WORLD
The World's Largest Satellite Magazine
207
TELE
SATELLITE & BROADBAND
10-11 2008
€ 6,95
£ 4.95
$ 8.95
B 9318 E

Australia: AU$11.90 incl GST
Austria: DEU: €5,90 ENG: €6,95
Belgium: €6,95
Bosnia: KM12,90
Botswana: R43.82 excl Tax
Canada: CA$8.95
China: ¥40
Croatia: K49,50
Egypt: EP20
Estonia: EEK99
Finland: €6,95
France: €6,95
Germany: DEU: €5,90 ENG: €6,95
Greece: €6,95
India: Rs550
Indonesia: Rp45.000
Ireland: €6,95
Israel: NIS25
Korea: W15.000
Lebanon: LL8000
Luxembourg: €6,95
Macedonia: D429
Maroc: DH45
Netherlands: €5,90 €7,80 met CD
Nigeria: N600
Namibia: R43.82 excl Tax
Pakistan: Rp450
Serbia: D549
Slovenia: €6,95
South Africa: R49.95 incl VAT
Others: R43.82 excl Tax
South Korea: W15.000
Spain: €6,95
Sweden: SKr69,50
Switzerland: Fr9,90
Taiwan: NT$330
UAE: D25
UK: £4.95
USA: US$8.95

Test Report
Sonicview
SV-360 Elite PVR
Easy To Use PVR Receiver

Test Report INFOSAT
INFOSAT V055
Primary Focus Dish
Lightweight Dish for C Band

Company Report
40 Years Spaun
High Quality Accessory Manufacturer S2 SPAUN

DX-er Report
Reception Experiments
Exploring Ka Band
In the 20 GHz Range

Test Report
TOPFIELD®
TF7700HSCI - Elegant HDTV PVR

TELE SATELLITE AWARD & BROADBAND 10-11/2008

TOPFIELD®
LEADER OF MULTIMEDIA HOME

See HD! Record HD!

HD PVR

TF7700HDPVR

Test winner

TELE SATELLITE AWARD & BROADBAND 02-03/200 8
TOPFIELD TF7700 HDPVR
Fully capable twin receiver with proven HDTV technology and outstanding picture quality.

DIGITAL fernsehen
1.2008
sehr gut
TOPFIELD TF7700HDPVR
www.digitalfernsehen.de

PREIS-/LEISTUNGSSIEGER
SATVISION
Topfield – TF7700HDPVR
GUT 83,5 %
3 HDTV-Receiver im Vergleich
Heft 01/2008

HD TV
Topfield 7700 HDPVR
SEHR GUT
AUSGABE 1.2008

DivX & mp3 Supported
HDMI Audio & Video output

- DVB-S and DVB-S2 Fully compliant
- Comfortable USB port on the front panel
- Dolby downmix & bitstream output
- Software auto update through internet
- 750GB HDD at maximum supported

WWW.**i-topfield**.com

Exclusively for TELE-satellite Readers

SatcoDX "World of Satellites"

SatcoDX's "World of Satellites" Software contains the technical data from every satellite transmission worldwide

SatcoDX 12/2008

World of Satellites

Worldwide Satellite Programming Database - Information Programme

Software V3.12 eng sdx Creator

Worldwide Satellite Charts
Every Channel from Every Satellite

Sat Wizard: What Channels Can You Receive from Where You Are With What You've Got?

DishTrak: What Satellites Can You Receive?

Channel Locator: Find the Channel You Want

Online Chart Updates: Internet Updates Anytime You Want

Receiver Programming: Sort and Filter, then Upload To SatcoDX Compatible Receivers

Satellite Footprints: See Where the Satellite Beams Really Go

Exporting and Printing of Chart Data: Save Your Customized Lists

Export Data Base in sdx
Program Your SatcoDX Compatible Receiver

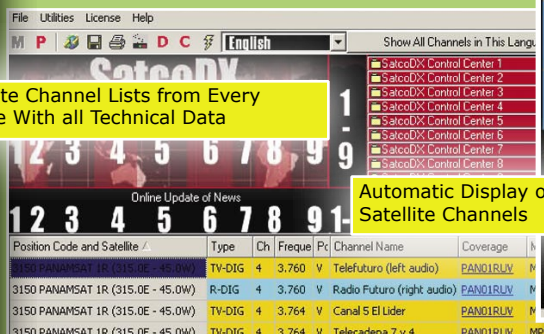
SatcoDX COMPATIBLE

FREE Includes Complete Copy of TELE-satellite 09/2008

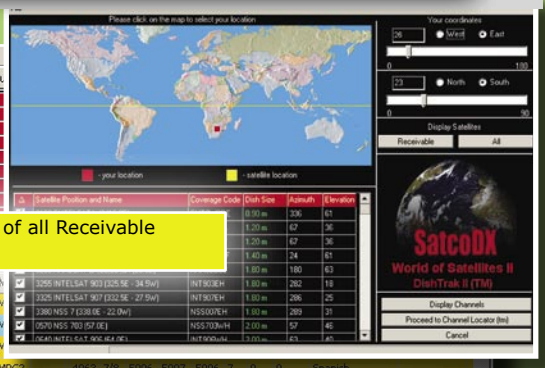
© TELE-satellite – Minimum System Requirements: Pentium III – 128 MB RAM – 16 bit Colordepth – 800x600 Screen Compatible to Win 95, 98, ME, 2000, NT4, XP

A Production of TELE-satellite & Broadband Magazine
For Private and Personal Use Only
ISSN 1861-5384
SatcoDX.com

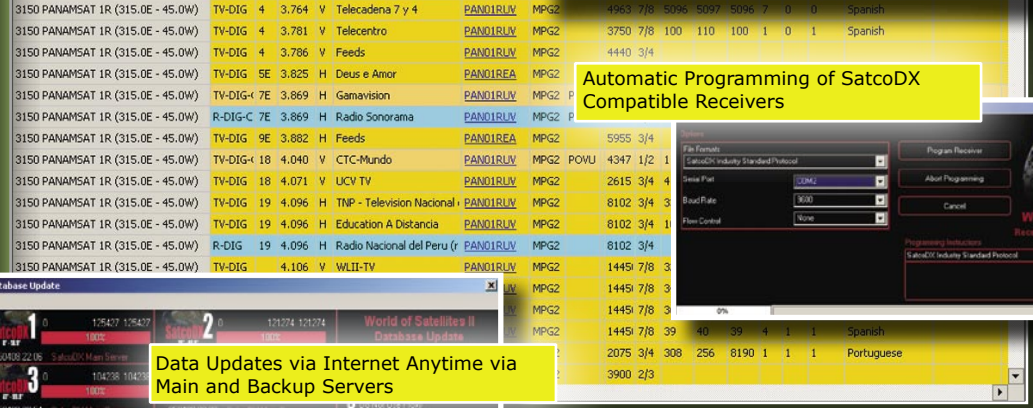
Download SatcoDX Software here:
www.TELE-satellite.com/cd/0812/eng



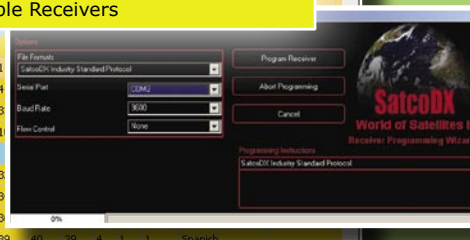
Complete Channel Lists from Every Satellite With all Technical Data

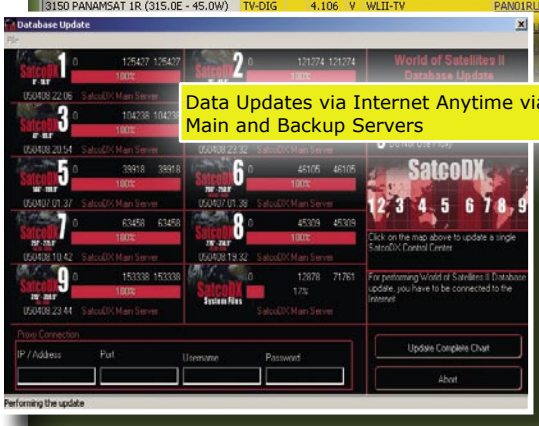


Automatic Display of all Receivable Satellite Channels

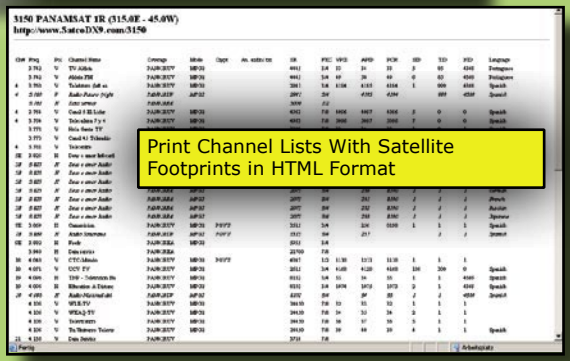


Automatic Programming of SatcoDX Compatible Receivers





Data Updates via Internet Anytime via Main and Backup Servers



Print Channel Lists With Satellite Footprints in HTML Format

The World's Largest Satellite Magazine
TELE SATELLITE & BROADBAND

Address:
TELE-satellite Magazine
PO Box 1234
85766 Munich-Ufg
GERMANY/EUROPA UNION

Editor-in-Chief:
Alexander Wiese
alex@TELE-satellite.com

Published in 21 Languages by:
TELE-satellite Medien GmbH
Aschheimer Weg 19
85774 Unterföhring
GERMANY/EUROPA UNION

Design/Production
Nemeti Barna Attila

Advertising
www.TELE-satellite.com/ads/

Newsstands and Subscription Services
See Page 113

Printed by:
Litografia Rosés
08850 Gavà
SPAIN/EUROPA UNION

ISSN 1435-7003

www.TELE-satellite.com/eng

Member of Distripress

Read TELE-satellite Magazine online:
http://magazine.tele-satellite.com/TELE-satellite-0811-eng.pdf

Lesen Sie TELE-satellit Magazin online:
http://magazine.tele-satellite.com/TELE-satellite-0811-deu.pdf

Read This Issue Online

Arabic العربية
http://magazine.tele-satellite.com/TELE-satellite-0811-ara.pdf

Indonesian Bahasa Indonesia
http://magazine.tele-satellite.com/TELE-satellite-0811-bid.pdf

Bulgarian Български
http://magazine.tele-satellite.com/TELE-satellite-0811-bul.pdf

Czech Česky
http://magazine.tele-satellite.com/TELE-satellite-0811-ces.pdf

German Deutsch
http://magazine.tele-satellite.com/TELE-satellite-0811-deu.pdf

English
http://magazine.tele-satellite.com/TELE-satellite-0811-eng.pdf

Spanish Español
http://magazine.tele-satellite.com/TELE-satellite-0811-esp.pdf

Farsi فارسي
http://magazine.tele-satellite.com/TELE-satellite-0811-far.pdf

French Français
http://magazine.tele-satellite.com/TELE-satellite-0811-fra.pdf

Greek Ελληνικά
http://magazine.tele-satellite.com/TELE-satellite-0811-hel.pdf

Croatian Hrvatski
http://magazine.tele-satellite.com/TELE-satellite-0811-hrv.pdf

Italian Italiano
http://magazine.tele-satellite.com/TELE-satellite-0811-ita.pdf

Hungarian Magyar
http://magazine.tele-satellite.com/TELE-satellite-0811-mag.pdf

Chinese 中文
http://magazine.tele-satellite.com/TELE-satellite-0811-man.pdf

Dutch Nederlands
http://magazine.tele-satellite.com/TELE-satellite-0811-ned.pdf

Polish Polski
http://magazine.tele-satellite.com/TELE-satellite-0811-pol.pdf

Portuguese Português
http://magazine.tele-satellite.com/TELE-satellite-0811-por.pdf

Romanian Românesc
http://magazine.tele-satellite.com/TELE-satellite-0811-rom.pdf

Russian Русский
http://magazine.tele-satellite.com/TELE-satellite-08011-rus.pdf

Swedish Svenska
http://magazine.tele-satellite.com/TELE-satellite-0811-sve.pdf

Turkish Türkçe
http://magazine.tele-satellite.com/TELE-satellite-0811-tur.pdf

Available online starting from 26 September 2008

اقرأ مجلة تيلي ستلايت مباشر
http://magazine.tele-satellite.com/TELE-satellite-0809-ara.pdf

Baca Majalah TELE-satelit online
http://magazine.tele-satellite.com/TELE-satellite-0809-bid.pdf

Přečtete si magazín TELE-satelit online:
http://magazine.tele-satellite.com/TELE-satellite-0809-ces.pdf

Lesen Sie TELE-satellit online:
http://magazine.tele-satellite.com/TELE-satellite-0809-deu.pdf

Read TELE-satellite Magazine online:
http://magazine.tele-satellite.com/TELE-satellite-0809-eng.pdf

Lea La Revista TELE-satélite en Linea:
http://magazine.tele-satellite.com/TELE-satellite-0809-esp.pdf

مجله تله ستلایت اینترنشنال را آن لاین مطالعه کنید
http://magazine.tele-satellite.com/TELE-satellite-0809-far.pdf

Téléchargez revue TELE-satellite entière sur notre serveur:
http://magazine.tele-satellite.com/TELE-satellite-0809-fra.pdf

Διαβάστε online το Περιοδικό TELE-satellite Διεθνές:
http://magazine.tele-satellite.com/TELE-satellite-0809-hel.pdf

Čitajte međunarodni časopis TELE-satelit na Internetu:
http://magazine.tele-satellite.com/TELE-satellite-0809-hrv.pdf

Leggete Online la rivista TELE-satellite:
http://magazine.tele-satellite.com/TELE-satellite-0809-ita.pdf

Olvassa a TELE-satellite magazint Internet cimünkön:
http://magazine.tele-satellite.com/TELE-satellite-0809-mag.pdf

在线阅读《国际卫星电视
http://magazine.tele-satellite.com/TELE-satellite-0809-man.pdf

Lees TELE-satelliet Magazine online:
http://magazine.tele-satellite.com/TELE-satellite-0809-ned.pdf

Czytaj TELE-satelitę Magazyn w wersji on-line :
http://magazine.tele-satellite.com/TELE-satellite-0809-pol.pdf

Ler Revista TELE-satélite online:
http://magazine.tele-satellite.com/TELE-satellite-0809-por.pdf

Citiți revista TELE-satelit online:
http://magazine.tele-satellite.com/TELE-satellite-0809-rom.pdf

Читайте журнал ТЕЛЕ-сателлайт он-лайн:
http://magazine.tele-satellite.com/TELE-satellite-0809-rus.pdf

Läs TELE-satellit online:
http://magazine.tele-satellite.com/TELE-satellite-0809-sve.pdf

Uluslararası TELE-satellite Dergisi'ni online okuyun:
http://magazine.tele-satellite.com/TELE-satellite-0809-tur.pdf

Technomate

TM-5000 Series
with USB PVR & Component

92%
"What Satellite"
Jan 08

- 10,000 Channel Memory
- Component (YPbPr) Output
- Very Fast & Detailed Blind Search
- USB 2.0 for Software Download/Upload, MP3 & JPEG Playback
- Record/Playback FTA Channels by USB
- Super Sensitive Tuner

TM-5200 D USB
Free-To-Air Satellite Receiver

TM-5300 D+ USB
Built-in Smart Card Reader

TM-5400 CI+ USB
Card Reader + Common Interface

TM-5600 CI USB
Common Interface Slot

TM-6000 Series
High Definition USB PVR

- 10,000 Channels
- Record Scrambled/FTA Channels by USB
- USB 2.0 for Software Download/Upload, MP3 & JPEG Playback
- MPEG-4 & H.264 (1080i/720p/576p/576i)
- 1 Smart Card Reader & 2 CI

TM-6800 HD
DVB-S/S2 Satellite

TM-6900 HD COMBO
DVB-S/S2 Satellite & DVB-T Terrestrial

TM-3000 Series

TM-3500 D+ USB:

- 6,000 Channels • Timeshift
- Built-in Smart Card Reader
- Record Scrambled/FTA Channels by USB
- Record 1 Channel and watch another at the same time! (on same TP)

TM-3100 D
Free-To-Air Satellite Receiver

TM-3200 D+
Built-in Smart Card Reader

TM-3300 2CA
2 Card Readers

TM-3400 CI+
Card Reader + Common Interface

Technomate Europe
Zi De Vunt 4, 3220 Holsbeek, Belgium
Tel: +32(0)16/40.80.47
www.technomate.com

http://www.epivalley.com

Be DIVX

NOVA 3000

USB PVR with DivX

PVR ready via USB for external HDD & SD memory card
Game from the web available
DivX file play available
Music & Photo store and play available
MPEG-2 DVB compliant
Video decoding : MPEG-2 MP@ML
Audio decoding : MPEG Layer I & II
SCARTS, S/PDIF, S-VHS, RCA output

EpiValley

• The Head Office : #321, GongDan-Dong, GuMi-City, KyeongSangBuk-Do, Korea • TEL : 82-31-714-0038 • FAX : 82-31-714-9888 • EMAIL : hsyou@epivalley.com
• Communication & Broadcasting Div.: #411 Lordland EZ Tower, 153, Gumi-Dong, Bundang-Gu, SungNam-City, KyoungKi-Do, Korea

CONTENT

TOPFIELD TF7700HSCI
Digital Satellite Receiver for SDTV/HDTV in DVBS and DVBS2 28

INFOSAT V055 PRIMARY FOCUS DISH
1.65 m Primary Focus Dish 34

IMPERIAL SATBOX HD
A perfect HDTV Receiver.....42

SONICVIEW SV-360 ELITE PVR
Easy To Use PVR Receiver.....46

VENUS NEW MILLENNIUM II-EP
Receiver for big motorized dishes 52

Media: Satellite & Broadband News 16
Feature:
Matching LNBF and Dish Type.....24
AWARD Winning
Satellite Receiver Guide 56
Company Report:
40 Years Spaun, Germany 58
Company Report:
Clark Electronics, Holland 70
Company Report: Teleippica, Italy 72
Company Report:
Square Plan, South Africa 76
Satellite Reception:
Satellite Reception in a Train 78
Channel Report: Fashion TV.....80
SatcoDX Suite CD-ROM 82
Practice Tip: Topfield Software 84
DX-er Report:
First Steps in the Ka Band 86

Dear Readers

For this first time TELE-satellite subscribers receive the 'SatcoDX Suite' CD-Rom with this issue. It contains a software suite that is compatible with SatcoDX satellite charts and is based in the 'SatcoDX Updater' which loads the complete SatcoDX database on your computer in one-hour intervals. Some of the 'SatcoDX Suite' applications load the database directly, others allow adding the data manually.

All 'SatcoDX Suite' applications are optimised for the SatcoDX database. Having an up-to-date database at your fingertips is a valuable addition to the software. Gone are the times when you had to manually update old satellite lists or had to look for current lists from a variety of available sources. No other satellite list is being updated hourly, which means only the SatcoDX charts are kept up-to-date, all of the time.

One of the special features of the 'SatcoDX Updater' is the 'SatcoDX-all-transponders.csv' file. This file lists all satellites with their respective transponders and this way makes it the ideal base file for satellite receivers. This file is not only updated every hour as well, it also contains the TID (transponder identification) and NID (network identification) PIDs as well as the DVB-S or DVB-S2 modulation standard used. With this information the file becomes an easy option for defining a receiver's database. Of course the 'SatcoDX Updater' can give out the satellite charts in csv as well as xml or sdx formats.

Admittedly, not everything in the SatcoDX satellite lists works perfectly already, but any problems there are will be solved as quickly as possible. If you want to contribute to making SatcoDX even better and more accurate and have your own reception station you can look at www.SatcoDX.com/autoscan for more information.

Have fun checking out the 'SatcoDX Suite' software. The issue after the next will contain the next edition of the suite, while the coming issue will once again include the SatcoDX 'World of Satellites' CD-ROM – please have a look at the preview on page 114 as well.

Yours,
Alexander Wiese

P.S.: My favourite radio station this month is 'Club Asia' from London (11,222 EUROBIRD 1 at 28,5° East), playing loads of Indian and Pakistani chart toppers. I really like their jingle saying "Where have you been when you first heard this", followed by a classic Indian pop title.

Country Report:
Satellite Reception in India 90
Media: VSAT News.....98
New Satellites 102
DX-er Report:
Feedhunter Rini.....106
History: 10 Years Ago 110
History: 20 Years Ago 112

ADVERTISERS

ABCOM 39
ANTECH.....99
ARION.....13
AZURE SHINE.....95
CARDSPLITTER 67
CSTB-2009 26
DISHPOINTER..... 105
DISHSTONE.....51
DIZIPIA 115
DOEBIS 14-15
EEBC-2008 40
ECHOLINK..... 103
EPIVALLEY 11
EURASIA-2008.....69
GT-SAT INTERNATIONAL.....27
HORIZON 63
IBC-2008..... 107
INFOSAT..... 49, 61
JIUZHOU 116
KATHREIN 20
MFC 101
MOTECK 103
MTI 95
NANOXX.....23
OPENBOX 65
OPENSAT.....21
PASAT ANTENY.....69
PROMAX.....33
REMOTEMAN 100
SATCATCHER 97
SEATEL.....67
SG LAB 105
SMARTWI.....19
SONICVIEW 87
SPAUN.....17, 41
SUBUR SEMESTA 79
TEHNIK B 97
TECHNOMATE.....10
TEVII 37
TOPFIELD..... 2
TRIMAX.....22

12-16 September, 2008
Rai Amsterdam, the Netherlands
Hall 12E / Booth No. A31

Who makes HD quality?

Pure & Vivid HD picture / Stylish wide body (430mm) with VFD front panel display / Supporting 2 CAMs of DVB Common Interface Standard / Various Video Display Format With PAL/NTSC/576p/720p/1080i 50Hz/60Hz Support / HDMI Digital Audio & Video Output / Easy and Fast Auto Programming, Intuitive User Interface / Supports RS-232C port for S/W upgrade

ARION TECHNOLOGY
Good Choice Better Life!
www.arion.co.kr/global

High Definition Digital Satellite Receiver
ARION AF-4000HDCI

conax NAGRAVISION irdeto USB openTV CANAL DIGITAAL HDMI macrovision

ARION Technology Inc. Tel +82-31-361-3000 / Fax +82-31-361-3099 / e-mail info@arion.co.kr

DOEBIS

Kompetenz in Satellitentechnik

JAEGER HUMAX TOPFIELD SMW SWEDISH MICROWAVE AB emitor S2 SPAUN

NEW TECHNOLOGIES – NOW ON STOCK

We are official HUMAX distributor

HDTV Receiver Selection

HUMAX

PR-HD 1000 / PR-HD 1000 C

HDTV for satellite and cable reception

- Suitable for Premiere and Premiere HD
- MPEG4 / MPEG2 Technology
- opt. out for Dolby Surround Sound
- Nagravision embedded
- HDMI (with HDCP)
- 2 x CI SLots
- 2 x Scart

HUMAX

iCORD

Twin HDTV PVR Reciever

- Recording 4 channels whilst watching a live tv or Play-back
- Time shifted recording for 2 hours
- Integrated 160, 320 or 500 GB HDD
- 1080i, 720p, 576p, 576i video resolution
- Audio decoding: Dolby AC-3 (Dolby Digital)
- AV File transfer by USB 2.0 port
- 2 Common Interfaces
- HDMI output

TOPFIELD

TF-7700 HD PVR

HDTV Digital Satellite Receiver with Personal Video Recorder

- Fully DVB-S / DVB-S2 (H.264) HD compliant
- With 2 tuners
- Time shift supported
- Dual Recording supported
- DivX codec embedded
- USB memory supported

TOPFIELD

TF-7700 HSCI / TF-7700 HCCI

HDTV for satellite and cable reception

- Supports MPEG-2, MPEG-4, H.264 and fully DVB compliant
- 2 Common Interfaces
- USB 2.0 supported for fast PC interface
- VFD Display for service information

TOPFIELD

TF 6500T HDMI **NEW**

DVB-T Receiver

- HDMI outputport, 576p, 720p, 1080i
- Fully DVB-T compliant
- 2000 service TV & Radio programmable

TF 6000 FE

Digital Satellite Receiver

- MPEG-2 Digital and fully DVB compliant
- DiSEqC 1.0, 1.1, 1.2 and USALS (DiSEqC 1.3)
- 5000 services (TV and Radio) programmable

HUMAX F3 FOX CI

UNICABLE TECHNOLOGY

Digital Satellite Receiver with CI Slot

- Scrambled channel receivable with DVB CI.
- MPEG-II Digital & Fully DVB Compliant.
- Max. 4000 channels receivable.
- Channel list mode
- 4 Favorite channel groups
- DiSEqC version 1.0, 1.2 USALS compliant

Measuring Instruments

emitor

MEGALOOK

MEGALOOK helps professional users to do exact adjustments and maintenance of satellite dishes and of cable TV and terrestrial networks.

- Input frequency: 2-900 MHz and 920-2150 MHz
- 4.5" B/W Monitor for PAL/NTSC
- Lots of memory positions for spectrum pictures
- RS232 for PC-connection
- Built in, rechargeable battery.
- Only 7.5kg complete with carrying case

ALSO AVAILABLE:

- **Combolook**
- **Digital Satlook NIT**
- **Satlook Micro +**
- **Satlook Mark IV**

DIGISAT PRO ACCU

Measuring instrument for dish-properties
Check two LNBs at the same time
With DiSEqC tester

AlSO AVAILABLE:

- **Digisat**
- **Digisat+**
- **Digisat Pro**
- **Digisat Multi**

DIGIAIR dB

The meter to use for easy Digital terrestrial installations. Very sensitive, easy to maximize weak and strong signals.

- Frequency range of 47-862 Mhz
- Shows the signal strength in dBµV
- Shows the complete spectrum in one picture
- Presents one channel readout with high resolution or six channels simultaneously

Satlook Micro G2 **NEW**

- Measure on two LNB´s at the same time
- Spectrum-analyzer with zoom function
- Super bright 3" LCD display
- Digital BER, QPSK and S/N-ratio
- Readout NIT -gives Satellite ID and TV/Radio-channel info
- DiSEqC according to level 1.0, 1.1 and 1.2

ALSO AVAILABLE: **NEW**

Upgrade-KIT for Satlook Micro

You need a PC with internet-access in order to be able to upgrade Your old Micro with the new G2 version.

Satlook Micro G2 upgrade contains:

- CD with software
- New G2 carrying-case
- Owners manual

Satlook NIT Color **NEW**

- DVB satellite-receiver 920-2150MHz
- Spectrum-analyzer with expanded spectrum
- 5" 16:9 LCD color display
- DVB-S (Free to Air) and Analog TV-picture
- Digital BER, QPSK and S/N-ratio
- DiSEqC according to level 1.0, 1.1 and 1.2
- KU- and C-band (normal/inverted video)

DOEBIS GmbH & Co. KG

Dr.-Günter-Henle-Str.4
D-56271 Mündersbach

Fon: +49-(0)26 80 98 79- 0
Fax: +49-(0)26 80 98 79- 19

Email: info@doebis.de
Web: www.doebis.de

Türkçe konusan personele sahibiz !

Мы говорим и даём консультации на русском языке!

ALPS · GIBERTINI · PREMIERE · Inverto · MICROELECTRONICS TECHNOLOGY INC. · Stab

NETWORK streaming clients

ELANVISION EV-8000S

- Linux Operating System
- Ethernet Card 100 Mbit
- USB 1.1 Host Controller
- IBM Power PC ("STB04500/Pallas")
- Recording 2 channels simultaniously while playback another from HDD

and many more features

TOPFIELD

TF-6000 PVR ES/WS

Digital Satellit PVR with HDMI

- Wireless LAN with Fully DVB-S compliant
- Two tuners with Dual Decoding (PIP)
- HDMI Video/Audio Output
- Integrated 160, 320 or 500 GB HDD
- 5000 TV & radio services programmable

PCMCIA-Modules

- CONAX
- IRDETO
- VIACCESS
- ASTON / SECA
- CRYPTOWORKS
- CRYPTOWORKS (Arena)
- PREMIERE

- ALPHACRYPT Light
- ALPHACRYPT Classic
- ALPHACRYPT TC
- VIACCESS MPEG 2+4
- CONAX MPEG 2+4

Motors

Aktuatoren/ Actuators

Mini Actuators – 6", 8", 10", 12"
Regular Actuators – 12", 18", 24"
Heavy Actuators – 24", 36"

H-H Mounts

SG 99 / SG 99 II – up to 1,00 m
SG 107 – up to 1,10 m
SG 2100 A DiSEqC 1.2 – up to 1,00 m
Stab HH100 DiSEqC 1.2 – up to 1,00 m
Stab HH120 DiSEqC 1.2 – up to 1,20 m

LNBs

- MTI
- BEST
- INVACOM
- ALPS
- INVERTO
- MAXIMUM
- TITANIUM, etc.

– Single Universal
– Twin Universal
– Quattro Universal
– Quad Universal
– Octo LNB
– Monoblock Single Universal
– Monoblock Twin Universal
– Monoblock Quad
– C Band
– Circular
and many more

MAXIMUM®

V-Series

AVAILABLE AS:

– V-1 Single
– V-11 Single + DiSEqC
– V-2 Twin
– V-40 Quattro
– V-4 Quad
– V-8 Octo
– V-21 Single Monoblock
– V-22 Twin Monoblock
– V-24 Quad Monoblock

Full LNB range MAXIMUM available from stock

Multiswitches / DiSEqC - Switches

- SPAUN
- DTRON
- JAEGER
- JOHANSSON
- MAXIMUM
- BEST

From 2 in/1 out
up to 17 in/36 out

S2 SPAUN™ Full Range

Parts

Multifeedholder for 2, 3, or 4 LNB

Wallmounts

15 cm distance – Aluminium
25 cm distance – Aluminium
35 cm distance – Aluminium
45 cm distance – Aluminium
55 cm distance – Aluminium
35 cm distance – Steel
45 cm distance – Steel
50 cm distance – Steel
70 cm distance – Steel

F-Connector – 7 mm
F-Connector – 7 mm waterresistant
F-Connector – 4 mm and more

Remotesystems

AV-Linker – Videosender for remote control
Remote Blaster
Zapline 2 and more

BIG Link

Koaxialcable

High Qualitiy coax cable
Minicable Coax
Mini-Twincable Coax
> 100 dB / > 110 dB

INVACOM QDH 031

AVAILABLE AS:

– SNH-031
– TWH-031
– QTH-031
– QDH-031
– SNF-031
– TWF-031
– QTF-031
– QDF-031

Full LNB range INVACOM available from stock

MICROELECTRONICS TECHNOLOGY INC.

High-Line-Series

AVAILABLE AS:

– MTI AP 8 T2NRC Single
– MTI AP 82 XT2N Twin
– MTI AK54 XT2N Quad

} • 40 mm • 0,2 dB

Full LNB range MTI available from stock

Inverto digital-labs NEW

IDLP UST110-CUO10-8PP

Unicable-Standard one cable solution.
Cascadable multiswitch for up to 16 users.

UNICABLE TECHNOLOGY

Dishes

GIBERTINI · TRIAX · emme esse MULTIMEDIA SYSTEM

40 cm – White
70 cm – White, Black, Red
90 cm – White, Black, Red
100 cm – White, Black, Red
120 cm – White
130 cm – White, Black
160 cm – White

Big Dishes directly from our warehouse!

SDI	1,50 m
SDI	1,80 m
Irte	2,00 m
Irte	2,40 m

IRTE

Flat-Dishes NEW

SELFSAT H 10 D

- Works on all Ku-band Satellites
- Cross polarization improved
- Ideal for High Definition (HD) reception

MAXIMUM Flat-1

- Receives alle programs broadcasted by european satellites
- 2 LNB (twin) output for 2 set-top-boxes plugged
- 60/70 cm equivalency

Multifocus Dish

MAXIMUM®

E-85 Multifocus 48° Dish

- Ellipse shaped dish
- LNB holder for 5 LNBs, 48°
- Turnable mounting bracket for optimized reception
- Steel with polyester coating

Balcony mounting parts

25 cm distance – Steel
50 cm distance – Steel

120 cm length – Ø 6 cm

ALSO AVAILABLE:

– Balcony stand 100 cm Aluminium
– Balcony stand 100 cm Steel
– Balcony stand "Holland"
– Balcony holder L-form 25 cm
– Balcony holder L-form 50 cm

More products and informations you`ll find on our website www.doebis.de

Edited by
Branislav Pekic

EUROPE

EUROPE

20 PERCENT OF EUROPEAN HOMES WITH HD BY 2012

New research from media analyst Screen Digest suggests that by 2012, only 20% of all European households with high definition (HD) displays will actually be watching in HD. By the end of last year 18% of the 165 million European TV households were equipped with HD displays, although less than 1% of these were fully HD-enabled (equipped with an HD set-top box and an HD subscription enabling them to watch HD broadcasts). The report identifies three "critical success factors" necessary for the technology to really take off in the region: penetration of HD displays, supply of HD content and the availability of HD broadcast platforms.

WORLDSPACE PARTNERS WITH STM FOR DIGITAL RADIO

STMicroelectronics has signed an agreement with WorldSpace Satellite Radio to develop, manufacture and distribute chips for European Satellite Digital Radio (ESDR) receivers planned for a WorldSpace pan-European and Middle East service offering, starting with Italy in 2009. The agreement between WorldSpace and ST is expected to lead to the first fully integrated device for channel decoding in ESDR receivers. ESDR technology enables WorldSpace to employ a hybrid satellite-terrestrial network.

AUSTRIA

TELEKOM AUSTRIA PASSES 50.000 AONTV SUBSCRIBERS

Telekom Austria has now reached 50.000 customers for its "AonTV" IPTV service. The operator is offering a basic package on AonTV for free for six months to subscribers who sign up before the end of September, as well as the set-top box for a discounted price of EUR 29.90.

BALTICS

BALTICS EYE IPTV GROWTH

The Baltic countries will enjoy significant growth in development of IPTV over the next five years, says a report released by industry analysts Screen Digest. According to the report, Estonia is set to lead the growth, as its Baltica DigiTV, which already occupies a significant proportion of the local pay TV market, is expected to reach 20% of Estonia's households by 2012.

VIGINTA OPTS FOR WIDEVINE CYPHER PROTECTION

Lithuanian telecommunications services provider Viginta has selected downloadable content protection from Widevine to secure content delivered over DTT, hybrid QAM (cable) and IPTV networks. Widevine Cypher will be used to manage the delivery of broadcast and video on demand content over its multiple networks delivery systems, which include MMDS, fibre rich Metro Ethernet and Hybrid Fibre Coaxial networks, to a range of consumer devices.

TEO ARRIVES TO 28.000 IPTV SUBSCRIBERS

Lithuanian operator TEO has released its results for the first half of this year and states that it now has 28.000 subscribers for its IPTV service, up from 25.000 at the end of the first quarter of 2008.

BELARUS

BELTELECOM LAUNCHES IPTV SERVICE IN MINSK

Beltelecom has launched an IPTV service in Minsk and the new service will be deployed in other parts of the Republic from this autumn. General Director, Kanstantsin Tsikar, said that Beltelecom plans to charge a one-off payment of BYR 30.000 (USD 14) for IPTV subscribers, plus a monthly rental of BYR40.000. Beltelecom's IPTV offering currently carries 20 TV channels.

CZECH REPUBLIC

O2 ARRIVES CLOSE TO 100.000 IPTV SUBSCRIBERS

Telefónica O2 reached 98.000 subscribers for its O2 TV IPTV service by the end of the first half of this year, up from 87.173 at the end of March. Revenues from broadband-based services (ADSL, IPTV and content) rose 13.9% in the first half of this year relative to the same period of last year to reach CZK2 billion (USD133.5 million).

FRANCE

HD LICENSES AWARDED

French regulatory body Conseil Supérieur de l'Audiovisuel (CSA) has allocated an HDTV channel licence to Canal+ its pay-TV offering on DTT. CSA previously awarded free-to-air HD licences to TF1, M6, France 2 and Arte. Canal+ was the only payTV channel to apply for the HDTV licence.

FRANCE TELECOM IPTV SUBSCRIBERS UP 76%

France Telecom had a total of 1.54 million IPTV subscribers in Europe by the end of the first half of 2008, up 76% from 872.000 one year previously. The operator had 1.389 million IPTV subscribers in France alone, an increase of 65.9% by the same comparison.

GERMANY

DEUTSCHE TELEKOM SIGNS IPTV DEAL WITH MTV

Deutsche Telekom has signed a deal with MTV Networks Germany to offer the latter's content in the VOD library of the operator's IPTV service T-Home Entertain. Programmes cost EUR 0.99 for a 24-hour rental. T-Home Entertain customers will have unlimited access to all available content from Nickelodeon with a subscription to the 'Kids Selection' package, costing EUR 4.99 per month.

LIECHTENSTEIN

ERICSSON TO UPDATE TELECOM LIECHTENSTEIN'S NETWORK

Ericsson has signed an agreement with Telecom Liechtenstein to upgrade and expand their ADSL network with the new VDSL2 technology. VDSL2, based on Ericsson's advanced EDA1200 product, enables Telecom Liechtenstein wide deployment of multiplay services e.g. voice, video and data as well as HDTV, IPTV, Video on Demand, high speed Internet access and interactive gaming. Network deployment and integration has already started.

POLAND

TP TO LAUNCH ORANGE TV SERVICE

Poland will be the next country to get an Orange TV service under plans unveiled by Telekomunikacja Polska (TP), majority-owned by France Telecom. TP, which already operates the Orange mobile network in Poland, has now acquired rights to extend its usage of the brand across TV, internet access and other activities. TP said it would roll out the service in Poland within the next 12 months.

PORTUGAL

MEO IPTV SERVICE REACHES 100.000 SUBSCRIBERS

Portugal Telecom said its new Meo IPTV and satellite pay-TV service has reached 100.000 subscribers since its launch in April. The operator said Meo subscribers account for 15 per cent of its ADSL clients, adding that net subscriber additions in the second quarter have totalled over 53.000.

ROMANIA

ROMTELECOM TO LAUNCH IPTV TRIAL

RomTelecom will begin IPTV trials later this year, according to its TV business manager Miroslaw Smyk. The Romanian incumbent already offers pay-TV via a DTH platform with more than 500.000 subscribers.

RUSSIA

SISTEMA CHOOSES NDS FOR IPTV AND MOBILE TV

Sistema Mass Media (SMM) has selected the NDS Unified Headend to manage and protect TV content delivery to subscribers across both IP and mobile networks. The NDS Unified Headend integrates CA, DRM and third party applications, allowing operators to deliver secure broadcast and VOD services to a variety of devices - set-top boxes, mobile phones, PCs, Portable Media Players and digital video recorders.

SCANDINAVIA

VERIMATRIX SECURES TELIASONERA'S IPTV SERVICE

TeliaSonera has deployed the Verimatrix Video Content Authority System (VCAS) for the tier one telecommunications operator's successful IPTV services in the Nordic region, Estonia and Lithuania. Telia Digital-TV, which was one of the first IPTV services in Europe to launch in 2005, offers subscribers 70 channels such as Discovery and the Disney Channel and a 24-hour on-demand library of movies.

TELIASONERA ARRIVES TO 430.000 IPTV SUBSCRIBERS

TeliaSonera reached nearly 430,000 subscribers for its IPTV service across all markets by the end of the second quarter of this year, with total pay-TV customers including cable and satellite operations reaching a total of 816,000. The telco had 320,000 IPTV subscribers in Sweden alone by the end of the second quarter of this year, adding just 2,000 in the period, this gives a year on year increase of a respectable 162,000 customers. The number of IPTV subscribers in Norway alone doubled to 8,000 between April and June, while in Lithuania the figure rose by 10,000 to reach 35,000, and in Estonia the company added 4,000 subscribers to reach 64,000.

THOMSON TEAMS UP WITH TELENOR FOR IPTV DEPLOYMENT

Telenor has selected Thomson to provide services and hardware to assist it to deploy IPTV services in Norway, Sweden and Denmark. Thomson will providing Telenor with its SmartVision video services platform, which incorporates middleware, video on demand (VoD) servers and two ranges of IP set top boxes (the DBI2210 and the DBI8500 with integrated hard drive for personal video

recording). Additionally, Thomson is integrating a conditional access content protection application from Conax.

SLOVENIA

TELEKOM SLOVENIJE IPTV MARKET LEADER

Telekom Slovenije has seen its share of the national IPTV market fall by three percentage points year on year in the first quarter of 2008 to reach 60.4%, according to a report by the Agency for Post and Electronic Communications (APEK). Alternative operator T2 followed in second place with a gain of just under 1% to reach a 36.3% share of Slovenia's IPTV market, with Amis and Tus Telekom accounting for the remainder.

SPAIN

GREEN LIGHT FOR HISPASAT TAKEOVER

Several Spanish companies including Abertis won permission from the European Commission for a joint venture to control Spanish satellite operator Hispasat. The companies involved, besides Abertis, include SEPI, CDTI, and INTA. Although the Commission said the deal had raised questions about vertical overlaps because Abertis ran terrestrial transmitters for TV stations and also bought satellite capacity, it decided to authorise the deal.

SWITZERLAND

NETSTREAM SELECTS ENTONE FOR IPTV DEPLOYMENT

Swiss ISP Netstream has selected customer premises equipment from US firm Entone for its high-definition IPTV service deployments in the country. Netstream is a provider of managed services and systems integration to a number of operators in Switzerland, and selected Entone's Hydra HD IPTV video gateway and Amulet HD IPTV receiver for the service deployments.

TURKEY

TURKEY PREPARES TWO NEW SATELLITES

Having successfully launched Turksat 3A in June, Turksat is preparing to launch two others, Turksat 4A and 5A. The Turkish satellite operator will decide on the features of Turksat 4A in August and launch it in 2011. Turksat 4A will offer broadcasting services covering the Middle East, Central Asia, South Asia and Africa. Work on 5A will begin in Turkey and will be completely done by Turkish engineers, with plans for a launch in 2013 or 2014.

UNITED KINGDOM

BBC LAUNCHES HD TESTS ON FREEVIEW

The BBC has begun DVB-T2 test transmissions from the Guildford transmitter southwest of London, in preparation for HD on Freeview. This follows the approval by the DVB Project of the DVB-T2 specification and this will be the first time signals compliant with the DVB-T2 specification will be broadcast. DVB-T2 is the next generation digital terrestrial transmission standard for new HDTV services on Freeview. DVB-T2 can provide more capacity and this will be essential for HDTV services to be launched on Freeview, currently planned for the end of 2009.

BBC TO LAUNCH UHD TV TRIALS

In conjunction Italian and Japanese public broadcasters RAI and NHK, this September the BBC will begin trials of Ultra High Definition (UHD) TV. UHD, also known as Super Hi-Vision, produces a resolution of 7,680 × 4,320 pixels which is around four times as wide and four times as high as existing High Definition TV. With 4000 Scanning Lines, NHK is promising consumers an experience which feels close enough to reality to make them want to reach out and touch the on-screen action.

BT ENDS FIRST HALF WITH 282.000 IPTV SUBSCRIBERS

British Telecom has signed up 68.000 customers to its pay-TV service BT Vision during the three months to June 30. The company, which launched the IPTV service commercially last summer, ended June with 282.000 BT Vision customers. While customers can sign up to BT Vision without actually taking a monthly subscription, to make the service profitable, BT needs customers to take out regular subscriptions.

NORTH AMERICA

IPTV SUBSCRIBERS TOP 1.8 MILLION IN 2007

The number of IPTV users in the Americas surged to 1.8 million by the end of last year, up 257.1% from 501,000 in December 2006, according to a recent report by iSuppli. The majority of that growth came from

two leading U.S. telecom operators, AT&T and Verizon, which continued to expand their fiber-optic IPTV networks throughout 2007, and collectively served almost 1.2 million IPTV customers by year's end. This represents growth of 294.9%, from a mere 296.000 subscribers at the end of 2006.

ESPIAL TO ACQUIRE KASENNA

Canadian IPTV middleware vendor Espial Group said it will acquire Kasenna, a competitor based in California, in a USD6.5 million move that will aid consolidation in the fragmented IPTV middleware sector. According to Espial, the combined company will have more than 100 service provider customers supporting about 2.4 million IPTV customers. Kasenna customers include Cavalier Telephone, CenturyTel, FastWeb, Kentucky Telephone, SaskTel, Tennessee Telephone, Time Warner Cable, Charter Communications and Knology. The IPTV middleware market also includes companies such as Minerva Networks, Innovate Systems, Quative, Thomson, Nokia Siemens Networks and many others.

CANADA

HDTV SIGNS EXCLUSIVE DEAL WITH SMITHSONIAN NETWORKS

Canadian HD broadcaster High Fidelity HDTV Inc. and Smithsonian Networks of the USA have signed an exclusive programming agreement under which programs from the US service Smithsonian Channel HD will be broadcast on Oasis HD, Equator HD and Treasure HD, three of the all-HD channels operated by High Fidelity in Canada.

UNITED STATES

DISH NETWORKS OFFERS HDTV IN 61 MARKETS

Dish Network said it now offers local HD channels in 61 markets, accounting for 68% of the country. The company will also add local HD in 22 additional markets by the fall, including Albany (NY) and Scranton (Pa). Eric Sahl, a Dish senior vice president, said the company is "aggressively moving forward with plans to reach 100 HD local markets and 100 national HD channels."

MONSTER CABLE OFFERS HDTV TRANSMITTER

Monster Cable will offer a wireless transmitter for HDTV signals that will connect a home theater's TV set with a digital signal box or DVD player. The wireless system is comprised of a receiver that plugs into the HDTV's HDMI port along with a transmitter unit that will hook up with the signal source. Called Monster Digital Express HD, the set-up will also upscale non-HD signals to HD resolution. The system is able to transmit a video signal up to 30 feet away using the ultra-wideband (UWB) technology from Sigma Designs.

AT&T LAUNCHES HDTV STREAMS

AT&T Inc's U-verse IPTV service has started offering concurrent high-definition (HD) video streams to residential consumers in some markets. Other IPTV services, including Verizon FiOS, already support concurrent HDTV streams, allowing users to view one program in HD, while recording another on a DVR at the same time.

COMCAST TO INTRODUCE DIGITAL BOXES FOR HDTV

Comcast is expected to order up to six million digital converter boxes this year in an effort to create more space for High-Definition channels, according to Multichannel News. Comcast plans to use the digital converter boxes to eliminate the need to transmit analogue signals. The converter boxes will be issued to customers who now own analogue sets. The operator hopes to switch over 20 per cent of its entire subscriber base to all-digital in 2008. Next year, the cable operator will likely order another 12 million converter boxes to continue its phasing out of analogue signals.

GLOBECAST INVESTS IN HDTV UPGRADES

GlobeCast has completed the next phase of its U.S. HD strategy with the installation of state-of-the-art encoding and converting equipment at its broadcast centre in Culver City, California. Using gear that includes MPEG-2 and MPEG-4 HD decoders as well as the Snell & Wilcox Alchemist Ph.C HD standards converter with motion compensation, GlobeCast can receive and process HD signals into any international format. GlobeCast can also down convert to SD and deliver the signal worldwide using a combination of MPEG-2 and MPEG-4 HD/SD compression. GlobeCast also offers advanced modulation standards such as DVB-S2 to maximize capacity.

IPTV NETWORK SERVICES SELECTS LATENS

IPTV Network Services, a consortium of several IPTV service providers in the state of Utah, has successfully deployed the Latens ECOsystem (ECO) to enable its IPTV offering. Latens ECO provides IPTV Networks with a single platform comprising next generation middleware and Latens' highly regarded Conditional Access for the secure delivery of advanced content services. The affiliates of IPTV Network Services have been offering telecommunications services to over 45,000 residences and businesses in many counties.

VERIZON TO MAKE AVAILABLE 150 HD CHANNELS IN NYC

Verizon Telecom has launched FiOS services with 100 high-definition channels in parts of New York City, announcing the availability of 150 HD channels by the end of this year in sections of New York City and some other areas of the US. FIOS TV service packages start at USD 94.99 per month with 54 free HD channels.

ECHOSTAR XI SATELLITE LAUNCHED

DISH Network Corp's plan to roll out more high-definition video channels received a boost on July 16 after the successful launch of the company's EchoStar XI broadcast satellite. DISH needs to roll out more HD channels to be able to compete with larger rival DirecTV Group, as well as cable and phone companies' video services. DISH said it would add another 17 national HD channels, bringing its total to 100 ahead of its original year-end target. DirecTV has said it will have 150 HD channels by the year-end. DISH also said it would introduce TurboHD, an all-HD programming package.

XM SATELLITE AND SIRIUS COMPLETE MERGER

XM Satellite Radio and Sirius Satellite Radio have completed their long-pending merger. The combined company will use the name Sirius XM Radio Inc and expects cost savings of about USD 400 million in 2009 and to post EBITDA of more than USD 300 million. The new company said it has 18.5 million subscribers

LATIN AMERICA

COLOMBIA

ETB TO LAUNCH IPTV IN MARCH 2009

ETB plans to start tests of an IPTV service in November of this year and launch by March of next year, according to new company CEO Fernando Panesso. He said that the telecom operator will invest COP87 billion (USD51 million) in the roll-out of IPTV in Colombia, despite regulatory uncertainties. ETB does not have a pay-TV licence as required by the National Television Commission, but does have a licence to operate IPTV as a value-added service, as directed by the Colombian Communications Ministry.

UNE-EPM LAUNCHES IPTV SERVICE

Une-EPM Telecomunicaciones has launched IPTV services in the capital Bogotá and also Medellin, according to local newspaper La República, becoming the country's first IPTV operator. The service includes 105 video and 50 audio channels, as well as PPV and VOD, with films costing between COP 3.500 (USD 1.95) and COP 4.700. Subscription plans cost COP 90.000 to COP 244.000 per month in Bogotá.

ASIA & PACIFIC

2008 KEY FOR HDTV IN ASIA

Major pay-TV operators in the Asia-Pacific, Middle East and Africa expect to carry more than 340 HD television channels by 2013, up from 32 channels currently, according to a new Euroconsult report commissioned by Malaysian satellite operator Measat. By the end of the year, 70 per cent of the 25 platforms surveyed - including 21 in Asia - expect to be offering HD content, the report found. According to the report, 12 per cent currently offer HD services. The number of HD channels being offered by the platforms is forecast to reach 107 by mid-2009, 226 in 2011, and 341 in 2013.Over the next three to five years, HD will expand from between three and five channels to an average of 15 channels.

AUSTRALIA

FOXTEL INTRODUCES NEW HD STB

Foxtel has rolled out a new service, Foxtel HD+, to old and new customers with five dedicated 24/7 HD channels along with HD movies on demand, powered by a new set-top box - the iQ2. The new digital box has a 320GB hard drive to fit up to 30 hours of HD content and up to 90 hours of standard definition programs. Four tuners are aboard the iQ2. Two enabled at launch will allow for simultaneous recording and viewing, one is reserved for Foxtel On Demand and the fourth is listed by Foxtel to be "enabled in the future". New channels and on-demand HD movies are broadcast in 1080i, except for ESPN HD in 720p.

CHINA

CCTV LAUNCHES TERRESTRIAL HDTV

CCTV's HDTV channel started broadcasting in Shanghai in June, using the national standard single-carrier wave technology developed by Shanghai HDTV and Jiaotong University. Preparation is underway for similar broadcasts in Tianjin, Shenzhen, Qingdao, Shenyang, Qinhuangdao, and Guangzhou.

CHINA TELECOM WITH 940.000 IPTV SUBSCRIBERS

China Telecom has in excess of 940.000 subscribers for its IPTV service, and expects to pass a million subscribers very soon. The service, provided in cooperation with Shanghai Media Group (SMG), has been available in Shanghai, Jiangxu, Guangdong, Zhejiang and Shaanxi since 2005 and offers broadcast and on-demand content, as well as information services. Rival China Netcom, meanwhile, offers IPTV services in six cities including Beijing, Harbin and Shenyang, with a reported 100.000 subscribers as of May 2008.

ZHONGXING-9 SATELLITE LAUNCHED

China on June 9 launched a French-built communications satellite that was used for live TV broadcast

Wireless SmartWi®
Multi Room Solution


Living room


Teen room


Kids room

SmartWi is the only proven universal DVB Multiroom solution on the market.
Only SmartWi can guarantee that the content actually stays within the household who has paid for it.

More and more Operators realise that the content copyright holders are most likely to claim additional royalty. This is relevant in cases where the operator releases card clones on the market - without being able to control how and where these cards are used.
Offer your customers a flexible, universal, secure and proven DVB Multiroom solution.

SmartWi - The original professional DVB Multiroom solution since 2004.

Contact us for further information

SmartWi International
E-mail: info@smartwi.net
www.smartwi.net
Tel. +45702 60031

www.SmartWi.net

of Beijing Olympics in August. The Zhongxing-9 satellite was built by Thales Alenia Space for China Satellite Communications Corporations (Satcom), one of the six basic telecommunications operators in the country under the Ministry of Information Industry.

INDIA

AKSH LAUNCHES IPTV WITHOUT BROADBAND CONNECTION

Aksh Optifibres in association with telecom firm MTNL has launched country's first IPTV service which can be viewed without any high speed broadband connection. The company plans to invest around Rs 150 in its icontrol IPTV platform in Mumbai and Delhi, which would provide more than 100 channels to its customers. It carries all the major popular entertainment channels from the Star and Sony group and sports channels from Neo and Ten Sports. Aksh has also entered with an agreement with telecom giant BSNL and MTNL, aiming for a strong presence in urban and rural areas where the government-controlled telecom firms have vast subscriber base.

BHARTI AIRTEL LAUNCHES IPTV WITHOUT AUTHORISATION

The Information and Broadcasting (I&B) ministry has asked the Department of Telecom (DoT) to initiate action against Bharti Airtel for launching IPTV services without obtaining the requisite approvals. While, Bharti in its response has said it has not launched commercial IPTV services, but was only doing pilots, the I&B ministry has told the DoT that private telcos have not been cleared to offer this service.

MTNL PROVIDES 74 IPTV CHANNELS

MTNL is currently providing as many as 74 channels through their IPTV service, compared to just around 26 free-to-air channels during launch. The company has signed up a deal with Time Broadband Services and its Israeli partner Optibase for developing and handling the content delivery network for its IPTV services. They are currently using Optibase's IPTV MGW 5100 platforms for its digital IPTV headend operation at the company's network operating centre. Time Broadband is now preparing to deploy IPTV services on both TV & PC delivery.

MINISTRY ACCEPTS IPTV RECOMMENDATIONS

India's Ministry of Information and Broadcasting has accepted recommendations from the Telecoms and Regulatory Authority of India (TRAI) for IPTV, according to local reports. The uplinking/downlinking norms will be amended to enable all broadcasters to provide signals to all distributors of TV channels, including IPTV operators, TRAI has also received a consensus from broadcasters to adopt non-discriminatory price regime on the composition of channel bouquets and the pricing of channels on an a-la-carte and bouquets basis for IPTV services.

INDONESIA

BNS TO DESIGN HD IPTV PLATFORM FOR PT

IP solutions provider BNS has been appointed by Indonesian telecommunications provider PT. Multi Kontrol Nusantara (MKN), a subsidiary company of Bakrie Group, to design and procure a turnkey HD & SD IPTV service platform. BNS's IPTV Service Platform design will enable MKN to deliver high and standard definition video services, including multicast, VOD, Network PVR, Time-Shift-TV, eShopping, games and others.

ISRAEL

SPACECOM TO PURCHASE AMOS 5 SATELLITE

Spacecom Satellite Communications will buy the Amos 5 communications satellite from Russia's JSC Academician MF Reshetnev Information Satellite Systems for USD 157 million. The Amos 5 satellite is scheduled for delivery and launch by March 31, 2011, and is due to operate for 15 years. Spacecom can cancel the agreement to buy the Amos 5 up to the launch if the satellite cannot be delivered, if it is found to be flawed during ground tests, or if it is lost after launch.

JAPAN

SKY PERFECT JSAT CONSIDERS HDTV

Sky Perfect JSAT Corp. is exploring the option of expanding its satellite television business by launching a broadcasting-satellite-based digital service in 2011 to complement its communications-satellite TV offerings. In the communications-satellite TV service, the company plans to start offering 12 high-definition TV channels in October. By 2011, the number is expected to be raised to nearly 100, roughly half the firm's communications-satellite TV channels. "We aim to become one of the top high-definition TV broadcasters in the world," said Chairman Masanori Akiyama.

JAPANESE COMPANIES AGREE ON IPTV STANDARDS

Telecoms companies Nippon Telegraph and Telephone (NTT), KDDI and Softbank BB have teamed together with technology vendors including Sony, Matsushita Electric Industrial, Toshiba, Sharp and Hitachi, as well as the country's five major commercial TV broadcasters and public broadcaster NHK. The companies expect to draw up unified IPTV standards and urge local IPTV operators and consumer electronics manufacturers to develop compatible technologies and equipment.

KAZAKHSTAN

KAZSAT-1 LOST

Kazakhstan's sole communications satellite, used by many of the country's TV broadcasters, is out of control due to a computer glitch and is likely to be lost altogether. Kazakhstan launched the Russian-built KazSat-1 satellite in June 2006, the first of four which it aimed to have in orbit by 2020 and which it said would establish the Central Asian country as a global space power. The head of Kazakhstan's National Space Agency, Talgat Musabayev, said the satellite has been out of touch since June 8 and could no longer be controlled from a space command centre in neighbouring Russia.

MALAYSIA

TELEKOM MALAYSIA TO LAUNCH IPTV IN 2009

Telekom Malaysia is to launch IPTV commercially in the second quarter of next year, as part of its drive to increase the usage of broadband services in the country, the company's CEO Datuk Zamzamzairani has said. Telekom Malaysia has reportedly been conducting trials in 400 homes in the Klang Valley, as well as in Kulim and Penang. When asked about channel offerings on the new service, the executive said that this is still in development.

NEW ZEALAND

SKY TV TO INVEST USD 17.5 MILLION IN HDTV

SKY TV, which is controlled by Rupert Murdoch's News Corporation, will spend $NZ22 million (USD17.5 million) over two years on high-definition broadcasts. The broadcaster said it aimed to get 80,000 set-top boxes installed. The new high-definition set-top boxes would cost $NZ599, or may be rented for $NZ15 a month. Sky TV's HD content is via a My Sky HDi set-top box that is identical to that offered by Foxtel. Sky TV subscribers also have access to five channels; Sky Sport 1 and 2, Sky Movies, Sky Movies Greats and free-to-air channel TV3.

OPENSAT

MAKE THE FUTURE PRESENT

1x Smart Card Reader • 2x Common Interface • HDMI / HDCP • Component Video output for Digital TV • MPEG2 MP@ML, MPEG4 Part10/H.264 • Dual Decoding (Real PIP Function) • High speed searching and switching channel time • Fully supported EPG (Grid or Matrix type) • Teletext and Subtitle supported by OSD • Easy auto satellite program searching • Auto NTSC / PAL switching • Software upgrade and Playback JPEG, MP3 etc via USB • Full HDTV

XT 9500 HD

ABC BIZNIS

ABC BIZNIS Krušovská 4646, 955 01 Topoľčany, Slovakia
Tel.: +421 38 5313508, Fax: +421 38 5313508, E-mail: info@abcbiznis.sk, Web: www.abcbiznis.sk

www.opensat.info

SINGAPORE

MIO TV TO AIR CONTENT FROM HOLLYWOOD STUDIOS

Disney-ABC, Warner Bros. and 20th Century Fox will air more than 50 series on Singapore's Mio TV IPTV platform in a first-of-its-kind syndication deal with the country's dominant telecom, SingTel. The exclusive deal with the one-year-old platform will see series air as early as 24 hours after their U.S. broadcast. Financial terms of the licensing agreements were not disclosed. The exclusive on-demand window will last five to six months.

STARHUB TO ADD FIVE HDTV CHANNELS

Pay-TV operator StarHub plans to be offering five high-definition channels on its digital cable platform by the end of this year, including a sports service. HD5 and Sports HD have already joined the the existing National Geographic Channel HD and Discovery HD. A fifth high-definition channel will be up and running by year end.

SOUTH KOREA

CABLE OPERATORS CRITICISE IPTV ACT

Cable TV operators have protested against the IPTV Act prepared by the Korea Communications Commission, saying that it is disappointing to cable TV and the entire broadcasting industry as the Act is biased in favor of certain communications operators, especially KT. The KCC's IPTV Act confirms accounting separation that all backbone operators are subject to is enough to prevent them from transferring their dominating power. In addition, the IPTV act also includes PAR or Program Access Rule that cable networks have opposed, citing that the rule might cause infringement on content providers' property rights and disrupt the nation's content industry, the companies said.

THREE IPTV OPERATORS SELECTED FOR PILOT PROJECT

Korea Communications Commission has selected KT Consortium, Hanaro Consortium and LG Dacom Consortium for a pilot project of convergence of broadcasting and telecommunication. The selected consortium, run with 3 billion won of the public and private matching fund, plans to provide contents owned by national and public institutions to subscribers so that they can see the contents at home through IPTV. It will kick off pilot service for 600 households in December.

SRI LANKA

SRI LANKA TELECOM PICKS UTSTARCOM IPTV SOLUTION

UTStarcom has signed a contract with Just In Time Holdings to supply its RollingStream end-to-end IPTV solution to Sri Lanka Telecom (SLT).SLT will use the RollingStream platform to bring IPTV services to its growing customer base throughout Sri Lanka. SLT, with more than 87 per cent market share and a subscriber base of more than 1.300.000 customers, expects to grow its residential and commercial business through its increased triple play capabilities now available with this IPTV deployment.

AFRICA

SOUTH AFRICA

MULTICHOICE LAUNCHES HDTV

MultiChoice launched HDTV in the South African market in July, the first of its kind in Africa. The Beijing Olympics were the first event to broadcast in HD format at the beginning of August. A new M-Net HD channel will launch at the end of August when HD PVR decoders will go on sale at major retail stores throughout the country at the price of R2499.00 (for a limited period only). To view DStv channels in HD, a customer will need a DStv decoder.

WORLD

AFN TO GO HD BY 2014

American Forces Network won't convert its satellite broadcast to a system that's compatible with high-definition television until 2013 for Pacific viewers and 2014 for viewers in Europe, according to Larry Sichter, Defense Media Center public affairs officer. AFN's current digital compression system packs 10 channels into a slither of satellite broadband. AFN will announce and publicize the exact details of its conversion plans sometime within the next 12 to 18 months.

Get the Power!

NANOXX

TESTED by drdish & RECOMMENDED

DIGITAL fernsehen
TESTSIEGER
6.2008
sehr gut
NANOXX 9500 HD
www.digitalfernsehen.de

Nanoxx 9500 HD
HEIMKINO 1,5
Testurteil:
sehr gut
Spitzenklasse 07/2008

HiFi Test TV+VIDEO HEFT 3/2008
Nanoxx 9500 HD
Spitzenklasse
Preis/Leistung: gut
1,5

Nanoxx 9500 HD
1,5 Spitzenklasse SAT Empfang
Preis/Leistung: gut

TELE SATELLITE AWARD & BROADBAND 04-05/2008
NANOXX 9500HD
Small enclosure, superbly crisp picture, extremly fast channel search, and connection for HDD

HDTV

USB Universal Serial Bus Personal Video Recorder
PVR

conax X CRYPT Blind Scan

NanoXX 9500HD

HDTV and SDTV Satellite Reception of Premium Quality

+ Outstanding super sharp picture both in MPEG-4 and MPEG-2 transmissions
+ USB2.0 with PVR Function for Digital Video Recording to an external USB2.0 Harddisk (to be connected optional)
+ Record 2 channels and watch a 3rd channel (also Timeshift) from the same transponder at the same time
+ Ethernet RJ45 for Software Upgrades, FTP File Transfer for copying files via LAN to the connected USB2.0 device (also Memory Stick)
+ Integrated Mediaplayer: Playback XVID, AVI, JPG and MP3 files from the connected USB2.0 device on the TV
+ 2 Common Interface Slots and 1 Smart Card Reader for Conax, X-Crypt, DG-Crypt, Firecrypt and Crypton
+ HDMI Ver. 1.2, S-VHS and YPbPr RGB Outputs

NanoXX 9500HD-C

HDTV and SDTV Cable Reception of Premium Quality

+ Outstanding super sharp picture both in MPEG-4 and MPEG-2 DVB-C transmissions (Cable)
+ Same specifications as the NanoXX 9500HD for satellite reception but DVB-C Tuner

conax X CRYPT Blind Scan

NanoXX 9200, 9400

Digital Satellite Receiver of Premium Quality

+ 10.000 Channels Memory,
+ Fast Blind Scan Tuner for scanning with 5, 4, 3, 2 or 1 MHz steps
+ USB1.1 Plug for Software, Channellist Upgrades + JPG-Foto Show
+ 2 Smart Card Reader for Conax, X-Crypt, DG-Crypt, Firecrypt and Crypton
+ Nanoxx 9400: same as 9200 but additional 2 Common Interface Slots

conax X CRYPT Blind Scan

NanoXX 9300C

Digital Cable Receiver of Premium Quality

+ 10.000 Channels Memory, DVB-C Standard, Blind Scan 5,4,3,2,1 MHz
+ QAM 16, 32, 64, 128, 256
+ USB1.1 Plug for Software + Channellist Upgrades + JPG-Foto Show
+ 1 Smart Card Reader for Conax, X-Crypt, DG-Crypt, Firecrypt and Crypton
+ 2 Common Interface Slots

iP PVR
X CRYPT

NanoXX 9600IP

Digital Satellite Receiver incl. IP PVR Function*

+ Record Video in MPEG format directly over your LAN Home Network to the hard disk of your Personal Computer (Windows). The needed Software Tool is included on CD Rom.
+ 6.000 Channels Memory
+ Ethernet RJ45 Plug for automatic Software Upgrades via Internet
+ 1 Smart Card Reader for XCrypt

NanoXX 1000

Digitaler Satelliten Receiver Free-To-Air

+ 4000 Channel Memory, Blind Search Funktion
+ SCPC, MCPC, C/Ku Band
+ 4 digit Frontdisplay, EPG 7 days
+ Multilingual OnScreen Menu
+ 2 Scart, Digital Audio Output S/PDIF (coaxial), Audio-Video Cinch
+ RS232, Main Power Switch

Distribution Germany
MatriXX Systems GmbH
Industriestr. 2
D - 65835 Liederbach
http://www.matrixxsystems.eu

Distribution Switzerland
Telanor AG
Bachstr. 42
CH - 4654 Lostorf
http://www.telanor.ch

Distribution Austria
Pötzelsberger Electronic GesmbH
Münchner Bundesstraße 121a
A - 5020 Salzburg
http://www.p-sat.at

Get the Power! NANOXX

http://www.nanoxx.info

Matching LNBF and Dish Type

Jacek Pawlowski

While satellite enthusiasts in Europe are very familiar with offset dishes, their counterparts in Asia may be more familiar with primary focus antennae. Both antenna types require different LNBF's. LNBF's differ in the reception band: C/Ku/S-Band and the polarization: linear or circular. You have to match the band and polarization with the signal you want to receive but you still can receive it with either a primary focus or an offset dish.

LNBF noise performance may be expressed either as noise figure (dB) or noise temperature (K). Those values are correlated - knowing one of them, you may calculate the other. This not a real difference but something like expressing the speed in km/h or knots.

But there is yet another parameter that you need to know when building your reception system. This is the f/D ratio of your dish and the f/D your LNBF is design for. f/D is a parameter telling you what part of the paraboloid has been "cut off" to form a primary focus dish. As you can see in Figure 1, D is a diameter of a dish and f is the focal length. Typically, the primary dishes are manufactured with the f/D = 0.28~0.42. To achieve the top performance, your LNBF should have the same f/D as your dish.

That's because the LNBF should have a proper viewing angle (feedhorn beamwidth) to "see" the whole reflector but not more. In other words, the f/D parameter defines the viewing angle of the feedhorn.

There is a picturesque mathematical formula that enables us to calculate this angle for a primary focus dish:

$$\theta = 2 \cdot \arctan\left(\frac{8 \cdot \frac{f}{D}}{16\frac{f^2}{D^2} - 1}\right)$$

If you do not have your calculator handy, you may refer to the table we prepared for you! **(table)**

And now, probably the most important fact: the LNBF's dedicated for offset dishes have the f/D parameter equal to 0.6. It means viewing angle 80°. The angle is calculated in accordance with a different formula because D is defined differently for an offset dish. But the most important fact is: the angle is much smaller for this kind of LNBF.

f/D ratio	Feedhorn beamwidth [°]
0.28	167
0.30	159
0.32	152
0.34	145
0.36	139
0.38	133
0.40	128
0.42	123

We illustrated this in Figure 1. If you install a proper LNBF on the dish (f/D=0.38 in this example), its viewing angle will match the reflector size. But if you install an LNBF dedicated for offset antenna (f/D=0.6), it will see only a portion of the reflector. The output signal will be much smaller.

How much smaller? In our example (f/D=0.38) the LNBF will see only 58% of the reflector diameter. For example, if the actual dish has a diameter 165 cm, we can expect a performance typical for a 96 cm dish. You will get antenna gain and directional characteristics equal to 96 cm primary focus dish. Big difference, isn't it?

So, perhaps we can win something installing a prime focus LNBF on an offset dish? Absolutely not! See Figure 2. Such an LNBF will see much more than a reflector only and that means it will pick up a lot of noise from the environment. The reception will be hardly possible.

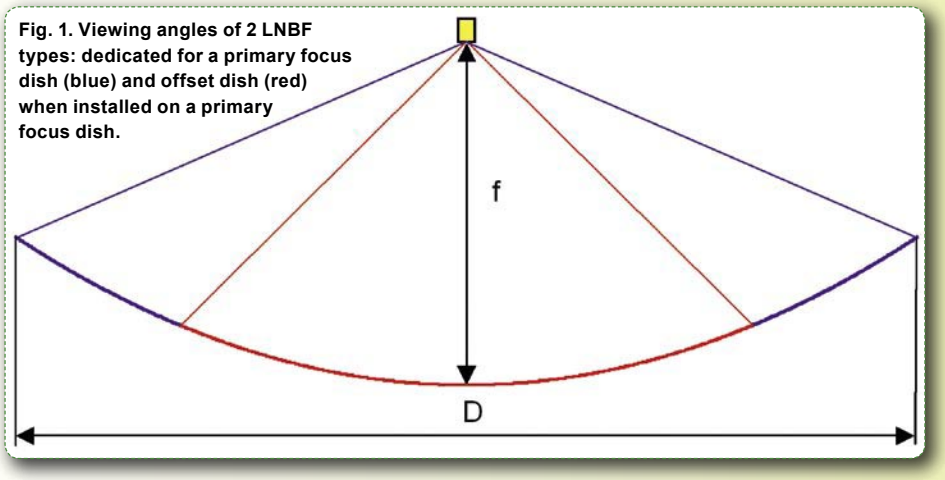


Fig. 1. Viewing angles of 2 LNBF types: dedicated for a primary focus dish (blue) and offset dish (red) when installed on a primary focus dish.

If the pictures look a bit strange to you, take into account that on both of them the satellite signal is coming vertically from top to the bottom.

The final conclusion is that you cannot use a primary focus type LNBF on an offset dish but you can use an offset type LNBF on a prime focus dish. But in the latter case you will get a performance equal to a much smaller dish: 40-60% of the actual diameter depending on the f/D parameter of a real dish.

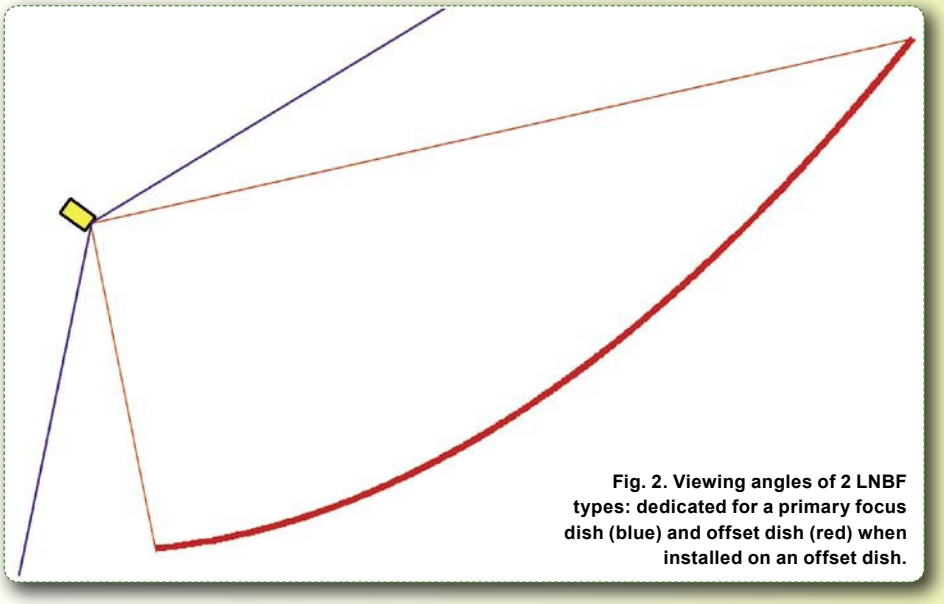


Fig. 2. Viewing angles of 2 LNBF types: dedicated for a primary focus dish (blue) and offset dish (red) when installed on an offset dish.

11th ANNIVERSARY INTERNATIONAL EXHIBITION AND CONFERENCE

CSTB - 2009

CABLE AND SATELLITE TV, IPTV, HDTV, BROADBAND, MOBILE TV,
CONTENT, OPERATOR'S SERVICES, SATELLITE COMMUNICATIONS

2 - 5 FEBRUARY
MOSCOW, CROCUS EXPO

Organizer

MIDexpo
МЕЖДУНАРОДНЫЕ ВЫСТАВКИ И ЯРМАРКИ

General partners

АКТР
РОССИЯ

iabm

Conference sessions
in association with

Official travel agent

MID TRAVEL
www.midtravel.ru

For additional information, please, call: (495) 737 74 79

www.cstb.ru

GT SAT
INTERNATIONAL

The new Generation "COMPACT LINE"

- Full product range available on all items
- Internal Professional rain cover
- Long neck for multifeed
- Best value for reliability
- 4.3° Monoblocks available
- **NEW!** Octo Circular LNB

YOUR SAT-SPECIALIST FOR NOW AND THE FUTURE

relook **advanced solutions 4 YOU**
NOW AVAILABLE!

HD-5000+
TWIN TUNER PVR HD READY

PVR ready for Internal and external HDD
Twin Modular Tuners DVB-S / T / C ready for internet applications (Radio/TV streaming via IP)
2CA + 1CI
High definition MPEG 4 DVB compliant, compatible standard definition as well
Ethernet & wireless connection
HD ready DVB-S2
web Browsing & RSS news reader
SW updates over : Internet or USB
7 days EPG

relook

relook

HD500
SINGLE TUNER PVR HD READY «LIGHT»

PVR ready over External HDD
1xCI & 1xCA
High definition MPEG 4 DVB compliant, compatible standard definition as well
HD ready DVB-S2
plus DVB-T Combo version
SW updates over : Internet or USB
Network communication via Ethernet
7 days EPG

GT-SAT International s.a.r.l., 16, Rue Millewee, L-7257 Helmsange-Walferdange, Luxembourg
www.gt-sat.com • info@gt-sat.com • tel.: +352 26432203 • fax: +352 26432204

Topfield TF7700HSCI

Elegant HDTV PVR Receiver with Extras

In the last several issues of TELE-satellite we had already introduced HD compatible receivers from the high-end manufacturer Topfield, in particular the top model TF7700HDPVR with twin tuners, PVR function and integrated hard drive (issue 03/2008).

Topfield heard all of these wishes and developed their new model TF7700HSCI: a single-tuner HDTV DVB-S2 receiver. The rear panel comes with a USB host connector to be used with an external hard drive or USB memory stick.

The manufacturer quickly recognized that there are many consumers who are not TV coach potatoes and don't necessarily need to have two tuners. That number could go even higher if the recorded programs with the aid of an external hard drive could be played back in different locations such as a second receiver in the bedroom, in the weekend cabin, on vacation, while camping, etc. You could even use more than one external hard drive in order to build up a small video archive or put some organization in your existing video archive.

Record you favorites television programmes into an external hard disk drive via the USB port

Otherwise the TF7700HSCI is a CI receiver that can handle DVB-S, DVB-S2-QPSK and DVB-S2-8PSK.

The TF7700HSCI is a visually appealing receiver. It comes delivered in a flat and black-colored 43cm wide chassis that fits perfectly in almost every TV rack. An extremely easy-to-read VFD display sits prominently in the center of the front panel that shows the current channel number and, while in standby mode, displays the current time.

Five buttons let you operate the receiver without the remote control and two CI slots hidden behind a flap are compatible with every possible module (Irdeto, Seca, Conax, Viaccess, Cryptoworks, Nagravision, etc.).

Even looking at the rear panel will put a smile on your

face: in addition to the HDMI connection that you would expect to find on an HDTV receiver, there are also two Scart jacks as well as six RCA jacks for stereo audio, video and YUV outputs, an optical digital audio output, an RS-232 interface, a USB 2.0 host connection and, of course, an IF input with looped-through output.

Topfield also included a small switch on the rear panel that lets you select if the output of the video signal is sent to the HDMI, YUV or Scart connectors and thus matches the settings in the main menu.

The included remote control sits nicely in your hand and is clearly labeled. Our test receiver also came with a very detailed user manual written in English; naturally, for each of the different country versions, a translation is provided.

Everyday Use

When turning on the receiver for the first time, the main menu is displayed that cannot be closed until all of the basic settings have been taken care of and a channel scan has been completed. A preprogrammed channel list that would have somewhat simplified the initial installation was not available.

The included satellite list encompasses 143 European, Asian and American satellites. The manufacturer finally listened to the endless criticism they received for the old satellite and transponder list and performed an overhaul such that now nearly every HD channel can be found on all of the known satellite positions. Let's not forget that new HD channels appear at different positions every week that understandably have not yet been programmed into the receiver. We can't really blame the manufacturer for that.

Fortunately, it is actually quite easy to add new satellite and transponder data; it is also just as simple to edit the existing data. As with all the other Topfield receivers, the TF7700HSCI supports the DiSEqC 1.0, 1.1, 1.2 and 1.3 (USALS) protocols and can therefore be used as well with the simplest multifeed combination, a DiSEqC motorized system or up to a 16 LNB WaveFrontier antenna.

A wide assortment of local oscillator frequencies (LOFs) for the C-band and Ku-band are already preprogrammed into the receiver. If you intend to use an S-band antenna with the TF7700HSCI, it would be no problem thanks to manual LOF entry.

Once the receiver has been matched to your specific antenna, the next step is a channel scan. In typical Topfield fashion, just about four minutes was needed to scan and load all the channels on a 110 transponder satellite.

Of course, in addition to the automatic channel scan, there's also a manual scan as well as the ability to manually enter PIDs for those more seasoned users.

If desired, a network scan can also be activated; in this way you can be sure that the receiver will find every possible channel even if the programming providers had decided to alter the arrangement of channels on the various transponders.

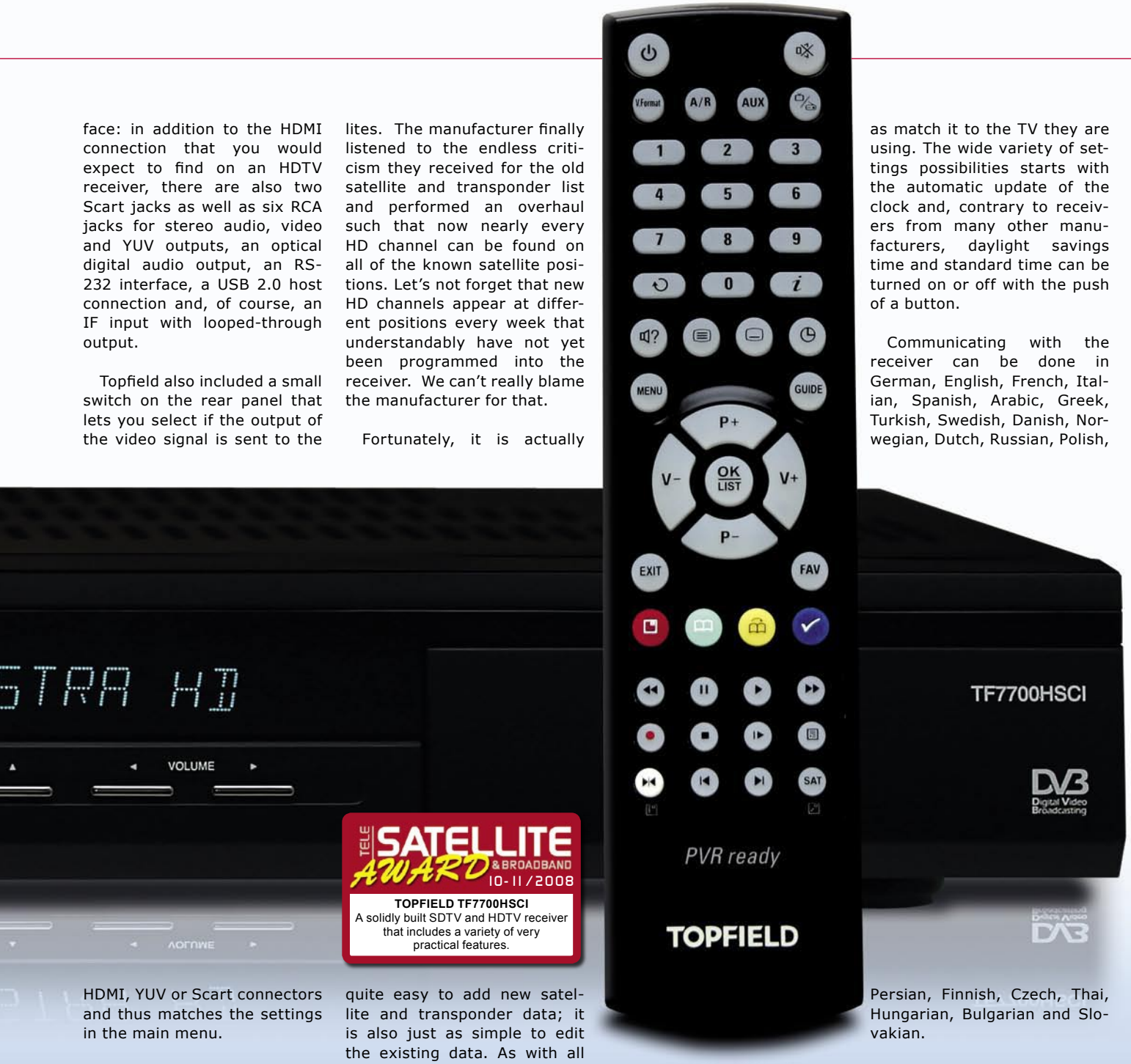
In the System Settings, the user can adapt the receiver to their requirements as well as match it to the TV they are using. The wide variety of settings possibilities starts with the automatic update of the clock and, contrary to receivers from many other manufacturers, daylight savings time and standard time can be turned on or off with the push of a button.

Communicating with the receiver can be done in German, English, French, Italian, Spanish, Arabic, Greek, Turkish, Swedish, Danish, Norwegian, Dutch, Russian, Polish, Persian, Finnish, Czech, Thai, Hungarian, Bulgarian and Slovakian.

Additional settings include a variety of OSD settings options as well as options for the A/V output signal.

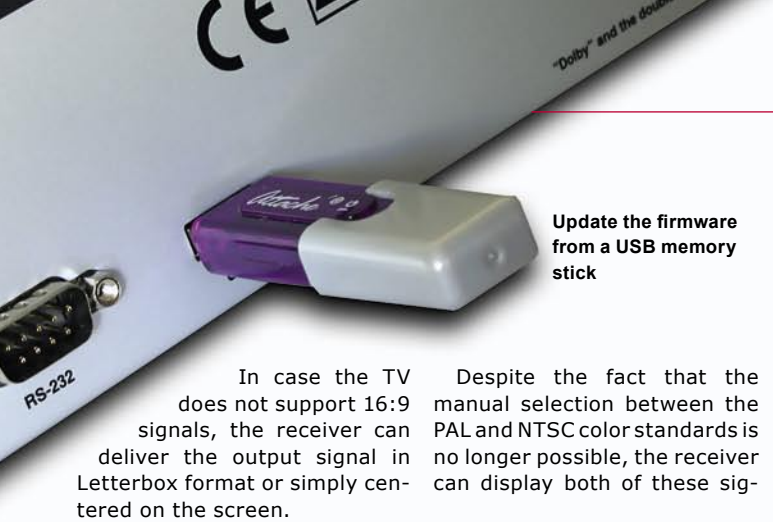
If the DIP switches on the rear panel set the video output to HDMI and/or YUV, the Scart output will only have S-Video or CVBS. If these switches are set to Scart, then RGB will also be available at the Scart output.

Even though more and more programming providers are making their content available in 16:9 format, there are still plenty of broadcasters that still use the older 4:3 format. The TF7700HSCI lets the user choose whether to view these channels in zoomed mode to fill the entire TV screen or with black bands to the left and right of the video image.



TELE SATELLITE AWARD & BROADBAND 10-11/2008

TOPFIELD TF7700HSCI
A solidly built SDTV and HDTV receiver that includes a variety of very practical features.



Update the firmware from a USB memory stick

In case the TV does not support 16:9 signals, the receiver can deliver the output signal in Letterbox format or simply centered on the screen.

But it should be fairly safe to assume that no user will use this receiver on a standard 4:3 TV.

In the Video Format menu, the user can select the resolution of the HDMI output signal (1080i, 720p, 576i or 576p) or the choice can be left up to the receiver itself based on the incoming signal by choosing Auto for this menu selection. This function is actually quite practical since a standard SD signal, that would otherwise be given an improved 1080i resolution through the use of a scaler, would appear foggy and washed out and thus choosing 576i or 576p would be the right choice.

The automatic signal switching performed exactly as it should during our tests; the receiver immediately recognized the high-quality HD signal from ORF1 HD and the correct resolution of 720p was selected. When the receiver was switched to an SD channel, the TF7700HSCI instantly activated 576p.

Even the 1080i resolution on the HD channels of a German PayTV provider were effortlessly recognized and matched by the receiver. The video format can conveniently by changed by pushing a single button on the remote control.

Despite the fact that the manual selection between the PAL and NTSC color standards is no longer possible, the receiver can display both of these signals without any problems. For DXer's this is great news: they won't have any trouble receiving feeds from the US.

As with most of the other Topfield receivers, the TF7700HSCI can also store only 5000 TV and radio channels; for a CI receiver with DiSEqC 1.3, this is clearly not enough.

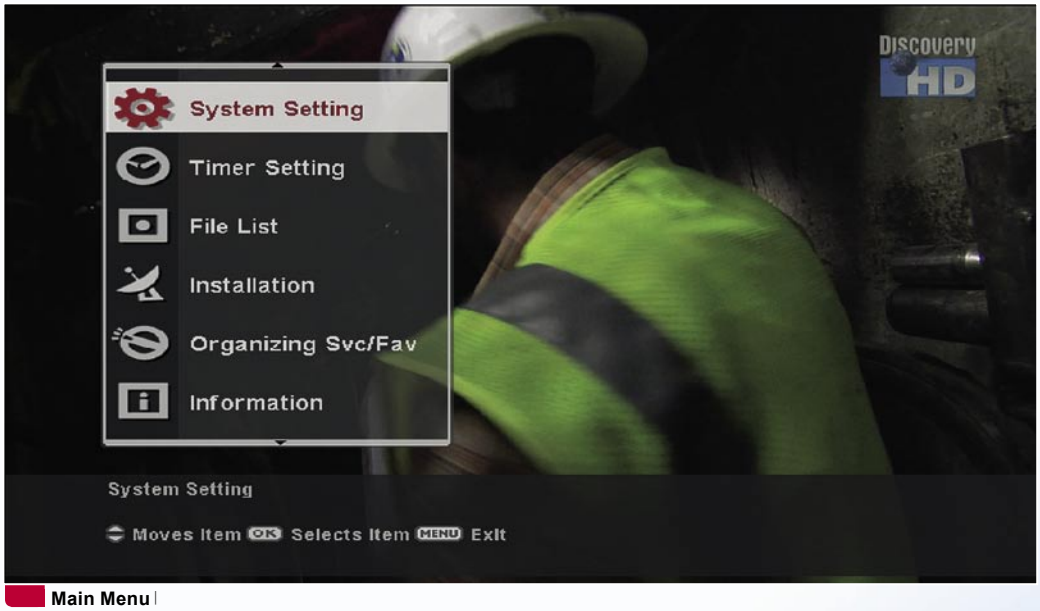
Because of the limited channel memory capacity, efficiently editing the channel list is even more critical. It would seem that Topfield put a lot of work into editing the channel list – users can easily delete, move or rename channels or lock them out with a PIN code. Channels that are watched more often can be quickly moved into one of the freely selectable Favorites lists and can then be accessed with the push of a single button. The System Restore function is an extremely practical feature. The user can take a complete snapshot of all the settings, the Channel and Favorites lists, satellite data, etc. and save this information as often as needed. Should there ever be a problem or if something went wrong with a setting, the original configuration can quickly be restored. The receiver would then be back to its original state with all of the correct settings in place.

Once all of the initial settings have been taken care of, the Exit button will take you out of the Main Menu and the receiver will then switch to the first channel in the list.

As we have come to expect from Topfield, a very informative Info bar appears that provides EPG information on the current program, the time, information on the channel (teletext, encryption, subtitles, multifeed, etc.) as well as transponder data. A second push of the Info button provides more detailed information on the current program assuming of course that this data is made available by the provider. Information on upcoming programming is delivered by the Guide button.

The TF7700HSCI quickly builds a complete overview of all the programming and by pressing the OK button timer settings can be handled directly from the EPG while the current program is visible in a small window (even with HD channels).

A push of the OK button displays the channel list that with



Main Menu

the help of the colored function buttons on the remote can be sorted or limited to specific satellites.

The time to switch between two HD channels is just under two seconds; the channel switching time is faster between SD channels.

Because of the automatic adjustment of the picture resolution, the time to switch between HDTV and SDTV channels can be as high as three or four seconds depending on the TV. If this is too long for you, simply turn off the automatic resolution function and change the resolution manually as needed with the remote control.

The Topfield manufactured tuner left us with a very good impression; it can easily handle weaker signals such as can be found on BADR 26° east, NILESAT 7° west or ASTRA 2D 28.2° east.

Unfortunately, we could not find any technical data on the tuner in the user manual so we had to conduct our SCPC test without any range data from the manufacturer to compare to. Our tests revealed that reception is possible only with symbolrates starting at roughly 2.0 Ms/sec.

We were especially pleased with the HDTV reception test; it performed perfectly and without any erratic video or crashes. We looked at various HDTV channels at different satellite positions and, regardless if it was FTA or encrypted, the TF7700HSCI did not have any problems with any of the channels.

Up to this point, the TF7700HSCI was similar in function to other HD receivers, but this is where the similarities come to an end: the integrated USB 2.0 host connection.

For our tests we connected a Seagate FreeAgent Pro hard drive and a 4GB USB memory stick. As soon as each device was connected, and this can even be done while the receiver is operating, the TF7700HSCI immediately recognized the new storage medium and, just like that, multiple PVR functions such as Record and Play instantly became available.

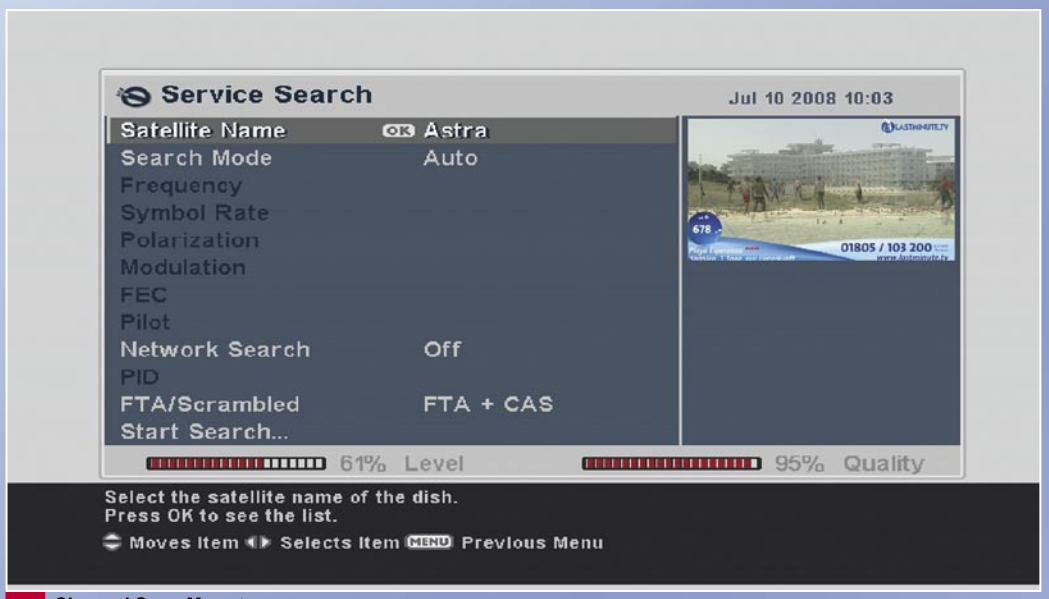
While one channel is being recorded (even an HD channel), all the other channels on the same transponder (again, even HD channels) are available to be viewed live. It is also possible to record one channel and watch a previously recorded channel at the same time.

Despite the extreme load we put on the receiver, we could not detect any interference or other hiccups during recording and playback.

In general, we could not detect any difference in performance compared to receivers with built-in hard drives; this lets the user take full advantage of an external storage device and gives them the flexibility to swap external devices or bring them with you to another location.

The recorded programs on the external hard drive or USB stick can also be played back on a PC without any problems or with the proper tools can be burned to a DVD. Even HD recorded programs did not give our computer any difficulties.

Topfield is constantly at work improving their products. New software updates can be uploaded into the receiver either via satellite, through the USB stick or through the serial interface. This makes it very easy for the user to keep the software in the receiver up to date.



Channel Scan Menu

Expert Opinion

Thomas Haring
TELE-satellite
Test Center
Austria

+

The TF7700HSCI is a solidly built SDTV and HDTV receiver that includes a variety of very practical features. Add to that the logically laid out and easy to understand OSD and you have a perfect everyday satellite receiver for the entire family.

The HDTV reception in DVB-S2 mode based on the H.264 standard functioned properly and thanks to the HDMI output, these super-clear signals can easily be connected to a plasma or LCD TV. With the help of the USB 2.0 interface and an external hard drive or USB memory stick, the TF7700HSCI becomes a full-powered PVR machine whose recordings can easily be taken anywhere and just as easily be played back directly on a PC.

-

The channel memory only has room for 5000 channels and a main power switch on the rear panel would also be practical.

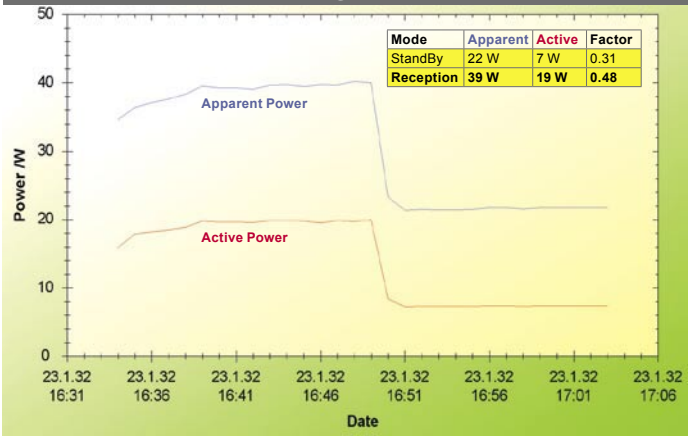
TECHNIC

DATA

Manufacturer	Topfield, Seongnam/Korea
Fax	+82-31-7082607
E-Mail	inquiry@topfield.co.kr
Model	TF7700HSCI
Function	Digital Satellite Receiver for SDTV/HDTV in DVBS and DVBS2 (QPSK/8PSK) MPEG2 and MPEG4
Channel Memory	5000
Symbolrate	2-45 Ms/sec.
SCPC Compatible	yes
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
USALS	yes
HDMI Connection	yes
Scart Connectors	2
Audio/Video Output	3 x RCA
Component Output	3x RCA
S-Video Output	no
UHF Modulator	no
Programmable 0/12 Volt	no
Digital Audio Output	yes
EPG	yes
C/Ku-Band Compatible	yes
PVR Function	yes (via external USB 2.0 storage medium)
Power Supply	90-250 VAC, 50/60 Hz
Dimensions	43/26.5/6cm
Weight	2.9kg

ENERGY

DIAGRAM



First 15 Minutes: Active Operation with Channel Switching, Recording, Playback, etc. Second 15 Minutes: Standby

Info Bar

Expanded EPG

Channel List with Options Menu

Recording of HD Programs

Overview of Previously Recorded Programs

PROMAX

TV EXPLORER II+

Panoramic 6.5" screen visible under direct sunlight !

- ✓ Spectrogram*
- ✓ Merogram*

- ✓ HD (DVB-S2) Measurements
- ✓ MPEG-2 decoder & CAM interface
- ✓ Constellation diagram & MER by channel
- ✓ Video and Screen capture

FREE automatic updates with NetUpdate

Spectrogram and Merogram: monitors spectrum and MER by channel to trace impulsional impairments (*patent pending)

www.promaxelectronics.com

+34 93 260 20 02

INFOSAT V055 Primary Focus Dish

As Light As A Feather

TELE SATELLITE AWARD & BROADBAND 10-11/2008
INFOSAT V055 PRIMARY FOCUS DISH
Lightweight dish for C-band, easy to assembly and elegant looking

If you are a satellite fan living in Europe, the Ku-Band satellites are something very common to you. But haven't you ever thought about exploring the mysterious world of C-Band? You think that the C-Band dish needs to be big, heavy and ugly? Well, not quite. You cannot do too much about the size – the C-Band has approximately 3 times longer wavelength than the Ku-Band. So to get the similar gain, the antenna must be also 3 times bigger. But you do not have to use a solid dish. You can choose an aluminum mesh reflector instead. In this way, you get a light antenna wit a much more appealing look than a solid one.

Installation

V055 of INFOSAT is a 1.65 m aluminum mesh antenna. It comes in three packages. Four parts of the reflector make up the first one. The second contains the pole and the LNBF legs and the third one – nuts, washers, bolts and the rest of the mounting stuff. The weight of the reflector is only 3.8 kg. It means that one segment weights less than 1 kg.

After unpacking everything, we looked for the assembly instructions. The producer did not include any. Well, we counted every bolt and nut, sorted them by size and compared with the holes we could see in the reflector segments and mounting parts. It did not take us long to figure out which bolt/nut should be used for. However, if INFOSAT decides to sell this product directly to the end users, it could be a good idea to attach simple instructions.

The assembly of the four parts of the reflector was really easy. We did it quickly and moved to a more tricky part – preparation of a provisional base for the antenna pole. Fortunately, a piece of particleboard was waiting in our garage exactly for the moment like that. How wise, that we did not throw it out. We could finally justify why so many strange things cover dust in our garage.

The V055 1.65m dish is delivered in three packages

After adding four adjustable legs, we could use the board as a horizontal base for the pole. We attached the pole to the base using three legs included in the package. Mounting the reflector on the pole could not be easier. You just put it on.

After mounting the reflector on the pole, the last step to do was the installation of four legs supporting the LNBF. It did not cause any problem. The antenna was ready for testing. We were quite anxious to see what this lightweight dish is able to provide.

C-Band Reception – Linear Polarization

There are not too many C-Band satellites receivable in Europe that transmit with linear polarization. Thanks to the Satellite Dish Pointer (www.dishpointer.com) and SatcoDX (www.satcodx.com), we selected 4 such satellites. Only one of them: BADR-C had high elevation: 30°. The elevation of the remaining three: ABS-1, TELSTAR and NSS-10 was only around 10°. Our fears materialized. We were able only to receive the European beams of BADR-C.


INFOSAT
INFOSAT
INFOSAT

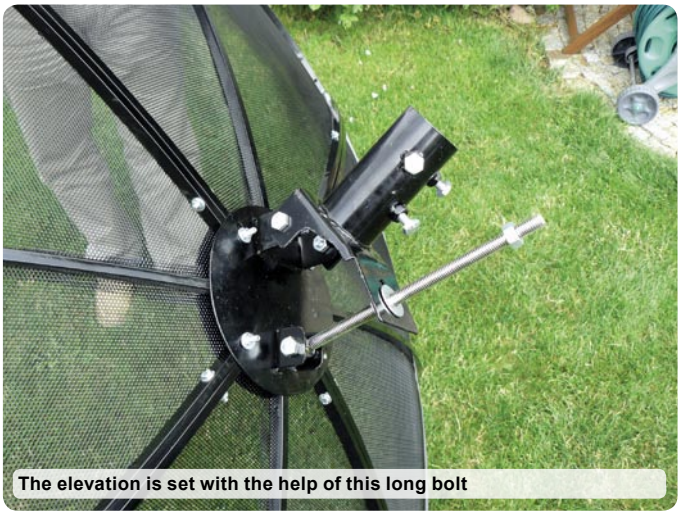

The 4 parts of the reflector are protected with cardboard


Reflector parts are unpacked...


...and so is the rest of the package


Assembly of the reflector was quite easy due to the very low weight


Are all the nuts tightened?


The elevation is set with the help of this long bolt


The improvised support for the antenna has been prepared. The included mast has been attached to the particle board equipped with adjustable legs to level it off.


Well done, all parts fit, now the electronic parts

TeVii

Watch HD, Record on HDD

C500
C CA USB

S500
S2 CA USB

S650
S2 USB

S460
S2 PCI

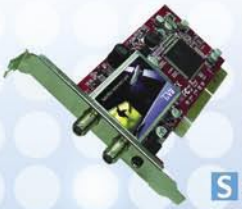
- DVB-S/S2/C (AVC/H.264)Compliant
- 3rd Party software ready
  ProgDVB/MyTheatre/SkyGrabber/FastSatFinder
- Multiple CA Support (S500/C500)
- Vista 32/64 bit & Linux driver Support

LooK For Distrubutors In Your Region

Please Contact matthias@tevii.com
www.tevii.com
TAIWAN

High Speeed Broadband via Satellite

S 600



S 420

PLANETSKY SATGATE SpectrumSat SPACEGATE OPEN-SKY SkyDSL RADUGA INTERNET CTB SATCONXION

The finished dish with the typical C-band LNB protector. It's elegant and is allowed be fixed permantently next to the trees

Time to align the antenna. We recommend to use a water level equipped with an angle meter – it will make setting the elevation much easier.

The other satellites did not even produce the smallest peaks on our spectrum analyzer. The trees surrounding our place made it impossible. In that moment, we were really sorry that the TELE-satellite test center is not located on the roof of a skyscraper.

The signal from BADR-C, 26°E, was very, very strong. We received transponder 3880H (27500, 3/4) with the channel power of 84 dBµV and C/N 12 dB. Noise margin was over 6 dB. Another digital transponder: 4040H (27500, 3/4) was not worse. Signal strength 84.1 dBµV and C/N 12.6 dB. The noise margin: 6.3 dB. Very good!

The analog transponders were equally strong and clear. The C/N was higher than for the digital transponders (what is natural) but would you expect C/N=23.5 dB!? We noted this record for the transponder 3996H (PAL). The Al Jazeera English channel is transmitted with such powerful signal.

Ku-Band Reception – Linear Polarization

Although mesh antenna is rather dedicated for C-Band, we also tried a primary focus LNBF for Ku-Band. The reception in Ku-Band was not so strong. We tested one transponder on HOTBIRD satellite (13°East). Generally speaking, the carrier to noise ration was slightly worse than that of a regular LNB mounted on 90 cm offset dish (12 dB vs. 12.5 dB). We were hoping for a performance of a 120 cm solid dish but remember that a mesh antenna is not the best good choice for Ku-Band. Some noise from the ground can get through the mesh surface and reach the converter.

Because it could be quite interesting for our readers, we also tried a regular Ku-Band LNB for offset dishes. We installed it on INFOSAT V055. Theoretically such LNB has too high f/D ratio (0.6) so it can only "see" a central part of the primary focus dish. Our measurements confirmed the theory. The signal quality dropped by 1 dB when compared with the primary focus LNBF (C/N = 11 dB). However, strong satellites like HOTBIRD could still be received even with such "wrong" LNB installed on V055.

The fun starts: trying to receive a C-Band satellite located very low over the horizon

AB IPBox 900HD

UNCOMPARABLE WITH OTHER HDCI RECEIVERS, LINUX INSIDE !

- SATELLITE, CABLE OR TERRESTRIAL BOX HD
- eSATA, USB2.0 FOR HDD
- ETHERNET
- NEW DESIGN
- 2 x CI SLOT
- WEBINTERFACE, HDMI WITH HDCP, YPBPR

Timeshift Pauselife TV

ETHERNET

JPG

MP3

RECORD & PLAY

ab-com

www.abipbox.com

BUILDING CITY OF THE FUTURE TOGETHER!

www.eebc.net.ua

6th EASTERN EUROPE EXHIBITION AND CONFERENCE IN TELECOMMUNICATIONS AND BROADCASTING

EEBC 2008
Telecom & Broadcasting

PRODUCTS, SERVICES, TECHNOLOGIES AND SOLUTIONS FOR:
- TELECOMMUNICATIONS
- BROADBAND SYSTEMS
- INTERNET
- BROADCASTING
- CONTENT PRODUCTION

OCTOBER 29-31
KIEV, UKRAINE
"KievExpoPlaza"

General Internet Partner

General Information Sponsor
ИД «СофтПресс»

Media Partners

Contact information: TECHEXPO company (Ukraine) tel/fax:+38 044 5010209 e-mail: info@eebc.com.ua http:// www.eebc.net.ua

EEBC 2008
Telecom & Broadcasting

6-я Восточноевропейская выставка и конференция по телекоммуникациям и телерадиовещанию

29-31 октября 2008
КиевЭкспоПлаза, Киев, Украина

ПРИГЛАШЕНИЕ

INVITATION

6th Eastern Europe exhibition and conference in telecommunications and broadcasting

29-31 october 2008
KievExpoPlaza, Kiev, Ukraine

спонсоры билетов:
tickets sponsors:

www.eebc.net.ua

C-Band Reception – Circular Polarization

There are more satellites transmitting with circular polarization receivable in our location but most of them require bigger dishes than 1.65 m. However there were a few ones that should be reachable. We tested the antenna with NSS-7 22° West, and YAMAL 202 49° E. We got C/N 6-7 dB. Their EIRP is 40 dBW in our location what means that one should use at least 1.5 m dish to receive them. With C/N close to 7 dB we were at the reception threshold.

Conclusion

The V055 is a lightweight mesh dish which can easily be erected in a garden. It's size of 1.65 m diameter is the minimum required in Europe for C-band reception, but is sufficient in other regions with more high-power C-band satellites. The advantage of the V055 is it's ease of assembly, and that it fits easily into a garden. It's best used as a fixed dish for a high-power C-band satellite.

And now we test the dish with a Prime Focus LNB in Ku-Band

Experts Opinion

Jacek Pawlowski
TELE-satellite
Test Center
Poland

+

INFOSAT V055 is a very lightweight antenna best to be used as a fixed dish. It is easy to assembly and looks elegant. Definitely, it is not a big ugly dish!

-

Due to its delicate construction the dish is deformable and requires careful handling.

TECHNIC

DATA	
Manufacturer	INFOSAT INTERTRADE CO., LTD.
Website	www.infosats.com
Email	sales@infosats.com
Tel./Fax	+66- 2- 961-9161-3 / +66- 2- 961-8587
Model	V055
Function	1.65 m Primary Focus Dish
No. of segments	4
Focal length	63 cm
Depth	28 cm
f/D ratio	0.38
Material	Aluminum mesh 0.9 mm
Operating frequency	3.4 ~ 12.75 GHz
C-Band gain	35.5 dB
Ku-Band gain	42 dB
Stand pole	1 m, ∅ 2"
Reflector weight	3.8 kg
Mounting stuff weight	3.5 kg
Pole and leg supports weight	2.6 kg

Imperial SatBOX HD

A Perfect HDTV Receiver

Thanks to the emergence of HDTV, or high definition television, satellite receivers are going through a substantial redesign. Instead of 576 lines, this new technology brings with it nearly twice that amount, 1080 lines, and offers therefore a marked improvement in picture quality. The Imperial SatBOX HD receiver that we tested lets you receive not only DBS-S2 signals in MPEG2 (H.262) but also signals in the newer MPEG4 compression (H.264). At the same time, the video signals are now carried to the TV digitally with the new HDMI connections.

When I turned on the Imperial SatBOX HD for the first time, I sat there mesmerized by the high resolution transmissions for almost an hour. I surfed from ASTRA19 to HOTBIRD13 and from ASTRA 28.2 to ASTRA 23.5. Through it all I enjoyed the spectacular landscapes and the animal portraits that could be seen on the Demo channels. It's a nice feeling knowing that you are witnessing the birth of a new technology even if for the most part it's still in the starting gates in Europe.

I like the Imperial SatBOX HD. It weighs only about 2.2 Kg (4.8 LBS), measures 340x248x65 mm and therefore fits nicely in almost any entertainment center. Its power consumption is relatively low, in standby mode it uses only 12W and when fully operational 17W (with antenna motor it's more like 18W).

The sensitivity of the tuner is above average and its operating system is fast and comes with a number of convenient functions.

In addition to the Standby button on the front panel, there are seven more buttons that let you work through the menu system without the need of the remote control. The dominant feature on the front panel would have to be the 13-character alphanumeric display. It shows not only the channel name but also provides information on a number of the menu functions. The two CI slots plus the Conax card slot lets the box receive up to three different encryption systems at the same time. This is especially critical since HDTV is mostly available with encrypted PayTV packages.

Aside from the LNB In/Out and the two Scart jacks on the rear panel, there's also an HDMI output. The latter provides a digital output of up to 1080i lines of resolution whereby this line structure is also possible with the 576 lines of a normal DVB-S broadcaster thanks to upscaling.

The annoying line structure disappears with a compatible TV; this makes for enjoyable viewing even on larger flat screen TV's. Top quality stereo systems can be connected optically to the S/PDIF output or via the RCA jack.

Software upgrades can be uploaded through the RS-232 interface using a null-modem cable. The USB jack and the Ethernet connection are currently not active and are planned for a later version. The main power switch is a useful way to help save energy but it also makes the software upgrade process a little easier.

The receiver has an

above-average capacity of 7000 channels. This means there is a large memory reserve since the available FTA channels in Europe number at most 2500 leaving plenty of room for encrypted channels.

Memory management encompasses every satellite and 32 Favorites lists divided into TV and radio channels. They can be completely edited; entries can be locked, deleted, renamed or moved. Transponders can easily be added although no more than 16 satellites can be stored.

If you access the channel list with the OK button, you can scroll within the channel list without actually switching to another channel – a second push of the OK button is needed for that to happen. For every channel the associated frequency and polarization is shown.

With the left cursor button an additional menu can be called up with which you can access a Favorites list and the channel list. The remote control really doesn't need a Satellite button anymore.

With multiple satellites, channel management becomes a little more awkward. Moving and deleting channels can only be done with the entire channel list displayed; it might get a little confusing to keep track of what channel goes with what satellite.

This problem is somewhat solved by the fact that each channel keeps the same channel number regardless of what list you happen to be looking in at that moment.

With every channel change an Info bar appears at the bottom of the screen for 3 to 30 seconds (user-settable) that provides:

- the name and number of the channel
- the name of the current program
- the name of the next program
- the date, time, audio and language

Euro1080 on Astra23

Channel list for BBC HD

- $ display
- availability of EPG, teletext and subtitles
- name of the satellite, transponder and frequency
- signal quality bar graph

This Info bar can also be called up with the Info button.

A second push of the Info button displays a description of the currently running program. This data can also be viewed along with a thumbnail image of the current video by pressing the EPG button.

The EPG can show programming information for five channels at the same time for a week in advance, as long as this data is available in the first place. A 10-event timer is integrated into the EPG to make it easy to preprogram up to ten different programs.

The teletext function is quite sophisticated: every page is automatically downloaded by pressing the yellow Teletext button. Every page can therefore be accessed instantly when needed. The cursor buttons let you switch pages one at a time or by the hundreds just as fast.

Not all of the DiSEqC protocols are available. DiSEqC 1.0 lets you connect up to four fixed antennas and there's a helpful tool included to calculate azimuth and elevation for every satellite that can be seen from your location.

For motorized antennas up to 16 satellite positions can be set up manually with DiSEqC 1.2 or automatically with USALS.

The channel scan can be set to search by satellite, transponder, DVB-S or DVB-S2, FTA and/or encrypted channels. The scan itself is quite fast: HOTBIRD was completely scanned in roughly four minutes.

The channel scan must access a transponder list in order to work; without a transponder list a channel scan cannot be performed since, just like the previous model that was not an HDTV box, a Blind Scan function is not available.

Expert Opinion

Heinz Koppitz
TELE-satellite
Test Center
Germany

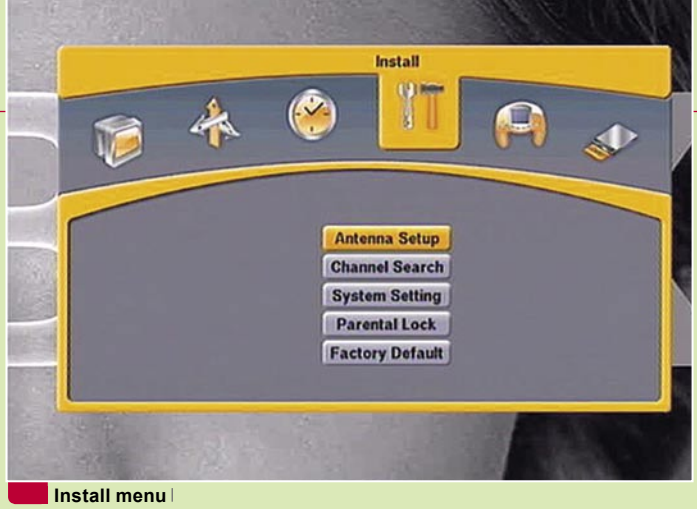
+

This receiver provides perfect HDTV video. It has no problems decoding older DVB-S signals and also the new DVB-S2 standard. Its various interfaces and functions are comfortable and easy to use.

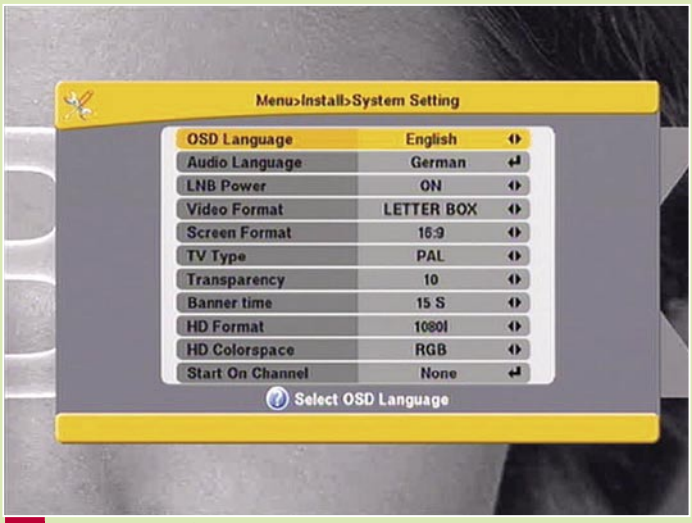
Large 13-character alphanumeric display
Sensitive tuner
DiSEqC 1.2 plus USALS

-

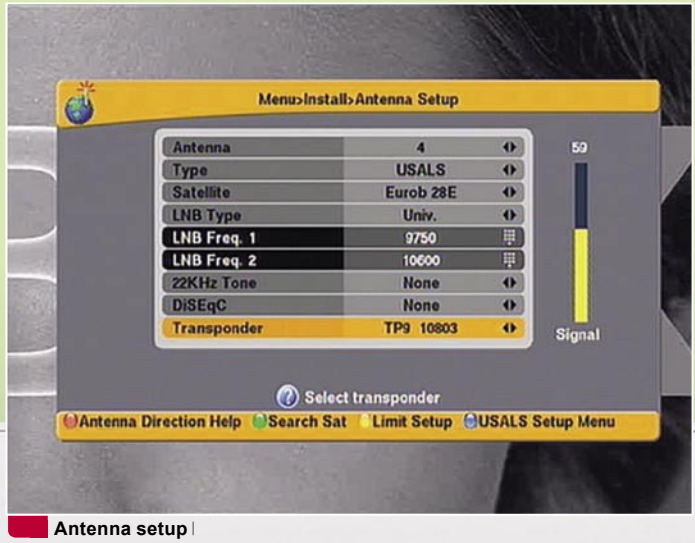
Fully preprogrammed only for ASTRA 19E and HOTBIRD 13E.
A maximum of only 16 programmable satellites.



Install menu



System setting



Antenna setup

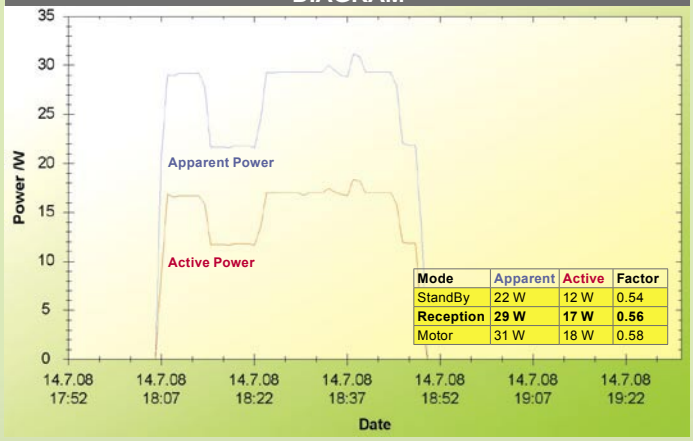
TECHNIC

DATA

Distributor	DVB Shop, Brehnaer Strasse 18 D-04509 Neukyhna OT Pohritzsch, Germany
Tel	+49-34954-31960
Fax	+49-34954-49233
E-Mail	webmaster@dvbshop.net
Website	www.dvbshop.net
Model	IMPERIAL SatBOX HD
Power Supply	175 ... 250 V AC
Power Consumption	6/12 Watt (Stand-By/Reception)
Size	340x248x65 mm
Weight	2200 g
DiSEqC	1.0, 1.2, USALS
Satellites	3 preset plus 13 additional positions
Program Listings	All, Satellites (each for TV and Radio)
Favorites	32 (each for TV and Radio)
Teletext	Full Page Memory
EPG	Extended 5 Channel Display, Program Details for 7 Days
Timer	10 for all EPG Programs
Front View	Stand-By, Down, Up, Left, Right, Menu, OK, Exit, Alphanumeric Display, CI-Flap
Rear View	IF In/Out, 2xSCART, HDMI, RS-232, USB, Ethernet, 4xRCA (Audio L/R, Video, SPDIF), Optical SPDIF, Main Switch
Slots	2 Common Interfaces, 1 Conax-Slot

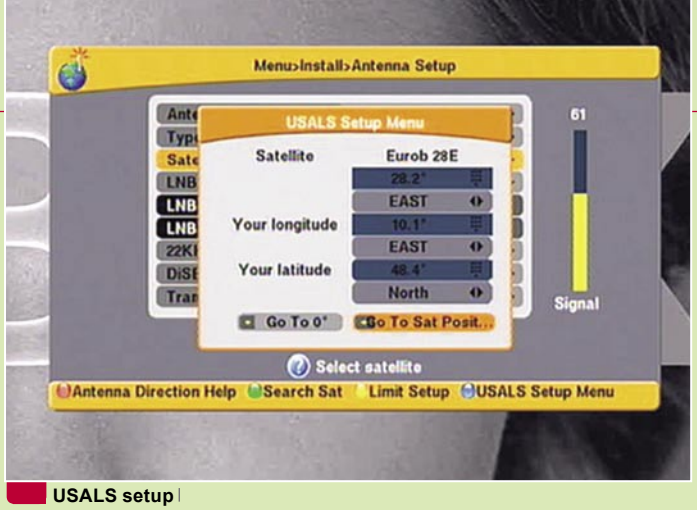
ENERGY

DIAGRAM

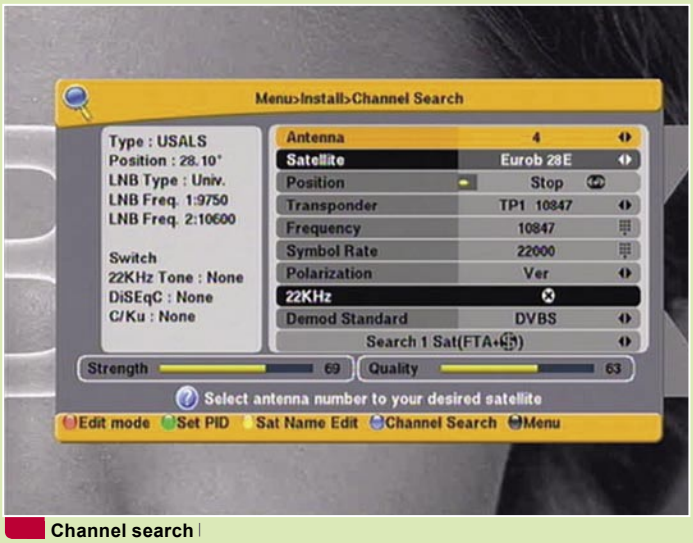


Mode	Apparent	Active	Factor
StandBy	22 W	12 W	0.54
Reception	**29 W**	**17 W**	**0.56**
Motor	31 W	18 W	0.58

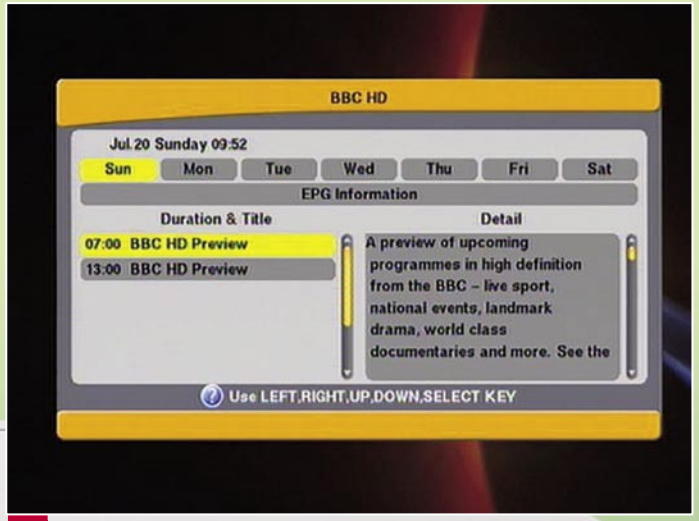
12W is used at the beginning and the end while in standby mode; the 17W used in the middle is with the receiver in operation – the 1W increase to 18W occurred while the antenna was moved from ASTRA 19E to TURKSAT 42.



USALS setup



Channel search



Info

Sonicview SV-360 Elite PVR

Easy To Use PVR Receiver

PVR boxes are becoming more and more popular every day. And with the large variety of channels available via satellite and so much to choose from, it's easy to see why. Your favorite program could be playing on the night you have to attend a wedding. Or maybe it's that championship boxing match you simply don't want to miss. Thanks to PVR boxes, any channel can be recorded for playback at a time convenient to you.

Because of this increasing popularity, more and more manufacturers are producing PVR boxes than ever before. Sonicview has also joined this group with their new twin-tuner SV-360 Elite PVR satellite receiver. Naturally, we wanted to see what this box was made of so when the package arrived a few days ago from Sonicview we knew that we had the opportunity to do just that.

When we opened the package we found a sleek-looking satellite receiver that was completely black in color except for a thin chrome-colored stripe that ran horizontally through the center of the front panel. This stripe also wraps around two small buttons (on/off and menu) and a set of ring buttons (left/right/up/down arrows and OK) on the front panel as well as one of the receiver's three USB 2.0 ports. These buttons let you completely operate the receiver should the remote control go missing. They are somewhat recessed into the front panel and because of their small size, someone with larger fingers might have some minor difficulties pushing the buttons sufficiently, especially the ring buttons. The USB port is protected from dust by a rubber flap that easily pops off to reveal the connection.

The rear panel is also very nicely equipped. Since it is a twin tuner box, you'll find a pair of satellite IF inputs as well as a pair of looped-through IF outputs on the left side. Then, of course, there are the typical set of RCA jacks that provide video and stereo analog audio outputs. But for improved video quality, there's an S-Video output and, better yet, another set of RCA jacks that give you component video outputs (Y, Pb and Pr). To go along with that is an optical S-PDIF digital audio output for superb audio quality. Rounding it all out is an RS-232 serial interface, two USB 2.0 ports and a main power switch.

The power cord is hard-wired into the receiver and comes with a North American plug. The receiver's power supply is rated at 95-250VAC, 50/60Hz and can therefore be used anywhere in the world; just make sure you have the right adapter plug and you'll be good to go. A modulator output is not available and since this particular box is meant for the North American market, Scart connectors are also not provided.

Unlike the receiver, the universal remote control is mostly silver in color except for a small black portion in the center. The remote sits nicely in your hand and, contrary to the buttons on the receiver, these buttons are not recessed and can easily be pushed by fingers of any size. The ring buttons and the buttons for the numerical keypad glow in the dark so that you can easily see them if you're watching TV without any lights on! This feature could even help you find the remote in a completely dark room. The remote can also be used to control your other electronic equipment such as your TV, DVD player or VCR. All in all, it is a very versatile remote control.

Everyday Use

Now that we had a chance to look at this box from the outside, let's see what it can do when we turn it on. The very first thing we noticed was the Sonicview logo on the left side of the front panel: when the receiver was plugged in (main power switch on), this logo was illuminated from behind. The soft blue color of the logo gives the receiver an elegant look to it. When the receiver is powered up for the first time, the SV-360 Elite PVR asks what on-screen language should be used. You can choose between English, French, German, Spanish, Italian, Russian Turkish, Dutch, Czech and Polish. Don't take too long to make your choice – if you don't select a language quick enough, the Sonicview automatically opts for the default language, in this case English. If this happens, it's not a problem at all to go into the menu and change it to a more suitable language.

TELE-satellite World www.TELE-satellite.com/...

Download this report in other languages from the Internet:

Arabic	العربية	www.TELE-satellite.com/TELE-satellite-0811/ara/sonicview.pdf
Indonesian	Indonesia	www.TELE-satellite.com/TELE-satellite-0811/bid/sonicview.pdf
Bulgarian	Български	www.TELE-satellite.com/TELE-satellite-0811/bul/sonicview.pdf
Czech	Česky	www.TELE-satellite.com/TELE-satellite-0811/ces/sonicview.pdf
German	Deutsch	www.TELE-satellite.com/TELE-satellite-0811/deu/sonicview.pdf
English	English	www.TELE-satellite.com/TELE-satellite-0811/eng/sonicview.pdf
Spanish	Español	www.TELE-satellite.com/TELE-satellite-0811/esp/sonicview.pdf
Farsi	فارسی	www.TELE-satellite.com/TELE-satellite-0811/far/sonicview.pdf
French	Français	www.TELE-satellite.com/TELE-satellite-0811/fra/sonicview.pdf
Greek	Ελληνικά	www.TELE-satellite.com/TELE-satellite-0811/hel/sonicview.pdf
Croatian	Hrvatski	www.TELE-satellite.com/TELE-satellite-0811/hrv/sonicview.pdf
Italian	Italiano	www.TELE-satellite.com/TELE-satellite-0811/ita/sonicview.pdf
Hungarian	Magyar	www.TELE-satellite.com/TELE-satellite-0811/mag/sonicview.pdf
Mandarin	中文	www.TELE-satellite.com/TELE-satellite-0811/man/sonicview.pdf
Dutch	Nederlands	www.TELE-satellite.com/TELE-satellite-0811/ned/sonicview.pdf
Polish	Polski	www.TELE-satellite.com/TELE-satellite-0811/pol/sonicview.pdf
Portuguese	Português	www.TELE-satellite.com/TELE-satellite-0811/por/sonicview.pdf
Romanian	Românesc	www.TELE-satellite.com/TELE-satellite-0811/rom/sonicview.pdf
Russian	Русский	www.TELE-satellite.com/TELE-satellite-0811/rus/sonicview.pdf
Swedish	Svenska	www.TELE-satellite.com/TELE-satellite-0811/sve/sonicview.pdf
Turkish	Türkçe	www.TELE-satellite.com/TELE-satellite-0811/tur/sonicview.pdf

Available online starting from 26 September 2008

With the correct language selected, the receiver goes right into channel reception mode. Since there are no channels as yet saved in memory, there was nothing to view. This simply means that we have to go and find the channels we want to watch. You can do this by pressing the Menu button on the remote to access the Main Menu in the receiver. The Main Menu is divided up into four categories (Installation, System Settings, PVR and Advanced Settings) and each of these is further divided up into additional sub-categories. All of these sub-categories can be seen to the right of the highlighted Main Menu category. Of course, the logical first step would be to go into the Installation menu so that you can tell the receiver what you have attached to it. With the Installation menu highlighted on the screen, a click of the OK button let's you choose from one of the four sub-categories. In the Dish Setting screen, you can set up your receiver to match your antenna configuration.

All of the antenna settings are on the left side of the Dish Setting screen. On the right side is a graphical display of the signal strength and quality levels with a green line representing the signal strength and a red line the signal quality. These two levels are also shown in numerical format. Underneath the graphical display is a bar graph representation of the signal strength and quality levels as well.

Before you begin, make a mental note of which antenna input on the rear panel you will be using. If you're using both inputs, make sure to remember which antenna input goes to what satellite antenna. Naturally the first step is to select the satellite or satellites that you want to receive and there is quite an extensive list to choose from: the SV-360 Elite PVR comes to you with a pre-programmed list of 195 (!) satellites. And you can even add five more! This list is fairly up-to-date although there are some satellites in the list that no longer exist or have recently changed names; a few of the newer satellites are also missing. Thankfully, the colored function buttons on the remote control make it easy to add, edit or delete satellites.

The Sonicview is DiSEqC

1.0/1.1/1.2/USALS compatible allowing you to connect its two tuner inputs to almost any possible antenna configuration from a single antenna to a motorized system. The most popular free-to-air (FTA) satellite in North America would have to be INTELSAT AMERICAS 5 at 97 west. So, naturally, we wanted to start our testing by setting up the receiver for this bird. Since the coax cable was connected to the IF-A input on the receiver, we selected the Tuner 1 input in the Dish Setting screen. The LNB type/frequency was set to single and 10750 MHz. Of course, if the LNB you're using utilizes a different local oscillator frequency (LOF), you will most likely find the correct LOF already stored in the list. If the LOF you need is not in the list, simply enter it using the numerical keypad on the remote control.

Next we chose a transponder from the preprogrammed list for this satellite. The left/right arrow keys on the remote can be used to select an active transponder or you can press the OK button to view a list of all the transponders stored for the selected satellite. For INTELSAT AMERICAS 5, the transponder list was mostly up-to-date. As it turns out, the same can be said for he stored transponders of all the satellites.

With the transponder list displayed, you can select the desired transponder by highlighting it and then pressing the OK button or, if necessary, you can add, edit or delete transponders right from this screen by once again using the colored function buttons on the remote control. Simply refer to the bottom of the on-screen display to find out what function is assigned to each colored button.

As we just mentioned, the transponder data for all the satellites is mostly up-to-date.

Main Menu

If you happen to find an error while looking through the transponder list for a satellite, it is a simple matter to edit the data. But if you can't be bothered with doing that work manually, the Sonicview's Blind Scan function will do the work of updating the transponder list for you automatically. Simply push the blue function button on the remote while in the Dish Setting screen to get started. You can select a single satellite scan or a multi-satellite scan.

For this test we opted for a single satellite scan. We also chose to scan both polarizations (vertical and horizontal) although one or the other could have been chosen. We next selected the Fast scan instead of a Detailed scan. Pushing the OK button started the Blind Scan. It zipped through both polarizations and completed the task in a mere 4 min 38 sec. There was no need to fumble around looking for a stop watch; the total scan time was conveniently displayed on the screen. But a good portion of this time was used to scan from 12.2 to 12.9 GHz; the extra time spent scanning this segment was not necessary for INTELSAT AMERICAS 5 and there was no way to limit the frequency range during the Blind Scan set up. The ability to set up frequency limits would have saved a little scanning time.

Naturally, we also wanted to check out the detailed Blind Scan. It turns out that the detailed Blind Scan completed its task in roughly the same time as the fast scan and managed to find the same number of channels.

So, now we have all these new channels in the channel list. Pushing the OK button while watching one of those channels will display the channel list. As you look through the channel list you will undoubtedly notice that some organization of the list will be necessary. For example, the list may include both FTA and encrypted channels. If you don't care about the encrypted channels, the now-infamous colored function buttons on the remote control come into play once again. With the channel list displayed, a push of the red function button displays only the FTA channels. Push it again to display only the encrypted channels and then once again to bring back the original list. Sorting the channel list is also just as easy: with the channel list displayed, pushing the yellow function button displays the available sorting criteria (alphabetically, by channel number, by satellite or default).

From the channel list you can also easily switch between tuner inputs by pushing the green function button. The SV-360 Elite PVR also comes with a multi-picture mode that displays the still images of 4, 9 or 16 different channels all on one screen so that you can get a quick overview of what is currently on TV. You can use the arrow keys to move around from one image to another and press the OK button when you find something interesting to watch. The receiver will then switch to that selected channel.

Switching between channels on the same transponder required almost one second. Going from one channel to another on different trans-

User Settings

The Original Irdeto Smart Card, Zeta version Blank Card

Available for sale at US$ 10 / card only

Special Discount for Big Quantities

INFOSAT

INFOSAT INTERTRADE CO., LTD. - www.infosats.com
46/22 Moo.5 Tiwanon Rd., Banmai., Pakkred., Nonthaburi 11120 Thailand
Tel. (66) 2- 961-9161-3 Fax: (66) 2- 961-8587 E-mail: niran@infosats.com

ponders needed roughly 1.5 seconds before the picture appeared. These times are something you can live with but it does take some of the fun out of channel surfing.

Of course, there may also be channels that you'll never watch or need to be renamed. In that case you simply go to the Channel Edit screen – the second sub-category of the Installation menu. Once in the Channel Edit screen, the video of the current channel can be seen in a small window on the right side of the screen with the channel list on the left side. Even the signal strength and quality bar graphs are included here. While in the Channel Edit screen, you can switch channels by scrolling to another channel and simply pressing the OK button on the remote. Once again, the colored function buttons on the remote control make it easy to delete, rename or lock out channels. You can even sort channels from this screen as well! Software version information and a factory reset function can also be accessed via the Installation menu.

The System Setting screen is broken up into four subcategories and lets you set up the receiver to your personal tastes. For example, from the User Settings screen you can change the menu language, adjust the menu transparency, change how long the Info bar is displayed plus much more. From the A/V Settings screen you can switch between NTSC and PAL, change the aspect ratio (4:3 or 16:9) or select the display mode (letterbox, pan & scan or full screen). The Time Setting screen lets you adjust all of the clock settings. The time can be set manually or automatically, daylight savings time can be turned on or off, etc. And then of course there are those channels that you don't want your kids to see. The Parental Control screen lets you block out any inappropriate programming. This screen also allows you to put restrictions on receiver access, menu access and encrypted channel access.

Personal Video Recorder

Yes, this is a PVR box, but if you're the observant type, you might have noticed something: where's the hard drive? You do need a hard drive to record programming, don't you? Well, as it turns out, the SV-360 Elite PVR does not come with a built-in hard drive. Instead, you need to connect an external storage device. This could be an external hard drive but it could also be some other external storage device such as a memory stick. And that's where the three USB 2.0 ports come into play.

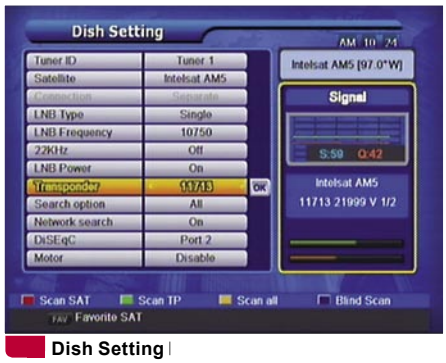
For our tests we decided to use a 4 GB memory stick we had lying around. The memory stick can be plugged in to any of the three USB ports. We used the front panel USB port for convenience. Recording a program is as simple as pressing the red Record button on the remote control. When the Record button is pushed, the receiver instantly starts recording the program on the current channel. Simply push the stop button to end the recording. If you want to record a second channel while the first is still recording, simply switch to the channel you want to record and repeat the process mentioned above. Both channels will be recorded at the same time. Pushing the stop button will give you the option to stop recording one of the channels or both channels.

To see a list of all the recordings that have been stored thus far, go into the receiver's PVR menu. You can use the arrow keys to scroll through the list and then push the Play button on the remote control to play back the desired selection. The remote comes with control buttons that let you pause the playback, rewind and fast forward at various speeds and play back in slow motion.

There's also an eight-event timer so you can set the receiver to record your favorite programs while you're out of the house. There's even a time shift function to save the day if someone comes knocking at your door while you're watching that four-star movie.

The receiver also comes with a number of other useful features such as picture-in-picture (PIP). It can also be used as an MP3 player and a JPEG viewer so you can show off all those pictures you recently snapped on your last vacation to your relatives and friends.

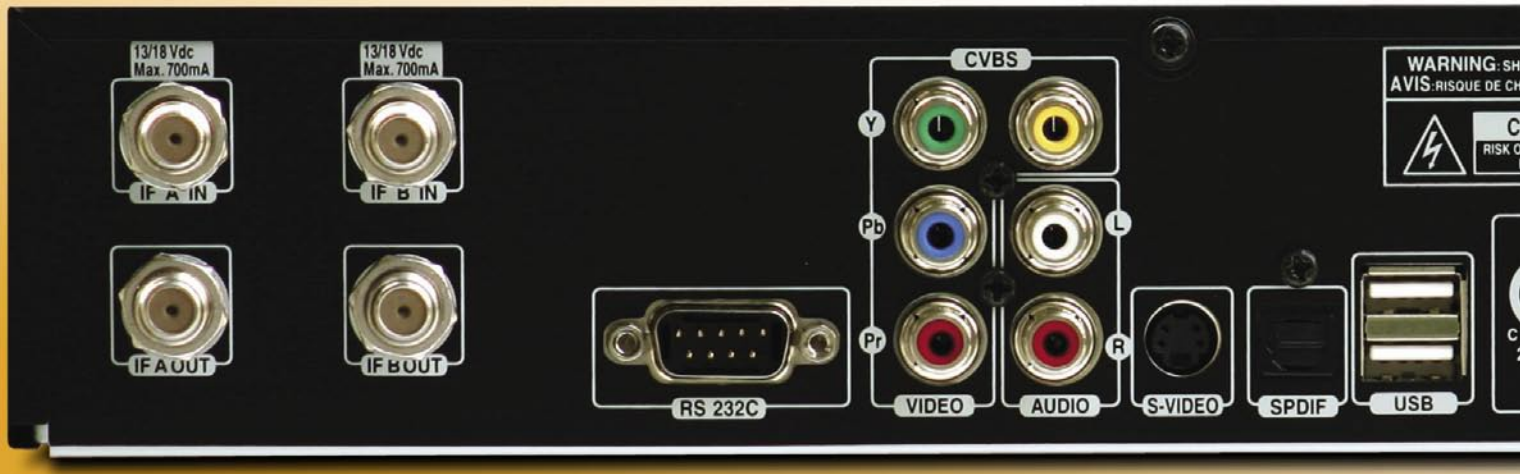
Channel List



Dish Setting

PVR List

PIP Channel List



TECHNIC

DATA

Manufacturer	Sonicview USA, Inc., San Diego California, USA
Tel	+1-760-842-8931
E-mail	sales@sonicviewusa.com
Model	SV-360 Elite PVR
Function	Digital Satellite PVR Receiver with two tuners
Channel Memory	6000
Satellites	195 (plus 5 user-settable)
Symbolrate	1-45 Ms/sec.
SCPC Compatible	yes
USALS	yes
Audio/Video Outputs	yes
Component Outputs	yes (Y, Pb, Pr)
S-VHS Output	yes
S-PDIF Output	yes
USB 2.0 Interface	yes, three
Power Supply	95-250VAC, 50/60Hz

Expert Opinion

Ron Roessel
TELE-satellite Test Center USA

+

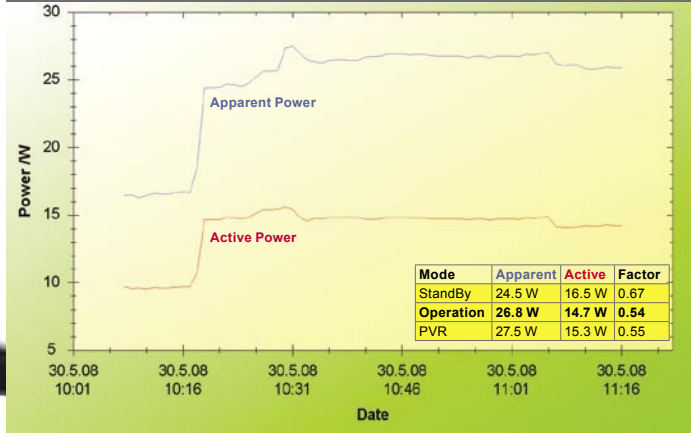
The Sonicview SV-360 Elite PVR is one of the easiest to use receivers on the market today. All of the menus are for the most part self-explanatory although a detailed user manual (English only) is also included should any questions arise. Many of the more critical software functions can be accessed from only one location; no need to hunt through all the different menu screens to find what you need. It is definitely a family-friendly receiver that comes with a multitude of features that would make any user happy.

-

The receiver does not have a modulator output but since most modern TVs today have more than one type of input, this really isn't that much of a problem. It is also not possible to set up frequency limits for a Blind Scan.

ENERGY

DIAGRAM



Mode	Apparent	Active	Factor
StandBy	24.5 W	16.5 W	0.67
Operation	**26.8 W**	**14.7 W**	**0.54**
PVR	27.5 W	15.3 W	0.55

After Stand-By the receiver is switched on at 10:18. The slight spike from 14.7W to 15.3W occured when the memory stick was inserted. At 11:05 the receiver went into Stand-By, with the harddrive still active.

Venus New Millennium II-EP

Motor control made easy

The Venus motor mounted on the Venus dish TELE-satellite presented in previous issue. The satellite receiver Venus New Millennium II-EP is optimized to control this motor

These days Asia takes much of the lead in satellite receiver technology, with a constant stream of receivers appearing from such places as China and Korea. Here though, our Asian voyage of discovery takes a different turn to meet only the second receiver we've tested from Indonesia. Clearly made with the Asian market in mind, it is a basic free-to-air receiver with a built-in traditional 36V positioner. It comes from the Venus brand, which will already be familiar to regular readers for their innovative segmented dish that we tested in issue 08/2008 and this receiver is especially designed to work with the Venus motor, which we will present in a next issue.

The receiver is housed in a full-sized black case, measuring 300x200mm and 60mm high. Basic controls are available on the front panel, where there is a red LED display of the current channel's number, which gives an almost retro look. The grey remote control does all it needs to, but it would be nicer perhaps if it matched the colour scheme of the receiver itself.

Rear connections are limited to the most frugal requirements. There's a single antenna input along with spring terminals to connect a 36V motor. There are no Scart or digital outputs – just a pair of composite video outputs and the usual UHF antenna loop. Stereo audio outputs are also present, and the back panel is completed with a 4-pin RS232 connector.

Our test receiver was supplied with a manual in Indonesian only. No doubt if and when the New Millennium is sold in other countries, it will have a manual in the required languages. But a good test of a receiver's ease of use is to find out if it can be used without a manual. The menu entry "Pen-

gaturan Sistem" led me to the receiver's setting screen where the menu language ("Bahasa") can be changed between Indonesian and English. The menus themselves are basic, and the text somewhat blocky, reinforcing the retro feel some more.

Initial Setup

The internal positioner works very much like the stand-alone positioners many of us may have used in the past. 60 positions are available to be stored, which can then be assigned to one or more satellites when scanning for new channels. Each satellite position is referred to just by number with the satellite's name being set later when channels are scanned. Therefore keeping a careful note of where each number points is necessary to avoid later confusion!

There's no automatic setup by using satellites at each side of the viewable arc, and nor is there any provision for setting east and west limits in the receiver. This means the user would need to ensure the limits on the dish motor have been set correctly to avoid any accidents. DiSEqC is included for switching between up to four LNBs.

After the satellite positions have been set up, finally it's time to get scanning for channels. 18 satellites covering the Asian area are already programmed into the receiver, so if these are receivable it's a simple matter of assigning the correct positioner number to them. New satellites can be added as needed, with their names being editable. The usual up/down buttons are used to scroll through the alphabet to set each letter of the name, but don't go too fast as both the up and down buttons go upwards!

Adding new channels is again simplified to the bare minimum. If like me, you don't enjoy the confusion sometimes caused by network scans and transponder lists, you're in luck – there's none of this. Channels can only be added to the receiver by blind scan or manual entry of frequency data.

Blind scanning shows up one omission from the receiver's software. Whilst it can drive a universal LNB perfectly well with full user control of the local oscillator frequency and 22kHz tone, there's no facility to scan the high and low bands in a single sweep. To cover the full Ku band we have to make two scans. The first, with the local frequency set to 9750, will scan up to around 11.500GHz.

Main menu

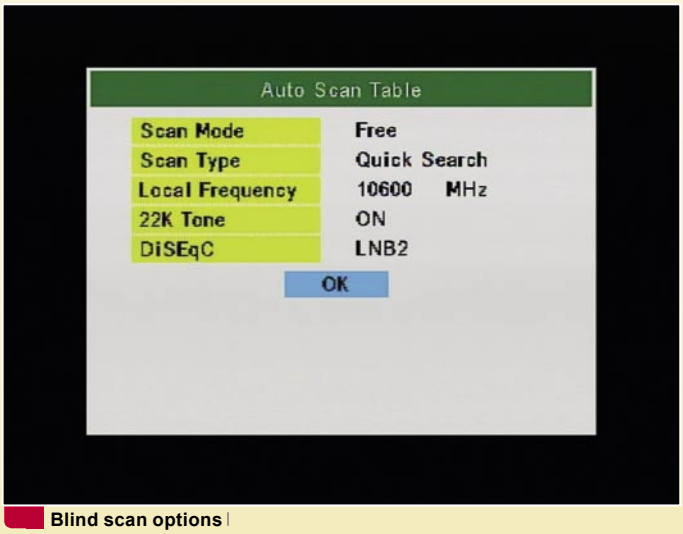
After this, we then need to change the local frequency to 10600, turn the 22kHz tone on, and scan again to get the remainder of the channels. The receiver remembers the LNB setting for each channel, so once committed to memory they appear correctly when selected.

The blind scan is not very fast even when using the quick scan option. The two scans required to find everything from HOTBIRD took a total time of 56 minutes, but with most Asian satellites transmitting on less transponders this is not really a matter. Pressing any button on the remote aborts the scan,

TELE SATELLITE AWARD & BROADBAND 10-11/2008

VENUS NEW MILLENNIUM II-EP
Easy to use receiver for big motorized dishes at an economic price

saving any channels already found. Duplicate channels are not added at the end of the list, unless their parameters have. As with many blind scan receivers the discovered symbol rate is slightly inaccurate, most often in the region of 30 above reality. Adding individual channels is best done manually, so being forearmed with a SatcoDX chart is useful. Frequency, polarity and symbol rate are all needed. This time all channels found are added to the end of the list, whether they are duplicates or not.



Blind scan options

Organising channels once they have been scanned and stored is kept to basic level. Each entry in the channel list can be moved up and down the list, marked for deletion, or added to a single favourites list. The favourites list can't be viewed or edited on its own – favourites can only be located by finding the heart symbol when scrolling through the unsortable main list. The P+ and P- buttons are used to navigate between the channels marked as favourites. Radio channels are added and edited in the same way as TV, but from a separate list and menu entry.

Everyday use

When it's finally time to watch some TV, pressing the OK button gives us the list of all stored channels. This list can be reduced to each individual satellite by using the MENU button. The P+ and P- buttons allow selection of the next or previous satellite.

This list always defaults to showing all satellites, so remembering channel numbers or using the favourites function might be preferred over lots of repetitive scrolling and searching. The alphabetical search commonly seen on many modern receivers would be a helpful addition here. When a channel is selected for viewing from this list, the picture zooms out from its small window to fill the full screen, which is a nice little touch.

Blind scan in progress

Picture quality is OK, bearing in mind that we have only UHF or composite video outputs to choose from. Widescreen transmissions are catered for, up to a point. The receiver always assumes a 4:3 TV is being used, and black bars are

Channel list

used at the top and bottom of the screen if a 16:9 transmission is detected. Everyday viewing, once we have the channels and satellites set up as we need them, is simple and easy enough. Zapping between channels is fairly fast, and the EXIT button is used to switch to the previously viewed channel.

Audio channels and PIDs can be quickly edited if needed, which is a bonus when a channel changes PIDs – we don't have to fear going back to blind scanning or manual frequency entry just to change this small detail. The INFO button gives a helpful screen detailing the channel's name and parameters, plus allowing quick fine-tuning of the dish position.

The EPG button on the remote instead gives us a "PIP" display of 9 channels. As usual, only one of these is live and the rest are freeze-frames. Teletext is unavailable.

Summary

After the initial setup, for everyday TV viewing and channel-surfing the New Millennium II-EP does the job well if not too much further editing and sorting is needed. The receiver is best when it comes to handle the Venus motor which he does rather superbly. Despite a few places where the menus could be made tidier or easier to navigate, its basic design meant that I had little problem finding my way around the receiver without having to try to consult the Indonesian manual, so that test is won easily.

The nature of the receiver would opening up the spectrum of multi-satellite reception to people who may usually be put off by the cost of a receiver with a built-in positioner.

Channel info & blue bars

Expert Opinion


Andy Middleton
TELE-satellite
Test Center
UK

+

Uncomplicated channel data storage and editing

Easy handling of a 36 V motor

Blindscan makes it usable for satellite DXers

-

No Scart or digital outputs

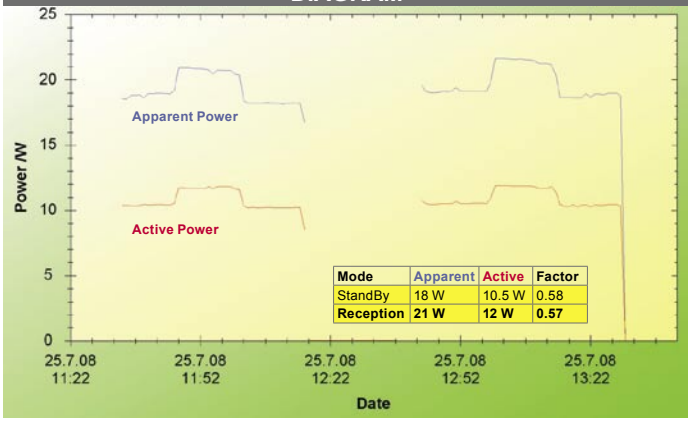
TECHNIC

DATA

Manufacturer	PT. Subur Semesta, Jln. Kamal Raya No. 8, RT. 0014/RW. 09 Tegal Alur, Jakarta Barat 11820
Tel	+62 21 5559733
Fax	+62 21 5559805 / 5555009
Email	subur@dnet.net.id
Model	Venus New Millennium II-EP
Satellites	60
SCPC compatible	yes
USALS	No
DiSEqC	1.2
Scart connectors	0
Symbol rates	2-45 Ms/sec
Audio/Video outputs	4 (two video + left/right audio)
UHF output	Yes, channels 21-69
0/12 volt output	No
Digital audio output	No
EPG	No
C/Ku-band compatible	Yes
Power supply	100-240 VAC, 50-60Hz

ENERGY

DIAGRAM



AWARD Winning Satellite Receivers

TELE SATELLITE AWARD & BROADBAND 10-11/2008

IMPERIAL SATBOX HD
Perfect HDTV Reproduction with Ease of Use and Extraordinary Display

Manufacturer	DVB-Shop
Website	www.dvbshop.net
Function	HDTV satellite receiver
DVB-S2/LAN	• / •
Channel Memory	7000
DiSEqC	1.0 / 1.2
S-Video/HDMI	— / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 10-11/2008

TOPFIELD TF7700HSCI
A solidly built SDTV and HDTV receiver that includes a variety of very practical features

Manufacturer	Topfield
Website	www.topfield.co.kr
Function	HDTV-PVR satellite receiver
DVB-S2/LAN	• / —
Channel Memory	5000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	— / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 10-11/2008

SONICVIEW SV-360 ELITE PVR
A family-friendly receiver and easiest to use with a multitude of features

Manufacturer	Sonicview USA
Website	www.sonicviewusa.com
Function	Digital satellite PVR receiver with two tuners
DVB-S2/LAN	— / —
Channel Memory	6000
DiSEqC	1.0 / 1.1 / 1.2
S-Video/HDMI	• / —
Scart/Digital Audio	— / •

TELE SATELLITE AWARD & BROADBAND 10-11/2008

VENUS NEW MILLENNIUM II-EP
Easy to use receiver for big motorized dishes at an economic price

Manufacturer	PT. Subur Semesta
Website	www.subursmt.com
Function	Digital satellite receiver for motorized dishes
DVB-S2/LAN	— / —
Channel Memory	4000
DiSEqC	1.2
S-Video/HDMI	— / —
Scart/Digital Audio	— / —

TELE SATELLITE AWARD & BROADBAND 08-09/2008

ABCOM IPBOX 9000 HD PLUS
A huge range of connection options make this box a true all-rounder – yet it remains easy to use as a family receiver.

Manufacturer	ABCom
Website	www.abipbox.com
Function	HDTV PVR for DVB-S, DVB-S2, DVB-C and DVB-T
DVB-S2/LAN	• / •
Channel Memory	10000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 08-09/2008

IMPERIAL DB 1 CI HDMI
Practical and user-friendly interface – the perfect match for satellite radio listeners and DXers

Distributor	DVBShop
Website	www.dvbshop.net
Function	Digital satellite receiver with CI-Slot
DVB-S2/LAN	— / —
Channel Memory	5000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	— / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 06-07/2008

ARION AF9400PVR HDMI
A solid and easy to use receiver that with its Scaler can present satellite channels in excellent quality.

Manufacturer	Arion, South Korea
Website	www.arion.co.kr/global
Function	Digital satellite PVR receiver with built-in Scaler
DVB-S2/LAN	• / —
Channel Memory	8000
DiSEqC	1.0 / 1.1 /1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 04-05/2008

OPENSAT X9000HDCI
Fasten your seatbelt: super fast channel zapping combined with superb audio and video quality in SD and HD

Manufacturer	ABC BIZNIS
Website	www.opensat.info
Function	DVB-S/S2 MPEG2/4 HD receiver with single tuner
DVB-S2/LAN	• / —
Channel Memory	4000
DiSEqC	1.0 / 1.2
S-Video/HDMI	— / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 04-05/2008

METABOX HD COMBO CI
HD all-rounder for satellite and terrestrial reception with perfect usability – great as a box for the whole family

Manufacturer	Metamultimedia
Website	www.metamultimedia.net
Function	HDTV receiver for DVB-S, DVB-S2 and DVB-T
DVB-S2/LAN	• / —
Channel Memory	10000
DiSEqC	1.0 / 1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE AWARD & BROADBAND 04-05/2008

NANOXX 9500HD
Small enclosure, superbly crisp picture, extremly fast channel search, and connection for HDD

Manufacturer	NanoXX
Website	www.nanoxx.info
Function	Digital HDTV PVR receiver
DVB-S2/LAN	• / •
Channel Memory	10000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 04-05/2008

TOPFIELD TF7720HSIR
Ideal HDTV Receiver for FTA and Irdeto encrypted channels

Manufacturer	Topfield
Website	www.topfield.co.kr
Function	DVB-S, DVB-S2 HDTV receiver with Irdeto CA
DVB-S2/LAN	• / —
Channel Memory	5000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 02-03/2008

TOPFIELD TF7700 HDPVR
Fully capable twin receiver with proven HDTV technology and outstanding picture quality.

Manufacturer	Topfield
Website	www.topfield.co.kr
Function	Digital DVB-S, DVB-S2 HDPVR receiver with ethernet connection
DVB-S2/LAN	• / •
Channel Memory	5000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	• / •
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 02-03/2008

AB IPBOX 350PRIME PVR
A Linux-based Receiver as Powerful as Never Before

Manufacturer	AB-COM
Website	www.abcom.sk
Function	Linux-based receiver for terrestrial, cable and satellite DVB reception
DVB-S2/LAN	— / •
Channel Memory	4000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	— / —
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 02-03/2008

NANOXX 9600 IP
Perfectly working CA receiver with smart use of network interface

Manufacturer	NanoXX
Website	www.nanoxx.info
Function	Digital CA satellite receiver with PVR functionality via network
DVB-S2/LAN	— / •
Channel Memory	6000
DiSEqC	1.0 / 1.2 / 1.3
S-Video/HDMI	— / —
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 12-01/2008

NanoXX 9400
Very fast low-threshold blind scan receiver – ideal for DXers

Manufacturer	NanoXX
Website	www.nanoxx.info
Function	Blind scan receiver with USB
DVB-S2/LAN	— / —
Channel Memory	10000
DiSEqC	1.0 / 1.1 / 1.2
S-Video/HDMI	— / —
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 12-01/2008

INFOSAT ZIMPLE BOX 3
Fast and easy to use receiver for FTA reception with a very sensitive tuner

Manufacturer	Infosats
Website	www.infosats.com
Function	MPEG2 FTA receiver with Blind Scan
DVB-S2/LAN	— / —
Channel Memory	1000
DiSEqC	1.0 / 1.2
S-Video/HDMI	— / —
Scart/Digital Audio	— / —

TELE SATELLITE & BROADBAND AWARD 12-01/2008

ARION AF-4000HDCI
A receiver that will make any newbie happy as well as please any pro with its endless possibilities

Manufacturer	Arion
Website	www.arion.co.kr
Function	HDTV satellite receiver with CI slot
DVB-S2/LAN	• / —
Channel Memory	4000
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
S-Video/HDMI	— / •
Scart/Digital Audio	• / •

TELE SATELLITE & BROADBAND AWARD 10-11/2007

TECHNOTREND S2-3650CI
HDTV Reception with Many Features for Little Money

Manufacturer	DVB-Shop
Website	www.dvbshop.net
Function	USB box for reception of DVB and DVB-S2 in SDTV/HDTV
DVB-S2/LAN	• / —
Channel Memory	unlimited
DiSEqC	1.0
S-Video/HDMI	— / —
Scart/Digital Audio	— / —

TELE SATELLITE & BROADBAND AWARD 10-11/2007

JIUZHOU DVS-2018BS
Very Stable, Solid Receiver for Professional Use

Manufacturer	Jiuzhou
Website	www.jiuzhou.com.cn
Function	Professional digital satellite receiver with 2 CI slots
DVB-S2/LAN	— / —
Channel Memory	!
DiSEqC	—
S-Video/HDMI	— / —
Scart/Digital Audio	— / —

TELE SATELLITE & BROADBAND AWARD 10-11/2007

TECHNISAT DIGITSIM S2
Exceptional Mini-receiver with Very High Signal Sensitivity and Ease-of-Use

Manufacturer	TechniSat Digital
Website	www.technisat.com
Function	Digital satellite receiver with two Systems for SIM Cards
DVB-S2/LAN	— / —
Channel Memory	4000
DiSEqC	1.0 / 1.2 / 1.3
S-Video/HDMI	— / —
Scart/Digital Audio	• / —

Spaun at 40 years

Moving into the new decade with many new products

Alexander Wiese

Well, actually, the title isn't quite correct; the company Spaun doesn't celebrate its 40th anniversary until 2009. But Spaun is so full of energy and is getting ready to introduce a wide range of new products in their anniversary year that we simply couldn't wait to find out about this company's long history.

Almost every TELE-satellite reader will associate the name Spaun with high-quality satellite distribution components. "Quality made in Germany" is their motto; Spaun's mission in life is to make sure that the quality of their products is always kept at the highest level.

But more on that later. Let's take a closer look at Spaun itself: they are a company that can be found in extreme southwestern Germany. The founder of the company, that today has nearly 100 employees, is Friedrich Spaun. He explained to us how it all started: "It all began for me on my kitchen table in 1969." Back then FM radio in Germany was just starting to transmit in stereo. It quickly became clear that many of the radios in use were not getting enough of an antenna signal - an amplifier was needed that would raise the signal-to-noise ratio. "I constructed an amplifier board that was installed in the indoor antennas supplied by a large manufacturer", remembers Friedrich Spaun. It was the start of his one-man company.

In 1972 his little company was so successful that he was able to hire his first employees. "In 1974 real production of multi-range amplifiers and passive distributors was started", Friedrich Spaun recalls. Of course back then these were components for terrestrial television and Spaun was only an OEM manufacturer for other German firms. In 1980 supply line amplifiers for cable TV were added to the mix.

Thus far production took place in a rented house, but that all changed in 1988: "That's when we built our production facility in Singen that we still work out of today and were also at the same time a pioneer", comments Friedrich Spaun as he shows us the outside walls made of aluminum: "For many years we were a reference point for the manufacturer of these walls."

A look at the office building of company Spaun in Singen in southwestern Germany. Behind the building to the right can be found the production facilities for Spaun's multiswitches.

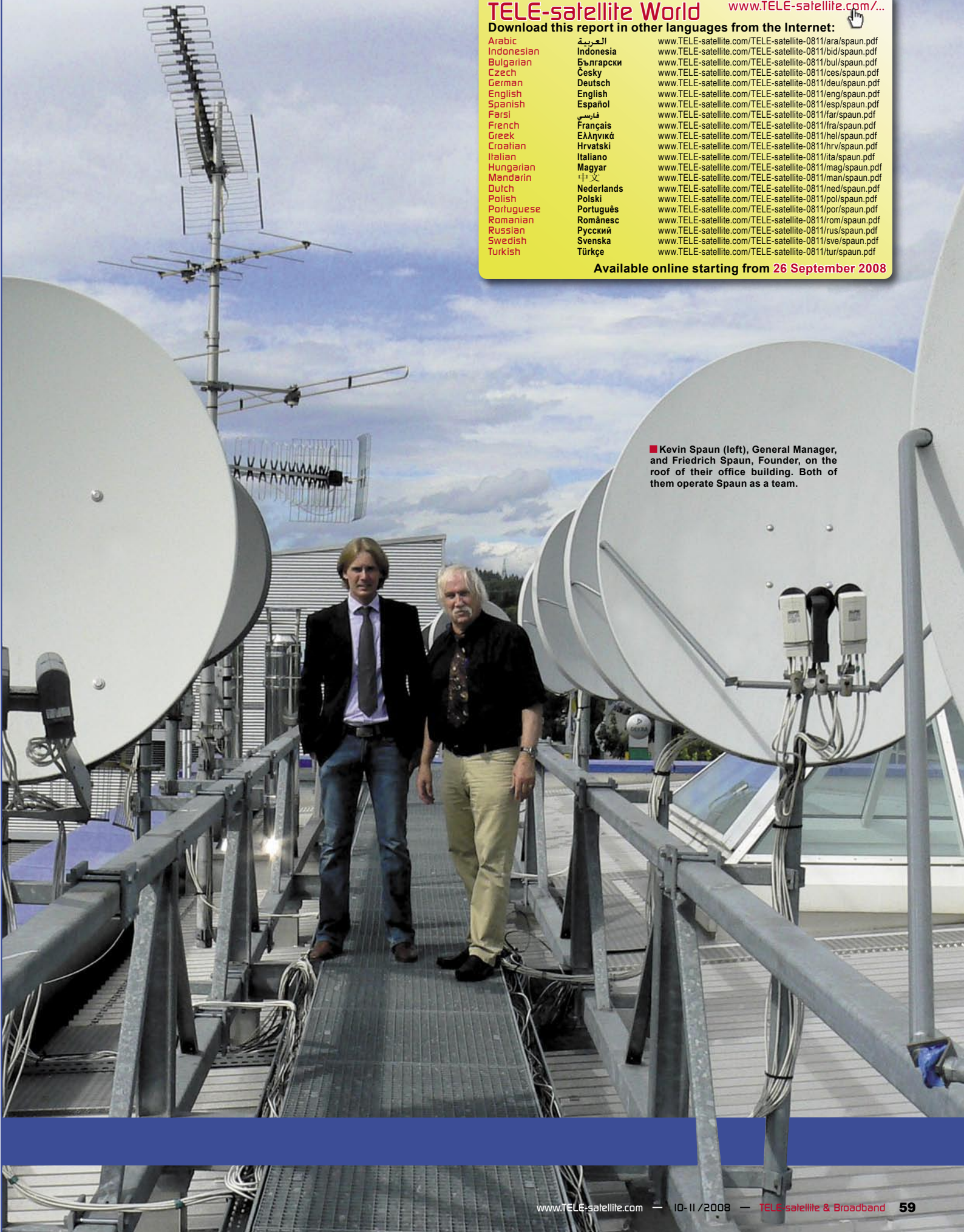
TELE-satellite World

www.TELE-satellite.com/...

Download this report in other languages from the Internet:

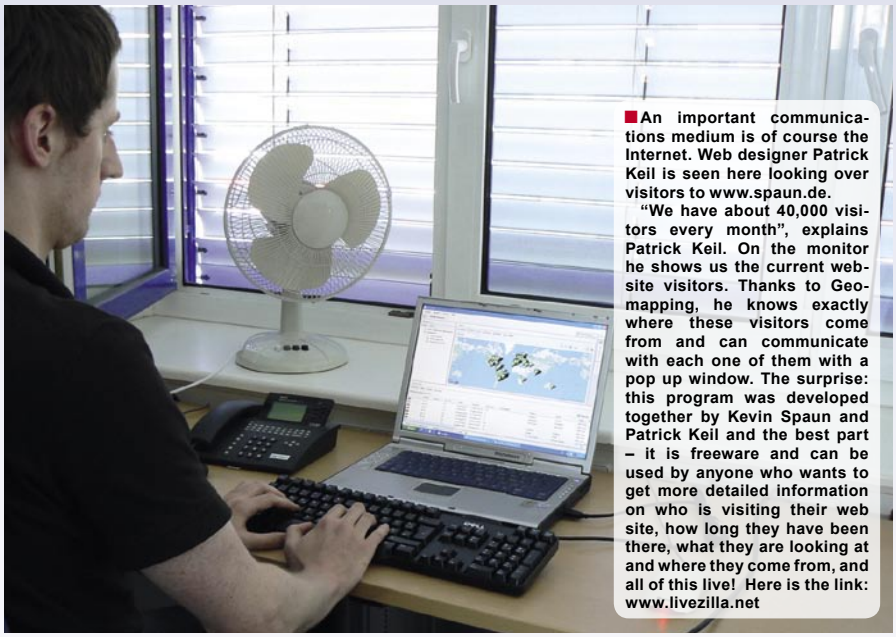
Arabic	العربية	www.TELE-satellite.com/TELE-satellite-0811/ara/spaun.pdf
Indonesian	Indonesia	www.TELE-satellite.com/TELE-satellite-0811/bid/spaun.pdf
Bulgarian	Български	www.TELE-satellite.com/TELE-satellite-0811/bul/spaun.pdf
Czech	Česky	www.TELE-satellite.com/TELE-satellite-0811/ces/spaun.pdf
German	Deutsch	www.TELE-satellite.com/TELE-satellite-0811/deu/spaun.pdf
English	English	www.TELE-satellite.com/TELE-satellite-0811/eng/spaun.pdf
Spanish	Español	www.TELE-satellite.com/TELE-satellite-0811/esp/spaun.pdf
Farsi	فارسي	www.TELE-satellite.com/TELE-satellite-0811/far/spaun.pdf
French	Français	www.TELE-satellite.com/TELE-satellite-0811/fra/spaun.pdf
Greek	Ελληνικά	www.TELE-satellite.com/TELE-satellite-0811/hel/spaun.pdf
Croatian	Hrvatski	www.TELE-satellite.com/TELE-satellite-0811/hrv/spaun.pdf
Italian	Italiano	www.TELE-satellite.com/TELE-satellite-0811/ita/spaun.pdf
Hungarian	Magyar	www.TELE-satellite.com/TELE-satellite-0811/mag/spaun.pdf
Mandarin	中文	www.TELE-satellite.com/TELE-satellite-0811/man/spaun.pdf
Dutch	Nederlands	www.TELE-satellite.com/TELE-satellite-0811/ned/spaun.pdf
Polish	Polski	www.TELE-satellite.com/TELE-satellite-0811/pol/spaun.pdf
Portuguese	Português	www.TELE-satellite.com/TELE-satellite-0811/por/spaun.pdf
Romanian	Românesc	www.TELE-satellite.com/TELE-satellite-0811/rom/spaun.pdf
Russian	Русский	www.TELE-satellite.com/TELE-satellite-0811/rus/spaun.pdf
Swedish	Svenska	www.TELE-satellite.com/TELE-satellite-0811/sve/spaun.pdf
Turkish	Türkçe	www.TELE-satellite.com/TELE-satellite-0811/tur/spaun.pdf

Available online starting from 26 September 2008



■ **Kevin Spaun (left), General Manager, and Friedrich Spaun, Founder, on the roof of their office building. Both of them operate Spaun as a team.**

A customer has a problem. Steffen Kuck is Technical Support Manager and helps Spaun's customers daily from 8AM to 12PM and from 1PM to 5PM. One of his tools is the SatcoDX CD-ROM with its worldwide satellite data.



An important communications medium is of course the Internet. Web designer Patrick Keil is seen here looking over visitors to www.spaun.de.

"We have about 40,000 visitors every month", explains Patrick Keil. On the monitor he shows us the current website visitors. Thanks to Geo-mapping, he knows exactly where these visitors come from and can communicate with each one of them with a pop up window. The surprise: this program was developed together by Kevin Spaun and Patrick Keil and the best part – it is freeware and can be used by anyone who wants to get more detailed information on who is visiting their web site, how long they have been there, what they are looking at and where they come from, and all of this live! Here is the link: www.livezilla.net

He then explained how Spaun ended up with their company colors: "Those are the colors of the building walls, blue and silver, and we decided to incorporate these colors into our corporate identity."

Spaun has only existed as a stand-alone brand name since 1991. That was after the fall of the Berlin Wall. Up to that point Spaun only delivered their products to West Germany; there was no real thought of exporting products. The new market in eastern Germany brought with it so many new opportunities that Friedrich Spaun finally decided: "We are now going to distribute products under our own brand name!"

In 1993 his first successful product was a multiswitch for two satellites and one terrestrial TV input followed soon after by four and eight satellite input models. These products were quickly exported to neighboring countries. Today 50 % of their products are exported of which 30 % are shipped to EU countries with 20 % ending up outside of Europe. Total sales for Spaun range between 12 and 15 million Euros each year.

This is where Kevin Spaun comes into the picture. He took over company operations from his father Friedrich Spaun in early 2008. "But we run the company as a team", confirmed both of them at the same time.

Kevin Spaun wants to expand the export business: "At the moment we are in the process of locking in the North American market; we are looking for local distributors and also want to open our own distribution office in the USA", reveals Kevin Spaun, "we also want a stronger presence in the Middle East."

Spaun offers nearly 200 different products of which the best-selling products are, and always have been, multiswitches avail-

Spaun general Manager Kevin Spaun also likes to get his hands dirty sometimes by testing multiswitches.

The antenna signals from the roof land here and can be connected to the multiswitches in any arrangement. Customer problems can also be replicated and then checked out here.

THAILAND
Diversity & Refinement
EL 0121/07

Difference from your competitors

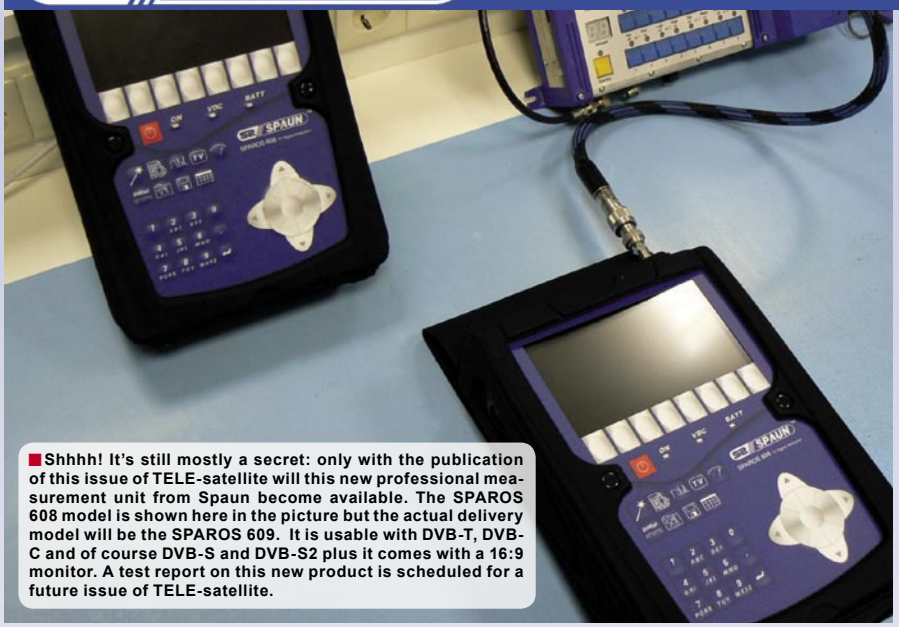
INFOSAT

Colorful Mesh Dish as you need

- Antenna Dish size : 4.5', 5.0', 5.5', 6.0', 7.0', 7.5', 10' ➲ As you need
- Made from Aluminum material, ➲ Anti-Rusted
- Polyester Powder Colour Coating, ➲ Longer time for Outdoor Using
- Selectable in Black, Red, Pink, Orange, Yellow, Violet, Blue, Silver
- Available for Fixed mount type and Movable mount type
- Special Discount prices for Big Volume and our dealers
- Quality Assurance by Thai Export Promotion Department (Thailand Brand)

Integrated LNBF C&KU Band
with DiSEqC Switch
LNBF CKU-01 Model

INFOSAT INTERTRADE CO., LTD. - www.infosats.com
46/22 Moo.5 Tiwanon Rd., Banmai., Pakkred., Nonthaburi 11120 Thailand
Tel. (66) 2- 961-9161-3 Fax: (66) 2- 961-8587 E-mail: niran@infosats.com



■ Shhhh! It's still mostly a secret: only with the publication of this issue of TELE-satellite will this new professional measurement unit from Spaun become available. The SPAROS 608 model is shown here in the picture but the actual delivery model will be the SPAROS 609. It is usable with DVB-T, DVB-C and of course DVB-S and DVB-S2 plus it comes with a 16:9 monitor. A test report on this new product is scheduled for a future issue of TELE-satellite.

■ A look in the warehouse. Shipping Manager Christoph Reichle told us, "Our stock inventory lasts about 3-4 weeks." Trucks come on a daily basis to pick up the packages and palettes for their customers.

Production of a Multiswitch

■ This is a four-layer circuit board delivered from an outside company. It is the building block for a multiswitch.

able with 5, 9 and 17 inputs with one of the inputs set aside for terrestrial signals.

Kevin Spaun is proud of his multiswitch product line: "With the Power 9 and 17 input basic units we are able to set up systems for up to 3000 users", explains Kevin Spaun, "no one else can do that." Reference customers for systems that large are, for example, the Jumeirah Beach Residence Tower in Dubai, the Nokia Development Center in Sweden, Microsoft's headquarters in Prague, Eutelsat in Paris, the Japanese Embassy in Berlin plus many, many more. Spaun multiswitches can even be found on many luxury yachts, and why not, every cabin needs to have its own satellite signal, right?

Finally, we also wanted to know about all the new products that are set to be introduced in their anniversary year. Kevin Spaun took a deep breath and began, "In the Spring of 2009 we want to introduce a fiber optic distribution system to the market." This type of system can provide service for 10,000 or more users.

This fiber optic technology will only be used in the distribution of satellite signals. Before it reaches the end user, the fiber optic signal is converted back to a standard digital signal and then routed through the multiswitches to the receivers. "This only works with a very strong laser transmitter", explains Kevin Spaun and continues by hinting at the many new artificial islands that are popping up in Dubai, "This will allow us to service an entire island."

By the time this issue reaches your hands, a new product will be released that you wouldn't expect from Spaun: a highly professional signal measurement unit. "Naturally it receives DVB-S2 signals and it also has a 16:9 monitor", explains Kevin Spaun, "even antenna installers want to watch HDTV on their measurement units", even though they should only be using it for reference.

Also newly available from Spaun is coaxial cable – appropriately named "Spoax". Its color? You have three guesses. No, not white. And no, not black either. If you guessed blue, you'd be right – their company colors. "With this coax cable and matching connectors, we can construct the perfect signal distribution system", reveals Kevin regarding the reason for the product palette expansion. The goal? "We want you to come to us for everything." In other words, they want to provide everything you need for the best possible satellite signal distribution.

And while we're on this subject, another innovation fits right in: price. "Without compromising quality", comments Kevin, "we are starting a new product segment at substantially lower prices."

The Premium products that have thus far been available from Spaun have been expanded in early 2008 to include Standard products. Shortly after this issue is published, the Light Class will make its debut on

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2007

Winners of The Queen's Award For International Trade 2007, Horizon Global Electronics is a UK Company established in 2001 specialising in the design and manufacture of hand held test equipment for the digital satellite and TV sector. Our strength lies in being able to find innovative solutions to leading technology issues .

HORIZON

For a reliable solution!

INTRODUCING THE HORIZON DIGITAL METER RANGE

THE HORIZON DIGITAL SATELLITE METER USB & USB PLUS

HDSM USB

- New graphics capable 128 x 64 pixel high brightness (adjustable) backlit LCD
- New Full Speed USB 2 interface with automatic driver download
- Full backwards compatibility with existing HDSM downloads
- New 3300 mAh battery pack offering in excess of 7 hours operation
- New nylon F connectors for maximum durability
- Faster processor with recall of last selection used
- New manual carrier configuration mode
- Twice the satellite setting capacity with 64 selections available
- Lock indication within 100ms of acquiring the satellite
- Custom program files available on request (e.g. VSAT)
- L-Band, C-Band, Ku-Band and Ka-Band capability
- Quality indicator (Pre BER) displayed alongside RF Level (dBuV)
- Pre and Post BER can be displayed with their actual values (setup option)
- Toggle to display Post BER and Carrier to Noise (dB)
- DiSEqC switch commands (available from sub menu)
- Symbol rates 2Msymb to 45Msymb
- Frequency range 950 to 2150MHz
- Input impedance 75 Ohms
- LNB Pass / Fail test function
- LNB short circuit protection
- Satellite cable integrity test
- Upgradeable firmware
- Intelligent internal AC charger 100 to 240 V AC
- Automatic fast and trickle charge modes
- 12 volt in car charger supplied
- USB lead supplied
- CE approved
- Compliant with EN 61326-1 : 2006 (EMC) and EN 61010-1 : 2001 (Electrical safety)
- Registered design
- Free product support via phone and email

HDSM USB PLUS (additional features)

- Easy to use Spectrum Display Mode
- QPSK Constellation Diagram (with zoom function)
- Histogram display with up to 9 simultaneous carrier measurements for single cable installations (SCR)
- Data Logging (upload installation measurement data to your PC)

HORIZON DIGITAL TERRESTRIAL METER (HDTM)

- Displays Signal Strength (RF level) with DVB-T indicator.
- Fast and accurate Pre BER readings in real time for easier antenna pointing using the built in CODFM indicator for quality of service.
- Can store up to 32 transmitter selections (via our web site downloads) a default of UHF 21 – 69 step through is preloaded.
- Built in intelligent universal mains charger 100 – 240V AC (CE approved) with V delta detection for fast and then trickle charging.
- Minimum run time of 5 hours with a full charge on the 2400 mAh NiMH battery.
- Computer interface: Serial Port (Com 1-4) for upgradeable software on transmitters.

FROM TEST TO MEASUREMENT

DEALERS AND DISTRIBUTORS WANTED

Speed up your installations call now on

+44 (0)1279 417005

or visit our website

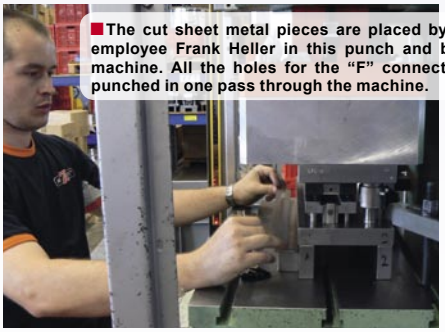
www.horizonhge.com

email: sales@horizonhge.com

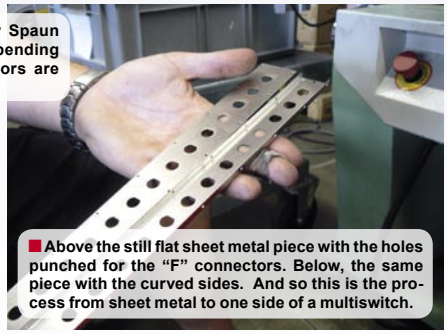
■ These automated machines install all of the components on the circuit boards.

■ Spaun employee Habib Ferchichi checks a completed circuit board.
"Typically only one out of 1000 boards have a problem", he explains.

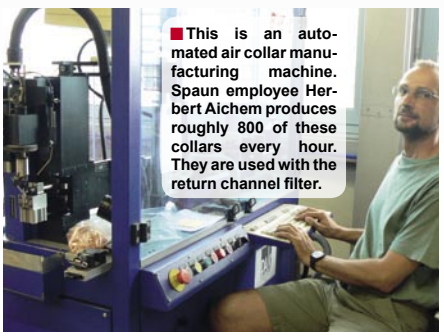
■ Where does the circuit board go? In a metal case, of course. And where do these cases come from? Here from this processing machine on which is a roll of sheet metal 36mm wide and 0.7mm thick with a 0.02mm thick nickel coating. A new roll weighs roughly 100 Kg and is 400 m long.



■ The cut sheet metal pieces are placed by Spaun employee Frank Heller in this punch and bending machine. All the holes for the "F" connectors are punched in one pass through the machine.



■ Above the still flat sheet metal piece with the holes punched for the "F" connectors. Below, the same piece with the curved sides. And so this is the process from sheet metal to one side of a multiswitch.



■ This is an automated air collar manufacturing machine. Spaun employee Herbert Aichem produces roughly 800 of these collars every hour. They are used with the return channel filter.

■ The air collars are extremely small.

the market. Kevin Spaun explains the connection: "There is absolutely no difference in quality, only in what it comes with." While for example a Premium class multiswitch might come with an adjustable level control, this feature would not be available in their Standard and Light products resulting then in only two choices. "The price situation looks like this: if a Premium class product is priced at 100 %, then the Standard class item would be 75 % and a Light class choice would be 50 %", explains Kevin.

So what else is new? "A wideband switch for the US market", replies Kevin, "it uses a frequency range below (!) the standard IF band for the distribution of HDTV signals particularly those of PayTV provider DirecTV." More specifically, it means the range from 250 to 950 MHz will be used for satellite IF distribution in addition to the standard range of 950 to 2050 MHz. TELE-satellite will be taking a closer look at this innovative product that could also be interesting for other markets outside of the US, with a test report in the next issue. Patrick Schmid is responsible for these products. He belongs to the grandchildren generation of the founder Friedrich Spaun and is already an employee of the company.

Friedrich Spaun is also looking at another completely different subject, that not much thought has been given to up until now, but one that will certainly be playing a much bigger role in the future and one that TELE-satellite has been looking very closely at for the past several issues: the energy use and efficiency of the power supplies! "My son and I together are running a new company, Spaun Power", explains Friedrich Spaun as he gestures to a building on the other side of the street, "Very soon we will be starting production of switching power supplies, not only for our own use of roughly 150,000 power supplies each year, but also as an OEM product."

The ever-increasing energy shortages around the world are forcing a closer look at the efficiency of power supplies. But that's not the only reason. "The most critical component in a multiswitch is the power supply", explains Friedrich Spaun, "here we see the most failures." Friedrich Spaun is quite convinced: "a reliably functioning power supply that also uses the least amount of electricity is needed everywhere."

This is how Spaun, in their 40th year, is building themselves another leg to stand on while at the same time expanding their signal distribution business to include everything you could possibly need. It's a strategy that looks to be very successful and one that Friedrich Spaun confirms in his company phrase:

"Every year for me has been a successful and profitable year." All profits are reinvested in the family company so that Spaun can easily expand all on its own.

Here's to another 40 years of Spaun!

D I G I T A L S A T E L L I T E R E C E I V E R

OPENBOX®

CHANCE TO SEE MORE

X-810

2 x UniCAS interface
with Conditional Access

NEW DVB-S Tuner based on Zarlink chip
with "Blind Scan" function

Support transponders with symbol rate
from 1000 up to 45000 Msps

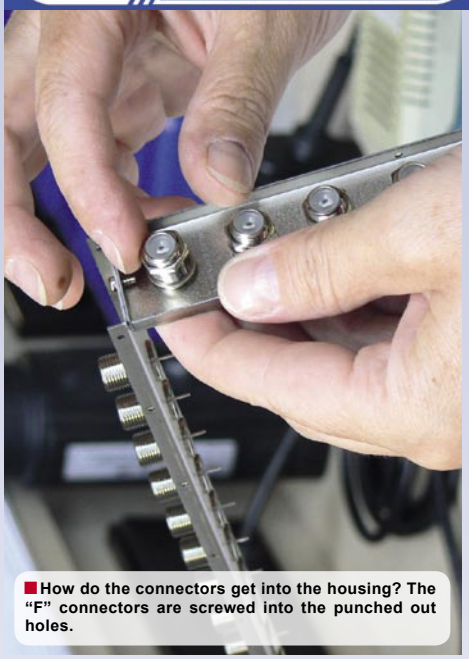
Faster search and channel selection
with a low speed transponders

Brilliant picture and quality sound
with AV switch based on SONY IC

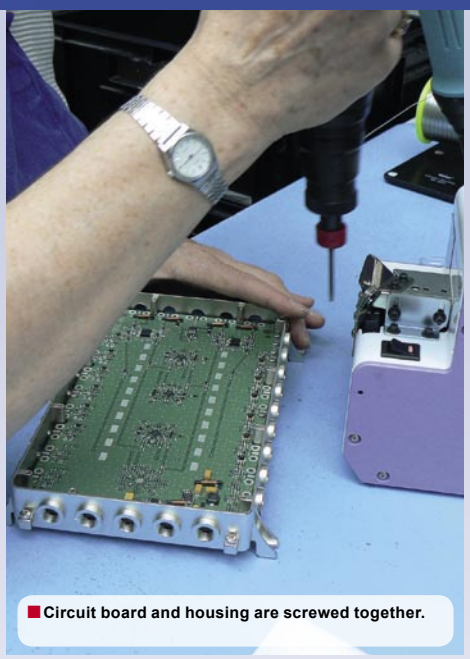
Large quantity of additional functions
and strong technical support

TM OPENBOX® REPRESENTATIVE OFFICES:

UKRAINE	Company "SAT SYSTEMS", Zaporozhye, tel/fax: +38(061)2-220-220, +38(061) 2222-300
RUSSIA	Company "Sky Market", Moscow, tel/fax: +7(496)971-24-81, +7(495)589-67-49
BELARUS	Company "Global Technologies", Minsk, tel/fax: +375(17)254-68-00, +375(17)254-67-09
BALTIC STATES	Company "ELBELA", Vilnius, tel/fax: +370 659 389 87, +370 5 233 37 59



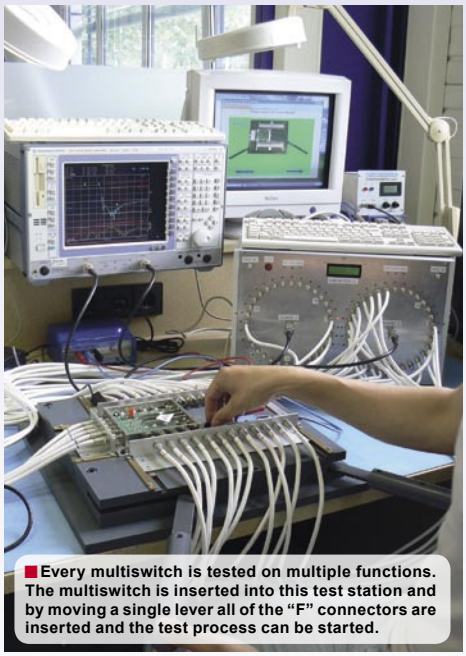
How do the connectors get into the housing? The "F" connectors are screwed into the punched out holes.



Circuit board and housing are screwed together.

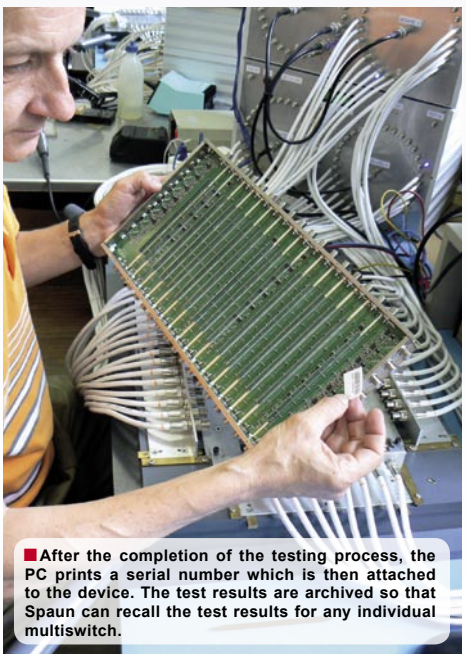
To finish off the process, the lid is screwed in place. Friedrich Spaun explains:
"That is a very critical point: with smaller sized housings, flexible lids can provide sufficient EMV protection. With larger housings, this level of protection can only be achieved using a large number of screws."

Quality to Measure

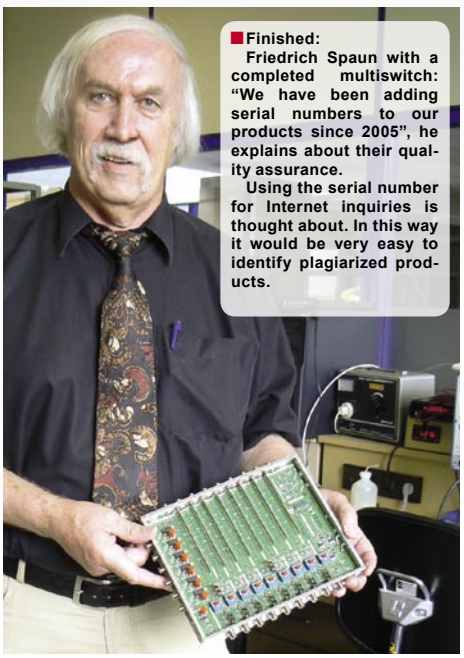


Every multiswitch is tested on multiple functions. The multiswitch is inserted into this test station and by moving a single lever all of the "F" connectors are inserted and the test process can be started.

Spaun employee Peter Fuchs shows us the testing process on a model 17 test station, the largest of the ten test stations used by Spaun. "In the past a complete test required 50 minutes", explains Peter Fuchs, "today only three minutes is needed to automatically test every function.



After the completion of the testing process, the PC prints a serial number which is then attached to the device. The test results are archived so that Spaun can recall the test results for any individual multiswitch.



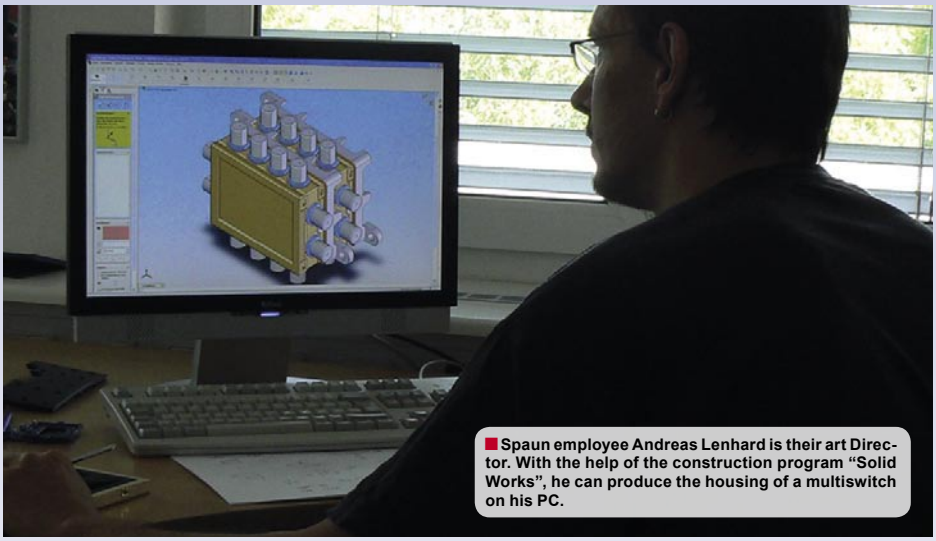
Finished:
Friedrich Spaun with a completed multiswitch: "We have been adding serial numbers to our products since 2005", he explains about their quality assurance.
Using the serial number for Internet inquiries is thought about. In this way it would be very easy to identify plagiarized products.

Even if a Spaun multiswitch passes all of its electronic tests perfectly, it still isn't clear if it is technically sound.
This part is checked here: every multiswitch is placed with its power supply in this high voltage test chamber. In this way Spaun can guarantee that the completed multiswitch is 100% perfect.
They are so sure that they provide a 5-year guarantee. "In reality", explains Friedrich Spaun, "we repair products that are older than five years."
It's very simple, there are so few of them that the warranty period could be extended, "but for legal reasons we keep it at five years", explains Friedrich Spaun.

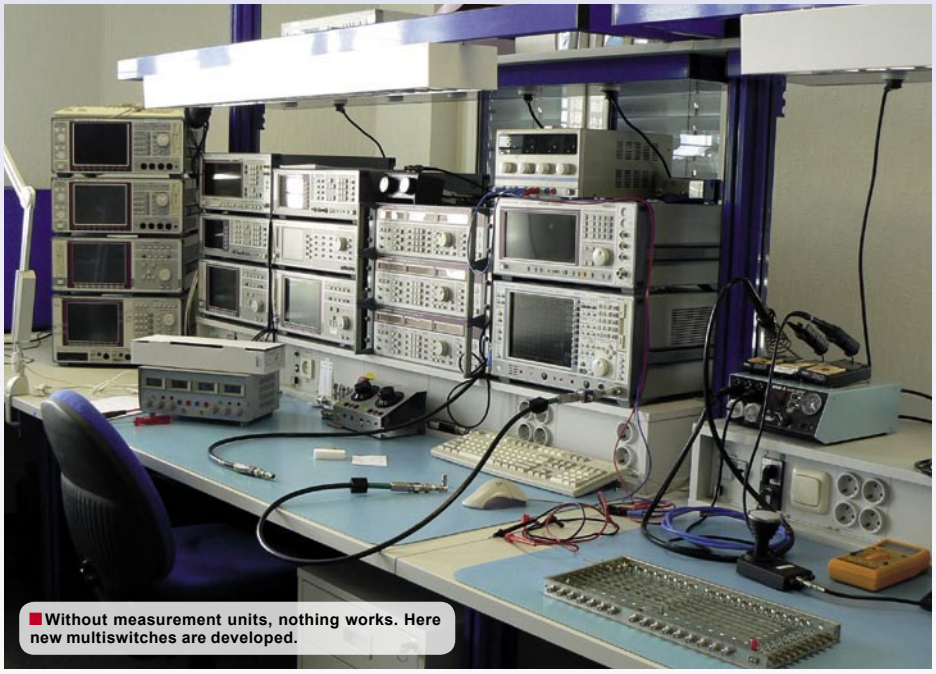
SPAUN™

Construction and Security Checks of Multiswitches

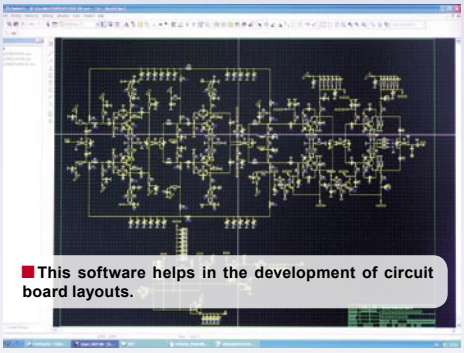
■ Completed multiswitches are also placed in this environmental chamber for testing.
"Our specifications state that our devices are temperature tested from -20° C to +50° C", explains Friedrich Spaun, "but we naturally test from -30° C to +60° C to make absolutely sure."



■ Spaun employee Andreas Lenhard is their art Director. With the help of the construction program "Solid Works", he can produce the housing of a multiswitch on his PC.

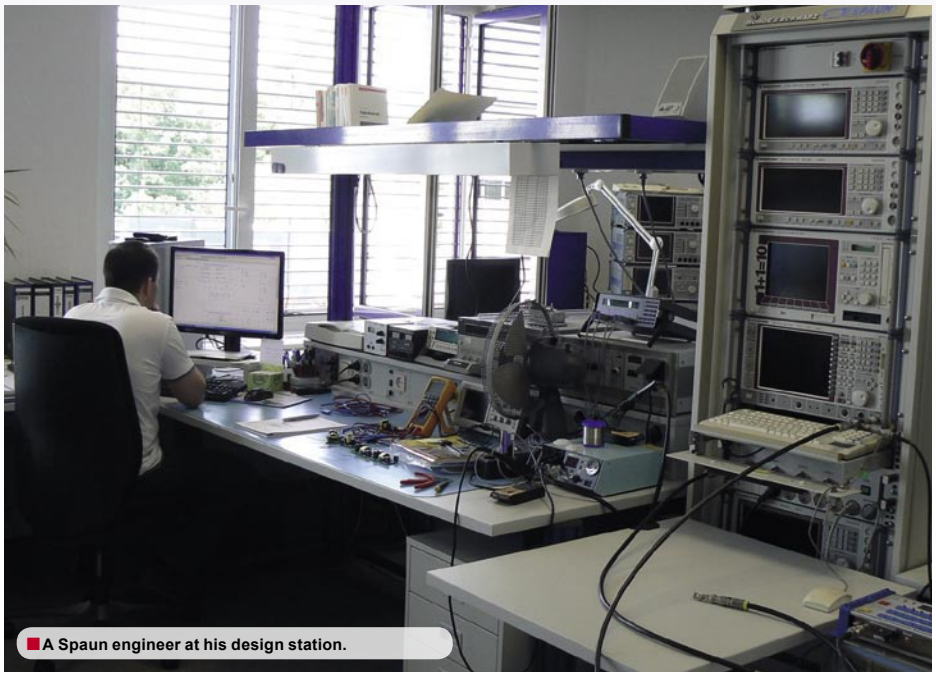


■ Without measurement units, nothing works. Here new multiswitches are developed.



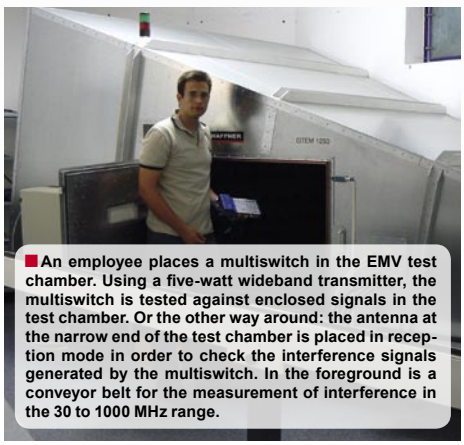
■ This software helps in the development of circuit board layouts.

■ Quality and security belong together.
To guarantee that Spaun switches are truly secure, a type of lightning generator is used to simulate an electrical load.



■ A Spaun engineer at his design station.

■ With this burst generator various types of line interference can be simulated.



■ An employee places a multiswitch in the EMV test chamber. Using a five-watt wideband transmitter, the multiswitch is tested against enclosed signals in the test chamber. Or the other way around: the antenna at the narrow end of the test chamber is placed in reception mode in order to check the interference signals generated by the multiswitch. In the foreground is a conveyor belt for the measurement of interference in the 30 to 1000 MHz range.

12th International Trade Fair and Conference for Satellite Communication, Broadcasting, Cable and TV Content

Broadcast
Cable & Satellite
eurasia

a CeBIT Event

www.cebit-bcs.com

20 -23 November 2008

Istanbul Expo Center
Istanbul, TURKEY

Hall 9 : Broadcasting, Cable & TV Content
Hall 10 : Satellite Communication

Supporters

SVF Satellite Solutions. The World.

KOSGEB

TELEKOMÜNİKASYON KURUMU

TUYAD

RTÜK RADYO ve TELEVİZYON ÜST KURULU

Organizer

Deutsche Messe
Worldwide

Hannover-Messe International
Istanbul Ltd. Şti.

Phone: +90 (212) 334 69 00
Fax: +90 (212) 334 69 34
info@hf-turkey.com

THIS FAIR IS ORGANIZED WITH THE PERMISSION OF THE UNION OF CHAMBERS AND COMMODITY EXCHANGES OF TURKEY IN ACOORDANCE WITH THE LAW NUMBER 5174

PASAT ANTENY

SATELLITE AND COMMUNICATION ANTENNAS

▪solid ▪aluminium ▪prime focus

www.sat.bg online shop

PASAT ANTENY

BULGARIA
tel: +359 350 63911; +359 350 66311
fax: +359 350 64011
e-mail: sales@pasat.bg; www.sat.bg

Clark Electronics

70 Years Old and Full of Ideas

Clark Electronics in southern Holland right at the entrance to the Rotterdam harbor has been around since 1938. This year they are celebrating their 70th anniversary. What better reason for us to pay them a visit and find out what such a long-standing company is all about.

And wouldn't you know it: in their stockroom we found a large supply of vacuum tubes as they were used in broadcasting equipment 70 years ago. That's how Clark Electronics got started: with the production of AM radios. Later on came two-way radios for private and military applications. When it was no longer profitable to do their own manufacturing, Clark Electronics shifted over to wholesale electronic component suppliers – that was in the early 1960's.

In 1993 it was time: the satellite age started at Clark Electronics. The company, in a close relationship with manufacturers in Taiwan and China, began to develop and market receivers for the Benelux (Belgium, Netherlands, Luxembourg) region. In 2000 they entered into a cooperation with Topfield and finally with Arion. "Now we are in the process of developing our own brand name", revealed John Kamp, Director of Clark Electronics.

He doesn't think much of low prices: "If someone wants a satellite receiver, they'll buy one, price is not always the deciding factor", believes John Kamp, although, "this assumes of course that the receiver can do what the customer wants and above all without any errors or crashes!"

John Kamp believes that the current weak order situation with satellite dealers in Europe has less to do with price and more to do with incorrect product choice.

"The HD market is not quite ready yet; right now it's much better to offer customers SD receivers with upscalers." They also seem to have a similar grip on the available channels. "You're not going to be watching Discovery HD 24 hours-a-day", comments John Kamp, "but rather normal channels that are not yet available in HD." He believes the breakthrough in HD will occur in 2012.

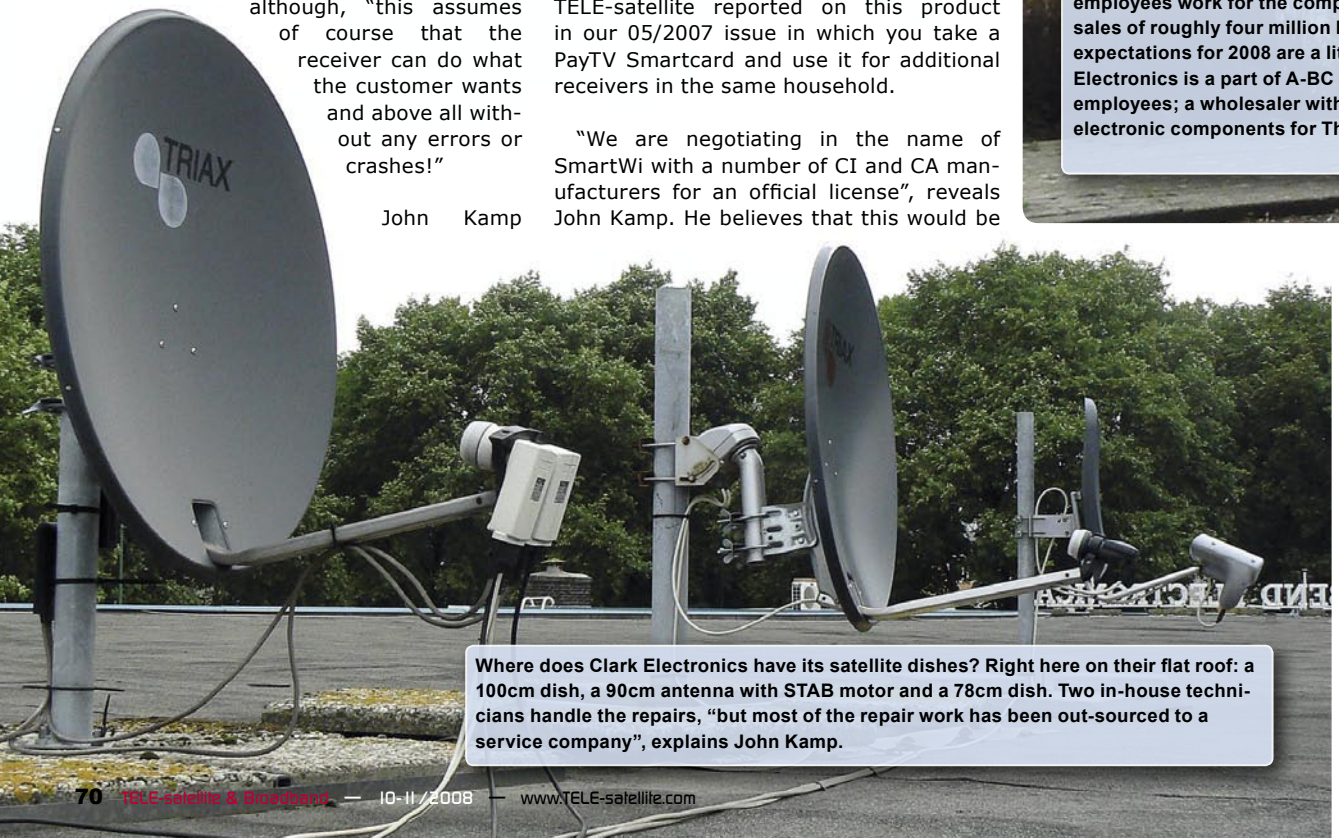
His vision of the future is more towards multimedia anyway. "One day, everyone will have a network server with a very high storage capacity on which TV channels, MP3 files, pictures, etc. can be stored and accessed in any room in the house via the network connection." Clark has already taken a step in that direction: their own receiver will include a universal remote control.

Until that time, John Kamp is focusing on an equally interesting product: SmartWi. TELE-satellite reported on this product in our 05/2007 issue in which you take a PayTV Smartcard and use it for additional receivers in the same household.

"We are negotiating in the name of SmartWi with a number of CI and CA manufacturers for an official license", reveals John Kamp. He believes that this would be

A look in the stockroom in which you will find not only SmartWi products waiting to be delivered to the Benelux countries, but also their own Clark satellite receivers.

The flag gives away the location of Clark Electronics: here in this industrial park where Clark Electronics has its headquarters, 11 employees work for the company and manage sales of roughly four million Euros in 2007 – the expectations for 2008 are a little less. Clark Electronics is a part of A-BC Group with 35 employees; a wholesaler with electronics and electronic components for The Netherlands.



Where does Clark Electronics have its satellite dishes? Right here on their flat roof: a 100cm dish, a 90cm antenna with STAB motor and a 78cm dish. Two in-house technicians handle the repairs, "but most of the repair work has been out-sourced to a service company", explains John Kamp.

John Kamp is Director and COO of Clark Electronics. The map on the wall shows Japan and China. "I usually visit South Korea and China 10 times a year to work with our cooperative partners", explained John Kamp about his business trips.

A treasure chest full of old supply makes up their in-stock supply of vacuum tubes. John Kamp explains, "We still get orders for these old tubes."

an interesting market for PayTV providers. "How often does a second Smartcard ordered from a PayTV provider end up with a neighbor?"

In his view, the solution is quite simple: if you no longer give out a second Smartcard, it could never come to this. Customers with multiple receivers can instead be offered SmartWi. A simple and truly "smart" solution.

SmartWi is already preparing for the day when their products are officially licensed: the company is now incorporated and working on completing their corporate design.

Our visit to Clark Electronics was very enlightening; something we did not expect from a company celebrating their 70th year!

■ **Mario Sussi in his favorite place: among his satellite dishes. The large dish in the background is the 6.0-meter uplink antenna pointed to EUTELSAT W2 at 16 east. The small 100cm SNAI dish receives the SNAI signal that is then combined with the HOTBIRD signal in their local network. In the background to the left are the microwave antennas for the terrestrial signal network: "Sometimes it's cheaper to transmit the horse racing signals terrestrially, not to mention they are also less susceptible to rain fade since here they are transmitted in the 6 GHz range."**

From DXer to Technical Manager

A Visit with Mario Sussi from Teleippica in Lucca (Toscana), Italy

Betting on horse racing is a popular pastime in Italy. This is due in large part to Teleippica unifying the horse betting system and reorganizing the network across all of Italy. Teleippica in charge for transmission on behalf of UNIRE's four channels of which two, UNIRE TV "gray" and UNIRE TV "green", are the actual betting channels and, with the publication of this issue of TELE-satellite, a third channel, UNIRE TV "blue", will have started. There's also the SNAI-TV channel that broadcasts other sports betting events as well as a summary of all broadcasts that is produced with a 15-minute delay for Sky Italia and offered in their Pay TV package.

Naturally, sports betting involves live transmissions. Mario Sussi is responsible for these complex transmissions. He spoke to us about his DXer days in the past, "I tuned into the first satellite transmissions in Europe; that was Project Eurikon back in 1982." Over the years, his antenna farm grew larger and larger to

include a 3.8-meter mesh antenna and a 3.0-meter solid dish. "But that's all in the past", winked Mario, "today there are other problems to solve."

His experiences as a DXer, where he always had to find practical solutions using the simplest methods, help him today to solve much more complex signal processing problems. He gave us an example, "In our own office system we need to not only have access to HOTBIRD but also naturally our own transponder at 16 east." He acquired a narrow LNB, one that he could mount at a 3 deg offset, and fiddled with a single-cable solution so that only one single cable was needed to receive both HOTBIRD and the SNAI-TV transponder at 16 east.

But there are also more complex systems in the works. "We are in the process of converting our system to HD." Even though the transmissions directly from the racing venues are still in SD, Mario came up with his own idea to make it work: he scales the incoming SD signal up to HD and can then transmit the programs in MPEG4 with an 8 MB bandwidth.

It's easy to see that Mario has satellite technology in his blood. He can tell based on the reception signal what encoder is being used. "One encoder manufacturer doesn't have a complete grasp of their technology; you can easily see this", comments Mario.

We asked him as a professional what direction he thought that HDTV would continue to go. For Europe he referred to the state-run as well as the public channels: "they have to lead the way; private channels don't normally take the initiative."

A horror to him is the HD programming from their national PayTV provider Sky: "They scale everything up. This can be

■ **SNAI's main office can be found in Lucca not too far from Pisa, Italy.**

▲ **A look inside the video room. Here the programming clips are put together, sent terrestrially by microwave link to SNAI headquarters in Rome, then back again and then uplinked to the satellite at 16 east.**

seen by the customer who then opts away from HD."

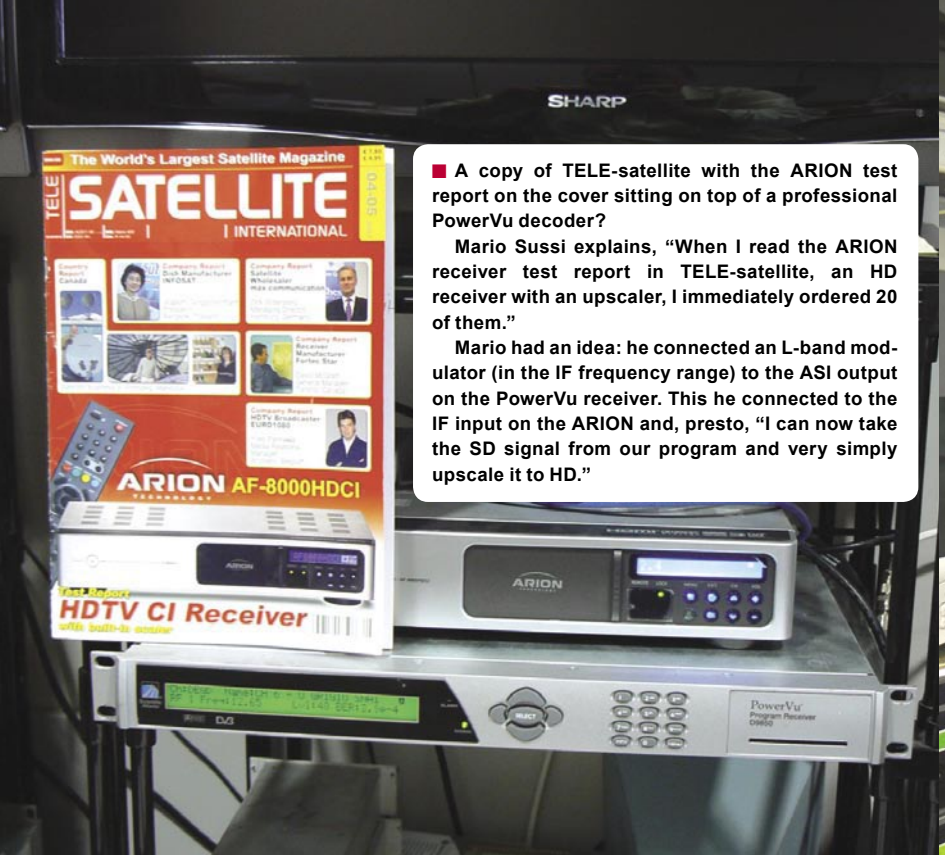
He does see HDTV coming in the future but not as fast as originally hoped. He calculates that the savings that DVB-S2 and MPEG4 bring with it don't compensate for the extra costs customers would need to pay for new receivers.

His arguments for the new fiber optic LNBs from Global Invacom that TELE-satellite recently introduced are similar: "Fiber optic technology is coming; it is beginning to develop in this direction", observes Mario, but he is also skeptical about seeing this in the near future.

Before we left, Mario gave us a hot tip for DXers: "Most feeds today are transmitted in 8PSK – but few DXers can receive them." Why? Isn't 8PSK used with DVB-S2? "Yes, this is true", explained Mario, "but feeds don't transmit in DVB-S2, instead it is normal DVB-S." The problem lies with the readily-available LNBs: "There's not only the noise factor", explains Mario, "you also have phase noise. With a high-quality spectrum analyzer you can see that the carrier drifts very easily."

"As long as it drifts fairly slowly, the receiver is able to follow along. But if the drift is random, phase noise makes it impossible to demodulate the 8PSK constellation, and reception fades away." Mario told us of his experiences: "Pro-

◀ **In the heart of Teleippica: from here the five encoders are controlled and the programming is switched over to the uplink. Susanna DelPapa is in charge of this control room.**

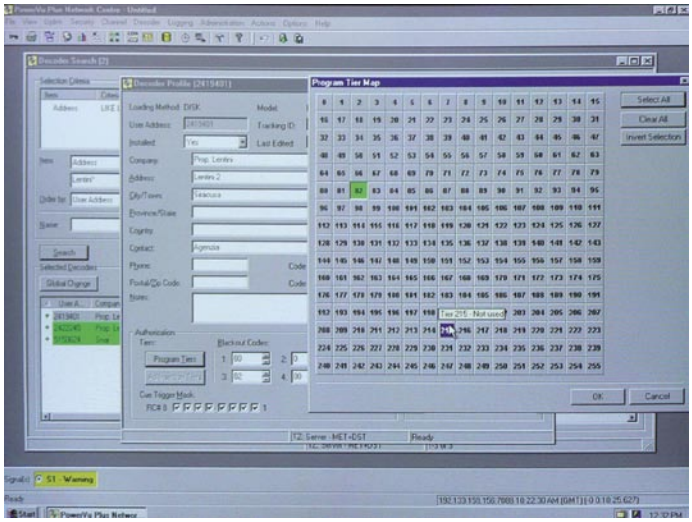


■ A copy of TELE-satellite with the ARION test report on the cover sitting on top of a professional PowerVu decoder?

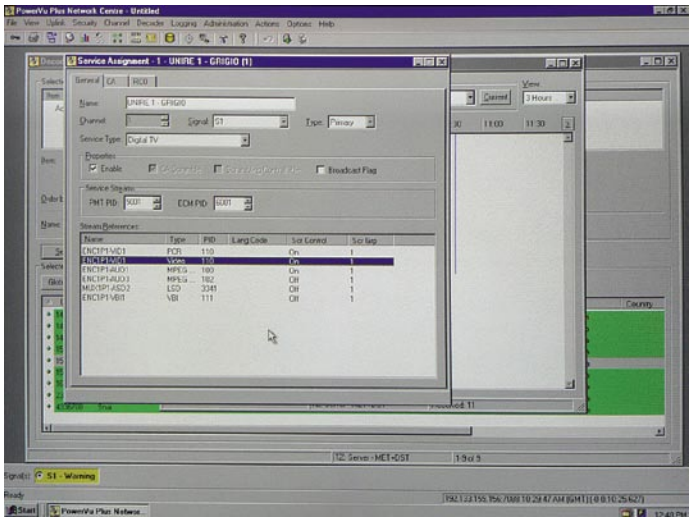
Mario Sussi explains, "When I read the ARION receiver test report in TELE-satellite, an HD receiver with an upscaler, I immediately ordered 20 of them."

Mario had an idea: he connected an L-band modulator (in the IF frequency range) to the ASI output on the PowerVu receiver. This he connected to the IF input on the ARION and, presto, "I can now take the SD signal from our program and very simply upscale it to HD."

■ Pietro Del Tessandoro is Mario Sussi's right-hand man and is also responsible for the uplink encoder.



▲ This is what the control software from PowerVu looks like: with this encryption system, each receiver can be individually controlled. AFRTS, the American Armed Forces Radio and Television Service, also uses PowerVu. Susanna explains how it works: "We can individually turn on and off a maximum of 30,000 customers/receivers; right now we have about 9000 customers." Each customer can be activated for up to 255 individual services; each service could be a video channel, an audio channel or a data channel. On the screen you can see 255 buttons. Button 44, for example, is the video signal from Unive TV "gray". "We can even change the transponder frequency in the receiver from here", explains Susanna about the PowerVu system, "The receiver switches automatically to the new transponder without the customer even realizing it."



▲ The individual PIDs are lined up with the corresponding signals through the PowerVu software.

fessional LNBs are very frequency-stable and can therefore receive 8PSK in DVB-S without any problems." For the feed-hunters within the DXer group, Mario recommends searching for frequency-stable LNBs. "There are some manufacturers that produce standard LNBs that would fit the bill."

Mario looks at it as part of his job description to always be in step with the technology. But he can also see the dangers: "You need to be in the right place at the right time; it doesn't help to invest too soon, but at the same time you don't want to be too late to embrace new technology."

It's demanding work but Mario is always ready for it. And finally, some praise for TELE-satellite: "TELE-satellite always keeps me up to date with the latest products on the market; this makes my job much easier." That makes us happy of course!

◀ This is what the back of a regular PowerVu receiver looks like as it is installed in the Teleippica betting offices.

Square Plan, Johannesburg

Square Plan is one of the larger satellite distribution companies in South Africa.

The President is Bernard Ruberg, a satellite hobbyist himself. He was the one who originally managed to receive ASTRA from Europe with his 4.5-meter antenna – of course in analog. That dish is still in service today but more antennas have been added to the mix: a 3.7-meter mesh antenna as well as two 2.4-meter dishes. All of these antennas can be found on his property in northern Johannesburg, as can be seen here on our picture. His company has been in existence for 23 years. Suwaibah Dadabhay, his office manager, explained to us: "We sell 65,000 dishes including LNBs every year. On top of that, we sell 10,000 100cm antennas as well as 1000 2.4 and 3.7-meter antennas each year." Installers and dealers can acquire all the necessary accessories such as switches, any kind of LNB from single and twin to Quad and Quattro. Square Plan also handles repairs. "Roughly 20% of our products are exported", explains Suwaibah, much of it to countries such as Angola and Mozambique. Nine employees make up Square Plan, four technicians and five office workers. Square Plan is convinced that business for 2008 will grow!

Suwaibah Dadabhay is Square Plan's Office Manager and organizes everything.

Functionality test for newly arrived LNBs: a technician tests every LNB by connecting it with a signal analyzer and then by attaching it to a dish pointed at 68.5° east.

A satellite DXer's dream: a 4.5-meter full dish and several other "smaller" antennas with diameters of 2.4 and 1.8 meters all with motors and then of course unrestricted visibility in all directions.

Satellite Reception in a Train

In the 03/2008 issue we introduced to you the company SeaTel, a provider of mobile satellite reception systems for ships. In that report we also mentioned that SeaTel was in the process of expanding into a new business area by developing mobile satellite reception systems for trains. And just recently, that milestone was reached: the first high-speed trains with satellite reception are now running on the rails!

Philip Haines speaking with TELE-satellite. He is the Technical Manager at 21net.

It has to do with Thalys. This company operates 26 high-speed trains that travel between the cities of Paris, Brussels, Amsterdam and Cologne. The new SeaTel system has been installed in 15 of these trains, and by the end of the year the remaining trains should also be equipped for Internet reception via satellite.

We asked Philip Haines, responsible for the technical development of this system with the company 21net, what is being offered. He explained, "We are receiving the Internet service from the Belgian broadband provider Telenet in the 12.5 to 12.75 GHz frequency range." It is an intelligent technology that is being installed; it was developed jointly with Nokia Siemens Network. This system automatically switches over to GPRS/GSM operation when the train enters a tunnel or when it stops at a station that is covered with a roof.

21net technicians at work installing the SeaTel satellite antenna for the mobile reception of HISPASAT. Since the Thalys high-speed trains don't travel much up or down any hills, the antenna itself doesn't require much in the way of elevation adjustments. This results in a lower wind load thanks to the flatter radom.

While the train is underway and as long as there is a clear line-of-sight view to HISPASAT, the goal is to provide "2 MBit/s download speed and 512 KBit/s upload speed for each train", explains Philip Haines, and then continues, "We are using an intelligent bandwidth distribution between the trains that statistically are underway only 40% of the time."

In the train itself, the passengers access the Internet via WiFi Hotspots. This certainly is a new experience: surfing the Internet in a high-speed Thalys train travelling at 300 kph (188 MPH)!

Finished! The radom is placed on top of the antenna. Now the system is not only protected from the weather but also from the enormous 300 kph (188 MPH) wind load.

VENUS DIGITAL

Anti Rust Material

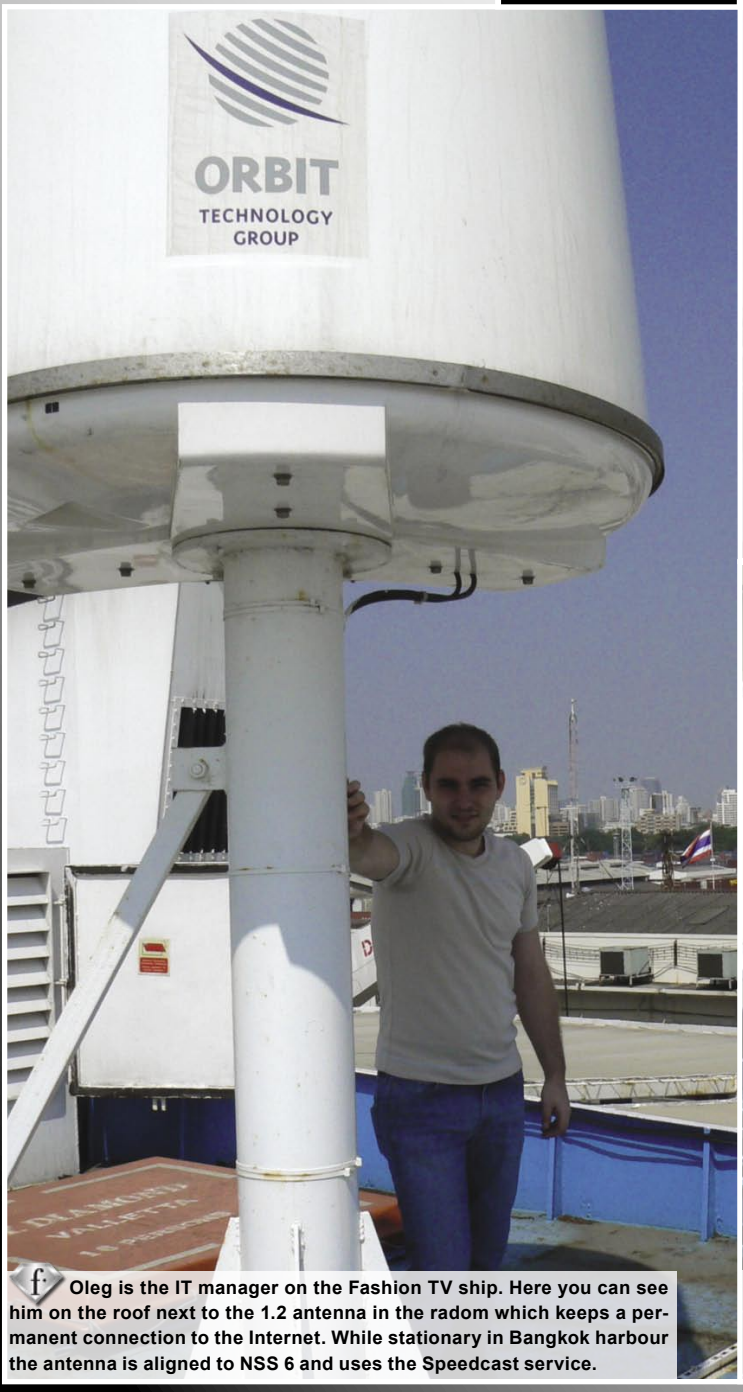
Galvalume®

by BlueScope Steel

PT.Subur Semesta
AN ELECTRONIC COMPANY
Jl: Kamal Raya No.8A RT.14/09
Tegal Alur, Jakarta Barat 11820
Tel: (62-21)-5559733 Fax:(62-21)-5559805
email: subursmt@gmail.com
http://subursmt.com
INDONESIA

Fashion TV

Reality Show at sea! Fashion TV has been the owner of a ship for a few months now – a vessel that was formerly used as a roll-on roll-off car ferry. The company is planning to use the ship as a party boat and also intends to broadcast a reality show based on the Big Brother concept and starring – what a surprise! – fashion models. This sounds like a really crazy idea and we wanted to have a closer look at those plans. After all, how will broadcast signals be sent from the ship to a transmitter?



Oleg is the IT manager on the Fashion TV ship. Here you can see him on the roof next to the 1.2 antenna in the radom which keeps a permanent connection to the Internet. While stationary in Bangkok harbour the antenna is aligned to NSS 6 and uses the Speedcast service.

Fashion TV has bought this vessel and converted it to a party and studio ship.

View of the broadcast centre: this is where the show is directed. The schedule on the wall in background shows which model is working at what time.

While the ship is anchored in harbour, the IT team installs dishes and uses them to record the live stream of Fashion TV in order to play back the program while the ship is at sea. Here you can see Jon Clarke, the owner of JSAT.TV in Bangkok, next to the two C band antennas. One is aligned to ASIASAT 3 at 100.5° East and the other one to INTELSAT 7,10 at 68.5° East.

We visited the Fashion TV ship in Bangkok. The vessel was originally equipped and converted in Greece, "but the technology was a huge mess and didn't work at all," according to Jon of JSAT.TV, a Bangkok company specialising in satellite technology. "We had to exchange the entire TV system on the ship and partially converted it to IPTV," he continues.

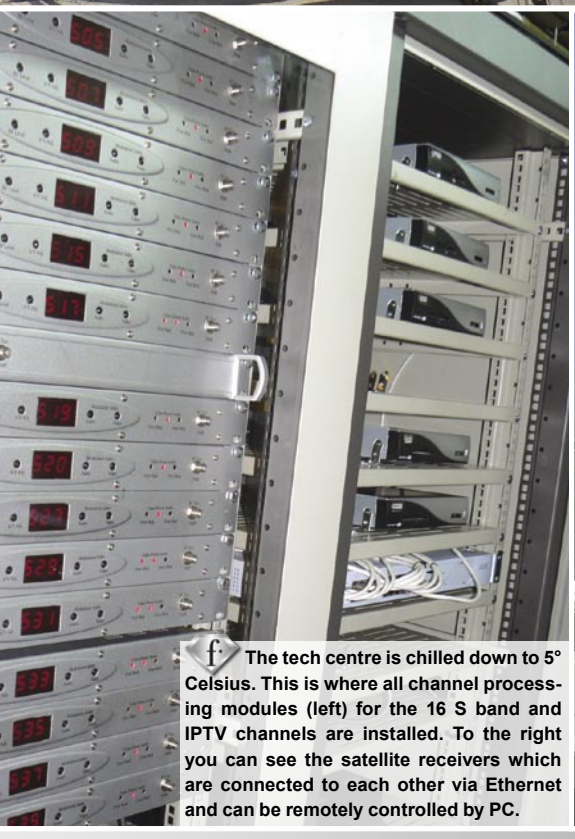
Bogdan is responsible for the on-board video technology and explains that "almost 500 TVs are connected to the system, and apart from a couple of monitors all are 16:9 flat screens."

So the Fashion TV ship features more TVs than most hotels. All cabins and each meeting and conference area, all stairways, bars and dance floors of the ship are equipped with flat screen TVs. In total, 16 channels are distributed on the S band, all of which are received by a self-tracking Ku band antenna.

"In addition, a total of 24 cameras are installed," explains Oleg, the IT manager on board the Fashion TV ship. "These are used as surveillance cameras on the one hand, but also for the Fashion TV reality show on the other hand." IPTV is being used to transmit the signals from the ship. A 1.2 m antenna maintains an IP connection to the Fashion TV broadcast centre and the same connection is also used to provide Internet access to the guests on board.

A powerful WLAN network capable of broadcasting through thick steel doors and walls inside the ship is available for guests to log onto the Internet. What a relief that the technical equipment required for this system is readily available in the Bangkok "Future Center", one of the huge shopping malls for tech-products. Components you'd be hard pressed to source in Europe are on offer here for very competitive prices.

Thanks to its technicians the Fashion TV ship features innovative satellite technology on board.



The tech centre is chilled down to 5° Celsius. This is where all channel processing modules (left) for the 16 S band and IPTV channels are installed. To the right you can see the satellite receivers which are connected to each other via Ethernet and can be remotely controlled by PC.

Bogdan takes care of video technology on the Fashion TV ship. Here he is next to the radom for the 60 cm antenna with automatic tracking.

SatcoDX Suite

A Collection of The Best Satellite Software Available Globally

For the real satellite enthusiast and the satellite professional wishing to use the most advanced software. All programmes have been adjusted to load the SatcoDX Satellite Database in the most easy and intuitive way. The SatcoDX Suite is only and exclusively available to TELE-satellite subscribers. Private and Personal Use allowed.

SatcoDX Suite Updater Version 0.9

Installs in Taskbar And Updates SatcoDX Chart on Your PC Every Hour - Always Up-To-Date With the Latest Transponder Updates

SatcoDX Suite Updater downloads the full SatcoDX Chart Database once every hour, provided that your PC is connected to the Internet and the license is valid. Additional to the original SatcoDX database in csv format, the Updater also downloads the **SatcoDX-all-transponder.csv** file, which contains all information needed as default settings for satellite receivers. Additionally, the Updater downloads the full chart in **xml** format which can be used for multiple applications.

Installation:

Click SatcoDX Suite Updater in the SetUp of SatcoDX Suite

Commercial and Professional Users Apply For License at www.TELE-satellite.com/ads/

DishPointer Version 1.0.0.0

Erect your Dish Virtually and Find out What Satellites and Channels you get at any Location Worldwide

DishPointer brings together IP-Location, Google Maps and SatcoDX Chart. If you are online, it shows your own location by default, choose the satellite you wish to receive, and DishPointer shows all installation details and the satellite channels available. Additional features allow you to check for obstacles in line of sight - all from the comfort of your PC.

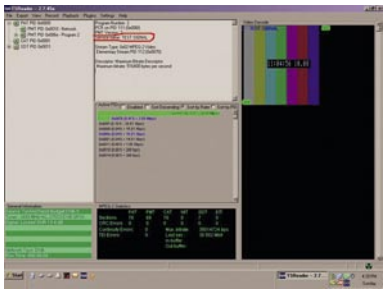
Installation:

Click DishPointer in the SetUp of SatcoDX Suite

Commercial and Professional Users Apply For License at www.dishpointer.com

TSReader Lite Version 2.8.46e

Read the Content of Transport Stream and Analyze Bitrates - Includes Video Displays



TSReaders connects to a wide selection of satellite PC cards and analyzes the transport stream. Each PID can be analyzed for its content and bitrate. Video PIDs are shown with a screenshot, including MPEG4 streams.

Installation:

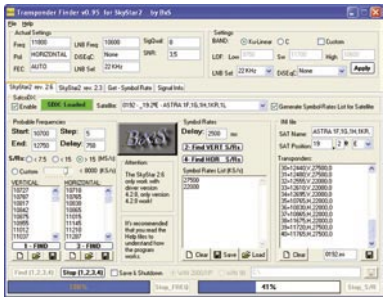
Click TSReader in the SetUp of SatcoDX Suite

Standard and Professional Versions of TSReader are available at www.tsreader.com

Transponder Finder Version 0.95

Find New Transponders Automatically With Intelligent Search

Transponder Finder requires SkyStar 2 r2.6 card with driver 4.2.8. It loads the sdx chart created by SatcoDX Updater and sorts Symbolrates by occurance. Transponder Finder searches for most used SRs first, then for frequencies, and only then starts a mechanical search for the SRs and frequencies left.



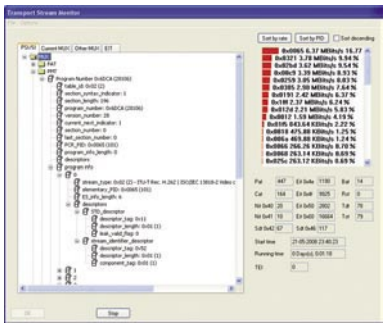
Installation:

Click Transponder Finder in SetUp of SatcoDX Suite

Commercial and Professional Users Apply For License at bxs.no.sapo.pt

DVBStreamExplorer Version 3.0.79

Analyze Transport Stream And Demux And Capturing to Disk



DVBStreamExplorer connects to a multitud of satellite PC cards and allows analyzing the stream, giving all informations available in stream including the full teletext data and shows bitrates. Shows services as MHP, AC3 or H.264

Installation:

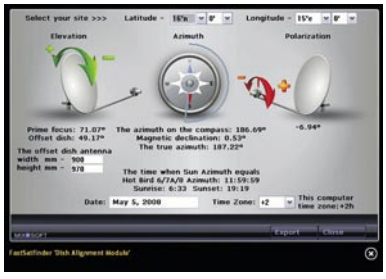
Click DVBStreamExplorer in the SetUp of SatcoDX Suite

Commercial and Professional Users Apply For License at www.dvbstreamexplorer.com

FastSatFinder Version 2.7.5

Alignment Tool with Signal Quality and Level Voice Reading

FasSatFinder offers all the tools needed for setting up a dish: select a satellite from the SatcoDX generated list and FastSatFinder immediately gives signal quality and level even in voice. Easy-to-understand graphics explain how to align dish for maximum.



Installation:

Click FastSatFinder in the SetUp of SatcoDX Suite

Commercial and Professional Users Apply For License at www.fastsatfinder.com

Topfield TAPs – Little Helpers for Your Topfield Receiver

Software developers don't always have it as easy as you might think they do. While one user wants to have very specific functions, the others sit there with puzzled expressions; while the professionals are always looking for more exotic uses for their equipment, the entire system must still remain easy to use for the beginner. This problem was solved decades ago in PC's in that on one side there are the operating system manufacturers and then on the other side you have hundreds of thousands of other smaller companies that have developed supplementary programs based on the basic operating system.

Up until recently, these types of developments were unknown in the DVB-S, DVB-C or DVB-T receiver world, and these boxes from all the different manufacturers come with only the exact features that were foreseen during their design stages.

For the aspiring South Korean manufacturer Topfield, this was simply not good enough. They came up with a plan to actively include the end users of their set top boxes in the developmental process. This was made possible by a unique programming interface, called TAP (Topfield Application Program), that the manufacturer made available at no cost to all users and included precise documentation of the possibilities and the proper approach to take. It didn't take long for dozens of hobbyists to surface that wanted to improve the capabilities of their Topfield receivers. Thanks to the Internet, these small supplemental programs quickly spread to others allowing Topfield receiver owners to choose from a variety of TAPs in order to upgrade their box with a specific useful function. A few of the better TAPs we would like to introduce to you here along with a download link so that you can take these TAPs for a test drive in your receiver.

Unless otherwise mentioned, most of the TAPs are compatible with Topfield's 5000 and 6000 PVR series and are easily uploaded into the receivers via the USB port or the network interface using the freely-available Altair program (downloadable from www.i-topfield.com). The TAPs are placed into the "Program Files" folder. This folder also contains the "Auto Start" subfolder. Any TAPs placed in this folder will automatically be executed when the receiver is turned on; any others would be activated by accessing the PVR menu and clicking on the << button.

Automove TAP – Increased Organization on the Hard Drive

This particular TAP is geared more towards our readers who are TV series lovers. It will take multiple recordings with the same title and move them into a predefined folder. Every recording from your favorite TV series will land not in the regular folder but nicely sorted in its own folder.

Download:

http://tools.hepke.com/component/

Filer TAP – A Wastebasket for Your Topfield

Who isn't familiar with this problem: when cleaning out your hard drive, one recording after the other is deleted only to find out that you still hadn't watched the conclusion of your favorite TV series. For the normal Topfield user, this would be an aggravating experience. But if you have the Filer TAP installed, there is no longer any need to worry. Much like a typical PC, the Filer TAP stores all deleted recordings in a virtual trash bin from which they can easily be restored if needed.

This TAP also provides some extras such as an expansion of the features in the receiver's PVR list: you can mark programs that have already been viewed, the font size can be adjusted and more sorting capabilities have been added.

Download:

http://www.elle4u.de/taps/filer

HDD Info TAP – Noise Suppression for Your Topfield Hard Drive

The hard drive is humming nicely in the background while you strain to listen to what they are saying in a quiet scene on the TV. For hard drive manufacturers, this has been a reason for some time already to incorporate some form of acoustic management although in most cases this option is usually not activated by default. In order to activate it, the hard drive would have to be removed from the receiver and installed in a PC; not exactly an easy procedure. The HDD TAP was written especially for this reason. It not only provides information on the installed receiver's hard drive, but in most cases can also let you activate many acoustic management settings directly through the receiver.

Download:

http://www.topfield-europe.com/de/09-taps/link.php?url=28

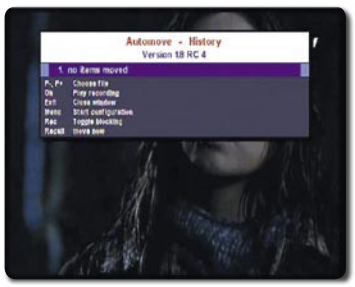
ImproBox – Many Practical Features for the Info Bar

ImproBox provides a replacement for the standard Info Box and offers a number of additional features. ImproBox provides three different backgrounds in four different colors and in addition to information on the current program also shows the user information on the next program. It is also possible to display all the upcoming programs in the Info Box, to directly display an upcoming primetime program, to look for repeats and to set your timer (extra time can be added to the beginning and end of a recording).

The live picture can be automatically reduced in size when the Info Box appears so that no portion of the picture is hidden behind the Info Box. ImproBox also provides a variety of Jump-to functions that let you, for example, quickly work your way through the recording menu or directly enter in your location in just minutes.

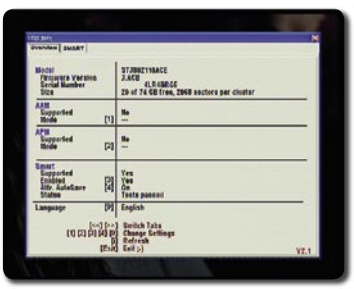
The Quick Start lets you restart the previously viewed recording with just the push of a button. Alternatively, a list displaying recently viewed recordings can be called up from which they can be played back again if desired. While a program is being recorded, ImproBox can display it in a preview window and, if desired, it can be manually stopped. This also holds true for the playback of an existing recording.

Important: ImproBox is shareware and can only be used for free for a limited time after which the user needs to obtain a license



Automove TAP

Filer TAP


HDD Info TAP

EPG from iTiNa

ImproBox with its many settings capabilities

Various screenshots of Jag's EPG

from the manufacturer!

Download:

http://www.improbox.de/index_en.html

Masterpiece Display – Gets the Most Out of the VDF Display

This little TAP expands the Topfield 5000's VDF display by providing more useful data, such as the actual time, and also changes the presentation of longer data names during playback (from this point on it would only be scrolled a single time). In our tests we were unable to get this TAP to work with Topfield's 6000 series.

Download:

http://www.topfield.cc/files/Firebird/MPDisplay.zip

Jag's EPG – A Must-Have

If you are not satisfied with Topfield's standard EPG, you could always give Jag's EPG a try. One thing is for sure: after using Jag's EPG, it is highly unlikely that you will miss Topfield's normal EPG. With Jag's EPG, you can, for example, download the EPG data for the first 100 channels automatically on a daily basis (e.g. overnight) so that you can view them anytime you want without any download delays, even if you're not on your favorite channel. In addition to the countless ways that this data can be displayed, this TAP also has a variety of search and sort functions, lets you directly enter timer settings with the ability to add extra time before and after the programs start time, etc. The entire range of features provided by this TAP fills a 38-page full-size user manual. In addition to the original TAP, other programmers have developed accessory tools such as a program to display timer settings on a PC. This TAP is freeware!

Download:

http://www.topfield-europe.com/forum/forumdisplay.php?f=58

Bookmark TAP – An Absolute Favorite

At first glance, the Bookmark TAP seems rather small and unremarkable but it provides the receiver with an extremely practical function. Every time you push the Stop button, a bookmark is placed at the exact point where the playback of a recording was stopped so that later you can pick up watching your program exactly where you left off.

Download:

http://www.mynetcologne.de/~nc-lueckth2/

Movie Progress TAP – When is This Movie Over?

This useful TAP displays the remaining time of a program in a graphic located just above the Info bar.

Download:

http://www.boeckle-net.de/topfield_taps.htm

3PG – Expanded EPG

The 3PG TAP also deserves mention although it offers functions similar to the Jag's EPG. Our suggestion: try them both out and decide for yourself which TAP you want.

Download:

http://www.topfield-europe.com/forum/forumdisplay.php?f=67

iTiNa – The Third is the Charm

Developing an EPG TAP that includes everything that thus far has been missing in other TAPs, was the idea of two Topfield enthusiasts who, through some painstaking work, have created iTiNa (intelligent Timer and Navigation). For one thing, it comes with a completely new EPG and Info bar display, and for another, it also includes a number of practical features such as audio reproduction for the blind, overlapping timers on the same tuner, automatic scanning in the EPG data along with direct timer programming, an Auto-move function, plus much more.

Download:

http://www.itina.de

AutoZapper – A TAP for TV Junkies

This TAP was developed for all those chronic channel surfers out there with sore thumbs. It will channel surf automatically with a user-settable delay between all the channels in the channel list.

Download:

http://www.boeckle-net.de/topfield_taps.htm

PIP Switch – Deluxe PIP function

The PIP Switch TAP expands the standard PIP function with a few new features. You can now view split-screen images or set up overlapping windows. The result is impressive and looks exceptionally professional.

Download:

http://www.mynetcologne.de/~nc-lueckth2/

Backup TAP – First Aid for Your Topfield

If everything should go wrong one day and your channel list, settings and timer entries should all disappear, this TAP would help as long as a backup had already been made. It would let you bring the receiver back to its original state.

Download:

http://tonyspage.abock.de/TAPS/backup_settings3.2.zip

Topfield MP3 Jukebox

Every Topfield PVR receiver has the capability to playback MP3 files but this function was not given much attention by the manufacturer. The MP3 Jukebox TAP comes into play here and provides all of the functions you'd expect to find in a decent Jukebox.

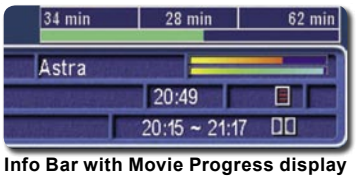
Note: At this point, this TAP only works with the Topfield 5000 series and not with the 6000 series!

Download:

http://www.netgio.com

These are only a few of the TAPS that we had room to write about and that we felt were worth mentioning. On the web sites listed below you will find many more small as well as large helpers for your Topfield receiver:

http://www.topfield.cc



Info Bar with Movie Progress display

3PG TAP's easy-to-read EPG overview

AutoZapper TAP – the next channel will appear shortly

Split-screen view thanks to the PIP Switch TAP

Backup TAP

Topfield MP3 Jukebox

First Steps in the Ka Band

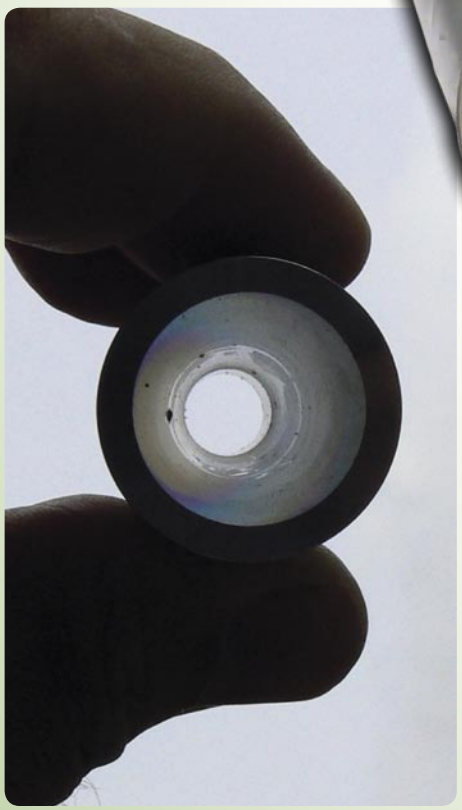
Reception Experiments In the 20 GHz Range

TELE-satellite has reported on the Ka band several times already, the latest time as recently as in issue 09/2007. The Ka band extends from 18.2 to 22.2 GHz and was split by LNB manufacturers into different segments. "A" denotes the first segment from 18.2 to 19.2 GHz, "B" stands for the second segment from 19.2 to 20.2 GHz and so on. Reducing each segment to a 1 GHz bandwidth makes sure conventional satellite receivers are capable of receiving signals that are transmitted on Ka band transponders when converted into intermediate frequencies between 0.95 and 1.95 GHz.

With these facts in mind it was about time someone tried out Ka band reception after all. Ron Eberson in Amsterdam did just that and we visited him to find out how he went about with his mission and what result he was able to achieve. This is how his story begins: "First of all I obtained a Ka band LNB directly from the manufacturer." The reason for this direct approach is that Ka band LNBs are not (yet) available from high street satellite shops. While Ka

Ron Eberson in the garden of his town house in northern Amsterdam. He shows a Ka band LNB with a purpose-built feed. Ron Eberson is an experienced antenna professional: for many years he had owned a company producing amateur radio antennas. In 2000 he sold his business and since then he has been able to invest most of his time in satellite reception.

Ron Eberson had a feed made out of an aluminium cast. "I could have done it myself with the help of a turning lathe," he says adding that "everybody can do that. You can buy a turning lathe for 300 euros these days." The feed output measures 28.8 mm and is fitted to the antenna, the feed's input fits the LNB output with 10.8 mm.



View into the feed horn: the conical shape of the feed is visible.

The feed fits perfectly into the existing reflector antenna and is inserted into the existing funnel feed.

SONICVIEW

SV-360 Premier

SV-360 Elite

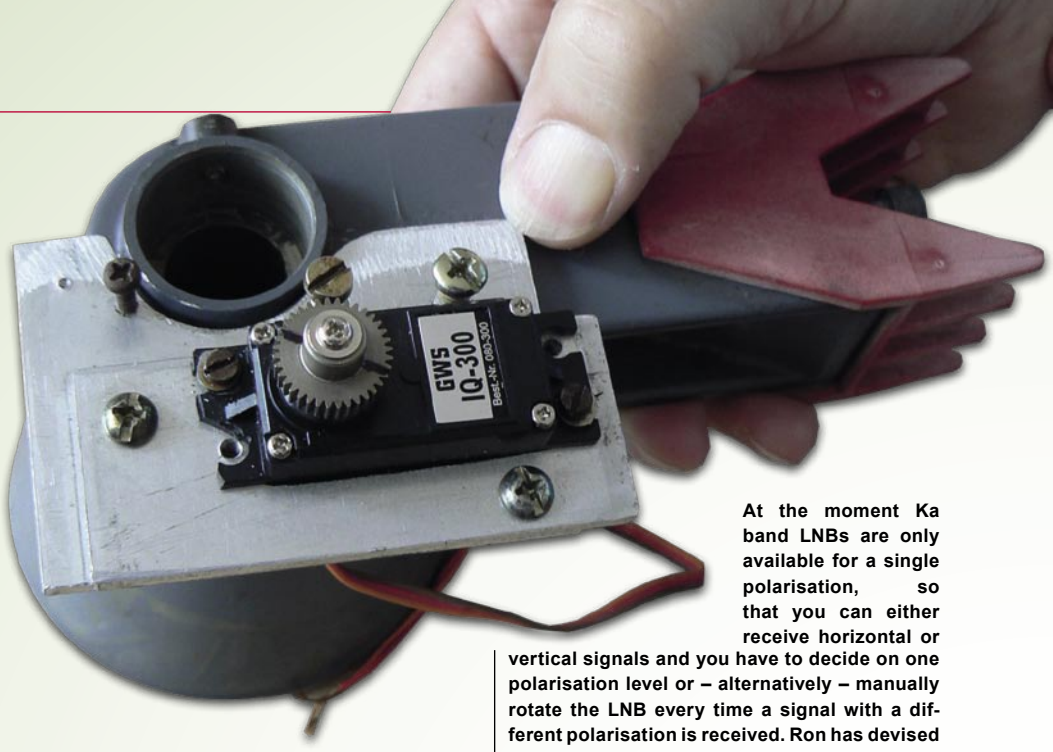
SV-HD8000

Sonicviewusa.com • 4225 Oceanside Blvd, Suite M101 • Oceanside, California 92056 • United States
(52)1-760-842-8931 • (52)1-760-842-8935 FAX • Dealer inquiries contact - sales@sonicviewusa.com

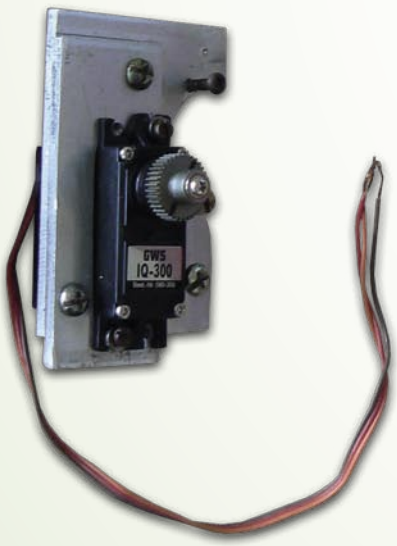
band technology is already being used in professional applications, these systems always come in complete packages so that individual components are hard to come by. In particular, providers of Internet-via-satellite frequently rely on the Ka band as it offers extremely good bandwidths and the capacities are underused at the moment. North American Internet service provider Wildblue is one of the pioneers of Ka band use. Once Ron Eberson was able to call several Ka band LNBs (one for each frequency range or segment) his own, he encountered the next obstacle. "Due to the higher frequency range the waveguide is narrower than for other bands, which means that regular Ku band feeds simply won't fit." Not a problem for Ron Eberson, as he quickly made up his mind to build his own customised feed. "Of course I had to calculate the correct measurement first," Ron explains, but this turned out to be quite straightforward thanks to a software application called PCAAD 5.0 (http://www.antennadesignassociates.com/pcaad5.htm). "All you do is enter some basic parameters and the tool takes care of all the rest."

So then the actual feed had to be built. "Actually, I could have done it myself with the help of a turning lathe," Ron continues, but as he has a friend working at a professional metal processing company he had the feed made from an aluminium cast based on the result of the software tool. The next stop was to decide which receiver could be used for Ka band reception. According to Ron "any receiver will do, even though it only makes sense to use a box which allows entering any given IF manually." That's why Ron went for a Fortecstar receiver because "this box correctly displays the reception frequency on screen."

Ever since, Ron has been spending enormous amounts of time scanning the Ka band satellites. Albeit, his moments of success are still rare. "I'm really stuck without knowing the appropriate symbol rates," Ron tells us with disillusionment. A situation like this is the greatest challenge for any genuine DXer and even Ron admits that "this is part of the fun. Where's the challenge when all you need to do is press a button?". In the meantime he set up his own Internet forum (www.gregorian-users.com and http://96592.forums.motigo.com) to get in touch with other Ka band enthusiasts. "At the moment there are three members on the forum, but I do hope this number increases so that we can exchange our thoughts and ideas regarding the Ka band," hopes Ron Eberson, a true satellite pioneer.

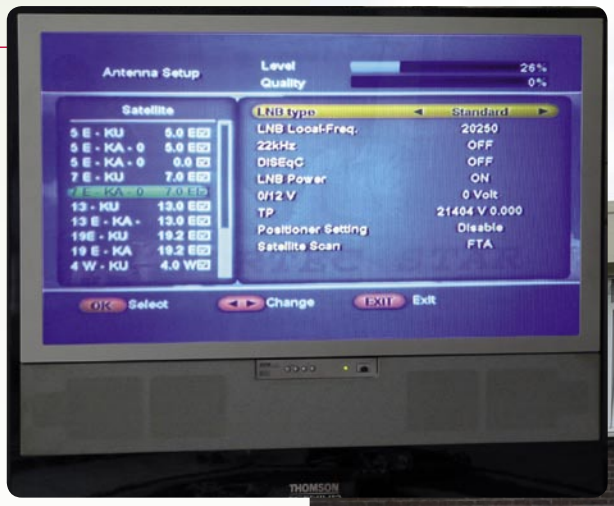


At the moment Ka band LNBs are only available for a single polarisation, so that you can either receive horizontal or vertical signals and you have to decide on one polarisation level or – alternatively – manually rotate the LNB every time a signal with a different polarisation is received. Ron has devised something different altogether. "For about 10 euros I'm building a device that rotates the LNB as needed," Ron explains. "I take a motor with a cogwheel, like the ones that are used for model building, and a so-called servo tester, which are also quite common for model building when the remote control is not in use."



The LNB rotator is still in the making, but this is how it will work in the end: the motor with the cogwheel is mounted on the feed, and the LNB is mounted in the feed with a cogwheel ring and a flange so that it can rotate. With this mechanism Ron will be able to rotate the LNB from horizontal to vertical with his remote control.

The existing funnel feed for the Ku band. The Ka band feed is put into the opening that usually takes in the Ku band LNB. The funnel feed increases reception efficiency.

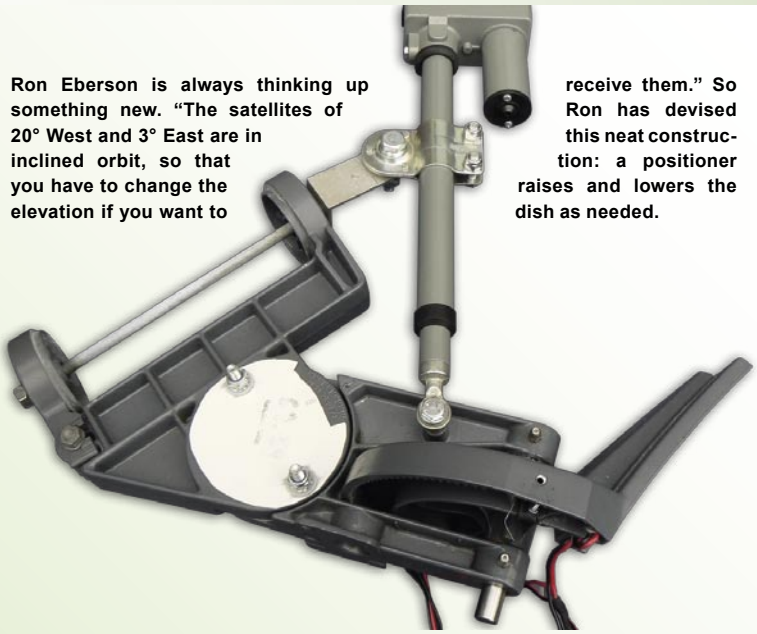


The moment of truth has arrived: Ron enters the local frequency of 20.250 GHz in his receiver and thus makes the receiver display the correct reception frequency without conversion. As the Ka band LNB is not divided into high and low bands and the polarisation cannot be changed, all these settings are turned OFF. However, due to lacking symbol rate information Ron has not been able to receive any Ka band signals yet.

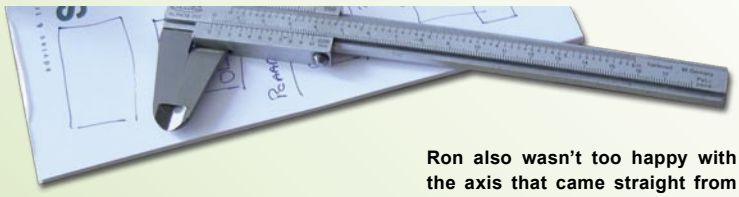
Ron has installed a 90 cm reflector antenna on the roof of his town house.

Ron Eberson's Handiwork

This is the small 55 cm reflector antenna Ron uses for his Ka band experiments. Nothing extraordinary at first sight, but if you have a closer look you'll notice that the motor is mounted at the wrong place: it does not sit below the rotating axis but above it. And come to think of it, we're not talking about a regular motor here either, but a DiSEqC motor. Ron sheds some light: "A conventional motor requires a 36 V positioner and can only move the dish 50° in each direction, which wasn't good enough for me." So Ron replaced the axis with a purpose-built axis and put a DiSEqC motor on top of it. "This has many advantages," Ron smiles, "because the dish can be turned almost 90° in each direction now, the motor axis is better protected from the elements and I can rotate the antenna using DiSEqC commands."



Ron Eberson is always thinking up something new. "The satellites of 20° West and 3° East are in inclined orbit, so that you have to change the elevation if you want to receive them." So Ron has devised this neat construction: a positioner raises and lowers the dish as needed.



Ron also wasn't too happy with the axis that came straight from the manufacturer (above): so he simply built a new one from machining steel (below) and added grooves for permanent lubrication. "Ever since, the antenna has worked flawlessly. Once a year I add some fat for lubrication and the thing runs as smoothly as on day one." In addition he added a thread in the centre. "This way I can stabilise the antenna if the motor is removed, otherwise the dish would judder like a sail in the wind."

SatcoDX India

Alexander Wiese

Recently, a new SatcoDX AutoScan station was set up in India. Now, SatcoDX stations automatically detect all satellite channels transmitted over India, using scan software that was developed in-house at SatcoDX. With the currently two stations – one of which is located in Thiruvananthapuram in southern India, the other one on New Delhi to cover the North – SatcoDX is now able to analyse almost all beams that can be received in India.

The Thiruvananthapuram AutoScan station has been operational for two years now and is managed by Satheesan, a very committed satellite DXer with many years of experience in the field of satellite reception. "I set up my first dish twelve years ago," Satheesan proudly tells us.

Since then his antenna farm

has grown steadily, a development that was helped by the fact that he has more than enough free space for this. Meanwhile he receives all satellites available at his location.

For SatcoDX he runs six PCs, each of which scans fours beams, making it a total of 24 beams which are being scanned by Satheesan 24/7. This way new channels are detected almost immediately and their parameters are entered automatically into the SatcoDX frequency charts.

For several months now the Thiruvananthapuram SatcoDX AutoScan station has been complemented by an additional station in New Delhi which is operated by computer engineer Siddharth. He reveals that "I have some ten years of experience of feed hunting and up to today I was able to receive virtually all satellites positioned in the orbit above India."

As he lives right in New Delhi, space had become a major drawback and at the moment Siddharth is in the preparation stages for relocating to a place outside New Delhi so that he can keep receiving all signals at his new location in Moradabad. There he will have more space to set up additional dishes for receiving northern signals as well.

Once the new station is up and running SatcoDX will be able to receive and analyse virtually all beams available in India and thus will offer up-to-date satellite charts free of charge to all and everyone at www.SatcoDX.com

Thiruvananthapuram SatcoDX AutoScan station (Federal State of Kerala)

Satheesan Puzhakkara

Satheesan in his shack in front of the scan PCs for the Thiruvananthapuram AutoScan station. Using a DiSEqC switch each PC scans four satellites. All results are transferred immediately to the SatcoDX server using an ADSL Internet connection, so that they become available in www.SatcoDX.com with hardly any delay.

New Delhi SatcoDX AutoScan station

Siddharth Gautam

Siddharth in his shack in front of the PC at New Delhi SatcoDX AutoScan station

This 10-foot dish is aligned towards BADR at 26° East. It was assembled on site and was designed by a local craftsman.

Assembly of a commercial 10-feet dish

Close view of the 12-feet dish: with a little bit of improvisation it is possible to receive eight beams, namely (from above): APSTAR 6 at 134E, VINASAT 1 at 132E, JCSAT 3 at 128E, ASIASAT 4 at 122E, CHINASAT 6B at 115.E (this LNB is the one that is in focus), NSS 11 at 108 in the Ku-Band, ASIASAT 3S at 105.5E und ASIASAT 2 at 100.5E

One bag of cement is mixed up on the roof...

...and the mast foundation is erected using some 200 bricks

Satheesan's antenna farm for the Thiruvananthapuram SatcoDX AutoScan station in southern India

The satellite installer mounts the LNB on the feed roddings...

... and takes care of fine-tuning once the dish is set up.

Done! The antenna is now perfectly aligned to receive EUROBIRD 2 signals at 25.5E.

TEHNIC B

B-dul 16 Decembrie Nr. 41
Timisoara, Romania
tel: 0040 356 006000
fax: 0040 356 006003
mail: tehnicb@rdstm.ro
web: www.tehnicb.ro

OFFSET SATELLIE ANTENNA, STEEL
60 / 70 / 80 / 90 cm

DIGILINE SINGLE LNB

THB-SAT TWIN LNB

WALLMOUNT SPD 21 cm

WALLMOUNT SPL 38 cm

INTELSAT-HOTBIRD
DOUBLE LNB HOLDER

DISEQC 2/1 SWITCH

TELEMANN 1600
DIGITAL SATELLITE METER

THB-SAT RG-6U COAX CABLE
ROLL 100m or 300m

F-CONNECTOR (100 Pc)

The products can be branded. In case of larger order the products will be delivered free of charge.

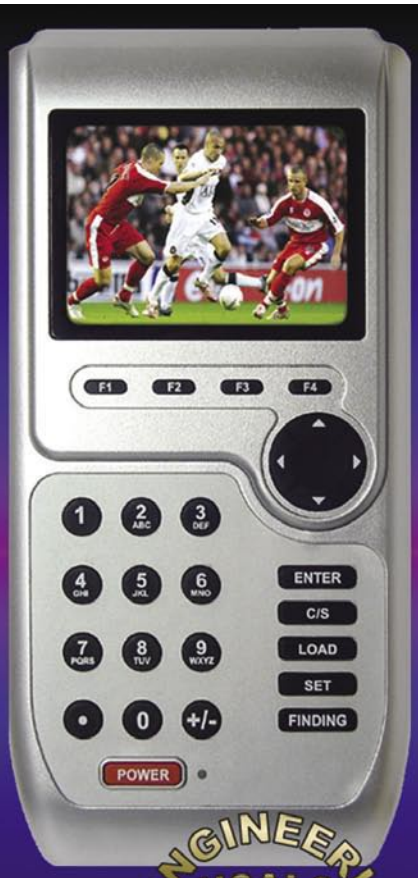
SATCATCHER

DIGITAL SATELLITE METERS

THE FUTURE.... TODAY!

UNIQUE SATELLITE LISTING.
VERY HIGH BUILD QUALITY.
HIGH POWER BATTERY.
VERY LIGHT AND PORTABLE.
LCD TV FUNCTION.
WATCH THE CHANNELS.
SPECTRUM ANALYZER.
FULL KIT INCLUDED.
SATELLITE MOTOR CONTROL.
DISEQC SWITCHING.
EASY TO EDIT BY HAND.
2 YEAR WARRANTEE.(1 yr Battery)
VERY EASY TO USE.

DIGIPRO II
DIGIPRO III
DIGIPRO IIIs
DIGIPRO EXCEL-TV
DIGIPRO T MAX
DIGIPRO Q MAX
DIGIPRO ST COMBO



HIGH QUALITY ENGINEERING
USALS
HQ

SatCatcher Ltd. Unit 7 Salvesen Way
Freightliner Road , Hull , East Yorkshire
United Kingdom. HU3 4UQ
0044(0)1482 221577

WWW.SATCATCHER.COM

Edited by
Branislav Pekic

EUROPE

EUROPE

CHE INSTALLS IDIRECT HUB, LAUNCHES DVB-S2

Cobbett-Hill Earth Station (CHE) has installed an iDirect Series 15000 Universal Satellite Hub and acquired multiple iNFINITI 5000 Series Satellite Routers to launch a hosting service for VNOs. With the debut of its new offering, CHE has signed its first VNO customer, AGC Marine Telecom, which will provide its mega yacht and cruise line customers with high-speed broadband connectivity. In addition to its VNO operations, CHE will be launching an IP broadband service using iDirect's next-generation Evolution DVB-S2 system with Adaptive Coding and Modulation (ACM). The investment enables CHE to develop a multiple- satellite DVB-S2 network for operators with markets in Africa and the Middle East, where space segment remains highly limited.

OMNIGLOBE BECOMES RESELLER OF INET VU MOBILE ANTENNA

Communications equipment supplier OmniGlobe Networks EMEA has signed a long-term reseller agreement with C-COM Satellite Systems, to become an authorised reseller of its iNetVu mobile satellite antennas. OmniGlobe Networks will be promoting and selling antenna communication systems to its well established customer base, spanning more than 70 countries. OmniGlobe Networks will offer the iNetvu antenna systems which are fully compatible with the world's leading satellite-based IP technologies and automatically connects to the internet at broadband speeds. The agreement with C-COM Satellite System also enables the company to enter the growing mobile VSAT and DSNG) markets.

BULGARIA

TRANSAT TO PROVIDE VSAT CONNECTIVITY

Satellite communications company Transat has signed a co-operation agreement with Microsoft Bulgaria to provide software service (SaaS) applications from the last quarter of 2008. The VSAT connectivity offered by Transat will enable satellite access to SaaS applications for customers in remote areas. The idea is to market a package of broadband Internet and software solutions.

THE NETHERLANDS

THRANE & THRANE INTRODUCE VSAT SOLUTION AND NETWORK

Satellite equipment manufacturer Thrane & Thrane will introduce a maritime VSAT solution and network in September 2008. Thrane & Thrane will offer the new SAILOR 900 VSAT and various fixed broadband data packages at attractive flat rates plus additional voice channels, addressing the professional maritime market. With fixed standard data and voice packages of up to 1024/256 kbps and additional voice channels, the SAILOR 900 VSAT solution allows ship operators to be online at all times with the benefit of cutting communication costs while sailing inside the SAILOR 900 VSAT coverage area.

TURKEY

VIASAT COMPLETES INSTANBUL VSAT NETWORK

ViaSat has completed the rollout of its LinkStarS2 satellite networking system to ELIOP S.A. (Spain) for data collection, monitoring, and control of drinking and waste water operations for the Istanbul Water and Sewerage Administration General Directorate (ISKI). ELIOP has integrated its own "SHERPA" supervisory control and data acquisition (SCADA) technology with LinkStar terminals to gather information on water reservoir levels, pipeline integrity, water quality, and drinking and waste water distribution management for a community of 15 million customers. ViaSat supplied the complete satellite communication network including the antennas, satellite transmission electronics, LinkStar hub, and 300 network terminals.

NORTH AMERICA

GLENTEL TO PRESENT NEW VSAT TECHNOLOGY

Wireless communications solutions provider Glentel Inc has showcased a new generation of VSAT-based satellite services. The new VSAT system was developed to meet the needs of supervisory control and data acquisition (SCADA) users who require more robust and reliable remote infrastructure. Glentel's new system offers virtually guaranteed data transfer at a cost comparable to traditional radio links. From its state-of-the-art hub, located in Edmonton, Glentel's VSAT services can configure, monitor and control thousands of remote sites across North America. Each compact terminal including a satellite modem, IP router, TCP optimization over satellite, 3DES/AES encryption and QoS/prioritization.

UNITED STATES

BROADPOINT AWARDED SEACOR MARINE CONTRACT

Telecommunications and network solutions company Broadpoint has been awarded an additional contract from SEACOR Marine, a leading provider of support services to oil and gas operators. The contract covers connectivity services for five new vessels. SEACOR will be able to provide its crews and passengers with more reliable and convenient voice and data services, including wireless Internet. In addition, on the SEACOR Cheetah, the ability to transmit video over satellite will act as a safety measure, enabling experts on shore to view vessel conditions in real-time.

US MONOLITHICS LAUNCHES NEW SATELLITE PRODUCTS

US Monolithics has launched a line of commercial C-and Ku-band satellite transmit and receive products. New products include C- and Ku-Band low-noise block down converters (LNBs) and block up converters (BUCs) specifically designed for (VSAT) satellite communication terminals. The product line includes a series of high-stability free running DRO and PLL LNBs, Ku-band BUCs from 1W to 150W, and C-band BUCs from 1 to 300W.

SATELLITE INDUSTRY OPPOSES KU-BAND TERRESTRIAL SERVICE

The global satellite communications sector has asked the U.S. Federal Communications Commission (FCC) not to allow terrestrial fixed services to operate in the 14.0-14.5 GHz band due to potential interference to fixed and mobile satellite-based services provided using the band. The Global VSAT Forum (GVF) and European Satellite Operators Association (ESOA) called upon the FCC to dismiss a Petition for Rulemaking submitted by the Utilities Telecom Council and Winchester Cator to share Ku-band spectrum. The GVF and ESOA claim that the proposals by the Telecom Council and Winchester would not protect present and future fixed satellite service operations from harmful interference and likely would result in harmful interference even at modest deployment levels.

ACCELENET TO IMPROVE MILITARY OPERATIONS IN IRAQ

IAP Worldwide Services has selected Intelligent Compression Technologies' AcceleNet WAN optimization and application acceleration client software to speed the application experience of its staff in Iraq. The purchase represents the first implementation of several projects using limited bandwidth networks and long-range satellite links by IAP, a provider of support services to the U.S. Department of Defense and other federal, state, and foreign governments. The AcceleNet client is designed specifically to improve performance of public and secure web applications, file shares, and email over networks with limited bandwidth, latency and high packet loss, including 3G wireless, DSL, and satellite.

NORSAT LAUNCHES 12 NEW LANGUAGE VERSIONS

Satellite solutions provider Norsat International has released its advanced satellite acquisition and terminal control software, LinkControl, in 12 new languages. Norsat LinkControl is now available in a total of 15 different languages: Arabic, Bahasa, Chinese (Simplified and Traditional), Dutch, English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish and Turkish. Norsat LinkControl software allows users to operate all aspects of a portable VSAT terminal from a single console. LinkControl is also compatible with modems from Radyne, iDirect and Paradise and transmitters from Xicom.

VSAT RECEIVES USD 52 MILLION ORDER

ViaSat has won a delivery order valued at approximately USD 52 million for Multifunctional Information Distribution System terminals from The Space and Naval Warfare Systems Command (SPAWAR), San Diego. By gathering information into a digital view of the battlefield, MIDS provides greater situational awareness in combat for the U.S. Navy, Air Force, Army, Marine Corps, and for U.S. defense partners. The secure, high capacity, jam resistant wireless (non-satellite) system connects users with both digital data and voice communications. Delivery of Lot 9 units is expected to begin in May of next year and continue through the first quarter of ViaSat's fiscal year 2011.

SEAMOBILE WINTS GSA CONTRACT

SeaMobile Enterprises' MTN Satellite Services division has won a contract from the General Services Administration (GAS) to provide its full suite of satellite communication services to government agencies, including the U.S. military, via its GSA schedule. GSA is an independent agency of the United States government dedicated to help manage and support the basic functions of federal agencies. MTN Satellite Services offers "Always On - Always Available" worldwide connectivity through its integrated

global C-Band and multi-regional Ku-Band VSAT networks. Its advanced IP overMPLS backbone is approved for use with U.S. government encryption technologies, and provides a secure and robust integrated global network.

TCS AWARDED USD 246 MILLION U.S. ARMY CONTRACT

Wireless communications provider TeleCommunication Systems (TCS) has been awarded an indefinite delivery/indefinite quantity delivery order with a potential value of USD 246 million over the next 39 months. The delivery order is with the U.S. Army Communications-Electronics Life Cycle Management Command (CECOM LCMC) to support its need for rapidly deployable and highly secure satellite communication access to broadband satellite services.

SEAMOBILE TO PROVIDE IPTV PLATFORM FOR CRUISE SHIPS

Wave Entertainment Network, a division of SeaMobile Enterprises, has presented its IPTV television platform available to the cruise line industry worldwide. The continually expanding line-up includes linear and on-demand programming services from major media companies such as A&E Networks, CBS, Comcast, Cox Communications, Discovery Networks, Fox Cable, Fox News, NBC Universal, Twentieth Century Fox Studios and Viacom. In addition, cruise line guests who are sailing in the Mediterranean are able to view television programs in a variety of different languages from the top European providers, including Euronews, BBC News, BBC Prime, France 24, TV5 Monde, RAI International, RAI News 24, DW TV, ARD, and TVE International.

LATIN AMERICA

BRAZIL

SHIRON SATELLITE WINS VSAT CONTRACT

Shiron Satellite Communication's Brazil office has closed a commercial agreement with Sanmina-SCI to produce state-of-the-art, broadband satellite communication VSATs locally in Hortolândia (SP), district of Campinas. Shiron will be the first and only company to have local production of VSATs in Brazil. Currently, more than 20,000 VSATS are imported every year into Brazil, and the country's installed base exceeds 100,000 VSATs. With Coldecon and Anditel/IPC in Colombia, Shiron has deployed over 7,000 VSAT terminals in 2007, and is deploying, for the first time in Latin America, 3,000 iRG-S2/ACM VSATs with 16APSK ACM (Adaptive Code Modulation) outbound and an 8PSK with FEC 8/9, the most efficient VSAT system deployed.

ASIA & PACIFIC

BANGLADESH

FIRST PRIVATE INTERNET GATEWAY OPERATIONAL

The first private International Internet Gateway (IIG) started operating in Bangladesh in June. Two POPs have been installed in Dhaka and Chittagong in the first phase of operations, to be expanded later. Mango Teleservices, a unit of Dhaka-based Communication Solution Limited, set up the IIG in partnership with multinational corporation Cisco Systems, Inc. The IIG operator will give internet service providers and businesses high speed, high bandwidth international connections through its network. Mango's IIG will be connected with the existing submarine cable as its main link and with the Satellite Earth Station/VSAT as its back up until another submarine cable is available.

FIJI

TFL PROVIDES VSAT HUB FOR VANUATU COMPANY

Vanuatu's telecom company has been assisted by the Telecom Fiji Limited (TFL) in providing telecommunication services to its remote customers through its VSAT hub based in Yaqara. Like Fiji, Vanuatu has customers in remote lying areas whose only means of access to telecommunication services is via satellite. Two years ago TFL made a substantial investment in its upgrading of the VTSAT service through its partnership with Gilat using their Sky Edge technology.

INDIA

RAILWAYS TO GET VSAT COMMUNICATION HUB

Indian Railways will soon have its own state-of-the-art communication network as it has signed a contract with Hughes to set up its first dedicated VSAT communication hub. The VSAT hub would allow the Indian Railways to not only offer a host of mission critical applications but also provide Internet access on running trains. The commissioning of the dedicated VSAT hub will allow Indian Railways to connect 1,000 locations across 19 States and give voice and data connectivity for their services at remotely

located stations where fixed and mobile network of telecom operators have not reached so far.

TATANET PARTNERS WITH VT IDIRECT AND STELECTRONICS

Satellite-based IP communications technology supplier VT iDirect together with its sister company, ST Electronics (Satcom & Sensor Systems) has announced a strategic partnership with Tatanet Services, an Indian VSAT service provider. Tatanet has implemented an iDirect Series 15000 Universal Hub in Mumbai, which will enable it to expand its business across multiple developing markets that require specialized service capabilities. Through iDirect's Intelligent Platform, Tatanet can provide satellite VPN, VoIP and Internet broadband services to major enterprises and organizations, supporting remote communications, business continuity networks and a wide array of critical IP applications.

ISRAEL

GILAT SHAREHOLDERS APPROVE MERGER WITH GALACTIC

The shareholders of Gilat Satellite Networks approved the Agreement and Plan Merger, dating back to March 31, among Gilat, Galactic Holdings and Galactic Acquisition Company, pursuant to which Galactic Acquisition Company will be merged into Gilat. Gilat will continue as the surviving entity and will become a wholly-owned subsidiary of Galactic Holdings. Gilat Satellite Networks is a provider of IP based digital satellite communication and networking products and services. The Company designs, produces and markets VSATs and related VSAT network equipment.

JAPAN

BB SAT TO PROVIDE SATELLITE BROADBAND SERVICE

Beginning October 1, BB SAT will demonstrate two-way consumer satellite broadband service in Japan. The demonstration service is aimed at showing how broadband satellite service can solve Japan's "digital divide" problem of several million households, and how this service can be a significant part of the government's strategy to provide broadband service to all citizens. Two towns in the Japanese "digital divide", Shobara in Hiroshima prefecture and Tsuru in Yamanashi prefecture, have been selected as sites for this initial demonstration service. The demonstration service will use the ViaSat SurfBeam system already in widespread use in the U.S. and elsewhere. Satellite capacity is being provided by Space Communications Corporation using their Superbird B2 spacecraft.

MALAYSIA

TELEKOM MALAYSIA AND NUMIX TO LAUNCH BROADBAND SERVICE

The partnership venture of Telekom Malaysia Berhad (TM) and Numix Engineering has contracted 5 MHz of transmission capacity on the NSS-6 satellite at 95 degrees East to launch two-way Ku-band broadband services targeting Malaysia and other countries in South East Asia. TM is Malaysia's leading next generation communications and broadband provider. Numix Engineering provides local expertise involved in the supply and system integration of high technology products.

SINGAPORE

SINGTEL EXTENDS MARITIME SOLUTIONS VIA SES NEW SKIES

Singapore Telecommunications is extending its suite of maritime satellite solutions globally by contracting capacity on SES New Skies' NSS-7, NSS-703 and NSS-5 satellites. Terms of the three-year deal for up to 5MHz of capacity over the three satellites remain confidential. The SES New Skies satellites will also support demand for Singapore Telecommunications's (SingTel) OfficeAtSea@SingTel suite of Maritime VSAT solutions, which enable vessels to communicate seamlessly and cost-effectively with their headquarters on land. Solutions include 'always-on' unlimited broadband internet access, email, low-cost VoIP calls, GSM onboard and ship surveillance.

AFRICA

KENYA

KENYA TO GET NEW VSAT NETWORK

Kenyan businesses are to get a new VSAT network to deliver high quality voice, broadband data and video services. The new network is expected to be used primarily by banks and financial services companies to provide private networking services, including interactive data, broadband Internet access, VoIP and client-server banking applications to their customers throughout Kenya. The network, comprising SkyEdge II IP VSATs and a SkyEdge II hub which supports multiple satellites, will cover sites in various parts of Kenya. The Kenyan network

will be commissioned and operated by Alldean Satellite Networks, a Kenyan satellite service provider offering both domestic and cross-border connectivity to virtually anywhere in Africa.

NIGERIA

EMPERION WEST AFRICA INTRODUCES VIDEO CONFERENCING

In its effort to help corporate institutions, multinationals and small enterprises as well as individuals reduce the rate of travelling, thereby saving cost and time, Emperion West Africa, one of Nigeria VSAT providers has pioneered the introduction of Videoconferencing on demand. Managing director, Sandeep Jayaswal, said that kiosks would be erected throughout the country where anyone could walk in at a pre-planned period and put through a videoconference call. Emperion designs, deploys, operates and maintains broadband IP communication solutions and services based on digital satellite (VSAT) and fixed wireless access (FWA) networks.

GALAXY BACKBONE PROMISES LOWER INTERNET COSTS

Telecommunication service provider Galaxy Backbone has vowed to reduce internet costs by deploying latest technology in the country and deploy ICT infrastructure in all 774 local government areas. According to director general, Gerald Ilukwe, the main goal of Galaxy Backbone was to build and operate a single nationwide IT infrastructure platform, to provide network services to all Federal Government ministries, departments and agencies (MDAs), and equally provide connectivity and digital access that would enable relevant solutions for governance, education to rural areas and other underserved communities in Nigeria. He added that the network operation centre located at Ahmadu Bello way in Abuja, is “largest and most sophisticated VSAT network in West Africa, if not in Africa”.

NIGERIAN BANK ACQUIRES PRIVATE TELECOM OPERATOR

According to the “Business Day” newspaper, an unnamed bank is believed to have acquired private operator Prest Cable and Satellite TV Systems (Prestel). Prestel currently operates a CDMA2000 1x network covering eleven of the country’s 36 states of the federation. It also has a licence for commercial VSAT installation to provide broadband services and data communication for government sectors, private organisations, banking and financial institutions. Business Day states that Prestel strengthened its position in the Nigerian telecommunications market when it obtained a unified access service (UAS) licence for NGN260 million in July 2006.

NIGERIA TO DEPLOY 1.500 VSAT TERMINALS

Within a three-year period, Nigeria has received the sum $1.2 million (about N150 million) from the Universal Postal Union as grant to improve postal services in the country. The Nigeria Postal Service (NIPOST) is set to deploy 1,500 very small aperture terminals, VSAT in the post offices across the 36 states of the federation. Nigeria is collaborating with France to finance building and deployment of VSAT across the 36 states of the federation and this should be completed in 15 months. This will make possible the introduction of many services, including cyber cafe services in rural areas.

SOUTH AFRICA

INTERNET SOLUTIONS SELECTS ND SATCOM SKYWAN

ND SatCom’s technology platform SkyWAN has been selected by Internet Solutions (IS), a leading South-African converged communications service provider, to set up a VSAT network for the Pan-African trade association COMESA. COMESA will connect its offices throughout the continent to its headquarters in Lusaka, Zambia, for office applications such as internet access, file transfer, phone, fax and email.

WORLD

SPACENET INTRODUCES INSTANT VSAT SOLUTION

Spacenet has introduced a new ION instant VSAT communications solution that enables rapid deployment of complete converged communications through satellite for emergency response teams and remote industrial operations such as oil rigs, mines and construction sites. Available immediately with Spacenet’s commercial grade Connexstar service, the new self-contained and field kit offers a turn-key voice, video and broadband data solution, according to the company. The company said that ION can also be deployed as part of a custom developed satellite network. Spacenet’s ION is designed with emergency response personnel in mind, and can be easily carried and deployed by one or two people, can be checked as luggage aboard commercial airlines, or integrated into a mobile command vehicle.

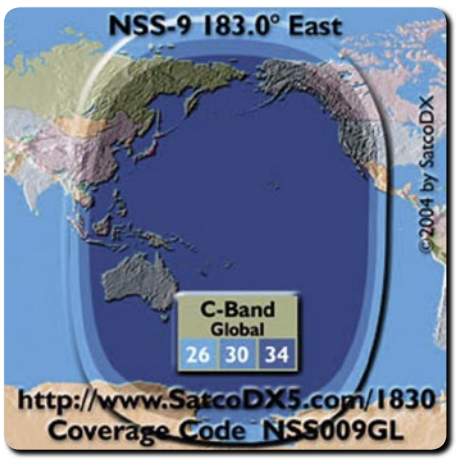
KVH AND VIASAT ROLL-OUT MINI VSAT NETWORK

In-motion satellite TV and communications provider KVH Industries has announced a new agreement with ViaSat, to begin the global rollout of mini-VSAT broadband satellite communications service. Under the terms of the deal, KVH and ViaSat will roll out an exclusive global network offering access to KVH’s mini-VSAT broadband service for maritime use with airtime revenue to be shared between the two companies. KVH has agreed to acquire satellite capacity from Ku-band satellite operators as well as purchase three new regional satellite hubs from ViaSat. These hubs will use ViaSat’s ArcLight spread spectrum mobile broadband technology and be operated by ViaSat.

New Satellites

The Ariane 5 ES-ATV launcher, on its mobile launch table, shortly after its transfer from the Final Assembly Building (BAF) at the Launch Zone (ZL-3) of Ariane Launch Complex no.3 (ELA-3) at the Guiana Space Centre, Europe's Spaceport, on 7 March 2008, for fuelling and final launch preparation. Also visible are two of the four 100-m-tall lightning towers surrounding the launch pad." (Photo: ESA - S. Corvaja 2008; http://www.esa.int/images/_SCO1025_L.jpg)

Edited by
Sylvain Oscul



NSS 9

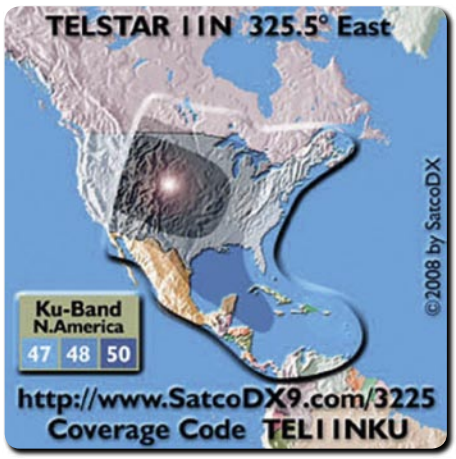
This satellite will be launched from French Guiana by Ariane 5. NSS-9 will be positioned at 183° E (177°W) and will replace NSS-5 with three C-band beams. The satellite will carry 44 active C-band transponders with a global beam providing coverage of the entire earth. NSS 9 is intended to free up NSS 5 which in turn will then be free to relocate to 57 degrees to replace NSS 703.

HOTBIRD 9

With a Ariane 5 launcher, this new HOTBIRD will be co-located at 13°EAST, designed to cover all 102 Ku-band transponders at the HOTBIRD position, it will be able to substitute any transponder on any other HOTBIRD satellites. Manufactured by Astrium with a Eurostar 3000 spacecraft type, the satellite has a minimum of service life of 15 years.

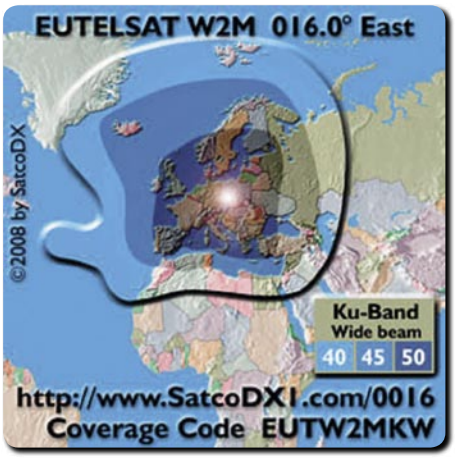
TELSTAR 11N

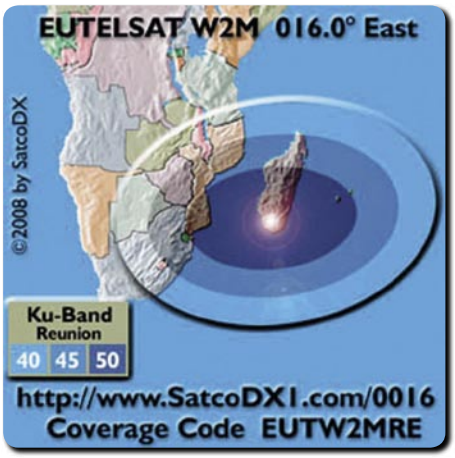
The new Loral Skynet satellite called TELSTAR 11N will provide service from 39 high-power Ku-band transponders beams. The satellite will be positioned at 322.5°E (37.5°W). TELSTAR 11N is dedicated to complement the coverage of TELSTAR 12 satellite at 345°E (15°W), which provides Ku-band trans-Atlantic coverage.



EUTELSAT W2M

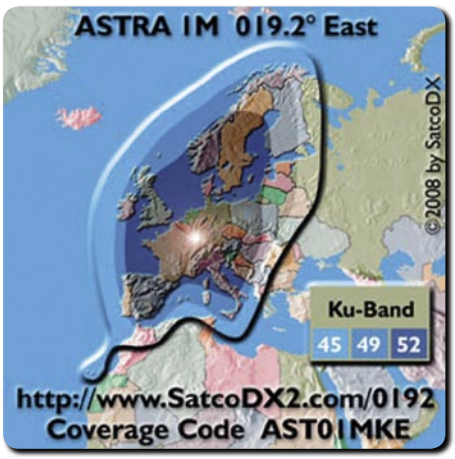
EUTELSAT W2M will operate 26 transponders in Ku-band and up to 32 depending on operational modes, at EUTELSAT's 16° E position. The satellite is planned to be launched with TELSTAR11N in October 2008 from Kourou with Ariane 5 launcher. The fixed beam will cover Europe, North Africa and the Middle East, while a steerable beam can be re-oriented in-orbit according to market requirements.





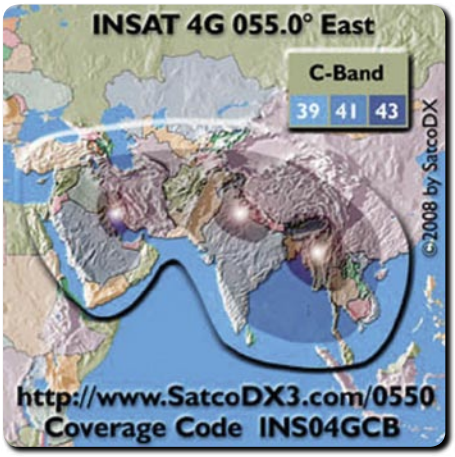
ASTRA 1M

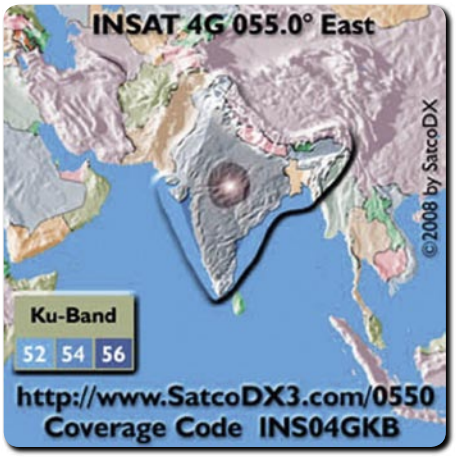
The satellite will be launched from the Cosmodrome in Kazakhstan by a Proton M launcher. EADS Astrium has manufactured this last ASTRA satellite called 1M spacecraft based on its Eurostar E3000 platform, the latest version of the Eurostar series, which became first part of the SES fleet with the ASTRA 2B spacecraft launched in September 2000. ASTRA 1M embeds 36 transponders for the first five years. The satellite is specified for a minimum service life of 15 years.

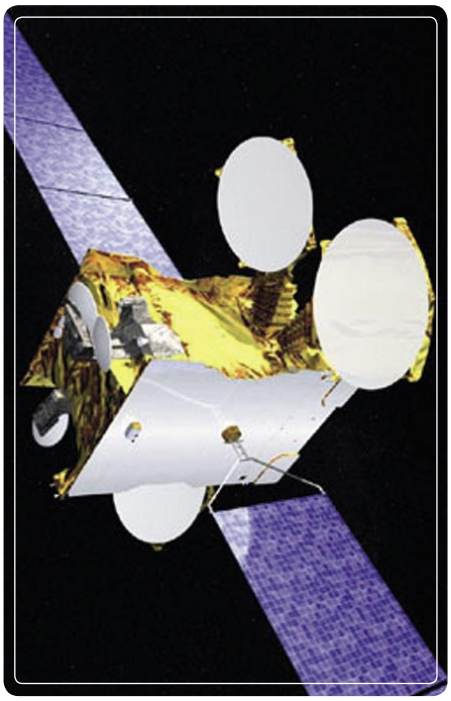


INSAT 4G

INSAT4G is proposed as a Ku-band satellite carrying 18 transponders similar to INSAT4A. It will also carry 2 BSS transponders and a GAGAN (GPS Aided Geo Augmented Navigation). The satellite will be launched by an Ariance vehicle from Kourou.







PSA-5

PORTABLE SPECTRUM ANALYZER

950-2150 MHz Range
High resolution spectrum
High dynamic range
DVB-S measurement
High level accuracy
Small and light weight
Easy to use

SG Lab Ltd.
Tel.: 00359 2 9784226, Sofia, Bulgaria
e-mail: info@sg-lab.com

www.sg-lab.com

DishPointer.com

See where to point your dish, before you climb on the roof!

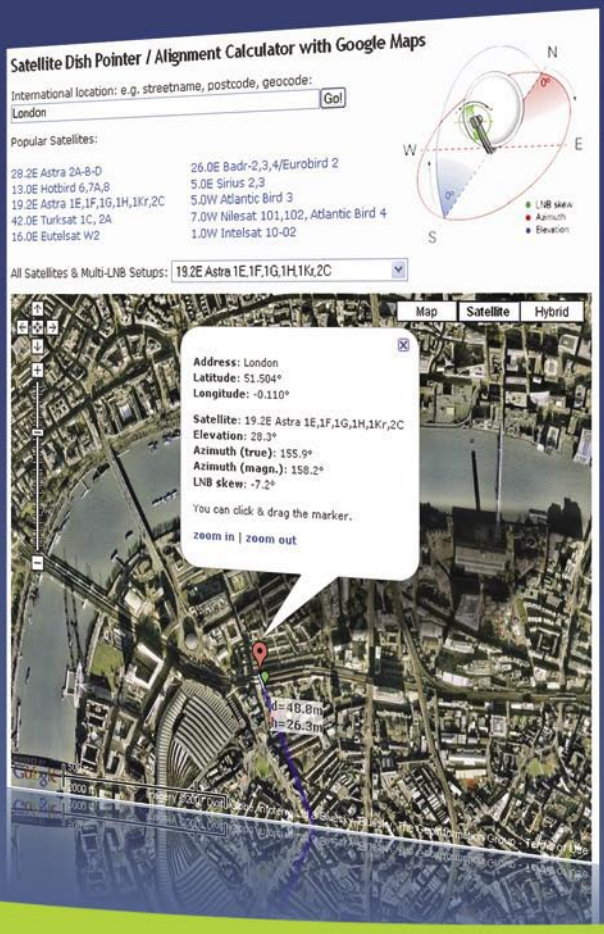
DishPointer, the state-of-the-art dish alignment and satellite information tool, is now available for commercial companies as a customised solution, programmed to fit individual needs.

FREE Widget

Add DishPointer Lite to your site - it's free!

TV stations & program providers
Online shops & distributors
Satellite operators
Receiver manufacturers
Professional installers
and many more...

Give your clients and customers easy access to satellite information, hassle-free and straight to the point. For more information, visit www.dishpointer.com.



References

CANAL DIGITAAL SATELLIET
TV VLAANDEREN DIGITAAL
INNOVATION SATELLITE AWARD
MAXDIGITAL
The World's Largest Satellite Magazine TELE SATELLITE & BROADBAND

Powered By SatcoDX.com

www.dishpointer.com
info@dishpointer.com

Feedhunter Rini

What you see in your local evening news broadcast has to first find its way from the event location to the TV station's studio. This path typically involves the use of a satellite to get it from one point to another. This type of transmission is referred to as a feed and there are those that have made finding these satellite feeds their hobby. One of those happens to be Rini de Weijze who calls himself Feedhunter Rini, a name he uses to a number of different Internet satellite forums. How do you end up being a feedhunter? We asked Feedhunter Rini that very same question.

Feedhunter Rini has lived in his present home in northern Holland for 33 years. He was a bank manager but is now retired and can therefore spend more time playing with his hobby.

We wanted to know how it all started. Rini was kind enough to explain: "When I was 16, I stumbled onto Radio Moscow while listening to the airwaves and was completely surprised to discover that the transmission was in Dutch." This was the start of his interest in listening to the radio that culminated in the reception of shortwave ship transmissions in SSB.

But he became infected with the satellite virus when he one day spotted a satellite dish. Without any hesitation, he asked the owner of that dish what he was receiving with it.

"It was a 90cm antenna that is still hanging in the same spot today. Back then, the owner, Klaas van der Lingen patiently revealed to me everything he was able to receive with his Echostar receiver", explained Rini of that day.

Not too long after that, an 80cm dish from Triax with positioner was hanging on his own exterior house wall.

"My most interesting experience was the pirate transmissions from the Amateur TV club PI6ALK", remembers Rini, "they simply switched the uplink from the Amateur TV satellite OSCAR over to EUTELSAT 16E and started transmitting." Naturally, the Dutch authorities quickly put an end to that, but for Rini it was quite an experience to see how easy these transmissions could find their way onto a satellite.

In 2004 he upgraded to a 90cm antenna and in 2005 he installed a 90x99cm Fibo antenna with sub-reflector that he still uses today.

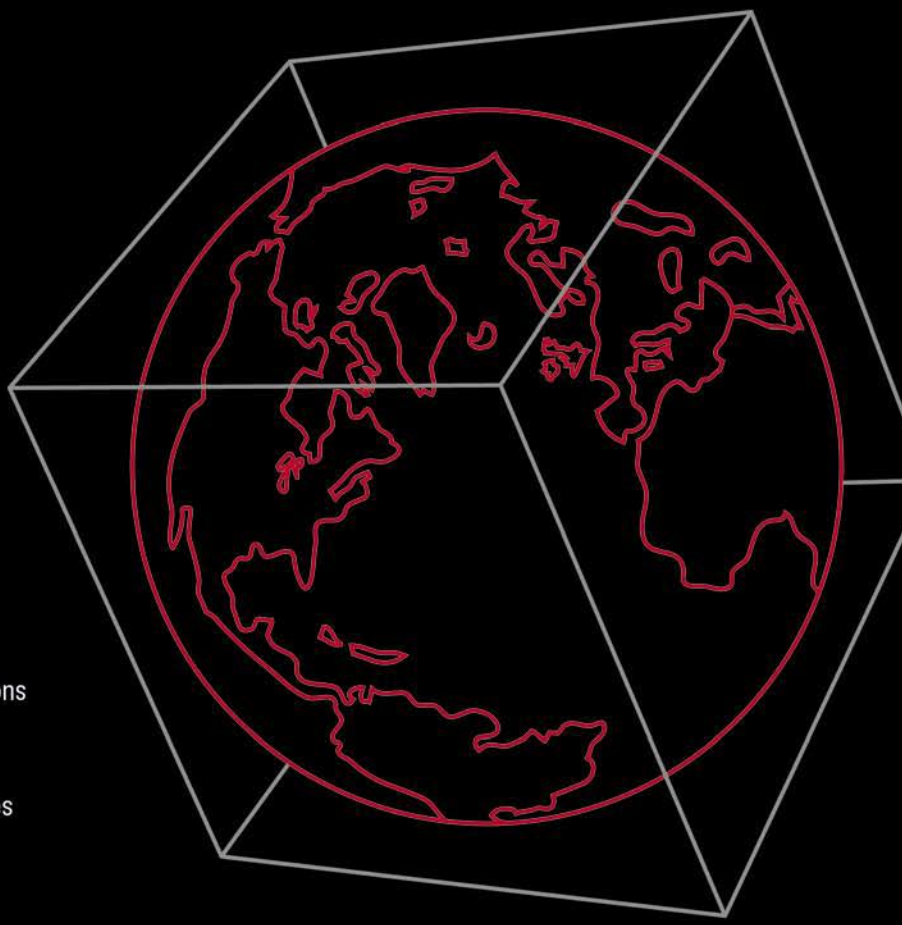
He dreams of having a real DX station on an open piece of land on which, together with his friend Ron Eberson, he can erect large dishes. "We can even get a hold of a used 2.4-meter antenna but it's not so easy to find the space for it." We wish him luck in his search!

Feedhunter Rini on the first floor of his home right next to his 90x99cm dish with sub-reflector he uses for his satellite reception. He can receive satellites from 54° east to 45° west.

Conference 11 - 15 September
Exhibition 12 - 16 September
RAI Amsterdam

IBC2008

the world of
content
creation
management
delivery



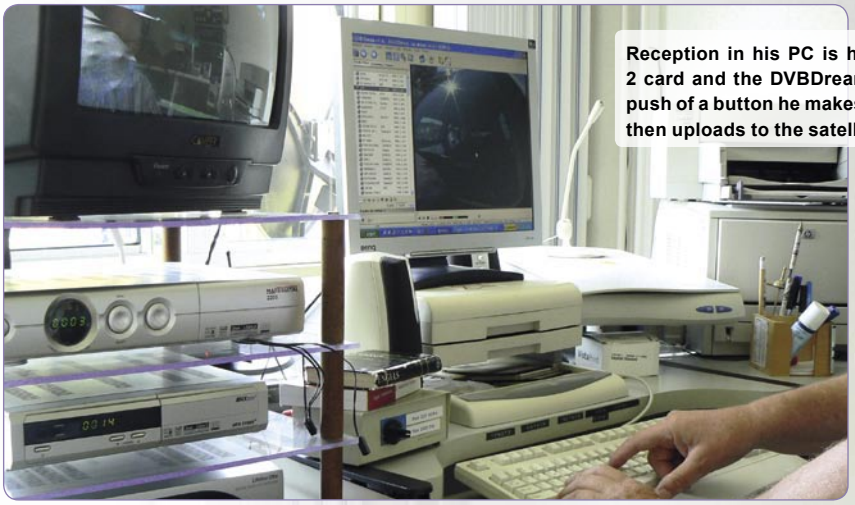
- 46,000+ visitors
- 130 countries
- 1,300+ exhibiting companies
- Business critical content
- Leading edge conference sessions
- Experiential Big Screen demonstrations
- Vendor seminar briefings
- Digital media business model updates
- 40+ years of thought leadership

With an additional 3,000m² gross packed with product/service suppliers and added value features, IBC2008 will be the biggest to date!

Keep up-to-date with the exhibitor list, conference programme and all of the new and exciting features at :

www.ibc.org

IBC Fifth Floor International Press Centre 76 Shoe Lane London EC4A 3JB UK
Tel: +44 (0) 20 7832 4100 Fax: +44 (0) 20 7832 4130 Email: show@ibc.org

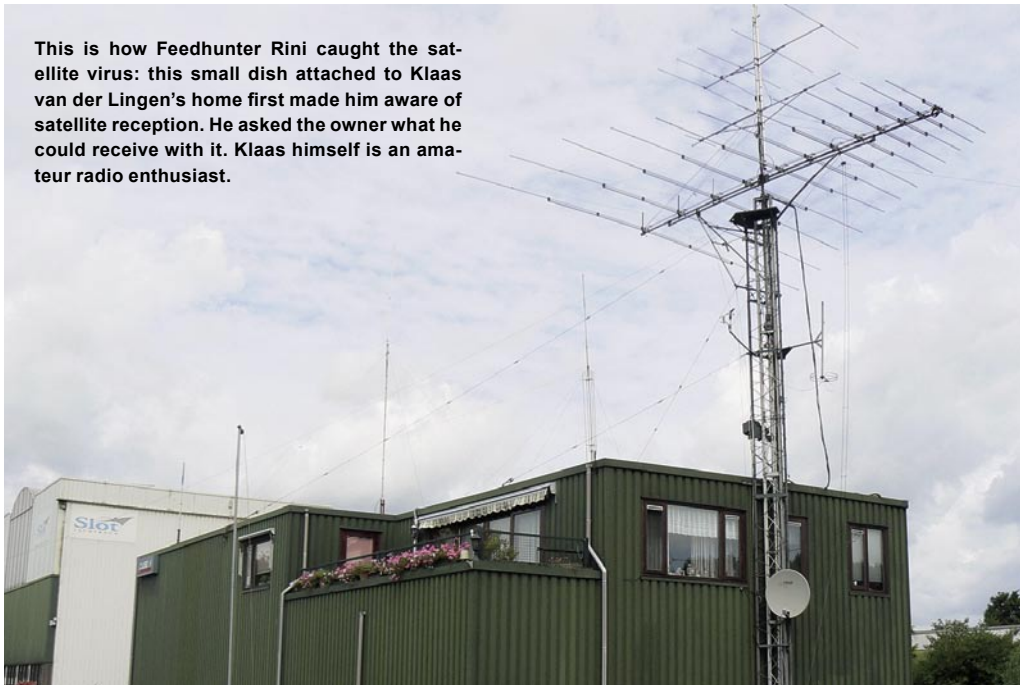


Reception in his PC is handled by a SkyStar 2 card and the DVBDream software. With the push of a button he makes screenshots that he then uploads to the satellite forums.

Feedhunter Rini at work feedhunting: with his Quad LNB he connects to three receivers and a satellite card in his PC. He uses a FortecStar box with Aston positioner and DiSEqC converter to move his antenna, as well as a Max Plus and a Max Digital receiver.
His TV monitor is set to A/V mode for his Max Digital receiver and he uses two UHF channels to receive the signals from the FortecStar or Max Plus boxes. With a homemade video switch he can send the video signal from his two Max receivers to the video card in his PC to get screenshots of different programs he can't receive with the built-in card.

SATELLITE	FROM	TILL	POLARIZATION	NUMBER OF FEEDS	FROM	TILL	POLARIZATION	NUMBER OF FEEDS	FROM	TILL	POLARIZATION	NUMBER OF FEEDS
2 East ASTRA 1C	11200	12750	H+V	<+>7								
3 East TELECOM 2C	12500	12750	V	<+>7								
4 East EUROBIRD 4	10950	11400	H	<+>7	12500	12570	H+V	<+> 7				
5 East SIRIUS	12140	12750	H+V	<+> 7								
7 East EUTELSAT W3	10960	11200	H+V	<+> 7	11370	11420	H+V	<+> 7	12510	12560	H+V	< 7
9 East EUROBIRD 9	No Info											
10 East EUTELSAT W1	10950	11200	H+V	<+> 7	12520	12745	H+V	< 7				
13 East HOTBIRD	10700	12750	H+V	<+> 7								
16 East EUTELSAT W2	10960	11200	H+V	<+> 7	11680	11700	V	< 7	12500	12750	H+V	<+>7
19.2 East ASTRA	10955	12750	H+V	<+> 7								
21.5 East EUTELSAT W6	10955	11000	H+V	< 7	11010	11700	H+V	< 7	12500	12700	H+V	< 7
23.5 East ASTRA	11450	11690	H	< 7	12620	12710	H+V	<+> 7				
26 East ARABSAT 2	11100	11200	H+V	>7	11630	11660	H+V	>7	12520	12740	H+V	<+>7
28.2 East EUROBIRD1/ ASTRA	12500	12750	H+V	<+> 7	11470	11490	V	<+> 7				
30.5 East ARABSAT 2B	12520	12540	H	< 7								
33 East EUROBIRD 3	10955	11190	H+V	<+> 7	11620	11700	H+V	<+> 7				
36 East EUTELSAT W4	10955	11700	H+V	<+> 7	12640	12660	V	< 7				
39 East HELLASSAT	10950	11150	V	< 7	11450	11700	H	< 7	12550	12660	H+V	< 7
40 East EXPRESS 1AR	11030	11200	V	< 7	11450	11640	H+V	< 7				
42 East TURKSAT/EURASIA	10950	11200	H+V	<+> 7	11480	11970	V	< 7	12510	12750	H+V	< 7
45 East EUROPSTAR 1	11450	11690	V	< 7	12510	12710	H+V	<+> 7				
53 East EXPRESS AM22	11080	11700	H+V	< 7	12630	12670	H+V	<+> 7				
54.8 East INTELSAT 702	11100	11150	V	< 7								
57 East NSS 703	11040	11550	V	< 7								
1 West INTELSAT/THOR	10980	11200	V	< 7	11460	11680	V	< 7				
4 West AMOS	11150	11350	H	<+> 7	11415	11580	H	< 7				
5 West ATLANTICBIRD 3	10950	11200	H+V	<+> 7	11450	11700	H+V	<+> 7	12540	12700	H	<+> 7
7 West NILESAT	10700	12750	Div									
8 West ATL.BIRD/TELECOM 2D	12500	12750	H+V	<+> 7	11450	11680	H+V	<+> 7				
11 West EXPRESS 3A	11480	11700	V	<+> 7								
12.5 West ATLANTICBIRD	10950	11200	H+V	< 7	11325	11700	H+V	< 7	12530	12760	H+V	<+> 7
15 West TELSTAR 12	11000	11040	V	< 7	11450	11700	H+V	< 7	12520	12750	H	<+> 7
18 West INTELSAT 901	10960	11700	H+V	<+> 7								
20 West INTELSAT 603	10940	11700	H	<+> 7								
22 West NSS 7	10950	11160	H	<+> 7	11465	11700	H	<+> 7	12510	12720	H	<+> 7
24.5 West INTELSAT 905	11050	11690	V	<+> 7								
27.5 West INTELSAT 907	10950	11700	V	< 7								
30 West HISPASAT	11460	11680	H+V	<+> 7	12035	12180	H+V	<+> 7	12535	12750	H+V	<+> 7
31.5 West INTELSAT 801	10960	11050	V	<+> 7								
34.5 West INTELSAT 903	11120	11700	V	<+> 7	10960	11000	V	<7				
37.5 West TELSTAR 11	11500	12750	H+V	< 7								
43 West INTELSAT 3R	12500	12750	H+V	<+> 7								
45 West INTELSAT 1R	11480	11700	H+V	< 7								

This list compiled by Ron Eberson and Feedhunter Rini and constantly kept up to date by them is the key instrument for looking for new feeds on a daily basis. The list shows satellites which are used for feeds, as well as the frequency ranges, polarisations and average number of feeds. To start with, Feedhunter Rini rotates his dish to the required satellite. Next, he lets his receiver scan only the range between the two frequencies and this way finds the feeds as quickly as possible. On his PC he then makes screenshots und uploads the files to specialist satellite forums such as sat4all.com and dxtv.eu. Other feedhunters therefore can find out within minutes which feeds are currently active. If you like to have a go for yourself you should begin with choosing a satellite that transmits many feeds so that your chances of actually discovering a feed are highest. Bear in mind, though, that feed transmissions often only last for a few minutes. Only rarely are they active for more than an hour – such as when a football match is transmitted, for example.

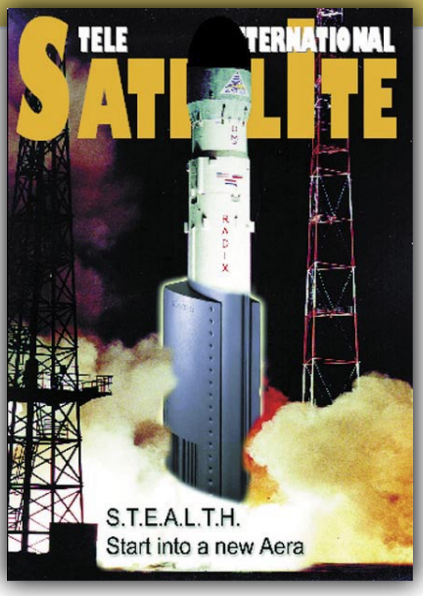


This is how Feedhunter Rini caught the satellite virus: this small dish attached to Klaas van der Lingen's home first made him aware of satellite reception. He asked the owner what he could receive with it. Klaas himself is an amateur radio enthusiast.

Edited by
Alexander Wiese

10 Years Ago

Travel into the Past
TELE-satellite Magazine
Issue 10/1998



In last issue, we reported about our visit to the Radix distributors meeting. There, the official introduction of their latest receiver, the Radix Stealth, took place. Most distributors immediately placed their orders. We took one sample with us and gave it a thorough test. And now, just before the holidays are coming, the Stealth has hit the shops. What is so special about it? You may associate the name with invisibility. That is almost right. Of course, the box is not really invisible, but you can put it anywhere behind books or in a cupboard.

Nokia Mediamaster 9800S

Almost everyone in the digital satellite reception market was curious about the successor of the famous Nokia 9200/9600 family of satellite receivers. Almost three years after the European launch of digital satellite television, it seems that Nokia has set the market standard for digital set-top boxes.

No wonder, it was the first receiver capable of doing software and settings updates over the air, but even more importantly through the Internet. Get the latest channel lists from the Internet and upload them into your receiver within minutes. It saves a lot of time and your receiver always has up-to-date channel settings.

MTI LNB AP8-T2

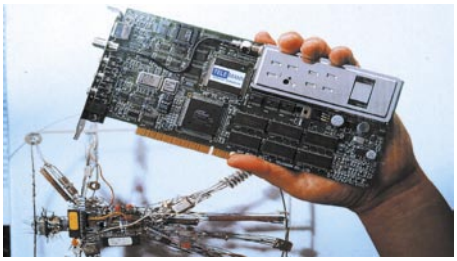
For most experts, Microelectronics Technology is probably better known as MTI. Professionals have known MTI for years by their VSAT installations,

SCPC reception units and microwave transmitters. Of course, the development of LNB is a continuous process whereas improvements are made over and over again. Recently, MTI has introduced the AP8-T2 LNB. As a professional manufacturer should, MIT do their best providing realistic specifications. For MTI, the outstanding performance of the AP8-T2 is very stable in its LOF. We ordered two samples and gave them a thorough test, not in our lab but up on the roof. Only the extreme temperatures in out our test had to be created articficially.

Radix S.T.E.A.L.T.H.

Hirschmann Hit-Sat

Hirschmann offers a complete kit with all components you need to get started right away. All included in one sturdy box are a dish (65, 75 or 85 cm), a universal LNB (digital compatible) and an analogue Satellite receiver.



digital stuff on satellites nowadays, such as TV channels, why not receive them as well? Telemann-Satellite Solutions offers the SkyMedia 200, a special PC card that allows reception of almost all kinds of digital satellite signals. The television or radio signals can be fed to

The included LNB is a Twin LNB, so it is very easy to connect an additional digital receiver, which can be operated completely independent of the analogue box. Another fine solution could be the use of one dish for two households.

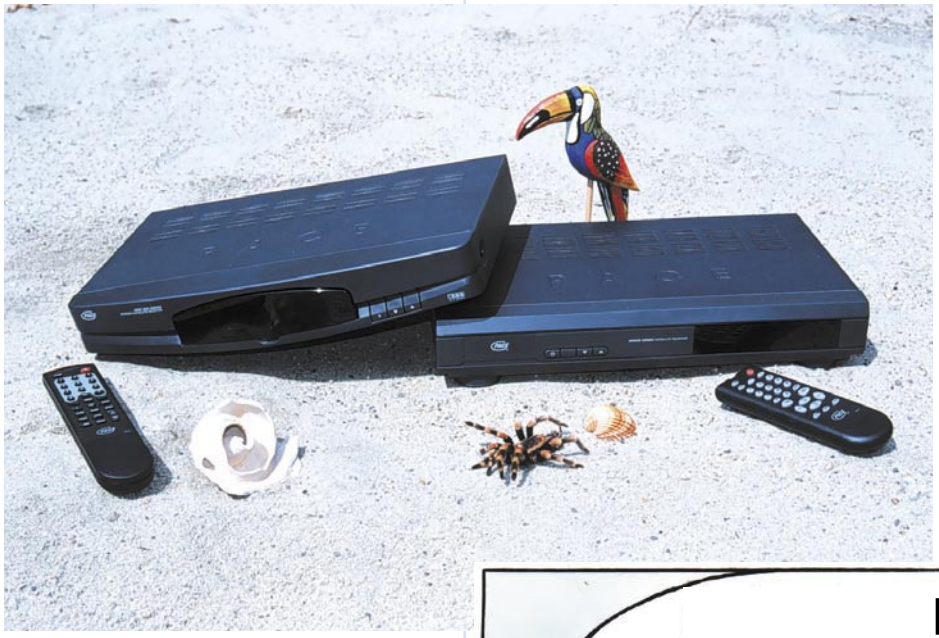
SkyMedia 200

Special MPEG streams on satellites all over the world contain Internet information and other data such as pre-selected material or continuous streams of information. You will need a personal computer if you want to subscribe to such a service. But as there's more

your television or hi-fi set, and the data services stay where they belong—on your computer. Professionals can now watch CNN (available on almost every satellite) and at the same time receive data services from the same orbital position. But this combination makes sense even at at home. You can, for instance, use a satellite-based Internet service while the rest of the family watches a digital channel on the usual TV set.

Prosat P-2002S

Two years ago a minimalist digital receiver would set you back some 900 Euros—only to allow you



to catch one or two digital bouquets if you were lucky. Today basic units like these are almost impossible to come by. Consumers demand digital boxes that can be used to receive all channels and services in the DVB standard—this has become the only selling argument. Nonetheless, a well equipped digital receiver for less than 350 Euros is a rare thing. TSI picked one of the few cheapies on offer and examined it to the extreme: P-2002S

DB-6000

This new digital receiver is the first box for DVB reception from Benjamin Electronics Co. Ltd. of Taiwan. They have done a very good job examining the markets before actually producing anything. First of all, this DB-6000 will strike you because of its silver colour. Finally some colour in this black box business. The metal housing makes the receiver heavy duty, sturdy and very well suitable as the foundation of a heap of other boxes. On the front, we found a large four-digit display indicating the channel ID. The DB-6000 can store up to 1000 channels. Also located on the front are the buttons for channel browsing and standby.

MSS-220

It was a very practical reason why we wanted to test the new MSS-220. In our test lab we were looking for an analogue receiver capable of processing the signals from two dishes and also being C-band compatible. On the other hand, it should also be able to store all available channels on all the important satellites. So we came across the MSS-220. For Pace it is very much common to build satellite receivers on a region specific basis, which means that you will find an appropriate decoder built in (if any) in addition to pre-programmed regional satellite channels. In the UK, for instance, the MSS-220 comes equipped with a Videocrypt decoder, but there is no decoder in it for the rest of Europe. Here, the pre-programmed stations cover the geostationary arc from 45° West to 180° East. That makes it very universal for a large area that includes Africa and the Mid-East.

PalMaster 1000

The technology comes wrapped in a modern design which, not quite coincidentally, matches the style of Bang&Olufsen TV sets. The brand is quite popular in Scandinavia, so the PalMaster's remote can also control B&O TVs. On the front of the receiver, a large six-digit display gives you all information you would like to see on the receiver itself. It can store up to 500 channels. A metal lid hides the three famous buttons for emergency operation. Here, there are also two smartcard slots for the MAC decoder that is built into the Scandinavian version of the PalMaster 1000. Even at the back, there is nothing special to be found: three Scart connectors, two LNB inputs (900-2150MHz), and phono jacks to get the audio signals over to your stereo.

Want More? Free Time Travel 10 Years Back:

Read Full Magazine TELE-satellite 10/1998 Here:

http://magazine.TELE-satellite.com/vintage/TELE-satellite-9810-deu-eng.pdf

Edited by
Alexander Wiese

20 Years Ago

Travel into the Past
TELE-satellite Magazine
Issue 05/1987

Market review of rotary dishes

ALLSAT

Satelliten-Drehanlage mit:
Spiegel 1.8 m Parabol Fiberglas
Standgestell
Horizont-zu-Horizont-Motor
Downconverter mit Polarizer
Satelliten-Receiver CR 1100 E
kombiniert mit Motorsteuereinheit
Bedienung über eine Fernbedienung

Preis: DM 6798,-

Anbieter:
ALLSAT
Albrecht-Dürer-Str. 2
D-6720 Speyer
Tel 0 62 32 / 7 93 99

Weitere Detailangaben nächste Seite

BELTRONICS

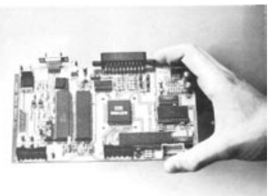
Satelliten-Drehanlage mit:
Spiegel 1.5 m Aluminium
Standgestell
Teleskop-Actuator
Doppeldownconverter
mit elektronischer Umschaltung
Satelliten-Receiver SBR 1550
kombiniert mit Motorsteuereinheit
Bedienung über eine Fernbedienung

Preis: DM 6498,-

Anbieter:
BELTRONICS
Roermonder Str. 594
D-5100 Aachen
Tel 02 41 / 17 46 49

Weitere Detailangaben nächste Seite

D2-MAC card

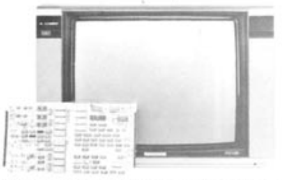


D2-MAC Entwicklungsstand bei Intermetall

Die Entwicklung des Chip ITT DMA 2270 möchte Intermetall Freiburg zur Funkausstellung vorstellen. Da als Bauteilehersteller ein Stand auf der IFA nicht möglich war, möchte man sich der Presse und den Geräteherstellern, die den Chip in die Satelliten-Receiver und TV-Geräte integrieren werden, in einem renommierten Hotel präsentieren. Selbst die in der abgemagerten Version einzuhaltenden Parameter werden als nicht einfach realisierbar eingestuft. Immerhin ist die Integration in dem Ein-Chip-Decoder selbst mit einem 4 Megabitspeicher vergleichbar, in dem 150.000 Transistorfunktionen auf 52 qmm Fläche korrespondieren. Während man die Videoseite im Griff hat, wird momentan am Redesign des Audioteils gearbeitet. Die Zeit zur Funkausstellung wird deshalb mit etlichen Stunden Überzeit der Entwickler verbracht werden, um den Sinn der Digitalen Tonnorm, nämlich die Qualitätsverbesserung, deutlich machen zu können. Etwa 3 Millionen DM kostete der bisherige Entwicklungsstand, mit dem erarbeiteten Wissen ist Intermetall in der Lage, jede MAC-Version in ihrem Digit-2000-System zu verarbeiten.

Foto links: Labormuster eines fertigen D2-MAC-Decoders. In der Platinenmitte der eigentliche MAC-Chip. Foto: Intermetall

Grundig reveals first 100 Hz TV Set



Super-Fernseher für Satellitenseher

Zur Funkausstellung wird der erste serienmäßige 100-Hz-Fernseher vorgestellt. Ein 4 MBit-Speicher verdoppelt die Bildwechselfrequenz, was ein flimmerfreies Bild ergibt. Eine Stoptaste ermöglicht das Anhalten auch eines schnell bewegten Bildes. Das Supergerät kann als Multinormgerät alle TV-Normen empfangen, NTSC wird jedoch erst demnächst dazustoßen. Besonders Satellitenzuseher können wegen der vom Satelliten gelieferten Studioqualität und einem TV-Gerät wie diesem die Grenzen der heutigen Technik erfahren.

Der nachrüstbare 80-Seiten-Videotextspeicher ist in 8 x 10 Blöcken jedem Videotext-tragendem Programm zuzuordnen und verbessert dadurch beim Programmspringen gerade der Satellitenprogramme erheblich den Bedienungskomfort. Speziell beim weltweiten Empfang erleichtert die automatische Spracherkennung die korrekte Darstellung fremdsprachiger Texte.

Grundig, Kurgartenstr. 37, D-8510 Fürth

Portable Satellite Receiver by Stog

PORTABEL SAT-RECEIVER

Camping Sat

Mit Minimaßen kommt ein 12 Volt Einfach-Satelliten-Receiver auf den Markt

Im Standardgehäuse mit 18 cm Breite und 5 cm Höhe läßt sich heutzutage bereits ein kompletter Satelliten-Receiver unterbringen. Der Nachteil, daß in so kleinem Gehäuse kein Netzteil mehr Platz hat, entpuppt sich beim kontradiktisch „Galaxy" getauften Mini-Receiver von STOG als Vorteil. Es ist jedenfalls der erste Receiver der uns unterkommt, der mit der Autobatterie betrieben werden kann.

Das fahrende Auto wird zwar selten zum Satellitenempfang genutzt, aber während des Campingurlaubs im Inwie im Ausland läßt sich bequem das gewohnte TV-Programm auf den Urlaubsschirm holen. Den teuren Heimreceiver mit Fernbedienung schleppt niemand mit in den Urlaub.

Das Gerätchen verfügt über alle notwendigen Features. Die Satellitenkanäle werden über ein bedampftes Poti eingestellt (Hinweis: Bastler können eine Preomatschaltung ergänzen), ebenso die Tonablagefrequenzen. Eine AFC-Schaltung holt den Empfangskanal immer sofort auf Mitte.

Fast an ihre Grenzen stößt die AFC beim TELECOM-Empfang, der wegen des geringen zum Empfang notwendigen Spiegels gut zum Gerät paßt. Sehr viel Fingerspitzengefühl ist notwendig, um die teilweise nur im Abstand von 30 MHz strahlenden Programme noch einfangen zu können. Auch die Tonfrequenzen erfordern Feingefühl beim Einstellen, von Mehrfachempfangsstellen sollte man sich nicht irritieren lassen.

Paßt fast schon in den Autoradioschlitz: Mini-Satellitenempfänger für 12 Volt von STOG. Foto: TELE-satellit / KK

Die Rückseite liefert genau das, was gebraucht wird: ein UHF-Ausgang für die Camper mit Portabelfernseher und ein DIN-AV-Ausgang für die anspruchsvolleren Seher oder für den Gebrauch daheim.

Als Zweitgerät oder gar als Erstgerät für Einsteiger erfüllt das kleine Gerät den Zweck des Satellitenempfangs ohne Bedienungskomfort. Auch als Portabelempfänger zur Empfangsoptimierung bei Spiegelinstallationen kann das Gerät gute Dienste leisten, wenn kein eigener Meßempfänger zur Verfügung steht. Bei steigender Nachfrage wird der Hersteller sicherlich das jetzige anspruchslose Standardgehäuse gegen ein gefälligeres austauschen.

TECHNISCHE DATEN

Hersteller/Importeur	STOG GmbH
Gerätebezeichnung	GALAXY
ZZF-Nummer	beantragt
Fernbedienung	keine
Programmeinstellung	über Poti
Frequenzanzeige	keine
AFC	fest eingebaut
Fernspeisespannung	+ 15 Volt
Tonfrequenzbereich	5.6 bis 8.5
Block-ZF-Eingang	F 75 Ohm
Audio/Video-Ausgang	DIN-AV
UHF-Modulationsausg.	F 75 Ohm
TESTERGEBNIS	
Empfindlichkeit	gut
Bildqualität	befriedigend
AFC-Einsatz	befriedigend
Tonqualität	gut
Bedienungskomfort	ausreichend
Einsatzmöglichkeit	Zweitgerät

Bezug: STOG, Menzinger Str. 97, D-8000 München 50, Tel 089/8111016

Multiple Dishes Pointing to Same Satellite for Higher Gain

Die Preise von Standardspiegeln sind dank hoher Stückzahlen erheblich gefallen. Großspiegel, das sind hierzulande Spiegel mit mehr als 1.8m Durchmesser, werden weiterhin nur in relativ geringen Mengen geordert und sind entsprechend teuer. In manchen Fällen aber sind Großspiagel dennoch notwendig und ihr Einsatz unumgänglich, wenn schwach einfallende Satelliten empfangen werden sollen. Bei uns sind das z.B. „Exoten"-Programme wi wie das Israelische oder Iranische TV vom INTELSAT V-F5 bzw F6. Im ferneren Ausland wiederum ist der Empfang der für Mitteleuropa sendenden Satellitenprogramme gewünscht.

Auf eine in solchen Fällen preiswerte Lösung ist vor kurzem der amerikanische Parabolspiegelhersteller DH Satellite TV gekommen. Was beim terrestrischen Empfang schon lange in besonderen Empfangssituationen angewandt wird, soll schließlich auch genauso beim Satellitenempfang gehen: das simple Parallelschalteh mehrerer gleichartiger Spiegel zur Erhöhung des Empfangssignals.

Der Chef von DH Satellite TV, Franklin A. Weeks, schrieb uns dazu:

Die Idee zu diesem Empfangskonzept entstand während einer Satelliten Fachmesse. Im Gespräch mit Keith Anderson (Chef der Satellitenfirma Anderson Scientific - d.Red.j erzählte mir dieser von einer Geschäftsreise in den Südpazifik. Er traf dort einen Freund, der ihm erzählte, daß er mit seinem 6 m Spiegel nichts empfangen könne, ein noch grösserer Spiegel aber nicht mehr infrage käme. Ich schlug ihm daraufhin vor, er solle eine Methode entwickeln, mehrere Antennen in Phase so zu schalten, daß sie einer einzigen Großantenne derselben Empfangsfläche entspräche. Keith sagte, er könne eine Weiche, Phasenglieder und darauf abgestimmte Downconverter entwickeln. Wir kamen überein, diese Idee gemeinsam zu vermarkten, ich liefere die Spiegel, er die Elektronik.

Soweit Franklin A. Weeks, der als Chef eines Spiegelbetriebes um die Schwierigkeiten weiß, einen genauen Großspiegel herzustellen: „Es ist leicht, vier sehr genaue 3 m Spiegel herzustellen, aber schwierig, einen exakten 6 m Spiegel zu produzieren." — Auf die Verhältnisse in Europa übersetzt, wo ja bereits 3 m Spiegel zu den „Großspiegeln" zählen, wären vier 1.8 m Standardspiegel presigünstiger als ein einzelner 3.6 m Spiegel.

Oben: Vier 3m-Spiegel zur Empfangssteigerung parallel geschaltet;
unten: das gleiche mit 1m Spiegeln.
Fotos: Franklin A. Weeks

Das von den beiden professionellen Satellitenfreaks entwickelte System wird unter dem Namen „MANA/EG" angeboten. Die seltsame Abkürzung steht für „Multiple Antennas in phase for Noise Abatement and Extra Gain". Es besteht aus zwei, vier oder acht gleichen Spiegeln beliebiger Grösse je nach Notwendigkeit und der darauf angepaßten Elektronik mit einer patentierten phasenrichtigen Zusammenschaltweiche.

Entsprechend der ursprünglichen Zielsetzung ist das System derzeit nur für den in ganz Amerika üblichen Empfang im 4 GHz Bereich ausgelegt. In diesem Bereich senden auch in Europa genügend viele Satelliten, die es lohnt einzufangen. Vier parallel geschaltete 1.8 m Spiegel im 4 GHz Bereich entsprechend 3.6 m rechnerischer Gesamtspiegelgrösse erlauben auch bei uns den Empfang einer ganzen Reihe (mehr oder minder) interessanter Programme (siehe 4 GHz Tabelle in dieser Ausgabe).

Von DH Satellite TV lieferbar wäre auch eine 16er Kombination: das entspräche schon fast einer „Erdefunkstelle", wie es im Postdeutsch so wun-

Want More? Free Time Travel 20 Years Back:

Read Full Magazine TELE-satellite 05/1987 (sorry, available in German only):

http://magazine.TELE-satellite.com/vintage/TELE-satellite-8705-deu.pdf

TELE-satellite Magazine Worldwide Newsstands and Subscriptions Centers

Western Europe	Distributor/Subscription
Austria https://www.tele-satellite.com/secure/atd/	**Pressevertrieb Valora** ☎ AT 06246-882-882 ✉ welcome@leserservice.at
Belgium https://www.tele-satellite.com/secure/ben/	**Leo Stouten** ☎ BE 049-5632378 ✉ leo.stouten@telenet.be
France https://www.tele-satellite.com/secure/eng/	**TELE-satellite** ☎ FR 042-6467194 ✉ abonnement@TELE-satellite.com
Germany https://www.ips-d.de/order-tsi_de/	**IPS Presseservice** ☎ DE 02225-7085-338 ✉ abo-telesatellit@ips-d.de
Greece http://www.hellenicmags.com/magazine_detail.cfm?Publ_id=3394	**Hellenic** Subscription TELE-satellite ☎ GR 02-2878500 ✉ gasa@hdaath.gr
Italy https://www.tele-satellite.com/secure/eng/	**TELE-satellite** ☎ IT 02-39293770 ✉ abbonamento@TELE-satellite.com
Luxembourg http://mpk.lu/mpklink/mpkabo.htm	**Messageries Paul Kraus** ☎ LU 499-888-8 ✉ courrier@mpk.lu
Netherlands https://www.tele-satellite.com/secure/ned/	**Betapress BV** ☎ NL 0161-459-539 ✉ telesatelliet@betapress.audax.nl
Spain https://www.tele-satellite.com/secure/eng/	**SGEL** ☎ ES 093-1845889 ✉ suscripcion@TELE-satellite.com
UK https://www.tele-satellite.com/secure/uke/	**TELE-satellite UK** ☎ UK 0207-0433-771 ✉ subscription@TELE-satellite.com

Eastern Europe	Distributor/Subscription
Bulgaria http://tele-satellite.hit.bg/	**TEL-SAT** Ivan Penev ☎ BG 02-8557143 ✉ ipenev@mail.orbitel.bg
Croatia http://www.distriest.si/webpages/ed.jsp?id=2176&lang=sl	**Distriest d.o.o.** Cena TELE-satellite ☎ SI 05-7341977 ✉ info@distriest.si
Czech & Slovak http://www.sat-servis.cz/	**Sat Servis** Miroslav Kodet ☎ CZ 0607-134-112 ✉ kodet@sat-servis.cz
Poland https://www.tele-satellite.com/secure/eng/	**TELE-satellite** Prenumerata Magazyn ☎ PL 02-239-88351 ✉ prenumerata@TELE-satellite.com
Russia https://www.tele-satellite.com/secure/eng/	**ТЕЛЕ-сателлайт** ☎ RU 812-3090603 ✉ russia@TELE-satellite.com
Serbia http://www.distriest.si/webpages/ed.jsp?id=2176&lang=sl	**Distriest d.o.o.** Cena TELE-satellite ☎ SI 05-7341977 ✉ info@distriest.si
Slovenia http://www.distriest.si/webpages/ed.jsp?id=2176&lang=sl	**Distriest d.o.o.** Cena TELE-satellite ☎ SI 05-7341977 ✉ info@distriest.si

Asia	Distributor/Subscription
China http://www.aluo-sat.com/chinese/Magazine.htm	订阅杂志 **Aluo-sat Co., Ltd** Luo Shi Gang ☎ CN 0755-82175354 ✉ webmaster@aluo-sat.com
India https://www.tele-satellite.com/secure/ind/	**Satheesh Kumar P.C.** ✉ puzhakkara2008@gmail.com
Israel http://www.steimatzky.co.il	**Steimatzky** ☎ IL 03-577577 ✉ chana@steimatzky.co.il
Indonesia https://www.tele-satellite.com/secure/bid/	**P.T. Indoprom** ☎ ID 021-8091928 ✉ indoprom@indo.net.id
Korea http://www.publications.co.kr/	**Universal Publications Agency** ☎ KR 02-3672-0044
Taiwan http://www.tep.com.tw/ContactUs.htm	**Taiwan English Press** ☎ TW 02-2775-3456 ✉ service@tep.com.tw
Thailand https://www.tele-satellite.com/secure/tha/	**Infosat Intertrade** ☎ TH 0961-9161-3 ✉ sales@infosats.com

The Professional Combination:

Order TELE-satellite + CD at your nearest Subscription Service

Note: A one-year subscription includes six issues of TELE-satellite Magazine plus the updated SatcoDX CD-ROM with each issue.

Americas	Distributor/Subscription
Canada https://www.tele-satellite.com/secure/can/	**TELE-satellite** Markus Preis ☎ 1-212-796-5745 ✉ m.preis@TELE-satellite.com
Mexico https://www.tele-satellite.com/secure/eng/	**TELE-satélite Suscripción** ☎ MX 553-687-7170 ✉ suscripcion@TELE-satellite.com
USA https://www.tele-satellite.com/secure/usa/	**TELE-satellite** Markus Preis ☎ 212-796-5745 ✉ m.preis@TELE-satellite.com

Africa	Distributor/Subscription
Botswana https://www.tele-satellite.com/secure/eng/	**MCS - Caxton Press** TELE-satellite Subscription ☎ SA 01-146133234 ✉ markus@TELE-satellite.com
Namibia https://www.tele-satellite.com/secure/eng/	**MCS - Caxton Press** TELE-satellite Subscription ☎ SA 01-146133234 ✉ markus@TELE-satellite.com
Nigeria	**Newsstand Agencies Ltd** ☎ NG 01-4936073 ✉ newsstand@linkserve.com
South Africa https://www.tele-satellite.com/secure/eng/	**MCS - Caxton Press** TELE-satellite Subscription ☎ SA 01-146133234 ✉ markus@TELE-satellite.com

Exhibition Preview

- **7 - 12 October 2008: CeBIT Bilişim Eurasia**
  ICT trade show
  TUYAP Fair and Congress Center, Istanbul, Turkey
  www.cebitbilisim.com

- **15 - 17 October 2008: SCaT India**
  South Asia's Largest Tradeshow Of The Indian Cable & Satellite Television Industry
  World Trade Centre, Cuffe Parade, Mumbai, India
  www.scatindia.com

- **29 - 31 October 2008: EEBC 2008**
  6th Eastern Europe Exhibition and Conference
  Kiev Expo Plaza, Kiev, Ukraine
  www.eebc.net.ua

- **3 - 5 March 2009: CABSAT 2009**
  Middle East's Electronic Media & Satellite Communications
  Dubai World Trade Center, UAE
  www.cabsat.com

- **2 - 5 February 2009: CSBT 2009**
  Cable, Satellite, Broadcasting, Television
  Crocus Exhibition Center, Moswoc, Russia
  www.cstb.ru

- **19 - 21 March 2009: SatExpo 2009**
  Space and Advanced Telecommunications
  New Rome Fair, Rome, Italy
  www.satexpo.it

- **25 - 27 March 2009: Satellite 2009**
  Exhibition for Satellite Enabled Communication
  Walter E. Washington Convention Center, Washington, USA
  www.satellite2009.com

- **March: CCBN 2009**
  The 17th China Content Broadcasting Network Exhibition
  China International Exhibition Center, Beijing, China
  www.ccbn.tv

- **26 - 28 May 2009: ANGACABLE 2009**
  Tradefair for Cable, Broadband and Satellite
  Koelnmesse, Cologne, Germany
  www.angacable.com

TELE-satellite Deadlines

Editorial Deadlines, Magazine Publishing Dates and CD-ROM Add-Ons (Subscribers Only)

Software	CD	Number	Issue	Deadline	On Sale at Newsstands	Available Online
SatcoDX World of Satellite		#208	12/2008	3 October 2008	14 November 2008	28 November 2008
SatcoDX Suite and Updater		#209	02/2009	5 December 2008	16 January 2009	30 January 2009
SatcoDX World of Satellite		#210	04/2009	6 February 2009	13 March 2009	27 March 2009
SatcoDX Suite and Updater		#211	06/2009	3 April 2009	15 May 2009	29 May 2009
SatcoDX World of Satellite		#212	08/2009	5 June 2009	17 July 2009	31 July 2009

TWIN HDTV Digital Satellite PVR

DS4H-9160

Fully DVB-S/DVB-S2 (H.264) HD Compliant

Dual DVB-S2 HD Tuners

Linux Operating System

Advanced High Picture Quality BROADCOM chip

Powerful Trick Mode

Firmware upgrade and Desktop HDD Recording via Ethernet port

Two(2) Channel Recording whilst Watching Play-back

JPEG and MP3 Play-back

Fast Scanning supported

Unicable / SCR (Single Cable Router) supported

Maximum 1TB (Terabyte) HDD (Hard Disk Drive) supported

True-Color 32bit GUI

IBC 2008

(International Broadcasting Convention)

Hall 5, Stand C10

12-16 September, 2008, RAI Convention Centre, Amsterdam, The Netherlands

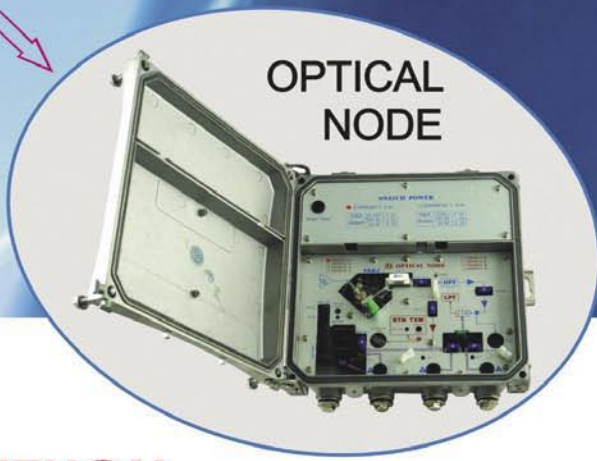
www.dizipia.com

15th Floor, East Wing, IT Venture Tower, 78 Garak-Dong, Songpa-Gu, Seoul 138-160, Korea
E-mail : info@dizipia.com ktkwak@dizipia.com / Tel : +82-2-2142-1970 / Fax : +82-2-2142-1999

DiZiPiA

WATCH THE WORLD WITH JIUZHOU

DVB/ATSC
-DIGITAL STB SERIES
CATV SERIES
DISH ANTENNA SERIES
LNB SERIES



JIUZHOU ELECTRIC GROUP

Headquarters: NO.16 Yuejin Road Mianyang,Sichuan,China
Shenzhen Branch: Jiuzhou Electric Building, Southern No.12 Road, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China 518057
Contact: Mr. Alex Deng
Tel: +86-816-2468774
Fax: +86-816-2468903
E-mail: overseas@jiuzhou.com.cn
Website: www.jiuzhou.com.cn