Humax PR-HD1000 HDTV – but only for Central Europe and China

In our previous issue of TELE-satellite we presented a HDTV receiver for Japan. This time we're introducing a Humax HDTV receiver using the new DVB S2 system and thus being the first box with this advanced system we were able to test. Without giving away too much at the beginning: the box can be used in Central Europe and China even today.

Even when switched off the receiver deserves special praise for its elegant design. The casing save the 20 W standby power consumption, which is rather on the high side.

antenna with several LNBs will not be able to fully use all their signals with this box for the time



is silver and black flap protects the perfectly readable VF display and five buttons for operating the box without the remote control. In addition, there are two CI slots as well as one card reader for the smartcard of a pay TV provider. It should be noted that a smartcard is required for the Humax box to receive signals, which is about as unusual as the fact that smartcards have to inserted 'downside up' with the contact area facing upwards, whereas virtually all other receivers require it the other way round.

On the perfectly equipped rear panel you'll find an HDMI interface, three RCA sockets for YUV as well as three additional RCA sockets for stereo audio and video, two scart euroconnectors, an optical audio output, a USB and an RS232 interface and last but not least the IF input with a corresponding looped through output. The penny pinchers amongst our readers will certainly also appreciate the main power switch which helps

The remote control that is being. included in the package has a good feel when held in hand, features a convenient key layout and has German lettering, because we tested the model for that is sold in the German speaking market. We also loved the fact that Humax throws in an HDMI cable, which is a very wise move given that this is definitely not a standard utensil in most

Everyday use

Once the desired language is chosen from German, English or Turkish the setup menu leads you to the channel search. There is a list of 25 pre-programmed current European satellites, to which five additional birds can be added manually. DiSEqC 1.0 is available for switching between different receivable satellites and users of a motor-controlled antenna will find DiSEgC 1.2 and 1.3 (USALS) very handy. Unfortunately DiSEqC 1.1 for addressing up to 16 LNBs is missing, so that owners of a multifeed

Before we can start enjoying HDTV channels the automatic channel search is activated and - if you use the German model - starts with scanning the signals of German pay TV provider 'Premiere', followed by all other transponders and satellites depending on the configuration. No gold medal can be hoped for with regard to the scanning speed: five minutes and 10 seconds were needed to scan all channels of a 65 transponder satellite. We strongly urge Humax to improve that performance as dozens of other receivers give an example of how fast a channel search should be these days. At the end of the setup procedure the receiver checks whether new software is available, which can be downloaded right via satellite.

Tune into one of the new HDTV channels and you'll soon forget all about the rather slow channel search. The Humax receiver delivered pin sharp pictures on our test monitor, a Pioneer

PDPS05XDE, Especially for the German channels Sat1 HD and Pro7 HD, which are simulcast in SDTV and HDTV, the superiority of HDTV transmission becomes literally crystal clear. The only thing we were not quite happy with was the 4:3 format of the two HDTV channels mentioned, leading to annoying and potentially harmful black bands to the left and right of the TV picture on our Plasma screen. We can hardly blame the receiver for this, though, as this is a decision of the channel operators at Sat1 and Pro7.

Of course the best video quality by far is achieved with using the HDMI output, but even with YUV the picture quality is remarkable. Please note, however, that the integrated copy protection of most HDTV channels will result that networks like 'Premiere HD Film', for instance will not be displayed using YUV.

The channel list is organised in a way that all 'Premiere' channels are listed starting with channel 100, followed by all other received channels. Channel 1 through 99 can be filled by the user to his or her heart's content, in addition to the favourite lists that are of course also available.

The user interface of the Humax PR-HD1000 is simply exemplary - they could not have done it any better in terms of ease of use and clarity. The channel list is very cleverly arranged as well, with four areas and two columns, so that channels of a specific satellite, of the favourite list or pay TV channels (sorted according to CAS) can be displayed at a touch of one of the colour-coded buttons on the remote control.

Switching between channels takes almost three seconds, making the Humax a rather slow fellow - the manufacturer has promised to improve that performance, however. After switching to a new channel an info bar is inserted with details about the current programme. Unfortunately there are no details regarding the programme that is coming up next.

The EPG of the PR-HD1000 is another outstanding feature of this Humax receiver. All event details of most channels are



quickly loaded and displayed either as a chart for several channels or for each individual channel. At first the receiver shows an overview of all days for which information is available, and when clicking on an available date the programme preview is displayed. Thanks to this clever design the EPG is extraordinarily clear and concise, making sure even beginners will quickly learn how to use it.

The blue function key on the remote reveals another fantastic highlight of this new Humax receiver - a full-text search covering all available EPG data. By simply indicating a given genre or keyword all corresponding programmes are listed in next to no time.

The only downside we noticed was the slow reading of EPG data for some channels (while working perfectly swiftly for others) - this is where we expect some amendments from the manufacturer. The overall flawless impression of the many features of this receiver is rounded off with a built-in teletext decoder.

Other satellites

Even though this receiver was definitely not designed for use in extreme reception situations or for DX purposes we still wanted to find out about the tuner sensitivity and the reception capabilities for SCPC signals with very low symbol rates. For this purpose we tried to receive the Arabsat 2D at 26° East and the horizontal beam of the Nilesat at 7° West, both of which come in very weak at our location. The good news first: we were truly surprised about the sensitivity of the tuner. However, the symbol rate range from 1 to 45 Ms/s in DVB mode as indicated in the technical data sheet did not quite live up to its promise, as a truly stable reception was only possible with signals higher than approximately 3 Ms/s. Lower symbol rates could be locked, but the signals disappeared again and again.

In DVB S2 mode we attempted to do some tests with the HDTV channels of British Sky Digital, but the receiver refused to read the appropriate transponders. We had more luck with HDTV channels of TPS on Atlantic Bird at 5° West (11.470 V) and of Sky Italia on Hotbird at 13° East (11.900 H). Apparently these channels adhere to the strict DVB S2 specifications.

Finally, we wanted to find out if and how the Humax PR-HD1000 DVB-S2 processes signals in China and for this purpose we sent the box to the TELE-satellite Test Center in ShenZhen with express courier. TELE-satellite expert Luo Jun then connected the receiver which was previously tested in Europe to his reception system and soon was able to give the 'go ahead'. The CCTV HDTV channel on Asia-Sat 4 at 122.2° East (4.060 V 27500 on the C-band) came in perfectly using a Novel Tong-Fang CAM.

However, the Humax PR-HD1000 cannot receive the SITV-HD channel transmitted via

Chinastar at 87.5° East (3.851 V 13300). This HDTV channels uses the DVB-8PSK modulation

which is not compatible with the current software configuration of the Humax PR-HD1000.

TECHNIC



| Manufacturer | Humax Co., Ltd. |
|----------------------|--|
| Homepage | www.humaxdigital.com |
| Model | PR-HD1000 |
| Function | Satellite receiver for DVB-S and DVB-S2 |
| Channel memory | 5000 |
| Satellites | 30 |
| Symbol rate | 1-45 Ms/sec (from approx. 3 Ms/s in our test) |
| SCPC compatible | • |
| USALS | • |
| DiSEqC | 1.0 / 1.2 / 1.3 |
| Video formats | 1080i, 720p, 576p |
| Scart connections | 2 |
| HDMI output | • |
| Audio/video outputs | 3 x RCA |
| YUV output | 3x RCA |
| S-Video | • |
| UHF modulator | - |
| 0/12 Volt output | - |
| Digital audio output | • |
| EPG | • |
| C/Ku band compatible | • |
| SatcoDX compatible | - |
| Power supply | 90-250 VAC, 50/60 Hz |
| Power consumption | max. 45W, standby 20W |

Expert conclusion

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Operating the Humax PR-HD1000 is simply fun, its menues are easy-to-navigate and clearly laid out and the EPG deserves special praise as well. The crystal clear pictures using the HDMI interface are simply breathtaking and whoever has enjoyed HDTV channels once will have a hard time going back to the countless SDTV channels.



There are some minor glitches and flaws (search speed, loading time for EPG data, channel switching time), but these are issues that could be solved by the manufacturer with a software update.



Reception of CCTV in ShenZhen, China

| Satellite | CHINASTAR1 |
|---------------------------------|------------|
| Frequency | 3851 |
| Polarization | Vertical |
| Symbol Rate | 13300 |
| Transmission | DVB |
| FEG | Auto |
| Modulation | QPSK |
| Pilot | Off |
| | Save |
| Strength 27% mmmm | |
| Quality 0% | |
| O Change Option CTP Option List | |

SITV-HD not recognised in DVB mode |

| EPG Tabelle Times | 10:11 23.09 2006 () Suchers |
|-------------------------|---------------------------------------|
| 0184 Sat.1 HD | |
| | |
| | |
| 35.05 Samstag | |
| 26.05 Sonntag | |
| 27.03 Montag | |
| 38 20.03 Dienstag | |
| 29.03 Mittwoch | |
| 50.03 Connerstag | |
| SI 31.03 Preitag | |
| 01.04 Samstag | TANK . |
| CO Office CD Karallists | DAY. |

EPG



SCPC reception

| 3851 Vertica 13300 |
|--------------------------|
| Vertica |
| |
| 13300 |
| |
| DVB-S2 |
| 3/4 |
| BPSK |
| Off |
| Save |
| |
| |

SITV-HD not recognised in DVB-S2 and 8PSK modes either