

Panasonic

DVD/CD Player / Video Cassette Recorder NV-VP33EB/EBL

(Model suffix: 'EB' for UK model, 'EBL' for Ireland model)

Operating Instructions



CVC super

VIDEO Plus+

SUPER DRIVE



Before connecting the device, operating it or adjusting settings please read these operating instructions completely; especially the safety precautions on pages 2 and 3.

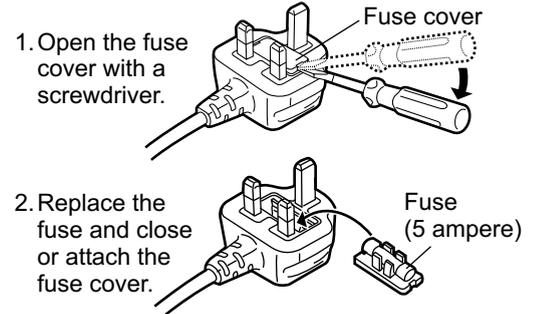
Contents	Page
Safety Precautions	2-3
Included Accessories / Sales and Support Information	4
Remote Remote Control - Codes / Inserting batteries	5
Front Panel / Sockets	6-7
Remote control functions	8-10
Connecting with 21-pin Scart cable	11
Connecting with Audio-Video cable	12
VCR Auto Setup	13
Connecting with RF cable	14-15
VCR Auto Setup with RF cable	15
Connecting to Satellite Receiver, Set Top Box	16-17
DVD-Connectors	18-19
Checking the Settings after Auto Setup	20
Removing Interference / Changing RF-output channel	21
VCR menu control	22
VCR Playback / Tracking control	23-24
General convenient functions / Tape Care	25-26
Recording	27-32
Timer recording	28-29
Recording with INTELLIGENT TIMER	30
Recording with VIDEO Plus+	31-32
Recording with external recording controls	33
Manual Functions	34-39
Manual Tuning / Changing the name of TV stations	34
Changing the order of TV stations or deleting a station	35
Creating a new station table	35
Shipping condition / factory defaults	35
Others menu / Owner ID / QUICK ERASE	36-37
Clock setting / NICAM sound system	38-39
DVD-QUICK SETUP	40
DVD Playback functions	41-44
VCR-DVD functions	45
Navigation Menu	46-47
HighMAT / CD Text	48
Functions menu	49-53
SETUP menus	54-55
Information	56-57
Country codes	58
Before requesting service	59-61
21-pin Scart Socket	62
Specifications	63
Index	last page



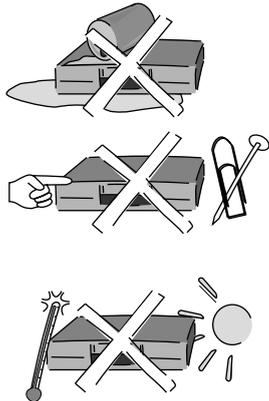
Important Safety Warnings

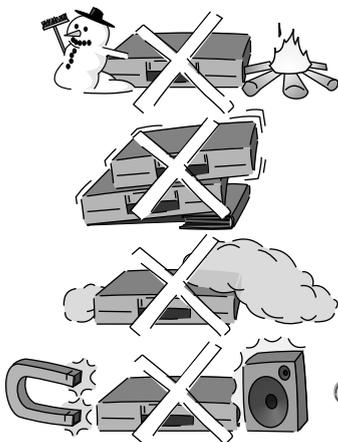
- The moulded three pin mains plug is supplied for your safety and convenience and must NOT be cut off.
- A 5 amp fuse is fitted in the mains plug. If the fuse has to be replaced, it must be of the same rating and approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse.

To replace the fuse, open the fuse compartment with a screwdriver as shown and replace the fuse and the cover securely.



- To prevent electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified service engineer only.
- **WARNING:** To reduce the risk of fire, electric shock or product damage, do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Do not insert metal object into the slots or openings of the unit.
- This unit is not disconnected from a.c. mains while it remains connected to a live mains outlet, even if it has been turned off.
- The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.
- This unit is intended for use in moderate climates.





CAUTION!

Caution

- Avoid exposing the unit to direct sunlight or other heat sources.
- Avoid sudden change in temperature or humidity, dew or condensation may form, causing malfunction.
- Dispose of batteries in accordance with the instructions given in this book.
- Place the unit on a flat, stable surface. Do not place heavy object on top of the unit.
- Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast materials may infringe copyright laws.
- This unit is designed for indoor use only.
- Do not use in area with strong magnetic fields, e.g. near transmitting antenna.
- This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

- Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure the unit is well ventilated. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation vents.
- Do not obstruct the unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place sources of naked flames, such as lighted candles, on the unit.
- Dispose of batteries in an environmentally friendly manner.
- This product utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not open covers and do not repair yourself. Refer servicing to qualified personnel.

Inside of product

CAUTION	- LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class II
CAUTION	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.	IEC 60825-1 / Class 3b
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.	
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNNGÅ UDSÆTTELSE FOR STRÅLING.	
VARO!	- AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERISÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.	
WARNING	- SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.	
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.	
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG. WENN ABECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	
注意	- 打开时有可见及不可见激光辐射。避免激光照射。	
注意	- ここを開くと可燃及び不可視レーザー光が出ます。 ヒームを見たり、触れたりしないで下さい。	RQLCA0141

**CLASS 1
LASER PRODUCT**

Back of product, see page 7.



Care and Maintenance

- The cabinet can be wiped clean with a damp cloth, disconnect from mains before cleaning. Do not use detergent or solution containing benzol or petroleum.
- Video heads clogging can occur with use, when this happens picture and sound will become distorted during playback. Purchase a head cleaning tape or consult your dealer. Note that video head cleaning is not covered by the warranty.

Included Accessories



Check that you have the accessories and items shown



Remote control
EUR7720X60

Included Accessories

AC Mains Lead
RJA0044-3C



RF cable
K2KF2BA00001, VJA0728-A
or K1TWACC00001



Batteries for the
Remote Control
R6 size



Operating Instructions
RQTD0144-B

Quick Start Guide
RQCAD0018

Guarantee Card

Panasonic

Sales and Support Information

Customer Care Centre

- For customers within the UK:
08705 357357
- For customers within the Republic of Ireland:
01 289 8333
- Visit our website for product information: **www.panasonic.co.uk**
- E-mail:
customer.care@panasonic.co.uk

Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday - Thursday 9:00am - 5:30pm; Friday 9:30am - 5:30pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at **www.panasonic.co.uk**
- Most major credit and debit cards accepted.
- All enquiries, transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Remote



- Some television set models of the listed manufacturers can not be operated using this remote control.

Remote Control - Codes

You may operate television sets with this remote control, by changing its code.

- Press and hold TV Stand-by/on switch.
- Enter your television set's two-digit code. If the television set does not operate correctly, try entering an alternative code.

This set up must be repeated after changing batteries.

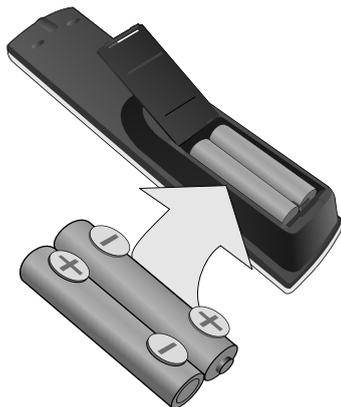
Brand	Code	Brand	Code	Brand	Code	Brand	Code
Panasonic	01-04,45	GOODMANS	05,06,31	NOKIA	25-27	SANYO	21
AIWA	35	GRUNDIG	09	NORDMENDE	10	SBR	06
AKAI	27,30	HITACHI	22,23,31,40-42	ORION	37	SCHNEIDER	05,06,29-31
BLAUPUNKT	09	INNO HIT	34	PHILIPS	05,06	SELECO	06,25
BRANDT	10,15	IRRADIO	30	PHONOLA	31,33	SHARP	18
BUSH	05,06	ITT	25	PIONEER	38	SIEMENS	09
CURTIS	31	JVC	17,39	PYE	05,06	SINUDYNE	05,06,33
DESMET	05,31,33	LOEWE	07	RADIOLA	05,06	SONY	08
DUAL	05,06	METZ	28,31	SABA	10	TELEFUNKEN	10-14
ELEMIS	31	MITSUBISHI	06,19,20	SALORA	26	THOMSON	44
FERGUSON	10	MIVAR	24	SAMSUNG	31,32,43	TOSHIBA	16
GOLDSTAR/LG	31	NEC	36	SANSUI	05,31,33	WHITE WESTINGHOUSE	05,06

Inserting batteries into the remote control unit:

The batteries last for about a year, depending on how often you use the RC unit.

- Do not mix old with new batteries or batteries of different types.
- Only use batteries without any harmful substances (such as lead, cadmium, mercury).
- Do not use rechargeable type batteries.
- Remove the batteries if the remote control unit will remain unused for longer periods of time.
- Do not heat or short-circuit the batteries.
- Immediately remove used-up batteries and replace with batteries of type AA, UM3 or R6.
- Be sure to put in the batteries the right way round (+ and -).

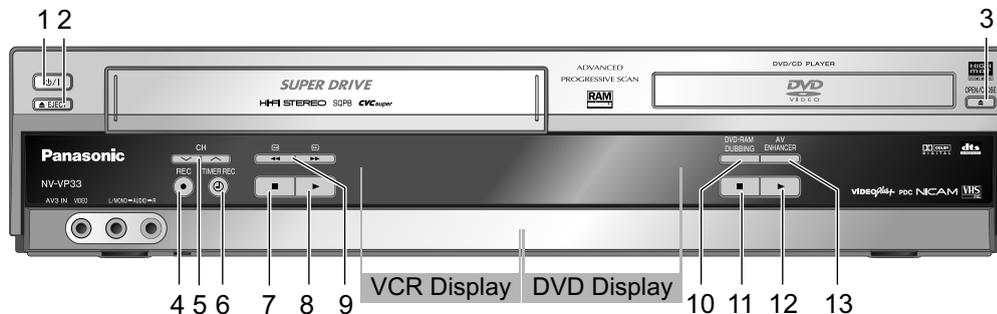
Dispose of **batteries**, packaging material and the unit **according to statutory regulations**. They must not be thrown into the household refuse.



Front Panel

VCR= Video Cassette Recorder

Detailed information is available on the specified pages.



Device control

1		Standby/on switch
2		To eject a video cassette.
3		Opens and closes the disc tray.
4		Record button
5		Selects a channel.
6		Activates the recording timer.
7		VCR Stop button

8		VCR Playback button
9		Fast winding / JET SEARCH
10		To copy a DVD RAM to VHS cassette.
11		DVD Stop button
12		DVD Playback button
13		Automatically optimises and adapts the audio and video settings to the disc used. The Picture and Audio menus are not available when this function is enabled.

Display

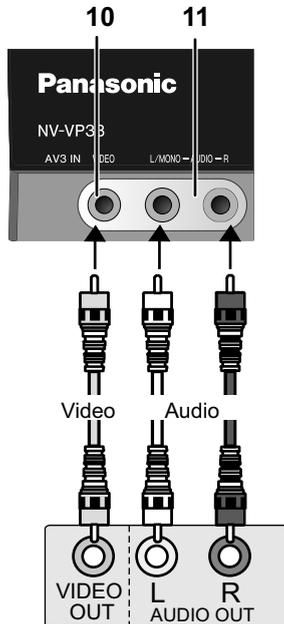
	Active picture signal. This symbol appears next to the symbol for video cassette or disc in the VCR or DVD display. The picture signal is toggled using the VHS / DVD toggle switches.
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	A video cassette is in. The logo is animated when a function such as playback or forward/rewind is being performed.
	A disc is in. The logo is animated when a function such as playback or picture search is being performed.

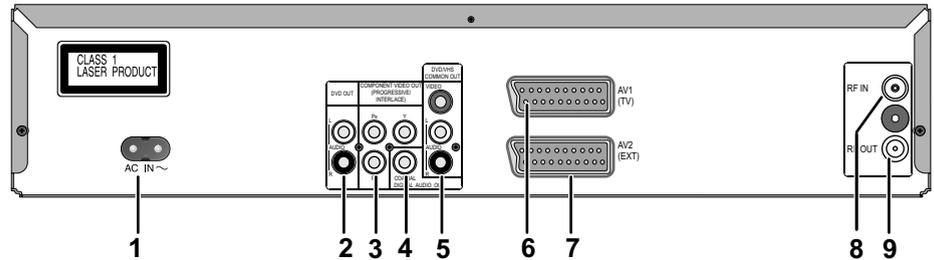
Sockets

Connection to AV3 (front panel)

- Connect your external unit (e.g. a video camcorder) with the front panel input. Just seize the L/Mono port for mono recording of the audio signal.
- Use **INPUT** to select A3.



External equipment
(e.g. Video movie camera)



1	AC Input socket (Power supply)
2	DVD AUDIO OUT socket L = AUDIO output left channel R = AUDIO output right channel
3	COMPONENT VIDEO OUT socket (Progressive / Interlace)
4	COAXIAL DIGITAL AUDIO OUT socket
5	DVD/VHS COMMON OUT socket L = AUDIO output left channel R = AUDIO output right channel
6	AV1 21-pin Scart socket
7	AV2 21-pin Scart socket
8	RF IN socket (Aerial input)
9	RF OUT socket (Aerial output)
10	AV3 VIDEO IN socket
11	AV3 AUDIO IN socket L = AUDIO input left channel (Mono) R = AUDIO input right channel

Remote control General functions

Stand-by/on switch

Press to switch the unit from on to stand-by mode or vice versa. In stand-by mode, the unit is still consuming a small amount of power.

Switching this appliance into stand-by mode does not disconnect it from the mains.

Press the button a couple of times to select Sound mode.

VCR: stereo (L R), left channel (L -), right channel (- R), mono (- -) playback

DVD: Select the appropriate audio channel (L R) or track, which depends on the disc you use

Numeric keypad

Direct input via numeric key pad (18= 1 3

CANCEL/RESET: Undoes entries or selections

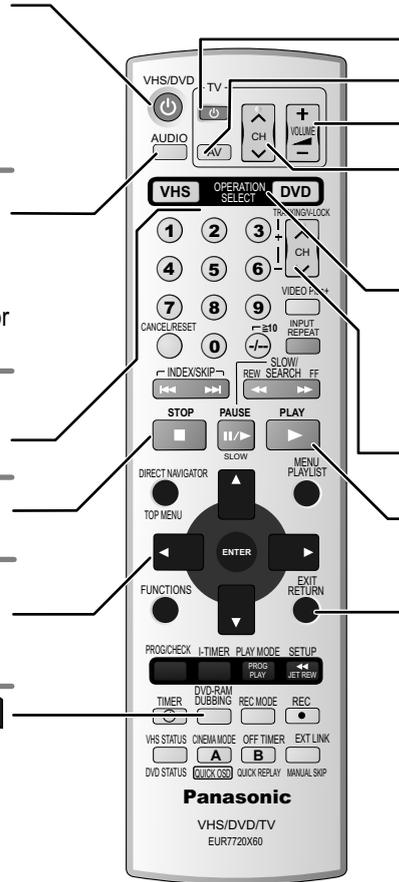
To eject cassette or disc

Press **STOP** for more than 3 seconds.

OSD menu selection buttons.

- **DVD:** to select JPEG, WMA or MP3 groups () or titles ().
- **ENTER:** Selects or saves a setting.

To copy a DVD RAM to VHS cassette. 45



TV functions

TV set Stand-by/on switch. 5

TV set AV input selection.

TV set volume control.

To select the respective TV program memory location.

Remote control's VHS/DVD toggle switches to toggle between VCR and DVD functions and to switch between VCR and DVD picture.

VCR functions are enabled.

DVD functions (blue labels) are enabled.

Channel selector

Press **PLAY** to start playback.

Quits a menu.

Remote control VCR functions

Tape counter

The tape counter will be automatically reset to [0:00:00] when you insert a video cassette.

- Or you can press the **CANCEL/RESET** button on the remote control unit to manually reset the tape counter to [0:00:00].

Finding the start of a recording.  25

Pause a recording session.
Still or slow motion playback.  23

Press **STOP**  to stop recording, playing back or winding.

Defines programmes transmitted to the same program memory location at the same time.  30

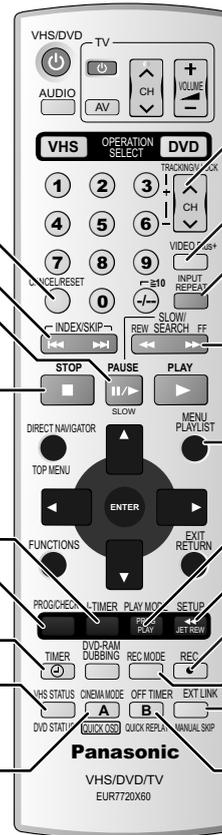
To display the Timer recording menu.  28

Activates the recording timer.

Press the button repeatedly to display the time, tape counter or remaining tape.

Cinema Mode  26

A: To delete tagged station.  35



Tracking control of disturbed images during playback  24

Video Plus+ menu  31

AV input select button

Pressing the **INPUT** button a couple of times will select A1, A2, A3 (front) or dc (DVD internal).

Goes from Stop into Fast Forward or Fast Rewind mode. Forward and backward search during playback.  25

Displays the VCR menu.  22

Plays back programmed recordings.  29

For fast rewinding to the beginning of the tape.  25

Video recording

Sets the tape speed.  27

To record using the external recording level control.  33

Switches the unit into stand-by mode after the set time.  25

B: Move tagged station.  35

Remote control DVD functions

Skip chapters, titles or frames

- Press **SKIP** during playback or in pause mode.

Stop playback

- Press **STOP** twice.

Resume

- Press **STOP** during playback to store the current position on the disc.
- Press **PLAY** while the disc logo in the display is blinking. Playback will be resumed at the point where you stopped it.

Cancel the Resume function

- Press **STOP** until the disc logo in the display is no longer blinking.

* Opening the disc tray or the unit going into stand-by mode also clears the stored position on the disc.

Pause playback (still image)

- Press **PAUSE** during playback. Playback stops at the current picture frame.
- Press **PLAY** to resume playback.

Displays the DVD-RAM menu.

Displays the main menu.

To display the Functions menu

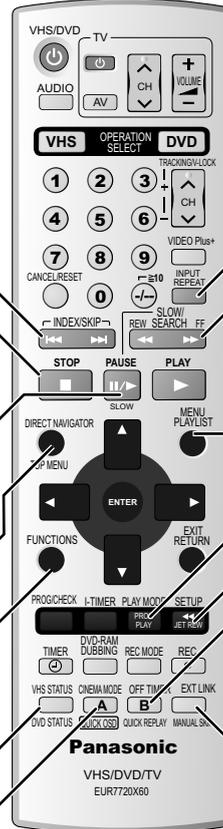


Displays time or chapter/title or content/group when pressed again.

Hides the playback status display.



For some disc formats not all of the described DVD functions are available.



Repeat

- Press **REPEAT** during playback. There is no mode for repeatedly playing back entire discs.

Slow motion (backwards/forwards)

- Press **SLOW** in Pause mode. Keeping the button pressed increases the speed of search at 5 steps.
- Press **PLAY** to resume normal playback.

* VCDs do not support reverse slow motion playback.

Search

- Press **SEARCH** during playback. Keeping the button pressed increases the speed of search at 5 steps.

Displays a Playlist



Displays the menu.



Random Playback/Program Playback



Displays the SETUP menu.



Scene replay (not with +R/+RW media)

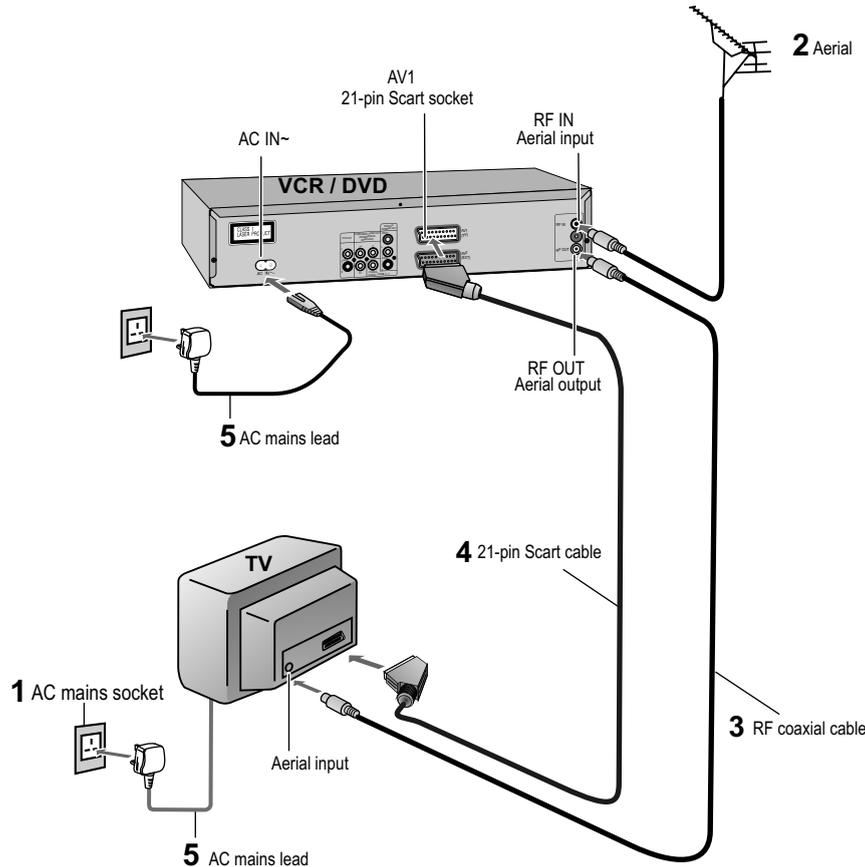
- Press **QUICK REPLAY** during playback. Every push of the button replays a couple of seconds of the current track or programme. However, you cannot go back to before the beginning of a title.

* **QUICK REPLAY** is not supported by all discs.

Manual Skip (not with +R/+RW media)

Playback jumps forward 30 seconds each time this button is pressed.

Connecting with 21-pin Scart cable (Fully wired)

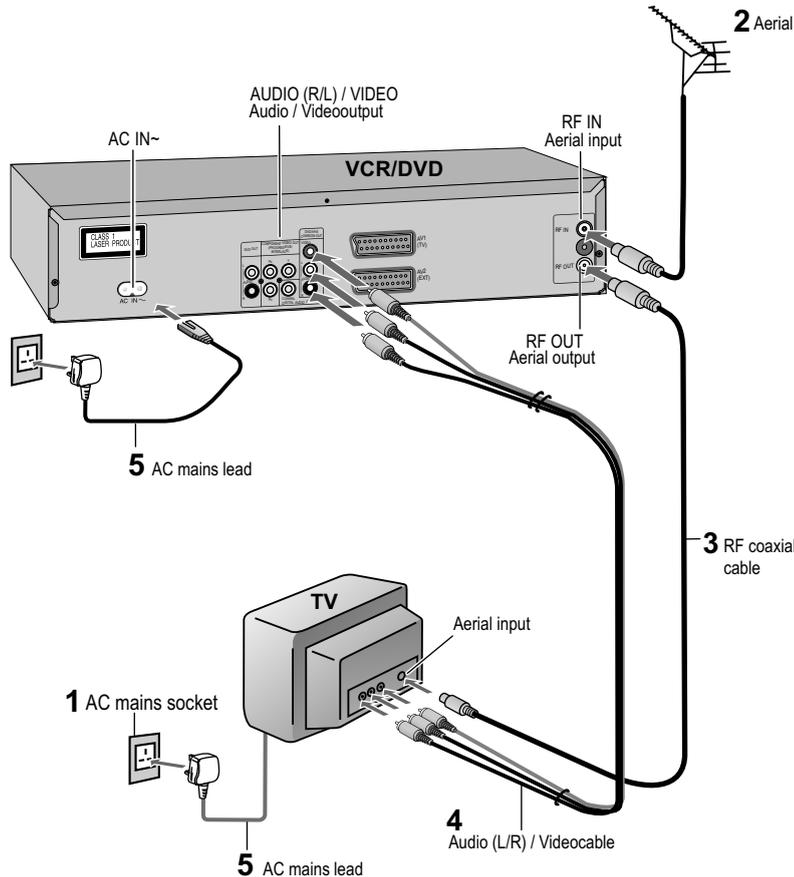


Follow the steps described below.

- 1** Ensure TV Power is disconnected from AC Mains socket.
- 2** Connect aerial to the RF IN (Aerial input) connector of the VCR/DVD.
- 3** Connect the VCR/DVD's RF OUT (Aerial output) to the TV set's Aerial in connector.
- 4** Connect the VCR/DVD's AV1 socket (21-pin Scart socket) to the TV set's Scart In socket.
- 5** Connect VCR/DVD and TV set to the AC mains socket.

Follow the steps for VCR Auto Setup on page 13.

Connecting with Audio-Video cable



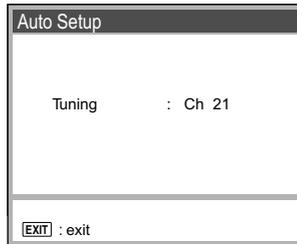
Follow the steps described below.

- 1** Ensure TV Power is disconnected from AC Mains socket.
- 2** Connect aerial to the RF IN (Aerial input) connector of the VCR/DVD.
- 3** Connect the VCR/DVD's RF OUT (Aerial output) to the TV set's Aerial in connector.
- 4** Connect the VCR/DVD OUT (AUDIO R/L, VIDEO) sockets of the VCR/DVD to the TV input.
- 5** Connect VCR/DVD and TV set to the AC mains socket.

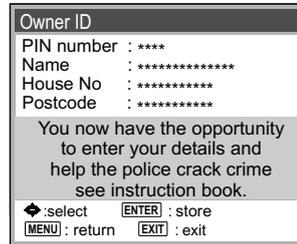
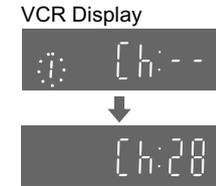
Follow the steps for VCR Auto Setup on page 13.

VCR Auto Setup with 21-pin Scart cable / Audio-Videocable

(Automatic tuning)



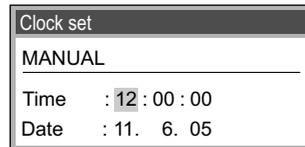
- Turn on your television set.
- With the **Stand-by/on switch** turn on the VCR/DVD. Automatic tuning for all available TV stations begins. Approximate duration is 5 minutes.
- After Automatic tuning has finished, press **EXIT**. The Owner ID screen will appear.



Owner ID

You can complete the Owner ID now or skip this step and do it later. To do it later, press the **EXIT** button. Your VCR is now ready to use. Optionally, you can have a QUICK SETUP following VCR Auto Setup for the DVD player (page 40).

- To set the Owner ID now, press the **Numeric** buttons or **▲▼▶** to enter a four-digit PIN number.
- Press **◀**, to correct the digit.
- Make sure that you will remember the PIN number (make a note of it).
- Press the **ENTER** button twice to confirm.
- Enter the [Name], [House No] and [Postcode] in the same way.
- Press the **ENTER** button to confirm each entry.
- Press the **EXIT** button to leave the Owner ID screen.
- You will now see the TV picture. Your VCR/DVD is now ready to use. Optionally, you can have a QUICK SETUP following VCR Auto Setup for the DVD player (page 40).



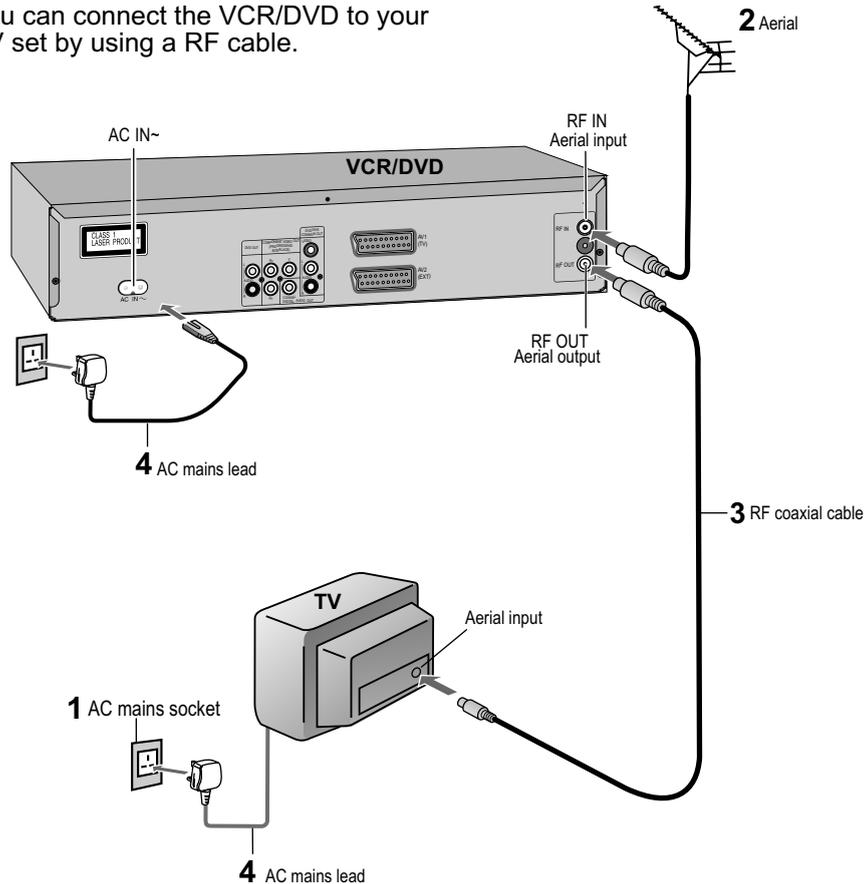
If the clock setting menu appears

(Auto clock set was not possible due to a weak signal)

- Press **▲▼◀▶** to set the correct time and date.
- Press the **ENTER** button to finish this setting.
- * Mind that a wrong date or time will influence the programmed recording of TV programmes (don't forget to change summer time and winter time).
- * If Auto Setup has previously been completed the VCR will not start Auto Setup automatically. In this case you can re-start Auto Setup again. See page 35.
- * If you want to cancel Auto Setup before it has finished, press the **EXIT** button. You can restart Auto Setup again. See page 35.

Connecting with RF cable

You can connect the VCR/DVD to your TV set by using a RF cable.

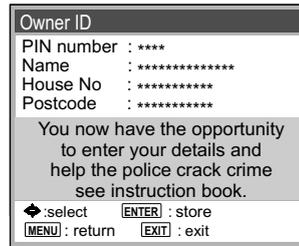
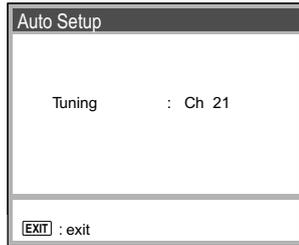


Follow the steps described below.

- 1 Ensure TV Power is disconnected from AC Mains socket.
- 2 Connect aerial to the RF IN (Aerial input) connector of the VCR/DVD.
- 3 Connect the VCR/DVD's RF OUT (Aerial output) to the TV set's Aerial in connector.
- 4 Connect VCR/DVD and TV set to the AC mains socket.

Follow the steps for VCR Auto Setup on page 15.

VCR Display



VCR Auto Setup with RF cable (Automatic tuning)

- Turn on your television set.
- With the **Stand-by/on switch** turn on the VCR/DVD. Automatic tuning for all available TV stations begins. Approximate duration is 5 minutes.
- After Automatic tuning has finished, press **EXIT**. The Owner ID screen will appear.
- While Auto Setup is running the first digit of the VCR display will flash. After a while it will stop flashing and the RF output channel number will be displayed.
- Select an unused channel pre-set on your TV and tune it to the RF output channel number shown on the VCR display (or until you can clearly see the Auto Setup screen). Store the new video playback channel (refer to the instructions for your TV).
- * In some cases, the RF output channel may interfere with the TV stations transmitted in your area. This may prevent you from seeing the On-Screen Display clearly. Please see page 21 for removing the interference before restarting Auto Setup (page 35).

Owner ID

You can complete the Owner ID now or skip this step and do it later. To do it later, press the **EXIT** button. Your VCR is now ready to use. Optionally, you can have a QUICK SETUP following VCR Auto Setup for the DVD player (page 40).

- To set the Owner ID now, press the **Numeric** buttons or **▲▼▶** to enter a four-digit PIN number.
- Press **◀** to correct the digit.
- Make sure that you will remember the PIN number (make a note of it).
- Press the **ENTER** button twice to confirm.
- Enter the [Name], [House No] and [Postcode] in the same way.
- Press the **ENTER** button to confirm each entry.
- Press the **EXIT** button to leave the Owner ID screen.
- You will now see the TV picture. Your VCR is now ready to use. Optionally, you can have a QUICK SETUP following VCR Auto Setup for the DVD player (page 40).

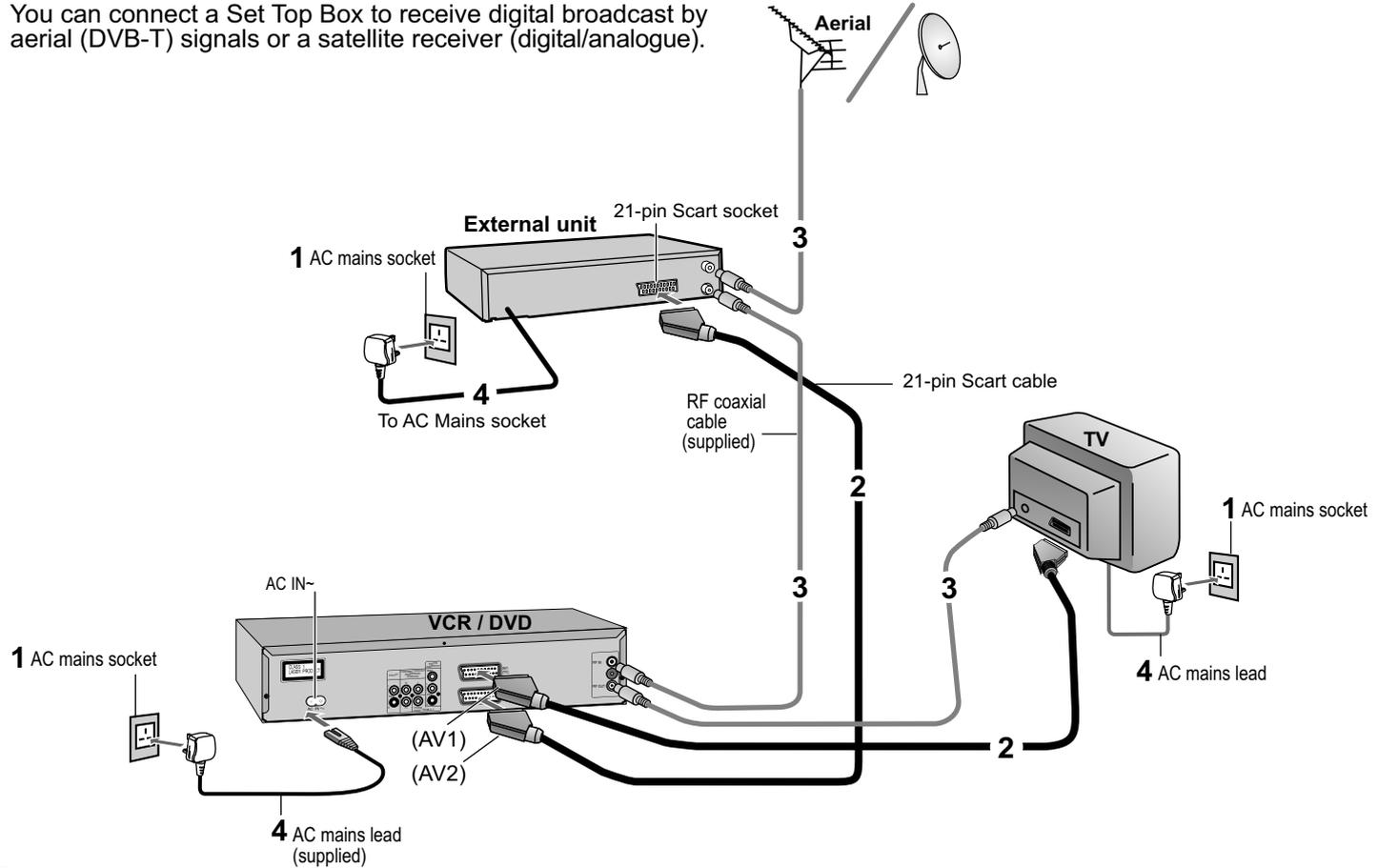
If the clock setting menu appears

(Auto clock set was not possible due to a weak signal)

- Press **▲▼◀▶** to set the correct time and date.
- Press the **ENTER** button to finish this setting.
- * Mind that a wrong date or time will influence the programmed recording of TV programmes (don't forget to change summer time and winter time).

Connecting to Satellite Receiver, Set Top Box

You can connect a Set Top Box to receive digital broadcast by aerial (DVB-T) signals or a satellite receiver (digital/analogue).

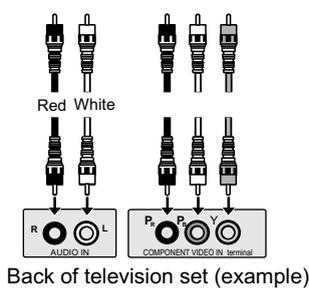
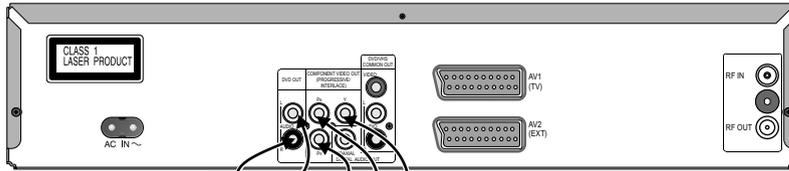


Follow the steps described below.

- 1** Ensure TV Power, External unit Power and VCR/DVD Power are disconnected from AC Mains socket.
- 2** Connect a 21-pin scart cable (fully wired) to the AV2 21-pin scart socket on the VCR/DVD and to the 21-pin scart socket on the External unit.
Connect a 21-pin scart cable (fully wired) to the AV1 21-pin scart socket on the VCR/DVD and to the 21-pin scart socket on the TV set.
- 3** Connect aerial to the Aerial in connector of the External unit.
Connect the External unit's Aerial out connector to the VCR/DVD's RF IN (Aerial input).
Connect the VCR/DVD's RF OUT (Aerial output) to the TV set's Aerial in connector.
- 4** Connect the External unit, VCR/DVD and TV set to the AC mains supply.
- 5** Switch on the TV set and VCR/DVD.
Set the VCR menu settings for AV2 according the connected External unit (See page 33).
- 6** Switch on the External unit. Then follow page 13 for VCR Auto Setup with 21-pin Scart cable.

* [RGB] means separate Red/Green/Blue colour signals. If you connect a TV equipped with RGB input capability to the AV1 socket on this VCR/DVD, and a decoder equipped with RGB output capability to the AV2 socket, RGB signals will pass through the VCR/DVD to the TV when the VCR/DVD is in stand-by mode. The RGB signals cannot be recorded or produced by this VCR/DVD.

DVD-Connectors



DVD ports

Connection to a TV set without a scart socket or to an amplifier component (home cinema):

To be able to hear sound in stereo or Dolby Pro Logic quality, attach an amplifier or an analogue audio component supporting these features.

- To avoid sound quality problems deactivate function Advanced Surround when you attach an amplifier with Dolby Pro Logic functionality.



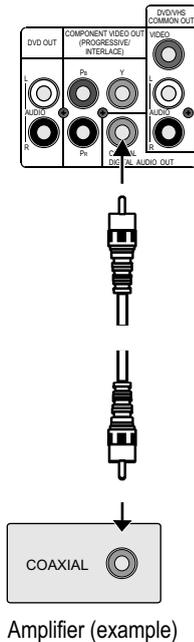
COMPONENT VIDEO OUT - Connection

The COMPONENT VIDEO OUT connection outputs the color-difference signals (P_B/P_R) and the luminance-difference signal Y separately, thereby enabling a higher resolution and color trueness.

- The description of the COMPONENT VIDEO IN connection can be different depending on the television set or monitor (e.g. $Y/P_B/P_R$, $Y/B-Y/R-Y$, $Y/C_B/C_R$). Please refer to the instruction manual for your television.
- Connect the cables as shown in the figure according to the colors and markings on the connection sockets.
- * The COMPONENT VIDEO OUT connection cannot be used if the AV1 Output in the Menu Video is set to [RGB].
- * With a normal television, the progressive scan process can lead to flickering even if the television is progressive-compatible. Set the Video Output Mode setting to [625i].



DVD-Connectors



Digital connectors (COAXIAL)

To play programmes with a 5.1-channel surround sound, connect the digital audio output (COAXIAL) with an external Multi-channel Dolby Digital Decoder, for example.

Prerequisites for making recordings with an external digital recorder

- The original disc must not be copy-protected.
- The recorder must be able to process signals with a scanning frequency of 48 kHz/16 bit.
- You cannot make MP3/WMA recordings.

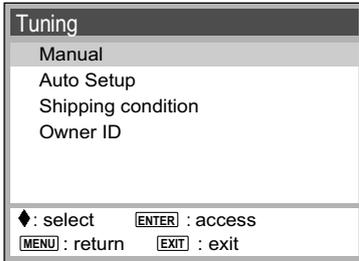
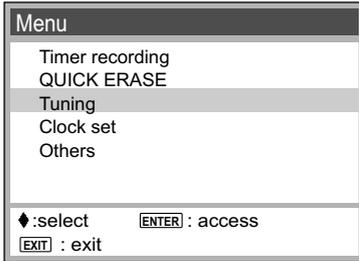
- * Adapt the Audio SETUP menu settings to the following:
PCM Digital Output: [up to 48 kHz]
Dolby Digital / DTS Digital Surround / MPEG: [PCM]



- * Deactivate function Advanced Surround.



Checking the Settings after Auto Setup



MENU
PLAY LIST



- Press the **MENU** button to display the OSD Main menu on the TV screen.
- Press **▲▼** to select Tuning then press the **ENTER** button.
- Press **▲▼** to select Manual then press the **ENTER** button to display the list of tuned TV stations and confirm that all available TV stations have been set correctly.

* If station name is [****]:

The asterisks indicate that a station was found during Auto Setup but has not been named (due to weak signal).

The stations in the list with asterisk will need to be named manually see page 34.

* If station name is [- - - -]:

The dashes represent unused channel positions.

The stations in the list with dashes will need to be set manually. See page 34.

EXIT
RETURN



- Press the **EXIT** button to exit the On Screen Display.

When the station names and/or channel numbers have not been set correctly, see page 34 for details.

When no station has been found, confirm all connections of the VCR again and restart the Auto Setup. See page 35 for details.

TV Reception Channels

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	BBC1	22	6	****	30
2	BBC2	23	7	----	---
3	ITV	24	8	----	---
4	CH4	25	9	----	---
5	CH5	26	10	----	---

Example of UK model

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	RTE1	2	6	ITV	24
2	NET2	4	7	CH4	25
3	TNG	6	8	CH5	26
4	BBC1	22	9	----	---
5	BBC2	23	10	----	---

Example of Ireland model

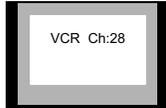
The reception channels are different for UK and Ireland.

Removing Interference / Changing RF-output channel



TV screen

The picture with interference



On-Screen Display
Test pattern indication

VCR display



Indication when the RF output channel is 28 (example)



Indication after changing the RF output channel to 31 (example)



Test pattern indication



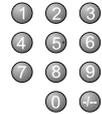
The clear picture

In some cases, interference (lines or patterning) or a very poor picture may appear on the TV when the VCR/DVD is connected. If this happens, follow the steps below to change the video playback channel (RF output channel) to remove the interference.



- Press the **MENU** button for more than 5 seconds. The RF output channel number is displayed on the VCR display.

- Press the **Numeric** buttons or use the Channel (**CH**) button to select a channel number, which differs by 2 or 3 from the present channel number. (For example, if the original channel number was 28, enter 31.)

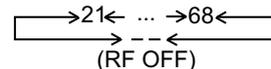


- Retune your TV until you receive the Test pattern. It may be necessary to repeat steps above until you can see the Test pattern clearly. If using a Scart cable please see the note below.

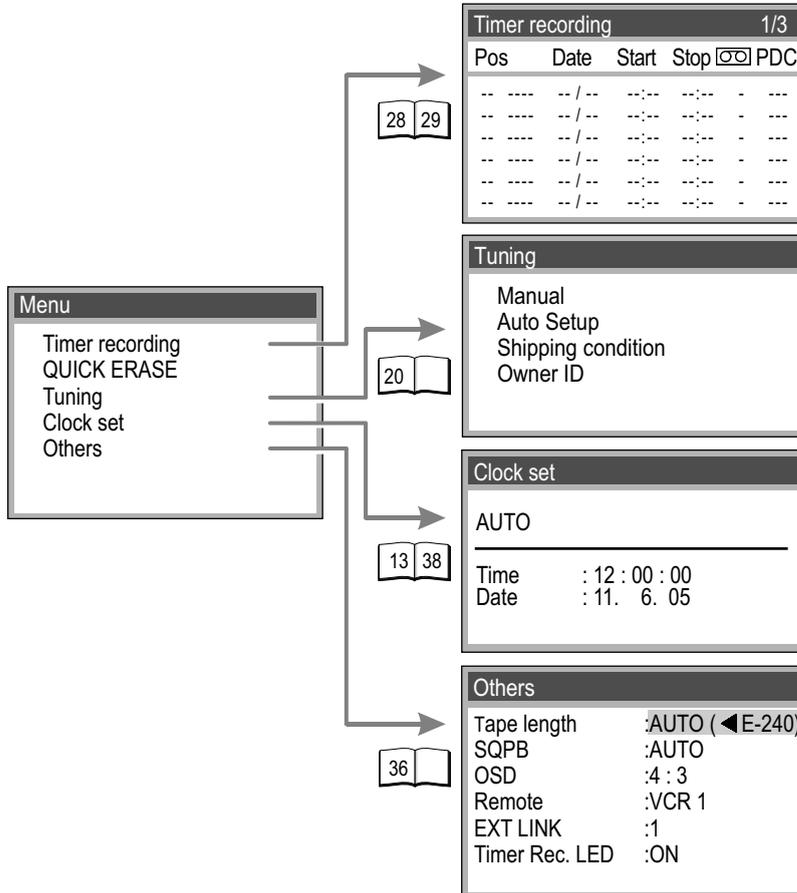
- Press **ENTER** to finish this setting.

* Set the RF output channel of the VCR/DVD to [- -] (RF OFF) if the VCR/DVD is connected to the TV via the 21-pin Scart cable.

- Press **MENU** for about 5 seconds. The preset channel will be displayed on the VCR-display.
- Press channel select buttons **CH** or **0** to invoke [- -].
- Confirm with **ENTER**.



VCR menu control



The cursor buttons on the remote control unit allow you to navigate through menus and change selected entries.

- Press **MENU**, the menu screen appears.
- With ▲▼ select the desired sub-menu.
- Press **ENTER**, the selected menu appears.
- With ▲▼ select the entry you would like to change, then confirm with **ENTER**.
- Make your changes following the menu steps.
- With **MENU** return to the previous menu.
- Press **EXIT** to leave the menu.

VCR Playback

VHS/DVD



Normal playback

- Turn on the VCR.
- Make sure that the television set is turned on and set to the appropriate AV input.
- Insert a video cassette.

PLAY



- Press **PLAY** ► to start playback.

STOP



- Press **STOP** ■ to end playback.

Playback from power stand-by mode

When inserting a cassette and pressing **PLAY** ►, the device will turn itself on and start playing back.

Starting automatic playback

When inserting a cassette with removed protection tab, playback will start automatically.

Repeat playback

The VCR repeats playback from beginning to the end of the recording.

- In stop or playback mode press **PLAY** ► for longer than 5 seconds.
- Press **STOP** ■ to end playback.

R 0:05.57

PAUSE



SLOW

Still playback

- Press **PAUSE/SLOW** during playback.
- To exit still playback press **PAUSE/SLOW** again or **PLAY** ►.

PAUSE



SLOW

Slow playback

- During playback press **PAUSE/SLOW** for longer than 2 seconds.
- To return to normal playback press **PLAY** ►.

Tracking control



Playback picture containing noise bars



Adjusting the playback picture

Under normal conditions, the VCR automatically adjusts the tracking for optimum performance.

However, in some cases it may be necessary to adjust it manually.

If the picture contains noise bars and it is not clear to see (tracking adjustment):

If noise bars appear during normal playback, slow playback or still playback, follow the operations below.

During normal or slow playback, press **CH** ∇ or \blacktriangle until the noise bars disappear.

- If the noise bars appear during still playback, switch the VCR over to the slow playback mode and then adjust the tracking as explained above.

To return to Auto Tracking:

Press **CH** ∇ or \blacktriangle simultaneously.

If the still picture jitters or jumps (V-lock adjustment):

If the still picture jitters or jumps, perform the following.

During still playback, keep the **CH** button ∇ or \blacktriangle pressed until the picture becomes stable.

- * With certain TV models and tapes, it may not be possible to adjust the tracking perfectly.
- * If you play back a cassette that was recorded on another unit of VCR, the picture quality may be inferior in the normal playback, slow playback, and still playback, and it may need to manual adjust the tracking by above method.
- * Also, on some TVs, the picture may scroll up and down in the special playback functions.
- * However, these are not malfunctions.

General convenient functions

Auto-Start

When inserting a cassette the VCR will automatically switch on.

Automatic rewinding

When a cassette is played to the end, the VCR will automatically rewind it to the beginning of the tape.

* This function is not available during programmed recording sessions.

Search forward ►► or backwards ◀◀



- While playing back press ►► or ◀◀, the search begins.
 - When pressing the button twice (JET SEARCH) the search speed increases.
 - When holding the button down the search will run for the duration of the button being held.
 - Press **PLAY ►** to end search.
- * This function is not available in some cases (e.g. at the beginning or end of the tape).

Fast winding forward ►► or backwards ◀◀



- In stop mode press ►► or ◀◀. Press **STOP ■** to end winding.

JET REW

For fast rewinding to the beginning of the tape. On a E180 cassette approx. 43 seconds.

* Tape counter and tape remain display are unavailable during this function.



Quick search for a beginning of a recording



While playing back or in stop-mode.

- **INDEX ►►** tape winds forward / **INDEX ◀◀** tape rewinds.
- Every time you press the button (max. 20 times) the VCR will find the start of the next recording.
- Playback will start automatically.
- Press **STOP ■** to exit the Search function.

Time limited recording or playback

OFF TIMER



During recording, playback or stop mode the device switches to stand-by after a preset period of time.

Press the button repeatedly to increase this period from 30 to 60, 120, 180 or 240 minutes.

The set time appears in the VCR's display.



- Press **OFF-TIMER**

Automatic stop function

To protect the video heads the device will automatically quit the functions search backwards/forwards, quick search, still playback and slow playback after 5-10 minutes. Interference and motor noise are not a malfunction.

Playing back S-VHS Cassette Tape (SQPB=S-VHS Quasi Playback)

It is also possible to play back tapes recorded on an S-VHS VCR.

- The picture quality will be similar to VHS playback.
- It is not possible to make an S-VHS recording with this VCR.

General convenient functions

Tape Counter

When inserting a video cassette the tape counter will automatically reset to [0:00.00].

The tape counter may also be reset to [0:00.00] by pressing the **CANCEL/RESET** button.

Automatic shut down and removing cassettes

If the VCR is switched into stand-by mode, the cassette may be removed by pressing the **EJECT**-button. Once done the VCR will switch back to stand-by mode.

Playing back NTSC video cassettes

You can play back NTSC video cassettes for viewing on a PAL system TV set.

If there is any interference when playing back NTSC, try readjusting your TV set.

Read the operating instructions of your TV set. You cannot record or copy video cassettes in NTSC format.

CVC Super - Crystal View Control Super

The CVC function enables optimal picture quality. The picture is automatically set as clear and sharp as possible.

Cinema Mode

Cinema Mode can improve the picture during the playback of recorded video cassettes. The attainable improvement depends on the graphical material used.

Tape Care

Some do's and don't's on tape care.

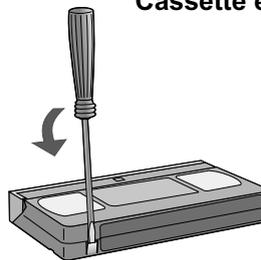
DO:

- Use a good quality branded tape, such as Panasonic.
- Keep in the box supplied with the tape, or a video case, when not in use.
- Try to use the whole tape when making recordings and avoid re-recording over the same section of the tape repeatedly as this will help prevent premature tape wear.
- Take care to insert a tape correctly into the VCR to avoid damage.
- Take tape out of the VCR when not in use.

DO NOT:

- Expose the tape to high humidity or temperature.
- Expose to liquid.
- Expose to dust particles by storing directly on a carpet for example.
- Use a damaged tape or attempt to repair it.
- Dismantle the cassette housing.
- Attempt to lift the front cassette flap or touch the tape surface.

Cassette erasure protection



Break out the erasure protection tab to protect the cassette against accidental erasure of recordings you wish to keep.

Stick adhesive tape over the gap if you wish to re-record a protected cassette.

Recording

Recording functions	
Instant recording	
Instant recording of the VCR - TV picture.	 27
Timer recording	
Recording controlled by timer.	 28 29
Recording with INTELLIGENT TIMER	
Repeating programmed recordings.	 30
Recording with VIDEO Plus+	
Programming recordings using the VIDEO Plus+ function.	 31 32
Recording with external recording controls	
Recording is controlled by an external device.	 33

Instant recording

Set the television to the appropriate AV input and insert a cassette into the VCR; make sure that the cassette's protection tab is intact.



- Select the channel to be recorded with **INPUT**.
When recording from an external device, select from Scart inputs AV1, AV2 or the Front input AV3.
To record from the internal DVD/CD player, select dc.
If you want to record via the tuner, select the desired television channel using the programme selection button.



- Press **REC** to start recording.
- Press **STOP** ■ to stop recording.
- Press **PAUSE/SLOW** to pause recording.
- Press **PAUSE/SLOW** again to resume recording.

* To protect the video heads the function will be terminated after approx. 5 minutes.



Tape speed

- Prior to starting the recording session, press **REC MODE** to set the tape speed.

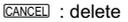


- | | |
|-----------------------------------|---------------------------|
| SP : normal recording time | - optimal picture quality |
| LP : double recording time | - lower picture quality |
| EP : triple recording time | - lowest picture quality |

When playing back LP or EP recordings, interferences may occur when using certain types of cassettes (e.g. Type E-300). These are not indicative of a VCR malfunction.

Timer recording

Timer recording							1 / 3
Pos	Date	Start	Stop		PDC		
1	BBC1	31/12	10:30	11:30	SP	ON	
2	BBC2	31/12	11:30	12:30	SP	ON	
3	ITV	31/12	12:30	13:30	SP	ON	
4	CH4	31/12	13:30	14:30	SP	ON	
5	CH5	31/12	14:30	15:30	SP	ON	
---	--	--	--	--	SP	---	

 :select  : store
 : delete  : exit



The Timer recording allows you to programme the recording time of TV programmes up to 1 month in advance. Use the on-screen menu to programme a maximum of 16 recordings. Do not forget to verify that there is enough tape left. The length of the recording must not exceed the tape left on the video cassette.

PROG/CHECK



- Press **MENU**, and confirm **▲▼** Timer recording with **ENTER** or press **PROG/CHECK** to display the Timer recording menu.
- Press **ENTER** to access timer programming.
- Select a station **▲▼** (e.g. BBC1).
- Press **▶** to set date, week or weekday with **▲▼** (e.g. 31/12).
- Press **▶** to set start- and stop-time with **▲▼**, **▶** (e.g. 10:30). Hold buttons down to change time in 30-minute steps.
- Press **▶** to select tape speed: **A** (Automatic), **SP**, **LP**, **EP** with **▲▼**.
- Press **▶** to set PDC ON/OFF with **▲▼**.
- Press **ENTER** to save timer programme.

TIMER



- Repeat these steps for further recordings you may wish to programme.
- Press **TIMER** to activate the VCR's timer mode. Make sure the symbol  is displayed on the VCR display. The Timer Rec button on the device also lights up if the function was not turned off.

- * The Timer Rec button blinks for 5 seconds if the timer is turned on and you try to perform a function. Most buttons are blocked when the timer is turned on.
- * Do not forget to verify that there is enough tape left. The length of the recording must not exceed the tape left on the video cassette.

To cancel the Timer recording Standby Mode

When you want to use the VCR for playback or manual recording before the programmed timer recording will be performed, you can temporarily cancel the timer recording standby mode.

TIMER



- Press **TIMER** button. The  indication on the VCR display disappears.

However, after you have finished using the VCR, remember to reactivate the timer recording standby mode.

TIMER



- Press **TIMER** button again, otherwise the programmed timer recording will not take place.

Timer recording

Changing or cancelling a timer programme



- Press **PROG/CHECK**, the Timer recording menu appears.
- With **▲▼** select the entry you would like to edit, confirm with **ENTER**.
- Modify entries with **◀▶▲▼** and confirm with **ENTER**.
- Press **CANCEL/RESET** to delete a recording.

Playing back programmed recordings



- Press **PROG PLAY**.
- The device will rewind to the beginning of the recording, and automatically start playing it back.

You can also play back programmed recordings manually.

This function will not work if the tape has been ejected after Timer Recordings have been completed.

Automatic SP/LP selection

A: If, at the beginning of a timer programme, there is not enough tape left to complete it, the SP/LP function will automatically run the tape at LP speed. This ensures that the entire programme will be recorded. If the LP mode is not enough to 'stretch' the remaining tape to fit, you will not be able to record all of the TV programmes.

* It is not possible to automatically activate the EP mode.

Checking the timer programme



- Press **PROG/CHECK**, the Timer recording menu appears.
- Press **PROG/CHECK** again or **EXIT** to quit the menu.

PDC function

Programme Delivery Control adjusts the start and stop time of a timer recording automatically to ensure the recording starts and finishes in line with the programme broadcast. This is useful when a programme over-runs the published times.

The station must be transmitting PDC and the exact time must be set for PDC to work. The VCR detects whether a station is transmitting PDC only during the tuning process. If PDC is introduced or discontinued by a station you will need to re-tune the VCR before it becomes aware of this. PDC transmissions are not currently nation-wide so please check with your local broadcaster for more information.

ON : The station transmits PDC signals. You must set the timer to the time specified in the TV magazines.

OFF: If you do not want to use the PDC signals, you can turn them off.

- - - : The station does not transmit PDC signals. Try to set the start and stop time such that the entire film can be recorded even if a programme begins or ends earlier or later than planned.

Recording with INTELLIGENT TIMER

INTELLIGENT TIMER							25/10/05	
Pos	Date	Start	Stop		PDC			
1	BBC1	25/10	10:30 11:30	SP	ON			
1	BBC1	25/10	18:30 19:30	SP	OFF			
 2	BBC2	25/10	12:30 13:30	A	ON			

Timer recording							1 / 3	
Pos	Date	Start	Stop		PDC			
1	BBC1	26/10	10:30 11:30	SP	ON			
1	BBC1	26/10	18:30 19:30	SP	OFF			
--	--	--/--	--:--	--:--	--			
--	--	--/--	--:--	--:--	--			
--	--	--/--	--:--	--:--	--			
--	--	--/--	--:--	--:--	--			

INTELLIGENT TIMER							25/10/05	
Pos	Date	Start	Stop		PDC			
1	BBC1	25/10	10:30 11:30	SP	ON			
1	BBC1	25/10	18:30 19:30	SP	OFF			
 2	BBC2	25/10	12:30 13:30	A	ON			

The INTELLIGENT TIMER allows you to easily time the recording of programmes broadcasted by the same TV station at the same daytime at different days.

To use the INTELLIGENT TIMER function, at least one recording session must be programmed in the Timer recording menu (page 28). This information will be copied into the INTELLIGENT TIMER menu.

Upon completing the programmed recording session, such session information will be deleted from the Timer recording menu, but remain available in the INTELLIGENT TIMER menu. From there such information may be copied back to the Timer recording menu, thus allowing you to easily programme the recording session again with changed dates.

The INTELLIGENT TIMER menu will contain information about the last 5 programmed recording sessions.



Copying stored recording sessions

- Press **I-TIMER**.
- With **▲▼** or **I-TIMER** select recording session.
- Press **TIMER** to activate the VCR's timer mode.



Editing a programme

- Press **I-TIMER**.
- Press **▲▼** or **I-TIMER** to select a programme and confirm with **ENTER**. The Timer recording screen appears.
- With **◀▶** modify the desired data, and store changes with **ENTER**.
- Press **TIMER** to activate the VCR's timer mode.

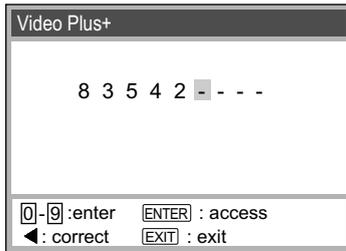
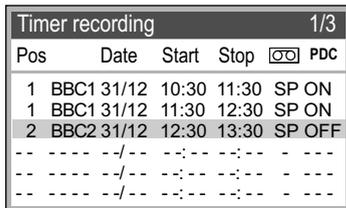


Protecting I-TIMER programmes

Once 5 entries are stored in INTELLIGENT TIMER menu, any new entry will overwrite the oldest stored programme.

- Press **I-TIMER**.
- With **▲▼** or **I-TIMER** select an entry.
- To protect the entry press **▶**. The  symbol appears.
- To remove protection press **◀**. The  symbol disappears.

Recording with VIDEO Plus+

Timer recording 1/3

Pos	Date	Start	Stop	Ⓜ	PDC
1	BBC1 31/12	10:30	11:30	SP	ON
1	BBC1 31/12	11:30	12:30	SP	ON
2	BBC2 31/12	12:30	13:30	SP	OFF
-	-/-	-:-	-:-	-:-	-:-
-	-/-	-:-	-:-	-:-	-:-
-	-/-	-:-	-:-	-:-	-:-

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

Programming recordings with the VIDEO Plus+ function

The VIDEO Plus+ code simplifies entering programme information to record TV and SAT programmes. The recording time may be slightly longer than the TV programme.



- Press **VIDEO Plus+**.
- Enter the VIDEO Plus+ number (◀ to correct entry).
- Confirm entry with **ENTER**. The Timer recording screen appears.



If you do not wish to edit the Timer recording data activate timer mode

- Press **TIMER** to activate the timer mode. The ⊖ symbol appears on the VCR display.

- To edit Timer recording data press **ENTER**.
- Select station ▲▼ and use ▶ to set date.
- Use ▲▼ to set the date, week or day of week and use ▶ to set the start time.
- Use ▲▼ to change the start time and use ▶ to set the stop time.
- Use ▲▼ to change the stop time and use ▶ to set the tape speed.
- Set the tape speed: **A** (Automatic), **SP**, **LP**, **EP** ▲▼ use ▶ to set PDC. (for automatic setting and PDC recording see page 29)
- Press **ENTER** to confirm the settings.
- Press **TIMER** to activate the timer mode.



Ensure that the video recorder symbol ⊖ is displayed. The Timer Rec button on the device also lights up if the function was not turned off.

* The Timer Rec button blinks for 5 seconds if the timer is turned on and you try to perform a function. Most buttons are blocked when the timer is turned on.

To cancel the Timer recording Standby Mode see page 28.

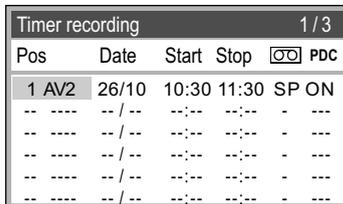
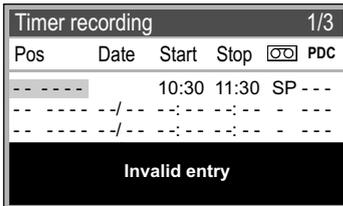
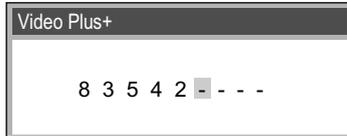
- * If the device fails to recognise the TV station automatically, the [- -] indication appears under the programme position (Pos). The [- -] will also appear, when using VIDEO Plus+ to record from a Satellite broadcast for the first time. For each satellite station, you will have to set the Pos for the first time (for details see page 32).
- The TV station must be entered manually with ▲▼. The VCR will store this information so it will not have to be entered again.

Recording with VIDEO Plus+

VIDEO Plus+ Codes for Satellite Receivers / Set Top Box

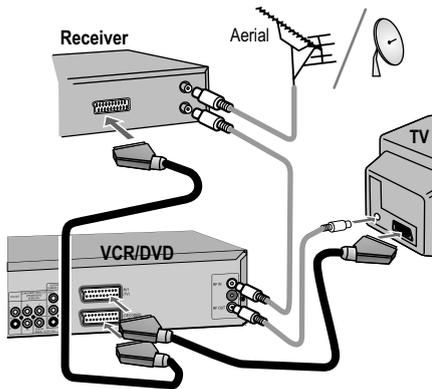
This VCR is not designed to control (switch on or change channel) your satellite receiver or Set Top Box, however, it can be taught to recognise VIDEO Plus+ Codes for Satellite stations. The Satellite Receiver or Set Top Box must be switched on and the correct station selected. Some receivers have their own timer facility for this purpose. Please refer to your Satellite Receiver/Set Top Box instructions for use of such timer facilities.

For your VCR to recognise the VIDEO Plus+ Codes for each satellite station, you must teach your VCR which channel or AV input to record from for the first time. Otherwise when setting a VIDEO Plus+ recording, the [- -] symbol will appear in the channel position indicating that the VCR does not know which channel position to set. Once you have set the channel/AV input once the VCR will remember it whenever you use a VIDEO Plus+ Code for the station again.



- Press the **VIDEO Plus+** button.
- Enter a VIDEO Plus+ Code from a Satellite TV Guide for a satellite channel, e.g. Sky 1 using the **Numeric** buttons. Press **◀** to correct any mistakes.
- Press the **ENTER** button. [- -] will appear instead of a channel number/AV input.
- Press the **CH** button to select the channel or AV input that is to be used for recording from the satellite channel.
- Press the **ENTER** button to memorise the setting. The VCR will now automatically set the programme position or AV input correctly when a VIDEO Plus+ recording is set for this satellite station in the future.
- Press **▲▼** to select the programme that you have just set. Now press the **CANCEL/RESET** button to delete it from the timer recording list. It is no longer needed.
- Repeat the steps above until you have set and deleted dummy timer recordings for each of the satellite stations that you will make VIDEO Plus+ recordings from.
- Press **EXIT** when you have finished.

Recording with external recording controls



Others	
Tape length	: AUTO(◀E-240)
SQP/B	: AUTO
OSD	: 4:3
Remote	: VCR 1
EXT LINK	: 2
Timer Rec. LED	: ON

◀ : select
[MENU] : return [EXIT] : exit



EXT LINK

The AV2 input of this VCR is equipped for use with external equipment having external timer recording control such as digital satellite receivers. The AV2 input can be set to EXT LINK 1 or EXT LINK 2 depending on the equipment to be connected. Fully wired 21-pin scart cable is required. Refer also to the manufacturer's instruction for the external unit.

- Press **MENU**, the Menu screen appears.
- With ▼ select menu Others and confirm with **ENTER**.
- With ▲▼ select [EXT LINK] and turn to [2] or [1] ◀▶.
- Press **MENU** to return to the Menu screen.

EXT LINK 1: The VCR recording start and stop time is controlled by a control signal sent via the 21-pin scart cable from the external unit (e.g. Sky Digibox).

EXT LINK 2: The VCR will start recording when AV2 input detects the video signal and stop recording when the video signal is switched off by the external unit.



- Press **EXT LINK** to activate the VCR's recording stand-by mode. Make sure the VCR's display EL appears. As long as the satellite or digital receiver transmits the special recording signal, or a video picture is transmitted, the VCR will continue to record.

* Be sure that the timer programmes stored by your VCR do not overlap with the ones of the satellite or digital receiver. Some external equipment may not work with this function, refer to the operating instructions for the external unit.



Quitting recording stand-by mode

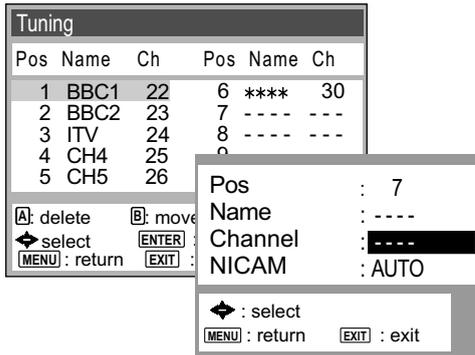
- Press **EXT LINK** to quit recording stand-by mode. The display EL disappears. You can now play back a cassette, make a manual recording or watch TV.
- You must press **EXT LINK** again to reactivate the recording stand-by mode.

Manual Functions

This VCR has 99 programme positions that can be tuned to receive TV stations. In certain circumstances you may wish to tune in a station manually or rename a TV station.

Manual Tuning

- Press **MENU**, the Menu screen appears.
 - Select the Tuning menu by pressing **▼** and confirming with **ENTER**.
 - Confirm [Manual] by pressing **ENTER**.
 - With the **◀▶▲▼** buttons, select an open storage position.
 - Press **ENTER**.
 - Press **◀▶** to start Channel tuning, or **Numeric** buttons to enter the channel number.
 - Wait until the desired station has been set.
 - Press **MENU** to return to the Tuning screen.
- * If you have performed Manual Tuning to find TV stations, the [- -] indication may appear under [Pos/Name] on the On Screen Display when programming a VIDEO Plus+ timer recording.



Tuning

Pos	Name	Ch	Pos	Name	Ch
1	BBC1	22	6	****	30
2	BBC2	23	7	----	---
3	ITV	24	8	----	---
4	CH4	25			
5	CH5	26			

[A]: delete **[B]**: move
◀: select **[ENTER]**:
[MENU]: return **[EXIT]**:

Pos : 7
 Name : ----
 Channel : ----
 NICAM : AUTO

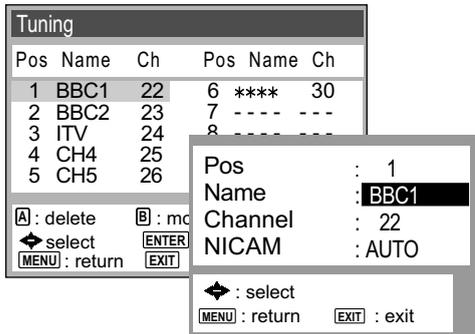
◀: select
[MENU]: return **[EXIT]**: exit

Options available for tuning the channels

Pos		Station position	 35
Name		Station name setting	34 
Channel		Channel setting	34 
NICAM	AUTO / OFF	Automatic NICAM detection/Mono	 39

Changing the name of TV stations

- Press **MENU**, the Menu screen appears.
- With **▼** select the Tuning menu, confirm with **ENTER**.
- Confirm [Manual] with **ENTER**.
- With **◀▶▲▼** select the name entry.
- Press **ENTER**.
- With **◀▶** select the name entry.
- The cursor will mark the first letter **BBC1**.
- With **▲▼** change that letter.
- With **▶** select the next letter **BBC1**.
- Press **MENU**.
- The new name will be stored in Tuning.



Tuning

Pos	Name	Ch	Pos	Name	Ch
1	BBC1	22	6	****	30
2	BBC2	23	7	----	---
3	ITV	24	8	----	---
4	CH4	25			
5	CH5	26			

[A]: delete **[B]**: move
◀: select **[ENTER]**:
[MENU]: return **[EXIT]**:

Pos : 1
 Name : BBC1
 Channel : 22
 NICAM : AUTO

◀: select
[MENU]: return **[EXIT]**: exit

Manual Functions

Tuning					
Pos	Name	Ch	Pos	Name	Ch
▶ 1	BBC1	22	6	****	30
2	BBC2	23	7	----	----
3	ITV	24	8	----	----
4	CH4	25	9	----	----
5	CH5	26	10	----	----

[A] : delete **[B]** : move
[↔] : move **[ENTER]** : store
[MENU] : return **[EXIT]** : exit

Tuning	
Manual	
Auto Setup	
Shipping condition	
Owner ID	

Auto Setup	
[ENTER] : yes	Tuning : Ch 1

Tuning	
Manual	
Auto Setup	
Shipping condition	
Owner ID	
OK?	
[ENTER] : yes	[EXIT] : no

Changing the order of TV stations or deleting a station

- Press **MENU**, the Menu screen appears.
- With **▼** select the Tuning menu, confirm with **ENTER**.
- Confirm [Manual] with **ENTER**.
- Press **B**. An arrow to the left will mark the selected field.
- With **◀▶** move the station to any other desired location.
- Press **ENTER**.
- Press **A** to delete the station.

Creating a new station table

- Press **MENU**, the Menu screen appears.
- With **▼** select the Tuning menu, confirm with **ENTER**.
- With **▼** select [Auto Setup], confirm with **ENTER**.
- Press **ENTER** to confirm.

The Auto Setup menu will be displayed.
The Automatic Tuning will start.

- * When no stations have been set, confirm all connections and restart Auto Setup.
- * You can restart Auto Setup, without using remote controller, by pressing some buttons on the front of the unit. Hold down **▼** and **▲** on the main unit simultaneously for about 5 seconds.

Shipping condition/factory defaults

Shipping condition resets the VCR back to the original factory settings except Owner ID information. This is useful if the VCR is going to be used in a new location as auto-setup will begin again when the unit is switched on (after connecting to aerial and mains).

- Press **MENU**, the Menu screen appears.
- With **▼** select the Tuning menu, confirm with **ENTER**.
- With **▼** select [Shipping condition] and confirm with **ENTER**.
- Press **ENTER** to confirm.
- To re-tune the VCR, disconnect and reconnect the AC Mains lead.

Manual Functions

Menu Others

VHS DVD

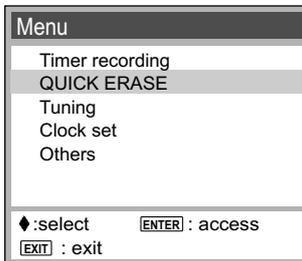
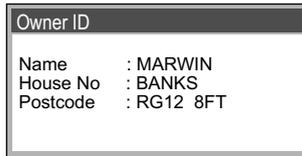
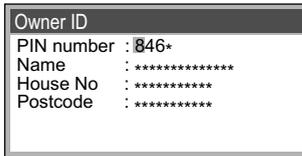
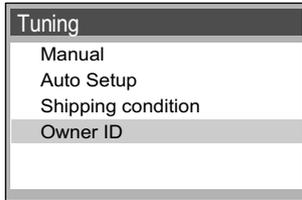
- Press **MENU**
- Select Others ▲▼
- Confirm with **ENTER**
- Select the Menu item ▲▼
- Changes with ◀▶
- Press **MENU** to quit the menu.

Others	
Tape length	:AUTO (◀E-240)
SQPB	:AUTO
OSD	:4 : 3
Remote	:VCR 1
EXT LINK	:1
Timer Rec. LED	:ON



Tape length	Sets the tape length of the cassette you use. AUTO (◀E - 240), E - 195, E - 260, E - 300
SQPB	AUTO : The VCR automatically detects the type of recording. ON : Plays back S-VHS format cassettes in quasi S-VHS format. OFF : Plays back cassettes recorded in VHS format only.
OSD	4 : 3 : Displays appear at the edge of the screen (displays not visible on 16:9 format screens). WIDE : Displays appear at the edge of the screen (displays appear in the middle on 4:3 format screens). OFF : No on-screen displays.
Remote	The device and the remote control may be switched to alternative frequencies. In the Menu select VCR1 or VCR2 to switch the device settings. Then press and hold the ENTER and ① or ② keys of the remote control, to switch it to the according device frequency. If the remote control and the device are not set to the same frequency, the VCR display shows the current setting of the device. In this case, please change the frequency of the remote control using ENTER and the appropriate number.
EXT LINK	2 : External recording control by satellite receivers or digital receivers (video signal). 1 : For digital receivers transmitting a special recording control signal, e.g. the F.U.N. receiver (TU-DSF41).
Timer Rec. LED	ON : Timer Rec button lights up when the device is in timer mode. OFF : The LED feature of the Timer Rec button is turned off.

Manual Functions



Owner ID

- Press **MENU** and select Tuning **▲▼**
- Press **ENTER**.
- Select Owner ID **▲▼** and press **ENTER**.
- Use the **Numeric** buttons or **▲▼** to enter the current PIN number. After entering the correct PIN number, you can change the Name, House No and Postcode.
- Press **ENTER** to conclude the setting.
- Use **▲▼◀▶**, the **Numeric** buttons and **ENTER** to select and change the desired information.
- Press **EXIT** to exit the On Screen Display.

To display the Owner ID information on TV

- Keep **EJECT** pressed for more than 5 seconds.
- * The PIN number is not displayed.
After 30 seconds, this menu automatically disappears.

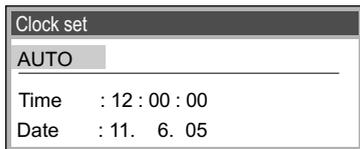
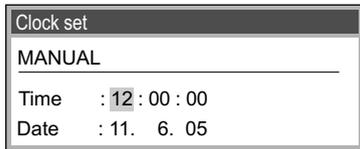
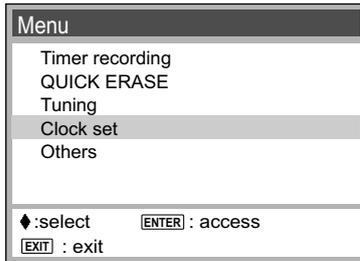
QUICK ERASE

To record on a cassette containing previous recordings without loss of quality, erase these recordings with the QUICK ERASE function.

- Press **MENU**.
- Select QUICK ERASE with **▲▼**.
- Confirm with **ENTER** or cancel with **STOP ■**.

The erase process takes approx. 30 minutes for an E-180 cassette.

Manual Functions



Clock setting

The clock will normally be set correctly during Auto-Setup however, in some circumstances the VCR cannot set the clock automatically. In this case, follow the operation steps below to manually set the clock.

To manually adjust the clock

- Press **MENU** and select Clock set ▲▼.
- Press **ENTER**.
- Confirm that Clock set is set to **MANUAL**, and press **ENTER**.
- Use ▲▼◀▶ or **Numeric** buttons to set the Date and Time.
- Press **ENTER** to conclude the settings.
- Press **EXIT** to exit the On Screen Display.

To activate the automatic time correction function

The correct time for the VCR clock can be automatically maintained when the VCR is tuned to a station that transmits a time signal.

- Press **MENU** and select Clock set ▲▼.
 - Press **ENTER**.
 - Use ◀▶ to set **AUTO**.
 - Press **ENTER** to conclude the setting.
 - Under adverse reception conditions, etc., the Automatic time correction function may not work. In this case, the indication for Clock setting is automatically reset to **MANUAL**. If the reception conditions improve later on, it is possible to activate this function.
 - Press **EXIT** to exit the On Screen Display.
- * If Clock setting is set to **AUTO** when you open the Clock screen, do not set it to **MANUAL**, otherwise, the automatic time correction function is deactivated.
 - * This VCR uses a 24 hour clock.
 - * In case of a power failure, an automatic back-up system maintains the clock for approximate 60 minutes.
 - * When Clock setting is set to **AUTO**, the automatic time correction function checks and if necessary adjusts the time several times every day. The automatic time correction function only works when the VCR is in standby, it does not work in the timer recording mode.
 - * Don't forget to change summer time and winter time.

Manual Functions

AUDIO Audio mode (L/R)



At each press of the **AUDIO** button, the selected sound output is indicated with L (Left) and R (Right).

Stereo playback : Display: LR
 Left audio channel playback : Display: L -
 Right audio channel playback : Display: - R
 Playback of normal audio (Mono) sound : Display: - -

NICAM sound system

The NICAM System is a 2 channel digital sound broadcast system which in most instances provides high quality stereo sound. Broadcasters can also transmit two separate mono soundtracks on this system.

- AUTO:** When you record a programme which is broadcast with NICAM sound, the NICAM sound is automatically recorded.
- OFF:** If you want to record the normal (mono) sound on the Hi-Fi audio tracks during a NICAM broadcast, or if the stereo sound is distorted due to poor reception conditions.

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	BBC1	7	6	----	---
2	BBC2	4	7	----	---
3	ITV	2	8	----	---
4	CH4	12	9	----	---
5	CH5	13	10	----	---

- Press **MENU**, the Menu screen appears.
- With ▼ select the Tuning menu and confirm with **ENTER**.
- Confirm Manual with **ENTER**.
- With ◀▶ select the desired channel and confirm with **ENTER**.
- With ▼ select NICAM and switch to AUTO or OFF with ◀▶.
- Press **MENU** to return to Tuning.

Pos	:	1
Name	:	BBC1
Channel	:	7
NICAM	:	OFF

DVD-QUICK SETUP



The navigator keys of the remote control unit allow you to move between menus and to accept or change the selected settings.



- Press **ENTER** to store a change.
- Press **RETURN** to go back to the previous screen.
- Press **SETUP** to quit the menu.



- DVD QUICK SETUP may follow VCR Auto Setup.
- Use **VHS/DVD** on the remote control to select DVD.
 - Press **SETUP** to display the QUICK SETUP menu. Use the navigator keys ▲▼◀▶ to select a menu language, then press **ENTER** to confirm. To continue with setting the defaults, press ▲▼ to select [Yes] and **ENTER** to confirm. You can later go to the Setup menu to run QUICK SETUP again.
 - Use the DVD Setup menu options to adapt the default settings below to your appliance. Every menu item provides further information on the options you have.
- * Please refer to the operating instructions of your TV set to read more about the best settings.

54

Select your TV's aspect ratio.

The format of TV screens is either 4:3 (standard) or 16:9 (wide-screen). Select the aspect ratio that matches the screen setting of your TV set.



- Following QUICK SETUP, you can use the options of the DVD Setup menu to make further settings.
- Press **RETURN** or **SETUP** to quit the DVD Setup menu.

54

DVD Playback functions

DVD-Video	Video CD	CD	RAM
MP3	WMA	JPEG	



Playback

- Press **OPEN/CLOSE** \blacktriangle on the VCR/DVD to open the disc tray.
- Place the disc on the disc tray.
- Press **PLAY** \blacktriangleright .
The disc tray closes and disc playback starts automatically.
- * The player may take some time to read all of the disc information!
- * An incorrect full title display can result for +R and +RW media.

MP3, WMA, JPEG:

The Playback menu appears on the screen.



Pause playback (still image)

- Press **PAUSE** during playback.



Interrupt playback

- Press **STOP** \blacksquare .
- Press **PLAY** \blacktriangleright to resume playback.



Stop playback

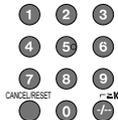
- Press **STOP** \blacksquare twice.



Playback of a particular track or title

DVD-Video	Video CD	CD	RAM
MP3	WMA	JPEG	

Type in a number using the RC unit's numeric key pad.
For example, to select title 23:



DVD/RAM/VCD/CD : Press [Title] + [2] + [3] .

MP3/WMA/JPEG : Press [2] + [3] + **ENTER**.

The unit automatically starts playing the selected track.

- * Certain discs may not provide this function at all or only if the appliance is in stop mode.
- * An incorrect full title display can result for +R and +RW media.

DVD Playback functions



Repeat

- Press **REPEAT** during playback.
You can choose from the following settings, depending on the disc you use:

DVD-Video	Off	→	Chapter	→	Title
DVD-RAM PG	Off	→	Program	→	All
DVD-RAM PL	Off	→	Scene	→	Playlist
VCD/CD	Off	→	Track	→	All
WMA/MP3	Off	→	Content	→	Group
JPEG	Off	→	Group		

- * The repeat function is available only if the disc runtime is displayed during playback. There is no mode for repeatedly playing back entire discs.

Repeating a VCD using playback control (PBC)

- Press **STOP** ■ during playback until [PBC] is no longer displayed.
- Type in the number of the CD track using the RC unit's numeric key pad.
- Press **REPEAT**.

The display shows the REPEAT function.

Single frame mode

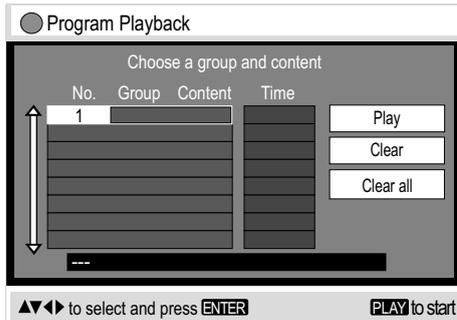


In pause mode, press remote control buttons ◀ or ▶ .

Every push of one of these buttons takes the film a single frame forwards or backwards. Keeping one of these buttons pressed continuously displays the next single frame in the chosen direction. You can also press **PAUSE** ■ to move the film forward a single frame at a time.

- * VCDs do not support a backward motion by single frames.

DVD Playback functions



* DVD-V, MP3, WMA, JPEG: Press ▲▼ or the numeric keys of the remote control unit to select or specify the track/group to be played in a random order.

Program Playback

DVD-Video Video CD CD MP3 WMA JPEG

You can programme up to 32 chapters/tracks to be played in any order.



- Press **PLAY MODE** while the disc is stopped. The Program Playback screen appears.
- * Use the numeric keys to specify the Group/Title (not with CDs) and the Content/Chapter. In the case of MP3 or WMA discs or if you select the numbers using ▲▼, press **ENTER** to confirm every entry.
- Repeat this procedure to make further entries.
- Press **PLAY ▶**. The unit starts to play the programme.
- * Some discs may not provide this function.
- * An incorrect full title display can result for +R and +RW media.

- To clear an entry, press ▼▲ to select it first.
- Press ▶ and ▼ to select [Clear], then press **ENTER**.
- Choose [Clear all] and press **ENTER** to clear all entries.
- To change an entry, press ▲▼ to select it, then press **ENTER** to confirm.
- Press **ENTER** to confirm any changes to the Group/Title and Content/Chapter objects.



To quit the Program Playback mode

- Stop the disc and press **PLAY MODE** until Program Playback disappears from the display. The actual programme is retained.
- * To clear the programme, switch off the appliance or remove the disc.

Random Playback

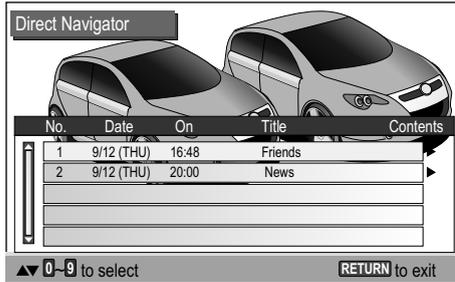
DVD-Video Video CD CD MP3 WMA JPEG

All chapters/tracks are played once each in a random order.

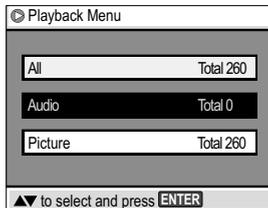


- Press **PLAY MODE** while the disc is stopped. The Program Playback screen is displayed.
- Press **PLAY MODE** again. The Random Playback screen is displayed.
- Press **PLAY ▶** to start Random Playback.
- To deactivate the function, stop the disc and press **PLAY MODE**.

DVD Playback functions

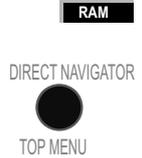


Your player can play DVD-RAM discs recorded in the video recording format, version 1.1, by a DVD video recorder, DVD video camera, computer etc.



DVD-RAM Direct Navigator

- Press **DIRECT NAVIGATOR** to enter or exit the menu screen. Programme names are shown only if they were entered when the RAM was produced. Press **▶** to display the programme information. Press **◀▶** to browse. Press **RETURN** to go back to the previous screen.
- Press **▲▼** or use the numeric keys to select a programme. Playback starts in the background. Press **ENTER** to hide the menu screen.



To play tracks from a Playlist

You can play tracks contained in a Playlist recorded on a DVD video recorder, for example.

- Press **PLAY LIST**. The Playlist screen is displayed if the disc has a play list on it. Press **PLAY LIST** again to quit the menu.
- Press **▲▼** or use the numeric keys to select a play list, then press **ENTER** to confirm. Playback starts. Press **SKIP** to leave out tracks down a play list.



Playback Menu



- The Playback menu appears on the screen when you insert a JPEG, WMA, MP3 or HighMAT disc.
- Press **▲▼** to select the contents you wish to play, then press **ENTER** or **PLAY** to confirm.

* To display the Navigation Menu with HighMAT Discs select the [Play as Data Disc] option in the Others menu via **FUNCTIONS**, while in Stop mode.

VCR-DVD functions



* Playing back music, NTSC formatted films or copy-protected discs might result in interferences.



Synchronous recording

How to copy a non copy-protected disc to VHS type cassette.

- Select DVD on the remote control. 
- Use **PLAY** ► and ◀▶▶ to select the disc's starting position.
- Press **II/|** to select Pause playback.
- Select VCR on the remote control. 
- Press **INPUT** to select the **dc** channel.
- Use ◀▶▶ and **PLAY** ► to define the starting position for tape recording.
- Press **II/|** to pause VCR playback.
- Press **REC** to activate the recorder's recording stand-by mode.
- Press **II/|** to start synchronous VCR recording and DVD playback.

DVD RAM DUBBING




DVD RAM DUBBING enables you to copy a DVD RAM to VHS cassette. In case you copied several programmes of one DVD RAM, the **INDEX** ◀▶▶ function allows you to directly access these on the resulting tape.

- Insert DVD RAM and VHS video cassette, then press **DVD RAM DUBBING** for longer than 3 seconds in STOP mode.
All programmes of the DVD RAM are copied to the VHS cassette.
- Recording is stopped automatically by the VCR once the copying process ended.
- Press **STOP** ■ to cancel the recording programme.

* DVD RAM DUBBING does not work with copy-protected discs.

Navigation Menu

JPEG MP3 WMA



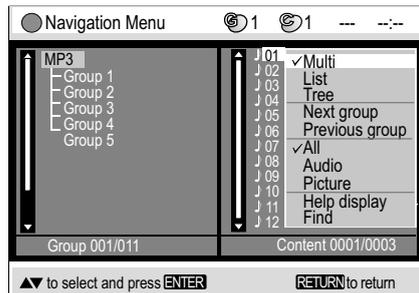
To display the Navigation Menu

- Press **PLAYLIST**. The Navigation Menu is displayed.
- Press **▲▼** to select a title, then press **ENTER** to start playing it.
- Press **PLAYLIST** to quit the menu.

To display the selection menu

- Display the Navigation Menu **FUNCTIONS** and press **FUNCTIONS**.
The Selection menu is displayed.
- Press **▲▼** to select a menu item, then press **ENTER** to confirm or **RETURN** to quit the Selection menu.

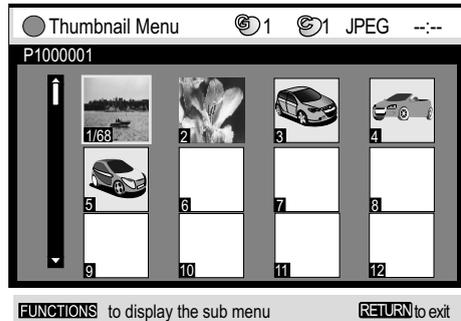
- * To display the Navigation Menu with HighMAT Discs select the [Play as Data Disc] option in the Others menu via **FUNCTIONS**, while in Stop mode.



Navigation Menu / Selection menu options

Multi	The [Group] and [Content] panels are tiled vertically. • Press ◀▶ to move the cursor from [Group] to [Content] and back.
List	Shows the [Content] of the selected [Group].
Tree	Displays a tree view of the groups. Press ▲▼ and ENTER to select a [Group]. The Group's contents is shown.
Thumbnail	Displays the JPEG Thumbnail Menu.
Next group Previous group	Moves to the next or previous group.
All / Audio / Picture	Selects the formats shown on the Navigation Menu.
Help display	Displays help on the menu control or the status indicator.
Find	<p>To find groups or content</p> <ul style="list-style-type: none"> • Press ▲▼ to enter the target word into the text box. • Press ENTER to confirm every letter. • Press ◀ to make corrections. • Press ▶ to select [Find] and ENTER to confirm. The match list contains the matching entries. If there are no matching entries, you will see: [Not found]. • Press ▲▼ and ENTER to start playing the track you looked for. <p>* In the [Multi] view press ◀▶ to select the Group or Content panel. The search is performed in the selected area.</p> <p>Search with asterisk: The match list covers all entries containing the word you specified.</p> <p>Search without asterisk: To look for the first word in a title press ◀ to delete the asterisk.</p>

Navigation Menu



HighMAT

Playlist	List 1
Group	Name
Content	Song 1
Artist	Name
Album	Title

JPEG

Group	Pictures 5
Content	P1010002
Date	2004/01/25 17:26
Camera	DMC-LC20

JPEG Thumbnail Menu

JPEG

- Pick **FUNCTIONS** from the Navigation Menu and press **▲▼** to select Thumbnail.
- Press **ENTER** to confirm. The Thumbnail Menu is displayed.
- Press **▲▼◀▶** to select a picture.
Press **▲▼◀▶** to page up or down. When you have browsed the pictures of a group, the pictures of the next group are shown.
- Press **ENTER** to confirm. The selected picture is shown full size.

Rotate pictures

- Press **FUNCTIONS** during playback. The Functions menu will be displayed. The available options depend on the current disc.
- Press **▲▼** and **ENTER** to select [Rotate Picture].
- Press **▲▼** and **ENTER** to specify the direction of rotation.
- Press **RETURN** or **FUNCTIONS** to quit the menu.

51

Activate on-screen displays

JPEG HighMAT

- Press **FUNCTIONS** during playback. The Functions menu will be displayed. The available options depend on the current disc.
- Press **▲▼** and **ENTER** to select Other Settings.
- Press **▲▼** and **ENTER** to select Display Menu.
- Press **▲▼** and **ENTER** to select Information.
- Press **▲▼** and **ENTER** to select the respective option. JPEG: [Date], [Details].
- Press **RETURN** or **FUNCTIONS** to quit the menu.

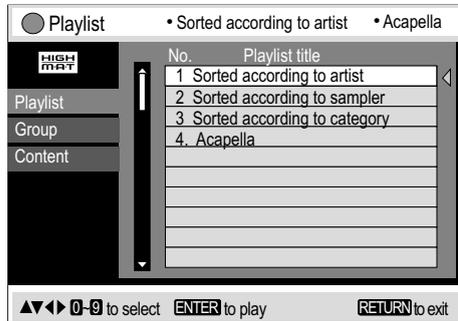
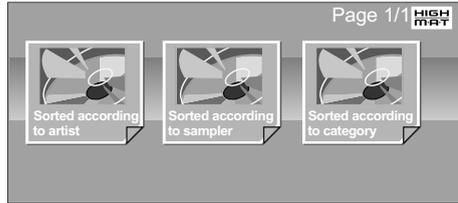
53

Select Group/Content

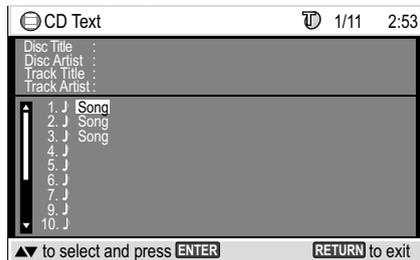
JPEG MP3 WMA

- Play back a disc and select the group or content on it.
- Press **▲▼** to select the Group, press **◀▶** to select the Content.
- * WMA: You cannot play copy-protected WMA files. This unit is not compatible with MBR. (MBR (Multiple Bit Rate): a file that contains the same content encoded at several different bit rates).
- * MP3: The appliance is incompatible with ID3 tags.
- * WMA, MP3, JPEG (CD-R / CD-RW): Make sure the discs are compatible with ISO 9660 (level 1 or level 2).

HighMAT



CD Text



HighMAT (High Performance Media Access Technology) is a joint **HighMAT** Panasonic and Microsoft technology development. Diverse HighMAT-level 2 format data (WMA, MP3 and/or JPEG) stored on a disc by a PC can be quickly played back by the appliance with the additional help of a menu.

While the HighMAT menu is displayed:

- Press ▲▼◀▶ to select and **ENTER** to confirm.

Menu: Takes you to a sub-menu containing further play lists or menus.

Playlist: Starts playback

- Press **TOP MENU** to show or hide the HighMAT menu.
- Press **RETURN** to go back to the previous menu.
- Press **FUNCTIONS** to show or hide the background stored on the disc.

Selecting from a Playlist

- Press **PLAYLIST** during playback.
The play list appears (◀ indicates the currently playing item).
- Press ◀ and then ▲▼ to move from [Playlist] to [Group] and [Content] and back.
- Press ▶ and then ▲▼ to select an item, then press **ENTER** to confirm.
- Press **PLAYLIST** to quit the Playlist screen.

CD Text menu

- Press **PLAYLIST**.
The CD Text menu appears on the screen.
The screen contains information on the disc and a list of tracks.
- Press ▲▼ to select a title.
- To play the selected track, press **ENTER**.
- Press **RETURN** to quit the menu.

Functions menu

Playback status indicator



- Press **QUICK OSD** to activate the playback status indicator.
- Press **SLOW/SEARCH** ◀▶ to change the playback speed.
- Press **QUICK OSD** again to hide the status indicator.

* The status indicator automatically appears when a CD is inserted.



DVD-RAM menu illustration



To display the Functions menu.

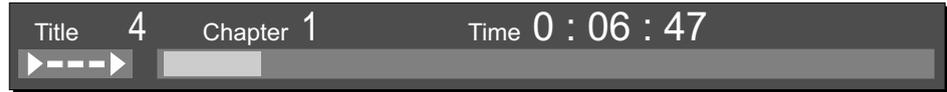


- Press **FUNCTIONS** to invoke the Functions menu of the current disc. The available options depend on the current disc.
- Press **▲▼** to select a sub-menu, then press **▶** or **ENTER**.
- Press **▲▼** to select a setting as described on pages 51 up to 53.
- Press **ENTER** to confirm. Press **▶** to display another sub-menu; press **▲▼** to select a setting as appropriate. Press **◀** to return to the previous menu.
- Press **ENTER** to confirm your selection. The items of the menus may vary depending on the contents of the disc.
- Press **RETURN** or **FUNCTIONS** to quit the menu.

Functions menu

Advanced Disc Review

DVD-Video RAM



FUNCTIONS



- Press **FUNCTIONS**. The Functions menu for the inserted disc appears. The available options depend on the current disc.
- Select Other Settings with **▲▼** and **ENTER**.
- Select Play Menu with **▲▼** and **ENTER**.
- Select Advanced Disc Review with **▲▼** and **ENTER**.

Depending on whether [Intro Mode] or [Interval Mode] was selected in the Setup menu, several scenes are briefly played as a preview of the disc.



In Intro Mode, approx. 7 seconds of each title/programme (RAM) is played. If the title/programme (RAM) is longer than approx. 7 minutes, the preview begins at 6:45 min. For shorter recordings, the preview starts at 0:00 min. In Interval Mode, scenes are played that are 10 minutes apart.

- Press **PLAY ▶** to return to normal playback.
- * This function can be compromised depending on the type of disc (DVD).
- * Only normal playback is possible for +R / +RW media.

Functions menu

● Functions	DVD-Video
Title 1/36	
Chapter 1/27	
Time --:--	
Audio ---	
Subtitle ---	
Angle -/	
Other Settings	
● Functions	Video CD
Track 1/ 2	
Time 48:10	
Audio L R	
Other Settings	
● Functions	HighMAT
Playlist 1/38	
Group 1/20	
Content 2/12	
Time 0:39	
Audio 96kbps	
Other Settings	
● Functions	WMA/MP3
Group 1/11	
Content 1/12	
Time --:--	
Audio	
Other Settings	
● Functions	JPEG
Group 1/ 6	
Content 1/68	
Thumbnail	
Rotate Picture	
Slideshow On	
Other Settings	
● Functions	CD
Track 1/14	
Time 48:10	
Other Settings	

Title/Track Search: Allows you direct access to a title/track if the disc hosts several.

* An incorrect full title display can result for +R and +RW media.

Program Search: Allows you direct access to a program if the disc hosts several.

Chapter Search: Allows you direct access to a chapter if the disc hosts several.

Group Search: Allows you direct access to MP3/WMA tracks or JPEG images defined to make up a group.

Content Search: Directly select a MP3/WMA track or JPEG image stored on the disc.

Playlist Search: Directly select a Playlist stored on the disc.

Time: Display/select playback time: Alternative display of current or remaining playback time.
MP3, WMA, SVCD: Shows the playback time only. +R /+RW media: Time selection is not possible.
Shows the current playback time or the remaining playback time.

Time Slip: Press ▲▼ to select the interval by which playback is to move back or forward.

Time Search: Use the numeric keys to specify the time at which playback is to be resumed.

Audio/Karaoke: Allows you to alter the pre-set language of synchronisation provided the disc gives you an alternative. In the case of VCDs, you can change the left/right audio channel setting.

Subtitle/Language: Selects the language of on-screen subtitles. [Off]: No subtitles displayed.
* In the case of +R / +RW media, an undisplayed selection can be given in the menu.

Marker (VR): Select the marker tags set on a DVD-RAM by a DVD recorder.

Angle: Change between camera angles of films recorded from various camera locations.

Thumbnail: Displays the thumbnail menu. Press ▲▼◀▶ to select a JPEG image.
Press ENTER to show the selected image full screen.



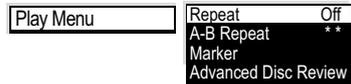
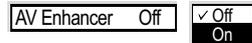
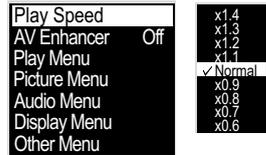
Rotate Picture: Select [Right] or [Left] to rotate the image on the screen in the selected direction.

Slideshow: Starts and stops the on-screen slideshow.
Choose [Interval] to set the time every slideshow picture remains on the screen (0 to 30 seconds).

Functions menu

These settings are not available for every disc.

Other Settings



Play Speed: Select a factor by which to change the playback speed.
The audio output switches to PCM (2-channel).

AV-Enhancer: Automatically optimises and adapts the audio and video settings to the disc used.
The Picture and Audio menus are not available when this function is enabled.



Repeat: Allows you to repeat the current track or chapter.

A-B Repeat: Playback repeats a defined section between positions A and B of a title.
Press **ENTER** to set starting point A and end point B. If you do not set point B, the end of the track is used as the end point. Press **ENTER** to terminate this function.



Marker: Up to 5 positions can be tagged pressing **ENTER**. Press **CANCEL** to delete any mistakes.
Select a marker and press **ENTER**. Playback starts at the marker tag.

The markers are cleared by opening the disc tray or switching off the appliance.

Advanced Disc Review: For a fast review of the disc.



* The Picture Menu functions are not available when the AV-Enhancer function is turned on.

Picture Mode: Changes the image display settings

Normal: Factory default

Cinema1: Cinema function for viewing in dark rooms. Bright picture areas are dimmed down.

Cinema2: Enhances brighter areas of dark scenes.

Animation: Intensifies the colours.

Dynamic: Brightens up the picture.

Video Output Mode: To switch to progressive output of the COMPONENT VIDEO OUT connection, e.g. to connect a plasma screen, select [625p].

RGB mode must be turned off for you to use this function.



If the television picture does not display correctly with this setting [625p], press **CANCEL/RESET** for approx. 6 seconds to reset the selection.

Transfer Mode:

For a PAL output signal

Auto: Movies with 25 frames per second are recognized and appropriately converted.

Video: Select this option if the video is distorted with the [Auto] option.

For an NTSC output signal

Auto1 (normal): Movies with 24 frames per second are recognized and appropriately converted.

Auto2: Suitable for movies with 30 frames per second in addition to movies with 24 frames per second.

Video: Select this option if the video is distorted with the [Auto1] and [Auto2] options.

Functions menu

These settings are not available for every disc.

Audio Menu

Advanced Surround Off
 Dialogue Enhancer Off
 Sound Enhancement Off

Display Menu

Subtitle Position
 Subtitle Brightness
 4:3 Aspect Auto
 Just Fit Zoom
 Manual Zoom x1.00
 Information On
 Bitrate Display Off
 GUI See-through Off
 GUI-Brightness 0

Other Menu

Setup
 Play as Data Disc

* The Audio Menu functions are not available when the AV-Enhancer function is turned on.

Advanced Surround: Produces an effect similar to surround sound at the two front speakers (SP) or the headphones (HP). Deactivate this function if the sound becomes distorted.

Off - Effect off (factory default).
 SP1 Natural - Normal degree of effect on loudspeakers.
 SP2 Enhanced - Enhanced degree of effect on loudspeakers.
 HP1 Natural - Normal degree of effect on headphones.
 HP2 Enhanced - Enhanced degree of effect on headphones.

* Advanced Surround is not supported by all discs. Deactivate the Advanced Surround effect if you experience distorted sound. Deactivate Advanced Surround if you are also using Dolby Pro Logic Amplifier. Dolby Pro Logic will not work properly if Advanced Surround is on.

Dialogue Enhancer: Puts up the volume of feature film dialogues.

Sound Enhancement: The sound spectrum is enhanced so that the tone sounds more natural and full.

Subtitle Position : Vertically moves the subtitle shown.

Subtitle Brightness: Modifies the brightness of the subtitle shown.

4:3 Aspect: This option is available if you have selected a default screen size of 16:9. You can adjust discs recorded in the 4:3 format to fit the 16:9 screen size. [Normal] plays the disc as 4:3. [Auto] automatically increases the picture. [Shrink] fills up the screen and compresses the picture. [Zoom] fills up the screen and trims the pictures on the edges.

Just Fit Zoom: Allows you to select a pre-defined picture size.

Manual Zoom: Zooms into the image to enlarge it by up to twice its original size.

Information: Display information of the content (on-screen display).

Bitrate Display: The screen displays the image data rate per second (Mbps).

GUI See-through: The background of OSD text becomes transparent.

GUI-Brightness: User-defined brightness of OSD text.

Setup: Jump to the SETUP Menu to make further changes to settings.

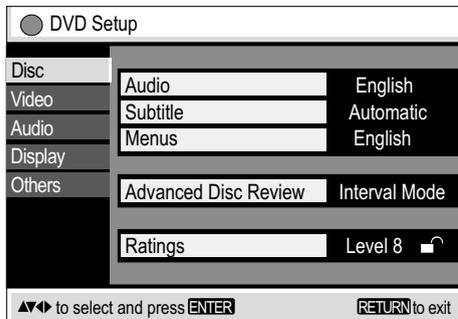
Play as HighMAT / Play as Data Disc: Stop the HighMAT disc and choose to play it as a data disc or as a HighMAT-format disc.

Play as DVD-VR / Play as Data Disc: Stop the DVD-RAM and choose to play JPEGs or the programme.

SETUP menus

To display the Setup menu

- Press **SETUP** to display the Setup menu.
- Press **▲▼** to select a sub-menu, then press **▶**.
- Press **▲▼** to select the option to be changed, then press **ENTER** to confirm.
- Press **▲▼** to select a setting option, then press **ENTER** to confirm.
- Press **◀▲▼** to select the next menu item.
- Press **RETURN** to quit the menu.



4:3 TV aspect ratio

Letterbox:



Pan&Scan:



Menu Disc

Audio Subtitle Menus	Disc's Audio language / Subtitle language / Menu language. Select the preferred language of either of the items. If the language you want is not on the list, select [Other] and type in the appropriate country code (see page 58). (Must be supported by the disc.)
Advanced Disc Review	For quickly reviewing the disc. Intro Mode plays approx. 7 seconds of each title/ programme (RAM) on a disc / Interval Mode plays scenes that are 10 minutes apart.
Ratings	Assign a ranking to disallow the viewing of some scenes [1-7] or the entire DVD video disc [0], and specify a password to guard access to the disc contents. This feature is not supported by all DVD video discs. <ul style="list-style-type: none"> • Type in a 4-digit code using the numeric key pad of your remote control unit, then press ENTER to confirm it. • Press ◀ or CANCEL/RESET to delete any mistakes. <p>A closed padlock icon is displayed while this feature is enabled. Make sure not to forget your password code.</p> <p>To change the setting</p> <ul style="list-style-type: none"> • Enter your password code and press ENTER to confirm. • Change the setting as appropriate and press ENTER to confirm.

Menu Video

TV Aspect	Sets the aspect ratio to 16:9 or 4:3 (Pan&Scan/Letterbox). 
Time Delay	When using an audio amplifier together with a plasma TV or a digital TV, the picture can be delayed in relation to the sound signal. You can synchronize the picture signal with the sound using the Time Delay setting.
AV1 Output	Selects the video signal from the scart socket (Video, RGB). You cannot use the COMPONENT VIDEO OUT connection in RGB mode.
Still Mode	Select a picture quality for still image mode: Automatic: The unit selects the optically better type of image. Field: Poorer quality than a picture frame. Frame: Although the image may be somewhat fuzzy, its quality is better than that of a field-based still image.
NTSC Disc Output	To play a NTSC disc, select a colour rendition standard (NTSC/PAL60) that matches the function of your TV set.

SETUP menus

Dolby Digital / DTS Digital Surround / MPEG:

Please choose the correct settings matching your audio system:

	Your equipment can not decode the signal	Your equipment can decode the signal
Dolby Digital	PCM	Bitstream
DTS Digital Surround	PCM	Bitstream
MPEG	PCM	Bitstream

Menu Audio

PCM Digital Output	PCM is the standard method used to record digital music signals on Audio CDs. For reasons of copyright protection, the digital output of PCM audio signals may be limited to 48 kHz/16 bit. Choose [Up to 48 kHz] if the digital audio outlet is used to connect your player to an amplifier that only processes sampling frequencies of up to 48 kHz. For 96 kHz check the digital-in requirements of your connected device.
Dolby Digital DTS Digital Surround MPEG	Change the setting to PCM if the connected equipment fails to decode the relevant signal. High noise levels may otherwise damage your ears or the loudspeakers. Adapt the settings to the ratings of your audio system.
Dynamic Range Compression	Available in the Dolby Digital (DVD) format only. The volume range is compressed by dynamically putting up the level of soft passages and lowering the level of loud passages.

Menu Display

Menu Language	Select the language of the appliance's menus as appropriate.
On-Screen Messages	Select [Off] to suppress the display of OSD text.

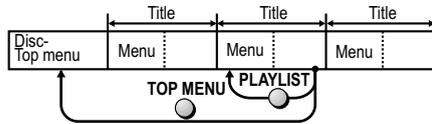
Menu Others

QUICK SETUP	Lets you change the basic settings or your appliance. 
Re-initialise Setting	Resets the appliance to factory defaults. Following reset and initialisation, press SETUP to run the QUICK SETUP utility again. 

Information

Playing DVDs and VCDs

The producer of the programme material can define the way in which the disc is played. Consequently, you may sometimes find that, in some cases, you cannot control the playback the way you wish using all of the functions and operations described in these operating instructions. We therefore recommend that you always read the reference material delivered with the disc.



DVD menu

Some DVDs have multiple menus. Pressing **TOP MENU** to display the main menu may take to another menu than pressing **PLAYLIST** to display the menu screen.

- * The functions assigned to these buttons depend on the disc. Please refer to the disc documentation leaflet.



Decoder

This appliance features an internal Dolby Digital decoder and a DTS decoder. You can enjoy these systems in stereo quality without the need of a separate decoder.

Problem caused by a disc

- Do not stick labels on the disc (this might render the disc useless).
- Only use a suitable pen for writing on the disc.
- Do not insert cleaning discs into the appliance.
- Do not play discs with any glue from stickers still on them.
- Do not play cracked discs.
- Do not play warped or irregularly shaped discs.
- First wipe the disc with a wet cloth, then with a dry cloth.
- Do not use clothing or other disc cleaners.



Information

Region codes



This player accesses the regional codes stored on DVDs. It supports all discs assigned regional code "2" or "ALL". **UK and continental Europe: "2"**.

Disc forms



Never play anything but circular discs with a diameter of 3" (8 cm) or 5" (12 cm). Discs of other shapes may damage the player hardware.

HighMAT and the HighMAT logo



are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Windows Media and the Windows logo



are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Dolby Digital

Method of encoding digital signals. The signals are very much compressed in the process to enable recordings of large volumes of data.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

DTS (Digital Theater Systems)

Sound system used in cinemas or movie theaters all over the world.

"DTS" and "DTS 2.0 + Digital Surround" are trademarks of Digital Theater Systems, Inc.

MP3 or MPEG 1 Audio Layer 3 is a file compression format used for digital audio files. It provides files of an extremely small size and may cause a consequential loss of quality.

WMA is a file compression format developed by Microsoft. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3. MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

This product features a copyright protection implement whose technology is protected by US patents and intellectual property rights owned by Macrovision Corporation and other copyright proprietors.

The use of this copyright protection implement is subject to permission of Macrovision Corporation and is restricted to purely private use only.

It is prohibited to examine this appliance for the purpose of unlicensed construction.

Disc Formats						
DVD-Video	DVD-R/-RW	DVD+R/+RW	DVD-RAM	VCD/SVCD	CD	CD-R/RW
		---				---
DVD-V			RAM JPEG	VCD	CD	WMA MP3 JPEG

- * Depending on the disc type and the conditions of recording, the appliance may sometimes fail to play the listed discs.
- * **DVD-RAM with JPEG:** Recorded with Panasonic DVD-Video recorders. To play JPEG files, select [Play as Data Disc] in Functions menu (page 53).

Country codes

Abkhazian	6566	Fiji	7074	Lingala	7678	Singhalese	8373
Afar	6565	Finnish	7073	Lithuanian	7684	Slovak	8375
Afrikaans	6570	French	7082	Macedonian	7775	Slovenian	8376
Albanian	8381	Frisian	7089	Malagasy	7771	Somali	8379
Ameharic	6577	Galician	7176	Malay	7783	Spanish	6983
Arabic	6582	Georgian	7565	Malayalam	7776	Sundanese	8385
Armenian	7289	German	6869	Maltese	7784	Swahili	8387
Assamese	6583	Greek	6976	Maori	7773	Swedish	8386
Aymara	6588	Greenlandic	7576	Marathi	7782	Tagalog	8476
Azerbaijani	6590	Guarani	7178	Moldavian	7779	Tajik	8471
Bashkir	6665	Gujarati	7185	Mongolian	7778	Tamil	8465
Basque	6985	Hausa	7265	Nauru	7865	Tatar	8484
Bengali	6678	Hebrew	7387	Nepali	7869	Telugo	8469
Bhutani	6890	Hindi	7273	Norwegian	7879	Thai	8472
Bihari	6672	Hungarian	7285	Oriya	7982	Tibetan	6679
Breton	6682	Icelandic	7383	Pashto	8083	Tigrinya	8473
Bulgarian	6671	Indonesian	7378	Persian	7065	Tonga	8479
Burmese	7789	Interlingua	7365	Polish	8076	Turkish	8482
Byelorussian	6669	Irish	7165	Portuguese	8084	Turkmen	8475
Cambodian	7577	Italian	7384	Punjabi	8065	Twi	8487
Catalan	6765	Japanese	7465	Quechua	8185	Ukrainian	8575
Chinese	9072	Javanese	7487	Rhaeto-Rom.	8277	Urdu	8582
Corsican	6779	Kannada	7578	Romanian	8279	Uzbek	8590
Croatian	7282	Kashmiri	7583	Russian	8285	Vietnamese	8673
Czech	6783	Kazakh	7575	Samoan	8377	Volapük	8679
Danish	6865	Kirghiz	7589	Sanskrit	8365	Welsh	6789
Dutch	7876	Korean	7579	Scots Gaelic	7168	Wolof	8779
English	6978	Kurdish	7585	Serbian	8382	Xhosa	8872
Esperanto	6979	Laotian	7679	Serbo-Croat.	8372	Yiddish	7473
Estonia	6984	Latin	7665	Shona	8378	Yoruba	8979
Faroese	7079	Latvian	7686	Sindhi	8368	Zulu	9085

Before requesting service

GENERAL DISTORTIONS

There is no audio output and the sound is distorted:

- Check the connections.
- Deactivate the Advanced Surround effect.

 53

The VCR display is not lit:

- Check AC mains connection.

The VCR display is lit, the device does not respond to controls:

- Device is set to recording stand-by or timer mode. Quit with **TIMER** button.
- External recording control is turned on. Quit this with the **EXT LINK** button.

Error code [U □ □] or [H □ □] appears:

- H□□: This is indicative of a malfunction. The digits following "H" depend on what state your player is in.
- Press **⏻/I** to put the player into stand-by mode, then briefly unplug and re-attach the AC mains cable.
- Contact the aftersales service if this does not remove the problem. Please state the error code displayed by the set.

The picture is disturbed when searching:

- This is a technical issue and not indicative of a malfunction.

No picture appears on the screen:

- Check the connections.
- Verify that the correct video input of the TV set has been selected.

The picture is cut off at its left or right edge:

- Check the Video menu's TV Aspect setting on the Setup screen.
- Check that the player is directly plugged into the TV set's AV Output and not to a video cassette recorder between the two units.
- Check the Zoom setting.

 54

 53

The remote control unit does not work properly:

- The remote control is sending the wrong frequency. Check whether VCR 1 or 2 is listed in the display and change the frequency of the remote control.
- Check the distance between the RC unit and the appliance (max. 7 metres).
- Check the batteries in the remote control unit.
- Point the remote control unit straight at the remote control signal sensor on the front panel.

 36

 5

No messages are output to the screen:

- Go to the DVD SETUP screen and set Functions menu option On-screen Messages- to [On].
- Go to the DVD SETUP screen and change the TV Aspect setting in the Video menu.
- Open the VCR menu to modify the OSD display.

 55

 36

Before requesting service

VCR DISTORTIONS

Manual correction of a bad picture:

- If you notice interference or a shift of the picture during normal, still or slow motion playback, press the **TRACKING / V-LOCK** button towards + or - to correct the picture.
- Press + and - together to actuate automatic correction. Some video cassettes do not support tracking control. This is not indicative of a malfunction.

Automatic Clock set doesn't work properly:

- Set Clock set to [AUTO].  38
- If the device cannot find a TV station transmitting the time signal, set Time and Date manually.

Bad picture or sound:

- The use of E-300 cassettes may cause problems if the recordings were taken at low tape speeds LP or EP.
- Verify that the aerial and/or Scart cables are attached and work properly.
- Check the SQPB/ S-VHS playback setting for S-VHS cassettes.
- Please contact your service technician if the video heads are dirty or worn out. Having a technical service shop clean the video heads is not covered by the guarantee.

The recording functions do not work properly:

- If  flashes on the device, check if the protection tab of the video cassette is still in.  38
- Check Time and Date.
- Check the start and stop time of the timer programme.
- Check if the **TIMER** button has been pressed to put the device into timer mode after programming a recording.  28
- Check the start and stop time of a PDC recording. Not all stations currently support the VPS/PDC control times (turn on/off).  29

The Timer Rec button on the device is blinking:

- You are trying to perform a function using the remote control, but the device is in timer mode. You cannot perform this function right now. Please quit timer mode by pressing the **TIMER** button.

Before requesting service

DVD DISTORTIONS

The loudspeakers emit loud noise:

- Go to the Setup screen and check the Audio menu settings of Dolby Digital, DTS Digital Surround and MPEG.

 55

The message "NO PLAY" appears:

- The player cannot play discs of the current format.
- The disc contains no recorded material.
- The function Ratings is active.

The OSD displays are cut off along their top edge:

- Check the TV Aspect setting.

 54

The player does not respond to function key commands:

- Certain control operations are not available with some discs.
- There may be interference caused by lightning or static charge. Press [⏻/I] to put the player into stand-by mode. Restart the player.

Playback does not start after pressing PLAY:

- Condensation has accumulated inside the player. Wait for 1 to 2 hours.
- The player only supports DVDs with regional code 2, All or from a group of regional codes containing regional code 2.
- The disc is dirty or damaged.
- The disc is in the wrong way round. The label of the disc you wish to play must face up.

Unable to change the audio track or the subtitle language:

- You can only choose from the languages actually recorded on the disc.
- Some discs require you to change the setting via the Disc menu.

The subtitles are not shown:

- The disc does not provide any subtitles.
- You deactivated the display of subtitles.
- The subtitles are at the wrong position. Move the position of subtitles.

The audio track or subtitles do not use the language selected from the menu:

- The disc does not provide the language you selected.

Unable to change the aspect angle:

- It depends on the disc whether this function is available.

You forgot your password:

- Stop the player and keep pressing player button  (VCR) together with  (DVD) and also  until [Initialised] disappears from the screen. This restores all factory defaults. When you are done switch off the unit and back on afterwards.
- Afterwards, display the QUICK SETUP menu to re-initialise the appliance to your preferences.

 40

COMPONENT VIDEO OUT connection does not work:

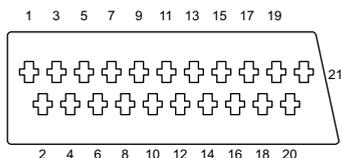
- Check whether the AV1 Output is set to [RGB] and change it to [Video].

 54

21-pin Scart Socket

The 21-pin Scart socket transmits both input and output signals for picture and sound. TVs equipped with the same type of socket can be connected here. This type of socket is also called Peritel, Euro Connector and Euro AV.

21-pin Scart Socket



AV1 Scart Socket (NORMAL)

- 1 Audio output CH2 (R)
- 2 Audio input CH2 (R)
- 3 Audio output CH1 (L)
- 4 Audio ground
- 5 Blue ground
- 6 Audio input CH1 (L)
- 7 Blue
- 8 Switching voltage
- 9 Green ground
- 10 Reserved
- 11 Green
- 12 No connection
- 13 Red ground
- 14 Blanking ground
- 15 Red
- 16 Blanking
- 17 Video output ground
- 18 Video input ground
- 19 Video output
- 20 Video input
- 21 Ground

AV2 Scart Socket

- 1 Audio output CH2 (R)
- 2 Audio input CH2 (R)
- 3 Audio output CH1 (L)
- 4 Audio ground
- 5 Blue ground
- 6 Audio input CH1 (L)
- 7 Blue
- 8 Switching voltage
- 9 Green ground
- 10 Control signal
- 11 Green
- 12 Reserved
- 13 Red ground
- 14 Blanking ground
- 15 Red
- 16 Blanking
- 17 Video output ground
- 18 Video input ground
- 19 Video output
- 20 Video input
- 21 Ground

The Red, Green and Blue (RGB) video signals are looped through only from an external source unit, for example from a connected a pay-TV decoder, i.e. they are not from tape playback.

Specifications

Power supply:	220-240 V AC, 50 Hz	Dynamic range Audio	VCR: more than 90 dB (Hi-Fi sound tracks) DVD: (linear audio): 100dB / CD audio: 96dB
Power consumption:	22W (in operation)	Total harmonic distortion CD audio	0.0025 %
Controls	multifunctional remote control (VCR, TV and DVD), VCR / DVD, main functions on the unit	S/N ratio CD audio	115dB
VCR playback functions	PAL and NTSC Playback on PAL TV S-VHS Quasi Playback (SQPB)	Frequency response VCR audio	20 Hz to 20 kHz (Hi-Fi sound tracks)
Video- and Audio heads	4 Video heads, 2 heads Hi-Fi	Frequency response DVD audio (linear audio)	4 Hz to 22 kHz (sampling frequency 48 kHz) / 4 Hz to 44 kHz (sampling frequency 96 kHz), CD audio: 4 Hz to 20 kHz
VCR Recording system	2 rotary heads, helical scanning system	DVD digital tone output	COAXIAL Output connector: Cinch connector Output level: 0.5 V _{ss} (75 Ohm)
VCR tape speed	SP: 23.39 mm/s , 240 min / LP: 11.7 mm/s , 480min (E-240 cassette)	Laser-Pick up	Wave length: 662 nm/785 nm / Laser power: Class 1 / Class 3A
VCR fast forward/fast rewind time	approx. 60 sec. (E-180 cassette)	Operating temperature / humidity	5°C to 35°C / 35-80% RH
Video TV system	VCR: PAL 625/50 DVD: PAL 625/50, PAL 525/60, NTSC	Weight and dimensions	approx. value: 3.9 kg / 430 (width) x 89 (height) x 270 mm (depth)
Video input and output level	1.0 V _{pp} (75 Ohm)	Compatible disc formats:	DVD-V, DVD-RAM, DVD-R/DVD-RW (Video format), DVD+R/DVD+RW (Video format), VCD, SVCD, CD-Audio (CD-DA), CD-R/CD-RW (discs formatted as CD-DA or Video CD). WMA, MP3, JPEG : 4000 tracks max. / 400 groups.
DVD RGB-Video output	RGB-output connector: 0.7 V _{pp} (75 Ohm) / output connector: AV1	Compatible compression rate:	MP3 : 32 - 320 kbps WMA : 48 - 192 kbps. Exif Version 2.1 Baseline files Picture resolution between 320 x 240 and 6144 x 4096; sub sampling: 4:2:2 or 4:2:0 Level 2 (audio and image)
DVD COMPONENT VIDEO OUT Output	Y: 1.0 V _{ss} (75 Ohm) P _B : 0.7 V _{ss} (75 Ohm) P _R : 0.7 V _{ss} (75 Ohm)	HighMAT :	
Horizontal resolution VCR	more than 240 lines (SP)	Technical specifications are subject to change without notice.	
S/N ratio VCR video	more than 43 dB (SP)		
Input level audio	0.5V rms, more than 10 kOhm		
Output level audio	VCR: 0.5V rms, 300 Ohm - 1 kOhm / DVD: 2V rms (1 kHz, 0 dB Fs) output connector: Pin jack, AV, 2 channel(L/R)		

Index

	Page		Page		Page
A-B Repeat	52	HighMAT	48,53	Remote	36
Advanced Surround	18,53	INDEX/SKIP	9,10,25	Repeat	52
Angle	51	INTELLIGENT TIMER	30	RF-coaxial cable	11,12,14,15
Audio	55			Scart cable	11
AUDIO IN/OUT	12,18	JET SEARCH	25	Slideshow	51
Audio language	54	JPEG	41,42,44,47,51	Sound Enhancement	53
AV input	27			SP/LP selection	29
AV ENHANCER	6,52	Laser	3	SQPB	36
AV2 socket	7,33	Letterbox	54	Still Mode	10,23,24,41,54,60
		Marker	52	Subtitle	51,53,54
Chapter	42,51	MP3	41,42,44,47,51	S-VHS cassettes	36
Cinema Mode	26	MPEG	19,55,57,61		
COAXIAL	19	NICAM	39	Tape counter	9,26
CVC Super	26	NTSC	26,54	Tape length	36
		OSD	36	Tape remain display	9
Date	13,38			Tape speed	27
Dialogue Enhancer	53	PAL	26,54	Time	13,38
DIRECT NAVIGATOR	44	Pan&Scan	54	Title	42,51,56
Dolby Digital	19,55,57	Password	54,61	VIDEO IN	18
DTS Digital Surround	19,55,57	PBC	42	WMA	41,42,44,47,51
DVD-RAM	44,45	PDC	29	Zoom	53,59
		Picture Mode	52		
Erasure protection	26	Playback Menu	44		
EXT LINK	33,36	Playlist	44,48		
		Program Playback	10,43		
Field	54	Progressive Mode	18,52		
Frame	54				
		QUICK ERASE	37		
Group	47,51	QUICK OSD	49		
GUI-Brightness	53				