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VCR



VR 608/07

Operating instructions



Let's make things better.



PHILIPS

Remote control

You will find explanations for the controls and the displays on your video recorder on the second to last page of these operating instructions.



TIP



SMART 
STANDBY/ON 

- Select picture adjustment
- Switch set on / off
- Interrupt function
- Interrupt programmed recording
- Delete entry
- Delete programmed recording
- Select function
- Activate / deactivate child lock
- Change between TV reception and video recorder reception

CLEAR / CL

SELECT
CHILD LOCK 
MONITOR

0-9

- Enter data
- Select programme number
- Programme Turbo Timer recordings
- Programme recordings
- Check / change recordings
- Delete recordings

TURBO TIMER
TIMER 

MENU
OK

- Switch main menu on / off
- Store
- Confirm

↑ P+ / ↓ P-

- Select next / previous menu point
- Select next / previous programme number

← / →

- Select entry field

TV functions

+ ▴ -
⊗ / TV
TV / ⏻
+ TV -

- Increase / reduce TV volume
- Switch sound on / off
- Switch TV on / off
- Select next / previous programme number

⏮

- In STOP or STANDBY mode: Rewind
- In playback mode: Fast reverse

PLAY **▶**

▶▶

- Play back recorded cassette
- In STOP or STANDBY mode: Wind forward
- In playback mode: Fast forward

STOP **■**

RECORD/OTR **●**

INDEX **▶▶**

- Stop tape
- Starting recording manually
- With **⏮** or **▶▶**: Searching for index marking

STILL **⏸**

- Stop tape and show still picture

Accessories

- ✓ Operating instructions
- ✓ Quick Start Guide
- ✓ Remote control
- ✓ Batteries
- ✓ Aerial cable
- ✓ Mains cable

1

Introduction



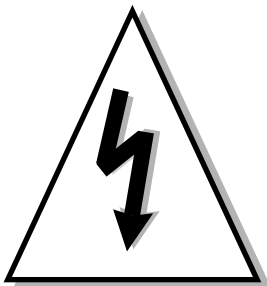
**Welcome to the family of owners
of Philips VHS video recorders.**

Thank you for choosing to buy our product. Please wait at least three hours after transporting the appliance before starting installation. The set needs this time in order to become acclimatised to its new environment (temperature, air humidity, etc.).

**Your Philips Team hopes that
you will enjoy using your new
video recorder.**

This product complies with the requirements of Directive 73/23/EEC + 89/336/EEC + 93/68 EEC.

Important notes for operation



You should not under any circumstances open the set yourself. You would expose yourself to the risk of an electric shock from the hazardous high voltage inside.

When the appliance is connected to the power supply, there are some components which are constantly operational. To switch off the video recorder completely, you must disconnect it from the power supply.

The video recorder does not contain any components that can be repaired by the customer.



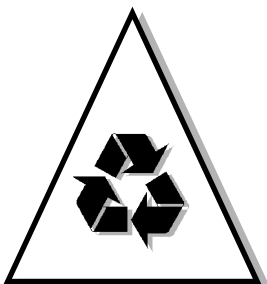
Make sure that air can circulate freely through the ventilation slots on the video recorder.

Make sure that no objects or liquids enter the video recorder. If liquid is spilt into it, disconnect the video recorder immediately from the power supply and call the After Sales Service for advice.

The video recorder should not be used immediately after transportation from a cold to a hot area or vice versa, or in conditions of extreme humidity.

These operating instructions have been printed on non-polluting paper.

Please deposit old batteries at the relevant collection points.



Please make use of the facilities available in your country for disposing of the video recorder packaging in a way that helps to protect the environment.

This electronic device contains many materials which can be recycled. Please enquire about the possibilities for recycling your old set.

The most important functions of your new video recorder



Your Philips video recorder can be used, not only for recording and playing back VHS cassettes, but it also has a whole range of special functions which will make day-to-day use of your new video recorder easier for you.



Plug in and off you go - getting started with your new video recorder just couldn't be simpler. Once you have connected the cables, you will immediately see text on the screen which will assist you at all stages of operation.



Philips has developed a system which makes it possible for you to get the best possible playback quality from video cassettes. Interference on old, often-played tapes is minimised, and in new or high quality cassettes, details are even clearer.




The precision mechanism developed by Philips guarantees short rewind times and, by automatically detecting the length of the tape, makes operation as easy as possible for the user.



The simple programming system VIDEO Plus+ revolutionized the video world when it was introduced. Instead of having to enter many different details (date, starting time, finish time, programme), which was often tiresome and liable to errors, all you have to do is enter a number, up to nine digits long, which can be found in any TV programme listing.

VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under licence from Gemstar Development Corporation.

So that you can identify your machine in the event of theft, enter the serial number (PROD. NO) here. You will find it on the type plate on the back of the set.

MODEL NO.	VR 608/07	PHILIPS
PROD. NO.	

If you have any problems using the video recorder, please read the corresponding chapters in this instruction manual. If you have any questions, there is also a customer support service available in your country. You can find the telephone number in the guarantee information enclosed in the packaging. Please have your model number (MODEL NO.) and production number (PROD. NO.) ready.

Important information for customers in Great Britain

This set is fitted with an approved moulded 13 amp plug. To change the fuse in this plug or to attach a different plug, please proceed as follows:

- 1 Take off the fuse cover and remove the old fuse
- 2 Insert a new fuse. Suitable fuses are those of the type BS 1362 3A, A.S.T.A. standard or BSI standard
- 3 Close the fuse cover

If the attached plug does not meet your requirements, you can cut it off and replace it with a suitable plug. Please observe the following conditions:

If your new plug uses a built-in fuse, this should be a 3A fuse.

If your new plug does not contain a built-in fuse, please do not use any fuses in your fusebox with a rating of more than 5A.

Please destroy the old cut-off plug so that it cannot be used elsewhere.

- 4 Connect the blue cable (neutral "N") to the terminal in the plug which is marked with the letter "N" or coloured black
- 5 Connect the brown cable (live, "L") to the terminal in the plug which is marked with the letter "L" or coloured red
- 6 Do not in any circumstances connect either of the two cables to the terminal in the plug which is marked with the letter "E", the symbol "⏏" or coloured green or green / yellow

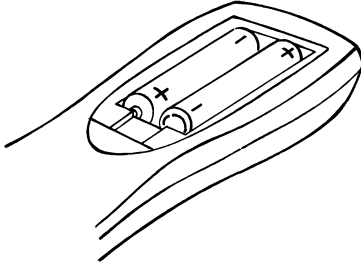


Before you refit the plug cover, make sure, that the grip at the bottom of the plug is clamped over the plastic cover of the lead, not just over the two wires.

2

Connecting the video recorder

Preparing the remote control for operation



- 1 Take the remote control of the video recorder and the enclosed batteries (2 batteries)
- 2 Open the battery compartment, insert the batteries as shown and then close the battery compartment. The remote control is now ready to use

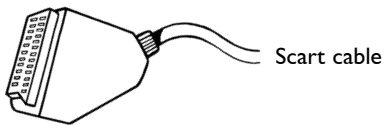
Connecting to a TV set with a scart socket



Aerial cable



Mains cable



Scart cable



- 1 Have the following cables ready: An aerial cable (enclosed), a mains cable (enclosed) and a scart cable

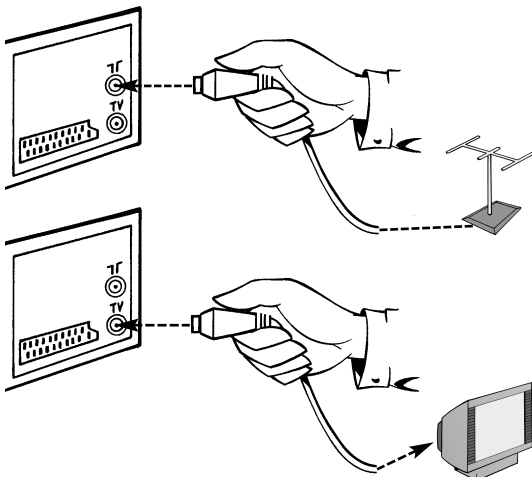
What is a scart cable?

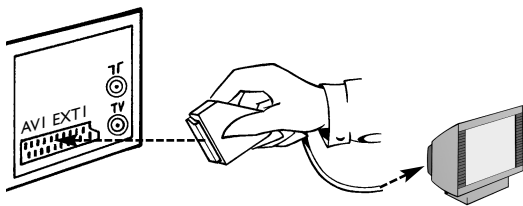
The scart or Euro-AV cable serves as the universal recording and playback connector for picture-, sound- and control signals. With this type of connection, there is practically no loss of quality during the signal transfer. We recommend that you use a scart cable (available from specialist stores) when using this video recorder.



PARDON?

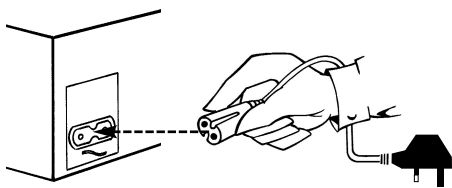
- 2 Switch off your TV set
- 3 Remove the aerial cable plug from the back of your TV set and insert it into the aerial socket  on the back of the video recorder
- 4 Take the enclosed aerial cable and connect the appropriate end to the aerial socket of your TV set and to the TV socket  on the back of the video recorder





- 5** Take a scart cable and connect one end to the scart socket on the back of your TV set and the other to the scart socket **AVI EXT I** on the back of the video recorder

✗ My TV set has more than one scart socket
 ✓ Then you have a more modern TV set. Please check first (with the aid of the operating instructions for the TV set), which of the available scart sockets is intended for use with the video recorder.



- 6** Take the enclosed mains cable and connect the appropriate end to the mains socket \sim on the back of the video recorder and the other to the nearest free socket

- 7** Your set should automatically switch over to the programme number allocated to video recorder operation (usually: EXT, 0 or AV). You will see the welcome screen.

✗ My screen is still blank
 ✓ If a TV set receives a signal via the scart socket, it usually switches automatically to the corresponding programme number. This automatic function might be adversely affected. Please switch manually to the corresponding programme number (usually: EXT, 0 or AV)
 ✓ Check the cable connections



- 8** You can find more details in the chapter "Initial Installation"

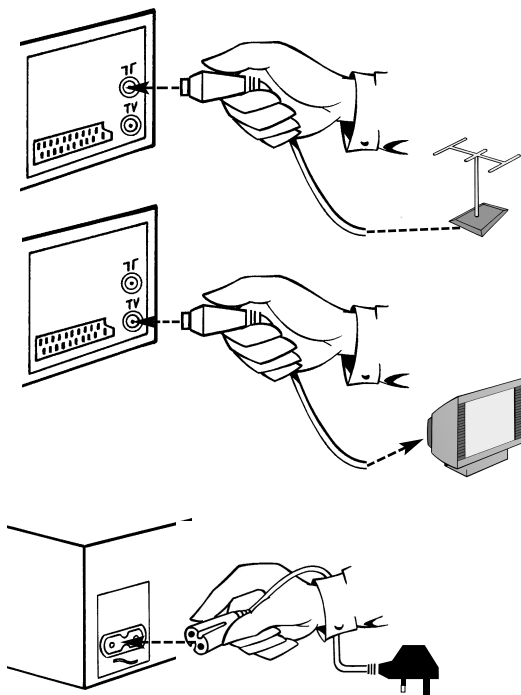
Connecting to a TV set without a scart socket



- 1** Have the following cables (provided with your new video recorder) ready: An aerial cable and a mains cable



- 2** Switch off your TV set



3 Remove the aerial cable plug from the back of your TV set and insert it into the aerial socket **TV** on the back of the video recorder

4 Take the enclosed aerial cable and connect the appropriate end to the aerial socket of your TV set and to the TV socket **TV** on the back of the video recorder

5 Take the enclosed mains cable and connect the appropriate end to the mains socket **~** on the back of the video recorder and the other to the nearest free socket

6 Switch on your TV set and select on your TV set the programme number which will in future be used for operation with the video recorder

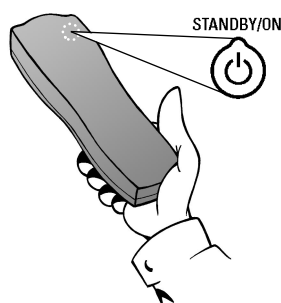
7 Change the settings of this programme number on your TV set until you see the adjacent welcome screen clearly and in colour on the screen



X There is no test image

✓ Your video recorder “broadcasts” on the frequency 583MHz (CH35) in the UHF range (ultra high frequency). Repeat the matching of the selected programme numbers on the TV set

✓ Check the cable connections



8 Switch off the video recorder with the Standby button **⏻**

Connecting additional devices

Additional devices, such as a decoder, camcorder, satellite receiver, etc., can be connected to the scart socket **AV2 EXT2** on the back of the video recorder. You will need a scart cable for this (available from specialist stores).

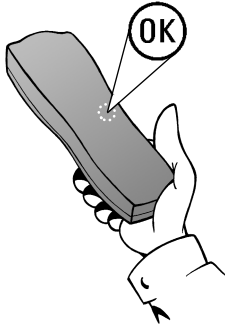
There are two audio output sockets on the back of the video recorder - **AUDIO OUT L R**. You can connect a stereo system to these.



3

Initial installation

Setting TV channels, date and time for the first time



- 1 Using the OK button activate the automatic initial installation

"Aim" correctly

Always point the remote control at the video recorder and not at the TV set.



- 2 The set seeks out and stores all available TV channels as well as time and date. This procedure may take several minutes. As soon as all the data has been stored, the screen will show the message "STORED".

The Teletext clock resets automatically

If a TV channel which has Teletext is stored as programme number P01, the video recorder automatically takes in the date and time from the text function. The change from summer to winter time and vice versa should also occur automatically.



X Despite a continued search the video recorder finds no TV channels ("00 TV CHANNELS FOUND")

✓ Please be patient! The video recorder will search through the entire frequency range in order to identify the maximum possible number of available TV channels. TV channels transmitted in your country may use a higher frequency band. As soon as this range is reached, the video recorder will find all available channels.



- 3 The initial setting of channel, date and time is completed

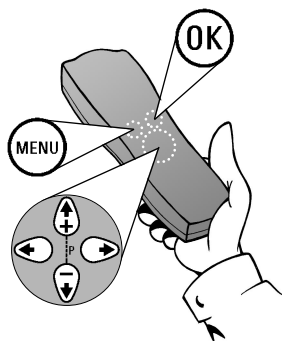
X The time is not shown in the display of the video recorder ("--:--") or is shown incorrectly

✓ While initial installation was going on, the set was unable to recognise the time. Please read the paragraph in Section 4 "Changing the time and date" to correct this problem



Searching for TV channels manually

In exceptional cases, it may happen that on initial installation the set does not find all the available TV channels. In this case, the missing TV channels must be searched for and stored manually.



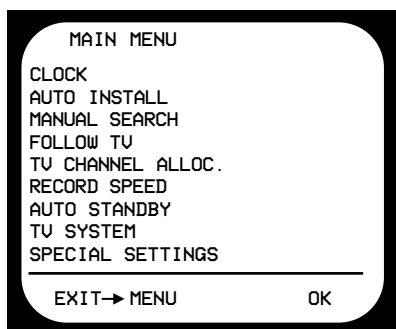
- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears

What is an on-screen menu?

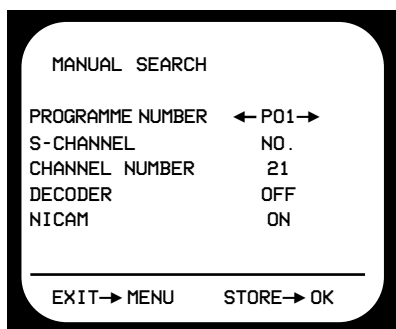
The on-screen menu takes the mystery out of using your new video recorder. All settings and recording steps can be done easily via the on-screen menu by following the corresponding instructions on the screen.



PARDON?



- 3 Use **↓P-** or **↑P+** to select the option “MANUAL SEARCH”
- 4 Confirm with **OK**
- 5 Use **→** or **←** (or **0-9**) to select the programme number (e.g.: “**1**”), which you want to manually allocate to a TV channel



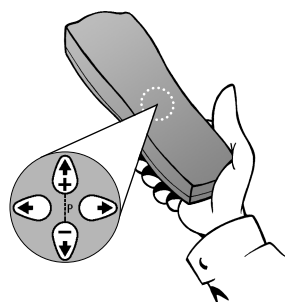
- 6 If you are looking for a special channel, use **↓P-** or **↑P+** to select the option “S-CHANNEL” and use **→** or **←** to activate the “YES” setting. To search for a “normal” channel, the “NO” setting must be selected

What is a channel, or a special channel?

TV channels are transmitted on precisely-defined frequency ranges. These ranges are also referred to as “channels”. Each channel has its own TV station allocated to it. Most cable and satellite TV providers supply tables of channel allocations. Special channels (hyperband channels) are transmitted on special frequencies.



PARDON?



- 7 Use **↓P-** or **↑P+** to select the option “CHANNEL NUMBER” and use **→** or **←** (or **0-9**) to enter the number of the TV channel required

X I don't know the channels for my TV stations

- ✓ No problem. Hold down the button → to start the automatic channel search. A changing channel number will appear on screen. Continue the automatic channel search until you have found the desired TV station



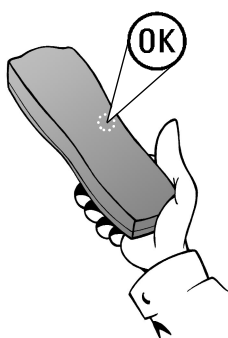
PROBLEM

HiFi reception in Nicam

This video recorder can receive HiFi sound transmissions in Nicam standard. To switch this function on or off use ↓P- or ↑P+ to select the option "NICAM" and use → or ← to activate the "ON" or "OFF" setting. Nicam digital stereo is a TV broadcasting system capable of delivering CD quality digital stereo sound.



TIP



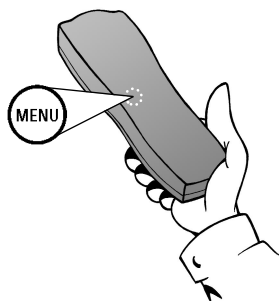
- 8 Press **OK** to store the TV channel found. The screen will briefly show "STORED"

X I can't find the TV channels from my satellite receiver

- ✓ These do not have to be stored as actual TV channels. On your video recorder, select the programme number "E2". Individual TV channels must be selected on the actual satellite receiver itself



PROBLEM



- 9 Finish manual searching of TV channels by pressing the **MENU** button or return to step 3 to allocate additional TV channels

Allocating decoder

- 1 Use ↓P- and ↑P+ or the number keys 0-9 to select the TV channel, which will in future be automatically decoded by your decoder

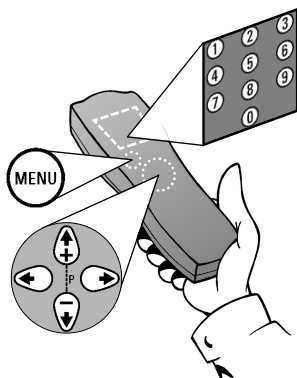
What is a decoder?

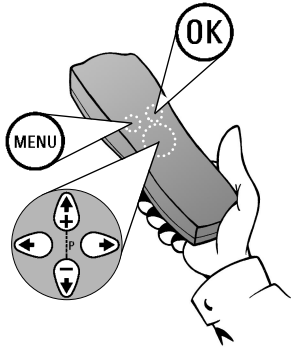
Like a deciphering machine, a decoder (available in TV and video stores) deciphers the TV channels for which additional charges must be paid. Without the appropriate decoder, you will receive these TV channels distorted.



PARDON?

- 2 Press the **MENU** button





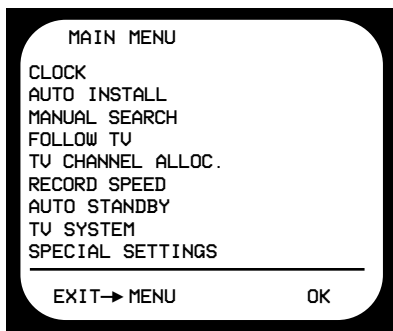
- 3 The on-screen menu appears. Use the buttons \downarrow P- and \uparrow P+ to select the menu point "MANUAL SEARCH" and confirm with OK

What is an on-screen menu?

The on-screen menu takes the mystery out of using your new video recorder. All settings and recording steps can be done easily via the on-screen menu by following the corresponding instructions on the screen.



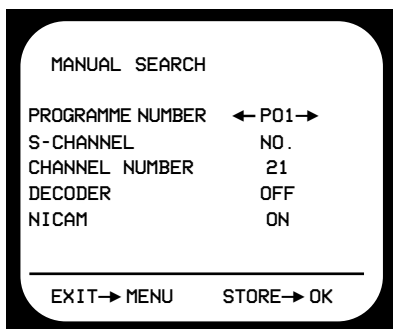
PARDON?



- 4 Use \downarrow P- or \uparrow P+ to select the option "DECODER"

- 5 Using \rightarrow or \leftarrow , activate the setting "ON". The display will show "DEC". When selecting "OFF" the decoder will not be allocated

- 6 Confirm with OK and leave the on-screen menu with the MENU button. The screen will briefly show "STORED"



Check decoder allocation at a glance

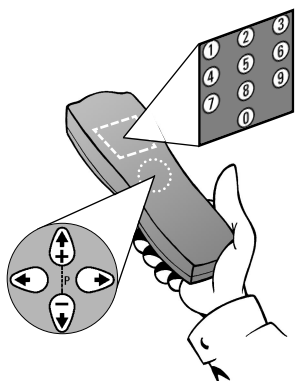
There is no need to call up the on-screen menu to check to which TV channel on the video recorder a decoder is allocated. Simply use \downarrow P- and \uparrow P+ to select a TV channel. If "DEC" appears in the display, a decoder is allocated to this channel.



TIP

Using a satellite receiver

Those TV channels which are received via a satellite receiver connected (to the scart socket **AV2 EXT2**) can be viewed on the video recorder on programme number "E2". Press the number button **0** on the remote control and then the button \downarrow P- to select this programme number. The TV channels of the satellite receiver are selected not on the video recorder itself, but directly on the satellite receiver.

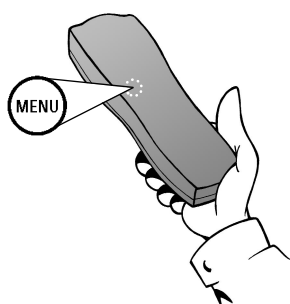


4

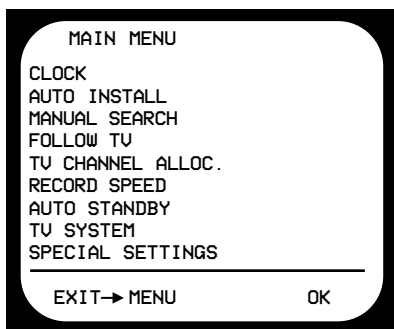
Settings

Searching for TV channels automatically

On initial installation, the video recorder performs an automatic channel search. If the channel assignments of your cable or satellite TV provider change or if you are reinstalling the video recorder, e.g. after moving house, you can start this procedure again. The video recorder finds all the available TV channels and stores the new settings.

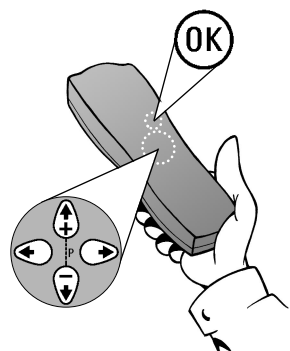


- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option "AUTO INSTALL" (automatic channel search) and confirm with **OK**



Sequence of TV channels

TV channels are stored in the following sequence: BBC1, BBC2, ITC, CH 4, CH 5, others.



- 4 The set seeks out and stores all available TV channels. This procedure may take several minutes. As soon as all the TV channels have been stored, the screen will show the message "STORED".

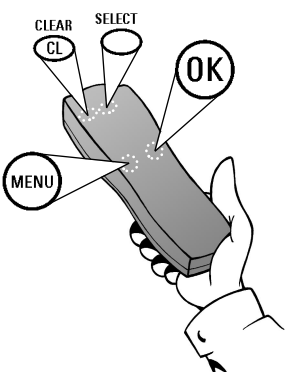
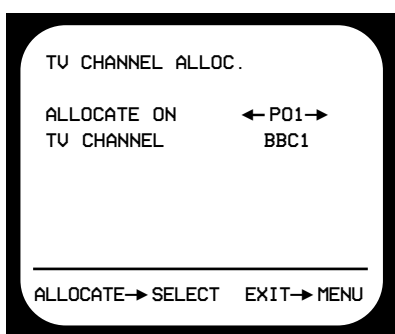
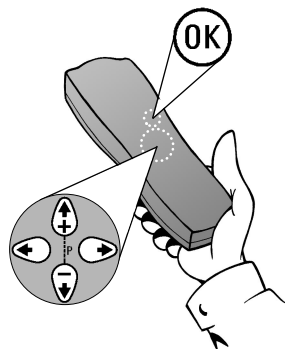
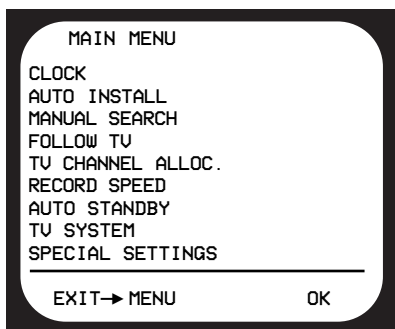
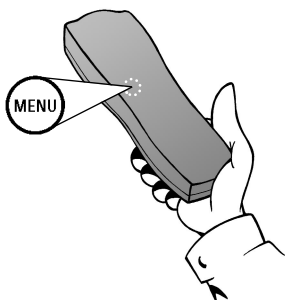


✗ The video recorder is not finding all the TV channels

- ✓ In exceptional cases, it may happen that the set does not find all the available TV channels. In this case, the missing TV channels must be searched for and stored manually. You can look up how to do this in the chapter "Initial installation" ("Searching for a TV channel manually").



- 5 Finish with the **MENU** button



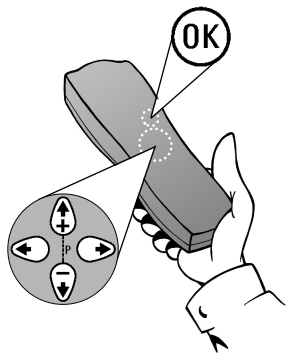
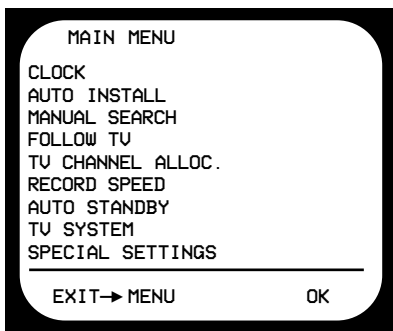
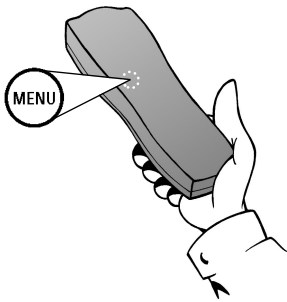
Sorting and clearing of TV channels manually

After you have performed the automatic channel search you may not agree with the sequence in which the individual TV channels have been allocated to the programme positions of the video recorder. You can use this function to individually sort the TV channels found or to delete unwanted TV channels or those with poor reception.

- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option "TV CHANNEL ALLOC." and confirm with **OK**
- 4 Use **→** or **←** to select the TV channel, to be allocated a programme position
- 5 **Sorting:** Press **SELECT**, to allocate the TV channel to the programme position set **P 01**
Delete: Delete the TV channel which has been set with **CLEAR (CL)**
- 6 Continue repeating the steps **4** and **5**, to allocate additional TV channels (**P 02, P 03, ...**) or to delete additional TV channels
- 7 Finish the manual sorting / clearing of TV channels with the **MENU** button

Sorting of TV channels automatically (Follow TV)

After you have performed the automatic channel search you may not agree with the sequence in which the individual TV channels have been allocated to the programme positions of the video recorder. You can use this function to sort the TV channels found exactly in the same order they are stored on your TV set.



- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation
- 2 Press the **MENU** button on the remote control. The on-screen menu appears
- 3 Use **↓P-** or **↑P+** to select the option "FOLLOW TV" and confirm with **OK**
- 4 Press **OK** to start the automatic TV channel sorting. The display of the video recorder shows "TV 01"
- 5 On your TV set select the programme number "01"
- 6 Press **OK** on the remote control of the video recorder. The video recorder compares the channels stored with the one currently chosen on the TV set. When the matching TV channel has been found, the video recorder stores it on "01".

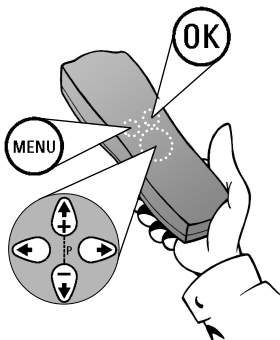
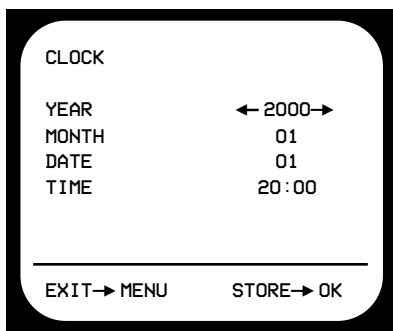
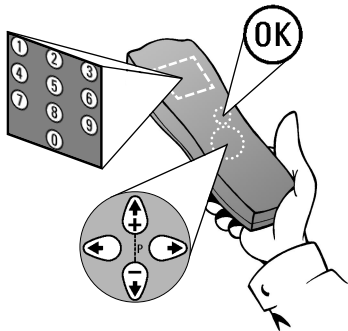
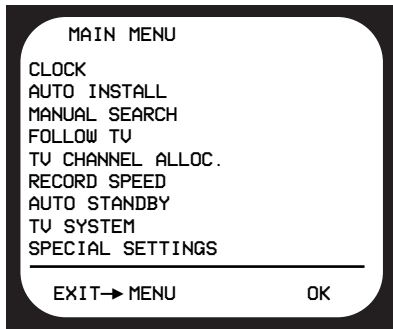
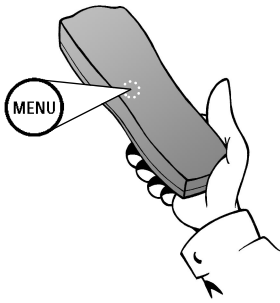
- ✗ The display of the video recorder shows "NOTV"
- ✓ Unfortunately your TV set and the video recorder are not able to exchange data. If you still want to change the order of the stored TV channels, please read the section "Sorting and clearing of TV channels manually" in this chapter.



PROBLEM

Changing the time and date

If the display shows an incorrect time or “---:---”, the time and date must be set manually.



- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option “**CLOCK**” and confirm with **OK**
- 3 In the “**YEAR**” option – if the setting displayed is incorrect - enter the current year with the number buttons **0-9** (or with **→** and **←**)

Enter the values correctly

Numbers less than 10 must be entered with an additional “0”. Therefore for “9” you must enter “09”.



- 4 Use **↓P-** or **↑P+** to select the option “**MONTH**” and - if the setting displayed is incorrect - enter the current month with the number buttons **0-9** (or with **→** and **←**)
- 5 Use **↓P-** or **↑P+** to select the option “**DATE**” and - if the setting displayed is incorrect - enter the current calendar date with the number buttons **0-9** (or with **→** and **←**)
- 6 Use **↓P-** or **↑P+** to select the option “**TIME**” and - if the setting displayed is incorrect - enter the current time with the number buttons **0-9** (or with **→** and **←**)
- 7 Check the settings displayed for year, month, date and time and store them by pressing **OK**. The screen will briefly show “**STORED**”
- 8 Leave the on-screen menu with the **MENU** button

The Teletext clock resets automatically

If you store a TV channel which has Teletext as programme number P01, the video recorder automatically takes in the date and time from the text function. The change from summer to winter time and vice versa should also occur automatically.




5

Operating instructions

General information

Switching on

If the video recorder is in standby mode, it can be switched on either by pressing the Standby button , by pressing one of the number buttons **0-9** or by inserting a cassette.

Automatic switch-off

If the video recorder is not used for several minutes, it switches itself off automatically. This function can be deactivated (e.g. if you want to use the video recorder as a TV receiver). You can find out more about this in the chapter "Other functions" ("Adjusting automatic switch off").


Energy consumption

The video recorder should always be connected to the mains so as not to affect programmed recordings and use of the TV set. Power consumption (in energy saving mode) is less than 4W.

Saving energy

In standby mode, the display of the video recorder shows the current time. This display can be deactivated manually, in order to reduce power consumption to a minimum in standby mode. You can find the necessary steps in the section "Other functions" ("Energy-saving mode").

Emergency exit

The video recorder and the remote control have the option of an "Emergency exit". You can use the Standby button  to interrupt any step during use. But even without an "emergency brake" your new video recorder is safe: there is no risk whatsoever of damaging the set by performing user steps incorrectly.


In the event of a power cut

Channel data are stored for around 1 year; time and timer data remain in the memory of the video recorder for around 3 hours.

Navigation in the main menu

You can check and / or change many functions and settings of your video recorder via the main menu. The individual functions are selected as follows via the on-screen menu of the video recorder

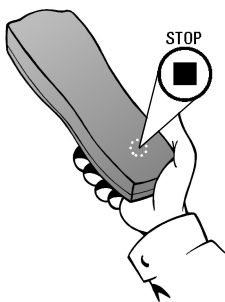
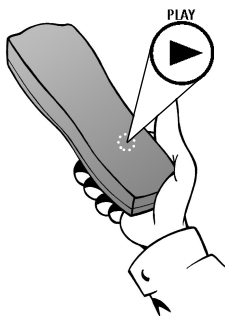
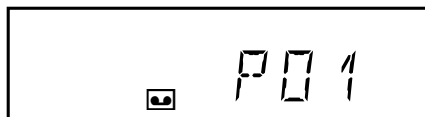
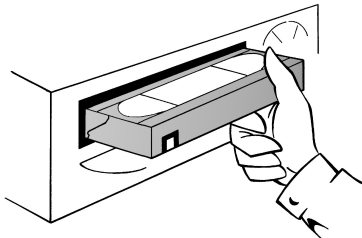



Call up:	MENU
Select:	↑ P+ or ↓ P-
Confirm:	OK
Enter:	0-9 or → and ←
Interrupt:	STANDBY/ON 
Abandon:	MENU

6

Playback

Playing cassettes




- 1 Insert a VHS cassette in the cassette opening on the front of the video recorder. The tape will be caught and automatically placed in the correct position. The display will show “”

What does VHS mean?

The “Video Home System” (VHS) has become the world-wide standard for recording and playback of amateur video cassettes. The popular standard has since been refined. Super-VHS (S-VHS) offers greater sharpness and less noise, Digital-VHS (D-VHS) now only works with digital picture and sound signals. Your video recorder can only record and play standard VHS cassettes.



PARDON?






- 2 Press the Playback button  to play the tape

✗ Picture / sound quality is poor

- ✓ Please read the section “Removing picture interference” in this chapter.
- ✓ When playing many rental videos or older, poorer quality cassettes, it may not be possible to completely filter out picture and sound interference. There is nothing wrong with the video recorder.



PROBLEM

- 3 Press the Stop button  on the remote control (or the Stop/Eject button  /  on the front of the video recorder) to stop playback
- 4 Press the Stop/Eject button  /  on the front of the video recorder to remove the tape

Automatic switch-off

Many functions (pause, still picture, search, ...) switch themselves off automatically after a short time in order to protect the cassette and to save energy.

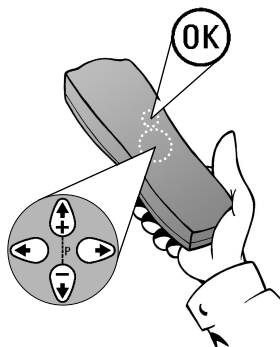
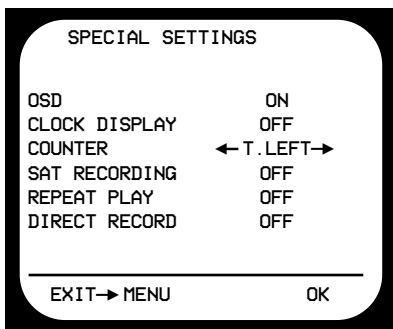
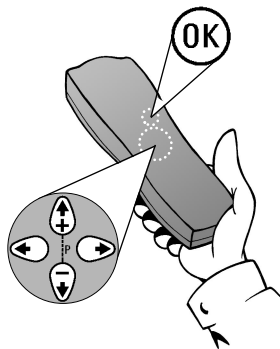
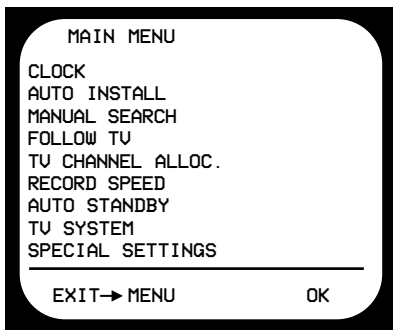
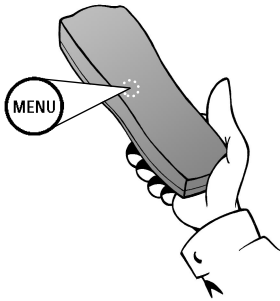


TIP

Playing back NTSC cassettes

If you are using a PAL TV set which is capable of showing a frame frequency of 60 Hz, you can play cassettes which have been recorded on the NTSC standard (USA, Japan, etc.). During an NTSC playback, some special functions (e.g. still picture) are not possible. The display will show “~~60~~HZ”

Selecting tape position display type



If the **OK** button is pressed during playback and recording the current tape position (hours : minutes : seconds) is shown in the display. There are two different types of display available.

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option “**SPECIAL SETTINGS**” and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option “**COUNTER**”

What types of display are available to me?

- “**LINEAR**”: The display shows the number of minutes of tape already played (00:00:00 - hours/minutes/seconds)
- “**TIME LEFT**”: The display shows the playing time remaining until the end of the cassette (00:00 - hours/minutes)

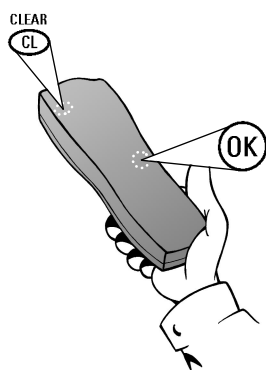


- 4 Use **→** or **←** to select the desired display type and confirm with **OK**. The screen will briefly show “**STORED**”

- ✗ The counter stops running when unrecorded places are found (“**LINEAR**” display type)
- ✓ This is normal, and is necessary for technical reasons.
- ✗ The display shows a negative playing time
- ✓ This may happen, for example, when you insert an incompletely-rewound cassette into the video recorder and rewind it to the start of the tape. Since the display is automatically reset to “00:00:00” when you insert a cassette, the actual start of the cassette for the set is less than zero - thus in the negative range. The tape position is displayed with a minus sign “-”.
- ✗ After inserting a cassette the video recorder shows no remaining playing time
- ✓ The set needs a little time to calculate the remaining playing time. After a few seconds, the display should change from --:-- to the corresponding value



Display / reset tape position



Call up: **OK**

Reset: **CLEAR (CL)** (only in the "LINEAR" display mode)

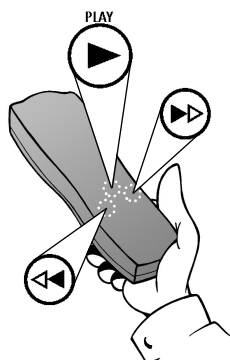
Automatic reset

Whenever a cassette is inserted the display is automatically reset to "00:00:00".



TIP

Searching for tape position with picture (picture search)



- 1 During playback press ◀◀ (rewind) or ▶▶ (forward)
- 2 Interrupt the search wherever you like with the Playback button ▶

Reduced quality

During picture search the picture quality is affected. The sound is switched off.

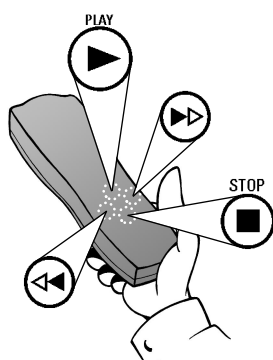
Different search speeds

If you press ◀◀ or Press ▶▶ twice, the search speed will increase.



TIP

Searching for tape position without picture (forward wind and rewind)



- 1 Stop the tape with the Stop button ■
- 2 Press ◀◀ (rewind) or ▶▶ (forward)
- 3 Interrupt the search wherever you like with the Playback button ▶

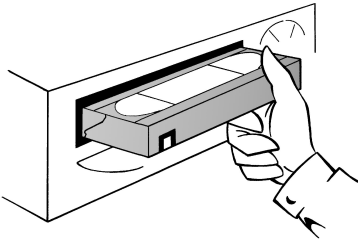
Switching between rewind / forward wind and picture search (instant view)

When winding the tape backwards or forwards if you hold down ◀◀ (rewind) or ▶▶ (forward wind), the set will immediately switch without a break to picture search (with picture). When you release the rewind or forward wind button the rewind or forward wind process (without picture) will continue



FOR EXPERTS

Searching automatically for tape position (index search)



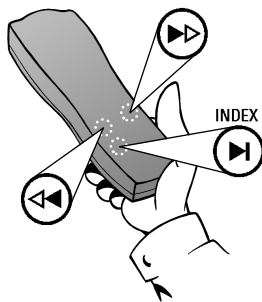
- 1 Insert a tape recorded on this video recorder or on another set with index marking




What is an index marking?

At the start of each new recording the video recorder automatically places a magnetic marking - similar to a bookmark - at the appropriate place on the tape. These positions can be found again quickly and easily later by pressing a button.





PARDON?



- 2 Press the Index button  and then  (next index marking) or  (previous index marking)

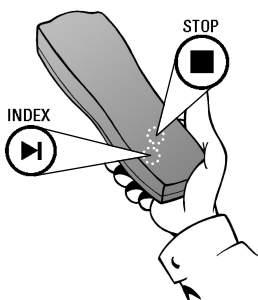
- 3 The video recorder searches for the desired index marking and automatically switches to playback

-  The tape has been stopped
-  The video recorder was unable to find an index marking on the tape inserted.





PROBLEM

Finding a blank position on tape automatically



- 1 Press the Index button  and then the Stop button 

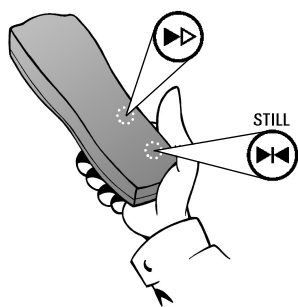
- 2 The video recorder searches for the next blank part - longer than one minute - of the tape and automatically switches to pause

-  The cassette is ejected
-  The video recorder was unable to find any blank space on the tape inserted



PROBLEM

Still picture / slow motion



- 1 To stop the picture, press the Still button ►◄ during playback
- 2 Keep ►◄ pressed down to play back the picture in slow motion or press ►◄ several times in succession in order to move the picture forward frame by frame
- 3 Press ►► once to start automatic slow motion playback

Increase playback speed

In automatic slow motion mode press ►► several times to increase the playback speed.

No sound during slow motion

During slow motion there will be no sound

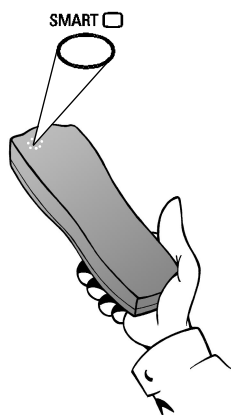


TIP

- 4 To resume playback press the Play button ►, to stop the tape press the Stop button ■

Selecting picture setting (Smart Picture)

Using the button **SMART** the picture settings can be displayed and altered during playback. There are four different settings available.



- 1 Press once on the button **SMART** . The current picture setting will be displayed
- 2 Press several times on the button **SMART** to change the picture setting. Each time the button is pressed, the next picture setting will be displayed.

What types of picture setting are available to me?

“NATURAL” :	Standard setting (for all types of films)
“DISTINCT” :	Emphasises details (e.g. for sports programmes)
“SOFT” :	Suppression of interference (when using rented cassettes)
“SHARP”:	Increase in sharpness (e.g. for animated films)



PARDON?

- 3 As soon as the **SMART** button has not been pressed for a few seconds, the last selected picture setting will be accepted.

Play compact VHS cassettes

You can, of course, also use this video recorder to play back compact VHS cassettes. To do this, you will need the appropriate cassette adapter. Its dimensions match those of a normal VHS cassette. The adapter is recognised and treated by the set as a VHS cassette.

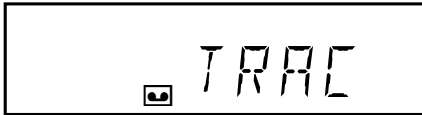
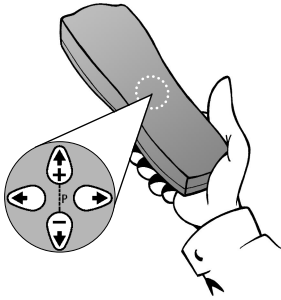


FOR EXPERTS

7

Removing picture interference

Optimizing tracking



- 1 During playback, hold down the button $\uparrow P+$ until the display shows "TRAC"

What is tracking?

Tracking is the name given to the process of optimizing picture and sound playback. During this process the speed of the tape is adjusted in such a way that all kinds of interference are removed or (in the case of old VHS cassettes) minimised.



PARDON?

- 2 Hold down the button $\downarrow P-$ or $\uparrow P+$ until the playback quality is at its best

- 3 Wait a few seconds until the message "TRAC" disappears from the display

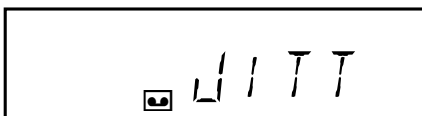
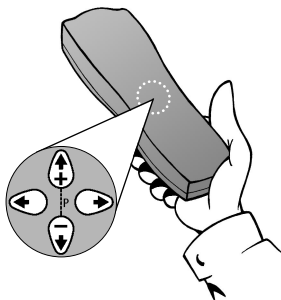
Tracking adjustment is retained

The adjustments made are stored until the cassette is removed. After that, the standard tracking adjustment is restored.



TIP

Optimizing still picture



- 1 When still picture is activated hold down the button $\downarrow P-$ or $\uparrow P+$ until the optimal picture quality is obtained. The display will show "LIT"

✗ I can't get optimal quality

✓ When using rental cassettes or older tapes, it may not be possible to get rid of all interference completely



PROBLEM

- 2 Wait a few seconds until the message "LIT" disappears from the display

The setting is retained

The adjustments made are stored until the cassette is removed. Then the still picture standard setting is restored.



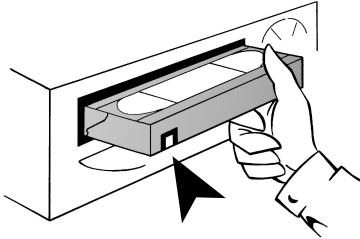
TIP

8

Manual recording

Starting and stopping of recording manually

- 1 Switch on the TV set and - if necessary - select the programme number set for video recorder operation



- 2 Insert a cassette without erase protection

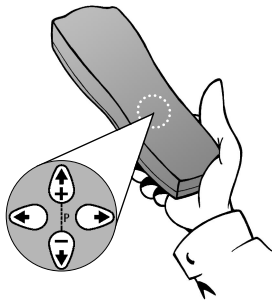
What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?

- 3 Use the buttons \downarrow P- or \uparrow P+ to select the programme number, under which your video recorder has stored the desired TV channel



✗ I can't find the TV channels from my satellite receiver

✗ I want to record from an additional device

✓ Signals from additional devices - such as a camcorder, other video recorder, PCs, etc. - are received via the scart socket of the video recorder. The programme numbers "E 1" and "E 2" are allocated for these sources.



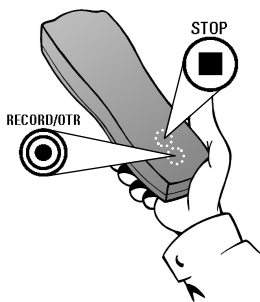
PROBLEM

Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



FOR EXPERTS



- 4 Start recording by pressing the Record button \bullet (remote control or on front of set). The display will show "O".

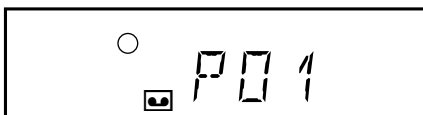
Displaying tape position

With the OK button you can display the current tape position (see chapter "Playback")

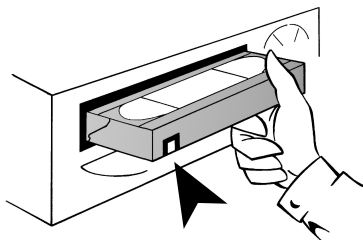


TIP

- 5 End the recording by pressing the Stop button \blacksquare



Starting recording manually / stopping automatically



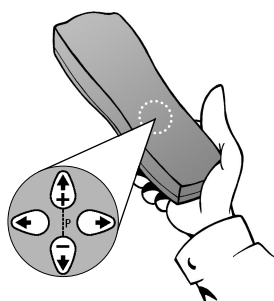
- 1** Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?



- 2** Use the buttons **↓P-** or **↑P+** to select the programme number, under which your video recorder has stored the desired TV channel

✗ I can't find the TV channels from my satellite receiver

✗ I want to record from an additional device

✓ Signals from additional devices - such as a camcorder, other video recorder, PCs, etc. - are received via the scart socket of the video recorder. The programme numbers "E 1" and "E 2" are allocated for these sources.



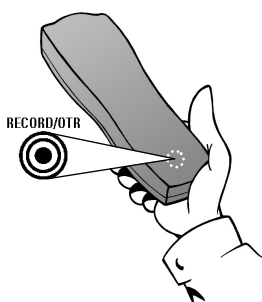
PROBLEM

Selecting the recording speed

You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette. This chapter explains how to set the desired recording speed ("Selecting the recording speed").



FOR EXPERTS



- 3** Press the Record button **●** several times. The time faded in corresponds to the duration of recording to be selected. Each time the Record button is pressed again this is increased in regular steps (30 minutes). Stop the adjustment when you have reached the desired duration. Recording will start.

Delete entry

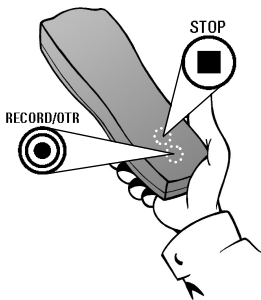
The recording period displayed can be reset to 00:00:00 with the **CLEAR (CL)** button.



TIP

Lining up manual recordings

When you add a further recording to a cassette, which already has a recording on it, a short blank (flicker) usually appears between the old and the new recording. This is how to avoid such an effect.



- 1 Look at the last minute of the old recording (playback)
- 2 Press the Stop button ■ at the point where you want the new recording to start (the display will show ||)
- 3 Press the Record button ● in the usual way to start the new recording

Selecting the recording speed

- 1 Press the MENU button on the remote control. The on-screen menu appears
- 2 Use ↓P- or ↑P+ to select the option "RECORD SPEED" and confirm with OK
- 3 Use → or ← to select the desired recording speed ("SP" - Standard Play or "LP" - Long Play or "AUTO" - Auto Long Play)

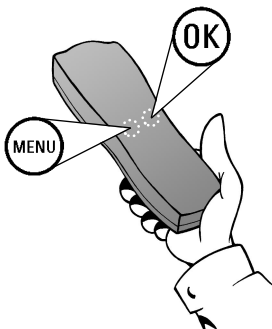
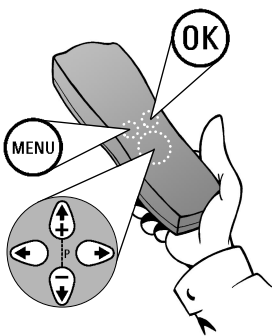
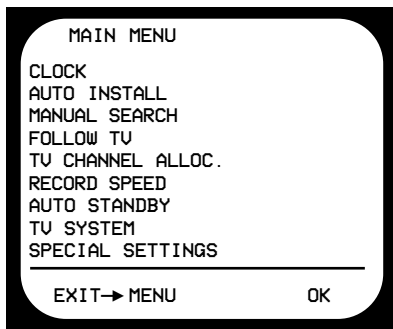
Standard Play / Long Play

Standard Play (SP) offers the usual, first-class picture quality. By using Long Play (LP), you can (with somewhat reduced picture quality) for example record about 360 minutes of programmes on a 180 minute cassette.



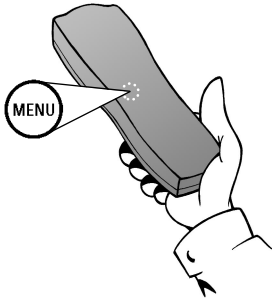
PARDON?

- 4 Confirm with OK. The screen will briefly show "STORED"
- 5 Stop selection of recording speed with MENU



Recording automatically from a satellite receiver

You can only use this function if you have a satellite receiver which can control other devices via a scart cable

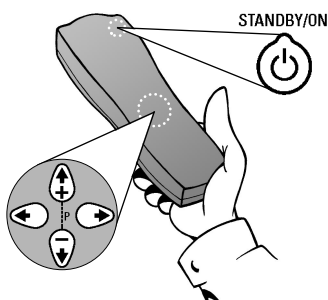
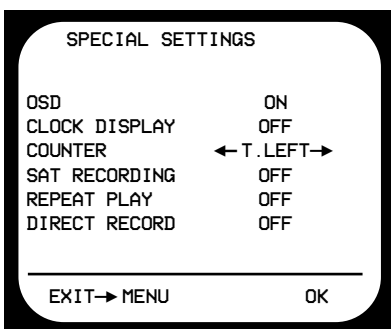
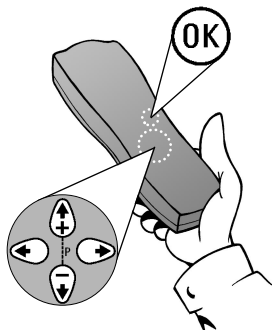
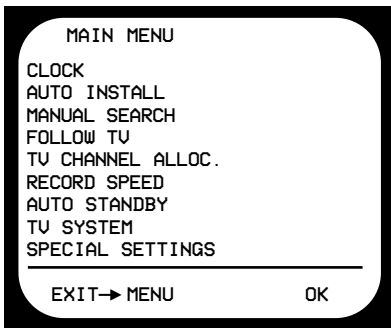



What is a scart cable?


The scart or Euro-AV cable serves as the universal recording and playback connector for picture-, sound- and control signals. With this type of connection, there is practically no loss of quality during the signal transfer. We recommend that you use a scart cable when using this video recorder.

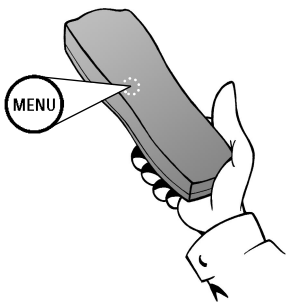


PARDON?



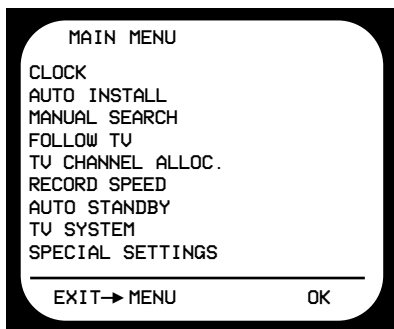
- 1 Insert a cassette without erase protection
- 2 Check that the satellite receiver is connected to the scart socket **EXT.2 AV 2** on the back of the video recorder
- 3 Press the **MENU** button on the remote control. The on-screen menu appears
- 4 Use **↓P-** or **↑P+** to select the option “**SPECIAL SETTINGS**” and confirm with **OK**
- 5 Use **↓P-** or **↑P+** to select the option “**SAT RECORDING**”
- 6 Use **→** or **←** to select the setting “**ON**”, to activate automatic recording from a satellite receiver, or “**OFF**”, to deactivate it. Confirm with **OK**. The screen will briefly show the message “**STORED**”
- 7 Programme the data on the satellite receiver for the desired recording. If necessary, you should refer to the instructions for your satellite receiver for assistance.
- 8 **SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON BUTTON . IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.**

When automatic recording has been activated by a satellite receiver, “” will light up in the display



Activate / deactivate direct recording

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "DIRECT RECORD"



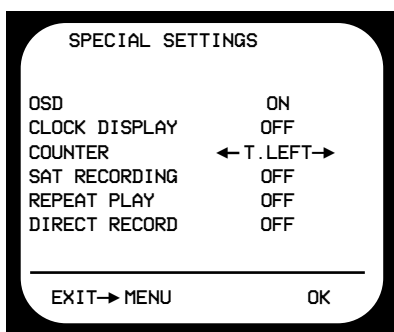
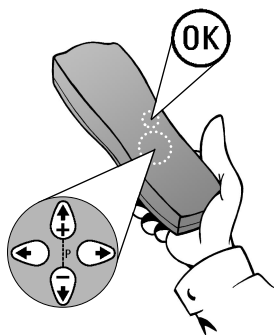
What is Direct Record?

The "Direct Record" function means you can record in seconds when the video recorder is switched off. When the record button is pressed, the video recorder automatically recognises which TV channel has been selected on the TV set and starts to record the corresponding programme.

Requirements: 1. The TV set and video recorder are connected with a scart cable! 2. The TV set supports the "Easylink" function. 3. The "Direct Record" function has been activated in the on-screen menu. 4. There is a cassette ready for recording in the machine!



PARDON?



- 4 Use **→** or **←** to select the setting "ON", to enable direct recordings, or "OFF", to deactivate this function.

✗ I cannot select "ON" or "OFF"

✓ If, in the option "DIRECT RECORD" the comment "N. ACT ." appears, your TV set unfortunately does not support the "Easylink" function. This means that direct recordings are not possible.



PROBLEM

- 5 Confirm the setting with **OK**

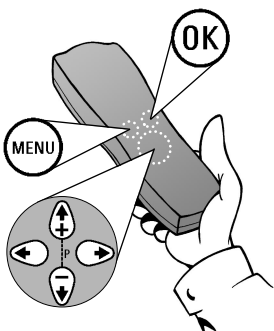
- 6 Leave the on-screen menu with the **MENU** button

Switch the video recorder off!

The "Direct Record" function only works when the Record button ● is pressed when the video recorder is switched off.



TIP



- 7 Switch of the video recorder with the Stand-by button

Making a direct recording

- 1 The “direct record” function must be activated in the on-screen menu (see previous page). No direct recordings can be made unless this function has been activated

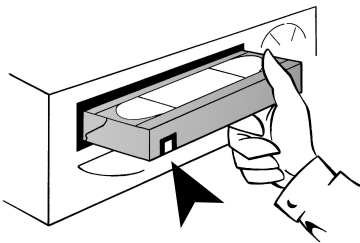
What is Direct Record?

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Requirements: 1. The TV set and video recorder are connected with a scart cable! 2. The TV set supports the “Easylink” function. 3. The “Direct Record” function has been activated in the on-screen menu. 4. There is a cassette ready for recording in the machine!



PARDON?



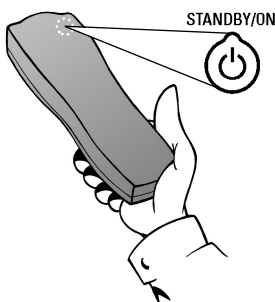
- 2 Insert a cassette without erase protection


What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.




PARDON?

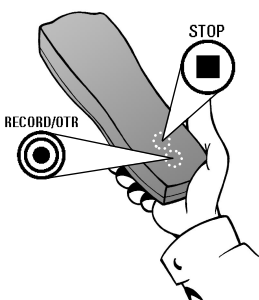


- 3 Switch off the video recorder with the Standby button 

- 4 On the TV set, select the channel for the programme you wish to record

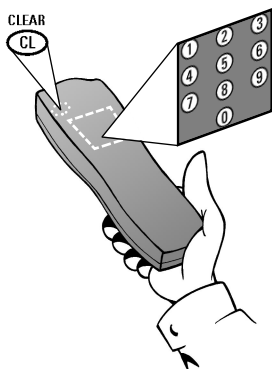
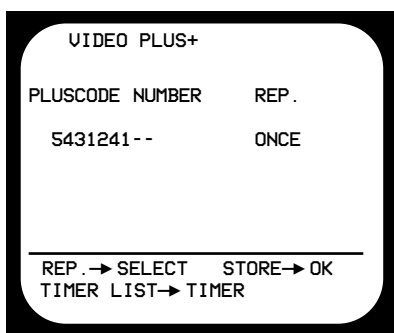
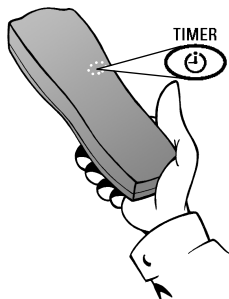
- 5 Press the Record button  on the video recorder. The video recorder recognises the TV channel on the TV set and automatically records the correct programme

- 6 End the recording by pressing the Stop button 



9

Programmed recordings



Programming timer with VIDEO Plus+

- 1 Press the **TIMER** button

What is a Timer?

The timer controls the programmed recordings of your video recorder. Requirements for a timer which works correctly: The clock in the video recorder must be correctly set or the reception of the TV signal must be as free from interference as possible (for example, if there is interference, the video recorder might not correctly recognise the VPS signal of a TV channel).



PARDON?

- 2 The **VIDEO Plus** screen will appear

What is VIDEO Plus+?

A programming system which replaces the often tiresome entry of date, starting time, finish time and programme number by the simple entry of a number up to nine digits long (which can be found in any TV programme listing).



PARDON?

- 3 Use the **0-9** keys to enter the PlusCode programming number of the TV programme selected: Incorrect entries can be cancelled with the **CLEAR (CL)** button

Daily / weekly recordings

If you like, you can use **SELECT "ONCE"** for one-off recordings, **"MO-FR"** for recordings, which are repeated daily (Mon-Fri) or **"WEEK."** for recordings, which are repeated each week on the same day.



FOR EXPERTS

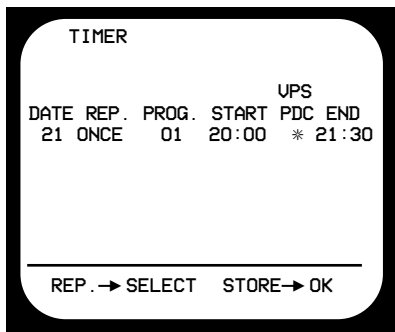
- 4 Confirm with **OK**

✗ I get the error message **"SELECT PROG. NR."**

✓ You have entered a correct PlusCode programming number - but automatic recognition of the correct TV channel has failed. Please enter the programme number under which your video recorder has stored the desired TV channel using the buttons **0-9** and confirm with **OK**.



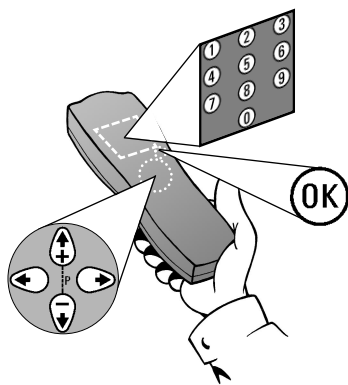
PROBLEM



- 5 The data of previously entered VIDEO Plus+ recordings are displayed Switch entry field – if necessary - with $\triangleleft + \rightarrow$ or $\leftarrow \triangleleft -$ and change the settings with the buttons $\downarrow P-$ or $\uparrow P+$

Activate VPS/PDC

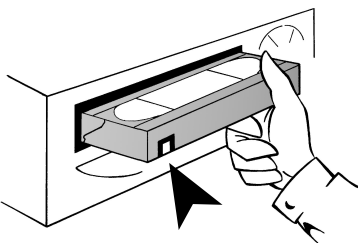
VPS (Video Programming Service) and PDC signals (Programme Delivery Control) are transmitted by TV channels at the start and end of transmissions and ensure that programmes will be completely recorded, even if they are rescheduled. In the entry field, "START" use **SELECT** to switch recognition of these signals on (*) or off ().



- 6 Confirm with **OK** The screen will briefly show "STORED"

Selecting the recording speed

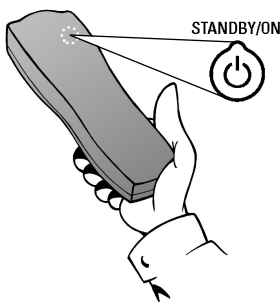
You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality, and with Long Play (LP) you can for example (with somewhat reduced picture quality) record about 360 minutes on a 180-minute cassette. In Auto Long Play, the video recorder recognises how much remaining playing time is available and automatically selects SP or LP. In the entry field "END" use **SELECT** to enter the required setting.



- 7 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



- 8 **SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON ⏻ BUTTON. IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.**

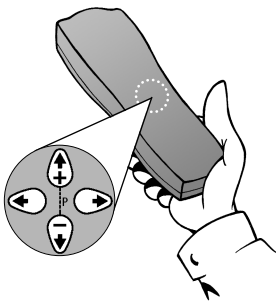
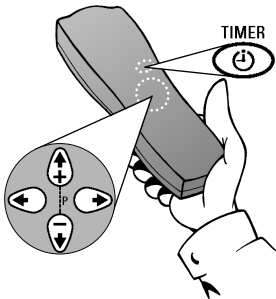
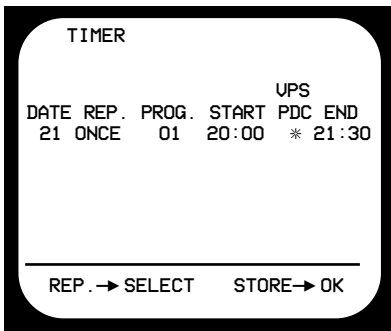
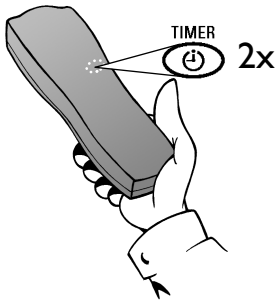
The video recorder switches itself off automatically. The display will show " ⏻ "

YOU WILL FIND TIPS FOR SOLVING PROBLEMS TO DO WITH VIDEO PLUS RECORDING ON THE FOLLOWING PAGE. PROBLEM





Problem solving (VIDEO Plus-Programming)

PROBLEM	SOLUTION
Error message: “SELECT PROG. NR.”	A correct PlusCode programming number has been entered - but automatic recognition of the correct TV channel has failed. Please enter the programme number under which your video recorder has stored the desired TV channel using the buttons 0-9 and confirm with OK
Error message: “PLUSCODE NUMBER NOT VALID”	The Pluscode programming number entered is incorrect or does not match the date entered. Please repeat the entry or finish with the button STANDBY/ON .
Error message: “MO-FR PROGRAMMING NOT POSSIBLE FOR WEEKEND”	The attribute “MO-FR” has been selected for a recording at the weekend. This is only possible for recordings from Monday to Friday. Please repeat the entry or finish with the button STANDBY/ON .
Error message: “SWITCH TO STANDBY - TIMER RECORDING”	A recording was programmed, but the video recorder was not switched into timer mode with the Standby button . Press STANDBY/ON , in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.
Error message: “NO CASSETTE”	A recording was programmed, but there is no cassette in the machine. Insert a cassette without erase protection ready for recording.
Error message: “ALL TIMERS OCCUPIED”	All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter “Deleting a programmed recording”).
“” and/or “” flash in the display of the video recorder	A recording was programmed, but there is no cassette in the machine. Insert a cassette without erase protection ready for recording. A recording was programmed, but the video recorder was not switched into timer mode with the Standby button . Press STANDBY/ON , in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.
Cassette is ejected after programming	A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.
Cassette is ejected during recording	The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.
The set cannot be used during recording	Once started, a recording can only be interrupted by pressing the STANDBY/ON button . WARNING: This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.
Year/month/date/time screen appears	The time has not been set or not set correctly. After entering / confirming year, month, date and time, you can continue programming.



Programming timer without VIDEO Plus+

- 1 Press the **TIMER** button  twice
- 2 The Timer screen will appear
- 3 Use - if necessary - **↓P-** or **↑P+** to select a free memory location and confirm with **TIMER** .

What is a memory location?

For technical reasons, your video recorder has access to a limited number of “drawers” in which you can store your programming requirements. “Drawers” occupied by programme recording details are only available for use again after the video recorder has successfully completed a programmed recording or if it has been manually deleted. There are six available memory locations for programmed recordings on your video recorder.



PARDON?

- 4 Use **→** or **←** to select the entry field “**DATE**” and enter the date of your desired recording

Daily / weekly recordings

If you like, you can use **SELECT** “**MO-FR**” for recordings, which are repeated at the same time daily (Monday-Friday) or “**WEEK.**” for recordings, which are repeated each week on the same day.



FOR EXPERTS

- 5 Use **→** or **←** to select the entry field “**PROG.**” and enter the programme number under which the video recorder has stored the desired TV channel

Enter the values correctly

Numbers less than 10 must be entered with an additional “0”. Therefore for “9” you must enter “09”.



TIP

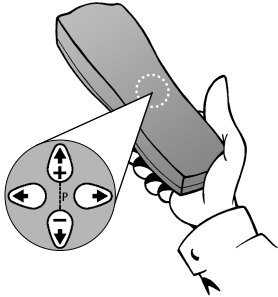
- 6 Use **→** or **←** to select the entry field “**START.**” and enter the start time of your desired recording

Activate VPS/PDC

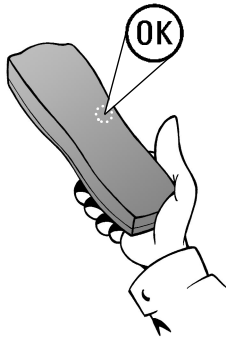
VPS (Video Programming Service) and PDC signals (Programme Delivery Control) are transmitted by TV channels at the start and end of transmissions and ensure that programmes will be completely recorded, even if they are rescheduled. In the entry field, “**START**” use **SELECT** to switch recognition of these signals on (*) or off ().



FOR EXPERTS



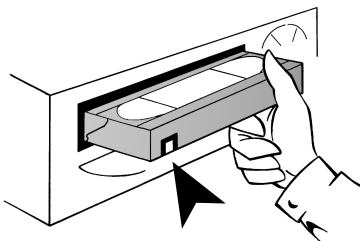
7 Use → or ← to select the entry field “END” and enter the finish time of your desired recording



8 Check that the date, programme number, start and finish time are shown correctly on the screen. Confirm with the OK button. The screen will briefly show “STORED”

Selecting the recording speed

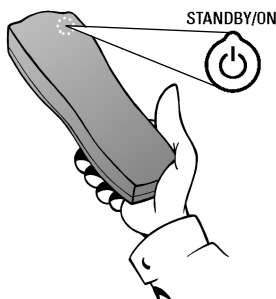
You have the option of two playback and recording speeds: Standard Play (SP) offers the usual first-class picture quality, and with Long Play (LP) you can for example (with somewhat reduced picture quality) record about 360 minutes on a 180-minute cassette. In Auto Long Play, the video recorder recognises how much remaining playing time is available and automatically selects SP or LP. In the entry field “END” use **SELECT** to enter the required setting.



9 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.







10 SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON  BUTTON. IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.

The display will show “⏻”

ON THE NEXT PAGE, YOU WILL FIND SOME TIPS FOR SOLVING PROBLEMS CONCERNING TIMER RECORDING.



Problem solving (Timer programming)

PROBLEM	SOLUTION
Error message: “NO CASSETTE”	A recording was programmed, but there is no cassette in the machine. Insert a cassette without erase protection ready for recording.
Error message: “SWITCH TO STANDBY - TIMER RECORDING”	A recording was programmed, but the video recorder was not switched into timer mode with the Standby button. Press STANDBY/ON  , in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.
“” and/or “, in order to make the programmed recording. Warning: if you do not do this, the video recorder will not record.	
Error message: “ALL TIMERS OCCUPIED”	All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter “Delete / check / change programmed recordings”).
Cassette is ejected during recording	The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.
Cassette is ejected after programming	A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.
The set cannot be used during recording	Once started, a recording can only be interrupted by pressing the STANDBY/ON button  . WARNING: This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.
Year/month/date/time screen appears	The time has not been set or not set correctly. After entering / confirming year, month, date and time, you can continue programming.

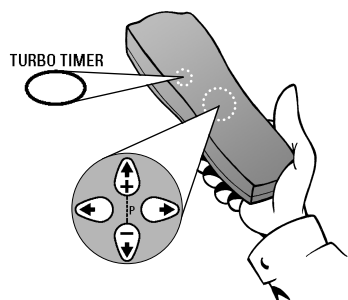
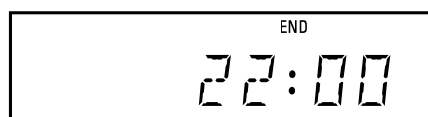
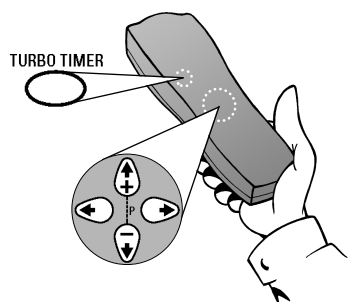
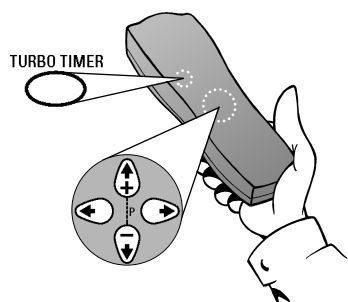
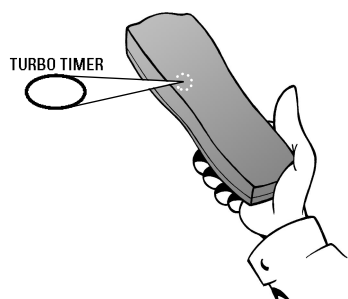
Recording via external sources

If you want to watch or record transmissions from a satellite receiver, films from a video camera (or from other external devices), connect the device to the scart socket **EXT1 AV1** or **EXT2 AV2** and select the programme number on your video recorder “**E 1**” or “**E 2**”.



**FOR
EXPERTS**

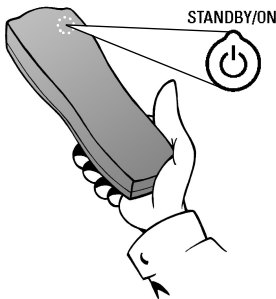
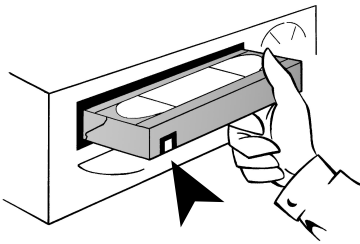
“Turbo Timer”-Recording



Using the “Turbo Timer”, you can make a programmed recording within the next 24 hours quickly and simply, without having to switch on the TV set. All you need to do now is enter or confirm the desired programme number and start and finish time in the video recorder.

- 1 Press the **TURBO TIMER** button on the remote control.
- 2 The display shows the programme number to which the video recorder is currently set, e.g.: “PROG. 01”. Change – if necessary – the displayed programme number with **↓P-** or **↑P+**. Confirm with the **TURBO TIMER** button
- 3 The display shows the actual starting time, e.g.: “START 20:00”. Change – if necessary – the displayed start time with **↓P-** or **↑P+** (or with 0-9)
- 4 Confirm with the **TURBO TIMER** button
- 5 The display shows a suggestion for the end of the recording e.g.: “END 22:00” (Start time + 2 hours). Change – if necessary – the displayed finish time with **↓P-** or **↑P+** (or with 0-9). Confirm with the **TURBO TIMER** button. The display briefly shows “OK”.

OK



- 6 Insert a cassette without erase protection

What is erase protection?

VHS cassettes can be protected from over-recording by breaking off a thin strip of plastic (arrow). This erase protection can be overridden by sticking one or more strips of adhesive tape tightly over the gap which has been created.



PARDON?

- 7 SWITCH OFF THE VIDEO RECORDER WITH THE STANDBY/ON BUTTON . IF YOU DON'T DO THIS, THE SET WILL NOT RECORD.

The display will show “”

Problem solving (Turbo Timer programming)

PROBLEM

SOLUTION

Error message: “CASS”, “” and “” will blink in the display

A recording was programmed, but there is no cassette in the machine. Insert a cassette without erase protection ready for recording.

Error message: “FULL”

All the available memory locations in your video recorder for timer and VIDEO Plus programming are full. Delete a programmed recording (see chapter “Delete / check / change programmed recordings”).


Cassette is ejected during recording

The end of the tape was reached during a programmed recording. The recording could not be completed satisfactorily.

Cassette is ejected after programming

A cassette with erase protection was inserted. Please deactivate the erase protection or insert another cassette which is ready for recording.

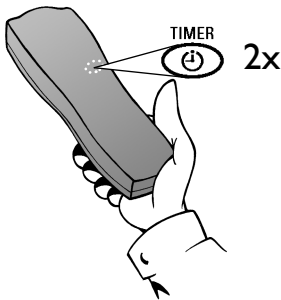
The set cannot be used during recording


Once started, a recording can only be interrupted by pressing the **STANDBY/ON** button . **WARNING:** This will not only stop the recording, but it will also delete the programmed recording from the memory of the video recorder.

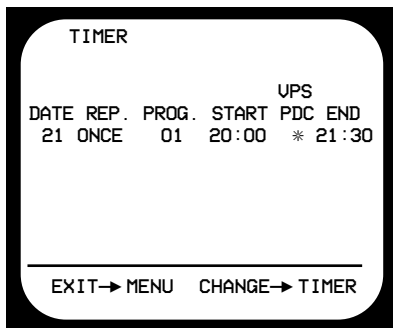
Error message: “CLK”

The time has not been set or not set correctly. A Turbo Timer recording is not possible. Please enter the correct time (Section “Changing the time and date”).

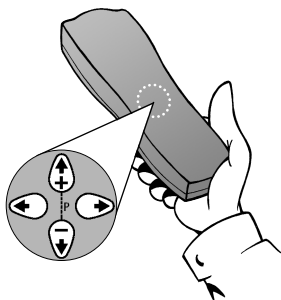
Delete / check / change programmed recordings



1 Press the **TIMER** button  twice on the remote control



2 Use the buttons **↓P-** or **↑P+** to select the memory location in the display which you want to check/change/delete

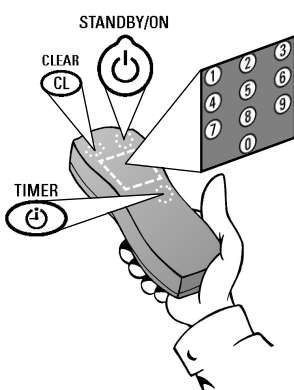


What is a memory location?



For technical reasons, your video recorder has access to a limited number of “drawers” in which you can store your programming requirements. “Drawers” occupied by programme recording details are only available for use again after the video recorder has successfully completed a programmed recording or if it has been manually deleted.





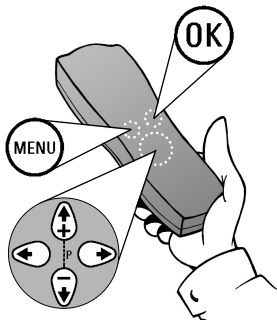
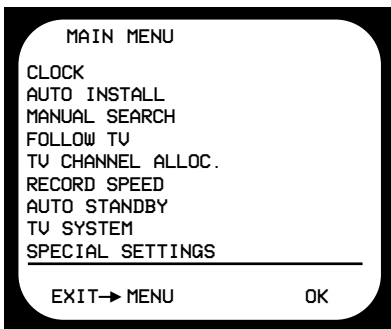
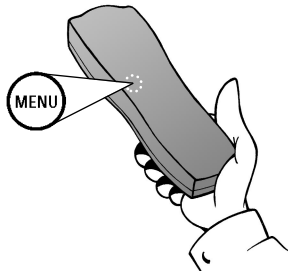
PARDON?



3 **Delete:** Press **CLEAR (CL)** and finish with the button **OK**.

Check: Press **TIMER** , check the stored details and (once you have checked) end with the Standby button 

Change: Press **TIMER**  and use the buttons **0-9** (or **↓P-** and **↑P+**) to enter the new value(s). Confirm with **OK** and activate the timer again with the Standby button .



Adjusting automatic switch-off

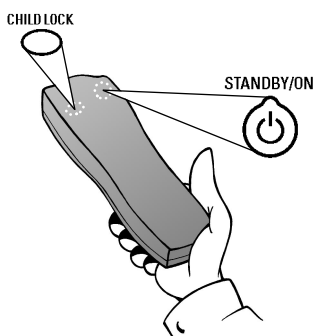
If the video recorder is not used for several minutes, it switches itself off automatically. If you want to use the video recorder as a TV receiver, you can deactivate the automatic switch-off as follows:

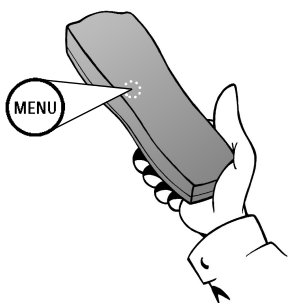
- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "AUTO STANDBY" and confirm with **OK**
- 3 Use **→** or **←** to select the setting "OFF" (automatic switch-off deactivated) or "ON" (automatic switch-off activated) and confirm with **OK**. The screen will show the message "STORED"
- 4 Complete the adjustment of automatic switch-off with the **MENU** button

Adjusting the child lock

You can prevent unauthorised use of your video recorder with this function. Once it is activated, the buttons on the front of the set are locked. Previously entered programmes will of course be recorded

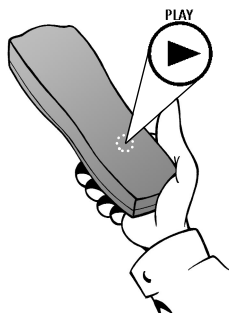
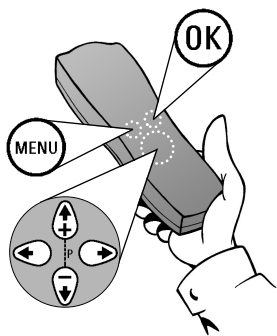
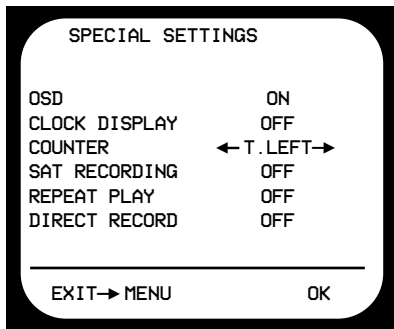
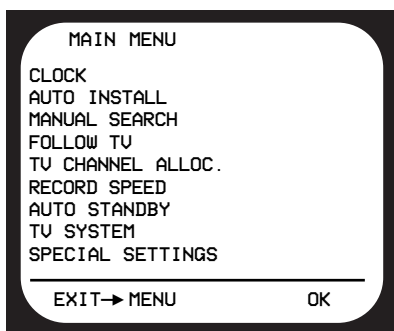
- 1 Press the **CHILD LOCK** button for a few seconds, until the display shows "🔒". The child lock is now activated. Switch off the video recorder with the Standby button **⏻** on the remote control. The set can now only be switched on with the remote control. Put away the remote control in a secure place
- 2 To deactivate the child lock, press the button **CHILD LOCK** for a few seconds until "🔒" disappears in the display





Replaying cassette continuously

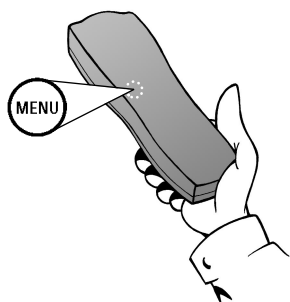
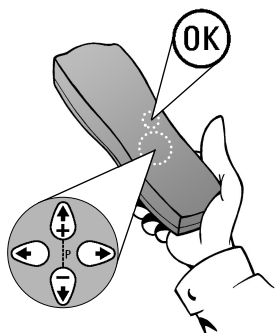
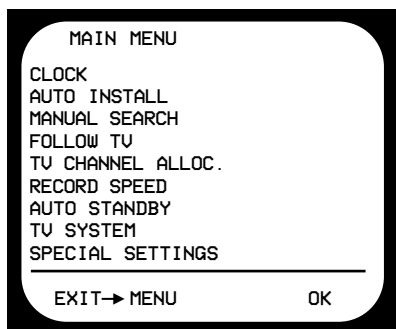
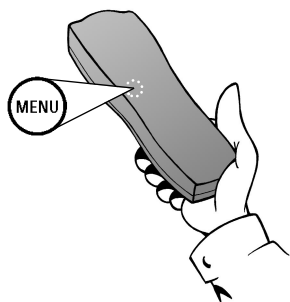
This function can be used to play a tape over and over again. If the end of the cassette or of the recording has been reached, the video recorder automatically rewinds to the start of the tape and starts to play back again. This function is activated or deactivated as follows:



- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option “**SPECIAL SETTINGS**” and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option “**REPEAT PLAY**”
- 4 Use **→** or **←** to select the setting “**ON**” (continuous playback) or “**OFF**” (no continuous playback) and confirm with **OK**. The screen will briefly show “**STORED**”
- 5 Complete the adjustment of continuous playback with the **MENU** button
- 6 Insert a cassette
- 7 Press the Playback button **▶** to start the playback or continuous playback (depending on the setting)

Changing the TV system

When playing back cassettes which have been recorded with signals from a different TV system there may be interference with the colour. To deactivate the automatic change to a different TV system, you must follow these steps.



TV systems

Other countries, other TV systems: In central Europe transmissions are broadcast in the PAL-System (Phase Alternation Line) Standard, while in France SECAM (Séquentiel à mémoire) is used. In some countries (USA and Japan), TV viewers receive their programmes as an NTSC signal (National Television System Committee). Many TV and video sets can process and show several transmission systems,



PARDON?

- 1 During playback press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "TV SYSTEM" and confirm with **OK**
- 3 Use **→** or **←** to select the desired TV system or "B/W" for black and white playback and confirm with **OK**

Reactivating automatic change-over

As soon as the cassette is ejected with the Stop/Eject button **■/▲** the set switches automatically back to the "AUTO" setting (automatic switching). To change the setting during playback, perform the steps **1-3** again and select "AUTO".



TIP

- 4 End the change-over to automatic TV system changing with the **MENU** button

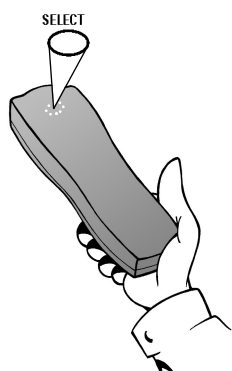
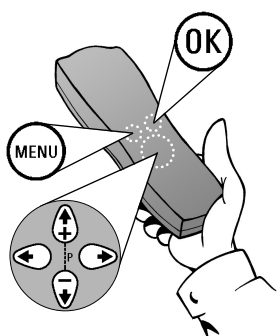
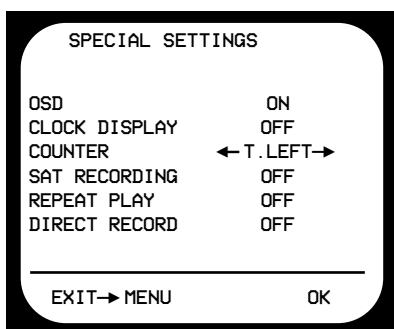
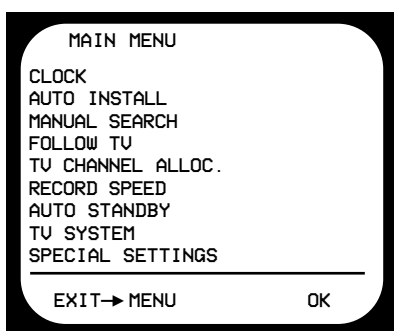
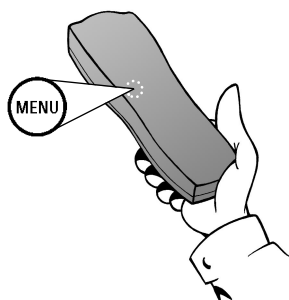
Black and white recordings

Of course, you can also make recordings in black and white from connected video signal sources (Camcorder, second video recorder,...) with this function. To do this, before starting the recording select the setting "B/W".



FOR EXPERTS

Adjusting the OSD information



If this function is activated, the current operating details of the video recorder will be briefly displayed on the screen

What is an OSD?

The on-screen menu or OSD (“On Screen Display”) takes the mystery out of using your new video recorder. Using the main menu (MENU button on your remote control), all settings and recording steps can be done easily via the on-screen menu by following the corresponding instructions on the screen.



PARDON?

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option “**SPECIAL SETTINGS**” and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option “**OSD**”
- 4 Use **→** or **←** to select the setting “**ON**” (OSD information on) or “**OFF**” (OSD information off) and confirm with **OK**

What goes on behind the settings?

ON: For each type of operation selected (playback, recording, etc.) the corresponding symbol appears briefly on the screen

OFF: OSD information is not shown



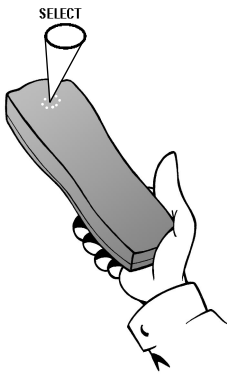
TIP

- 5 Complete the adjustment of the OSD information with the **MENU** button

Selecting the sound channel

During playback or while receiving a TV channel via the video recorder, one or more sound channels can be selected. This means, for example, if there are multilingual transmissions, you can select the language you want.

- 1 Press the **SELECT** button on the remote control. The current sound channel setting is displayed



What goes on behind the settings?

- STEREO: Both left and right stereo sound tracks can be heard
- LEFT: The left stereo sound track can be heard
- RIGHT: The right stereo sound track can be heard
- MONO: The mono sound track can be heard
- MIX: The mono sound track as well as the left and right stereo sound tracks can be heard



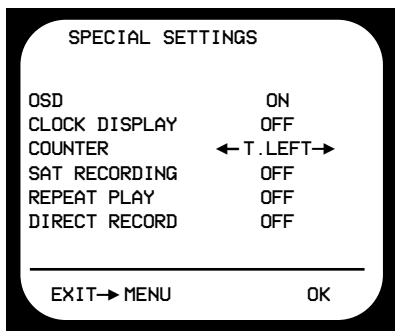
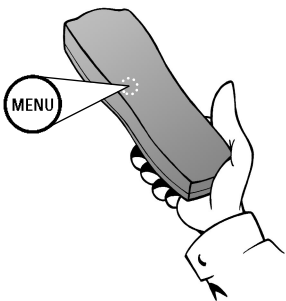
- 2 Press the **SELECT** button several times until the desired setting can be seen on the screen

Automatic switch-over to mono

If no stereo signal is recorded on a video cassette, the video recorder automatically switches over to the "MONO" sound channel setting

Make dubbing audible

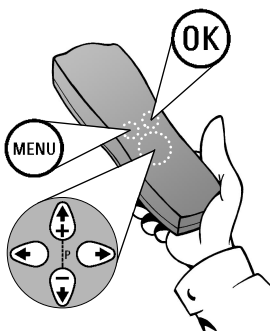
When dubbing video recordings, the mono track is recorded with a new sound signal. The original stereo signal is retained. To make dubbing audible, you must select the "MIX" or "MONO" sound channel setting.



Energy-saving mode

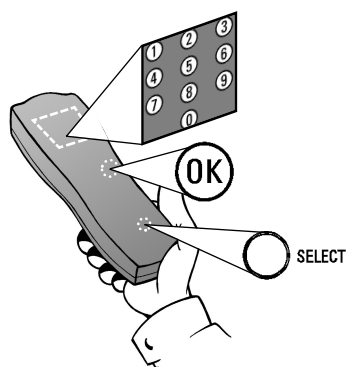
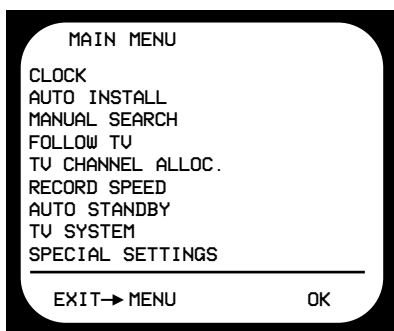
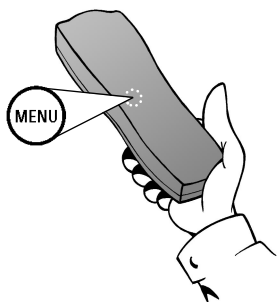
To reduce the power consumption of the video recorder you can switch the clock in the display of the video recorder on or off as follows:

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 Use **↓P-** or **↑P+** to select the option "SPECIAL SETTINGS" and confirm with **OK**
- 3 Use **↓P-** or **↑P+** to select the option "CLOCK DISPLAY"
- 4 Use **→** or **←** to select the setting "ON" or "OFF" and confirm with **OK**. The screen will briefly show "STORED"
- 5 Complete the adjustment of the clock display with the **MENU** button



Adapting remote control

If you are using two video recorders which both react to the same remote control codes, you can use this function to change remote control and video recorder to other codes.



What are remote control codes?

Each time the button on your remote control is pressed, an invisible infra-red signal is sent to the video recorder. Each button has been allocated a specific code, which ensures, that the video recorder will carry out the corresponding function. If two video recorders respond to the same codes, the remote control signal emitted will be recognised and performed by both. Therefore the possibility exists, to allocate different remote control commands (with other codes) to this video recorder. This means that the uninterrupted use of both video recorders is possible once more.



PARDON?

- 1 Press the **MENU** button on the remote control. The on-screen menu appears
- 2 On the remote control press the buttons **SELECT** and **2** simultaneously, to set the video recorder to "VCR 2" (or **SELECT** and **1**, to set it to "VCR 1")

What must I set?

If two video recorders respond to the same codes, they are either both set to "VCR 1" or "VCR 2". Please change the setting of only one video recorder! The factory setting of the video recorder is "VCR 1".



TIP

- 3 Confirm with **OK**. The screen will show "RESPONDS TO VCR 2" or "RESPONDS TO VCR 1". The on-screen menu disappears. The adjustment of the remote control is complete

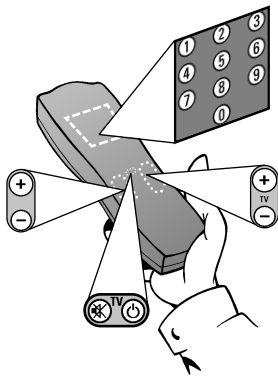
- ✗ My on-screen menu does not disappear
- ✓ The video recorder does not recognise the change of remote control codes. Repeat steps 2 and 3
- ✗ After the buttons are pressed "VCR 1" or "VCR 2" appears in the display of the video recorder
- ✓ Repeat step 2 to reset the remote control to the displayed settings







PROBLEM

Using the TV remote control

With the enclosed multicode remote control you can control the main functions of your TV set. To do this, you must first enter the make of your TV set.



- 1** Find the make of your TV set from the list below and take note of the corresponding remote control code(s)
- 2** Hold down the button  / TV and enter one of the listed codes with the number buttons 0-9.
- 3** Now you can control your TV set remotely with the following buttons:
 - +  - (Increase / decrease TV volume)
 -  / TV (Switch sound on / off)
 - TV /  (Switch TV on / off)
 - + TV - (Next / previous TV programme number)

REMOTE CONTROL CODES

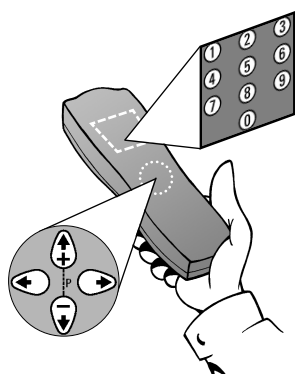
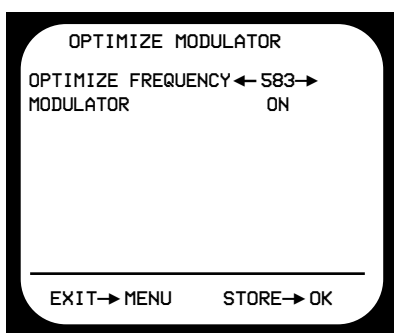
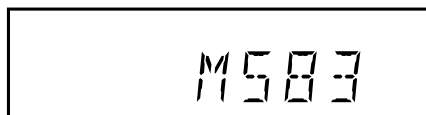
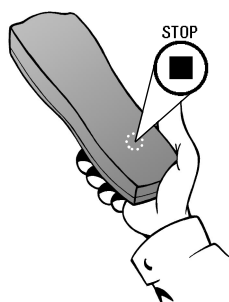
Acura	02	Finlux	10,13,32	Metz	34	Shorai	28
Adyson	05,20	Firstline	02,19,20,23,28,31	Mitsubishi	07,14,16	Siarem	12
Akai	18,33	Fisher	18,20,35	Mivar	19,27	Siemens	17
Akura	21,25	Formenti	30	Multitech	02,12,19	Silver	07
Alba	02,07,21	Frontech	23,25	Neckermann	01	Sinudyne	12,28
Allorgan	28	Fujitsu	10	Nikkai	05,06,10,19,21,25	Solavox	05
Amplivision	20	Funai	25,28	Nobliko	12	Sonitron	18
Amstrad	02	GEC	10,20	Nokia	33,41	Sonoko	02
Anitech	02	GPM	21	Normende	15	Sonorlor	18
Arcam	19,20	Geloso	02	Oceanic	33	Sony	03,04,07
Asuka	21	Genexxa	21	Orion	28,30,31	Soundwave	38
Audiosonic	15	GoldStar	15,20,27	Osaki	05,10,20,21,25	Standard	02,20,21
BPL	26	Goodmans	07,10,20,29,36	Oso	21	Sunkai	28,31
BSR	28	Gorenje	35	Osone	05,10	Susumu	21
BTC	21	Graetz	33	Otake	29	Tandy	10,20,21
Basic Line	02,21	Granada	10,18,20	Otto Versand	01,03,07,20,30	Tashiko	07,20
Baur	03,33	Grundig	17	Palladium	35,38	Tatung	10,20
Beko	35	HCM	02,26	Panama	20,25	Tec	20,23
Blaupunkt	17	Hanseatic	01,30,33	Panasonic	24,34	Technema	30
Blue Sky	21	Hinari	02,07,21	Pathe Cinema	19,30	Technics	24
Blue Star	26	Hisawa	26	Pausa	02	Telefunken	15
Bondstec	23	Hitachi	05,07,08,13,15,20,22	Perdio	30	Telemeister	30
Bondstec	23	Huanyu	19,36	Phase	05	Teletech	02
Boots	20	Hypson	25,26	Philco	23	Teleton	20
Brandt	15	ICE	20,25	Pioneer	15	Tensai	21,28,29,30
Britannia	19	ICeS	21	Profex	02,33	Texet	19,21
Bush	02,07,21,26,28,36	ITT	33	Proline	31	Thomson	15
CGE	23	Imperial	23,35,38	Protech	02,12,20,23,25,38	Thorn	06,10,33
CS Electronics	19	Inno Hit	10	Quelle	03,04,33	Tomashi	26
CTC	23	Interfunk	23,33	Questa	07	Toshiba	06,07
Carrefour	07	Intervision	12,20,25	Rank Arena	07	Uher	30
Cascade	02	Isukai	21	Rediffusion	33	Ultravox	12
Cimline	02	JVC	07,09	Rex	25	Universum	13,25,32,35
Clatronic	23,35	Kaisui	02,19,20,21,26	Roadstar	02,21,25,38	Videosat	23
Condor	30,35	Kathrein	01	SEG	07,20,25	Videotechnic	20
Contec	02,07,19	Kingsley	19	SEI	12,28	Visa	02
Crown	02,35,38	Koyoda	02	Saba	15	Vision	30
Cybertron	21	Leyco	10,25,28	Saisho	02,04,25	Walham	20
Daewoo	02,36	Lloytron	05	Salora	33	Watson	30
Dainichi	21	Luxor	33	Sambors	12	Watt Radio	12
Dayton	02	M Electronic	02,13,15,20,32,36,41	Samsung	01,02,20,25,27,35	Vega	07
De Graaf	18	Magnadyne	12,23	Sandra	19	White Westinghouse	19,30
Decca	10	Magnafon	12	Sanyo	04,07,10,18	Yoko	20,25
Dixi	02	Manesht	20,25,30	Schaub Lorenz	33		
Dual Tec	20	Marantz	01	Schneider	21,23,37		
Elite	21,30	Matsui	02,04,06,07,10,18,20,28	Sei-Sinudyne	03		
Ela	02	Memorex	02	Sentra	06		
Emerson	33			Sharp	07,11		
Ferguson	15						
Fidelity	19,33						
Finlandia	18,32						

If you have no success with the code corresponding to your TV set, please try again by entering one of the other remote control codes listed.

Suppressing interference

Optimizing the modulator

If the TV set and the video recorder are only connected with an aerial cable - rather than with an additional scart cable - it may happen that in certain reception locations the modulator frequency of the video recorder is occupied by a TV channel. As soon as the video recorder is switched on, the reception quality of the TV picture deteriorates. The following steps will show you how to overcome this problem.



What is a modulator?

The purpose of this electronic assembly inside your video recorder is to pass on the picture and sound information read in from the video tape via an aerial cable like a TV signal to the TV set. The modulator frequency determines the frequency range in which these signals are transmitted.



TIP

- 1 Switch the video recorder on and make sure there is no cassette in the video recorder
- 2 Press simultaneously the **STOP** button ■ on the remote control and the **STOP/EJECT** ■/▲ button on the front of the video recorder until the modulator frequency of the set appears in the display (e.g.: "1583" for 583 MHz)
- 3 The video recorder will now transmit a test image on this frequency
- 4 Use ↓P- or ↑P+ to select the option "OPTIMIZE FREQUENCY" and enter a new frequency with the number buttons 0-9

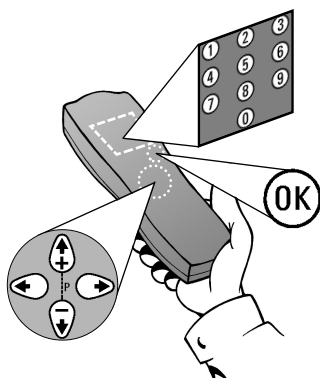
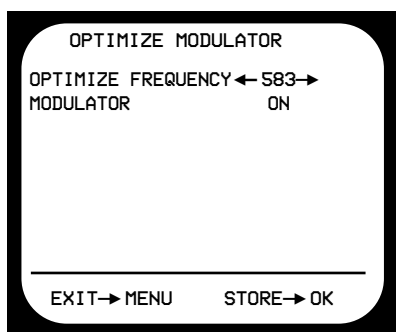
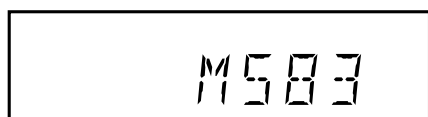
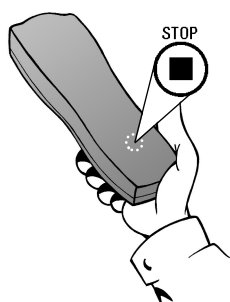
Which modulator frequency should I enter?

You can also make the video recorder search automatically for an appropriate frequency. To do so, simply hold down the button →. As soon as a free frequency has been found, it will be shown in the display.



PROBLEM

- 5 Tune the programme number of your TV set allocated for video use to the new modulator frequency until you see the test image sharply and in colour



- 6 Confirm the new modulator frequency with **OK**. In the display there will briefly appear “OK”. The screen will show “STORED”

Switching off the modulator

If you have connected the video recorder to the TV set with a scart cable, you can switch off the modulator when there is interference with the picture or sound (see below).






FOR EXPERTS

Switching the modulator on / off

If picture and sound interference cannot be removed by optimising the modulator, the integral modulator can be switched off. Warning: this is only possible if you have connected the video recorder to the TV set with a scart cable. It is not possible to operate with the modulator switched off without a scart cable.

- 1 Switch the video recorder on and make sure there is no cassette in the video recorder
- 2 Press simultaneously the **STOP** button ■ on the remote control and the **STOP/EJECT** ■/▲ button on the front of the video recorder until the modulator frequency of the set appears in the display (e.g.: “1583” for 583 MHz)
- 3 The video recorder will now transmit a test image on this frequency
- 4 Use ↓P- or ↑P+ to select the option “MODULATOR”
- 5 Use → or ← to select the setting “ON” (Modulator on) or “OFF” (Modulator off)
- 6 Confirm with **OK**. In the display there will briefly appear “OK”. The screen will show the message “STORED”

PROBLEM	POSSIBLE CAUSE / SOLUTION
Set no longer reacts when buttons are pressed	<ul style="list-style-type: none"> ✓ The power supply has been interrupted / failed ✓ A programmed recording is running. Interrupt with the Standby button  ✓ Child lock is activated: Switch this function off ✓ Technical interference: Remove the mains plug from the socket and reinsert it
The set is still not reacting, the display will show e.g. "E000"	<ul style="list-style-type: none"> ✓ Remove the mains plug from the socket, hold down the Standby button  on the front of the video recorder and reinsert the mains plug. When "-----" or "E P" appears in the display you can release . Warning: All data memories of the set (TV channel, time, timer) have been deleted.
Cassette is jammed in video recorder	<ul style="list-style-type: none"> ✓ Do not use force! Briefly remove the mains plug and then reinsert it
Remote control does not work	<ul style="list-style-type: none"> ✓ Aim the end of the remote control at the display of the video recorder ✓ Remove the batteries from the remote control and wait a few seconds before replacing them ✓ Batteries weak or flat: Change the batteries
No playback from video recorder	<ul style="list-style-type: none"> ✓ No recording on the cassette ✓ Select the TV programme number allocated to video operation ✓ Check that the TV channel number allocated to video operation is correct ✓ Cable connection loose/missing: Check the connections
Poor quality playback from video recorder	<ul style="list-style-type: none"> ✓ Check the TV to make sure that the programme number allocated to video operation is correct ✓ Cassette worn/faulty ✓ Tracking not correctly adjusted: Carry out the "Optimizing tracking" function
No recording possible	<ul style="list-style-type: none"> ✓ TV channel not stored or wrongly selected ✓ Cassette with erase protection inserted
Programmed recording not working	<ul style="list-style-type: none"> ✓ Storage position incorrectly/incompletely programmed ✓ Time/date not set correctly ✓ Cassette with erase protection inserted
Picture and/or sound interference in TV reception	<ul style="list-style-type: none"> ✓ Optimize the modulator or switch it off (when using a scart cable) ✓ Check the aerial cable connection
TV reception still not perfect	<ul style="list-style-type: none"> ✓ The Department of Trade and Industry operates a specialist service to help TV licence holders improve reception of BBC and ITC programmes and to prevent interference. If your dealer cannot help, ask at a main Post Office for the booklet "How to improve Television and Radio Reception".

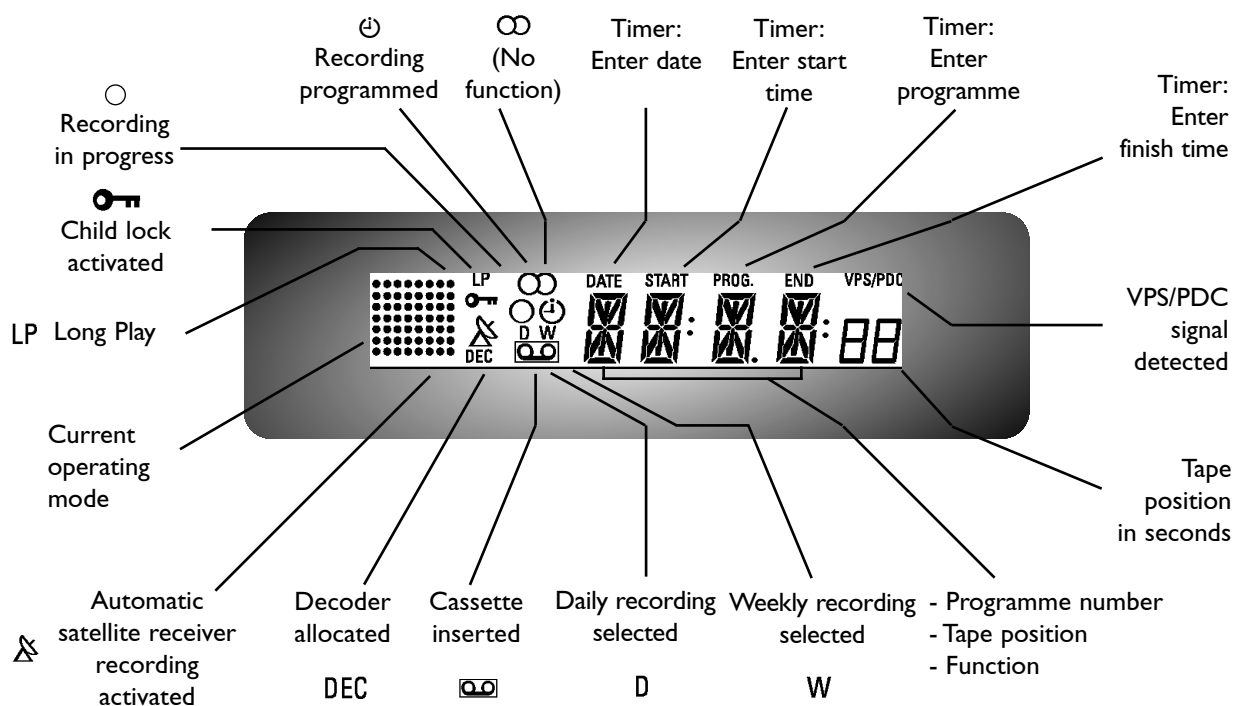
TECHNICAL DATA

Dimensions in cm (W/H/D):	38,0/9,3/26,0
Energy consumption	16W
Energy consumption (Low Power Standby)	< 4W
Mains voltage:	198-264 V / 50 Hz
Number of video heads:	4
Number of audio heads:	1 linear, 2 FM
Rewind / forward wind speed:	approx. 100 seconds (E180 cassette)
Recording / playback speed (E240 cassette):	SP (Standard Play) 4 Std., LP (Long Play) 8 Std.

Video recorder / display



- 1 STANDBY/ON
 - Switch set on/off
 - Interrupt function
 - Interrupt programmed recording
- 2 AUDIO/VIDEO IN
 - Connecting camcorder, video recorder, sound source (Programme number "AUX" or "E3")
- 3 RECORD
 - Record
- 4 PROGRAMME +/-
 - Select next/previous programme number/menu point
- 5 STOP/EJECT
 - During playback: Stop tape
 - In stop or standby mode: Eject tape
- 6 PLAY
 - Play back recorded cassette
- 7 (Shuttle)
 - In stop or standby mode: Rewind tape
 - During playback: Reverse picture search
- (Shuttle)
 - In stop or standby mode: Forward wind tape
 - During playback: Forward picture search
- 8 STILL
 - Still picture / slow motion



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