

Panasonic

DVD/CD Player / Video Cassette Recorder NV-VP31EB/EBL

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

Operating Instructions



CVC super

SHOWVIEW

SUPER DRIVE





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

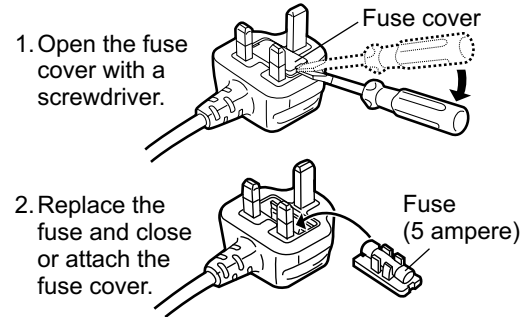
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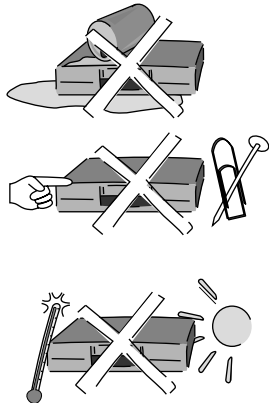
Important Safety Warnings

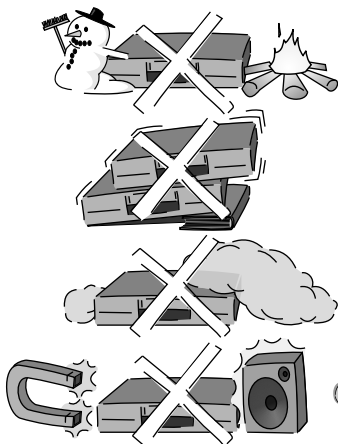
- The moulded three pin mains plug is supplied for your safety and convenience and must NOT be cut off.
- A 5 amp fuse is fitted in the mains plug. If the fuse has to be replaced, it must be of the same rating and approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body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

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.	IEC60825-1 / Class 3b
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.	
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ 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	- このを開くと可燃及び不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。	RQLCA0141

- 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.

**CLASS 1
LASER PRODUCT**

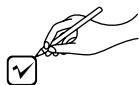
Back of product, see page 18.



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
EUR7720X20

Included Accessories

AC Mains Lead
RJA0044-3C



RF cable



K2KF2BA00001, VJA0728-A
or K1TWACC0001

Batteries for the
Remote Control
R6 size



Operating Instructions
RQTD0126-B

Quick Start Guide
RQCAD0016

Guarantee Card

Panasonic

Sales and Support Information

Customer Care Centre

- For UK customers:
08705 357357.
- For Republic of Ireland customers:
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 telephoning our Customer Care Centre Mon - Friday 9:00am - 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**.
- 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.

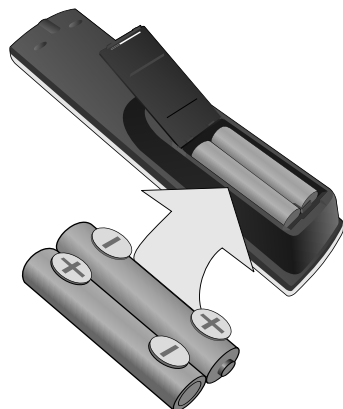
Brand	Code	Brand	Code	Brand	Code	Brand	Code
Panasonic	01-04,45	GOODMANS	05,06,31	NOKIA	25-27	SANYO	21
AIWA	35	GRUNDIG	09	NORDMENDE	10	SBR	06
AKAI	27,30	HITACHI	22,23,31,40-42	ORION	37	SCHNEIDER	05,06,29-31
BLAUPUNKT	09	INNO HIT	34	PHILIPS	05,06	SELECO	06,25
BRANDT	10,15	IRRADIO	30	PHONOLA	31,33	SHARP	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 -).

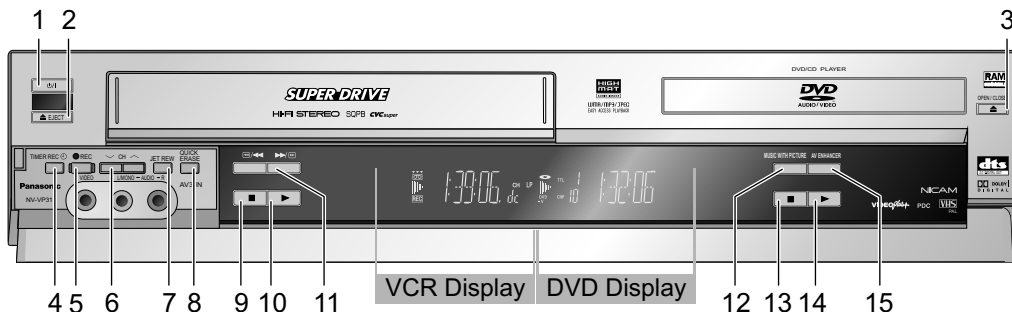
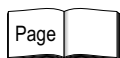
Dispose of **batteries**, packaging material and the unit **according to statutory regulations**. They must not be thrown into the household refuse.



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		Activates the recording timer.			
5		Record button			
6		Selects a channel.			
7		Fast rewind to the beginning of the tape.			
8		Erases a video cassette.			
9		VCR Stop button			
10		VCR Playback button			
11		Fast winding / JET SEARCH			
12		MUSIC WITH PICTURE			
13		DVD Stop button			
14		DVD Playback button			
15		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.			

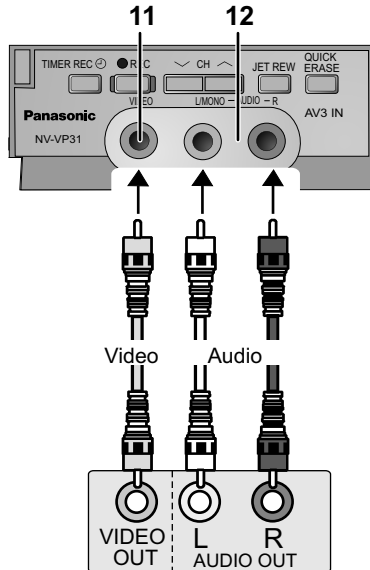
Display

	Active picture signal. The symbol appears on the VCR or DVD display. Use the VHS/DVD OUTPUT button to switch over the picture signal. To directly change the VCR or DVD output use the VHS, DVD toggle switches in combination with a function button (e.g. PLAY).		Playback
	A video cassette is in.		Pause playback (still image)
	A disc is in.		Slow motion
			Forward/Backward search
			VCR: Fast winding

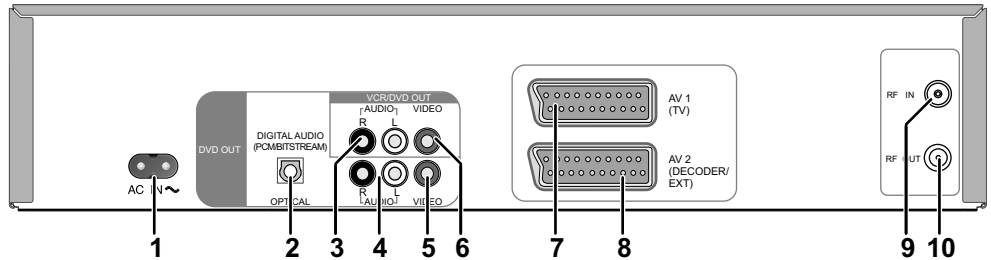
Sockets

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 Optical Digital Out terminal
3	VCR/DVD AUDIO OUT socket L = AUDIO output left channel R = AUDIO output right channel
4	DVD AUDIO OUT socket L = AUDIO output left channel R = AUDIO output right channel
5	DVD VIDEO OUT socket
6	VCR/DVD VIDEO OUT socket
7	AV1 21-pin Scart socket
8	AV2 21-pin Scart socket
9	RF IN socket (Aerial input)
10	RF OUT socket (Aerial output)
11	AV3 VIDEO IN socket
12	AV3 AUDIO IN socket L = AUDIO output left channel (Mono) R = AUDIO output 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

Output signal select button to toggle between VCR and DVD (for AV1, VCR/DVD OUT)

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.

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

DVD: To display the DISPLAY menu



TV functions

TV set On/Off switch.

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

VCR functions are enabled.

DVD functions (blue labels) are enabled.

Channel selector

Press **PLAY** to start playback.

Quits a menu.

To copy a DVD RAM to VHS cassette.


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.  24

Pause a recording session.
Still or slow motion playback.  22

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

Plays back programmed recordings.  28


Defines programmes transmitted to the same program memory location at the same time.  29

To display the Timer recording menu.  28

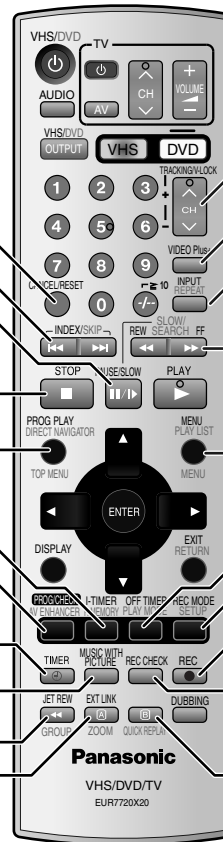
Activates the recording timer.


MUSIC WITH PICTURE

For fast rewinding to the beginning of the tape.  24

To record using the external recording level control.  32

A: To delete tagged station.





Tracking control of disturbed images during playback  23


Video Plus+ menu  30


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.  24

Displays the VCR menu.  21

Switches the unit into stand-by mode after the set time.  24

Sets the tape speed.  26

Video recording

You will be displayed either the Timer recording menu or an information on the current recording.

Toggles between TV reception and video playback channel.

B: Move tagged station.

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 [] is flashing on the display. Playback will be resumed at the point where you stopped it.

Cancel the Resume function

- Press **STOP** until [] is disappears from the display.
- * Opening the disc tray or the unit going into stand-by mode also clears the stored position on the disc.

Displays the DVD-RAM menu.

Displays the main menu.

Resumes playback at stored position following an interruption.

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AV ENHANCER

53

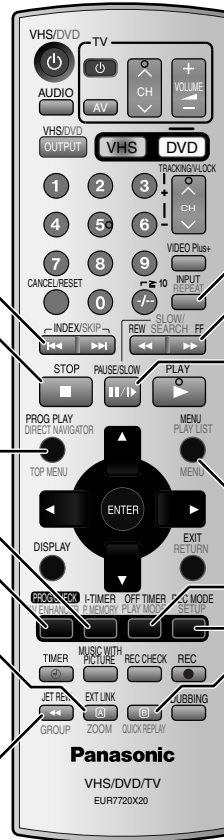
Zoom

- Press **ZOOM** during playback. Press to set the zoom factor, to select a Zoom mode: **ENTER** plus .
- Restore factory setting
- Press **ZOOM** until x1.00 is shown. The zoom functionality may be restricted depending on the disc format.

Group Search

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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.

Pause playback (still image)

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

Displays a Playlist
Displays the menu.

Random playback/Program play

44 45

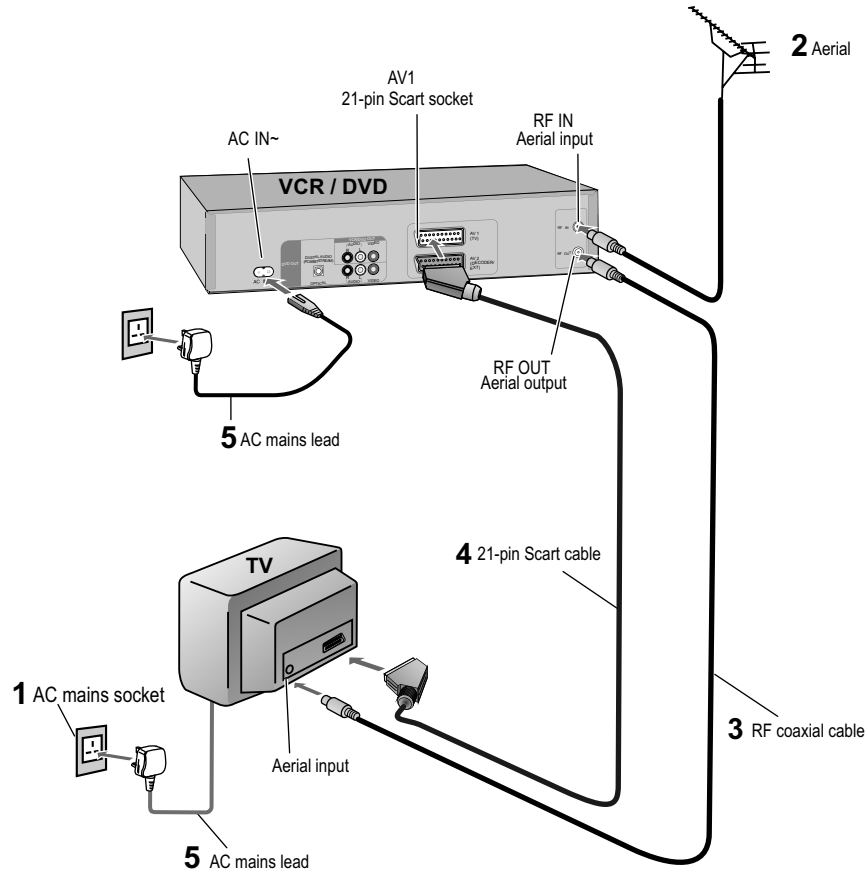
Displays the SETUP menu.

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Scene replay

- 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.

Connecting with 21-pin Scart cable (Fully wired)

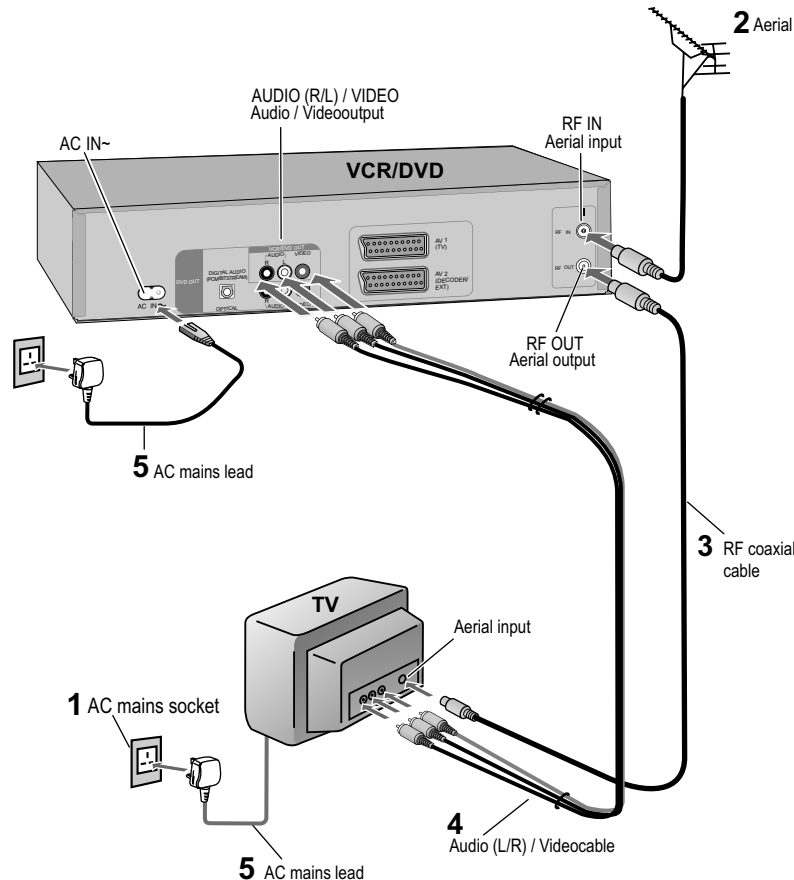


Follow the steps described below.

- 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-Videocable



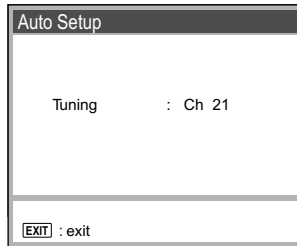
Follow the steps described below.

- 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.

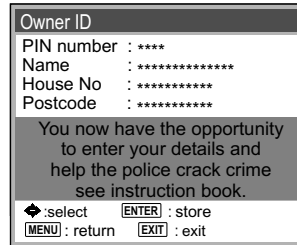
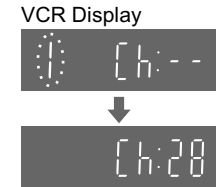
Follow the steps for VCR Auto Setup on page 13.

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

(Automatic tuning)



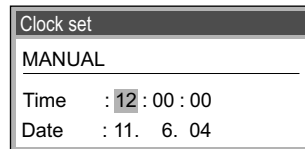
- Turn on your television set.
- With the **Stand-by/on switch** turn on the VCR/DVD. Automatic tuning for all available TV stations begins. Approximate duration is 5 minutes.
- After Automatic tuning has finished, press **EXIT**. The Owner ID screen will appear.



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).



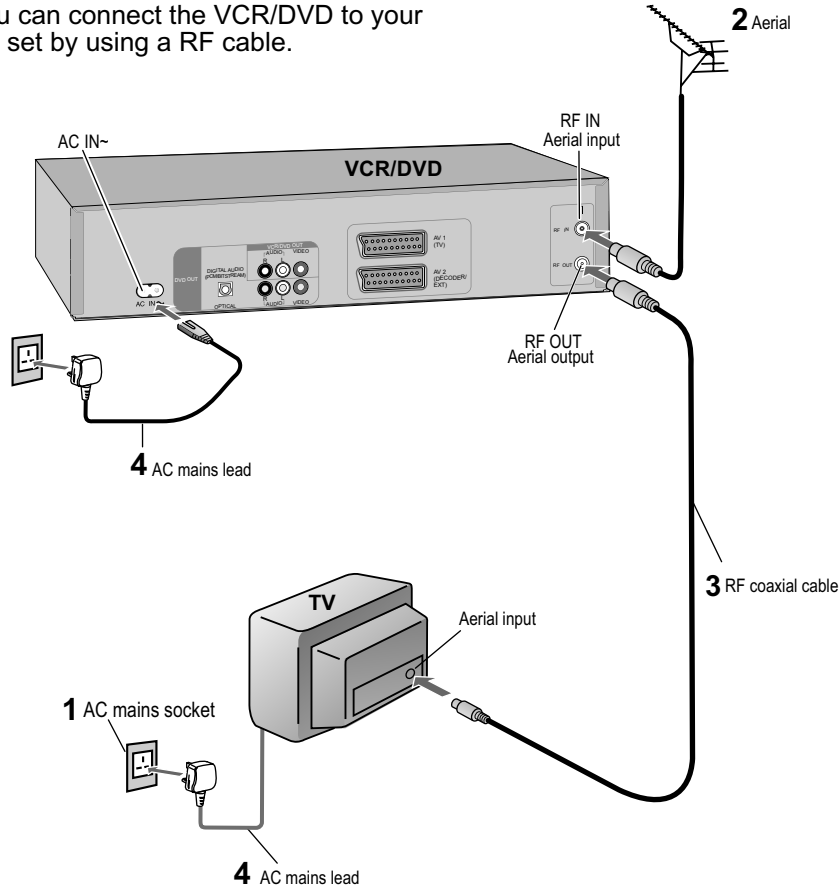
If the clock setting menu appears

(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.

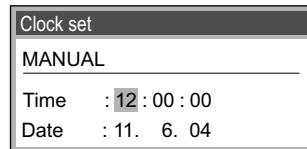
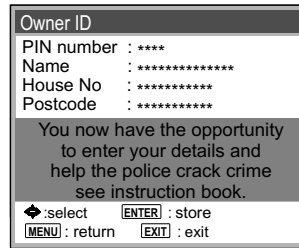
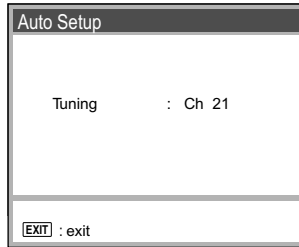


Follow the steps described below.

- 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 20 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).

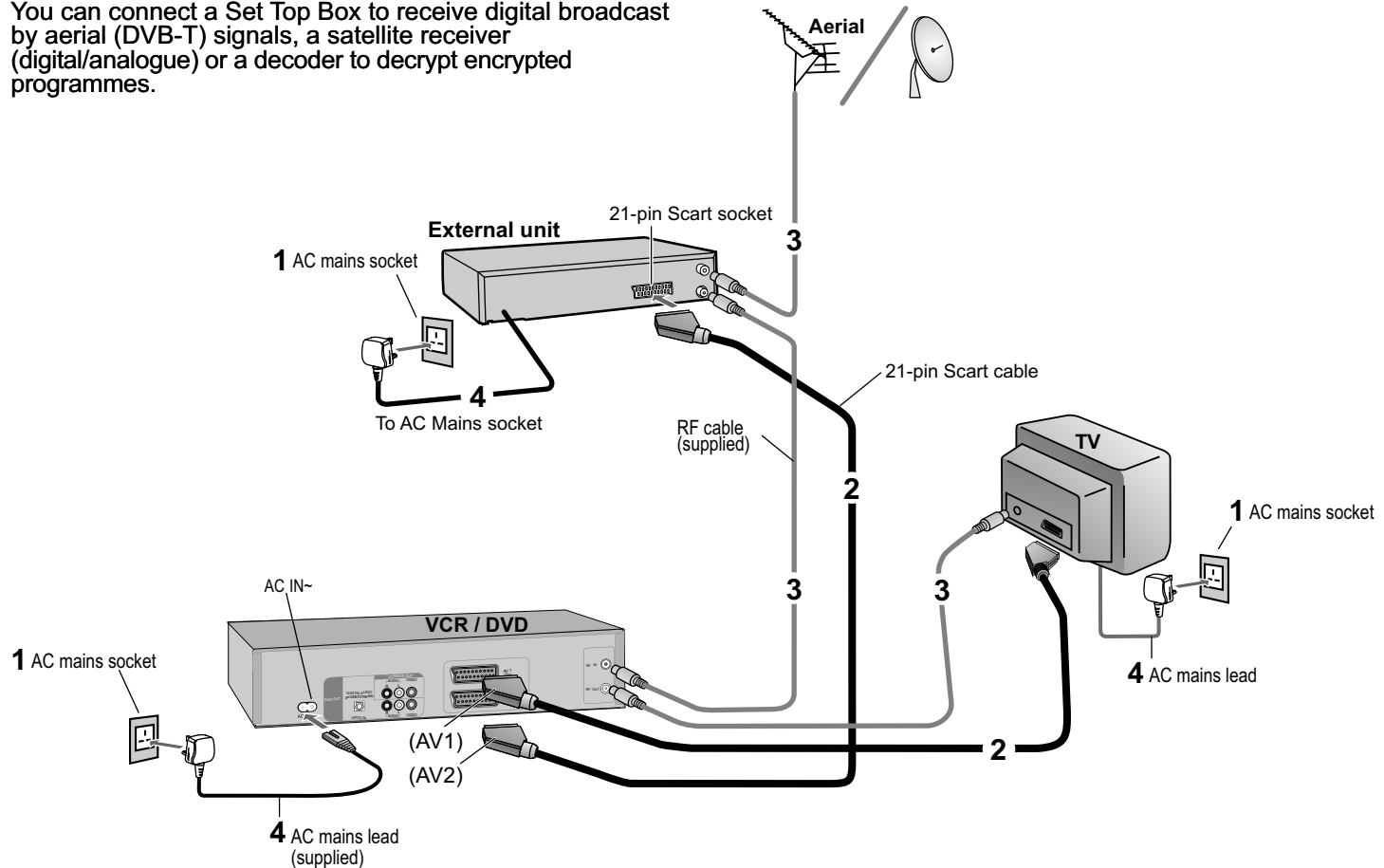
If the clock setting menu appears

(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, a satellite receiver (digital/analogue) or a decoder to decrypt encrypted programmes.



Follow the steps described below.

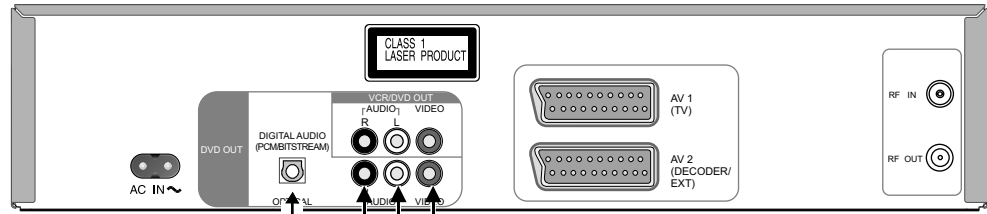
- 1** Ensure TV Power, External unit Power and VCR/DVD Power are disconnected from AC Mains socket.
- 2** Connect a 21-pin scart cable (fully wired) to the AV2 21-pin scart socket on the VCR/DVD and to the 21-pin scart socket on the External unit.
Connect a 21-pin scart cable (fully wired) to the AV1 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 32).
- 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

Before connecting

- Verify that all devices to be connected up are unplugged from the AC mains.



Digital connectors (OPTICAL)

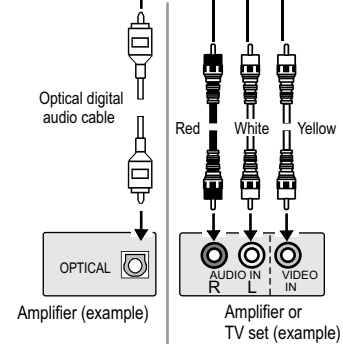
To play programmes with a 5.1-channel surround sound, connect the digital audio output (OPTICAL) with an external Multi-channel Dolby Digital Decoder, for example.

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.

Push in the jack all the way into the socket with this side facing up.



DVD ports

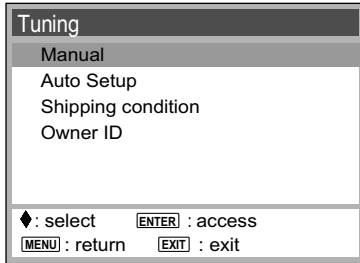
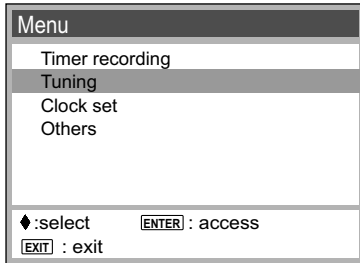
Connection to a TV set without a scart socket or to an amplifier component (home cinema):

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.



Checking the Settings after Auto Setup



- 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 33.



- 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

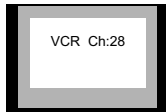
The reception channels are different for UK and Ireland.

Removing Interference / Changing RF-output channel



TV screen

The picture with interference



On-Screen Display
Test pattern indication

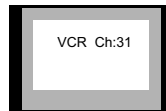
VCR display



Indication when the RF output
channel is 28 (example)



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



Test pattern indication



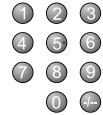
The clear picture

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.)

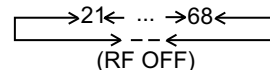


- Retune your TV until you receive the Test pattern. It may be necessary to repeat steps above until you can see the Test pattern clearly. If using a Scart cable please see the note below.

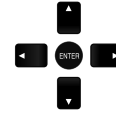
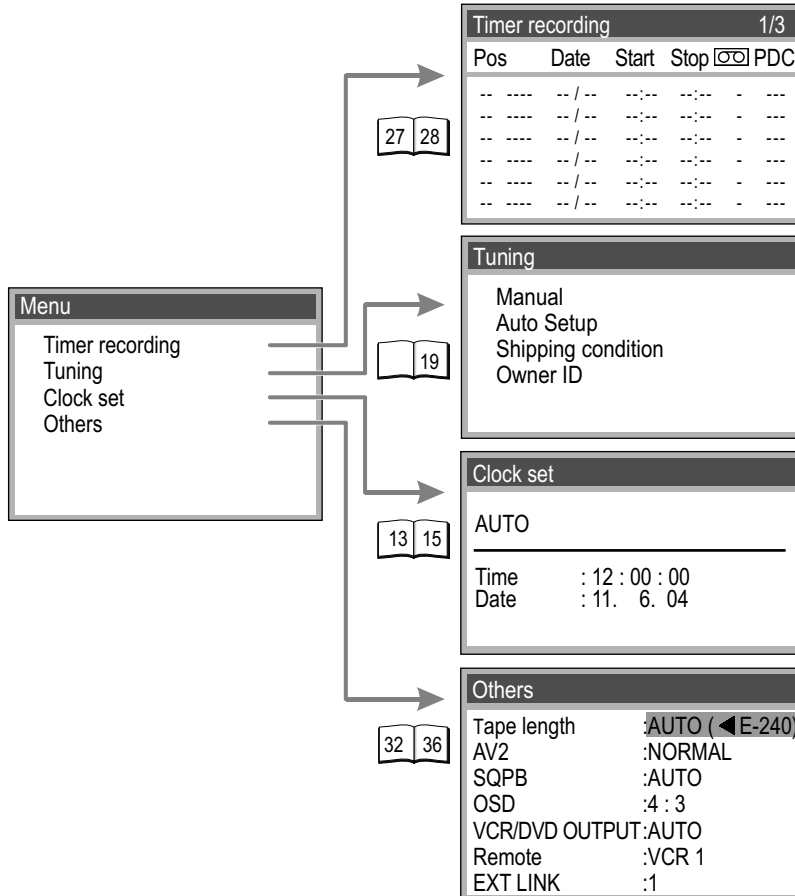
- Press **ENTER** to finish this setting.

* 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



PLAY



STOP



Normal playback

- Turn on the VCR.
- Be sure the TV set is turned on and tuned to the video playback channel.
- Insert a video cassette.
- Press **PLAY** ▷ to start playback.
- 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

<p>Auto-Start When inserting a cassette the VCR will automatically switch on.</p>	<p>Quick search for a beginning of a recording </p> <p>While playing back or in stop-mode.</p> <ul style="list-style-type: none"> • 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.
<p>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.</p>	<p>Time limited recording or playback </p> <p>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.</p> <ul style="list-style-type: none"> • Press OFF-TIMER
<p>Search forward ►► or backwards ◄◄ </p> <ul style="list-style-type: none"> • 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). 	<p>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.</p>
<p>Fast winding forward ►► or backwards ◄◄ </p> <ul style="list-style-type: none"> • In stop mode press ►► or ◄◄. Press STOP  to end winding. 	<p>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.</p> <ul style="list-style-type: none"> • The picture quality will be similar to VHS playback. • It is not possible to make an S-VHS recording with this VCR.
<p>JET REW </p> <p>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.</p>	

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.

QUICK ERASE

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

- Press and hold the **QUICK ERASE** button for a few seconds.

It takes approx. 30 minutes to erase an E-180 cassette.

Tape Care

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

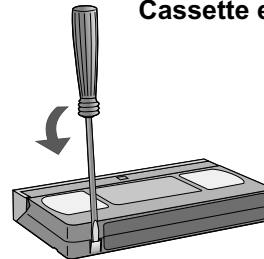
DO:

- 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.	 26
Timer recording	
Recording controlled by timer.	 27 28
Recording with INTELLIGENT TIMER	
Repeating programmed recordings.	 29
Recording with Video Plus+	
Programming recordings using the Video Plus+ function.	 30 31
Recording with external recording controls	
Recording is controlled by an external device.	 32



Instant recording

Set the TV set to the video channel and insert a cassette into the VCR; make sure that the cassette's protection tab is intact.

- Select channel to record from.
- When recording from an external device, select from Scart inputs AV1, AV2 or Front input AV3.
- Press **REC** to start recording.
- Press **STOP**  to stop recording.
- Press **PAUSE/SLOW** to pause recording.
- To protect the video heads this function will be terminated after approx. 5 minutes.
- Press **PAUSE/SLOW** again to resume recording.



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
AV ENHANCER



- 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.
- 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.



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.



- 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.



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

Timer recording

Checking the timer programme

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

PROG/CHECK
AV ENHANCER



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.

PROG/CHECK
AV ENHANCER



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.

PROG PLAY
DIRECT NAVIGATOR



TOP MENU

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.

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.

- - - : 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


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 27). 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.

INTELLIGENT TIMER							25/10/04		
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							25/10/04		
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			

I-TIMER
P.MEMORY



Copying stored recording sessions

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

I-TIMER
P.MEMORY



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

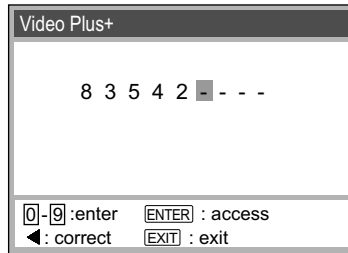
Once 5 entries are stored in INTELLIGENT TIMER menu, any new entry will overwrite the oldest stored programme.

I-TIMER
P.MEMORY



- 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+



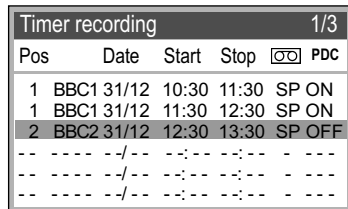
Programming recordings with the VIDEO Plus+ function

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.



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
-	-/-	-:-	-:-	-:-
-	-/-	-:-	-:-	-:-
-	-/-	-:-	-:-	-:-



- 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 28)
- Press **ENTER** to confirm the settings.
- Press **TIMER** to activate the timer mode. Ensure that the video recorder symbol ☹ is displayed.

To cancel the Timer recording Standby Mode see page 27.

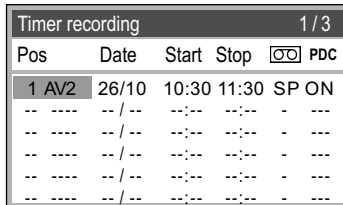
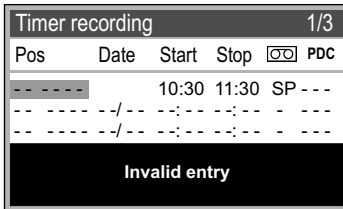
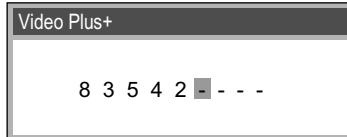
VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The **VIDEO Plus+** system is manufactured under license from Gemstar Development Corporation.

- * 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 31).
- 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+

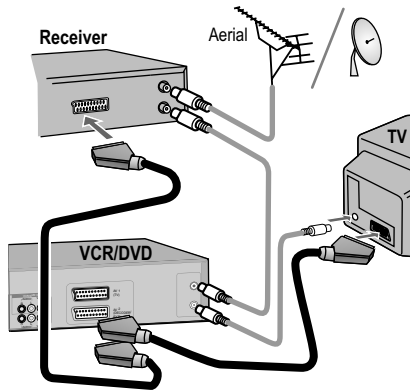
VIDEO Plus+ Codes for Satellite Receivers / Set Top Box

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)
AV2	: NORMAL
SQPB	: AUTO
OSD	: 4:3
VCR/DVD OUTPUT	: AUTO
Remote	: VCR 1
EXT LINK	: 2
◀ : 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.

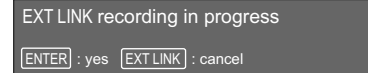
- Press **MENU**, the Menu screen appears.
- With ▼ select menu Others and confirm with **ENTER**.
- With ▲▼ select [EXT LINK] and turn to [2] or [1] ◀▶ .
- Press **MENU** to return to the Menu screen.

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 EXT Link 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.

The following screen will be shown if you select EXT LINK: [2]



- Press **ENTER** to hide this message.
- Press **EXT LINK** to stop recording.
- * 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 EXT Link 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

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

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

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

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.

Options available for tuning the channels

Pos		Station position	<input type="text" value="34"/>
Name		Station name setting	<input type="text" value="34"/>
Channel		Channel setting	<input type="text" value="33"/>
NICAM	AUTO / OFF	Automatic NICAM detection/Mono	<input type="text" value="39"/>

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
 [Left] : select [ENTER] : access
 [MENU] : return [EXIT] : exit

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

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

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
 [Left] : move [ENTER] : store
 [MENU] : return [EXIT] : exit

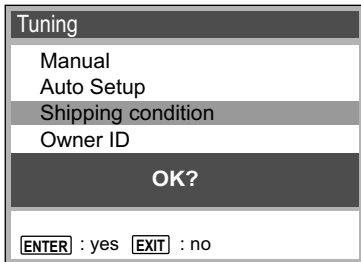
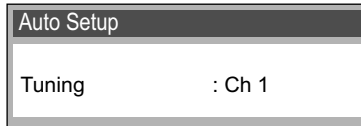
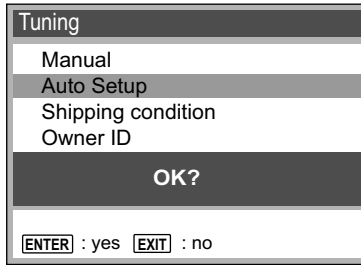
Changing the name of TV stations

- 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 B|BC1.
- With ▲▼ change that letter.
- With ▶ select the next letter B|BC1.
- Press **MENU**.
- The new name will be stored in Tuning.

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.



Manual Functions



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

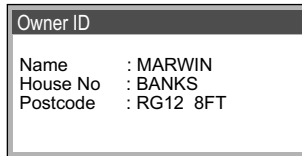
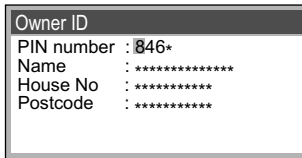
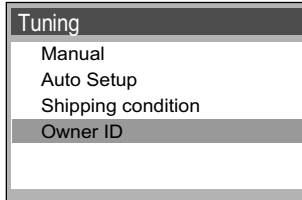
VHS DVD

- 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)
AV2	:NORMAL
SQPB	:AUTO
OSD	:4 : 3
VCR/DVD OUTPUT	:AUTO
Remote	:VCR 1
EXT LINK	:1

Tape length	Sets the tape length of the cassette you use. AUTO (◀E - 240), E - 195, E - 260, E - 300
AV2	Selects the type of external unit connected to the VCR/DVD's AV2 socket. DECODER : If a decoder is connected. EXT : If another video recorder or satellite receiver is connected.
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.
VCR/DVD OUTPUT	AUTO : When you press a function button the unit will activate the relevant video or DVD output, depending on the setting of the VCR/DVD toggle switch. MANUAL : Press the VCR/DVD OUTPUT button to manually toggle between the video and DVD outputs.
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.
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).

Manual Functions



Owner ID

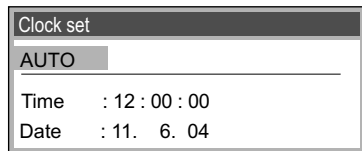
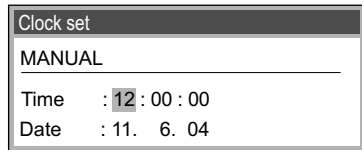
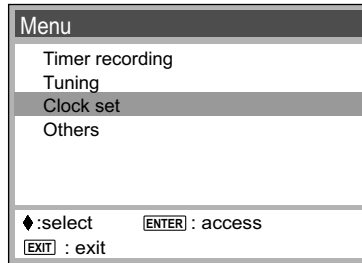
- Press **MENU** and select Tuning **▲▼**
- Press **ENTER**.
- Select Owner ID **▲▼** and press **ENTER**.
- Use the **Numeric** buttons or **▲▼** to enter the current PIN number. After entering the correct PIN number, you can change the Name, House No and Postcode.
- Press **ENTER** to conclude the 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.

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 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.

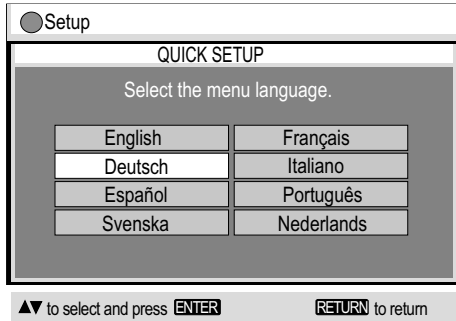
- AUTO:** When you record a programme which is broadcast with NICAM sound, the NICAM sound is automatically recorded.
- OFF:** If you want to record the normal (mono) sound on the Hi-Fi audio tracks during a NICAM broadcast, or if the stereo sound is distorted due to poor reception conditions.

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.

VHS DVD

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 Setup menu options to adapt the default settings below to your appliance. Every menu item provides further information on the options you have.

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- * Please refer to the operating instructions of your TV set to read more about the best settings.

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.

Select the maximum sampling frequency of the PCM digital output.

Before you proceed please check which setting is supported by your digital audio component (connection via OPTICAL).

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Following QUICK SETUP, you can use the options of the Setup menu to make further settings.

Press **RETURN** or **SETUP** to quit the Setup menu.

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DVD Playback functions

DVD-Video	Video CD	CD	RAM
DVD-A	MP3	WMA	JPEG





OPEN / CLOSE



PLAY



Playback

- Press **OPEN/CLOSE**  on the VCR/DVD to open the disc tray.
- Place the disc on the disc tray.
- Press **PLAY** .

The disc tray closes and disc playback starts automatically.

- * The player may take some time to read all of the disc information!

MP3, WMA, JPEG:

The Playback menu appears on the screen.



Pause playback (still image)

PAUSE/SLOW





- Press **PAUSE** during playback.



Interrupt playback

STOP



- Press **STOP** .
- Press **PLAY**  to resume playback.



Stop playback

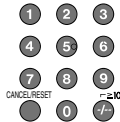
- Press **STOP**  twice.



Playback of a particular track or title

DVD-Video	Video CD	CD	RAM
DVD-A	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 **610** + **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.

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-A	Off	→	Track	→	Group
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.

DVD Playback functions

DVD-Video

Chapter review


This function lets you browse back through the chapters of a DVD-V by playing the first couple of seconds of every chapter.

- Press **STOP**  during playback.
- Press **PLAY** .

A message appears: Press PLAY to Chapter Review.

- Press **PLAY**  again.

The first couple of seconds of every chapter are played back. Normal playback is resumed at the point where you stopped it.


- * Do not press **PLAY**  if you do not wish to browse back through the chapters. After a couple of seconds, normal playback will be automatically resumed at the point where it was stopped.

POSITION MEMORY

DVD-Video DVD-A Video CD CD RAM MP3 WMA JPEG

Use the **Position Memory** function to resume disc playback at a set position. You can tag and directly access up to 5 discs. The position tag is retained when you change discs or when the unit goes into stand-by mode.



- Press **POSITION MEMORY** during playback. A message appears: Position memorized. You can now change discs or go into stand-by mode.
- Press **PLAY**  to play back the disc again. Playback is resumed at the stored position and the position tag is cleared.
- * Some discs do not fully support all of this function.

DVD Playback functions



Random playback

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

- Press **PLAY MODE** while the disc is stopped. The Program Play 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-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.

Single frame mode

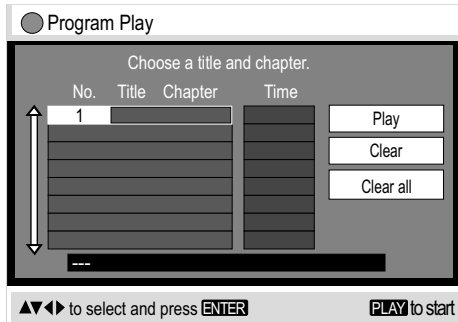


In pause mode, press remote control buttons **◀** or **▶** .

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



Program play

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

- Press **PLAY MODE** while the disc is stopped. The Program Play 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.

OFF TIMER
PLAY MODE



- 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.

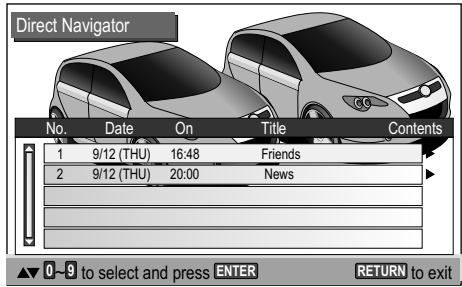
To quit the Program Play mode

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

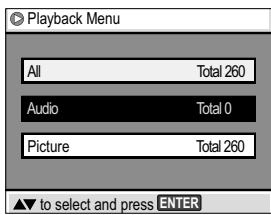
OFF TIMER
PLAY MODE



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.

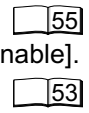


Playback Menu



- 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, change in the Setup menu in the sub-menu Others the HighMat setting to [Enable]. Or select the [Play as Data Disc] option in the Others menu via **DISPLAY**, while in Stop mode.



VCR-DVD functions



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



Synchronous recording

DVD-Video DVD-A RAM Video CD CD MP3 WMA JPEG

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.



DUBBING

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 **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.

MUSIC WITH PICTURE

DVD-Video DVD-A RAM Video CD CD MP3 WMA JPEG

M--P 1: It is possible to simultaneously use the DVD player for e.g. playing back a music disc and presenting video pictures.

M--P 2: It is possible to play back a video or JPEG disc on the DVD player and have the sound outputted via VCR or any other external unit simultaneously.

- Use **VHS/DVD** on the remote control to select DVD. 
- Press **PLAY** ▶ to start playback.
- Use **VHS/DVD** on the remote control to select VHS. 
- In VCR STOP mode, select M--P 1 or M--P 2 via **MUSIC WITH PICTURE**. The unit displays the video output and selects the AV3 front panel input.
- You can now use an external source, select the TV channel via **CH** or press **INPUT** to specify AV1 / AV2 / dc.
- Press **PLAY** ▶ to play back a video cassette.
- Press **MUSIC WITH PICTURE** in VCR STOP mode to terminate this function.



Navigation Menu

JPEG MP3 WMA

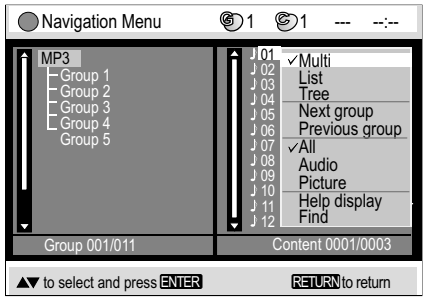


To display the selection menu

• Display the Navigation Menu and press **DISPLAY**.
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, change in the Setup menu in the sub-menu Others the HighMat setting to [Enable].
Or select the [Play as Data Disc] option in the Others menu via **DISPLAY**.



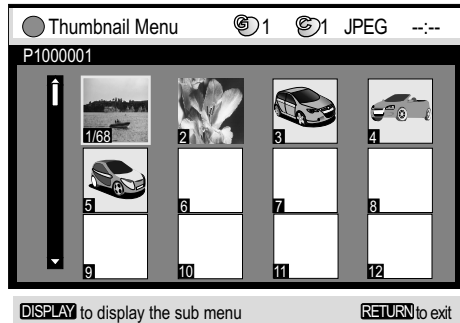
To display the Navigation Menu

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

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. 49
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 work in a title press ◀ to delete the asterisk.</p>

Navigation Menu



WMA / MP3 / CD-Text

Group : Songs 3
Content : 01 - Title 1

JPEG

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

JPEG Thumbnail Menu

JPEG

- Pick **DISPLAY** 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 **DISPLAY** during playback. The DISPLAY 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 **DISPLAY** to quit the menu.

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Activate on-screen displays

CD-Text JPEG MP3 WMA

- Press **DISPLAY** during playback. The DISPLAY 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 **DISPLAY** to quit the menu.

53

Select Group/Title

JPEG MP3 WMA

- Play back a disc and select the group or title on it.
- Press **▲▼** to select the Group, press **◀▶** to select the Title.

- * WMA: You cannot play copy-protected WMA files.
- * 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



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.

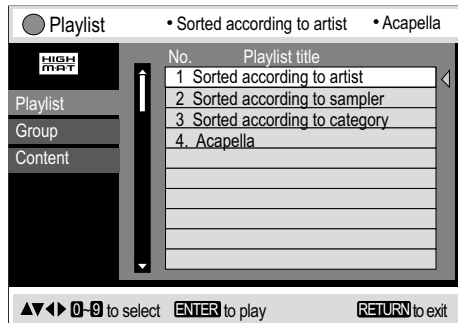
While the HighMAT menu is displayed:

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

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

Play list: Starts playback

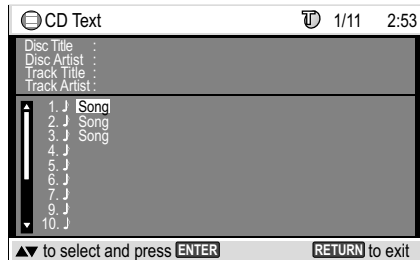
- Press **TOP MENU** to show or hide the HighMAT menu.
- Press **RETURN** to go back to the previous menu.
- Press **DISPLAY** to show or hide the background stored on the disc.



Selecting from a Play list

- Press **MENU** 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 **MENU** to quit the Playlist screen.

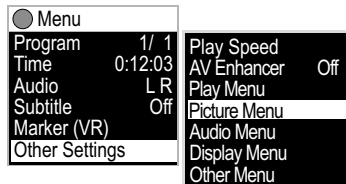
CD Text



CD Text menu

- Press **MENU**.
 - 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.

DISPLAY menu



DVD-RAM menu illustration

DVD-RAM

Picture Mode

- 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.
- User:** Provides changes of the Picture Adjustment menu.

Playback status indicator



DISPLAY



- Press **DISPLAY** twice to activate the playback status indicator.
- Press ◀▶ to change the playback speed.
- Press ▲▼ to display the current and the remaining playback time.
- Press **DISPLAY** again to hide the status indicator.

DISPLAY



To display the DISPLAY menu.

- Press **DISPLAY** to invoke the DISPLAY 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 52 and 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 **DISPLAY** to quit the menu.

DISPLAY



To modify the Picture Mode

- Press **DISPLAY**, the DISPLAY menu of the active disc is displayed. The available options depend on the current disc.
- Press ▲▼ and **ENTER** to select Other Settings. Press ◀ to go back to the previous menu.
- Press ▲▼ and **ENTER** to select Picture Menu. To display the settings, press **ENTER** again.
- Press ▲▼ and **ENTER** to select a setting. The menu item Picture Adjustment will be displayed if you select User. Press ▲▼ and **ENTER** to select Picture Adjustment. The Picture Adjustment menu will be displayed.
- Press ▲▼ to select an option, for modification then press ◀▶. [Contrast], [Brightness], [Sharpness], [Colour], [Gamma].
- Press **RETURN** or **DISPLAY** to quit the menu.


DISPLAY menu

<ul style="list-style-type: none"> ● Menu Title 1/36 Chapter 1/27 Time --:-- Audio --- Subtitle --- Angle -/- Other Settings 	DVD-Video
<ul style="list-style-type: none"> ● Menu Track 1/ 2 Time 48:10 Audio L R Other Settings 	Video CD
<ul style="list-style-type: none"> ● Menu Playlist 1/38 Group 1/20 Content 2/12 Time 0:39 Audio 96kbps Other Settings 	HighMAT
<ul style="list-style-type: none"> ● Menu Group 1/11 Content 1/12 Time --:-- Audio Other Settings 	WMA/MP3
<ul style="list-style-type: none"> ● Menu Group 1/ 6 Content 1/68 Thumbnail Rotate Picture Slideshow On Other Settings 	JPEG
<ul style="list-style-type: none"> ● Menu Track 1/14 Time 48:10 Other Settings 	CD

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

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.  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.

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.

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.  49

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).


DISPLAY menu

These settings are not available for every disc.

Other Settings

Play Speed	x1.4 x1.3 x1.2 x1.1 ✓ Normal x0.9 x0.8 x0.7 x0.6
AV Enhancer Off	✓ Off On
Play Menu	Repeat Off A-B Repeat ** Marker
Picture Menu	Picture Mode Normal
Audio Menu	Advanced Surround Off Dialogue Enhancer Off
Display Menu	Subtitle Position Subtitle Brightness Just Fit Zoom Manual Zoom x1.00 GUI See-through Off GUI-Brightness 0
Other Menu	Play as Data Disc


Play Speed: Select a factor by which to change the playback speed.
The digital audio output switches to PCM.

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

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.

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

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.

Picture Mode: Changes the image display settings 

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.

Subtitle Position : Vertically moves the subtitle shown.

Subtitle Brightness: Modifies the brightness of the subtitle shown.


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.

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.

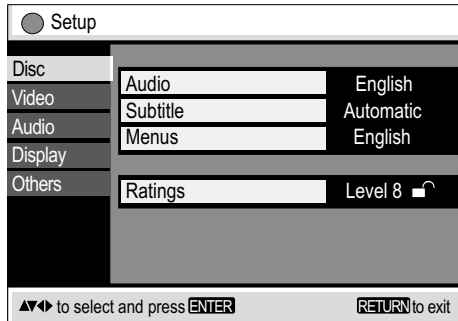
Play as HighMAT / Play as Data Disc: Stop the HighMAT disc and choose to play it as a data disc or as a HighMAT-format disc. 

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 last page).
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. A closed padlock icon is displayed while this feature is enabled. Make sure not to forget your password code. To change the setting <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).
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 96/192 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.
Audio during Search	Choose to have the sound on or off during the search.

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.

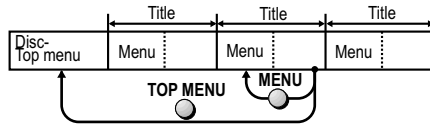
Menu Others

HighMAT	Enable: Activates HighMAT playback Disable: Plays HighMAT discs in the MP3/WMA/JPEG format.
QUICK SETUP	Lets you change the basic settings or your appliance.  40
Re-initialize Setting	Resets the appliance to factory defaults. Following reset and initialisation, press SETUP to run the QUICK SETUP utility again.  40

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 **MENU** 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 (DVD-V / VCD / CD) with a wet cloth, then with a dry cloth.
- If available, use the optional DVD-RAM/PD disc cleaner (LF-K200DCA1) to clean the DVD-RAM / DVD-R.
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	DVD-Audio	DVD-RAM	SVCD	Video-CD	CD	CD-R/RW
							---
				IEC62107			
DVD-V	DVD-A	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 DISPLAY 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

<p>There is no audio output and the sound is distorted:</p>	<ul style="list-style-type: none"> • Check the connections. • Deactivate the Advanced Surround effect. <p style="text-align: right;"> 53</p>
<p>The VCR display is not lit:</p>	<ul style="list-style-type: none"> • Check AC mains connection.
<p>The VCR display is lit, the device does not respond to controls:</p>	<ul style="list-style-type: none"> • Device is set to recording stand-by or timer mode. Quit with TIMER button.
<p>Error code [U □ □] or [H □ □] appears:</p>	<ul style="list-style-type: none"> • 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.
<p>The picture is disturbed when searching:</p>	<ul style="list-style-type: none"> • This is a technical issue and not indicative of a malfunction.
<p>No picture appears on the screen:</p>	<ul style="list-style-type: none"> • Check the connections. • Verify that the correct video input of the TV set has been selected.
<p>The picture is cut off at its left or right edge:</p>	<ul style="list-style-type: none"> • 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. <p style="text-align: right;"> 54</p> <p style="text-align: right;"> 53</p>
<p>The remote control unit does not work properly:</p>	<ul style="list-style-type: none"> • Check whether the remote control communicates VCR1 or VCR2 . • 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. <p style="text-align: right;"> 36</p> <p style="text-align: right;"> 5</p>
<p>No messages are output to the screen:</p>	<ul style="list-style-type: none"> • Go to the DVD SETUP screen and set DISPLAY 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. <p style="text-align: right;"> 55</p> <p style="text-align: right;"> 36</p>

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]. 
- 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. 
- 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. 
- Check the start and stop time of a PDC recording. 

Before requesting service

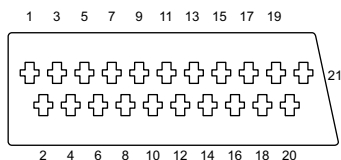
DVD DISTORTIONS

The loudspeakers emit loud noise:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">Check the TV Aspect setting.	 54
The player does not respond to function key commands:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">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:	<ul style="list-style-type: none">The disc does not provide the language you selected.	
Unable to change the aspect angle:	<ul style="list-style-type: none">It depends on the disc whether this function is available.	
You forgot your password:	<ul style="list-style-type: none">Stop the player and keep pressing player button /⏪ 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

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, 50/60 Hz
Power consumption:	21W (in operation)
Controls	multifunctional remote control (VCR, TV and DVD), VCR / DVD, main functions on the unit
VCR playback functions	PAL and NTSC Playback on PAL TV S-VHS Quasi Playback (SQPB)
Video- and Audio heads	4 Video heads, 2 heads Hi-Fi
VCR Recording system	2 rotary heads, helical scanning system
VCR tape speed	SP: 23.39 mm/s , 240 min / LP: 11.7 mm/s , 480min (E-240 cassette)
VCR fast forward/fast rewind time	approx. 60 sec. (E-180 cassette)
Video TV system	VCR: PAL 625/50 DVD: PAL 625/50, PAL 525/60, NTSC
Video input and output level	1.0 Vpp (75 Ohm)
DVD RGB-Video output	RGB-output connector: 0.7 Vpp (75 Ohm) / output connector: AV1
RF-converter VCR	UHF-channel (21-68), 75 Ohm
Horizontal resolution VCR	more than 240 lines (SP)
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, less than 1 kOhm / DVD: 2V rms (1 kHz, 0 dB Fs) output connector: Pin jack, AV, 2 channel(L/R)
Dynamic range Audio	VCR: more than 90 dB (Hi-Fi sound tracks) DVD:(linear audio): 100dB / CD audio: 96dB
Total harmonic distortion CD audio:	0.0025 %
S/N ratio CD audio:	115dB

Frequency response VCR audio 20 Hz to 20 kHz (Hi-Fi sound tracks)
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

DVD Optical digital output Laser-Pick up Optical terminal
Wave length: 662 nm/785 nm / Laser power:
Class 2 / Class 3a

Operating temperature / humidity 5°C to 35°C / 35-80% RH

Weight and dimensions approx.value: 3.8 kg / 430 (width) x 89 (height) x
266 mm (depth)

Compatible disc formats: DVD-V, DVD-A, DVD-RAM, DVD-R, 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.

Compatible compression rate: MP3 : 32 - 320 kbps
WMA : 48 - 192 kbps.
JPEG format : 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)

HighMAT :

Technical specifications are subject to change without notice.

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