

# Topfield TF7700 HDPVR

## Leader of Multimedia Home

**Sometimes it happens really fast**, so fast that it surprises even us! While we introduced to you the first single tuner HDPVR box in the last issue of TELE-satellite, this issue already gives us the opportunity to present the first twin-tuner HDPVR unit. This receiver was produced and developed by the South Korean company Topfield. Would you have expected anything different? This manufacturer somehow always manages to implement the latest technology as well as an easy-to-use concept in their receivers.

We were quite anxious when the delivery truck showed up and dropped off a package from South Korea. Hidden inside the box were a receiver and a remote control that just by looking at it gave us the impression of sheer elegance and excellent quality.

On the front side of the black and silver cabinet an easy-to-read VFD display is located in the center. Below the display can be found a set of five buttons that let you operate the receiver if no remote control is at hand. Unfortunately, if no fresh batteries are available for the remote control, these buttons don't really let you do more than turn the box on and off or adjust the volume and change the channel.

Hidden nicely behind a flap are two CI slots that Topfield integrated in the TF7700 HDPVR. They can accept any compatible module such as Irdeto, Seca, Viaccess, Conax, Alphacrypt, etc. Directly alongside these slots can also be found a USB 2.0 interface that can be used to link the receiver with exter-

nal devices such as USB sticks, hard drives as well as digital cameras and MP3 players.

The rear panel of this new Topfield receiver is also very nicely appointed: in addition



HDTV Reception / Info Bar |

to the two IF inputs with corresponding looped-through outputs, there is also an HDMI connection, six RCA jacks for composite video, stereo audio and YUV video, an S-Video jack, two Scart connectors, an RS-232 serial interface and optical digital audio output as well as a LAN connection. All things considered, there's really nothing missing here.

The included remote control sits very nicely in your hand with buttons that are efficiently arranged making it fun to play with this receiver. The well-written user manual comes with numerous pictures that make it easy for users to step into the world of the TF7700 HDPVR without overloading them with several hundred pages at first glance.

### Everyday Use

As we have come to expect from Topfield, the TF7700

HDPVR also does not come with an Installation Assistant. The manufacturer incorporated a logical and user-friendly concept that takes the user directly to the main menu after turning on the box for the first time from which all initial settings can be undertaken.

Especially important with a receiver that will most likely be used with LCD or plasma TV's, is naturally the HDMI output and above all the video format to be used. The user manual clearly explains the differences and alerts the user to use a single button on the remote control with which the video format can be changed should there be no picture on the TV. The receiver supports all resolutions including 576i, 576p, 720p and 1080i whereby 1080i would of course be preferable.

The TF7700 HDPVR is a receiver that was designed



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for the international market; there is an extensive selection of OSD languages available: in addition to German, English, French, Italian, Spanish, Turkish, Danish, Swedish, Norwegian, Dutch and Polish, Finnish and Hungarian are also available. The System Settings screen also lets the user select the proper color standard for the Scart connectors as well as the desired picture format.

In principle, this receiver was designed with the 16:9 video format in mind but unfortunately, there are a number of providers that still transmit in 4:3 format for economical reasons. Thankfully, the receiver comes with two different display modes: full screen and centered. While the "centered" option is more interesting for LCD TV owners since the 4:3 picture format is presented with a black band to the left and right of the video image, the "full screen" option is better for plasma TV users since there is a danger that these black bands on the edge of the video image might burn in to the display panel. In "full screen" mode the video image occupies the entire screen and thus prevents damage to the TV. The audio signal can be outputted in PCM as well as in bit stream format.

Once the initial settings have been taken care of and the receiver is matched up with the TV, the next step takes you directly into the Installation menu so that all the external connections can be set up in the receiver. The Topfield operates with two tuners that can receive channels in both DVB-S and DVB-S2 as well as in QPSK and 8PSK. The manufacturer included a preprogrammed list of 145 (!) satellites that for the most part comes with up-to-date transponder data. With the exception of HOTBIRD 13° east and NILESAT 7° west, the list is alphabetically sorted making it very easy to find a desired satellite. In addition to DiSEqC 1.0, access to multiple satellite positions can also be accomplished with DiSEqC 1.1 for up to 16 LNBs as well as the motor control protocols DiSEqC 1.2 and 1.3 (USALS).

This box was essentially designed to be used with two independent satellite signals but, if this should not be available, a single signal source would work also. The input of the second tuner would simply be fed with the looped-through output of the first tuner. The receiver must be told this via the Installation menu since only then can the recording functions – that now can't be used to their fullest extent – be controlled.

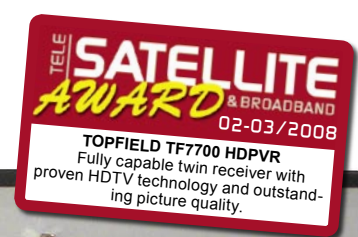
As we have come to expect from Topfield, the automatic scan was not the only scanning method: manual and other expanded scanning modes are also available whereby the latter lets you enter not only the frequency, symbolrate, polarization and modulation, but also the correct PIDs. As always, the satellite DXers thank Topfield for this.

If you have no need for PayTV despite the two CI slots, a simple push of a button in the same menu limits the scan to freely available channels. If you decide to use this box to receive multiple satellites, you may want to consider this since there's only room for 5000 channels in the receiver's memory.

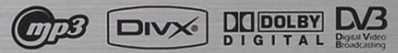
After a channel scan of multiple satellites, the channel list of our test receiver was quite filled up despite the FTA limitation so we decided to go to work editing, sorting and rearranging. In a very logi-

For organizational fanatics or for all those who find it too much work to sort the channel list directly via the receiver, Topfield offers a small tool named Vega from their web site ([www.i-topfield.com](http://www.i-topfield.com)) that lets you perform many editing functions on your PC. Unfortunately, the only way at the moment to get the channel list to the PC is via the RS-232 port and a null modem cable. Hopefully the manufacturer will incorporate the ability to upload the channel list via the network interface at some point in the future.

While we're on the "network" subject: the TF7700 HDPVR operates with a fully capable 100 MBit network connection that in the future will also allow recordings to be transferred to a PC. At the moment this



TF7700HDPVR



We were quite surprised with the speed of the automatic channel scan: only about five minutes was needed to scan our test satellite with 80 transponders. We were also happy to see that the transponder data was up-to-date so that the recently activated HDTV channels in DVB-S2 were also found during this scan.

cally arranged menu, the individual channels in the list can be renamed, moved, deleted or blocked from the nosy kids with a parental PIN code. The more popular channels can be moved into one of the many user-nameable Favorites lists for easy recall at a later time with the push of a button on the remote control.

is not possible; an update is being quickly worked on. But, even so, this connection is definitely not useless: in addition to satellite, the manufacturer also offers software updates directly to the receiver via the Internet through the network interface. Simply assign an IP address via the Installation menu and provide this

information to the standard Internet gateway in your local network. The receiver will then download the latest software via the network. Next to the manual assignment of an IP address, the DHCP protocol is naturally also supported so that the receiver can acquire all the necessary information directly from the router leaving the user with no additional settings work to do.

The System Restore feature

for the next two to seven days in an easy-to-understand format. Since we are dealing with a hard drive receiver in the TF7700 HDPVR, Topfield naturally saw to it that recordings could be programmed directly from the EPG; a quick push of the Record button is all that is needed. Especially practical is the ability with the push of another button to alter the recording settings to, for example, add extra recording time at the beginning or

program it once and you won't miss any future episodes in a series.

Thanks to the two fully functional DVB-S and DVB-S2 tuners, this receiver is capable of recording two different programs at the same time (regardless if it is HD or SD) and also play back a third previously recorded program from the hard drive (again, regardless if it is HD or SD) or a third over-the-air pro-



is also very practical. This feature stores a snapshot of all the settings including channel list, timers, etc. on the hard drive so that, should something go wrong with the settings or if the channel list is deleted by mistake, all of the previous settings can be easily restored.

Once all of the initial settings have been taken care of, the user can exit the TF7700 HDPVR's main menu after which the receiver switches over to the first receivable channel. As is the norm with Topfield, a very informative and easy-to-read Info Bar is blended in that includes channel information such as teletext, subtitles, language selection, DD audio, multi-feed, etc. and even the title of the currently running program (as long as this data is made available by the provider). A push of the Info button displays expanded information and a detailed description of the current program.

A push of the Guide button activates the expanded EPG and, depending on the program provider, shows the entire programming schedule

the end. This will guarantee that you won't miss anything interesting.

Topfield also stayed true to form with an easy-to-use channel list. A push of the OK button blends in the channel list and that can then be sorted and filtered to various criteria using the colored function buttons on the remote control. In normal operation the currently running program is recorded in the background so that it can be paused or replayed at any time.

If the telephone should ring while you're comfortably watching a program, a simple push of a button pauses the program. As soon as you are finished with your telephone conversation, the program can be restarted without you having missed a single second of that action movie or your favorite TV series. The Time Shift function makes it possible. And since we are talking about TV series, the new Topfield TF7700 HDPVR also supports the ability to record programs on a weekly or daily basis, or every weekday or weekend. In other words, just

gram. And also thanks to the clever CI operation, recorded PayTV programs are stored decrypted when possible, and should this not be possible, a corresponding symbol appears in the recordings list and with the push of a button encrypted recordings such as these are put through a copying process that stores them in decrypted mode. In this way they are still viewable even if there would be a key change by the provider.

Despite the ease-of-use concept and typical box features, all receivers must go through a stringent tuner test. As it turns out, we could not disturb the TF7700 HDPVR at all: reception of weaker signals on NILESAT at 7° west, ARABSAT at 26° east and ASTRA2D at 28.2° east proved to be no problem. Even SCPC reception was no obstacle: our test transponder on EUTELSAT SEASAT at 36° east with a symbolrate of 2.668 Ms/sec. was handled effortlessly.

To top it all off, Topfield provided this new receiver with a number of extra goodies including a DivX and an MP3



Main Menu |



EPG |



Channel List |



Channel Scan and SCPC Reception |



LAN Settings |



DivX Player |

player. It was no problem at all to use this box as an MP3 jukebox. Using the integrated DiVX player was a little more involved; to use it you first had to copy the recording from an external device to the receiver's hard drive via the USB 2.0 interface. Although this was taken care of very quickly, it still would have been nicer if the receiver could directly access the external device or if the DiVX files could have been copied to the receiver via the network interface.

images to our Samsung Full HD LCD TV and we were impressed each time. It was not only the hardly-noticeable delay when switching between SD and HD channels, but also the excellent SD picture quality that almost makes you forget that it's not a high-resolution image. Naturally, this only counts for certain SD transmissions; even the TF7700 HDPVR can't perform miracles with a data rate of 1.5 Mb/s.

Of course, its fullest capabilities could be seen with HD content. Many visitors to the test center stood in awe of its picture sharpness, precise detail, color depth and brilliance.

## Picture Quality

The TF7700 HDPVR had to also supply a variety of test

## Expert Opinion

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**The TF7700 HDPVR is one of the first fully capable twin HDPVR receivers and yet still offers proven technology with an operational concept that is logically thought out and clearly arranged. It is absolutely family and living room friendly and should be part of any household that has an LCD or plasma TV.**



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**The available channel memory could stand for some improvement**

## TECHNIC

### DATA

Manufacturer	Topfield, Seongnam/Korea
Fax	+82-31-7082607
E-Mail	inquiry@topfield.co.kr
Model	TF7700 HDPVR
Function	Digital DVB-S, DVB-S2 HDPVR Receiver with Ethernet Connection
Channel Memory	5000
SCPC compatible	yes (> 2Ms/s)
USALS	yes
DiSEqC	1.0 / 1.1 / 1.2 / 1.3
Scart Connectors	2
Audio/Video Outputs	3 x RCA + 3x RCA YUV
UHF Modulator	no
S-Video	yes
Component Output	yes
HDMI Connection	yes
Programmable 0/12 Volt	no
Digital Audio Output	yes
LAN	yes
EPG	yes
C/Ku-Band compatible	yes
Power Supply	95-250 VAC, 50/60 Hz
Power Consumption	max. 60W, Stand-by 9W