY DEST	
NO ANS DEST			NO ANS DEST			NO ANS DEST	
NO ACTION			NO ACTION			NO ACTION	
INVALID DEST			INVALID DEST			INVALID DEST	

MMC 734　　AUTO ATTENDANT MESSAGE MATCH

MESSAGE	RECORDING

MMC 735   AUTO ATTENDANT USE TABLE

PORT	PLAN	PORT	PLAN	PORT	PLAN	PORT	PLAN

MMC 736   SET AUTO ATTENDANT MUSIC ON HOLD

PORT	MESSAGE

MMC 802   CUSTOMER ACCESS MMC NUMBER

MMC	DEFAULT		MMC	OPTION
100	YES			
101	YES			
103	YES			
104	YES			
105	YES			
106	YES			
107	YES			
108	YES			
109	YES			
110	YES			
111	YES			
112	YES			
113	YES			
114	YES			
115	YES			
116	YES			
117	YES			
118	YES			
200	YES			
201	YES			
202	YES			
404	YES			
502	YES			
505	YES			
507	YES			

MMC	DEFAULT
602	YES
705	YES
706	YES
708	YES
715	YES

MMC	OPTION

MMC 803 ASSIGN TENANT GROUP

CABINET	SLOT	PORT	TENANT

Enter cabinet 1–2, slot 1–10, port 1–24, tenant 1–2, e.g., C=1, S=4, P=8 and T=2.

MMC 804   SYSTEM I/O PARAMETER

PORT 1	PARAMETERS	PORT 2	PARAMETERS
SERVICE		SERVICE	
SPEED		SPEED	
CHAR LENGTH		CHAR LENGTH	
PARITY		PARITY	
STOP BIT		STOP BIT	
RETRY COUNT		RETRY COUNT	
WAIT TIME		WAIT TIME	
SIM PAIR		SIM PAIR	

DEFAULT DATA: SERVICE   PORT 1   PCMMC
                                  PORT 2   SMDR
                                  PORTS 3-4   NOT USED
                 BAUD RATE   9600 BPS
                 CHAR LENGTH   8 BITS
                 PARITY   NONE
                 RETRY COUNT   03
                 STOP BIT   1 BIT
                 WAIT TIME   03000 MSEC
                 DSR CHK   OFF

MMC 808   T1 PARAMETERS

B8ZS		AMI	