

# Remote Enhanced Active Control for Hospitality (REACH Server) USER Manual

Samsung REACH SERVER |



# **USER'S MANUAL**

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#### 1. GENERAL INFORMATION

#### 1.1 **System Overview**

The 'Remote Enhanced Active Control for Hospitality (REACH Server)' application is a Remote Control Update system for the better and cost effective service to Hospitality industries. This will allow user/operator to configure the guest TV with RF distributing system. Application will help user to set and configure the guest room TV Set parameter. The created setting file will be used by SRCUS for configuration of guest TV.

Application is intended to create or modify clone files for user and to update guest TV with these clone files by transmitting them with RF. Application provides a user interface similar in appearance to TV's parameter settings where user can update factory menu settings and can modify or tune channels to update guest TVs.

To effectively complete and support the requirements of the "Hospitality" Industry, a management system is needed that will allow the operator to have control of the TV sets in the guest room without requiring a potential disruptive or costly visit to each room

- Channel Configuration Made Easy All from the Head End FMA System.
- Will configure and deliver the channel line-up and SW upgrade to the guest room terminals via the hotel's coaxial distribution.

This application is an S/W utility to configure user configuration parameter defined below:

- Hotel Factory Menu (Standalone Menu/Interactive Menu)
- \_ Channel map

It also supports generation of TS stream embedding clone file information and control of the modulator which is used for broadcast of TS stream.

Acrobat reader has to be installed in the machine to read User Manual.

## **1.2** Purpose of the Document

This document is prepared to facilitate and guide the user how to create/modify clone files, to update interactive/standalone menu settings, to configure channel map and to create TS stream using REACH Server. Screens-wise explanations are provided here in this document in the process flow of the application.



## 2. REACH SERVER DEVICE INSTALLATION

#### 2.1 Radio Frequency Interference Statement

**NOTE:** This equipment has been tested and found to comply with the limits for a Class-A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, it will be required to correct the interference at own expense.

This digital apparatus does not exceed the Class-A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications

The present digital apparel does not emit radio noise exceeding the limits for a Class-A digital devices prescribed in the Radio Interference Regulations edict by the Ministry of Communications of Canada.

**Warning**: Only devices certified to comply with the Class-A limits pursuant to Subpart A of the FCC Rules may be attached to this equipment. Operation with non-certified devices is likely to result in interference to radio and TV reception. Changes or modifications made to this equipment, not expressly approved by the FCC could void the user's authority to operate the equipment.

To maintain compliance with FCC radio frequency emission limits, shielded cables are required to connect equipment to other Class A certified devices and the use of quad shield, RG-6/U type CATV cable is required for connection to the CATV system. Any changes or modifications may void the user's authority to operate this equipment.

## **2.2 Introduction**

This guide explains how to install a REACH Server in an existing cable network. User should be familiar with cable TV systems. Some of the operations described by this guide could disrupt the entire cable TV system if performed improperly.

You must have the permission and authorization of the cable TV system operator before you begin the installation.

## 2.3 Installation Tools and Verification Equipments

The following equipment is required during initial system set up and installation:

- Flash light
- Power extension cords/strips
- Multimeter (Ohm meter/volt meter)
- 75 Ohm Attenuators (various values, i.e., 3, 6, 10 dB)
- Splitters, directional couplers (single port, multi-port, various values) Coaxial cables (various lengths)
- Spectrum analyzer or power meter and tone generator Instruments such as the spectrum analyzer, power meter and tone generator may be used to create and measure signals, signal levels and operating frequencies.



## **2.4 Installation Process**

- 1. Mount REACH Server in rack and connect keyboard/mouse/monitor. Connect AC power to monitor and REACH Server.
- 2. Power on monitor and REACH Server, and wait until boot up.
- 3. Select REACH Server channel or frequency. It is recommended to either stay with default of 87 (TV default), or select a lower channel to avoid the greater signal attenuation which occurs at higher frequencies (Selecting a channel other than 87 will require manually resetting the TV's REACH Server channel to match with TV setting).
- 4. Set the REACH Server to playback a video stream for system testing and balancing.
- 5. Measure the levels of the adjacent channels and match the REACH Server output level to those, but not lower than the signal level required to present -5 dBmV in every room, using RF attenuator pads. (As previously stated, an amplifier could be required depending on system configuration.)
- 6. Use an open input port, if available to inject the REACH Server signal into the distribution system, (use an external combiner if no input port available) and double-check that REACH Server signal level is matched well with adjacent channels, but is not less than -5 dBmV at every room.

## **2.5 Installation Example**

REACH Server output signal can be combined with other RF signals using RF combiner or directional coupler. REACH Server output power can be controlled from 29dBmV to 56dBmV. And, the output power must match with other combined RF signals.





Case #1.

In case the output power of REACH Server input into combiner, the output power will be same with other signal power input to the Combiner



Case #2.

In case there is no room for combiner input port, a Directional Coupler may be used. (for example : tap Val 16dB, insertion loss 1dB DC)



## **2.6 Front Panel Operation**

#### Front and rear view



ESC (Escape) Key: Escape from sub/main menu and cancel current input.

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Navigation Keys: Up/Down/Right/Left buttons, use for selecting a submenu or a decimal.



Modulation Mode: Modulation mode display Frequency: RF output frequency display in MHz unit Level: RF output power level display in dBmV unit System Message: Current operation status or error messages

#### **Frequency Control**

Frequency settings are as follows. Push [Enter] button from front panel. Main menu will be displayed on LCD, as below.



Select the "1. Frequency" menu with up/down navigation keys and push [Enter] button, the Frequency menu will be displayed on LCD, as below.



Set the desired frequency using the navigation keys.

Use up/down navigation keys to change the frequency, left/right navigation keys to move the unit.

#### Level Control

RF output level settings are as follows. Push [Enter] button from front panel. Main menu will be displayed on LCD, as below.

> -> 1. Frequency -> 2. Level -> 3. IPv4 Setting -> 4. Version



Select the "2. Level" menu with up/down navigation keys and push [Enter] button, the Level menu will be displayed on LCD, as below.



Set the desired level using the navigation keys. Use up/down navigation keys to change the Level in 0.5dB step.

#### **IPv4 Setting**

IPv4 settings are as follows.

Push [Enter] button from front panel. Main menu will be displayed on LCD, as below.



Select the "3. IPv4 Setting" menu with up/down navigation keys and push [Enter] button, the IPv4 Setting menu will be displayed on LCD, as below.



At first, select 'DHCP' or 'Static' mode through the "DHCP/Static" submenu. If you select 'Static' mode you may be need to change the "IP Address", "Subnet mask", and "Def. Gate way" settings. When you finish inputting parameters, select [Apply] and push [Enter] button to make settings active, or select [Cancel] and push [Enter] button to cancel the current inputs.

#### 2.7 Connecting to a REACH Server from a remote terminal

User can control and manage a REACH Server from a local terminal (keyboard, mouse and monitor) or from a remote host computer (terminal) with Windows Remote Desktop application.



To connect to a REACH Server from a remote host computer, you need to know below information and default settings of REACH Server

Settings	Default
<b>IP</b> Address	Obtain an IP address automatically (DHCP)
Computer name	REACH Server
User name	REACH Server_user
Password	admin4567

If user need, user can change above default settings with Windows OS control panel on a REACH Server.

#### **2.8** TCP/IP Setting of your host computer (Windows 7)

To connect to the host computer, which is the client (or remote) computer to a REACH Server, you need to set up your host computer's TCP/IP setting to be in a same subnet with the REACH Server. Refer to the below steps for Windows 7

- 1. Open Network Connections by clicking the **Start** button, and then click **Control Panel**. In the search box, type **adapter**, and then, under Network and Sharing Center, click **View network connections**.
- 2. Right-click the connection that you want to change, and then click **Properties**. If prompted for an administrator password or confirmation, type the password or provide confirmation.
- 3. Click the Networking tab. Under this connection use the following items, click either Internet Protocol Version 4 (TCP/IPv4) or Internet Protocol Version 6 (TCP/IPv6), and then click Properties.

Local Area Connection Properties					
Networking					
Connect using:					
Intel(R) PRO/1000 MT Network Connection					
Configure					
This connection uses the following items:					
Client for Microsoft Networks  Client for Microsoft Networks  File and Printer Sharing for Microsoft Networks  File and Printer Sharing for CP/IPv6)					
✓ Internet Protocol Version 4 (TCP/IPv4)					
Link-Layer Topology Discovery Mapper I/O Driver					
🗹 📥 Link-Layer Topology Discovery Responder					
Install					
Description					
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.					
OK Cancel					

- 4. To specify IPv4 IP address settings, do one of the following:
  - To get IP settings automatically using DHCP, click Obtain an IP address



automatically, and then click OK.

- To specify an IP address, click **Use the following IP address**, and then, in the **IP** address, **Subnet mask**, and **Default gateway** boxes, type the IP address settings.
- 5. To specify IPv6 IP address settings, do one of the following:
  - A. To get IP settings automatically using DHCP, click **Obtain an IPv6 address automatically**, and then click **OK**.
  - B. To specify an IP address, click **Use the following IPv6 address**, and then, in the **IPv6 address**, **Subnet prefix length**, and **Default gateway** boxes, type the IP address settings.
- 6. To specify DNS server address settings, do one of the following:
  - To get a DNS server address automatically using DHCP, click **Obtain DNS server** address automatically, and then click **OK**.
  - To specify a DNS server address, click **Use the following DNS server addresses**, and then, in the **Preferred DNS server** and **Alternate DNS server** boxes, type the addresses of the primary and secondary DNS servers.

Internet Protocol Version 4 (TCP/IPv4) Properties						
General Alternate Configuration						
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.						
Obtain an IP address automatical	у					
OUse the following IP address:						
IP address:						
Sybnet mask:						
Default gateway:						
Obtain DNS server address autor	matically					
Ouse the following DNS server add	resses:					
Preferred DNS server:						
<u>A</u> lternate DNS server:						
Validate settings upon exit		Ad <u>v</u> anced				
	ОК	Cancel				

TCP/IP Setting of Windows 7: For the other OS, please refer to the OS manual.



## **2.9** Remote Desktop Connection (Windows 7)

 Open Remote Desktop Connection by clicking the Start button . In the search box, type Remote Desktop Connection, and then, in the list of results, click Remote Desktop Connection. Or click the Start button , click All Programs, and then click Accessories, click Remote Desktop Connection.

Remote Desktop Connection					
<b>N</b>	Remote Desktop <b>Connection</b>				
<u>C</u> omputer:	SIRCH	•			
User name:	None specified				
You will be as	You will be asked for credentials when you connect.				
☑ Options		Connect <u>H</u> elp			

2. In the **Computer** box, type the name of the REACH Server that you want to connect to, and then click **Connect**. (User can also type the IP address instead of the computer name.)



## **3. GETTING STARTED**

#### 3.1 Installation instructions for Windows 7

- 1. To install Remote Enhanced Active Control for Hospitality (REACH Server), uninstall the old Version of PC Tool and then install new version.
- 2. Before Installing setup user has to install Prerequisites.
- 3. To install Remote Enhanced Active Control for Hospitality (REACH Server), locate and open the setup directory of REACH Server and double-click on the file "setup.exe".

REACH Server - InstallShield Wizard				
	Welcome to the InstallShield Wizard for REACH Server The InstallShield Wizard will install REACH Server on your computer. To continue, click Next.			
InstallShield	< Back (Next>) Cancel			

4. Click on Next Button to proceed for Installation wizard of REACH Server.

REACH Server - InstallShield Wizard						
License Agreement Please read the following license agreement carefully.						
	END-USER LICENSE AGREEMENT FOR SAMSUNG ELECTRONICS Samsung Interactive Remote Control for Hospitality (REACH Server) SOFTWARE PRODUCT IMPORTANT-READ CAREFULLY: This Samsung Electronics End User License Agreement ("EULA") is a legal agreement between you (either an individual or a single entity) and Samsung Electronics Co., Ltd. ("SAMSUNG ELECTRONICS") with respect to the SAMSUNG ELECTRONICS product identified above. The SAMSUNG ELECTRONICS software product may include associated software components, media, printed materials and "online" or electronic documentation ("SOFTWARE PRODUCT"). By installing, copying or using the SOFTWARE PRODUCT, you agree to be bound by the terms of this EULA. If you do not agree to the terms of this EULA, you may not install or use the SOFTWARE PRODUCT. I gccept the terms of the license agreement	i-				
InstallShield	Ca	ncel				

5. Read the license agreement carefully and select "I accept the terms in the license agreement" and click on Next button.

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REACH Server - InstallShield Wizar	rd				
Customer Information Please enter your information.					
	Please enter your name and the name of the company for which you work.				
	User Name:				
	Company Name:				
	Samsung				
InstallShield	<back next=""> Cancel</back>				

6. Click on "Next" button to proceed.

REACH Server - InstallShield Wizard						
Setup Type Select the setup type that best suits your needs.						
	<ul> <li>Click the type of setup you prefer.</li> <li>REACH Server</li> <li>Option to install REACH S/W on the REACH Server built in the Modulator controller.</li> <li>REACH Server can be used to control all of TV and transfer the clone file to a TV remotely.</li> <li>PC</li> <li>Option to install REACH S/W on a standard PC. Clone file can be deployed on a TV using a USB Memory.</li> </ul>					
InstallShield	< Back Next > Cancel					

7. Reach Server installation will work on Modulator, and PC installation will work on PC. Select Setup Type and click on next button.



REACH Server - InstallShield Wizard						
Choose Destination Location Select folder where setup will install files.						
	Install REACH Server to: C:\Program Files\Samsung	<u> C</u> hange				
		Control				
InstallSmeld	< <u>B</u> ack <u>Next</u> >	Lancel				

8. Click Next to install the application files to the default folder, or click Change to install to a different folder.



9. The wizard is ready to begin installation. Click on Install to begin the installation.



REACH Server - InstallShield Wiza	rd 🛛 🔍 📉
Setup Status	
	The InstallShield Wizard is installing REACH Server Installing
InstallShield	Cancel

10. This Screen will update with the installation progress.



11. After installation process completes, Click Finish to exit the wizard. After clicking on finish a desktop icon is made with name "S-LYNK REACH" for launching application and also it is added in your Start Menu->Programs



## 3.2 Launching/Starting S-LYNK REACH Application for PC/REACH Server

Hospitality REACH Server			- ×
File Help			
	Welcome to Remo	ote Enhanced Active Control for Hospitality IV model to proceed for clone file generation	
	Year	Select	
	Region		
	c :		
	Series		
	Model No.	▼	
	S/W Name		
		ОК	

- 1. Reach Server application can be launched in two different modes in PC and in Modulator during installation:
  - (a) PC to install application setup on PC
    - If REACHSERVER mode is installed on PC, on double click of shortcut icon, it will show the following message:



- "Utility" Menu is disabled
- "Update Reach Server Version" menu is disabled
- "Update Reach Server Group ID" menu is disabled
- "Current Reach Server Version" menu is disabled
- Generate functionality does not exists
- Modulator Controller bar does not exists

Please refer the screen shot as given below:





Hospitality REACH Server		
File Help		
Load From File		
Load REACH		
New REACH	Welcome to Remote Enhanced Active Control for Hospitality	
Update REACH Server Version	Select TV model to proceed for clone file generation	
Update REACH Server Group ID		
Select Model		
Utilities		
Exit		
	Year Select	
	Region	
	Series	
	Model No.	
	S/W Name	
	ОК	

Hospitality REACH Server		
File Help		
Load From File	IEW	
Load REACH		
New REACH		
Update REACH Server Version		
Update REACH Server Group ID		
Select Model		
Utilities		
Exit		
Hospitality Option -	Load the Saved Reach File	
Channel Map	Make a New Reach File New	
Ticker		
IPG		
	Preview Save	
	Model Name: HG40NB690QF Save	All

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Hospitality REACH Server		$=$ $\times$
File Help		
S-LYNK User Guide		
– Hom	sion	
About		
DETAIL		
and the second states from the		
Hospitality Option 👻	Load the Saved Reach File Load	
Channel Map	Make a New Reach File New	
Ticker		
IPG		
	Preview Save	
	Model Name: HG40NB690QF Sav	re All

Hospitality REACH Server		
File Help		
S-LYNK REACH		
- Home		
DETAIL		
Hospitality Option 🖌	Load the Saved Reach File Load	
Channel Map	Make a New Reach File New	
Ticker		
IPG		
	Preview Save	
	Model Name: HG40NB690QF Sav	e All



(b) REACHSERVER - to install application setup on modulator device

To launch the Reach Server application, user can either double-click on the icon made on desktop named "S-LYNK REACH.exe" or user can go to Start Menu -> All Program -> Samsung -> S-LYNK REACH -> S-LYNK REACH.exe.

- 2. Application will launch a window asking to select Year and Model to proceed.
- 3. Choose options from File Menu to proceed to the specific application requirement.

Hospitality REACH Server			
File Help			
	Welcome to Rer Sele	note Enhanced Active Control for Hospitality ct TV model to proceed for clone file generation	
	Year Begion	2013	
	Series	All	
	Model No.	US EU	
	S/W Name	ASIA	
		Default	
		ОК	



Hospitality REACH Server			
File Help			
	Welcome to Remote Select TV mc	e Enhanced Active Control for Hospitality del to proceed for clone file generation	
	Year	2013	
	Region	Default	
	Series	Default	
	Model No.	HGXXXXXXXX	
	S/W Name	T-HOTELUX	
		ОК	

4. Select default Region, if clone data of any model has to be send to any TV model via **USB** cloning only.

Note: Default model will be applicable for 2013 NT 13 models, and only Reach and Ticker can be send in default mode. Hospitality and Channel Map will be disabled.

#### **3.3 Uninstalling REACH Server Application**

- 1. To uninstall REACH Server, Go to Control Panel->Programs and Features->REACH Server, right click and uninstall the application.
- 2. OR Double click on ReachServer.exe, it will first ask to remove the previous installed setup.



<b>REACH Server - InstallShie</b>	ld Wizard
Preparing Setup Please wait while the In:	stallShield Wizard prepares the setup.
	REACH Server Setup is preparing the InstallShield Wizard, which will guide you through the rest of the setup process. Please wait.
REAC	H Server - InstallShield Wizard
	Yes No
InstallShield	Cancel



## **3.4 Create New Clone Files**

After launching REACH Server, application will show a window asking for Year, Region, Series and Model selection. To create any clone file, follow the given below steps:

- 1. Select Year, Region, Series and Model No. from the drop down boxes.
- 2. After selecting Model No. S/W Name of the model will be shown the in S/W Name textbox.
- 3. Click on OK button.



## **3.5 Modify existing Clone files**

To modify the existing clone files, follow the steps as mentioned below:

- 1. Go to File Menu -> Select "Load from file" option.
- 2. After clicking on "Load from file" option, browser window will open which will prompt to locate clone file folder.
- 3. After locating the file, click on OK.
- 4. Year, Region, Series, Model No. and S/W Name will be uploaded from clone files and will set the controls in disable mode.
- 5. Click on OK button.
- Hospitality option menu settings, Channels in Channel Map and Reach data will be loaded from the files. User can change them and can save or overwrite. Note: As per specification, Ticker data will not be retrieved from "Load from File" option.

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Hospitality REACH Server		- ×
File Help		
Load From File		
Load REACH		
New REACH	Welcome to Remote Enhanced Active Control for Hospitality	
Update REACH Server Version	Select TV model to proceed for clone file generation	
Update REACH Server Group ID		
Select Model		
Utilities		
Exit		
	Year Select	
	Kegion Savier	
	Model No.	
	S/W Name	
	ОК	

Hospitality REACH Server			
	Welcome to Re	mote Enhanced Active Control for Hospitality ect TV model to proceed for clone file generation	
	Year	2013	
	Region	ASIA	
	Series	HB-Series	
	Model No.	HG32AB460GW	
	S/W Name	T-NVTF6DEUCB	
		ок	



#### **3.6 Hospitality Options Setting**

After clicking "OK" button, Application will navigate to next screen and based on the model selected will display few or all menu tabs (Hospitality Options, Channel map, REACH, IPG, Ticker and generate).

To modify factory menu settings, follow the steps as mentioned below:

- 1. Select Hospitality Option Tab.
- 2. Application will expand the Hospitality Menu and show the menu item at left side.
- 3. Click on any menu item, will display all the data corresponding to selected menu on right side of the application in the controls. Controls will display the default value selected.
- 4. Based on user need, User can select different values in the controls.
- 5. To set logo, click on logo Download which will navigate to a file browser window.





6. In DVB model (except "Smoovie" vendor), "MyChannel" option will display. On Selecting "MyChannel" option, "Genre Editor" option will display which in turn on selection display Genre Editor window.



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7. If Widget Mode is ON in X12 US Model with Solution Type as "Vendor Server" and "SINC Server", the options Channel, REACH Server, Channel Map, IPG, Anynet + Return Source, Power On Source and Power On Channel will be disabled.



- 8. In NT13 EU460 Model, Security Mode option will be available. Enter password to enable/disable USB, HDMI and TTX option on TV.
  - Only numeric password is allowed and size of the password must be 8 characters.
- 9. Setting 'USB Enable/Disable' option in security mode as 'Disable' will disable the 'USB Media Mode' option and 'Hospitality Logo' option, also 'Hospitality Logo' option will be reset to 'Off'.
- 10. Setting 'HDMI Enable/Disable' option as 'Disable' will reset 'Power On Source' and 'Anynet+Return Source' option, will display first value selected in the combo and remove the 'HDMI' option from the source list. Also, 'Anynet+Return Source' option will be disable.



Hospitality REACH Server		$\Xi$
File Help		
Generate		
S-LYNK REACH 🗸		
Hospitality Option	Password Setting :	
Menu OSD	New Password	
Operation	Confirm Password	
Clock		
Music Mode		
External Source	Password Reset Ves No	
Eco Solution	Security Mode on/off On On	
Logo/Message	USR Enable/Disable	
Cloning	Chable Enable	_
REACH Server	HDMI Enable/Disable Enable	_
MyChannel	TTX Enable/Disable Enable	
Security Mode 🚽		
Channel Man	Description	
Спаппегмар	Security Mode:	<b>^</b>
Ticker	Password Settings:     New Password/ Confirm Password : Enter new password, Only numeric password is allowed.     Password should be of 8 characters.	
Modulator Controller	Model Name: HG32EB460GW Save	All

## 3.7 Channel Map Configuration

Channel Map tab shows a list of channels in a table where for every channel, Channel attributes i.e, Channel Name, PTC No., Program No., Modulation and Program Type will be displayed. Channel map information is only configured for English language. Though channel names in any other language in clone file loaded from TV will remain undisturbed after changes from REACH Server application. Channel category is a list of options for Air, Cable and All, at left of the table. All is selected as default, which shows every channel existing in the map. By selecting "Analog" or "Digital", channel list can be filtered in the table. Add a new channel, edit existing channel in list or delete it by clicking on add, edit and delete buttons respectively. Edit Button also shows complete information for a channel in the list which can modified.

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Hos	spitality REACH Server						= ×	
	Generate	СНА	NNEL CATEGORY :	Cable	TV(Digital)	ROOM TYPE :	etault	Default Public
Channel	YNK REACH 🗸		Display No.	Channel Name	PTC No.	Program No.	Modulation	RoomType3
Category			2	ESPN HD	23	1	256QAM	
This will filter	spitality Option			ESPN2 HD	23	2	256QAM	
the channels in			4	HD Net	24	1	256QAM	
the list	annel Map		5	GOLF HD	24	2	256QAM	
according to			6	NBA HD	25	1	256QAM	
their type Air,	ker		7	GOLHD	25	2	256QAM	
			8	Nat Geo HD	26	1	256QAM	Channel List
ID	G		9	An mal Planet HD	26	2	256QAM	
Analog/Digital			10	Travel HD	27	1	256QAM	
Radio selection			11	LIFE HD	27	2	2560AM	
will further				SportsNet	132	1	2560AM	
filters channels	1		13	TSN	131	1	256QAM	
according to their type.						-		
								Buttons to Add,
			Add			CH-Edit	Delete	Edit and Delete Channels
(	) Modulator Controll	er	Mo	del No: HG46NB890X	F	_	Save All	]

- 1. In Channel Map only for US region three Room types are supported.
- 2. Room type are Default, Public and Roomtype3(only with server .Please refer section 3.15 for more detail)
- 3. Based on the selecting Room type, channels list get displayed.

#### Add a New Channel

To add a new ATSC channel, follow below steps:

- 1. Select Air, Cable whichever type of channel user wants to add.
- 2. Select Analog or Digital.
- 3. Then click on the Add button. Application will pop up an Add New Channel Window.
- 4. Fill and complete respective fields and drop down boxes for the channel to add, like Name, Major No., Minor No., Program Type etc. These fields and their name will shown depend on selected region.
- Click on Add Button to add the channel otherwise click Cancel. (For DTV channels in ATSC models display number has two fields (major-minor) which can be set to any values from 0 to 999.)





Add New Chann	el 🔀
Channel Name	
Display No.	·
Program No.	
PTC No.	
	PTC Number must be in range 1~135
Modulation	•
ОК	Cancel

#### Add New Channel (DVB):-

Add New Char	nnel	×
Channel Name	DD Sports	
Program No.	67	
Frequency	10729	▼ MHz
Service ID	112	
Modulation	32QAM	-
Symbol Rate	27500000	-
Satellite Name	Astra 19.2E	-
FEC	1_2	-
Polarization	VR	-

To add a new DVB channel, follow below steps:

- 1. Select Air, Cable or Satellite whichever type of channel user wants to add.
- 2. Select Analog or Digital.
- 3. Then click on the Add button. Application will pop up an Add New Channel Window.
- 4. The above image shows UI for Satellite channels.
- 5. Select the respective fields from drop down boxes for the channel to add, like Frequency, Service ID, Modulation, Symbol Rate, Satellite Name, FEC, Polarization.
- 6. Select the respective fields from drop down boxes for the channel to add, like Frequency, Service ID, Modulation, Symbol Rate, Satellite Name, FEC, Polarization.



#### Delete a Channel from the list

Hospitality REACH Server						
File Help						
Generate	CHA	NNEL CATEGORY :	Cable 🔹	TV(Digital)		
S-LYNK REACH 🗸	1	Display No.	Channel Name	PTC No.	Program No.	Modulation
		59-1		59	1	256QAM
Hospitality Option 🛛	1	59-11		59	11	256QAM
		74-1		74	1	256QAM
Channel Map	-	74-2		74	2	256QAM
		113-1		113	1	256QAM
Ticker	1	113-2		113	2	256QAM
		113-3			3	256QAM
IPG	1	113-4 W	/arning		× 4	256QAM
			Do you want	to delete channel(s) Cancel	?	
	٠					•
		Add			CH-Edit	Delete
Modulator Controller	r	1	Model Name: HG32N	IB670BF		Save All

To delete an existing channel from the list, follow the below steps:

- 1. Select Air, Cable or Satellite whichever type of channel user wants to delete.
- 2. Select Analog or Digital or External.
- 3. Select the channel from the list by selecting the checkbox to Delete and click on Delete button.

#### Channel - Editor

To change display no. or channel name, follow the below steps:

Edit Channel		×		Edit Channel			×
Frequency Service ID	10758 112			PTC No.	12		I
Edit Country				Program No. :	0		
6	Use Check box for multiple	e selection)		Display No.	12		1
Display No.	67			Channel Name	123		1
Channel Name	DD Sports						1
🔲 Video Mute				Video Mute		Canaal	
ig-1	OK Cancel		Fig-	2		Cancer	

- 1. Select Air, Cable or Satellite whichever type of channels user wants to edit.
- 2. Select Analog or Digital or External.



- 3. Select the channel from the list to Edit and click on Channel-Edit button.
- 4. Change the display no. or Channel name of the channel. Click on OK Button to edit the channel.
- 5. If a new display no. already exits, application will prompt to modify the display number. On click of "Yes" button, application will swap new channel with the existing one.
- 6. In DVB model (except for SI Vendor selection as "Smoovie" vendor), Country selection box will be displayed.
- 7. Fig-1 is for DVB models & Fig-2 for ATSC models

## 3.8 Save Clone File

To save the clone files with modified parameters and channel map configuration, follow the below steps:

- 1. To save all the changes done in Standalone menu, Channel map, S-LYNK REACH, Ticker and IPG tab, click on "Save All" Button.
- 2. A browser window will open, which will ask for location to save the clone files as shown in fig. a



Fig. a

- 3. Select the folder where clone files will be saved or make a new folder and click OK.
- 4. After clicking OK, files will be saved in a folder named with software name of the model. Note: In case of REACHSERVER install type as PC, "Clone file saved" popup will be displayed.



5. After saving clone files, it will ask for stream generation as in fig b. (In case of REACHSERVER install type only for modulator application.)

Hospitality REACH Server		
File Help		
Generate	1EW	
S-LYNK REACH		
Home 🛨 🍵		
- Hotel Information		
+ Dining Stream	Save	
- Bakery Café		
- The Sushi	Do you also want to Generate Output stream ? (D:\Stream\OpenCable\)	
- The Steak		
- The Pizza	OK Cancel	
Hospitality Option -	Hotel Logo Position:	
Channel Map		
Ticker		
IPG	Preview Save	
Modulator Controller	Model Name: HG46N8690QF	Save All

Fig. b

6. On click of "OK" button, it will open generate window for generating streams as shown in fig c.

Hospitality REACH Server					
File Help					
Generate	VIEW				
S-LYNK REACH	Generate			X	
– Home	Merge Data Files to	Stream	TV Binary image t	o Stream	
	(HG32EB460GW)	C:\TEST\T-NV	TF6DEU( Browse	er 704 KB	
DE	Seed Stream C:\	Program Files\	Samsung\S-LYNK	F Browser	
	Output Folder D:	Stream\DVB-C		Browser	
	REACH Server Versio	n (Clone): 0x00	0ь	Update	
Hospitality Option 🛛 🗕	Ger	erate	Cancel		
Channel Map					
Ticker					
IPG			Preview	Save	
Modulator Controller	Ν	Nodel Name: H	G46NB890XF		Save All





- 7. Click on "Browser" button to select the clone file generated.
- 8. After selecting the clone files check box will be enabled depending upon the files available in clone.
- 9. We can check the check boxes for which we want to send data in streams.
- 10. Set timer to download data after a selected time for IPG & Ticker.
- 11. On Click of "Generate" button following steps occurs:
  - Displays pop up for current version

Hospitality REACH Server		
File Help		
Generate	REVIEW	
Construction of the second		
S-LYNK REACH	Generate	
Home 🕂 🏠	Merge Data Files to Stream TV Binary image to Stream	
<ul> <li>Hotel Information</li> </ul>		
+ Guest Services	(HG	
+ Dining	Current Data Version	
<ul> <li>Bakery Café</li> </ul>	DEACH Sequer PC Apple Current Data Version:	
- The Sushi D	Seec Software Version (Clone):0x000c	
- The Steak	Outs	
- The Pizza	Ref. OK	
– Spa	Browser	
	Please wait for stream Generation	
Hospitality Option •	Generate Cancel	
Channel Map		
Ticker		
IPG	Preview Save	
Modulator Controller	Model Name: HG46N8690QF Save	All



• Ask to update Software version as shown below fig.

Hospitality REACH Server		
File Help		
Generate	CHANNEL CATEGORY : All	
S-LYNK REACH 🗸	Display No. Channel Name PTC No. Program No.	Modulation
	Generate	
Hospitality Option 👻	Merge Data Files to Stream TV Binary image to Stream	
Channel Map	(HG32EB690Q8) D:\T-MST12DEUCB\Cli Browser 4 MB	
Ticker	Warning X	
IPG	Software Version (Clone file upgradation) must be greater than REACH Server Version in TV.Would you like to Update Software Version?	
	Please wait for stream Generation Generate Cancel	
	Add CH-Edit	Delete
Modulator Controll	ler Model Name: HG46N8890XF	Save All

• On click of OK button update screen will appear

Update REACH Server Version	×
Software version (Clone File Upgradation)	in DEC e.g. 0129
Software version (Clone file Upgradation REACH Server Version on TV.	n) must be greater than
OK Cancel	



• Displays message for updating REACH Server Group Id like below.

Hospitality REACH Server					
File Help					
Generate	CHANNEL CATEGORY :	All			
S-LYNK REACH +	Display No.	Channel Name	PTC No.	Program No.	Modulation
	Generate			63	
Hospitality Option •	Merge Data Files to S	Stream TV Binary	image to Stream		
Channel Map	(HG40N8690QF)	C:\New folder (2)\T-M	Browser 325 KB		
Ticker	Warning			×	
IPG	Would you lik	Ke to Update REACH	Server Group ID?		
	Please wait for stream	n Generation erate Cance	-		
	Add			CH-Edit	Delete
Modulator Controller	M	lodel Name: HG40N8690	QF		Save All

• Screen for updating REACH Server Group ID as shown below

Update REACH Server ID	×
REACH Server Version ID	All
ОК	Cancel

12. After streams generation completes a folder where stream is generated will be open.

## **3.9 Merging with TS- Stream (Generate Stream functionality)**

To merge the clone file with TS-stream follow the steps as given below:

1. Go to File Menu->Utility->Generate and click on "Merge Data Files to Stream"

Hospitality REACH Server					
File Help					
Ger	enerate			🖂 pitality	r
Me	erge Data Files	to Stream	TV Binary image	to Stream	
(Н	HG32EB460GW)	C:\TEST\T-NV	TF6DEUC Brows	er 704 KB	
E	REACH	🔽 Clone	IPG	☑ Ticker	
Se	eed Stream	C:\Program Files\S	amsung\S-LYNK	F Browser	
Ou	utput Folder	D:\Stream\DVB-C		Browser	
R	Refresh cycle	Hr	IPG	Ticker	
RE	EACH Server Ve	rsion (Clone): 0x00:	10	Update	
		Generate	Cancel		
		c	к		
	_	-			

- 2. Browse Clone files folder.
- 3. Browse seed stream folder.
- 4. Browse output folder.
- 5. Select Refresh cycle if polling required for Ticker and/or IPG
- 6. Click on generate button to generate stream and output stream will be generated. This step will take few minutes to create output stream.
- 7. If refresh cycle is set for IPG or Ticker then after refresh cycle ticker and/or IPG contents will be updated.

To merge TV Binary files with TS-Stream follow steps as give below:

1. 'Go to File Menu->Utility' OR 'Select model -> Click on Generate Window' and click on "TV Binary Image to stream".



Hospitality REACH Server		
File Help		
Generate	VIEW	
S-LYNK REACH		
	Generate 🛛	
– Home	Merge Data Files to Stream TV Binary image to Stream	
	(HG32EB460GW) CATESTAT-NVTF6DEUC Browser 704 KB	
	REACH Clone IPG Ticker	
DE	Seed Stream C:\Program Files\Samsung\S-LYNK F Browser	
	Output Folder D:\Stream\DVB-C Browser	
	Refresh cycle 2 Hr IPG 🖉 Ticker	
	REACH Server Version (Clone): 0x000b Update	
Hospitality Option 👻	Generate Cancel	
Channel Map		
Ticker		
IPG	Preview Save	
Modulator Controller	Model Name: HG46NB890XF Sa	ve All

- 2. Browse TV binary files folder.
- 3. Browse seed stream folder.
- 4. Click on generate button to generate stream and output stream will be generated. This step will take few minutes or more to create output stream.
- Note: Merge clone files are, merging the clone, S-LYNK REACH, IPG and Ticker file with the input Stream. The output multiplexed stream is used to transmit to the TV. Merge TV Binary is towards merging the TV firmware only with the Input stream. Again the output multiplexed stream is used to transmit to the TV. If 2013 model is selected then only Ticker option will be available.



## **3.10 REACH Server Modulator Controller**

To open Modulator application Go to File Menu->Utility->Generate and click on Generate button. There are recommended settings for modulator.

Note: Wait till all parameters are initialized.

- 1. Select modulator type: DVB-C or Open Cable.
- 2. Select Constellation type: Example, 64 QAM.
- 3. Select Frequency or channel number to 87. Please note REACH Server channel in TV should be same as channel number selected in PC Tool.
- 4. Select stream file to play. This will be generated from TS-Steam Merge menu (refer sec 2.10).
- 5. File should be at path 'D:\stream\Open Cable\' or 'D:\stream\DVB-C\'.
- 6. File format will be .mpg.
- 7. Remix (HW) will be OFF.

Modulator Controller	
FILE Open	RF Freq. Table
Path D:\Stream\DVB-C\Clone_Outputstream.mpg	Freq: 603,000,000
Modulator Type	Level: + 32.0
DVB-C     Image: Open Cable	☑ OFF
Parameters	Play time (Current (Total)
Constellation 64QAM 🗸	
Interleave I=128, J=1	00 : 07 / 00 : 07 🗵 Loop Count: 1201
Bit/Symbol Rate	Buffer Usage
Source 4.975991 Mbps	89% File size: 24 (MB)
Out         26.970302         Mbps           Sumbol         5.056044         Mbps	Packet(File) 134965
0.000341 Imps	
🕅 Remux (HW)	Pause Stop



## **3.11 Upgrading clone or binary file on TV**

To upgrade the Clone or Binary file to TV (Binary\_outputstream.mpg or clone\_outputstream.mpg) through Modulator utility.

- 1. Locate stream file in Modulator utility.
- 2. Select the set channel to broadcast the stream by clicking on Frequency Table.
- 3. Select Open cable for ATSC or DVB-C for DVB models.
- 4. Click Play Button to broadcast the stream.
- 5. In TV's factory menu, REACH Server channel must be same as the channel on which stream is broadcasting.
- 6. For clone file updation, REACH Server version in TV must be smaller than the software version set in Tool before generating stream file. For binary file updation, current software version in TV must be smaller than software version of binary used for updating.
- 7. Click on Manual REACH Server. (Please check channel setup is set to Cable not Air if cable is connected to TV for broadcasting.)



## **3.12 Update REACH Server Version**



To update REACH Server version for Clone, follows the steps as given below.

- 1. Go to File Menu -> Update Software Version.
- 2. A window will open which ask for Software Version (Clone File Up gradation).
- 3. Provide higher version than TV REACH Server version. E.g.
  - i) If software version is set as 01a0 in REACH Server PC application, then current TV REACH Server version should be less than this value for update.
- 4. Software version value for clone will be in decimal format
- 5. After providing the value, click on OK button for update version value.



## 3.13 Update REACH Server GROUP ID

- 1. This is used to download the clone file to only the specific TV group.
- 2. Cloning is done into only the specific TV group with only one REACH Server.
- 3. There will be the new item that set the specific group applying the cloning file in the program of REACH Server.
- 4. There will be the new item that set the specific group to classify TV sets in a hospitality site in the hotel menu of TV.
- 5. The owner will be able to apply each cloning file to each TV group with only one REACH Server.
- 6. To update REACH Server Group Id for Clone, follow as below.

Update REACH Server ID	×
REACH Server Version ID	All
ОК	Cancel



## 3.14 IPG

We can configure server settings to get XML data from network server & Local Machine, follow the below steps.

- 1. Go to IPG tab.
- 2. In IPG tab mainly two options are given
  - From server
  - From Local Machine.
- 3. If user select browse from server option "URL" is provided automatically in select Location editable textbox with corresponding username and password as shown in below fig.

Hospitality REACH Server		
File Help		
Generate		
S-LYNK REACH 🗸		
Hospitality Option 🛛 🚽		
Channel Map	Browse   From Server   From Local Machine	
Ticker	Select Location http://www.itv.guest-tek.com/itv/externalA	
IDC	User Name ind_samsung	
IPG	Password ******	
	Cancel Update	
Modulator Controller	Model Name: HG55NB690QF Sa	ve All



4. If user selects Browse from Local machine then user has to select xml file from Local machine.

Hospitality REACH Server		
File Help		
Generate		
S-LYNK REACH 🗸		
Hospitality Option 👻		
Channel Map		
Ticker	Browse From Server From Local Machine	
IPG	Select Location Browser	
2 Y L		
	Cancel Update	
Modulator Controller	Model Name: HG55NB690QF Save A	JI

- 5. On clicking Update button the entered settings will be validated.
- 6. On click of "Save All" button settings will be saved in Config.txt file in the executable directory of running application for valid credentials entered.



## **3.15 S-LYNK REACH (Remote Enhanced Active Control for Hospitality)**

S-LYNK REACH is feature to create configurable Menu using a tool and transfer it to TV using RF stream. The TV decodes the file to generate the menu designed according to the tool. It also includes display of IPG (Interactive Program Guide) which can be launched from S-LYNK REACH Menu. The IPG data is provided in the XML format to the tool. The tool further processes this data for TV to understand. A live server is maintained by the vendor to provide this IPG data.

Click S-LYNK REACH Tab to create new or load existing Hotel menu.

Hospitality REACH Server			
File Help			
Generate	PREVIEW		_
S-LYNK REACH			
– Home			
	DETAIL		_
		Load the Saved Reach File Load	
Hospitality Option 👻		Make a New Keach File New	
Channel Map			
Ticker			
IPG		Preview Save	
Modulator Controlle	r Mo	del Name: HG46NB890XF	ave All

Fig. 1

#### Load S-LYNK REACH Feature:

 Click the 'Load' button for loading the sample file (HotelMenu.xml). (Please refer to load sample file provided in installed location in folder 'REACH\_SAMPLE' for 2013 and 2012 models). Select sample folder X9\_NVT13, for NVT and X9 models and X10\_X12 for X10 & X12 models.

[USER MANUAL] Version 1.00. 000



Hospitality REAC	CH Server						
File Help							
Generate	PREVI	EW					
	🥏 Open						x
S-LYNK REACH	Look in:	🐌 X10_X12		-	← 🗈 💣 💷 ◄		
– Home	<b>C</b>	Name	*		Date modified	Туре	Size
	Recent Places	🔮 Hotel Menu	ı.xml		12/27/2012 2:30 PM	XML Docum	nent
	Desktop						
	Libraries						
	Computer						
Hospitality Op	Network						
		•					· ·
Channel Map		File name:	HotelMenu xml			<u> </u>	Open
Ticker		Files of type:	All xml Files(* xml)			-	Cancel
IDC			P	review	Save		
IPG							
Modulato	r Controller		Model Name: HG5	55NB690QF			Save All

Fig. 2

2. Click open after selecting file 'HotelMenu.xml'.

Hospitality REACH Server		
File Help		
Generate PREVIEW		
Home + A Hotel Information		
+ Guest Services	ŭ.	
+ Dining	Home	
<ul> <li>Bakery Café</li> </ul>	Hotel Information Guest Services Attractions Program Guide	
– The Sushi DETAIL		
- The Steak	Menu Title Home	
– The Pizza	Hotel Logo Browser Delete	
_ Spa		
Hospitality Option 🚽		
Channel Map		
Ticker		
	Preview Save	
Modulator Controller	Model Name: HG32EB460GW Save	All



- × Hospitality REACH Server File Help REVIEW Generate Home + Hotel Inf.. **Guest Services** Dining Bakery Café DETAIL The Sushi Menu Title Hotel Information The Steak Select Program Guide • None The Pizza Background Image Path C:\Program Files\Samsung\S-LY 11 (960 x 540) C:\Program Files\Samsung\S-LY Hospitality Option Image Path Image Position • • Channel Map Escape the fast paced city and find a blissful tranquility at luxurious The ĥ Content Samsung Seoul. Ticker -( Modulator Controller Model Name: HG32EB460GW Save All
- 3. Click any menu item to see its content and Preview like below Fig 4.

Fig. 4

4. If we select any menu which will launch some application in TV, then application name will shown in Preview For example Click on 'Select Program Guide' then Launch application will be 'Select Program Guide' and Preview as shown in fig 5.



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- 5. If we select any menu which will just show information, then in 'Select Program Guide' dropdown, 'None' will be displayed.
- 6. Click on any menu item to edit/design menu contents.



7. To see Preview or to modify a menu, select that menu item. For menu which will have information content will be shown like Fig. 7



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- 8. We can edit menu title, image position, image path, content, hotel logo and hotel logo position. We can see preview after selection from 'Browser' button and also with left/right image position by clicking 'Preview' button.
- 9. If we want to save the modified value for menu then we need to click on any other menu item. It will automatically save menu.
- 10. If we want to modify order of menu then Right Click on Menu selected as below fig 8.



Fig. 8

- 11. If we want to change the order of menu items then click on 'Move Up' or 'Move Down' by selecting & right clicking menu item
- 12. Click 'Home' menu to add Hotel Logo. As shown in Fig 9



Fig. 9

13. Click on 'Save' button to save only S-LYNK REACH files. It will ask to select path where we want to save. Then it will save all updated S-LYNK REACH files in selected path.



14. If we want to again modify menu then click any menu and after finishing all changes, click 'Save' as shown in Fig 10.



Fig. 10

#### Create New S-LYNK REACH Menu Feature:

- 1. We can create new S-LYNK REACH menu using click on 'New' button as shown in Fig. 1.
- 2. We can create new menu/sub menu of any existing menu using right click option 'Add' or click on '+' icon on right of selected menu as shown below Fig 11.

Hospitality REACH Server		
File Help PREVIEW S-LYNK REACH Home + Add 1 MoveUp MoveDown X Delete	Home	
DETAIL Hospitality Option - Channel Map Ticker	Menu Title Home Hotel Logo Browser Delete Hotel Logo Position	1
	Preview Save	
Modulator Controller	Model Name: HG32EB460GW Save A	All



3. On Clicking on 'Add' or '+' icon, menu with default title 'Untitled' will be added under selected menu with Launch application type 'None' as shown in fig 12.

Hospitality REACH Server		
File Help		
Generate		_
S-LYNK REACH		
Home		
– Untitled		
	ii	
	Untitled	
DETAIL		
DETAIL		
	Menu Title Home	
	Hotel Logo Browser Delete	
	Hotel Logo Position	
Hospitality Option 👻		
Channel Map		
Ticker		
	Preview Save	
Modulator Controller	Model Name: HG32EB460GW Save All	
	Fig. 12	

- 4. Edit menu Title by selecting newly added menu 'Untitled' in right pane and select Launch application type for this menu.
- 5. To launch Program Guide on click of any menu, select Program guide as "Program Guide" otherwise select 'none'.
- 6. Edit content same as mentioned in Fig. 6 then Fig. 7.
- 7. Select background image for first level menu as shown in fig 13. To refer image resolution, please refer Note below.

Hospitality REACH Server			
File Help			
Generate			
S-LYNK REACH			
+ Home			
Untitled			
DETAIL			
DETAIL	Menu Title	Untitled	
	Select Program Guide	Program Guide	-
	Background Image Path		Browser Delete
		(960 x 540)	
Hospitality Option +			
Channel Map			
Ticker			
	Pr	review Save	
Modulator Controller	Model Name: HG3	2EB460GW	Save All
		Fig. 13	

8. To see the changes in Preview, Click on "Preview" button.



#### Note:

- Size of background image for X9 and NVT models is 960 x 540 pixels.
- Size of background image for X10 and X12 models is 1280 x 720 pixels.
- Menu image size is 292 X 156 pixels.
- If Image for Menu, Background and Hotel logo is selected then to delete any image click on "Delete" button next to "Browser" button.



## 3.16 TICKER

Ticker is feature to create configurable information using a tool and transfer it to TV using RF stream. TV decodes the information to generate ticker on TV according to the data specified by tool. It supports two types of information display weather and announcement on TV.

#### **Ticker Functionality:**

1. To add a new ticker item, click "New Ticker" button.

Hospitality REACH Server				
File Help				
Generate	TICKER			Option
S-LYNK REACH 🗸	No. Ticker type	e Conte	ent	Image
Hospitality Option 🛛 🗸				
Channel Map				
Ticker				
IPG				
	DETAIL			
		No Contents		
		No contents		
	New Ticker		Delete	Save 🔺 🔻
Modulator Controlle	r	Model Name: HG40NB690QF		Save All

2. By default Announce Ticker Type option will be selected. Enter custom message (max length 256 chars) and for custom message user can upload any specific image (max size 20KB) for announcement



Hospitality REACH Server			
File Help			
Generate	TICKER		Option
S-LYNK REACH 🗸	No. Ticker type	Content	Image
Hospitality Option 👻			
Channel Map			
Ticker			
IPG			
	DETAIL		
	Select Ticker Type :	Announce	2
	Enter custom message	Custom test data for announcement data	38/256
	Upload Image	E:\TICKER_SAMPLE\Image_5.png Brows	er
		Cancel Save	
Modulator Controller	Model Na	me: HG40NB690QF Sa	ve All

3. Click save button (add mode) to add announcement information in Ticker grid.

Hospitality REACH Server			
File Help			
Generate	TICKER		Option
S-LYNK REACH 🗸	No. Ticker type	Content	Image
Haspitality Option	1 Announce Custo	m test data for announcement data	
Hospitality Option +			
Channel Map			
Ticker			
IPG			
	DETAIL		
	Select Ticker Type :	Announce	
	Enter custom message	Custom test data for announcement data	38/256
	Upload Image	E:\TICKER_SAMPLE\Image_5.png Br	owser
	New Ticker	Delete Sav	e 🔺 🔻
Modulator Controlle	r Model N	ame: HG40NB690QF	Save All



4. To add Weather Information, user can click "New Ticker" button and select weather Ticker type. Select country/city along with Weather API and enter license key.

Hospitality REACH Server			
File Help			
Generate	TICKER		Option
S-LYNK REACH 🗸	No. Ticker type	Content	Image
	🔲 1 Announce Custom	test data for announcement data	
Hospitality Option 👻			
Channel Map			
Ticker			
IPG			
	DETAIL		
	Select Ticker Type :	Weather	
	Select city	Australia Sydney	
	Weather API	Weather_Underground_API	
	License key	feaf08f3f71ada85	
		Cancel Save	
Modulator Controlle	r Model Na	me: HG40NB690QF	Save All

- Note: To register for weather API license key, kindly refer FAQs. Maximum 1 Weather and 4 announcements can be added in Ticker
- 5. Click save button (add mode) to add weather information in Ticker grid.

Hospitality REACH Server			
File Help			
Generate	TICKER		Option
S-LYNK REACH	No. Ticker type	Content	Image
	1 Announce	Custom test data for announcement data	
Hospitality Option 👻			~
Channel Map	2 Weather	Australia/ Sydney, Partly Cloudy, 26C, 79F, Humidity 78%, Wind From the	
Ticker			
IPG			
	DETAIL		
	Select Ticker Type :	Weather	2
	Select city	Australia Sydney	1
	Weather API	Weather_Underground_API	-
	License key	feaf08f3f71ada85	
	New Ticker	Delete Save	• •
Modulator Controller	м	lodel Name: HG40NB690QF Sat	ve All



6. Click on any row (to select) and click Up arrow button, to move up the selected row. Same way user can click on down arrow button to move down the selected row.

Hospitality REACH Server			
File Help			
Generate	TICKER		Option
S-LYNK REACH 🗸	No. Ticker type	Content	Image
	1 Weather	Australia/ Sydney, Partly Cloudy, 26C, 79F, Humidity 78%, Wind From them	<u></u>
Hospitality Option 👻	2 Appounce	Custom test data for announcement data	<b>11</b>
Channel Map		catom test adda for announcement data	
Ticker			
IPG			
	DETAIL		
	Select Ticker Type :	Weather	3
	Select city	Australia Sydney	2
	Weather API	Weather_Underground_API	-
	License key	feaf08f3f71ada85	
	New Ticker	Delete Save	<b>~ ~</b>
Modulator Controlle	r N	lodel Name: HG40NB690QF Sa	ve All



7. Select a ticker preview row (checkbox) and click on Delete button, to delete the selected row. It will ask for the confirmation to delete.







8. Click on Option button, to select Repeat time, Ticker interval, Text color and Background color.

Ticker Option		$\mathbf{x}$
• Repeat	<b>I</b>	
• Enter Ticker Interval (mins)	▼	
Text Color	Browser	
Background Color	Browser	
ок	Cancel	

Note: Repeat option means, how many times ticker data will display.

Ticker Interval option means, after how long ticker data will display periodically.



#### 4. FAQS

If REACH Server seems to have a problem, first review this list of possible problems and solutions.

**Test REACH Server modulator controller settings:** 

Modulator Controller	- and			X
FILE		Open	RF	Freq. Table
Path D:\Stream\D\	/B-C\Clone_Outputstream.mpg		Freq:	603.000.000
Modulator Type			Level:	0.5E +
© DVB-C ●	Open Cable		☑ OFF	
Parameters			Play time (Current / To	otal)
Constellation	64QAM 👻			
Interleave	[I=128, J=1 ▼		00 : 07 - <i>l</i>	00 : 07 🛛 🗹 Loop Count: 1201
Dit/Cumbol Data			Duffer Llogge	
Bibbymbol Kate			Buller Osage	
Source	4.975991	Mbps	a second states	89% File size: 24 (MB)
Out	26.970352	Mbps		Packet(File) 134965
Symbol	5.056941	Mbps		1.54505
🗐 Remux (HW)				Pause Stop

- The REACH Server upgrade only support Open Cable & DVB-C
- Recommended setting
  - Parameters Constellation: 64 QAM \_
  - Remux(H/W): Off
- REACH Server Frequency will be matched REACH Server Channel of TV.
  - If you change frequency table, please refer the frequency table in REACH Server manual (Appendix A).
  - Set same channel in both REACH Server PC program and in TV. For ex. if you have empty 2channel (57MHz) in Hotel, set 2channel (57MHz) both REACH Server PC program and TV.
  - Default initial value : REACH Server 87 (603MHz), TV REACH Server Channel: 87
- Level value on changing from keyboard or mouse varies from 29.0 to 56.0 -
- Frequency value on changing from keyboard or mouse varies from 050,000,000 to 870,000,000
- Test version information while merging files into stream :
  - To merge clone files ensure while merging REACH Server clone version in REACH Server PC program must be greater than the REACH Server version stored in TV.



- To merge binary file ensure the binary merged into the stream has higher version than the binary already updated in TV.

Hospitality REACH Server								
File Help								
Load From File								
Load REACH								
New REACH	Welcome to Remote Enhanced Active Control for Hospitality							
Update REACH Server Version	Select TV model to proceed for clone file generation							
Update REACH Server Group ID								
Select Model								
Utilities								
Exit								
	Year Select							
	Region							
	Series							
	Model No.							
	S/W Name							
	ок							
	572 ¥162							

- TV REACH Server version must be less than REACH Server PC application value for update.
  - PC application: REACH Server Version (Clone): 0002, TV REACH Server Version: 0001. Update is possible. After update TV version will be set equal to REACH Server PC version, hence TV will be 0002.
  - PC application: REACH Server Version (Clone): 0002, TV REACH Server Version: 0002. Update is not possible.



Generate				×			
Merge Data Files	to Stream	TV Bina	ry image t	o Stream			
TV Binary Files	C:\Program File	es\Samsun	Browser	0 KB			
Seed Stream	C:\Program File	C:\Program Files\Samsung\S-LYNK F Bro					
Output Folder	D:\Stream\Ope	encable		Browser			
REACH Server V	ersion (Clone): (	)х000ь		Update			
Generate Cancel							

- Merge TV Binary: support to upgrade Main SW.

- You need to contact to Samsung to have Merge TV Binary.
- Merge TV Binary could not support to upgrade Sub Micom



 Merged TS Stream should be located in D:\stream\OpenCable(US) or D:\stream\DVB-C(EU)

🚔 etraam				
The fide them formables Table	11-b			
File Edic View Favorices Tools	нөр			
🌀 Back 🔹 🕥 - 🏂 🔎 Se	arch 😥 Folders 🔢 🔹			
Address C D:\stream				✓ → Go
	Name	Size 🔺 Type	Date Modified	
File and Folder Tasks (*) Make a new folder Publish this folder to the Web Share this folder	DV8-C	File Folder File Folder	1/28/2011 1:15 AM 3/10/2011 12:51 AM	
Other Places     Image: Comparison of the place of the pl				
Details 🛞				

- You can check displaying REACH Server merged stream if you tune REACH Server channel.





Cautions for Hospitality mode options

Hospitality REACH Server		
File Help		
Generate	Hospitality Option	
S-LYNK REACH 🗸		
Hospitality Option	Hospitality Mode Standalone	
Hospitality Mode		
SI Vendor		
Power On		
Channel		
Menu OSD		
Operation		
Clock		
Music Mode		
External Device		
External Source		
Bathroom Speaker		
Channel Map		
Ticker		
IPG		
Modulator Controlle	er Model Name: HG46NB690QF Sa	ve All

- Hospitality Mode: should be Standalone. Interactive mode could not support REACH Server.
- In Hospitality "REACH Update Immediate" option has priority over "REACH Server Update Time" option. If "REACH Update Immediate" option is "On", "REACH Server Update Time" values will not be considered by the system. To use "REACH Server Update Time" option, "REACH Update Immediate" option should be "Off" and "REACH Server Update Time" should be other than "Off".
- Dynamic SI should be set 'Off' to modify DTV digital channel map in channel map tap.
- Which all TV broadcasting standard supported by REACH Server application?

REACH Server application support only ATSC and DVB.

#### How to add channels for DVB /ATSC?

Select particular TV region and model no. On basis of these parameters, application allows to add channel for DVB (for EU) or ATSC (for US). Please refer section 2.7.

#### What all broadcasting type REACH Server Modulator supports?

REACH Server modulator support only DVB-C (for DVB) and Open-Cable (for ATSC) standard for broadcasting.

What is difference b/w Channel in channel map and Channel configured in REACH Server modulator?

#### Version 1.00. 000 [USER MANUAL]



Channels in Channel Map are used to watch channel on TV. We can add more than one channel in channel map. It is in form of clone data and transfer using seed stream. On the other hand Channel configured in REACH Server modulator is used for broadcast data (clone or binary) from modulator with fixed frequency or channel number. This same channel number is used on TV named as REACH Server channel for software update. (Please refer Appendix A).

- Recommended PC resolution, to run REACH Server Software: 1280x1024 or 1280x960.
- S-LYNK REACH Software supports only Windows 7 (32 bit).
- How to Register for Weather License Key?
- To register for free weather API license, kindly go through with the following URL and sign up for API key.
- (1) Weather Underground API

http://www.wunderground.com/weather/api/

(2) <u>Weather Bug API</u>

http://developer.weatherbug.com/member/register



# 5. APPENDIX A

Table A.1

Channel PTC-frequency map Table (Cable STD (J.83B) - Open Cable)

СН	Freq.	СН	Freq.		СН	Freq.		СН	Freq.	СН	Freq.
1	75	31	267		61	447	1	91	627	121	777
2	57	32	273		62	453		92	633	122	783
3	63	33	279		63	459	1	93	639	123	789
4	69	34	285		64	465	1	94	645	124	795
5	79	35	291		65	471	1	95	93	125	801
6	85	36	297		66	477	1	96	99	126	807
7	177	37	303		67	483		97	105	127	813
8	183	38	309		68	489		98	111	128	819
9	189	39	315		69	495	]	99	117	129	825
10	195	40	321		70	501	]	100	651	130	831
11	201	41	327		71	507	1	101	657	131	837
12	207	42	333		72	513	1	102	663	132	843
13	213	43	339		73	519		103	669	133	849
14	123	44	345		74	525	1	104	675	134	855
15	129	45	351		75	531		105	681	135	861
16	135	46	357		76	537		106	687		
17	141	47	363		77	543		107	693		
18	147	48	369		78	549		108	699		
19	153	49	375		79	555		109	705		
20	159	50	381		80	561		110	711		
21	165	51	387		81	567		111	717		
22	171	52	393		82	573		112	723		
23	219	53	399		83	579	]	113	729		
24	225	54	405		84	585		114	735		
25	231	55	411		85	591		115	741		
26	237	56	417		86	597		116	747		
27	243	57	423		87	603		117	753		
28	249	58	429		88	609		118	759		
29	255	59	435	]	89	615		119	765		
30	261	60	441		90	621		120	771		



## Table A.2

## Channel PTC-frequency map Table (Cable (DVB-C\_256QAM))

СН	Freq.	СН	Freq.	СН	Freq.	СН	Freq.
01	114	31	354	61	594	91	834
02	122	32	362	62	602	92	842
03	130	33	370	63	610	93	850
04	138	34	378	64	618	94	858
05	146	35	386	65	626	95	866
06	154	36	394	66	634		
07	162	37	402	67	642		
08	170	38	410	68	650		
09	178	39	418	69	658		
10	186	40	426	70	666		
11	194	41	434	71	674		
12	202	42	442	72	682		
13	210	43	450	73	690		
14	218	44	458	74	698		
15	226	45	466	75	706		
16	234	46	474	76	714		
17	242	47	482	77	722		
18	250	48	490	78	730		
19	258	49	498	79	738		
20	266	50	506	80	746		
21	274	51	514	81	754		
22	282	52	522	82	762		
23	290	53	530	83	770		
24	298	54	538	84	778		
25	306	55	546	85	786		
26	314	56	554	86	794		
27	322	57	562	87	802		
28	330	58	570	88	810		
29	338	59	578	89	818		
30	346	60	586	90	826		



## **China Region**

**Note:** Broadcasting in china region will work from channel 45 to 95 and it will not work from 1 to 44 due to DVBC frequency differences in EU region.