Panasonic

DVD/CD Player / Video Cassette Recorder NV-VP30EB/EBL

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

Operating Instructions





CVC super



SUPER DRIVE







Before attempting to connect, operate or adjust this product, please read these instructions completely.

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Dear customer

Thank you for trusting and purchasing this high-quality product. Panasonic is one of the leading companies of the consumer electronics industry.

We are sure that this appliance will meet with all your expectations.

Precautions

Voltage: Only use power sources complying with the specifications (220-240 VAC, 50/60 Hz). You may otherwise overload the unit and cause fire. Do not use DC power sources. Check the source carefully when setting up the unit on a ship or other place where DC is used.

AC mains lead protection: Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock.

Service: Do not attempt to repair this unit by yourself. If the sound fails, the display is off, smoke escapes from the unit or any other problem occurs that is not described in these operating instructions, disconnect the power supply and contact your dealer or an authorised aftersales service centre.



www.panasonic.co.uk

(for UK and Republic of Ireland customers only)

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Mon-Friday 9:00am-5:30pm. (Excluding public holidays.)
- Or go on line through our Internet Accessory ordering application.
- 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!

Customer Care Centre

For UK customers: 08705 357357

For Republic of Ireland customers: 01 289 8333

Precautions

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 LASERSTRÄLING VED ÄBNING. UNDGÄ UDSÆTTELSE FOR STRÄLING.
VARO!	 AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING	 SYNLIG OCH OSYNLIG LASERSTRÄLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÄLEN.
ADVARSEL	 SYNLIG OG USYNLIG LASERSTRÄLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	 SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
注意	 打开时有可见及不可见激光辐射。避免激光束照射。
注意	 ここを開くと可視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

WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS

CAUTION!

- 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 UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

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.

CLASS 1 LASER PRODUCT

Back of product, see page 9.

CAUTION!

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.

Caution









Be sure to read the cautions carefully before you operate this VCR.

Keep the VCR away from high temperatures

Keep the VCR away from sources of heat such as direct sunlight, heating radiators, or closed vehicles.

Avoid magnets or magnetized objects

Never bring a magnet or magnetized object close to the VCR because this could adversely affect the performance of the VCR. When using the VCR together with other equipment, keep as much distance as possible between them to prevent them from adversely affecting each other's performance.

No fingers or other objects inside

Touching internal parts of the VCR is dangerous, and may cause serious damage. Do not attempt to remove the cover as; there are no user serviceable parts inside.

Keep away from liquids

Keep the VCR away from all liquids.

Caution: If water or some other liquid is spilled into the VCR, serious damage could occur. If this happens, disconnect from the mains socket immediately and consult your dealer.

Video head clogging

The picture and sound can be lost or become distorted if video heads become clogged. This may happen in certain environmental conditions or if old or damaged or damp tapes are used or after long use of the VCR.

If this occurs then please consult your dealer. Note: Video Head Cleaning is NOT covered by the warranty.

Cleaning the VCR

Wipe the VCR with a clean, dry cloth. Never use any cleaning fluid or other chemicals. Also do not use compressed air to remove dust.

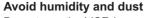
Avoid sudden changes in temperature

If the VCR is moved from a cold to a warm place or if a heater is turned on, condensation may form on the tape surface and inside the VCR.

If this happens, leave the VCR at room temperature for at least 1 hour before operating it.







Do not use the VCR in very humid or dusty places.

This may cause damage to its internal parts.



Stacking

Install the VCR in a horizontal position and do not place anything heavy on it.

Condensation may form in the following cases:

- If the VCR is in a room that was very cold before a heater has just been turned on.
- If the VCR is in a room with steam or high humidity.
- If the VCR is brought from cold surroundings into a well-heated room.
- The VCR is suddenly brought from cool surroundings, such as an air-conditioned room or car, to a place, which is hot and humid.

Note:

In any of the above-mentioned conditions, do not operate the VCR for at least 1 hour.
 This VCR is not equipped with a dew sensor.

IMPORTANT

Your attention is drawn to the fact that the recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

Check List

Check that you have the accessories and items shown

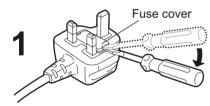
V		•••	Remote Control EUR7615KT0
	RF cable K2KF2BA00001, VJA0728-A or K1TWACC00001		Batteries for the Remote Control
	AC Mains lead RJA0044-3C		Quick Start Guide RQCAD0008
	Operating Instructions RQTD0073-B		Guarantee Card

CAUTION

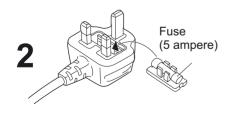
How to replace the fuse

Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



Caution for AC Mains Lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that is approved by ASTA or BSI to BS1362. Check for the ASTA mark \circledast or the BSI mark \Im on the body of the fuse. If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained. A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below. If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code: Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue. The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

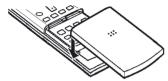
WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL & OR COLOURED GREEN OR GREEN/YELLOW. THIS PLUG IS NOT WATERPROOF - KEEP DRY.

FOR YOUR SAFETY DO NOT REMOVE OUTER COVER. To prevent electric shock, do not remove the cover. There are no user serviceable parts inside. Refer all servicing to qualified service personnel. For your safety, be sure not to connect or handle the equipment with wet hands.

Remote control codes

You can use this remote control also for the execution of some specific TV functions of different producer appliances. Try a different code if your TV set does not respond correctly.

Remote control closure



In case the remote control cover gets loose, lock it again as shown above.



• Keep button pressed and enter the two-digit code.

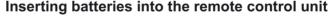
Brand	Code	Brand	Code	Brand	Code	Brand	Code
Panasonic	01-04,44	GOODMANS	05,06,31	NOKIA	25-27	SANYO	21
AIWA	35	GRUNDIG	09	NORDMENDE	10	SBR	06
AKAI	27,30	HITACHI 22,2	3,31,40-42	ORION	37	SCHNEIDER (5,06,29-31
BLAUPUNKT	09	INNO HIT	34	PHILIPS	05,06	SELECO	06,25
BRANDT	10,15	IRRADIO	30	PHONOLA	31,33	SHARP	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	80
DUAL	05,06	METZ	28,31	SABA	10	TELEFUNKEI	N 10-14
ELEMIS	31	MITSUBISHI	06,19,20	SALORA	26	THOMSON	10,15
FERGUSON	10	MIVAR	24	SAMSUNG	31,32,43	TOSHIBA	16
GOLDSTAR/L	.G 31	NEC	36	SANSUI	05,31,33	WHITE WESTING	HOUSE 05,06



Note: If code 44 is the operating code for a Panasonic TV set, the corresponding remote control features additional TV functions.

A = red, B = green, C = yellow, D = blue

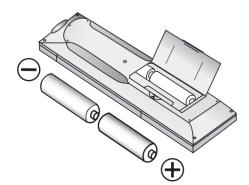
For example, to select the AV port of the Panasonic TV press the buttons INPUT SELECT AV and A,B,C or D.



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 is not used 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 not to confuse the polarity \oplus and \ominus .

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





Front Panel

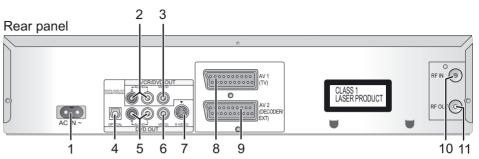


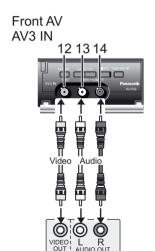
Device control

1	ტ/I	Standby/on switch ປ/I
2	▲ VCR	To ejects a video cassette.
3	TIMER CHECK	Displays the timer programme for verification.
4	REC CHECK	You will be displayed either the Timer menu or an information on the current recording
5	QUICK ERASE	Erases a video cassette.
6	PROG PLAY	Plays back programmed recordings.
7	MUSIC WITH PICTURE	Playback of an audio CD including VCR video output.
8	OPEN / CLOSE	Opens and closes the disc tray.
9	EXT LINK	Activates the recording timer for externally controlled recording.

10	> CH <>	Selects a channel.
11	● REC	Record button
12	TIMER REC ⊕	Activates the recording timer.
13	⊕/4	Fast winding / JET SEARCH
14	P+/E	Fast winding / JET SEARCH
15	•	VCR Stop button
16	©	VCR Playback button
17	•	DVD Stop button
18	©	DVD Playback button

Sockets





External equipment (e.g. Video movie camera)

1	AC Input socket (Power supply)
2	VCR/DVD AUDIO OUT socket L = AUDIO output left channel R = AUDIO output right channel
3	VCR/DVD VIDEO OUT socket
4	DVD Optical Digital Out terminal
5	DVD AUDIO OUT socket L = AUDIO output left channel R = AUDIO output right channel
6	DVD VIDEO OUT socket
7	DVD S-VIDEO OUT socket

8	AV1 21-pin Scart socket
9	AV2 21-pin Scart socket
10	RF IN socket (Aerial input)
11	RF OUT socket (Aerial output)
12	AV3 VIDEO IN socket
13	AV3 AUDIO IN socket left channel (Mono)
14	AV3 AUDIO IN socket right channel

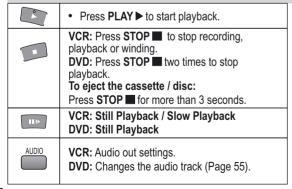
Remote control functions

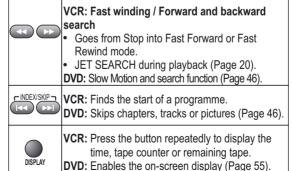
Some TV sets accept control signals from the VCR/DVD's remote control unit (Page 7). TV-Operations see page 36.

		_		
	General	Op	perations	>
VCR/DVD	Standby/on switch \circlearrowleft /I Press to switch the unit from on to standby mode or		VCR • • • DVD	
	vice versa. In standby mode, the unit is still consuming a small amount of power.		INPUT SELECT	
	OSD menu selection buttons.		VCR/DVD OUTPUT	-
ENTER .	ENTER: Selects or saves a setting.		001101	-
EXIT RETURN	Quits a menu.		***	
CANCEL/RESET	Undoes entries or selections.		000	
OFF TIMER PLAY MODE TV ASPECT	Switches the unit into standby mode after the set time of recording, playback or in Stop mode.		0 0 0	

Op	perations					
	VCR • • • DVD	Remote control toggle switch. For changing between VCR, DVD and TV functions.				
	INPUT SELECT	AV input select button. Toggles between input A1, A2, A3 (front) or dc (DVD).				
	VCR/DVD OUTPUT	Output signal select button. Toggles between VCR and DVD signal (for AV1, VCR/DVD OUT).				
	***	Active picture signal. The symbol appears on the VCR or DVD display. Use the VCR/DVD OUTPUT button to switch over the picture signal. To directly change the VCR or DVD output use the VCR/TV/DVD toggle switch in combination with a function button (e.g. PLAY ▶).				
	0 0 0 0 0 0 0 0 0	Direct input via numeric buttons (way of input = example: 18= 0)				

General Operations





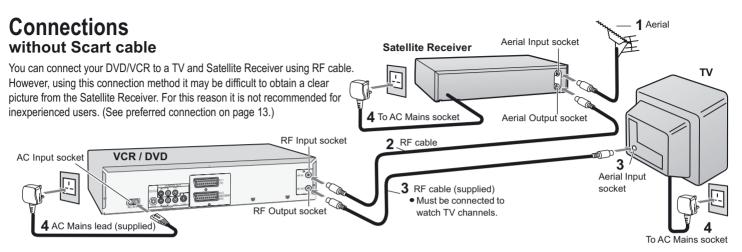


Remote control functions

	VCR - Operations					
REC	Video recording (Page 22).					
VIDEO Plus+	Displays the menu VIDEO Plus+ (Page 28).					
PROG/CHECK	Displays the menu Timer recording (Page 24).					
TIMER	Activates the recording timer (Page 24).					
I-TIMER B	Defines programmes transmitted to the same programme memory location at the same time (Page 27).					
SP/LP/EP	Sets the tape speed (Page 22).					
PDC	Controls the beginning and end of a recording session by a special signal (Page 26).					
EXT LINK	Activates the recording timer for externally controlled recording (Page 23).					
PROG PLAY	Plays back programmed recordings (Page 25).					
REC CHECK	You will be displayed either the Timer Recording menu or an information on the current recording.					
CANCEL/RESET	CANCEL: Clears an entry you made. RESET: Resets the counter to 0:00.00.					
TRACKING/V-LOCK	Channel selector / Tracking control of disturbed VCR picture.					
MENU	Displays the main menu.					

DVD - Operations					
QUICK REPLAY	Repeats the last couple of seconds of the current playback (Page 47).				
CINEMA	Enhances the contrast of the picture (Page 57).				
GROUP	On-screen display of groups of titles (Page 55).				
REPEAT	Repeat function (Page 49).				
ZOOM	Zoom function during playback (Page 50).				
PLAY MODE TV ASPECT	PLAY MODE: Random play / Programme play (Page 51).				
POSITION MEMORY	Resumes playback following an interruption (Page 48).				
ANGLE/PAGE	Chooses from various camera angles; turns menu pages.				
TOP MENU	Displays the main menu of a DVD (Page 61).				
MENU	Enables the Menu-display of a disc.				
SETUP	Displays the SETUP menu (basic DVD player settings, page 41).				
SUBTITLE	Selects the language of subtitles (Page 55).				

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



Follow the step-by-step guide below.

- 1 Connect the aerial to the aerial input socket of the Satellite Receiver.
 - If you do not have a Satellite Receiver, connect the aerial to the RF input socket of the VCR/DVD and go to step 3.

Satellite Receiver

Satellite Receiver

- Connect the aerial from Satellite Receiver to the RF Input socket.
- 3 Connect the RF output socket to the TV aerial socket.
 - Plug the TV, VCR/DVD and Satellite Receiver into the mains.

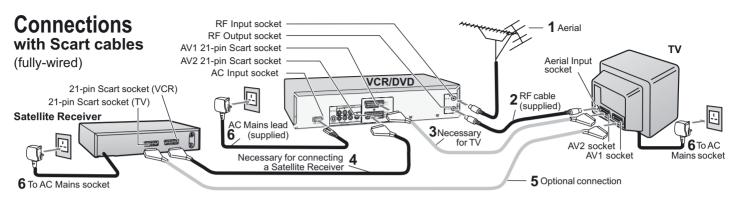
VCR/DVD

VCR/DVD

- 4 Flug the TV, VCR/DVD and Satellite Receiver into the main
- Switch ON your Satellite Receiver; to ensure reliable tuning select either SKY ONE or SKY NEWS.

Notes:

If, after Auto Setup is complete, the programme position of the satellite receiver is not to your preference, or 'SAT' name is not shown in the Programme List, you can re-arrange the programme position and enter 'SAT' name manually (See pages 31-32).



Follow the step-by-step guide below.

- Connect the aerial to the RF Input socket of the VCR/DVD.
- 2 Connect the RF cable from the RF Output socket of the VCR/DVD to the TV aerial input socket.
- 3 Connect the AV1 21-pin scart socket to the TV scart socket. If your TV does not have a scart socket or you do not have a scart cable, skip this step.
- Connect the AV2 21-pin scart socket to the VCR/DVD scart socket on your Satellite Receiver/Digital Receiver. If you are not connecting a Satellite Receiver, skip this step.
- Connect the TV scart socket of your Satellite Receiver to the AV1 scart socket of your TV. If you are not connecting a Satellite Receiver. skip this step.
- VCR/DVD □ ::00 E VCR/DVD © 0000 Satellite Receiver Satellite Receiver

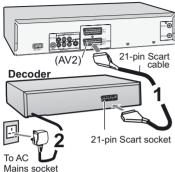
VCR/DVD

VCR/DVD

Plug the TV, VCR/DVD and Satellite Receiver into the mains.

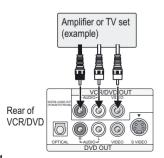
External units

VCR/DVD



Use a 21-pin scart cable to connect the decoder to the VCR's AV2 21pin scart socket





Connecting the VCR to a Decoder

To connect this VCR to a decoder, make the connections shown in the illustration below. For the connection to the TV, see page 13.

For details about the connection, also read the operating instructions of the decoder. Be sure to keep the VCR, TV and decoder disconnected from mains until you have finished all connections.

- 1 Connect a 21-pin scart cable to the AV2 21-pin scart socket on the VCR and to the 21-pin scart socket on the decoder.
- 2 Connect the decoder's mains lead to an AC mains socket.
- **3** Set AV2 to DECODER. For details, see page 33.

Note:

[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, and a decoder equipped with RGB output capability to the AV2 socket, RGB signals will pass through the VCR to the TV when the VCR is in standby mode. The RGB signals cannot be recorded or produced by this VCR.

Connecting to AV3

- Connect your external unit (e.g. a video camcorder) with the front input.
- Just seize the L/Mono port for mono recording of the audio signal.
- Select A3 with AV INPUT SELECT.

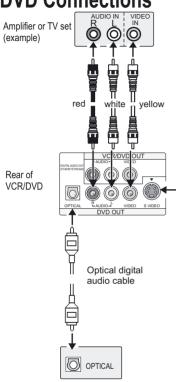


VCR/DVD OUT

You can connect the VCR/DVD direct with an Amplifier or TV set.

- Connect the analogue audio output (L/white and R/red) with a "Dolby Pro Logic amplifier", for example.
- To avoid sound quality problems, deactivate function Advanced Surround when you connect an amplifier with Dolby Pro Logic functionality (page 57).

DVD Connections



Amplifier (example)

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



Direct DVD audio/video output

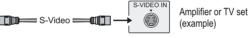
Independently of the VCR/DVD sockets you can connect all DVD sockets to a respective external unit.

A disc is played by the DVD player using the DVD OUT sockets. At the same time the video recorder is able to record or play back another programme.

- Connect the analogue audio output (L/white and R/red) with a "Dolby Pro Logic amplifier", for example.
- To avoid sound quality problems, deactivate function Advanced Surround when you connect an amplifier with Dolby Pro Logic functionality (page 57).

S-VIDEO output

Connecting the video recorder to the TV set with the S-VIDEO socket results in a higher picture quality compared to the connection via VIDEO OUT socket (only for DVD OUT).



Digital connectors (OPTICAL)

For optimum surround sound, connect a digital amplifier or a digital audio component. 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 recordings from MP3/WMA originals.

Adapt the settings of SETUP menu Audio (see page 44) to the following:

PCM Down Conversion: Yes
 Dolby Digital : PCM
 DTS Digital Surround : PCM
 MPEG : PCM

Deactivate function Advanced Surround (see page 57).

VCR AUTO SETUP



VCR Display



On-Screen Display



On-Screen Display



- Set the VCR/TV/DVD switch to VCR.
- Turn on the TV



• then press the VCR-Standby/ON button to switch on the VCR/DVD.

The VCR will now start Auto Setup.

- 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).
- If you connect your VCR/DVD to the TV by a Scart cable, you do not need to tune the TV as described above. Simply select appropriate input mode on TV.

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 again. Your VCR is now ready to use.

- To set the Owner ID now, press the Numeric buttons or ▲▼▶ to enter a four-digit PIN number.
- 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.



If the clock setting menu appears

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

- Press AVID to set the correct time and date.
- Press the ENTER button to finish this setting.

- Notes: 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 (page 32).
 - If you want to cancel Auto Setup before it has finished, press the **EXIT** button. You can restart Auto Setup again (page 32).
 - 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 19 for removing the interference before restarting Auto Setup (page 32).
 - DVD QUICK SETUP must follow the VCR AUTO SETUP for the DVD player (page 40).

TV Reception Channels

Example of UK model

Tuni	ng		
Pos	Name	Ch	Pos Name Ch
3 4	BBC1 BBC2 ITV CH4 CH5	22 23 24 25 26	6 **** 30 7 8 9 10

Example of Ireland model

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

The reception channels are different from UK and Ireland.

List of TV Reception Channels

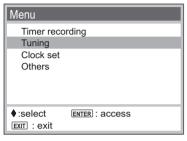
		VHF	UHF	CATV
Ī	UK	_	21–68	_
	Ireland	A–J	21–69	104–470MHz

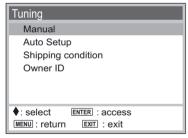
Channel Listing may differ from the examples shown left, depending on signal reception condition.

Checking the Settings for Auto Setup



On Screen Display





To confirm that the TV stations have been tuned correctly by Auto Setup



 Press the MENU button to display the OSD Main menu on the TV screen.



• Press AT 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.
 - Positions 5 and 6 may differ from the example shown on page 17. If Channel 5 is received, it is usually found on programme position 5 and a connected satellite receiver on programme position 6.
 - If Channel 5 is not received but a satellite receiver is connected, then the satellite receiver is found on programme position 5.



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 31 for details.

When no station has been found, confirm all connections of the VCR/DVD again and restart the VCR Auto Setup. See page 32 for details.

Notes:

- 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 31.)

- 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 30.).

Removing Interference / Changing RF-channel



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.



Set the VCR/TV/DVD switch to VCR.



 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 2 and 3 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.

Notes:

- Set the RF output channel of the VCR to [- -] (RF OFF) if the VCR is connected to the TV via the 21-pin Scart cable.
- Press the 0 button or Channel button to display [--], if using a 21-pin Scart cable.

Playback



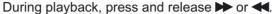


Set the TV set to the video channel and insert a cassette into the VCR

Normal Playback:

Press ▶ to start playback.

Cue or Review Playback:



- To return to normal playback, press ►.

High Speed Cue or Review Playback (JET SEARCH):

During playback, press and release ▶ or ◀ twice.

• During high-speed cue or review, the tape transport noise will increase. This is normal.



Still Playback:

During playback, press **II**/**▶**.

To return to normal playback, press ▶ or

Slow Playback:

During playback, keep **II**/**▶** pressed for more than 2 seconds.

To return to normal playback, press ▶.



Press ■ to stop playback.

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

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

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

Playing back NTSC video cassettes

You can play back NTSC video cassettes for viewing on a PAL system (PAL 60) TV set. You cannot record on or copy video cassettes to NTSC-format cassettes.

CVC Super - Crystal View Control Super

CVC Super gives the best picture quality possible by adjusting to the individual tape characteristics.

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 $CH \lor or \land until the bars noise$ 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 ∧ 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 ∧ pressed until the picture becomes stable.

- Notes: With certain TV models and tapes, it may not be possible to adjust the tracking.
 - 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.

Recording



A1:Scart input AV1 A2:Scart input AV2 A3:Front input AV3 dc: DVD (disc intern)



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

- Select a channel to record from.
 Select the AV channel if you are recording via the 21-pin scart cable.
- · Press REC to start recording.
- Press to stop recording.
- To pause recording: II/I>
 The function will switch itself off after approx. 5 minutes to protect the video heads.
- To resume recording: ■/





Tape Remain Counter / Indicator

The VCR display shows: time - counter - tape remain.

Press DISPLAY until 'REMAIN' is displayed.

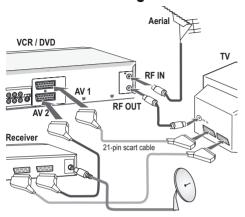


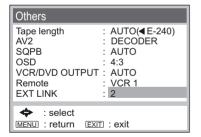


- Prior to starting the recording session, press SP/LP/EP to set the tape speed.
 - SP: normal recording time
 LP: double recording time
 simple picture quality
 reduced picture quality

Note: - When you play back LP or EP recordings, some cassettes (e.g. E-300 type) may produce interference. This is not indicative of a malfunction.

External recording control





The AV2 input of this VCR/DVD is equipped for future 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.

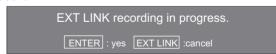
- **EXT LINK 1:** The VCR recording start and stop time is controlled by a control signal sent via the 21-pin scart cable from the external unit, for example Sky Digibox.
- EXT LINK 2: The VCR will start recording when AV2 input detects the video signal and stop recording when the video signal is switched off by the external unit

External recording control



- Press MENU and select Others
- Press ENTER
- Select EXT LINK 2 or 1
- Press MENU to return to the Menu screen.
- Press the **EXT LINK** button to activate the VCR's recording standby mode. As long as the Video- or Controlsignal is being transmitted by the Satellite or Digital Receiver, the VCR will record.

The following screen will be shown if you selected EXT LINK 2:



- Press **ENTER** to hide the message.
- Press the EXT LINK button to stop recording.

EXT LINK

- **Notes:** Be sure that the timer programmes stored by your VCR do not overlap 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.

Timer recording







The recording timer 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.

- Press MENU, select Timer recording and press ENTER;
 or press PROG/CHECK to display the Timer recording menu.
- Press ENTER

Use the cursor keys ▲▼ to make the next entries.

- Select a station ▲▼, ► (example BBC1)
- Set the date, week or day of week ▲▼, ► (example 31/12)
- Enter the recording start time: ▲▼, ▶ (example 10:30)
- Enter the recording stop time: ▲▼, ► (example 11:30)
 Keep the buttons pressed to change the time in 30-minute steps.
- Set the tape speed: A (Automatic), SP, LP, EP ▲▼, ▶
- Press ▲▼ or the PDC button to change the PDC setting (ON/OFF).
- Press **ENTER** to save the timer programme.



- Repeat these steps for further recordings you may wish to programme.
- Press TIMER to activate the VCR's Timer standby mode Ensure that the VCR symbol ⊕ is displayed.



- Do not forget to verify that there is enough tape remain. The total recording time must not exceed the length of tape on the video cassette.



Timer recording





Quitting the timer mode

Press TIMER; the VCR symbol ① turns off.
 You can now play back a cassette or make a manual recording.
 Press TIMER again to reactivate the timer programme you entered previously.



Displays the timer programmes for verification. (button on the unit only)

 Repeatedly press TIMER CHECK to view the details of the timer programmes on the VCR's display.



Checking the timer programme

- Press PROG/CHECK; the Timer Recording menu will appear.
- Press PROG/CHECK again or EXIT to quit the menu.

Changing or cancelling a timer programme

- Press PROG/CHECK to display the Timer Recording menu.
- Press Av to select the entry you wish to edit.
- Press ENTER
- Use ◀▶▲▼ to change the entries.
- Press ENTER
- Press RESET/CANCEL to cancel the timer programme.



Playing back programmed recordings

The unit will rewind to the beginning of the programmed recording and automatically start playing it back.

Notes:

- 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.

Timer recording



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 programme.

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

INTELLIGENT TIMER



This function makes it easier for you to time the recording of programmes transmitted by the same station at the same time but on different days. You can fully modify the programmes once they have been transferred to the Timer Recording menu. The INTELLIGENT TIMER menu lists the information of the last 5 timer programmes.



To use the INTELLIGENT TIMER function you must first programme at least one normal timer programme.



Setting a programme at it is

- Press I-TIMER.
- Press AV or I-TIMER to select a programme.
- Press **TIMER** to activate the timer mode.



- Press I-TIMER
- Press ▲▼ or I-TIMER to select a programme.
- Press **ENTER** to display the Timer recording screen.
- Use ◀▶▲▼ to change any of the data.
- Press **ENTER** to store a change.
- Press TIMER to activate the timer mode.

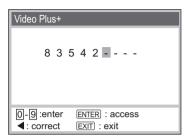
Protect and unprotect a Programme

If more than 5 timer programmes are made, the oldest entry will be deleted automatically if it is not protected.

- To protect a programme, select the entry ▲▼ and press ▶; the symbol ☐ is displayed.
- To unprotect press ◀; the symbol disappears.



VIDEO Plus+





Programming with the VIDEO Plus+ Function

The VIDEO Plus+ Codes (numbers) make it easy to set the VCR for timer recording from TV channel and SAT channel.

The recording time may be slightly longer than the TV programme.



- Press the VIDEO Plus+ button.
- Press the Numeric button to enter the VIDEO Plus+ code (press ◀ to correct any mistakes)
- Press ENTER

The Timer recording screen is displayed.

Set the tape speed: A (Automatic), SP, LP, EP ▲▼, ►
 (for automatic setting see page 26)





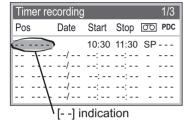
If you do not wish to edit the Timer recording data.

- Press TIMER to activate the timer mode.
 Ensure that the VCR symbol ⊕ is displayed.
- To edit Timer recording data press ENTER
- Use ▲▼, ▶ to select a station
- Use ▲▼, ▶ to set the date, week or day of week
- Use ▲▼, ▶ to change the start time
- Use ▲▼, ▶ to change the stop time
- See page 26 for PDC recording
- Press ENTER
- Press TIMER to activate the timer mode.
 Ensure that the VCR symbol ⊕ is displayed.



VIDEO Plus+





If [--] appears under Pos after entering a VIDEO Plus+ Code (Number)

Pos is the Programme Position/TV Station Name.

Normally, the name of the TV station and the number of the programme position is displayed under [Pos].

However, if the TV station information was not automatically set during Auto Setup due to adverse reception conditions, the [--] indication appears instead. 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.

In this case, follow the steps below to set the Pos.

Press A repeatedly to select the programme position on which the TV programme to be recorded will be broadcast.

After you have entered the information of a TV station, it remains stored in the VCR's memory, and you do not need to enter it again in the future.

To suspend the Timer recording Standby Mode

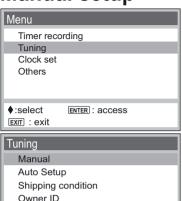
When you want to use the VCR for playback or manual recording before the programmed timer recording will be performed, you can temporarily suspend the timer recording standby mode by pressing the **TIMER REC** button so that the - indication on the VCR display disappears.

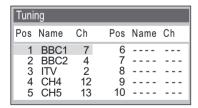
However, after you have finished using the VCR, remember to reactivate the timer recording standby mode by pressing the **TIMER REC** button again, otherwise the programmed timer recording will not take place.

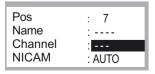
Note:

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

Manual setup









Menu Overview

The cursor keys of the remote control unit **I** allow you to move between menus and to change settings.

- Press MENU to display the Menu screen.
- Select an entry by pressing ▲▼.
- Press ENTER to access the selected sub-menu.

The selected sub-menu is displayed.

- Select the item you wish to edit .
- Press ENTER to access.
- Make the changes as appropriate. Follow the on-screen instructions.
- Press MENU to return to the previous menu.
- Press **EXIT** to guit the menu.

Manual Tuning

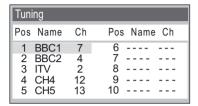
This VCR has 99 programme positions that can be tuned to receive TV stations. In certain circumstances you may wish to tune in a station manually or rename a TV station.

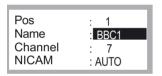
- Press MENU and select Tuning AT
- Press ENTER
- Select Manual AT and press ENTER
- Select a free line down the list: ◀▶▲▼
- Press ENTER
- Press ◀▶ to start Channel tuning, or the Numeric buttons to enter the channel number.
 Wait until the desired station has been set.
- Press MENU to return to the Tuning screen.

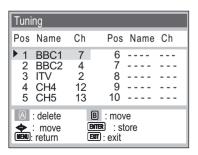
Note: If you have performed Manual Tuning to find TV stations, the [- -] indication may appear under [Pos/Name] on the On Screen Display when programming a VIDEO Plus+ timer recording.

Manual setup









Changing the name of TV stations

- Press Menu and select Tuning AV
- Press ENTER
- Select Manual and press ENTER
- Select a TV station ◀▶▲▼
- Press ENTER
- Select the Name entry ◀▶.
 The cursor will mark the first letter BC1.
- Change that letter ▲▼
- Next letter ▶, BBC1
- Press MENU

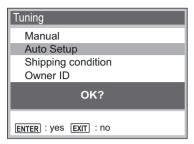
The new name will be stored in the station table.

Changing the order of TV stations or deleting a station

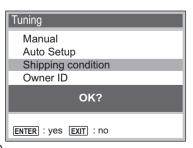
- Press MENU and select Tuning AT
- Press ENTER
- Select Manual and press ENTER
- Press button , an arrow at the left edge indicates which field has been selected.
- You can now move the station to any other location
- Press ENTER
- Press button to delete the station.

Manual setup









Restart Auto Setup

- Press MENU and select Tuning AT
- Press ENTER
- Select Auto Setup ▲▼ and press ENTER
- Press ENTER

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

Note:

- 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 / restoring factory defaults

Shipping condition resets the VCR back to the original factory settings. 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 and select Tuning AT
- Press ENTER
- Select Shipping condition ▲▼ and press ENTER
- Press ENTER

Note: - To re-tune the VCR, disconnect and reconnect the AC Mains lead.

Others Menu

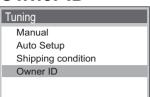


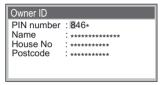
- Press MENU
- Select Others AV
- Confirm with **ENTER**
- Select the Menu item AT
- Changes with ◆▶
- Press **MENU** to quit the menu.

Others	
AV2 : SQPB : OSD : VCR/DVD OUTPUT : Remote :	AUTO(◀E-240) DECODER AUTO 4:3 AUTO VCR 1 2
: select MENU : return EXIT	: exit

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's AV2 21-pin scart socket. DECODER: If a decoder is connected. NORMAL: 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	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/TV/DVD switch. : Press the VCR/DVD OUTPUT button to manually toggle between the video and DVD outputs.		
Remote	You can set both the unit and the remote control unit to another frequency by choosing VCR1 or VCR2 from the menu. Press and hold remote control unit buttons ENTER and (a) or (a) to set the frequency channel of the relevant unit.		
EXT LINK	 : The VCR recording start and stop time is controlled by a control signal sent via the 21-pin cable from the external unit, for example Sky Digibox. : 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. 		

Owner ID







To change the 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 AT<
 , 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

• Keep **EJECT** pressed for more than 5 seconds.

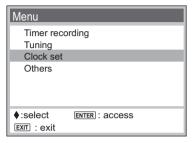
Notes:

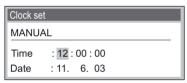
- The PIN number is not displayed.
- After 30 seconds, this menu automatically disappears.

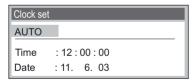
Clock setting



On Screen Display.







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 AV.
- 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 AV.
- 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 may be possible to activate this function.
- Press **EXIT** to exit the On Screen Display.

Notes: - 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.

TV control

Setting the Remote Control to operate your TV

• Set the VCR/TV/DVD switch to TV.



Only Panasonic TVs can be operated with the provided remote control. The settings for operating the TV with the remote control have already been made.

No additional settings need to be performed.

However, some of old Panasonic TVs cannot be operated using this remote control.

TV 🖒	TV-Standby/on	Press to switch the TV from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
0 0 0 0 0 0 0 0	Numeric (0-9)	To select desired programme position.
INPUT SELECT	AV	To select desired AV input on the TV.
TRACKING/V-LOCK	СН	Channel selector
VOLUME +	VOLUME	To adjust the volume of the TV.
TV ASPECT	TV ASPECT	To switch the screen format between the wide-screen and other aspects.

AUDIO out settings





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: - Rlayback 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.

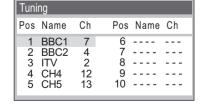
OFF: If you want to record the normal (mono) sound on the Hi-Fi audio

tracks during a NICAM broadcast, or if the stereo sound is distorted

due to poor reception conditions.

- Press Menu and select Tuning ▼
- Press ENTER
- Select Manual and press ENTER
- Select a channel ◀▶▲▼
- Press ENTER
- Select NICAM OFF ◀▶





Advanced functions

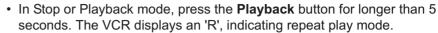




Repeat Playback

R 0:05.57

On-screen display



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

- Press to stop playing back at any time.
- The end of a recording is marked by noise portion without picture and sound.



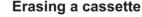
Quickly finds the start of a recording during playback or in Stop mode.



►► Fast Forward / ►< Rewind
 Every time you press the button (max. 20 times) the VCR will find the start of
 the next recording. Playback will automatically start for all recordings that are
 longer than 5 minutes.



Press
 to exit the Search function.





Press and hold for a few seconds the **QUICK ERASE** button on the unit to remove all recordings from a cassette.

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

Erasing avoids noise bands that may occur at the beginning and end of a recording over an existing one.

Note:

To protect the video heads, the unit automatically quits the Forward/Backward Search, Jet Search, Still Playback, Slow Playback functions after 5-10 minutes. Interference and motor noise are not indicative of a malfunction.

Advanced functions





Limiting the recording and playback time

Switches the unit into standby mode after the set time of recording, playback or in Stop mode.

• Press **OFF TIMER** repeatedly to extend the switch-off time from 30 to 60, 120, 180 or 240 minutes. The timer setting appears on the VCR/DVD display.

Tape Counter

To reset the tape counter (elapsed time) to "0:00.00".

- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.
- The tape counter can also be reset to "0:00.00" by pressing the RESET button on the remote control.

Convenient Automatic Functions

VCR Auto Power On

When you insert a video cassette, the VCR switches on automatically.

Auto Playback Start

When you insert a video cassette with a broken erasure prevention tab, playback starts automatically without pressing the **Play** button.

VCR-off Playback

When the VCR is off, and you press the **Play** button with a tape inserted, the VCR switches on and playback begins.

Auto Rewind

When the tape reaches the end, the VCR automatically rewinds it to the beginning (This function is disabled during timer recording).

Automatic Switch Off and Eject

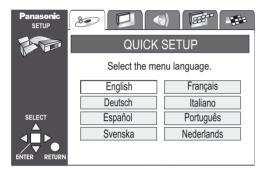
When the VCR is switched off, a tape can be ejected by pressing the **EJECT** button. The VCR will eject the cassette and automatically turn itself off again.

To eject the Video Cassette using the Remote Control

Keep the **Stop** button pressed for more than 3 seconds.

DVD QUICK SETUP





The items of the DVD QUICK SETUP menu provide an easy means of making some basic settings for your appliance.

- When the appliance is properly connected and the VCR AUTO SETUP is completed press **Standby/On** button \circlearrowleft to switch on the unit.
- Set the VCR/TV/DVD switch to DVD.
- Press the SETUP button on your remote control unit to display the QUICK SETUP menu which allows you to adapt the settings.

Navigate the user-friendly and clearly arranged on-screen menu by means of the cursor keys on the remote control unit ◀▶▼▲ .

Press

- ENTER to accept your selection.
- **RETURN** to go back to the previous on-screen menu.

Every menu item may provide further information on the options you have. Start by selecting a **menu language**.

Select the audio language:

If the language you want is not on the list, go to item Other and type in the appropriate language code (see last page) using the numeric key pad of your remote control unit.

Select the subtitle language:

If the language you want is not on the list, go to menu item Other and type in the appropriate language code (see last page) using the numeric key pad of your remote control unit.

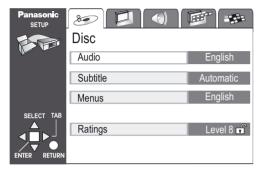
Select your TV's aspect ratio:

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

This completes the basic settings. If you want to change any of these settings, go to Others in the SETUP menu.

SETUP-menu Disc





Options of the SETUP menu

The SETUP menu contains options concerning menu items Disc, Video, Audio, Display and Others.

A clearly arranged on-screen menu guides you to and through the options.

- Press **SETUP** to display the SETUP screen.
- To select one of the SETUP sub-menus (e.g. Disc) from the tool bar, press ◀▶.
 The selected menu will be displayed.
- Press ▼▲ to select the option you wish to change (e.g. Audio).
- Press **ENTER** to confirm your choice. The available options will be shown.
- To select a setting press ◀▶▼▲, then press ENTER to confirm.
- This will automatically take you back to the on-screen menu of the SETUP menu item you selected. You can now change further settings.
- Press **RETURN** to return to the previous screen.
- Press **SETUP** to quit the SETUP menu.

Audio:

Select a dialogue language as appropriate.

The menu lists eight languages for you to choose from.

Original: The primary language on the disc is played.

If the language you want is not on the list, go to item Other and type in the appropriate language code (last page) using the numeric key pad of your remote control unit.

Subtitle:

Select a subtitle language as appropriate.

Select the Automatic display of subtitles if the disc contains no track with a dialogue language recording.

To select another language for the subtitles, proceed as described in section Audio.

Menus:

Select the language for the disc menus.

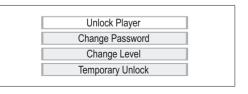
Proceed as described in section Audio.

SETUP-menu Disc









Ratings

Assign a rating to disallow the viewing of some scenes (1-7) or the entire DVD-Video disc (0).

This feature is not supported by all DVD-Video discs.

To select a rating (factory setting is "8")

When you select a rating between 0 and 7 you will be automatically prompted for a password.

- Type in a 4-digit code using the numeric key pad of your remote control unit.
- Press ENTER to confirm your entry.

The picture of a closed padlock tells you that the system is locked.

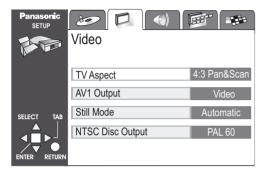
Make sure not to forget your password code.

To change the setting:

- Type in your password code.
- Press ENTER to confirm your entry.
- Select a new setting.
- Press ENTER to confirm your entry.

SETUP-menu Video





TV Aspect:

The format of TV screens is either 4:3 (standard) or 16:9 (wide-screen). Choose the 16:9 format if your player is attached to a wide-screen TV set. If it is attached to a standard TV screen you can choose either 4:3 Pan&Scan or 4:3 Letterbox (see illustration):

Pan&Scan:

Automatically crops a 16:9 picture and turns it into an optimum 4:3 picture producing neither black bars nor distortions.



* This format is not supported by all DVDs.

Letterbox:

Black bars will appear at the top and bottom edge of the screen to allow the reproduction of wide-screen video material on a standard TV screen.



AV1 Output:

Please check which setting is supported by your TV set. Please refer to the operating instructions of your TV set.

Video: Standard picture quality

RGB: Set RGB for best picture quality at DVD playback.

Still Mode:

Every picture frame is made up of two fields which are output to the screen one after the other.

Automatic: The unit automatically selects the optically better type of image.

Field: Poorer quality than a frame-based image; however, the image is less fuzzy.

Frame: Both fields of a picture alternate on the screen. Although the image may be somewhat fuzzy, its quality is better than that of a field-based still image.

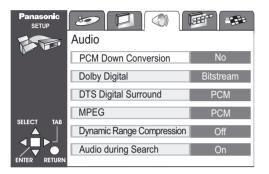
NTSC Disc Output:

To play a NTSC disc, select a TV standard (NTSC/PAL60) that matches the function of your TV set.

Please refer to the operating instructions of your TV set.

SETUP-menu Audio





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

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





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. The display will show "D.Mix" if you have multi-channel sound that can be mixed down to two channels.

PCM Down Conversion: Pulse Code Modulation

PCM is the standard method used to record digital music signals on audio CDs. DVD-Videos can be produced using the linear PCM method which is based on a sampling frequency of up to 96 kHz.

For reasons of copyright protection, the digital output of PCM audio signals may be limited to 48 kHz/16 bit.

Select "Yes" if an optical digital audio cable is used to connect your player to an amplifier that only processes sampling frequencies of up to 48 kHz.

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

^{*} If the equipment you connected cannot decode the signal, the setting must be changed to PCM. If not, signals that the equipment cannot process will be output by this unit causing high levels of noise which can damage your hearing and the speakers

Dynamic Range Compression:

Available in the Dolby Digital (DVD) format only.

This function compresses the volume range by putting up the level of soft passages and lowering the level of loud passages, e.g. to turn down the overall volume late at night.

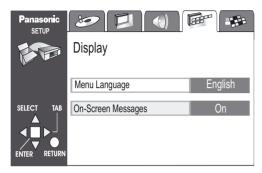
This option allows you to say whether or not the volume range is to be compressed.

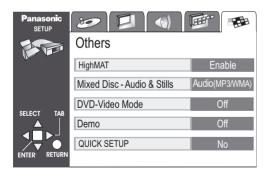
Audio during Search:

Lets you decide whether or not the sound is to be on during the search.

SETUP-menu Display/Others







Menu Language:

Select a menu language as appropriate.

On-Screen Messages:

The TV screen displays the commands you give by pressing the buttons on the remote control unit.

Select "Off" to suppress the display of on-screen commands.

HighMAT

Enable: to activate HighMAT playback (Page 54)

Disable: to play back HighMAT discs in WMA/MP3/JPEG format.

Mixed Disc - Audio & Stills:

Your DVD player can play back/display discs in the MP3/WMA (audio) and JPEG (image) formats. Select a playback format (JPEG or MP3/WMA) if the disc provides data in both formats.

DVD-Video Mode:

Playing back a DVD-Audio disc in DVD-Video mode ("On") allows you to play the DVD-Video section of the DVD-Audio disc.

This feature is not supported by all discs.

Demo:

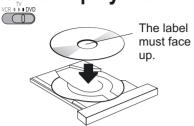
Select "On" to start a presentation of the different displays that the player can output to the TV screen.

Press **SETUP** to return to the SETUP menu.

QUICK SETUP:

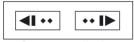
This function takes you to the QUICK SETUP menu.

Please refer to page 40 "DVD QUICK SETUP".



Example:

Group : WMA
Track : Example



On-screen display



On-screen display

Preparation

Switch on the TV set and set it to the video input that matches the connection between player and TV set.

Playback

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

- · Place the disc on the disc tray.
- Press PLAY ▶ to close the disc tray.Play back starts automatically.
 The player may take some time to read all of the disc information!

To pause playback

To stop playback

- Press PAUSE during playback.
- Press PLAY ▶ to resume playback.

Press STOP ■ twice one after the other.
 See page 47 "Resume function"

MP3, WMA, CD Text:

An on-screen box will display information on the track playing.

• Press **SUBTITLE** to show or hide the information box.

Slow Motion

DVD-V DVD-A RAM VCD

- Press SLOW ➡ (Slow Motion playback forwards or backwards) in pause mode.
- The speed of slow playback will increase in 5 steps while the relevant button keeps being pressed.
- Press PLAY ▶ to resume playback at normal speed.
- * VCDs do not support reverse Slow Motion playback.

Search function

DVD-V DVD-A RAM VCD CD MP3 WMA

- Press SEARCH ➡ during playback.
- The speed of search will increase in 5 steps while the relevant button keeps being pressed.

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

Skipping chapters, tracks or pictures







Scene replay

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

· Press QUICK REPLAY during playback.

Every push of the button replays a couple of seconds of the current item; on a JPEG disc it will take you back a couple of pictures.

However, you cannot go back to before the beginning of an item.

* QUICK REPLAY is not supported by all discs.

Random playback

DVD-V DVD-A VCD CD MP3 HighMAT

Plays all chapters/tracks once each in a random order.

- Press PLAY MODE in Stop mode. The PROGRAM screen is displayed.
- Press PLAY MODE again to display the Random Playback screen.
- * DVD-V/ DVD-A: Press ▼▲ or the numeric keys of the remote control unit to select or specify the title/group to be played in a random order.
- Press PLAY ▶ to start random playback.

To cancel the random play function

- Press PLAY MODE in Stop mode.
- * If you wish to use this function with HighMAT discs, you have to deactivate HighMAT in the SETUP menu. Then insert your HighMAT disc (page 54).

Resume function

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

This function allows you to interrupt the playback of a disc.

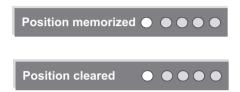
- Press STOP during playback to store the current position on the disc.
- Press **PLAY** ▶ while "▷" is flashing on the display.

Playback will be resumed at the point where you stopped it.

To cancel the Resume function

- Press STOP until " > " is no longer displayed.
- * The resume function is available only if the elapsed time is displayed during playback.

 The stored position will be cleared when you open the disc tray or when the unit goes into stand-by mode.



POSITION MEMORY

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

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

This function is available only if the elapsed playback time is displayed when playing the disc.

- Press POSITION MEMORY during playback.
- The "Position memorized" box will be displayed.
- You can now press \circ to go into stand-by mode or change discs.
- Press PLAY ▶ to replay the disc again. Playback will be resumed at the stored position and the position tag will be cleared.
- * Some discs do not fully support all of this function.

Chapter review

DVD-V

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** ▶. Screen "Press PLAY to Chapter Review" is displayed.
- Press PLAY ▶. The first couple of seconds of every chapter are played back.
 Normal playback will be resumed at the point where you stopped it.
- Do <u>not</u> 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.

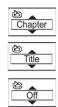
Frame-by-frame

DVD-V DVD-A RAM VCD

In pause mode, press remote control buttons **\(\bigsip \)**. 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 use button ■ to move the film forward a single frame at a time.

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



REPEAT



• Press REPEAT during playback. Repeatedly press the button to browse the settings as follows:

DVD-V DVD-A RAM	4444	Chapter Track Program Scene	$\stackrel{\rightarrow}{\Rightarrow}$	Title Group All Plavlist	$\stackrel{\Rightarrow}{\Rightarrow}$	Off Off Off Off
VCD/CD MP3/WMA JPEG HighMAT	444	Track Track Group Content	$\stackrel{\rightarrow}{\Rightarrow}$	All Group Off Group	=	Off Off

* The repeat function is available only if the elapsed time is displayed during playback. There is no mode that allows you to repeatedly play back entire DVD, WMA, JPEG or MP3 discs.

Repeating a VCD using playback control (PBC)

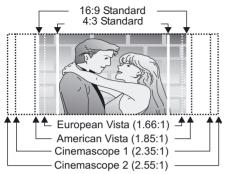
- Press **STOP** during playback until "PBC" disappears from the display.
- Type in the number of the CD track using the RC unit's numeric key pad.
- Press REPEAT. The display shows "TRACK REPEAT" or "ALL REPEAT".





space.

Preset Zoom Mode:



Synchronous recording



ZOOM function DVD-V DVD-A RAM VCD This function allows you to zoom into the picture to make better use of the available screen

- Press ZOOM during playback.
- * DVD-V : Press ◆▶ to display the Subtitle Position and Brightness screen, press ▼▲ to change the setting.
- Press ENTER and then

 to change the Zoom mode setting.
- Repeatedly press the button to browse the settings:
 - 4:3 Standard → European Vista → 16:9 Standard → American Vista
 - → Cinemascope 1 → Cinemascope 2.
- Press to fine-tune the zoom factor.

To restore the original ratio

- Press **ZOOM** until x 1.00 is displayed. The original ratio is also restored by opening the disc tray or when the unit goes into stand-by mode.
- * The zoom functionality may be restricted depending on the disc format.

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

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

- Use PLAY ▶ and II/I> to select the disc's starting position.
- Set dc channel with AV INPUT SELECT.
- Use ◀◀▶▶, PLAY ▶ and III/I to define the starting position for tape recording.
- Press **REC** to activate the recorder's recording stand-by mode.
- Press II/I starts synchronous recording.
- * Playing back music, NTSC formatted films or copy-protected discs might result in interferences.

MUSIC with PICTURE

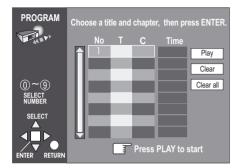
It is possible to simultaneously use the DVD player DVD-V | DVD-A | RAM | VCD | CD | MP3 | HighMAT | for playing back a music disc and presenting video pictures.

- Set the VCR/TV/DVD switch to DVD.
- Press PLAY ▶ to start music disc playback.
- Press MUSIC w/ PICTURE. The VCR output is displayed.
- You can input a signal from external source (e.g. dig. camera) or use the CH button to select the respective TV channel.
- To playback a video cassette set the VCR/TV/DVD switch to VCR and press PLAY ▶.
- To guit press MUSIC w/ PICTURE in stop mode.



Programme play





*If you wish to use this function with HighMAT discs, you have to deactivate HighMAT in the SETUP menu. Then insert your HighMAT disc (page 54).

Programme play

DVD-V DVD-A VCD CD MP3 WMA HighMAT

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

- Press **PLAY MODE** in stop mode until the PROGRAM screen appears.
- Type in the numbers using the RC unit's numeric key pad.
- * MP3 and WMA: Press ENTER to confirm your selection.
- Press PLAY ▶. Playback will start in the programmed order.
- * Certain discs may not provide this function.

To select a number using the cursor keys:

- Press ENTER.
- To select an item press ▼▲.
- Press **ENTER** to store that number.
- Press PLAY ▶. Playback will start in the programmed order.

To modify entries

- To select an entry press ▼▲.
- Press ENTER.
- · Modify the entry as appropriate.
- Press ENTER to store the modified entry.

To delete entries

- To select an entry press ▼▲.
- · Choose Clear.
- · Select Clear all to clear all entries.
- Press ENTER accepts your selection.

To quit the programme play mode

- Press **PLAY MODE** in stop mode until the programme play screen disappears. The actual programme will be retained.
- * Switching off the player or opening the disc tray will clear the programme.

DVD-V DVD-A RAM VCD CD MP3 WMA JPEG HighMAT

Playing back a particular track or title

Type in a number using the RC unit's numeric key pad. For example, to select title 23: DVD/RAM/VCD/CD: Press @ + @ + @ + @.

MP3/WMA/JPEG/HighMAT : Press 2 + 3 + ENTER.

The unit will automatically start playing the selected track or title.

* Certain discs may not provide this function at all or only if the appliance is in stop mode.

JPEG



Your VCR/DVD player can output JPEG pictures (Exif version 2.1) that were taken with a digital camera, for example, or generated by means of any other system. The resolution should range between 320 x 240 pixels and max. 6144 x 4096 pixels. Note that JPEG files must be extended by ".JPG", ".jpg", ".JPEG" or ".jpeg" and compressed in format 4:2:2 or 4:2:0.

- Press MENU to display the album of JPEG pictures.
- Use the cursor keys ◆▶▼▲ and ENTER to select the pictures.
- Press "Prev" or "Next" and ENTER to page through the album.
- Menu item "Tree" controls the group directory.
- Press ▼▲◆▶ and ENTER to take your pick.
- Press RETURN or MENU to quit the menu screen.

To rotate pictures

- Press ANGLE/PAGE while the picture is being displayed.
- Press **** to select the direction of rotation.
- Press **ENTER** to actually rotate the picture to the desired position.
- Press RETURN to quit this menu.

To skip groups

Press ▼▲ in picture mode to skip forwards and backwards.

To activate the JPEG on-screen displays

Press DISPLAY while pictures are being displayed.
 The on-screen displays will appear.



Press DISPLAY.

The Progress Indicator will be displayed.



Refer to pages 55-57 to learn more about how to use the on-screen displays (OSD).

MP3 | WMA | CD-Text

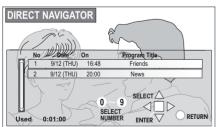
MP3 / WMA MENU





DVD-RAM Menu





- Press **MENU** to display/quit the MENU.
- Press and ENTER to select a track.
- Press to expand the Tree (table of contents).
- Press ▲▼ ◀▶ to select a group, press ENTER to confirm your selection.

To search for tracks

- Press AT to select the Find item, then press ENTER to display the text box.
- To enter a word from the track title you are looking for press
- Press ENTER after every letter to confirm it. To delete an entry press ◀.
- Upon completion press ▶ to select Find and press ENTER to run the function.
 All entries containing the word you specified are output to the match list.
- Press AT and ENTER to select a track title.
- To look for the first word in a title press

 to delete the asterisk.

 All entries starting with the word you specified are output to the match list.
- If there are no matches (Not found): press RETURN to change your search entry.
- Press Prev/Next to browse the album for the previous or next group.

Your VCR/DVD 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.

- Press **DIRECT NAVIGATOR** to display/quit the menu.
- Only programme names will be shown that were entered when the RAM was produced.
- Select a programme number using the numeric keys or pressing AV.
 The programme you selected will be played in the background.
- Press ENTER to confirm the setting and hide the on-screen display.

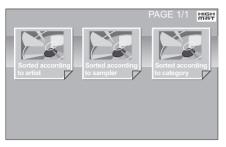
To output a Playlist

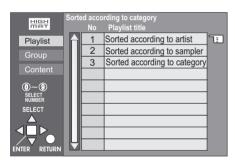
This function allows you to play groups of scenes previously produced by means of a DVD video recorder, for example.

- Press PLAY LIST to display the PLAY LIST screen.
- Press or use the numeric keys to select a Playlist.
- Press **ENTER** to start playing the list.
- · Press PLAY LIST to quit the menu.

HighMAT









HighMAT (High Performance Media Access Technology) is a jointly developed technology of Panasonic and Microsoft. If diverse computer data (WMA, MP3 and/or JPEG) is stored in HighMAT format on one disc, the HighMAT technology makes all of the information easily available for playback via the user-friendly and clearly arranged menu. The HighMAT format is fully compatible to the ISO 9660 Joliet standard.

While the menu is displayed

Press ▲▼ ◀▶ to select then press ENTER.



Menu: Takes you to the next menu which shows play lists or another menu



Play list: play starts

- Press TOP MENU to display the menu.
- · Press RETURN to display the previous menu.
- Press **DISPLAY**. The background changes to the one recorded on the disc.

Selecting from the Playlist

- Press MENU while playing.
- The Playlist appears (indicates the item currently playing).
- Press

 then

 to switch between the Playlist, group and content lists.
- Press ► then ▲▼ to select an item and press ENTER.
- To exit the Playlist press MENU.

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MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia

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On-screen displays



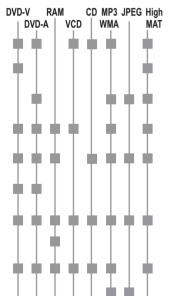


You can display on-screen information on disc and player (OSD) and manipulate various settings. Some DVD- discs do not support all of the settings. Please use the DVD menu instead.

- Press DISPLAY during playback. Enables the on-screen display feature.
- Use the cursor keys ▼▲ ◀▶ to make or change various settings.
- Some entries need to be confirmed by pressing **ENTER**.
- Press **DISPLAY**. The Progress Indicator will be displayed.

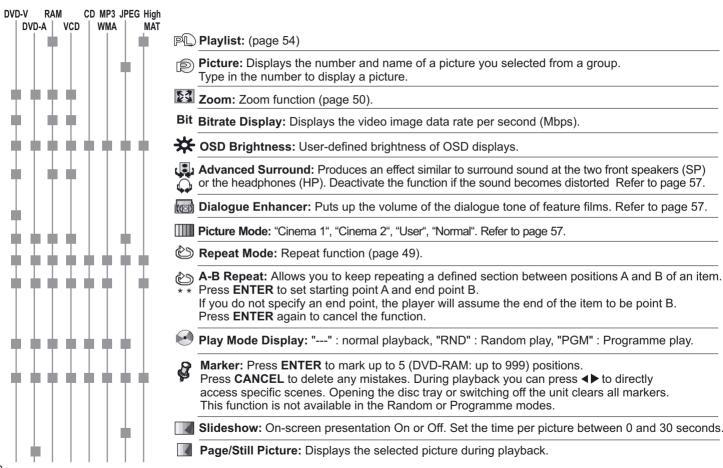


- Press ◀▶ to change the playback speed (DVD-V: Dolby Digital only).
- Press ▼▲ to display the elapsed and the remaining playback time.
- Press DISPLAY again. Now use the cursor keys ▼▲ to select any of the menu items (Play Menu, Display Menu, Audio Menu, Picture Menu).
- Press RETURN to hide the on-screen displays.



- Title or Track: Allows you direct access to a title/track if the disc hosts several.
- Chapter/Content: Allows you direct access to a chapter if the disc hosts several.
- Group: MP3/WMA or DVD-A tracks or JPEG pictures defined to make up a group. You can also provoke an on-screen display by pressing the **GROUP** button on your remote control unit.
- **Audio:** Allows you to alter the pre-set language of synchronisation provided the disc gives you an alternative. RAM/VCD: Sets the right or left audio channel.
- **Subtitle:** Selects the language of subtitles and sets their on-screen position and brightness. JPEG: Picture information; FULL: Displays all information; DATE: Displays the date; OFF: No display.
- Angle: Change between camera angles of films recorded from various camera locations.
- Bar Position: You can move the OSD displays around to another place on the TV screen.
- PG Program: Programmes stored on a DVD RAM (page53).
- Time: Display/select playback time (DVD-V,DVD-A,RAM: numeric keys). DVD-V,DVD-A,RAM,VCD, CD: Alternative display of elapsed or remaining playback time. MP3,WMA,SVCD: Playback time only.
- Total: Number of track/picture selected plus total number of items in selection.

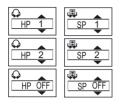
On-screen displays



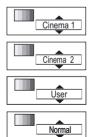
DVD-V RAM VCD

On-screen displays









Advanced Surround

With 2 or more audio channels only

Repeatedly press the button to browse the settings. Press ◀ and ▼▲ to toggle between SP and HP:

SP 1/HP 1: Normal rate of effect Enhanced rate of effect

SP OFF/HP OFF : Advanced Surround effect off (factory default)

- * 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.

 Dolby Pro Logic will not work properly if Advanced Surround is on.

Dialogue Enhancer

DVD-V

Available in the Dolby Digital format and DTS with 3 or multiple channels only.

Repeatedly press the button to browse the settings:

→ Dialogue Enhancer ON

Dialogue Enhancer OFF: Factory default.

* The function Dialogue Enhancer is not supported by all discs.

CINEMA

DVD-V DVD-A RAM VCD JPEG

The CINEMA function can either be accessed via the on-screen displays or directly selected by pressing the remote control button **CINEMA**.

You can manipulate the picture quality of films:

Press CINEMA

Press ▼▲ to select the individual settings:

Cinema 1 : Improved contrast of details of dark scenes.

Cinema 2 : Improved brightness setting for dark scenes.

▼ User : User-defined colour, contrast and brightness settings

■ Normal : Normal : Factory default.

Before requesting service

GENERAL DISTORTIONS						
There is no audio output and the sound is distorted:	Check the connections.Deactivate the Advanced Surround effect.					
The VCR display does not light up:	Verify that the AC mains lead is properly attached					
The VCR display is on but the unit does not respond to any input:	There is an active timer programme. Press the TIMER button to deactivate it.					
Error code "H □□" or "F □□" appears:	 This is indicative of a malfunction. The digits following "H" or "F" depend on what state your player is in. Press [७//] to put the player into standby mode, then briefly unplug and re-connect the AC mains cable. Contact the aftersales service if this does not remove the problem. Please state the error code displayed by the set. 					
The picture is disturbed when searching:	This is a technical issue and not indicative of a malfunction.					
The screen outputs no picture:	Check the connections.Verify that the correct video input of the TV set has been selected.					
The picture is cut off at its left or right edge:	 Go to the SETUP screen and check the "TV Aspect" setting in the Video menu. Check whether the player is directly plugged into the TV set's "AV IN (Scart)" or whether it is going through a video recorder between the two units. Check the Zoom setting (page 50). 					
The remote control unit does not work properly:	 Check if the remote control is operating VCR1 or VCR2 (page 33). Check the distance between the remote control unit and the VCR/DVD (max. 7 metres). Check the batteries in the remote control unit (page 7). Point the remote control unit straight at the remote control signal sensor on the front panel. 					
No messages are output to the screen:	 Go to the 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 VCR OSD display 					

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. 						
The automatic clock does not set correctly:	 Set Clock set to AUTO (page 35). Set Time and Date manually if the unit does not find a station emitting the time signal. 						
Bad picture or sound:	 The use of E-300 cassettes may cause problems if the recordings were taken at slow tape speeds (LP or EP). Verify that the aerial and/or scart cables are attached and work properly. Check the SQPB setting for S-VHS cassettes (page 33). 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 on flashes on the unit, check if the protection tab of the video cassette is still in. Check the Clock set menu (page 35). Check the start and stop time of the timer programme (page 24). Check if the TIMER button has been pressed to put the unit into timer mode after programming a recording (page 24). Check the start and stop time of a PDC recording (page 26). 						

The model no. and serial no. of this product are stuck down on the rear of the appliance. Please enter them below to serve as reference.	
Model No.	
Serial No	

Before requesting service

DVD DISTORTIONS							
The loudspeakers emit loud noise:	Go to the SETUP screen and check the Audio menu settings of "Dolby Digital", "DTS Digital Surround" and "MPEG".						
The message "NO PLAY" appears:	 The player cannot play discs of the current format. The disc contains no recorded material. Child lock is enabled. 						
The OSD displays are cut off along their top edge:	Move the display position down.						
The player does not respond to function key commands:	 Certain control operations are not available with some discs. Interference caused by lightning or static charge. Press [७//] to put the player into stand-by mode. Restart the player. 						
Playback does not start after pressing PLAY:	 Condensation has accumulated inside the player. Wait for 1 to 2 hours. The player only supports DVDs with regional code "2", "All" or from a group of regional codes containing regional code "2". The disc is dirty. The disc is in the wrong way round. The label of the disc you wish to play must face up. 						
Unable to change audio track or subtitle languages:	 You can only choose from the languages actually recorded on the disc. Some discs require you to change languages via the disc menu. 						
The subtitles are not shown:	 The disc does not provide any subtitles. You deactivated the display of subtitles. The subtitles are output to the wrong position. Move the position of subtitles. 						
The language selected from the menu is not used for the audio track or subtitles:	The disc does not provide the language you selected.						
Unable to change the aspect angle:	It depends on the disc whether this function is available.						
You have forgotten your password:	• Stop the player and keep pressing player button ☑/← together with ⑥ (DVD area) and ☐ DVD until "Initialized" disappears from the screen. This will restore all factory defaults. When you are done switch off the unit and back on afterwards. You will afterwards have to go to the QUICK SETUP menu (page 40) to set up the basic settings again.						

Informations

DVDs can contain titles and chapters that the producer of the disc put into a specific order. DVDs feature a Title menu that lists the available titles and chapters.

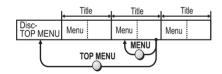
However, you can choose to select and then play individual titles and chapters.

DVD playback can be controlled and manipulated via the menu that the DVD player outputs to the TV screen. The audio tracks of many DVDs contain audio material in up to 8 languages. The DVD menu has an option for selecting the language you prefer. Many DVDs provide subtitles in several languages. They may contain material in up to 32 different languages. Some DVD player functions can be controlled by the DVD itself.

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.



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



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.









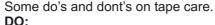


Playing DVDs and VCDs: The producer of the programme material can define the way in which the disc is played. Consequently, you may sometimes find that, in some cases, you cannot control the playback the way you wish using all of the functions and operations described in these operating instructions.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

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.

Cleaning and care: Just use a soft, dry cloth. Do not use alcohol or benzine.

Tape Care



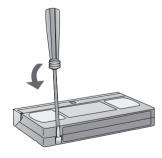
- 1) Use a good quality branded tape, such as Panasonic.
- 2) Keep in the box supplied with the tape, or a video case, when not in use.
- 3) Try to use the whole tape when making recordings and avoid re-recording over the same section of the tape repeatedly as this will help prevent premature tape wear.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

DO NOT:

- 1) Expose the tape to high humidity or temperature.
- 2) Expose to liquid.
- 3) Expose to dust particles by storing directly on a carpet for example.
- 4) Use a damaged tape or attempt to repair it.
- 5) Dismantle the cassette housing.
- 6) 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.



Specifications

220-240 V AC. 50/60 Hz Power supply: Power consumption: 27W (in operation) / approx. 6W (in Standby)

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. SP: 23.39 mm/s . 240 min / LP: 11.7 mm/s . VCR tape speed

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.

PAI 525/60 NTSC Video input and output level 1.0 Vpp (75 Ohm)

DVD S-Video output Y-output level: 1 Vpp (75 Ohm) / Coutput level: PAL: 0.300 Vpp (75 Ohm)

NTSC: 0.286 Vpp (75 Ohm) output connector: S-Video-terminal

DVD RGB-Video output RGB-output connector: 0.7 Vpp (75 Ohm) /

output connector: AV1

RF-converter VCR Horizontal resolution VCR S/N ratio VCR video

Input level audio

Output level audio

more than 43 dB (SP) 0.5V eff., more than 10 kOhm VCR: 0.5V eff., less than 1 kOhm / DVD: 2V eff. (1 kHz. 0 dB Fs) output connector: Pin jack, AV. 2

channel(I /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: Frequency response VCR audio

Frequency response DVD audio (linear audio)

DVD Optical digital output

Laser-Pick up

Operating temperature / humidity Weight and dimensions

115dB 20 Hz to 20 kHz (Hi-Fi sound tracks)

UHF-channel (21-69), 75 Ohm

more than 240 lines (SP)

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

Optical terminal

Wave length: 658 nm/790 nm / Laser power:

Class 2 / Class 1

5°C to 35°C / 35-80% RH

approx.value: 4.2 kg / 430 (width) x 89 (height) x 266 mm (depth)

Technical specifications are subject to change without notice.

DVD-Video	DVD-R	DVD-Audio	DVD-RAM	SVCD	Video-CD	CD	CD-R/RW	Ď
VIDEO VIDEO	R R4.7	AUDIO **	RAM [~] RAM 4.7	COMPACT SUPER VIDEO	COMPACT OISC DIGITAL VIDEO	DIGITAL AUDIO TEXT COMPACT COMPACT DIGITAL AUDIO		
DVD-V		DVD-A	RAM	V	CD	CD	WMA MP3 JPEG	

* It may not be possible to play CD-R, CD-RW, DVD-R and DVD-RAM in all cases due to the type of disc or condition of the recording.

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: Max, 999 tracks/ 99 groups.

Compatible compression rate:

MP3: 32 - 320 kbps WMA: 48 - 192 kbps. JPFG: Exif Version 2.1.

> Max. 3000 pictures and 300 groups: Picture resolution between 320 x

240 and 6144 x 4096 :

JPEG Format: 4:2:2 or 4:2:0.

HighMAT: Level 2 (Audio and Image)

A-B Repeat Advanced Surround Angle Audio AV2 AV1 Output AV-channels	Page 56 14,15,56,57,58 55 41,55 33 43 22	DTS Digital Sur DVD-RAM EXT LINK Field Frame Group	rround	15,44,60 53 23,33 43 43 49,55	NICAM NTSC NTSC Disc (OPTICAL OSD OSD Brightn On-Screen M	iess	ies	37 20 43 15 33 56 45,58	Scart cable Slideshow SP/LP select SQPB Still Mode Still Picture Subtitle S-VHS cass		2	14 56 26 33 43 56 41,55 20,33,59
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Ameharic 6577 B Arabic 6582 C Armenian 7289 C Assamese 6583 C Aymara 6588 C Azerbaijani 6590 C Bashkir 6665 C Basque 6985 D	Bihari 6672 Bireton 6682 Biugarian 6671 Burmese 7789 Byelorussian 6669 Byelorussian 6669 Cambodian 7577 Catalan 6765 Chiniese 9072 Croatian 7282 Croatian 7282 Zech 6783 Joanish 6865 Butch 7876	Estonia Faroese Fiji Finnish French Frisian Galician Georgian Gergian Gerek Greenlandic Guarani Gujarati Hausa	6979 Hindi 1984 Hungariai 17079 Icelandic 107073 Interlingu 17082 Irish 17089 Italian 1765 Javanese 1869 Kannada 18976 Kashmiri 17576 Kazakh 17178 Kirghiz 1718 Korean 17265 Kurdish 17387 Laotian	7383 7378 7365 7165 7384 7465 7487 7578 7583 7575 7589 7579 7589	Latin Latvian Lingala Lithunian Macedonian Malagasy Malay Malayalam Maltese Maori Marathi Moldavian Mongolian Nauru Nepali Norwegian	7665 7686 7678 7684 7775 7771 7783 7776 7784 7773 7779 7778 7865 7869 7879	Oriya Pashto Persian Polish Portuguese Punjabi Quechua Rhaeto-Ron Romanian Russian Samoan Sanskrit Scots Gaelic Serbian Serbo-Croad	8065 8185 n. 8277 8279 8285 8377 8365 c 7168 8382	Sindhi Singhalese Slovac Slovenian Somali Spanish Sundanese Swahili Swedish Tagalog Tajik Tamil Tatat Telugo Thai Tibetan	8368 8373 8375 8376 8379 6983 8385 8387 8386 8471 8465 8444 8469 8472 6679	Tigrinya Tonga Turkish Turkmen Twi Ukrainian Urdu Uzbek Vietnamese Volapük Welsh Wolof Xhosa Yiddish Yoruba Zulu	8473 8479 8482 8475 8487 8575 8582 8590 8673 6789 8779 88779 88779 9085