



# TVT500PVR

## Twin Tuner Digital Tapeless Video Recorder

### User Guide



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### Introduction

Thank you for purchasing this product which has been designed and manufactured to give you many years of trouble-free service. Before use please ensure that you have read all of the following instructions.

#### About This User Guide

This user guide contains all the information you need to know about how to setup, watch and record available DVB-T Free-to-Air channels using your PVR.

#### Safety is Important

To ensure your safety and the safety of others, please ensure you read the Safety Instructions before you operate this product.

- *Keep this information in a safe place for future reference.*

#### Safety Considerations

Position the cables so that they cannot be walked on or pinched by items placed on or against them.

- Do not use the PVR in humid or damp conditions (for example in a bathroom or kitchen).
- Do not allow the PVR to get wet.
- Do not expose the PVR to dripping or splashing.
- Do not place water filled objects such as vases on top of the PVR.
- Do not place naked flame sources, such as candles, on top of the PVR.
- Always ensure the PVR is positioned so that there is space around the PVR to allow ventilation.

#### Cleaning

- ALWAYS unplug the PVR before you clean it.
- Do not use liquid or aerosol cleaners.
- Clean the PVR with a soft, damp (not wet) cloth.

#### Servicing

- There are no user serviceable parts in this PVR.
- When servicing, refer to qualified service personnel.
- Consult your dealer if you are ever in doubt about the installation, operation or safety of this PVR.

### Electrical Information

- **Read these electrical safety instructions carefully before connecting the adapter to the mains supply.**
  - This PVR is supplied with an internal mains adapter. There are no user serviceable parts inside and it does not require any electrical adjustments.
  - This PVR is designed to operate on 230V AC 50Hz supply only. Connecting it to any other power sources may damage the PVR.
  - The PVR is designed for indoor use only.
  - If the plug attached to the PVR is not suitable for your socket, or becomes damaged please replace the plug following the wiring instructions given on the first page.
  - Periodically inspect the mains cable for damage. Do not use if faults or damage are found. Refer to qualified personnel.
  - Your PVR, as with any electronic equipment, consumes power. In order to reduce power consumption, please switch the PVR to standby when not in use. If you will not be using the PVR for a long period of time, we recommend unplugging it from the mains outlet.



This symbol indicates that the PVR is double insulated and does not require an earth connection.



This symbol indicates that the PVR is for indoor use only.



This symbol indicates that the PVR conforms to CE regulations.

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### Environmental Markings



The “Batteries marking symbol” means used batteries must not be disposed together with your household waste. Please, inquire about the local regulations regarding disposal of used batteries. For information: the batteries supplied with your receiver remote do not contain hazardous substances such as Mercury, Cadmium, or Lead.



The “Material recyclability symbol” means the package cardboard or user manual paper is recyclable.



The “Green dot” affixed on cardboard means that this PVR contains a large number of materials that can be recycled. If you are disposing of an old product, please take it to a recycling center.

## Getting Started

Remove your PVR carefully from the box, and remove the packaging from each part.

### In the box

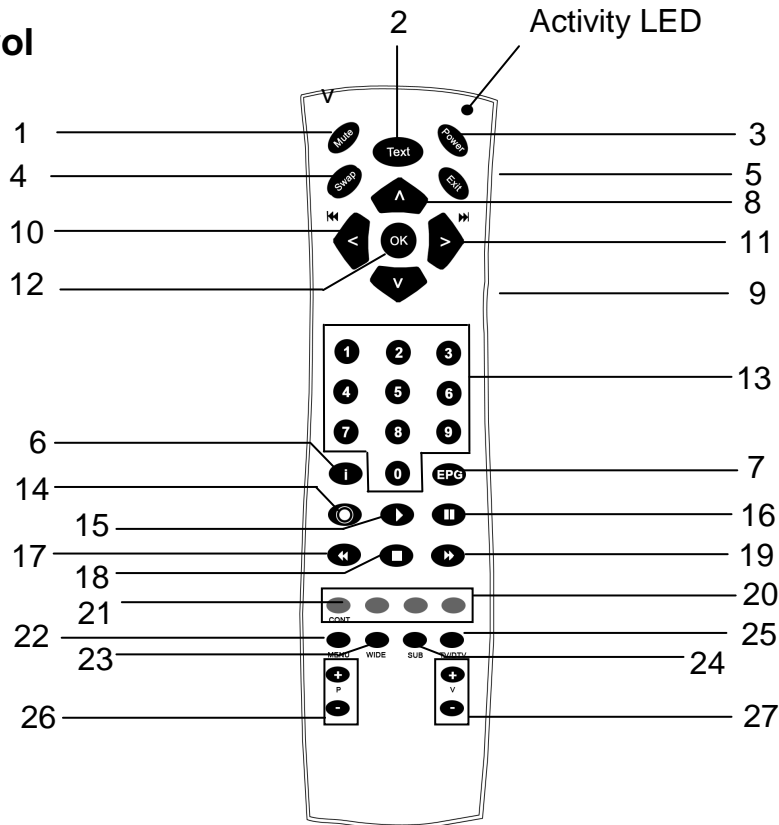
You will find the following items:

- PVR
- Remote Control (AAA batteries)
- SCART-to-SCART cable (for PVR to SCART input connector on TV set)
- User Guide (This publication)

If any of these items are damaged or missing, please contact the place where the PVR was purchased.

### Identification of Parts

#### Remote Control



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### Explanation of keys

1	Mute	Mute/Unmute audio output
2	Text	Display/Exit Digital teletext (when available)
3	Power	Turn PVR ON/OFF (standby)
4	Swap	Switch between two most recently viewed channels
5	Exit	Exit the current menu
6	i	Display information about the current menu (when available)/Show the I-bar/record I-bar
7	EPG	Display the electronic programme guide
8	UP	Select Next Channel/Navigate up through menus
9	Down	Select previous channel/Navigate down through menus
10	Left	During playback, skip 2 minutes backwards/Navigate left through menus
11	Right	During playback, skip 2 minutes forward/Navigate right through menus
12	OK	Confirm selection
13	Numerical keys	Direct channel entry
14	Record	Begin recording the current channel. Press repeatedly to set record duration/ Whilst viewing the EPG set a timer to record the currently highlighted programme
15	Play	Display the previous recording list/ Commence playback
16	Pause	Pause playback / Enter timeshift mode (for details see page 21)
17	Rewind	Search backwards (rewind) at high speed
18	Stop	Stop playback / recording
19	Fast Forward	Search forwards (fast forward) at high speed
20	Colour Keys	Various functions depending on the current menu (please see the on screen display for details)
21	Red	Display digital teletext (when available)
22	Menu	Display on screen menu/change between EPGs
23	Wide	Change screen format 4:3 or 16:9 depending on the TV Type setting in the configuration menu
24	Sub	Turn subtitles ON or OFF (when available for current programme)
25	TV/DTV	Switch between Digital TV and VCR loopthrough
26	Programme Keys	Select next/previous channel
27	Volume Keys	Change audio volume

### Using the Remote Control

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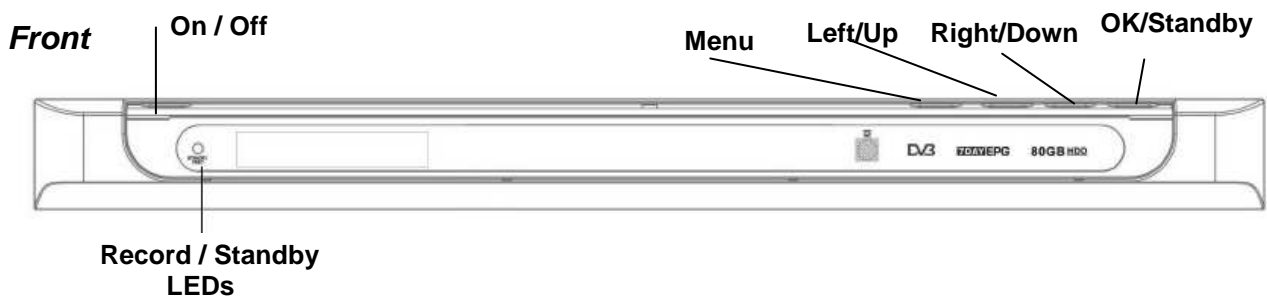
To use the remote control, point it towards the front of the PVR.

The remote control has a range of up to 7 metres from the PVR at an angle of up to 60 degrees.

The remote control will not operate if its path is blocked.

- **Sunlight or very bright light will decrease the sensitivity of the remote control.**

### PVR



#### Control keys:

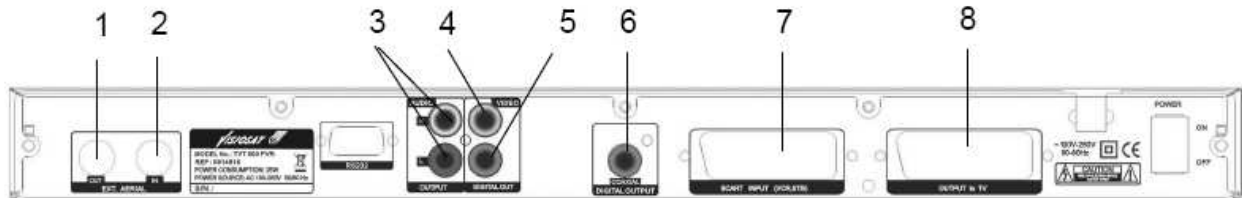
The following front panel keys can be used in the same way as the corresponding keys on the remote control unit. The last four keys' functions change what is shown on screen:

On / Off	Switches the PVR on or off
Menu	Open / close OSD menu
Left / Up	Press once to move the cursor up when viewing a menu / press while holding down the menu button to use a left cursor key with a menu option highlighted.
Right / Down	Press once to move the cursor down when viewing a menu / press while holding down the menu button to use a right cursor key with a menu option highlighted.
OK / Standby	Press the button briefly to function as OK button, press and hold for several seconds to function as the standby button.



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### Back

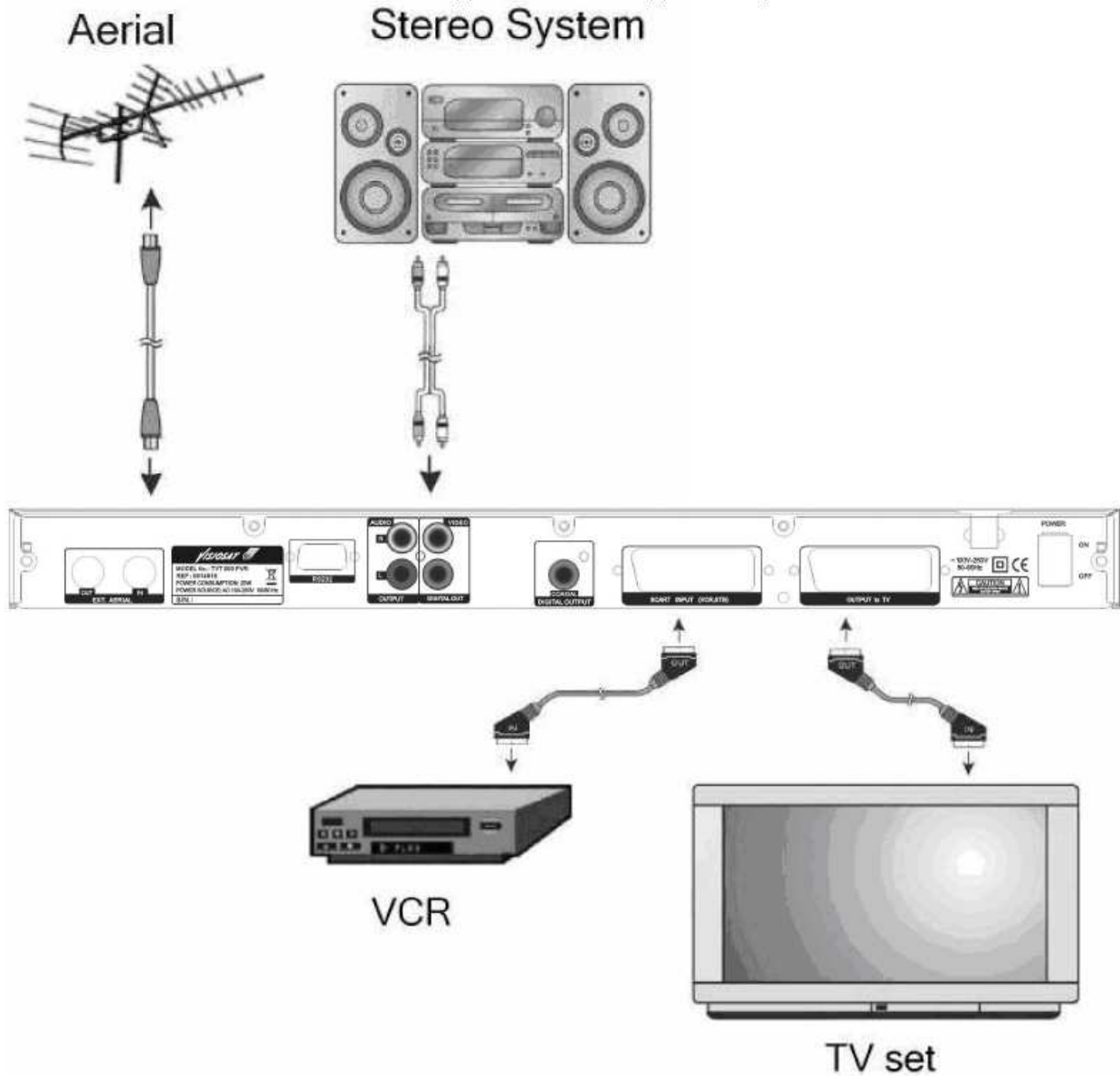


### **The PVR features the following connector sockets:**

- |                     |                                                                                                |
|---------------------|------------------------------------------------------------------------------------------------|
| 1 Aerial OUT        | (Coaxial) - connect to your TV set's Aerial IN                                                 |
| 2 Aerial IN         | (Coaxial) - connect to your aerial                                                             |
| 3 Audio OUT         | (RCA phono) - connect to an external audio device (e.g. stereo) via RCA phono cable            |
| 4 Video OUT         | (RCA phono) - connect to an external video device via RCA phono cable                          |
| 5 Digital Audio OUT | (RCA phono) - connect to an external audio device (e.g. surround decoder) via RCA phono cable. |
| 6 Digital Audio OUT | (Coaxial) - connect to an external audio device via coaxial cable                              |
| 7 VCR SCART         | (SCART) - connect to VCR / DVD Recorder                                                        |
| 8 TV SCART          | (SCART) - connect to your TV set                                                               |

## Connecting your PVR

The following diagram shows typical configurations only, and may differ slightly to your existing external equipment. If you are unsure on how to connect to your PVR, always consult your manufacturer's user guide supplied with your equipment.



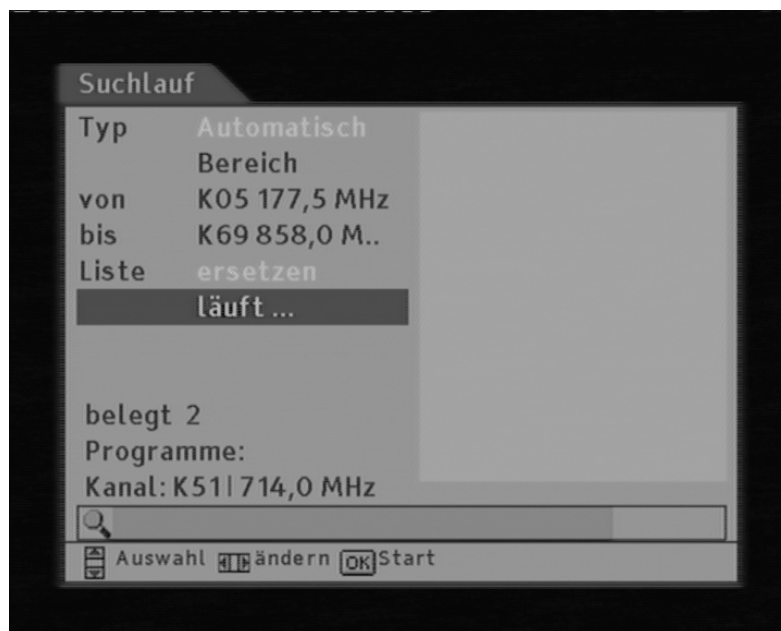
### First Time Installation

Connect any equipment according to the appropriate system diagram given on the previous page and power up/turn on the equipment by pressing the power button on the left side of the PVR. Depending on your TV set the AV channel may have to be selected in order to see the PVR programme (for further information consult the instruction manual that is supplied with your TV).

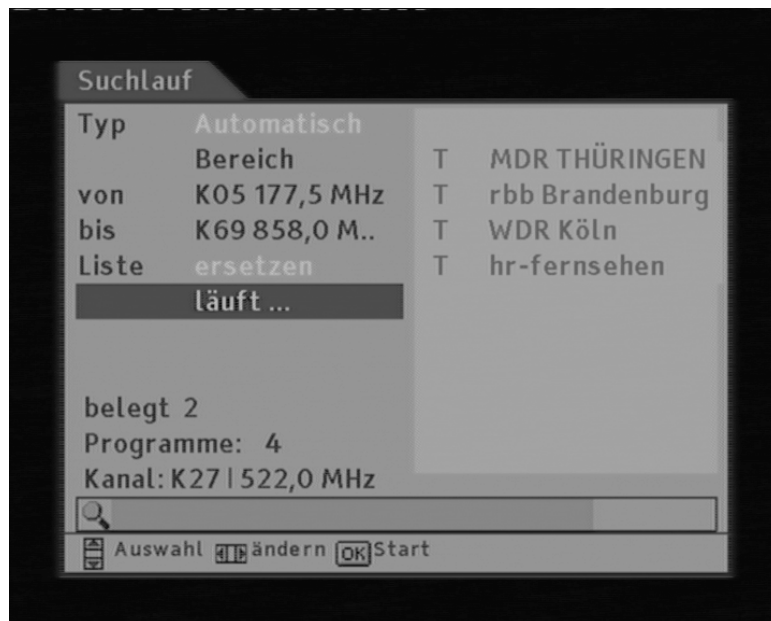
The First Time Installation dialogue will be shown on the screen.



Use the left / right arrow keys on the remote control to select the Menu Language. With the up / down keys you can select the other settings: Time Zone and Channel Search. Please select the Time Zone according to your location. After that navigate to Channel Search and press the OK button. This will start automatically the Channel Search Dialogue.



The PVR will start the channel search automatically. Depending on your Time Zone selection the scanned frequency range will be adapted. The channel search will be executed into 2 steps. In the first step all DVB-T frequencies will be detected over the complete frequency range. In the second step the services itself will be listed.



After the search has been completed, the PVR will switch to the first available channel. If no channels have been found, please refer to the troubleshooting section of this user guide.

### Using the PVR

The PVR comes with an easy to use on screen display (OSD) which allows you to access all the PVR's functions with the remote control.

#### *Navigating the OSD*

Most of the OSD functions are controlled by the following keys on the remote control:

Up/Down arrow keys	Move one item up or down Move one channel up or down
Left/Right arrow keys	Move one item left or right Change the setting of a configurable item
OK key	Confirm the current action
Exit key	Abort the current action Close the active OSD window
Colour keys	Functions differ depending on the current OSD window, please see the I-Bar at the bottom of the screen for details
i-key	Show help guide for OSD (where available)
Number keys	Switch to a specific channel Enter number values for timers

### ***Changing channels***

There are several ways to change channels:

1. Use the up/down arrow keys or the P + / - keys to advance one channel up or down
2. Enter a channel number with the number keys. Each number can be composed of up to 3 digits.
3. Use the Swap key to change back and forth between the current and the most recently viewed channel.

### I-Bar / Record I-Bar

The I-Bar displays information about the current programme whenever another channel is selected. Press the **i** key to show the I-Bar at any time.

The I-Bar shows the channel name, its number in the channel list, the type of channel which is currently tuned in (TV, radio or text) and the current date and time. It also displays a horizontal bar indicating signal strength as well as the title and schedule for the current and following event. Pressing the I key again displays a detailed event description. Using right and left arrow keys the current or next detailed event description can be selected. This event information may not be provided by every channel.



If a recording is being made the **i** key will also display the record/playback I-Bar additionally at the top of the screen, showing you a progress bar and a time display for the current recording as well as the Channel name being recorded and event information.



### Channel list

The channel list provides management functions for the channels found during a channel search. It is designed in a way that allows the currently select channel to be watched while making adjustments.

Access the channel list by pressing OK key or press the menu key and select **Channel list** from the setup menu.



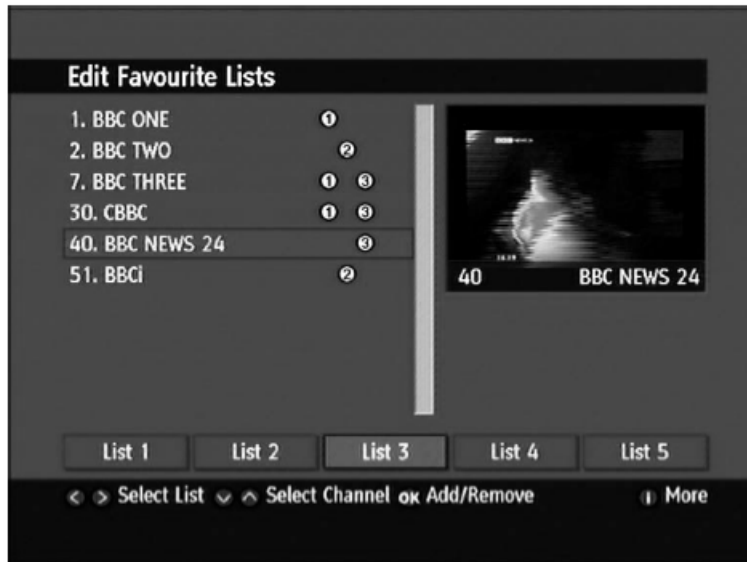
The channel list can be used for:

- Switch to a different channel by selecting it with the Up/Down arrow keys and pressing OK
- Press the SWAP key to change between current and previous channel
- Press Green to select a favourite list (4 different favourite lists are available)
- Press Red to select the Switch to the radio list
- Press Yellow to delete a service from the service list



### Favourites

The favourites function allows the channels to be organised in up to 4 different lists which can then be accessed whenever you switch a channel. Up to four channel lists can be set allowing for different channels for different members of the family.



The favourites screen can also be accessed by pressing the menu key and selecting **Favourites administration** from the menu.

1. Select one of the favourite channels to be added by using the up/down arrow keys and select the favourite list by pressing the number keys 1..4.
2. A small number appears to the right below the channel information to indicate it has been added to a favourites list. The active list can be changed in the channel list menu later.
3. Remove a channel from the list by selecting it and pressing the associated number key again.
4. Once your list is complete, close the OSD window by pressing Exit.
5. Now press the OK key to bring up the Channel list menu.
6. Press the green key to select the desired favourite list. The favourite list number will be displayed on top of the list. This favourite list will be used as default favourite list from now.
7. Exit the Channel list menu by pressing the Exit key.
8. Now when using the P +/- keys or the up/down arrow keys in order to change the channel, only the channels in the selected favourites list will be available.

Channels that belong to more than one list will be marked by several numbers next to the channel name. To access the full range of channels again, just enter the Channel list menu again and press the Green key until no list number will be displayed on top of the list.

### Guides (EPG)

The PVR comes with a fully featured electronic programme guides (EPG) to give you immediate access to all the programmes without the need for an old fashioned printed TV guide.

The EPG can be accessed by pressing the EPG key on the remote.

The list schedule provides information about events on every channel for 7 days week. Select the required channel using the up/down arrow keys.

- In the top area the extended program information of the current selected service and event is shown
- In case there is more information available you can press the i key to display it. The i sign will indicate this in the right lower corner.
- Programmes are shown in a specific time period of two to three hours in the bottom area. To toggle between service column and time period column press the blue button.
- If the time period column is active, use the arrow keys to advance time and days forward or backward. The currently selected day is shown next to the time period above the programme information. In that way you can get programme information for up to 7 days.
- A recording timer for a future programme can be directly set from this list by pressing the record key. The chosen event will be indicated by a clock icon and will be taken over into the timer list automatically.
- If you wish to cancel a recording press the RECORD buttons a second time.
- Record timers may also be edited from the timer menu. Please see the timer chapter for details.
- **Important Note:** A timer will record the selected programme in the background using the second tuner which then allows you to watch a different programme to that being recorded. The details of the recording can be seen in the record I-bar (during the recording) by pressing the **i key**. During a recording the channel number that second tuner is recording is shown in the display on the front panel to the right of the channel number that is being viewed.



### Timers

The timer feature can be used to set recording timer for a certain channel and time. The recording will start in background, using the second tuner allowing you to continue watching a different programme during the recording, when the start time is achieved. (During the recording the channel number of the recording is shown in the display on the front panel to the right of the channel number being viewed. Also the record I-bar will be shown if the **i-key** is pressed.)

In order to set a timer the following steps are performed:

1. Press menu and select the Timer administration option.
2. Press the Blue key to create a new timer. The Create a timer menu will be displayed.
3. Select the channel by pressing the right/left keys. The service list will be opened.
4. Press OK to select the service and to close the service list.
5. Select Date, Start und End time using the up/down arrow keys.
6. Modify date and time using right/down arrow key and number keys.
7. Press OK to apply the modifications.



Navigate with the up and down cursor keys to the chosen timer and press the yellow key in order to delete a single timer entry.

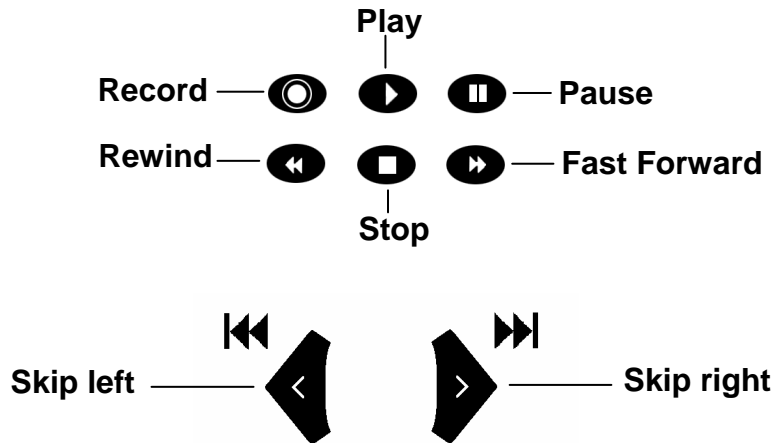
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### Recording & Playback

An important feature of your PVR is the record and playback function. The internal hard drive can store up to 30 hours of digital TV broadcast (depending on the data rate of the recorded programme, which is set automatically by the broadcaster).

Because your PVR has a Twin Tuner you can record one event and watch another programme at the same time. It is also possible to playback a recording during an active recording. Please note it is **not** possible to record two channels at the same time.

The PVR record and playback functions are very similar to those of a VCR. The buttons used for playback and recording are shown below.



### Record Mode

- The record key starts recording the programme on the current channel being viewed.
- The stop key stops the recording.
- Once the record button is pressed the second tuner is then set to record the channel that was being viewed when the button was pressed (the channel number being recorded will be shown in the display on the front panel to the right of the channel being viewed and also the record I-Bar will be shown when the **i-key** is shown). The main tuner can then be controlled as normal and the second tuner will continue to record, in the background, on the channel selected when the record button was pressed allowing you to watch a different channel to the one being recorded.

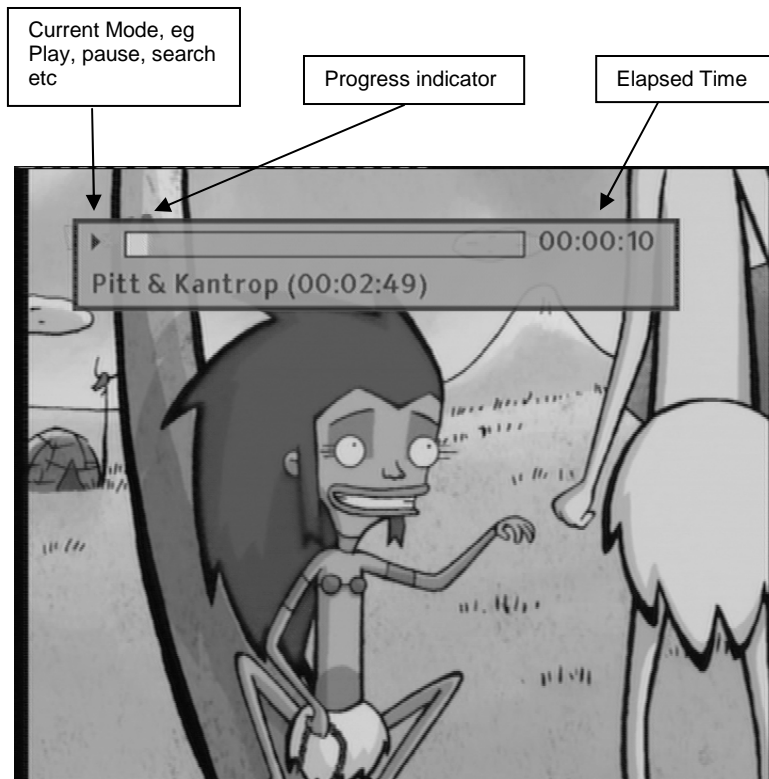
### Playback Mode

- The playback key opens the **Recordings list** screen where a previously recorded event can be selected for playback. (See the chapter Recordings list for detailed information)
- The stop key stops playback.
- Press the pause key to pause the playback.
- During normal playback, skip forwards or backwards two minutes by pressing either the right or left cursor buttons respectively.
- The rewind and fast forward keys can be used to navigate during playback. Pressing either key repeatedly will change the rewind / forward speed. Please note the OSD symbols indicating whatever function is active during playback.

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When you press the i-button during playback and recording, the I-Bar will be displayed in the upper part of the TV screen as shown below.



The yellow part of the bar represents the recorded portion of the programme and the small red bar is the current position within that recording. The elapsed time is also shown.

### **Timeshift**

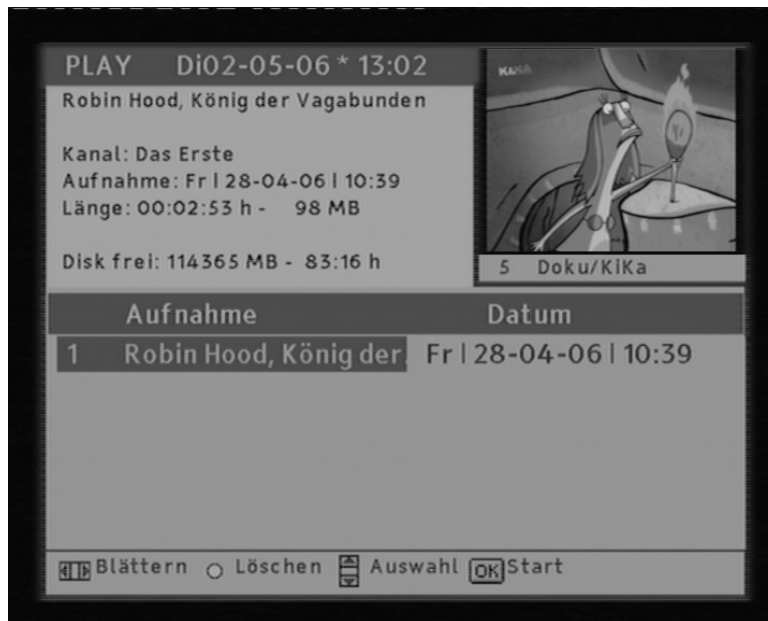
Timeshift can be used as follows:

There is an interruption while watching TV. Maybe the telephone rings or somebody is at the door. Timeshift can be used to effectively pause the current TV event and continue watching after the interruption has been dealt with.

- Press the pause key. The image freezes and record/playback I-bar will be displayed. The record/playback I-bar's time shows the time since pressing stop.
- Press play to resume watching the programme from the stopped position. In the record/playback I-bar a second time will be displayed that indicates the played time from time shift buffer. The fast forward and rewind keys can also be used to move forward or backward in the part of the programme that has been recording during timeshift.
- Press the stop key to exit from time shift mode. An OSD will appear that allows you to store the record by pressing the red button.

### Recordings list

The recordings list is library of all the records that have been created with the PVR's recording functions. It provides information about every recording, like the date, time and channel it was recorded on, the name of the recorded programme as well as the file size. It also shows if playback has already been started of the selected recording (the "played" counter indicates how much of the record has already been played) and how much free space remains on the PVR's internal hard drive. Please note that the time figure is only an estimate based on average data rates. The actual remaining record time may differ from this value.



The recordings list also provides the following functions:

- Open the Recordings list by pressing the play key
- Select a recording and press OK to start watching that recording from the beginning.
- To delete a file, simply select the file using the up/down cursor keys and press the yellow coloured key. A pop up will shown asking to confirm this action before the recording is actually deleted.

### Setting the audio volume

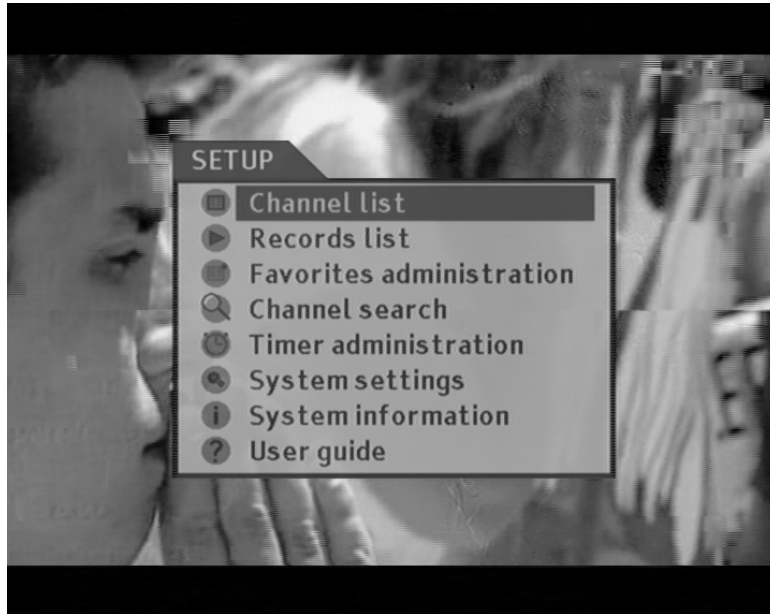
In addition to the volume controls the TV set or stereo, the PVR has its own audio volume setting which can be changed via the remote. Simply press the V +/- keys to adjust the volume. Press the mute key to turn the audio off completely. Press it again to restore the volume to the previous level.

The current audio volume level is indicated by the volume bar.



## Configuration

The PVR offers a lot of functions that can be configured to suit your personal preferences. In order to access the configuration menu, press the menu key on the remote control.



## System Settings

Select the System settings menu using the up/down cursor keys and press OK. This opens the setting menu.



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In order to change a setting, use the cursor keys up / down to select it and left / right to change its value. See below for a list of all possible settings:

Menu language: English, Deutsch, Francais

Set the default menu language.

Sound language: English, Deutsch, Francais, Espanol, Italiano, Turkce, Russkiy, Nederlands...

Set the default audio language.

Subtitle language: English, Deutsch, Francais, Espanol, Italiano, off

Set the default subtitle language. If you select off then subtitles are switched off

Time zone: United Kingdom, France, Austria, Germany

Sets the time zone according to your location

TV signal: RGB, CVBS

Set the output signal for the PVR's SCART sockets. RGB normally gives a better picture, however some TVs (especially older ones) cannot display RGB pictures. If this is the case select CVBS. Please check with the instruction manual for the connected TV to see if it can display RGB signals.

TV format: 4:3, 16:9

Set to the type of TV set that is connected to the PVR. Select 4:3 for a normal TV or 16:9 for a widescreen TV.

Position horizontal: Fine tuning of the TV picture in horizontal direction

This function allows the adjustment of the TV picture to get it well centralized

Position vertical: Fine tuning of the TV picture in vertical direction

This function allows the adjustment of the TV picture to get it well centralized

Front display: Display brightness

This function allows the adjustment of the front display brightness

Antenna type: passive, active

Turning on/off voltage feed of your antenna. If you have an active antenna, this function has to be activated. If you have a passive antenna the function has to be deactivated. If you don't know which type of antenna you have, you have to deactivate the function. This function allows the adjustment of the front display brightness

Hard disc: Format hard disk.

Formatting the hard disk deletes all the data stored on it, including all of the recordings.

System Update: Now, Automatically

The PVR comes with a special feature that allows the PVR to be updated using software that is broadcast over the air and received via the aerial (when the software is available). If the configuration is Now the upgrade search will start after pressing the OK button. If the automatic system update is selected the upgrade search will start directly after switching the PVR into the standby mode.

System Reset: Defaults

For a description of the First Time Installation process see page 11. Please note that performing a First Time Installation will delete your channel list and reset every menu setting to its factory default.



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Colour schema: Default, Seaside, Polar night, Rose Garden, Mint, Sand  
This function allows you to select your favourite OSD menu colour.

### ***System Information***

In the system information OSD device specific and reception specific information can be displayed.

To get the device information, press the red button. Software version number and some information to the used hardware will appear.

To get the reception information, press the green button. Beside the number of services some information to the current active service will be displayed.

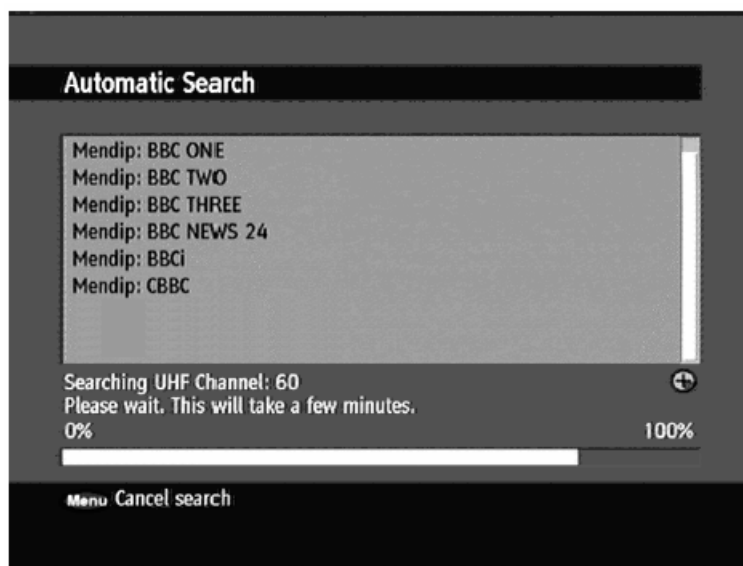
### Channel search

We recommend using the automatic search if several channels in your channel list are no longer being broadcast or if more than one or two new channels have become available. The automatic search will scan the frequency range according to your country settings automatically.

Please select in the list function between *replace* and *append* before you start the search process. If *replace* is chosen, the previous channel list will be replaced completely. If you select *append*, then all new services will be added to the current service list.

The complete search process may take several minutes to complete.

The progress bar at the bottom shows how much of the search has already been completed. Press the menu button to cancel the search for new channels.



If the manual channel search is selected, then you can directly modify the frequency range or the channel number for the search process. It is also possible to append new services or to replace the complete service list.

The manual search is quicker as the automatic search. But the channel numbers or frequencies must be known before attempting this method and therefore this is only designed for more advanced users.

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### Troubleshooting

#### Attention!

Please avoid unnecessary risks.

Never attempt to repair a defective – or seemingly defective – device on your own. Repairs should only be performed by a specialised repair facility or an equally qualified specialist.

Any electrical device is possibly susceptible to errors. However not every error represents a defect. Very often the cause for errors are faulty cables, connector cables/sockets or errors in connecting the device.

Before contacting the helpline please check that digital television is broadcast in your area by using the postcode checker available on the following Website:

[www.dtg.org.uk](http://www.dtg.org.uk)

If you are in an area that will receive digital television but cannot you may need an upgrade for your aerial.

Error	Possible cause	Remedy
Device does not start	Not connected to mains supply	Check mains adaptor and cable
No image, no sound	Not connected to mains supply	Check mains adaptor and cable
	No channels available	Perform automatic channel search (see page 27)
	Lost aerial connection	Check aerial connection
No image or bad reception	SCART connector not fully plugged in	Check SCART connector
	Aerial incorrect	Replace the aerial
	Channel parameters have changed	Perform automatic channel search (see page 27)
No image, audio OK	Channel parameters have changed	Perform automatic channel search (see page 27)
	SCART connector not fully plugged in	Check SCART connector
No reception of channels that were previously available	Channel is no longer broadcast	None
Remote control is not working	Obstacle between remote control and receiver	Remove obstacle
	Flat battery	Replace batteries
Certain stations cannot be received from time to time	Some services are not transmitted 24 hours a day and can sometimes be unavailable. This is not a fault.	
Poor image quality	Wrong TV SCART out signal	Try changing from RGB to CVBS or vice versa (see page 22)
Record time display does not advance	Hard disk not properly recognised	Format hard disk (see chapter <b>Settings</b> )
Recording does not work; front panel display shows "FULL"	No available space on hard disk	Delete recordings to free up space

## Technical Specification

### Basics

- DVB terrestrial Free-To-Air reception
- Twin tuner PVR DTT receiver
- Video and Audio out via 2x SCART
- EPG schedule (7 days) and EPG now/next support
- Integrated 80 GB (Hard Disc Drive)
- Update-Over-Air ability

### Input / Output specification

- 2x SCART out (EN 50049-1):
  - TV SCART out: CVBS, RGB, Audio
  - VCR SCART out: CVBS, Audio
  - VCR SCART in (pass to TV SCART): CVBS, Audio
  - Switching signal: at PIN8 0/6/12 V; at PIN16 0/1-3 V
- Loop-Through of RF signals

### STB mode functionality

- DVB terrestrial TV reception
- Integrated Hard Disk Drive for Recording and Playback support (PVR functionality)
- Electronic Program Guide (EPG)

### PVR mode functionality

- Time shift recording
- One-Touch-Recording
- Timer programmable by 7 day EPG
- Background Recording in watch mode and playback mode

### Power Supply

- Power supply 230VAC/50Hz
- Operation power consumption: < 16W