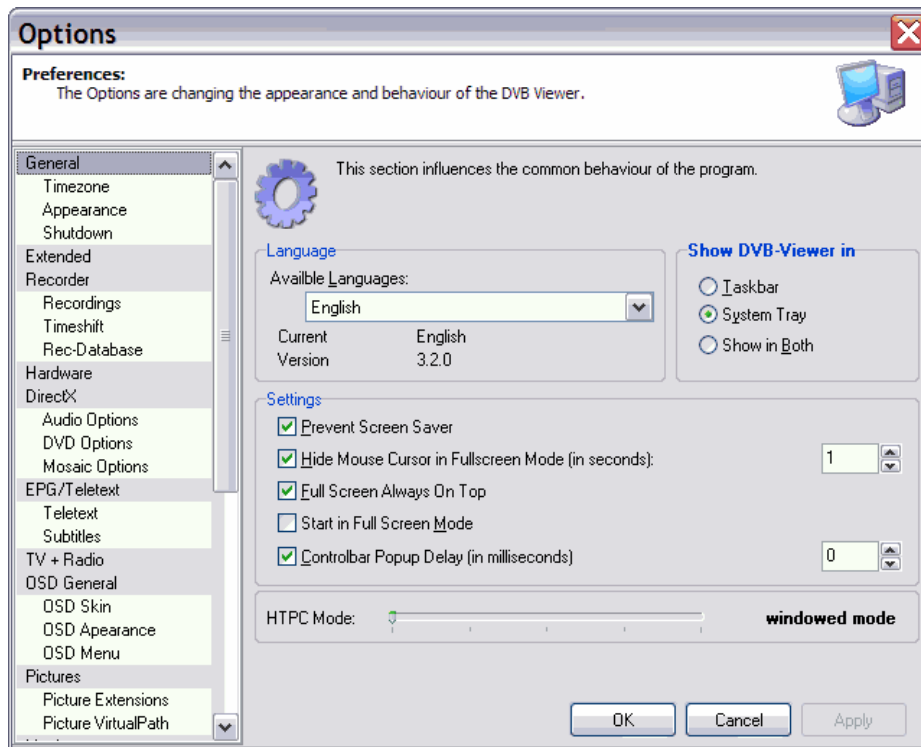




7. The Options Window

The DVBViewer Pro offers multiple possibilities for changing the appearance and adjusting the functionality.



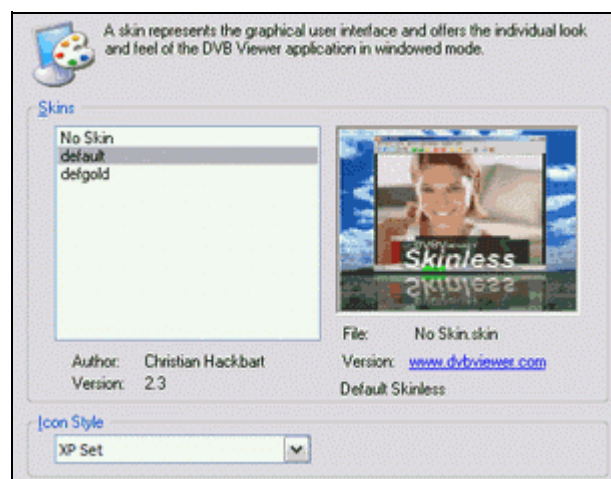
General Options

Language: Here you can select the language of the user interface.

Skin: You can set different skins for the DVBViewer.

Icon style: You can choose different the icon-styles for the DVBViewer toolbar:

- **9x set:** The toolbar appears in the classical style of Windows 98
- **XP set:** The toolbar appears in the modern style of Windows XP.
- **DVBViewer set No. 1/2:** These are special DVBViewer-style icons. Sets 1 and 2 differ by colour.



Prevent Screensaver: Prevents all screen saver activities and switching to the stand by/hibernation mode while the DVBCViewer is running.

Hide mouse cursor in fullscreen mode: Renders the mouse cursor invisible in full-screen mode after the set time.

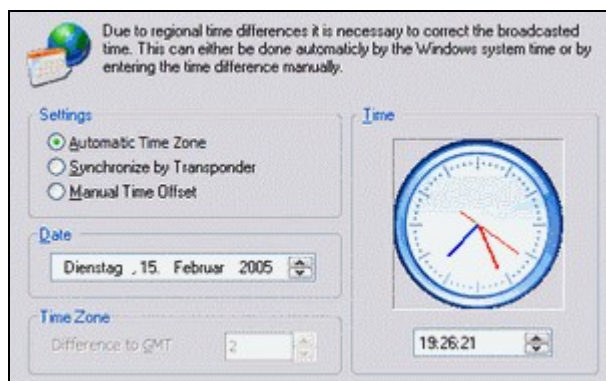
Fullscreen always on top: Enabled, all windows and menu bars will be in the background, thus you can only see the TV picture.

Start in fullscreen mode: The DVBCViewer opens in fullscreen mode, not window mode.

Controlbar popup delay in ms: Here you can set a delay for the controlbar popup, that means when you move the mouse-pointer to the bottom of the display area the controlbar will not pop up at once but after the set delay.

Show DVBCViewer in: Determines how Windows handles the running DVBCViewer. It can be shown in the taskbar, in the system tray, or in both. In general **System Tray only** is recommendable, in order to save space in the taskbar, and to enable the context menu via right-clicking the DVBCViewer tray icon.

HTPC-Mode changes the behaviour of the DVBCViewer. Window mode is the standard setting for normal mouse control, HTPC mode starts in full-screen/OSD mode and requires a remote control.



Automatic Timezone automatically adjusts summer and winter time.

Synchronize by transponder uses the transponder information for synchronization.

Manual Time offset speaks for itself.

Shutdown: Here you can set different actions to be performed after closing the DVBCViewer. You can also choose to prevent shutdown in case a recording is due within a set time.

Extended Options

Priority: Here you can set the priority for the DVBViewer's process in the system. To avoid problems it should at least be set to **higher than normal**, otherwise you may encounter lost frames in your recordings because of extensive CPU usage of other programs. **But please note** that especially highest priority may cause lost data, if you call time-consuming DVBViewer functions while recording (e.g. importing a channel list).

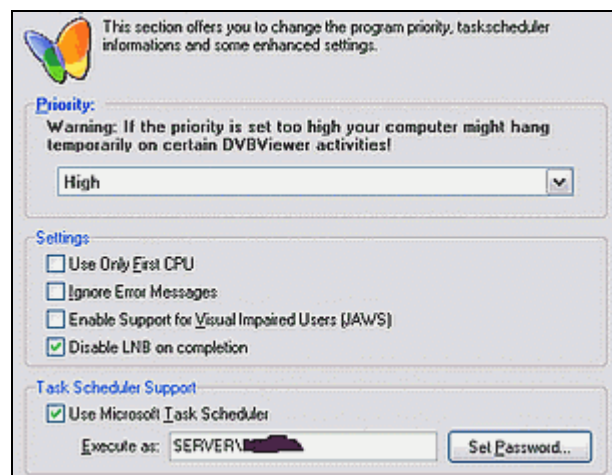
Use only first CPU enabled uses only one CPU in SMP/Hyperthreading environments. Since there may be issues with the TechniSat driver you should always enable this option.

Ignore error messages: Enabled, error messages are suppressed, which may occur when switching to an encrypted channel or one, that can't be received at all.

Support for visually impaired users (JAWS): When enabled the TV picture will be replaced by a textfield.

When JAWS is installed this text and videotext will be read aloud.

Disable LNB on completion switches off the LNB when closing the DVBViewer.



Use Microsoft scheduler: Videorecorder programmings are sent to the scheduler for using standby or hibernation mode between recordings. The computer will restart from hibernation and standby mode then.

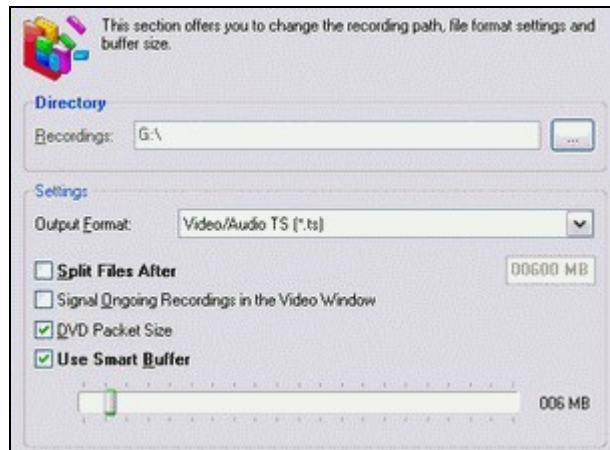
For using this function you must download the **Scheduler.exe** from the [Service Center](#) and copy the file(s) to the DVBViewer's main folder.

For further information please refer to the readme-documents bundled with the Scheduler-plugin.

Recording

This tabsheet contains important specifications for video and audio recordings.

Directory: Lets you set the folder to place the recordings by either entering the complete path or just clicking the folder symbol to open a window for a more convenient folder selection. By default the subfolder **capture** in the DVB-Viewer folder is used.



Recording format: The DVBViewer allows for recording in different file formats, which can be selected in this list:

- **MPEG 2 PS (.mpg):** This is the standard setting. Your recordings are saved in the MPEG2 **program stream** format. This format can be played back with any media player. Usually you can take such a file for creating video DVD or S-VCD without further processing. This is also known as multiplexed recording. You can choose between the file extensions .mpg or .m2p.
- **MPEG 2 PES (.pva):** This format is a relict that shouldn't be used any longer. There are certain restrictions with playback, for example seeking (jumping to different positions). It is also necessary to install a **PVA demultiplexer** which is able to separate the combined video and audio stream of this type of file. Such a filter is available from [Radlight](#).
- **MPEG 2 TS (*.ts):** This format records the original satellite data in the transport stream format. This one is most advisable for further editing and error correction.
- **Audio (*.mp2):** This selection only records the audio stream of a broadcast.

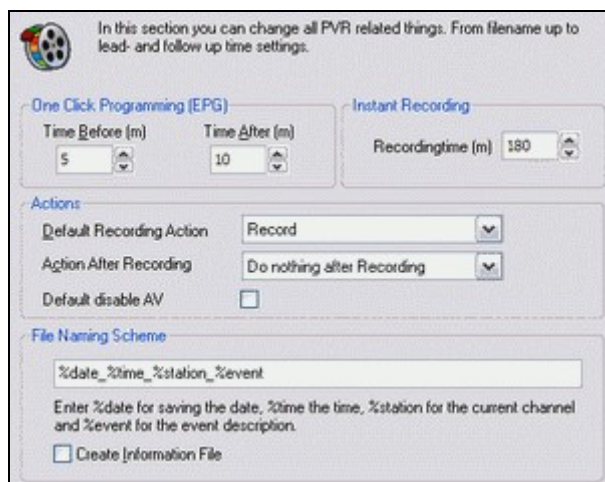
Split Files after: Enabled, the DVBViewer splits the recording automatically in portions of a specified size in order to cope with the limitations of the FAT32 file system (particularly under Windows 98/ME) or to prepare the files for creating S-VCDs. Enter the desired maximum size in the field **after xxx mbytes**.

Signal ongoing recordings in the video window: When enabled, actual recording is indicated by a flashing red point overlayed to the television picture (the indicator is not recorded!).

DVD packet size creates always 2048 bytes packets, or more precisely, lets the recorder align the data packets to 2048 byte borders by filling the remaining space with stuffing bytes. This may be suitable for stand-alone DVD players, but increases the file size.

Use Smart Buffer: Activated the A/V-data is buffered before being written to disk. The maximum buffer size is 10% of the available RAM.

TS format options lets you choose which additional information will be recording when using transport stream format, for example teletext, subtitles or multiple audio channels.



The screenshot shows a software window titled "In this section you can change all PVR related things: From filename up to lead- and follow up time settings." It contains two main sections: "One Click Programming (EPG)" and "Instant Recording".

One Click Programming (EPG):

- Time Before (m):** A spinner box set to 5.
- Time After (m):** A spinner box set to 10.
- Actions:**
 - Default Recording Action:** A dropdown menu set to "Record".
 - Action After Recording:** A dropdown menu set to "Do nothing after Recording".
 - Default disable AV:** An unchecked checkbox.
- File Naming Scheme:** A text box containing the format string "%date_%time_%station_%event". Below it, a note says: "Enter %date for saving the date, %time the time, %station for the current channel and %event for the event description." There is also an unchecked checkbox labeled "Create Information File".

Instant Recording:

- Recordingtime (m):** A spinner box set to 180.

Time before/after: This options adds time in minutes to the entries in the recorder list when programming via the EPG. Often the EPG information is not 100 percent correct or special events delay the programmed broadcast. Of course you can correct the settings one by one in the recorder list but this is a global setting.

You can also set **default actions for recordings** (i. e. only tune a channel) and after recordings (shut down for example).

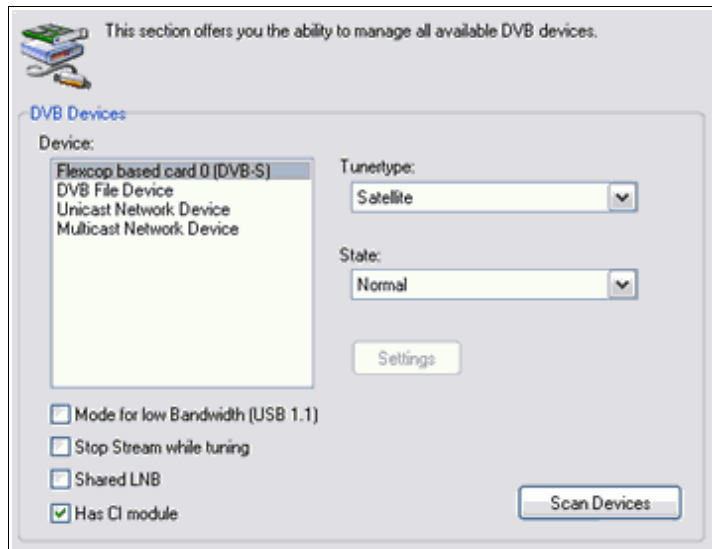
At **instant recording** the default time for manual recordings can be set.

Hardware

Device: For normal TV-operation you need to select your hardware. In case of Technisat SS2/AS2/CS2 it must be set to "Flexcop based cards".

In case you don't know your hardware you can **scan for the device**.

Unicast/multicast network device is the setting for network client operation of the DVBCViewer.



When using a USB box with USB 1.1 interface you should enable the **mode for low bandwidth** since USB 1.1 is limited to 11 mbit/second which may not be sufficient for multichannel operations or HDTV.

CI module must be enabled for payTV.

Unicast/multicast network device is the setting for network client operation of the DVBCViewer.

DirectX Options

Video Output: Usually you should use the overlay mixer. Encountering problems, you may choose one of the others:

The following modes are supported:

- **Overlay Mixer:** The standard setting. Overlay is the fastest mode.
- **Unchanged:** The output mode is chosen by the DirectShow System. Therefore some functions might not work (e.g. adjusting brightness or contrast), caused by the missing overlay mixer.

- **VMR7 Video Mixing Renderer:** This output mode enables an excellent semi-transparent OSD (On Screen Display), compared to the simulation of semi-transparency in other modes, because the OSD is actually mixed into the television picture.

The degree of transparency can be adjusted with the **VMR transparency** sliding control. The adjustments on the next tabsheet (EPG options: covering, half and full transparency) are ineffectual in this mode. Screenshots are possible, but the adjustment of brightness, contrast etc. may not work.

- **VMR9 Video Mixing Renderer:** Same as above, but it uses the renderer provided by DirectX 9 with even higher quality. DirectX 9 must be installed to get it working, though.

MPEG Audio decoder and MPEG video decoder: Here you can select the audio and video decoder. You may try different decoders to compare the output quality or to avoid problems which are caused by a certain video/audio decoder. For example the Nero audio decoder is known for causing problems.

Audio and video format detection: You may try to change these two options in case of problems with either video or audio playback, for example problems with non D1 broadcasts (for example 480 * 576, 544 * 576...) and Moonlight/Elecard decoders. Generally enabling these options increases the zapping delay since tuning takes a bit longer. By default you should disable these functions.

Use DVBSource for MPEG files: Uses a proprietary source- and demultiplexing filter so that there is no need for the inferior MS demultiplexing filter or 3rd party products. Should be enabled.

Post Processor lets you choose a special filter for enhancing the picture quality. Attention: This needs lots of CPU power.

Output device: Here you can select the output device for audio playback. Usually this is only of importance, if there is more than one sound card in your PC (e.g. one on the main board and an additional one). If you possess a single sound card, the options refer to different ways of accessing the device. Should be set to default DirectSound device.

Audio options lets you choose different output devices.

DVD Options: For DVD playback you can select audio and video decoders different from those for live-tv. You can also set the default subtitle and audio language.

Mosaic Options: Here you can set a video decoder for the mosaic preview, the arrangement of the channels and some other settings concerning font and colour.

EPG/Teletext Options

On this tabsheet the teletext and EPG options are located.

Do not receive EPG-data: Processing the EPG data can be very time-consuming on some channels. If this causes problems in conjunction with a slow CPU, the display may become jerky or the sound may get distorted, processing the EPG data can be switched off by using this option, although no EPG will be available then.

Preferred language lets you choose your desired language.

Auto-popup Mini-EPG in

seconds: Enabled, the DVBCViewer automatically displays some EPG information about the current broadcast after tuning a channel. The input field on the right determines how many seconds the EPG info remains visible.

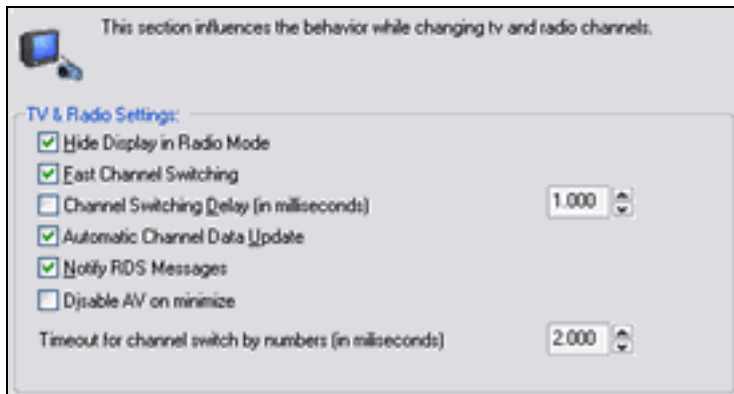
Persistent EPG data: Enabled, all collected EPG data is saved to the hard disk, when the DVBCViewer is shut down (EPG.dat in the DVBCViewer folder), so that the data is available after the next program start. You can also choose to compress the data.

Furthermore you can set the appearance of the teletext (colours, fonts) and subtitles including the language.



TV & Radio

Hide display in radio mode. Enabled, the DVBViewer's display window shrinks



when tuning a radio-channel, so that you will only see the menu, icon and status bar. The OSD can't be accessed while being in radio mode.

Channel switching delay: Enable and set a delay in milliseconds. This is pretty useful if

you are frequently using the **Channel plus/minus** function (via mouse or keyboard). The delay enables switching several channels forward/backward without tuning them, while the channel names are displayed continuously in the DVBViewer-window.

Fast Channel switching: Enabled, switching to another channel is performed much faster. However there are issues with certain MPEG2 decoders, for example Elecard. Particularly changes of the video resolution or audio mode (e.g. from stereo to a mono signal, and thus to a lower audio bit rate) sometimes lead to distortions (Mickey Mouse voices, the picture is compressed to 2/3 of the width). These can be fixed easily by using **Rebuild Graph** in the view menu. If the **Fast Channelswitch** option is not checked, the graph will be automatically rebuilt when switching over to another channel.

Automatic channel data update dynamically updates the PIDs of the current channel, useful and necessary for certain regional broadcasts.



radio mode

Disable AV on minimize stops the rendering when the DVBViewer is minimized so that the CPU and GPU stress is minimized, too.

Notify RDS messages

Network Streaming

As mentioned above you can watch TV over a **LAN** (local area network). There are two streaming solutions:

Unicast Streaming and Multicast Streaming

- **TCP (Transmission Control Protocol)**, this is one of the main protocols in TCP/IP networks. Whereas the IP protocol deals only with packets, TCP enables two hosts to establish a connection and exchange streams of data. TCP guarantees delivery of data and also guarantees that packets will be delivered in the same order in which they were sent.)
- **UDP (User Datagram Protocol)**. UDP is designed for applications where you don't need to put sequences of datagrams together. It fits into the system much like TCP. There is a UDP header. The network software puts the UDP header on the front of your data, just as it would put a TCP header on the front of your data. Then UDP sends the data to IP, which adds the IP header, putting UDP's protocol number in the protocol field instead of TCP's protocol number. However UDP doesn't do as much as TCP does. It doesn't split data into multiple datagrams. It doesn't keep track of what it has sent so it can resend if necessary. About all that UDP provides is port numbers, so that several programs can use UDP at once.

There are some prerequisites: First, the DVBCViewer must be installed on the **server** and should be installed on the **client(s)**. Second, on each **client** an **MPEG2 video and MPEG audio decoder** must be installed. Third, your **firewall** must be set up correctly.

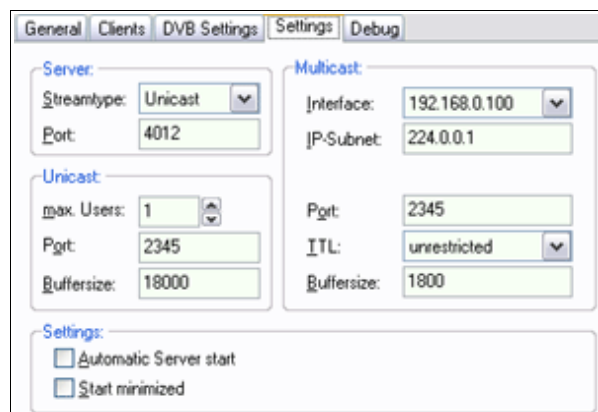
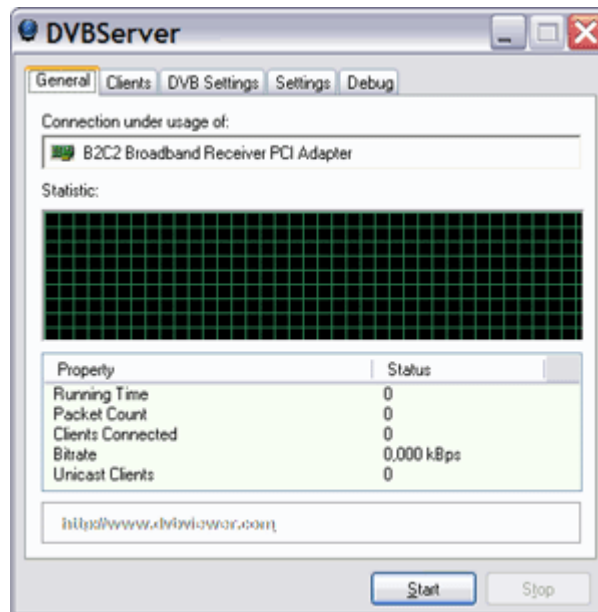
And, most important: A functioning network must be installed. Both the server and the client must be equipped with NICs (network interface cards or onboard solutions). They must be connected with at least CAT5 cabling or W-LAN 802.11g.

Use the following settings for the Microsoft network:

Server:

- The **TV card connection**: No protocol is necessary here. In case you want to assign a static IP to the SS2/AS2/CS2 you should use the following IP-address: 192.168.238.238, subnet-mask: 255.255.0.0.

- The **LAN connection**: The following items must be installed: The client for Microsoft networks, the file and printer sharing for Microsoft networks (not necessarily, but without it a network is quite useless), and the TCP/IP internet protocol. Here you should use a static IP-address, for example: 192.170.0.1, subnet-mask: 255.255.0.0.
- Now you must set up the DVB Server as follows:



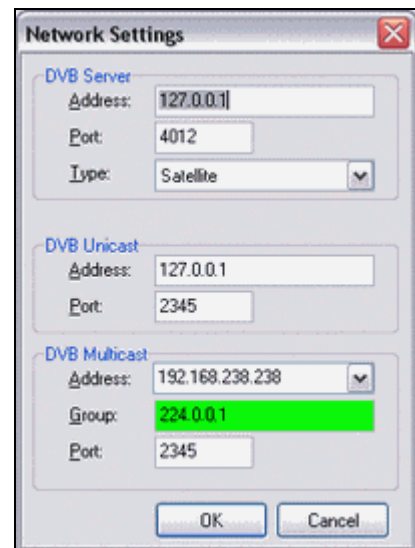
Streamtype: Select Unicast or Multicast. Multicast causes more network traffic. Unicast streaming should be used with W-LAN.

Interface: As interface you must select the network that connects the server with the client(s). Maybe you must select different values for **TTL** and **buffer** size, but that depends on your system.

IP-Subnet: You should use the default value.

Client:

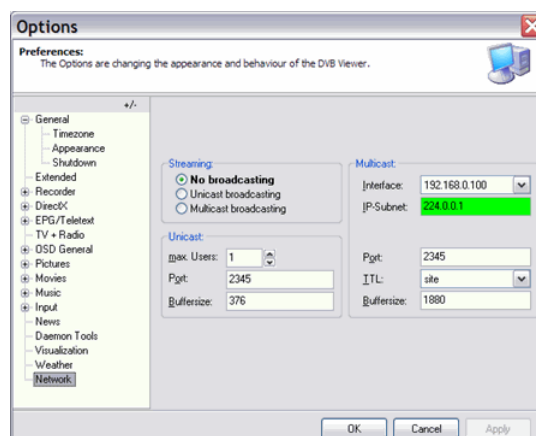
- In the DVBViewer you must adjust the settings in the options dialogue (DirectX) and set **multicast or unicast network device** as current device:
- Put in the IP-address of the server PC in both forms.
- As DVB multicast you must select the address of the network that connects the server with the client(s).
- The ports setting must correspond with the DVBServer.



When automatically obtaining the IP-address you can use the command "IPconfig.exe /all" (without quotation marks) in a DOS-box to determine the addresses. On both the server and the client you must set the **same workgroup**.

On the server you must only start the **DVB Server** and click on start. Then open the DVBViewer on the client. Now you can watch TV over LAN, you can switch all channels.

There is another way of streaming only the current channel without using the DVB-Server. In the options - network dialogue you find an input mask similar to the DVB-server. **Attention:** This works just with the current channel, that means you cannot tune another channel on the client!

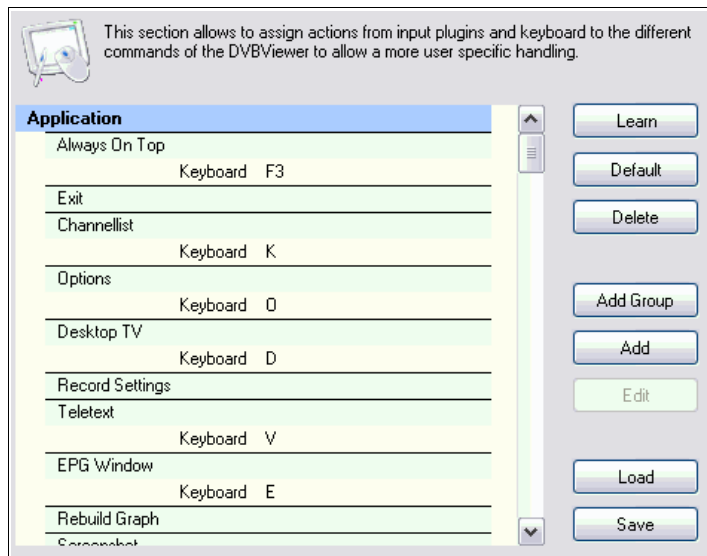


Input - Keyboard and Remote Control

You can assign every function of the DVBCViewer to a key (keyboard or remote control). Additionally you may also choose the function of the mouse wheel.

Use WinLirc remote control support must be enabled for using a remote at **input plugins**..

Keyboard: The left side of the list presents the available DVBCViewer functions.



The right column contains the assigned keys. In order to modify an assignment, click on **learn** and press the new button.

To **remove** an assignment click on **delete**.

Please note: Some combinations already used by Windows should not be used, since that may lead to problems, e.g. [Ctrl]+[Alt]+[Del].

Mouse

There is a list of functions which can be assigned to the mouse wheel. You can also modify the behaviour of the middle mouse button.

News, Weather, Daemon Tools

In HTPC/OSD mode you can read newsfeeds that you added beforehand (internet connection necessary).

For a weather forecast you must select the desired city (internet connection necessary).

The integration of Daemon Tools enables the use of virtual drives. The software can be downloaded at <http://www.daemon-tools.cc/dtcc/announcements.php>.