

TechnoTrend S2-3650CI

Handy HDTV-CI Receiver for Your PC



The German company

TechnoTrend has for some time now been working on HDTV solutions for your PC or laptop. Since many PC's have problems with available card slots, TechnoTrend decided to design an external box that is easily connected to your PC or laptop through the USB 2.0 interface.

Incorporating a USB 2.0 interface was not an arbitrary choice; this type of connection has established itself as a standard that can be found on most modern PCs and laptops today. There's also a nice little side-effect: thanks to the computing power that comes with a PC, TechnoTrend can offer its little HDTV receiver box for an unbeatable price.

On the front side of the S2-3650CI box that is only 15x10x3 cm in size can be found a CI module slot for reception of any PayTV form. In addition to

checking out Irdeto, Alphacrypt, Conax and Viaccess modules, we also confirmed that a Cryptoworks module was just as easily recognized. PayTV reception is therefore not a problem at all.

On the back can be found an IF input, a USB connection as well as a connection for the external 12V power supply.

The included remote control sits nicely in your hand although the buttons themselves are rather small; unless you have smaller fingers, pressing two buttons at the same time is a

definite possibility. The included 48-page user manual provides detailed instructions on how to use their own "TechnoTrend Media Center" software.

Thanks to the USB connection, installation is a piece of cake. We also appreciated the overall mechanical quality of the box; no plastic parts were used. This left us with a very positive impression.

Everyday Use

The installation of the S2-3650CI box and its accompanying software is plug&play compatible. After connecting the box to a PC, the hardware is automatically recognized by Windows at which point it asks for the driver CD.

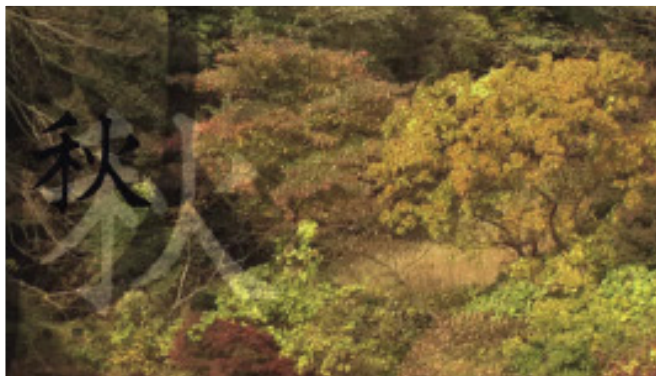
Once installed, the only remaining step is to set up the "TechnoTrend Media Center". It isn't even necessary to restart the PC; the box can be used immediately. We also had no trouble setting up this box on a 32-bit Windows Vista machine.

Some extra points were awarded here.

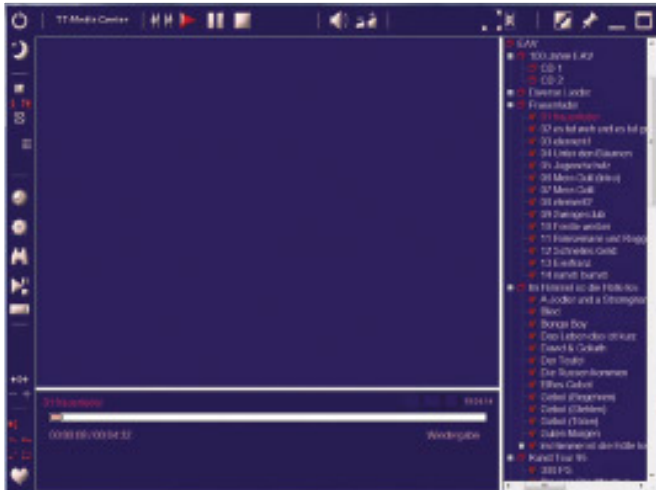
TechnoTrend recommends using an Intel Pentium 733 MHz PC for normal DVB-S. For DVB-S2 it should be at least a 3.4 GHz Pentium 4 or AMD 3500+/Dualcore along with a powerful graphics card such as the ATI X1800/X1900 or NVidia 6600GT/7600GT. The PC itself must also be operating under Windows XP or Vista.

The included software is divided into two sections: the TechnoTrend Media Center software for TV reception and a tool for accessing data services such as Internet via satellite. The Media Center comes preprogrammed with a nearly complete channel list from the popular European ASTRA 19.2° east orbital position. The entire channel list is sorted by provider making it easy to find the channel you want.

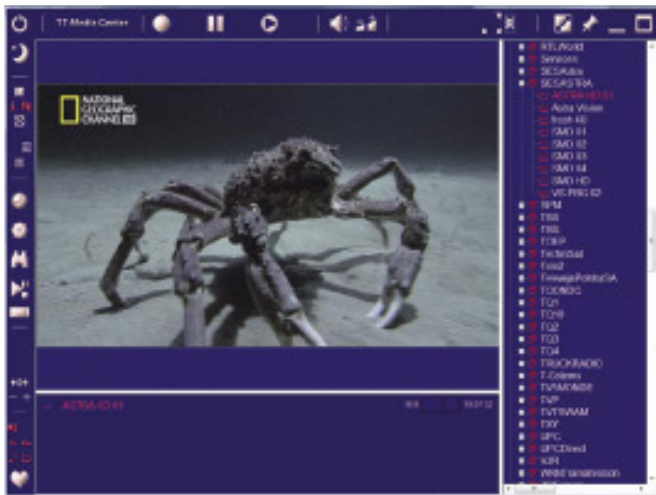
If you want to receive other satellite besides ASTRA, this can be handled via the Channel Search menu. More than 90



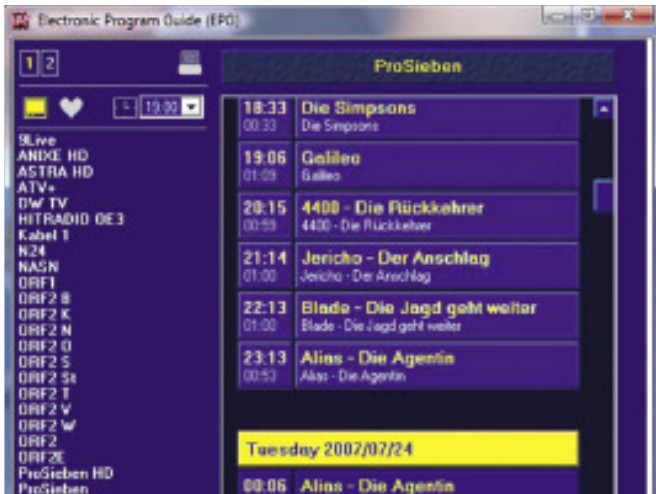
HDTV via ASTRA 19.2° east as an example |



The Media Center as a Jukebox – MP3 playback!



HDTV via ASTRA 19.2° east in a window!



EPG!



European, Asian and American satellites are preprogrammed with up-to-date data; this helps to make channel scanning fun again. It is also just as easy to expand or edit the transponder data.

Even every possible local oscillator frequency (LOF) is freely selectable.

In addition to a manual transponder scan, an entire orbital position can be scanned automatically. An 80-transponder satellite required about nine minutes for this task to be completed.

DiSEqC 1.0 is available for the control of up to four LNBs. Unfortunately, DiSEqC 1.1 for the control of up to 16 LNBs is currently not supported. At this point it should be mentioned that an unlimited number of channels can be stored and thanks to its easy-to-understand presentation and the Favorites lists, you should never lose track of what you have.

The "main panel" of the Media Center is divided into three sections. Thanks to the preprogrammed channel list, the user can jump right into TV viewing; the first channel doesn't need any more than two seconds to appear on the screen.

The channel switching time is actually quite good considering this is all happening through a PC. Switching between channels on the same transponder is taken care of in just about one second; between two different transponders, the software needs about two seconds. EPG data can also be displayed as long as this information is made available by the provider. Information on current and upcoming programs is displayed in a window near the bottom of the screen.

The EPG in the S2-3650CI box might make some owners of standard set to boxes green with envy. The software is able to read in all of the EPG data only a few seconds after switching to a new channel. The user can then take this data, including expanded EPG data, and arrange it in a more easy-to-read fashion with just the push of a button.

A Channel Magazine function

is also offered. In this mode the software displays the EPG data of all previously defined channels next to each other in an organized way so that, for example, with a single glance you can see what your favorite channels have in store for you in the evening.

If you're sitting comfortably watching TV and the telephone rings or someone comes knocking at your door, the TimeShift function lets you pause the program you are watching and pick it up again at a later time.

With the help of the Timer function, numerous programs can be marked for recording; weekly and daily timers are supported. Naturally, for recordings to take place the PC must be turned on; at the end of a recording, the Media Center will see to it that the PC is turned off. Of course a currently running program can be recorded at any time on the PC's hard drive.

We were quite pleased with the integrated teletext function. In only a few seconds it managed to download all of the available pages making it possible to access any of those pages or sub-pages in those same few seconds. These pages can also be saved in HTML format on your PC.

The TechnoTrend manufactured tuner is quite sensitive and has no problems handling small bandwidth SCPC signals. Our 1.6 Ms/sec test transponder was no obstacle for the S2-3650CI box; high symbol rates also presented no difficulties. In addition to QPSK modulation (necessary for DVB), the box and software also supports DVB-S2. Reception of the constantly increasing number of HDTV programs in MPEG4 using the H264 standard is no longer a problem.

After checking out all of the basic functions, we naturally wanted to test its HDTV capabilities. It didn't take long at all to find the FTA channels on ASTRA at 19.2° east and in just about two seconds we were enjoying the first channel in top-notch picture quality.

Only in a direct comparison could we see what the difference in HDTV quality meant. While

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SDTV channels hardly put any kind of load on the CPU of our Intel Core2 1.86 GHz machine, HDTV reception required much more CPU power. Our machine was able to handle this without any problems; there were also no negative effects to be seen on any of the other software programs that were running. It is therefore possible to watch

TV and work on your PC at the same time. Video and audio flowed smoothly with perfect synchronization between the two at all times.

If you happen to have an AC3 or Dolby Digital stereo system linked with your PC, you can naturally also take advantage of superior audio quality in addi-

tion to a super-sharp picture.

Contrary to some DVB-S2 set top boxes, the TechnoTrend Media Center has no trouble handling BBC's Sky Digital transponders on ASTRA 2D at 28.2° east.

In addition to TV reception, the Media Center can also play back videos from the PC in all the different formats. Thanks to the integrated picture-in-picture function, the live TV picture can be displayed at the same time in a small window or vice-versa, the live picture in a large window and the video playback in a small window.

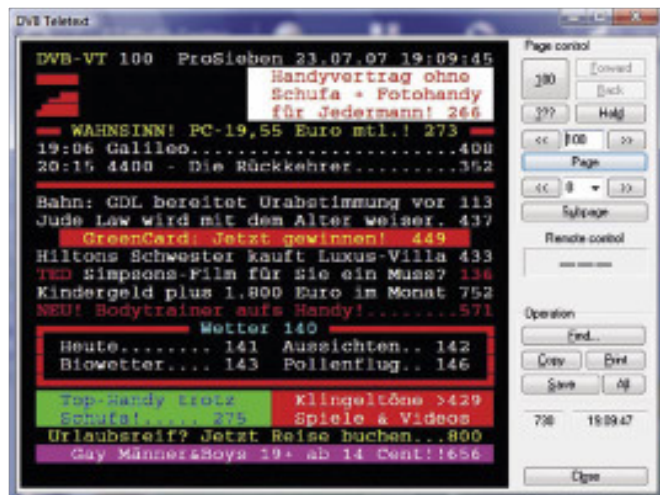
Annoying commercials can be skipped over. Not only that, the software can also act as a jukebox and play back any music data format. This is all nicely integrated into the channel list.

Through its own menu page in the Media Center software it

is possible to program all of the buttons on the included remote control to whatever you need if the default settings happen to not be good enough. In addition to TechnoTrend's Media Center software, a variety of other programs are also made available that can be used with this box.

And don't worry; if you're one of those that simply can't do without ProgDVB, you can relax, this box also works nicely with this software. In the latest version of ProgDVB, DVB-S2 support was also implemented; the Media Center as tuning aid in the background is now a thing of the past.

A special note for DXer's and hobbyists: the TechnoTrend S2-3650CI box can, like many other PC DVB-S solutions, also handle MPEG 4:2:2 assuming of course that the proper Codec is installed.



Teletext |



TV Guide |



Picture in Picture |

Expert conclusion

The TechnoTrend S2-3650CI is a true alternative to an HDTV set top box. You get quite a bit of power for not too much money. The included software functioned perfectly.

An expansion of the DiSEqC protocol to 1.1 would be nice to have.



Thomas Haring
TELE-satellite
Test Center
Austria

TECHNIC DATA

Distributor	DVB-Shop, Deutschland
Tel.	+49-34954/31960
Fax	+49-34954/49233
Website	www.dvbshop.net
E-Mail	webmaster@dvbshop.net
Model	TechnoTrend S2-3650CI
Function	USB box for reception of DVB and DVB-S2 in SDTV/HDTV
Channel Memory	unlimited
Satellites	93
Symbolrate	4-45 Ms/sec.
SCPC Compatible	yes (starting at 1.6 Ms/sec. in our test)
USALS	no
DiSEqC	1.0
EPG	yes
C/Ku-Band Compatible:	yes