

DVBViewer TERRATEC Edition

Manual



Version 1.1 - January 2014

DVBViewer TERRATEC Edition Manual

1. Introduction to DVBViewer	3
2. Installing DVBViewer and starting for the first time	6
3. The program interface	9
4. Settings	11
5. EPG	13
6. Teletext.	14
7. Scanner / Channel scan.	15
General information	15
A station search	17
8. Recording / Playing and Timeshift function	17
Video recording	19
Video recorder programming	20
Timeshift.	21
9. Display settings	22
10. Channel list	23
Delete folder or channel.	23
Add channel to favourites.	24
Sort channel list	24
11. Further information on installing DVBViewer	25
DVBViewer in restricted user accounts	26

1. Introduction to DVBCViewer

This chapter introduces the program and its most important features and describes the software and hardware requirements.

About these instructions:

There are two sections to these instructions. The first section helps you get started. How do I install the software and what do I have to do to watch television. The second section should also serve the following purposes:

- As a **Tutorial** for new users wishing to get to know DVBCViewer in more detail.
- As a **Guide** for anyone encountering problems while using DVBCViewer.
- As a **Reference Guide** for advanced users.

What can DVBCViewer do?

In short, DVBCViewer is a modern multimedia application which allows digital television and radio reception via satellite, cable and aerial to a PC. Here is an overview of the most important features:

- Digital DVD-quality flicker-free picture.
- Hard drive recorder for recording and archiving television and radio programmes with no loss of quality.
- Handy teletext function with page memory navigation, with no waiting times when you click on page numbers, just like the internet.
- EPG – an electronic programme guide providing extensive information on television and radio programmes, convenient programming of timer recordings and an option to save as an HTML listings magazine.
- Playing any multimedia files, providing the decoders required are installed on the system

DVBViewer TERRATEC Edition Manual

What are the requirements for DVBViewer?

As this software gives you access to digital television, you need an appropriate receiver unit which allows you to receive digital signals such as DVB-T, DVB-S or cable.

Your PC needs to be suitable for unrestricted video streaming in terms of both hardware and software. In concrete terms, this means:

- 2.0 GHz Intel or AMD CPU / Multi-core for HDTV
- 1 GB RAM / 2 GB for HDTV
- Graphics card with hardware acceleration for HDTV
- Windows XP SP3 (32 bit) / Windows Vista SP2 / Windows 7 SP1 / Windows 8

The requirements are slightly higher than for standard applications such as word processing or file management. The playback of television and video could be too much for PCs which are a few years old - a critical evaluation of performance specifications is required. PCs bought since around 2008 should, in general, be up to the requirements.

A little bit trickier ...

To avoid disappointment, we should also make clear what DVBViewer cannot do without further intervention.

The ability to record videos to the hard drive often throws up more detailed requirements: cutting out adverts, recording the videos to CD or DVD, playing them in a DVD player, etc. Although these are all possible, they generally require additional software tools.

For technical reasons, DVBViewer cannot convert the video data into a SVCD (Super-Video CD) or DVD-compatible format during live recording. This kind of "realtime conversion" requires computing capacities which are beyond even the most modern of PCs. DVBViewer therefore records the data exactly as broadcast.

You should also know that post-editing video on a PC is not as easy as many believe - especially if using a battery of freeware and shareware tools. Experience shows that anyone expecting simple, immediate Plug & Play solutions will end up frustrated. As a general rule, you need to try out various things, learn the skills and research online ... if you are prepared to do all this, you will doubtlessly be able to achieve what you want.

The DVBViewer Forum can offer useful advice:

<http://www.dvbviewer.com/forum/>

It allows you to swap tips and ideas with others, learn from the experience of other users, share your own experiences or use the search function to search the knowledge basis which has been built up over time.

2. Installing DVBViewer and starting for the first time

Before starting with the installation of the software, there are two things you need to do.

- Close any programs which are still running, if you are updating DVBViewer it is especially important to close the existing version of DVBViewer.
- If you are using Windows XP, make sure you have administrator rights.

As soon as the installation begins, a Setup Wizard automatically appears to guide you through the installation process. Follow the instructions shown by the wizard.



As you continue, you have the option of clicking on Back to take you back a step or clicking Cancel to cancel the entire installation process.

If there are no error messages, the installation process is complete as soon as you click on the Finish button to confirm the last stage in the last window.

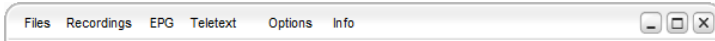
Now check that the device is connected correctly to the USB port and the aerial cable is plugged into the device.

If there are error messages when you first start DVBViewer or there is no picture or sound, check the back section of this manual.

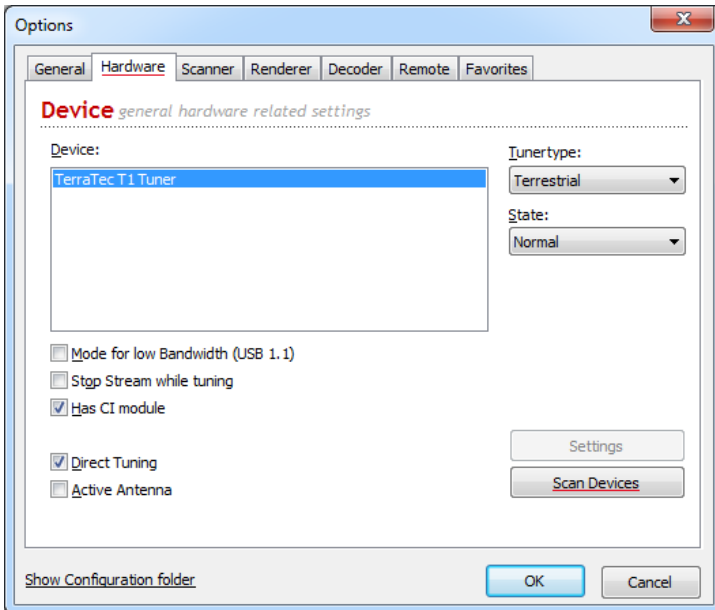
DVBViewer TERRATEC Edition Manual

First startup!

1. Click on the **Settings** button in the top menu bar.

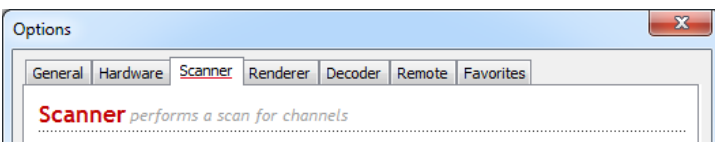


2. Now click on the **Hardware** table and then on the **Scan Devices** button.

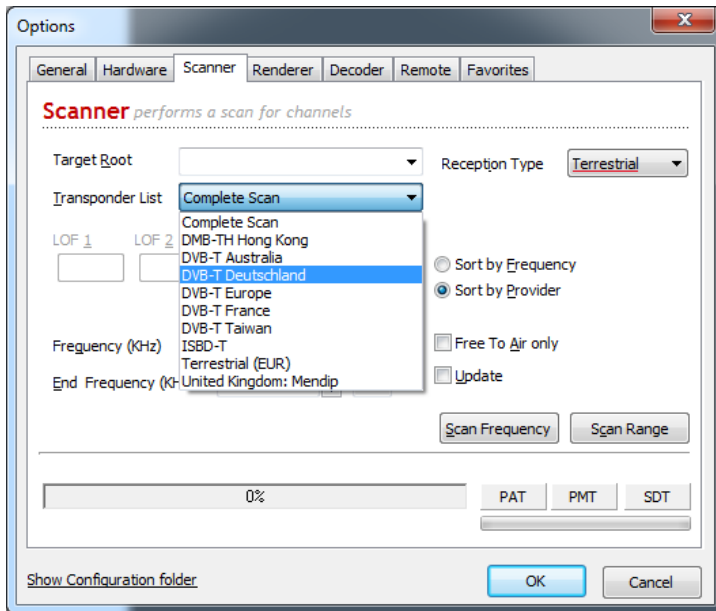


If nothing happens, check the USB stick is properly connected, the PCI card is properly fitted and the drivers are correctly installed. You can find out more about this in the support section of the TERRATEC homepage, for example.

If an entry appears under Device, you can click on OK to close the window. The next stage is the actual channel search, which you can find under Scanner.



3. Click on Scanner to open the channel search window.



Select the "Reception Type" menu option and then the Reception Type you want. A complete scan takes hours, narrowing down to a specific area shortens the waiting time considerably. Then confirm by pressing the Scan Range button. The channel search now begins.

4. Finally, close the window and select a channel.

You can now select a channel and enjoy digital television.

The channel list can now be found on the right-hand side of the display. Your current scan is shown as: "Scan XX.XX.XX".

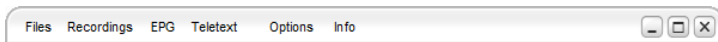
You can also select your favourites from this list or alter the list of channels by dragging and dropping. You can save a favourite by right-clicking on the channel and selecting "Add to Favourites".

DVBViewer TERRATEC Edition Manual

3. The program interface

This chapter describes basic options available in the menu bar below the display area. A tool-tip indicating the meaning of the icons appears if you hover over the icon for a couple of seconds with the mouse pointer.

Top menu bar:



File This function allows you to select audio and video files directly and play them.

Recordings Displays the video recorder window where you can program a recording.

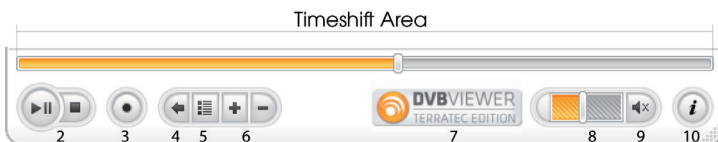
EPG Clicking on this option displays the Electronic Programme Guide.

Teletext This option starts the teletext.

Options Opens the options window.

Info Shows the current software version of the DVBViewer.

Bottom menu bar:

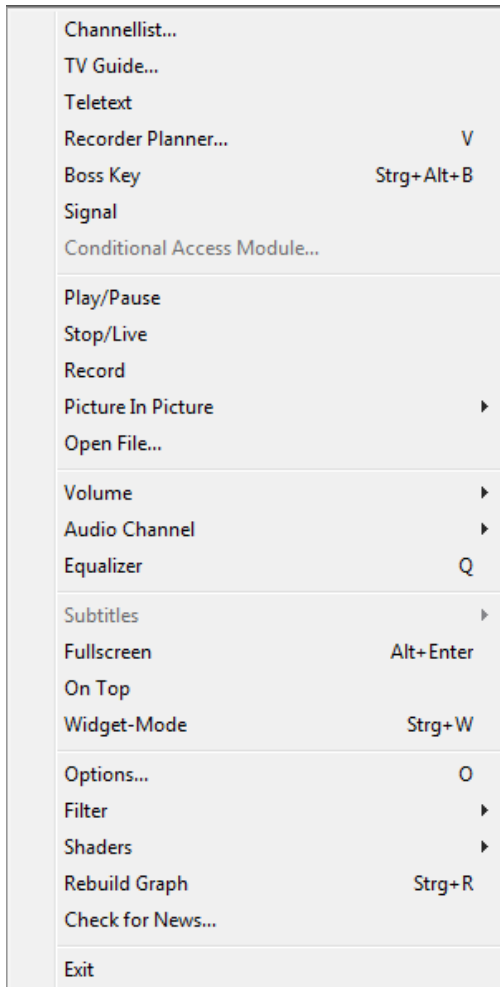


2. Play/Pause/Stop
3. Record
4. Last-viewed channel
5. Channel list
6. Switch channel
7. Opens the TERRATEC website in a browser window
8. Volume control
9. Mute button
10. Mini EPG

The context menu

There are more options in the context menu which appears when you right-click anywhere in the DVBCViewer screen.

More detailed information can be found later on in the manual, although most menu options should be self-explanatory.



DVBViewer TERRATEC Edition Manual

4. Settings

Click on the Settings button in the top menu bar to access the options.

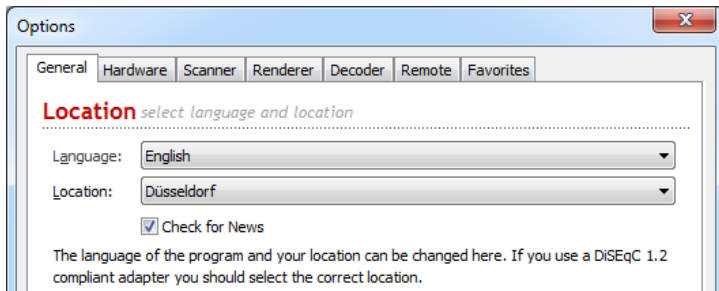
This window shows the general software settings. It contains the following tabs: General, Hardware, Scanner, Renderer, Decoder, Remote and Favorites.

General

You can configure the general program settings in the top half of the window.

Language: Set the language from the drop-down menu.

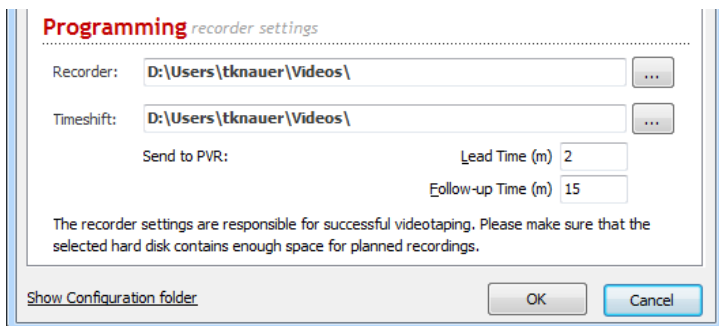
Address: This restricts the search range and speeds up the channel scan process.



The bottom half of the window contains recording settings.

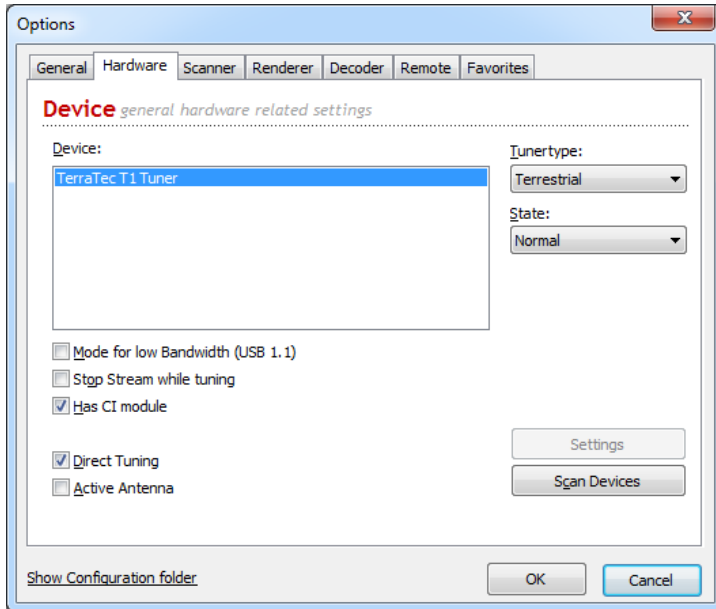
Recorder: Storage location for your recordings, you can edit this by clicking in the box next to it.

Timeshift: Storage location for timeshift buffer, you can edit this by clicking in the box next to it.



Hardware

This tab shows all connected devices and other settings options.



Device: Display of all connected devices, updated by clicking on Scan Devices button.

Tuner type: Select the reception type you are using.

Status: Defines preferences for your connected devices.

You can also adjust the mode for low bandwidth (USB1.1) in order to improve the refresh rate and quality. Activate the Stop Stream while tuning and CI Module options, if available. You can also activate Direct Tuning here.

The other tabs in this window are: Renderer, Decoder and Remote.

You can set the options for audio and video rendering in the Renderer tab. Rendering means the extent to which the digital image and sound information is put together by the PC or notebook. You can select various Renderers from the drop-down menu. Instructions can be found within the tab.

The decoder tab shows you all the decoders installed and also offers the option of adapting each of the individual decoders separately.

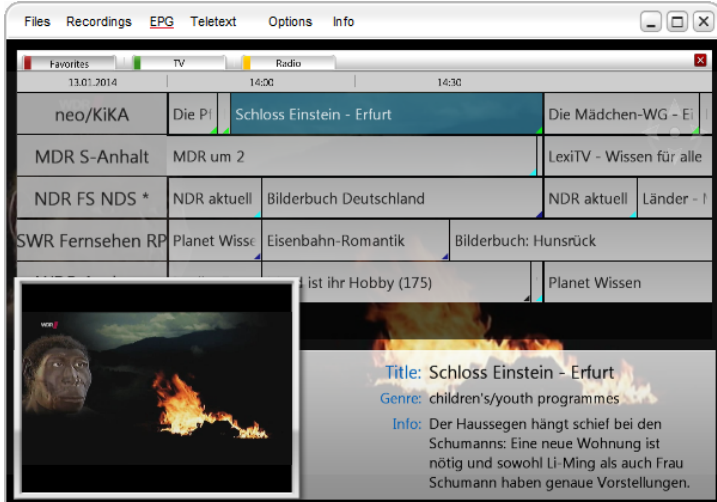
The last tab shows your remote control. This can be a conventional remote control or your keyboard. You can program the individual buttons within this window.

The **Show Configuration folder** field opens up your Windows Explorer and shows all the important DVbViewer files. Only advanced users should make any changes here.

DVBViewer TERRATEC Edition Manual

5. EPG

Clicking on this option displays the Electronic Programme Guide (EPG). It starts with a list of events for the channel currently selected.



6. Teletext

Clicking on Teletext in the top menu bar (also accessible via the context menu) brings up the Teletext window. The following options are available:



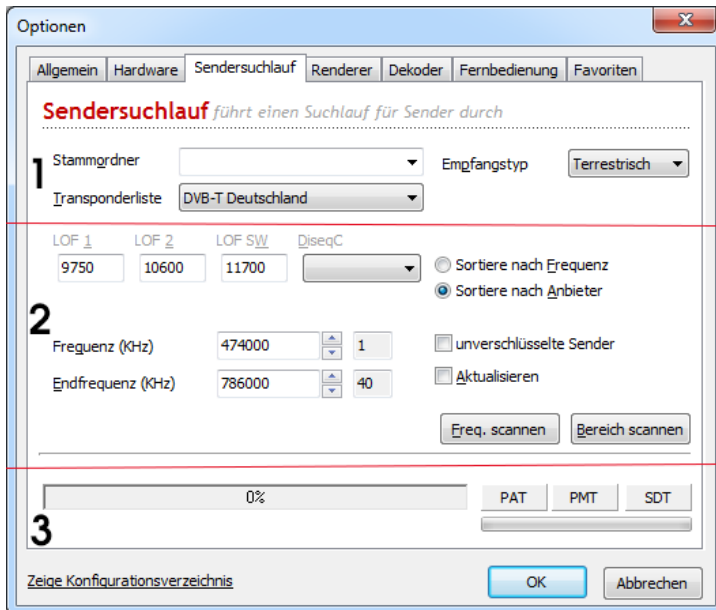
- Selecting a page is particularly easy if a page has already been referenced by teletext: In this case, simply click on the number displayed.

Please note that not all channels provide a teletext service - the icon is hidden if it is not available. It can also take a while before a page has been transmitted and is therefore available. Afterwards, it can be accessed without waiting, as DVBViewer stores pages it has already received in the cache.

DVBViewer TERRATEC Edition Manual

7. Scanner / Channel scan

Before you can enjoy watching digital television, you need to run a channel scan. We mentioned this briefly in Chapter 2. This chapter describes the options in more detail.



General information

The channel scan window has three different areas.

1. Basic settings

Target Root: Define where the search results for your channel scan should appear in your channel list here.

Reception Type: Define which reception types you wish to scan here.

Transponder List: You can select from preset frequency ranges in the transponder list. This accelerates and simplifies the channel scan.

2. Scan range

You can set your own scan range here manually. Various fields are greyed out as a function of the reception type selected earlier. This area of the channel scan window is aimed at advanced users. The following is an explanation of the individual fields:

- The LOF settings (Local Oscillator Frequency, LNB frequency) are best left unchanged.

- DiSEqC generally only needs to be set if your antenna system can receive multiple satellite positions (e.g. Astra and Eutelsat) and you want to cover a specific position with the scan. This setting is particularly important if you are scanning with the update setting (see below).
- The symbol rates field shows the default value (22000,27500) which is adequate for all conventional satellite positions received in Europe.
- The settings for the start and end frequency run a scan across the entire frequency range for the satellite position, which can take several minutes. It is often more effective to find out the frequency of new channels and then enter this as the start and end frequency. This means the scan is only run across this frequency, making it much quicker.
- Increasing the increment is only relevant if you are scanning without a predefined transponder list. In this case, the increment defines the interval at which the range between the start and end frequency should be randomly sampled. In this case, a value of over 5 MHz accelerates the scan, but increases the risk that DVBViewer overlooks channels.
- Switch on Update if you want DVBViewer to check whether channels found are already in the list during the scan. In this case, it is not entered as a new channel on the list, but updated instead. This is providing the channel found has the same service PID, audio PID and DiseqC setting as the existing one. This means you need to make sure the DiseqC setting is correct if you wish to carry out a scan with update.
- If 'only free to air channels' is activated, only unencrypted channels are added to the channel list during the scan. Please note: This option is effective on channel list imports!

Specialist magazine InfoSat and the SAT1 teletext pages (517) are good sources of information for (new) channel frequencies.

3. Scan process

You can start the channel scan using the Scan Frequency and Scan Range buttons. The bar shows a percentage figure indicating scan progress. The bottom bar shows the current signal strength.

A channel scan

The following is a general sketch of the best way to carry out a channel scan.

1. In the first field, assign the search results to a separate target root: You may find a load of unwanted channels (e.g. pay-TV channels). However, this method allows you to pick out interesting new channels and add them to your list before deleting the rest simply by deleting the "Scan" folder.
2. Select the Reception Type here.
3. From the Transponder List, select one of the preset frequency ranges in order to speed up the scan process.
4. You can now click on the Scan Range button and start the scanning process.

DVBViewer TERRATEC Edition Manual

8. Recording / Playing and Timeshift function

This chapter describes how you can record and play back videos using DVBViewer and the things you need to remember. In order to avoid problems, read through the preparation sections in this chapter carefully. Do not forget that the DVBViewer is also an excellent radio recorder. If you set a radio station and then start recording, you will, of course, get an audio file. We will cover this as well. Finally, we will cover the timeshift function which allows you to watch live television with a time delay.

File size

DVBViewer video recordings take up huge amounts of memory on the hard drive. However, it is difficult to predict exactly how much space is required. The results can vary depending on the bit rate used for transmission. But as a rough rule of thumb, you need to reckon on 2.5 GByte for a 90 minute film. Or, to put it another way: Around 28.5 MByte per minute. There is some consolation in the fact that the recording is an absolute copy of the original. Unlike a VHS video recorder, there is no loss of quality.

For this reason, note the following before starting a recording:

Find out about your file system. Open, "Computer", right-click on the drive and select "Properties" from the context menu.

If you are still using FAT32 under Windows 2000/XP, you need to convert to NTFS if you want to handle large videos. This is relatively easy and does not require reformatting or data loss. Consult Windows Help (search on NTFS) or specialist literature for how to proceed. Let an experienced colleague help if you can.

Before starting a recording, make sure that the space required is available - plus a suitable buffer.

Video playback

There are various ways of playing a video recorded with DVBViewer.

To do this, select File from the top menu bar in DVBViewer. A file selection window appears from which you can select the file you want.

During playback, the status bar shows Play, Pause and Stop buttons. You can click on the progress bar to skip to any point in the video.

As the DVBViewer has all the characteristics of a universal media player, you can also play audio and video files which were not recorded on the DVBViewer. This requires the relevant decoder to be installed on the computer system.

Automatic splitting of the video file

There are various reasons to split a recording across multiple files. To do this, proceed as follows:

- Click on Settings in the top menu bar.

- Check the Split box.
- Click on the input field and enter the maximum size you want (e.g. 2000 MByte for recordings in Windows 98 or a cautious 699 MByte for burning onto 700 MByte CDs).
- Close by clicking OK.

This means that the DVbViewer always creates a new file once the preset file size is reached and continues recording to this file.

Destination folder

Before you start your first recording, think about which folder on your hard drive you wish to save your videos to.

The default is: C:\Users\USERNAME\Videos\

You can select another folder by going to Settings in the General tab.

Audio recordings of radio transmissions are saved as mp2 files (unless PVA format is selected). There are not generally any issues with file sizes here.

Video recording

Once you have adjusted all the necessary settings, everything is very quick and simple: switch to the channel you want and click on the record button on the bottom menu bar. During the recording, the button is greyed out. Clicking on the button again stops the recording.

DVBViewer automatically generates unique filenames for recorded programs. It is based on the date and time of the recording, the channel name and the title of the programme (if this is available in the EPG). Where files are split automatically, a sequential number is also added.

What to look out for when recording:

It is best not to establish or disconnect an internet connection. This can easily lead to jumps which can make the recording unusable.

How many additional activities the recording process can handle without problems depends on the performance of your PC. On a low-performance PC, it is best to leave everything alone and even close any background programs in advance.

Video recorder programming

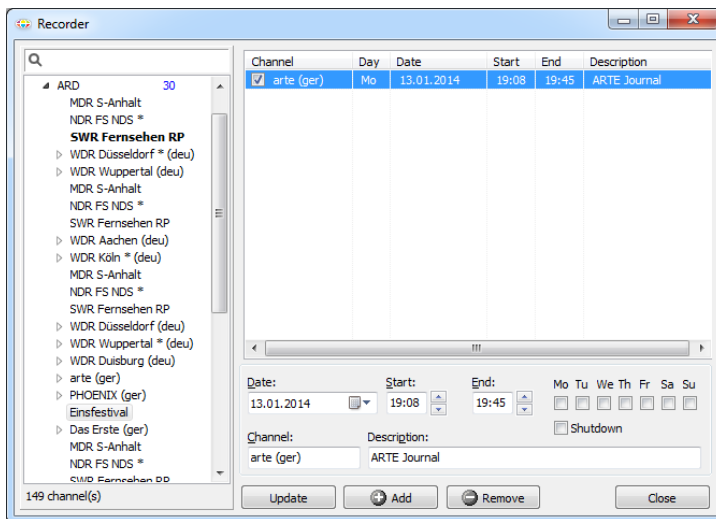
You can define the start and end time for a recording in the video recorder window.

Program the video recorder as follows:

1. Select a channel in the left-hand window (channel list) and click on the add button. An entry automatically appears in the top right-hand window, the example here shows arte.
2. You can set the date and time for the start and end of the recording in the bottom section.
3. You can add a note to the recording in the Description field.
4. If you wish your PC to shut down automatically once it has finished recording, check the Shutdown box.

DVBViewer TERRATEC Edition Manual

5. To set another recording, repeat stages one to three above and confirm by pressing the Add button.



The following options are available in the window:

- Click on a list entry to edit it. The data is then transferred to the input fields. The start and end times can be changed in one-te increments using the arrows next to the input fields. The Update option then replaces the data in the selected entry with the information in the input fields.
- To delete an entry, select it from the list and click on Remove.
- A simpler way of timing programme recordings is via the EPG window and the 'Send to PVR' button. You will then find the full entry in the recorder programming window. However, we do recommend adjusting the beginning and ending times by a few minutes as the television channels often do not stick to the timings exactly. VPS signals are, unfortunately, not yet available for digital television.

Please note that the recordings can only be processed if your PC is switched on and DVBViewer is running.

Timeshift

Timeshift is based on a special recording process which allows you to start playback while still recording.

Timeshift recording is useful in the following situations:

You want to watch a programme but only have time in 20 minutes. So you do not miss the start, you can start timeshift recording when the programme begins and then start timeshift playback 20 minutes later while the DVBViewer continues to record the live programme.

You want to watch a film without the adverts. Start the timeshift recording at the beginning of the film and give DVBViewer a head start of around 25 minutes. After this time, start timeshift playback and watch the film from the beginning. The progress bar in the status bar shows the

current position within the recording. When you get to an advert break, simply skip forwards a bit by clicking on the progress bar. This allows you to skip up to 5 advert breaks of 5 minutes each before you catch up with the live television programme.

The phone rings just at the most gripping point of the thriller you are watching. You can start timeshift recording and then start timeshift playback at the end of your telephone call. This means you can continue watching the programme again from where you left off.

The same situation, but you started timeshift recording just in case at the beginning of the film. If you are interrupted, simply click Pause in the DVBCViewer menu or the pause symbol in the status bar. When you get back to your computer, click on Pause again and the film can continue. Whatever happens, you will not miss any of the programme. To a certain extent, timeshift allows you to treat a television programme in the same way as a recorded video.

9. Display settings

This chapter summarises various functions which alter the appearance of the DVBCViewer window. There are also language settings options which have an effect on the television image shown. In particular, it allows manual correction if the DVBCViewer does not automatically make the ideal setting.

Altering the DVBCViewer window

In the View Menu, there are various options to alter the appearance of the DVBCViewer window.

- Always on top: If this option is checked, the DVBCViewer window cannot be covered by other program windows.
- Display subtitles: This command opens a window in which you need to either enter the number of a teletext page or select the relevant DVB subtitle language. The subtitles transmitted via this page are then shown on the screen. In order to remove the subtitles, select the menu item again.

These options are also available in full-screen mode via the context menu.

Full-screen mode

If you switch this option on, DVBCViewer switches to full-screen mode.

Double-clicking on the television image has the same effect. Double-clicking again takes you back to window mode. In full-screen mode, there are no visible controls, even your desktop is hidden. But you can access the DVBCViewer context menu by right-clicking.

Refresh filters and display

You can open up a sub-menu by clicking on "Filter" in the context menu. This lists the DirectShow components involved in the image and sound processing. By selecting the entries, where available, you can open windows with filter properties which are useful in specific cases. In general, you do not need to access these.

The "Refresh Display" command forces DVBCViewer to reset all filters and restart. This can remedy any problems with image and sound playback.

DVBViewer TERRATEC Edition Manual

10. Channel list

You can access the channel list either via the relevant button in the bottom menu bar or by hovering with the mouse over the right-hand side of the display. It is based on a hierarchical folder system which is similar to the file management system on your hard drive. This chapter describes how to navigate it and adjust it to your requirements.

Navigating the channel list

Top of the hierarchy is the target root (root) which normally corresponds to a specific satellite position (e.g. Astra 19° East). It is therefore represented by a satellite symbol.

Each target root contains two sub-folders called Video (for television channels) and Audio (for radio stations). These sub-folders each contain subfolders into which the channels are sorted by categories. You can create these categories yourself. Within the category folders, you can find the channels and then select them.

Open or expand a folder by clicking (or double-clicking) on the plus sign next to it. Clicking on the minus sign (or double-clicking) then collapses or closes it again. Double-clicking on a channel will open it in DVBViewer and start playing.

There are more navigation options from the keyboard:

The [↑], [↓], [Home], [End], [Pg Up], [Pg Dn] buttons move the selection up and down in various ways - the easiest thing is to try it out.

The [Enter] button activates a selected channel.

The [-] button on the number pad collapses a selected folder, while the [+] button opens it. The [*] button on the number pad is particularly effective: it opens a selected folder and all sub-folders and sub-sub-folders it contains ... if you apply this command to a folder, you can immediately see all the channels it contains.

If you are looking for a specific channel, you can enter it as a search term in the input field at the top of the list and then press [Enter]. The program finds the next entry in the list after the selected element which contains the search term. You can also find a channel via its channel number. The numbering begins at 0 and corresponds to the order the channels appear in the list.

Deleting a folder or channel

To delete a folder or channel, you first need to activate Edit Mode.

- Right-click in the box and then select Edit Mode.
- You can now right-click again on a folder or channel and then select delete from the context menu.

Adding a channel to favourites

- Right-click on a channel and select Add to Favourites.

Sorting the channel list

If you do not like the order of channels, categories or target roots, you can change them. The easiest way to do this is by dragging and dropping: Simply click on the object you wish to move, drag it with the mouse to the position you want and then release the mouse button again. Only the Video and Audio folders cannot be moved.

If you wish to move a channel to a different category or a different target root, simply grab it with

the mouse, drag it to the relevant folder and release it onto the icon. When you move it to another target route, the channel is still assigned to the same category: If the category does not exist in the new target root, a new version is saved.

Category folders can also be moved to another target root. They are automatically taken to the correct sub-folder (Video or Audio).

But there are other options via the keyboard:

- The [↑], [↓], [Home], [End], [Pg Up], [Pg Dn] buttons move the selection up and down in various ways - the easiest thing is to try it out.
- The [Enter] button activates a selected channel.
- The [-] button on the number pad collapses a selected folder, while the [+] button opens it. The [*] button on the number pad is particularly effective: it opens a selected folder and all sub-folders and sub-sub-folders it contains ... if you apply this command to a folder, you can immediately see all the channels it contains.

One important note: If you accidentally delete something from the channel list, you cannot retrieve it. Make sure you create a backup copy of the file channels.dat! This file can be found in the DVBCViewer folder and contains the entire channel list.

11. Further information on installing the DVBCViewer

DVBCViewer files

It can sometimes be useful to know the significance of the files in the DVBCViewer folder after installation. The most important information is as follows:

dvbcviewer.exe: This is the program file, the most important one.

channels.dat: This file contains the channel list as shown in the channel list window. Without it, there is no reception. So we recommend backing up from time to time.

setup.xml: This file contains the settings for DVBCViewer. If you change any settings (for example, your Favourites), it is noted in this file so everything is set up as you want next time you start the program. You can open and view the setup.ini file with a text editor (Notepad). However, you are better leaving the changes to DVBCViewer, unless you know exactly what you are doing.

favourites.xml: Your favourites are saved in this file.

epg.dat: This file is generated by DVBCViewer to store any EPG data received even after the programmes have ended.

***.ax:** All files with a .ax extension in the "Filters" subfolder are what are known as DirectShow filters which the DVBCViewer registers with the operating system in order to be able to control the DVB data streams.

***.ini:** All files with a .ini extension in the "Transponders" subfolder are transponder lists. These contain all the data DVBCViewer needs for fast channel scans for a range of different satellite positions. If you know what you are doing with digital satellite reception, you can open these files with a text editor and add information to them if required. Please note that the sequential numbering must be retained.

***.dll:** All files with a .dll extension in the "Plug-Ins" subfolder are add-on modules which govern the import of various channel list formats. If you received additional modules which enhance the

DVBViewer TERRATEC Edition Manual

functionality of DVBViewer, these should also be in the "Plug-Ins" folder.

***.lng:** All files with a .lng extension in the "Language" subfolder are language files which make sure that the DVBViewer can speak different languages. You can delete any you do not need. However, they will be back next time you update.

regfilter.exe: This program records all filters (generally, you do not need to run it as it is done automatically on installation).

hardware.xml: Settings for DVB cards.

server.xml: Server settings.

timers.xml: Contains programmed timer jobs

subpages.xml: The subtitles for the individual programmes are saved here.

windowdef.xml: Central administration of the OSD display

audiovis.ini: Setting for Sonique visualisation

The DVBViewer in restricted user accounts

As mentioned at the beginning of the chapter, DVBViewer will not run properly in a restricted user account under Windows 2000/XP. But it can be done. However, the tools used do have the capacity to completely cripple your system if not used properly. If you do not feel confident with the operation, ask someone with experience to help you. These are the steps you need to take:

- Log into a user account with Administrator rights.
- Extend the registry permissions. DVBViewer requires write access to two keys in the Windows registry which it cannot normally do in restricted accounts. Restricted users need to be given full access to these keys. This means you need to start RegEdit (Start - Run - Enter RegEdit). Scroll down to the following two keys:
 - o HKEY_LOCAL_MACHINE/Software/CM&V
- Right-click on these keys and select "Rights" from the context menu. Select "User" from the list and then check the "Full access" box. Close by clicking OK.
- Extend the access rights for files channels.dat and setup.xml. Otherwise, DVBViewer cannot rewrite these files when the program is exited, which means any settings changed are lost. Important: The following can only be carried out under Windows XP in safe mode (as Windows is starting up, press F8, select Safe mode then log on as administrator). Proceed as follows for each file:
 - Right-click on this file, select "Properties" from the context menu and then go to the "Security" tab. Select "User" from the list and then check the "Edit" box in the "Allow" column. Close by clicking OK.