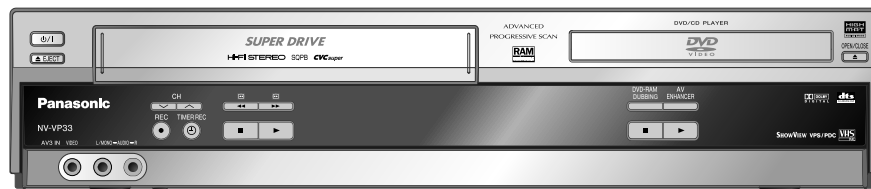


Panasonic

DVD/CD Player / Video Cassette Recorder NV-VP33 / NV-VP28 / NV-VP23

Operating Instructions



CVC super

SHOWVIEW

SUPER DRIVE



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

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Dear customer

Thank you for your trust and your decision to purchase this top-quality device. Panasonic is one of the leading manufacturers of entertainment electronics devices. We are sure that you will be completely satisfied with this device.

Matsushita Electric Industrial Co., Ltd.

<http://www.panasonic.co.jp/global/>



Included accessories

AC Mains Lead

RJA0043-1C



Batteries

AA, UM3 or R6

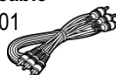


RF Coaxial cable



Audio/Video cable

K2KA6CA00001



Remote control

EUR7720X50 (NV-VP33 / NV-VP28)

EUR7720X70 (NV-VP23)

Operating Instructions

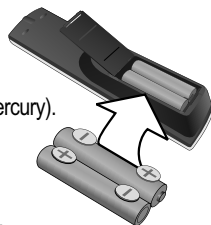
Guarantee Card

Inserting Batteries

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

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

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



WARNING:

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

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.

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.

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.

The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.

Voltage: Only use power sources complying with the specifications for this device.

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: Never attempt to repair this unit by yourself. If a problem occurs that is not described in these operating instructions, disconnect the power supply and contact your dealer or an authorised after sales service centre.

Safety Precautions

Install this device in a horizontal position.
Do not place anything heavy on it.



Keep this device away from high temperatures and avoid changes in temperatures.



Keep away from humidity and dust.



Inside of product

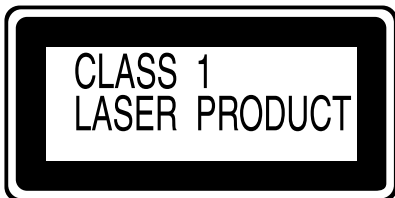
Produktets inside
(Norsk)

Tuotteen sisällä
(Suomi)

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. IEC9809-1 / Class 3b
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNNGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	- AVATTAESSA OLET ALTIINNA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLÄ. ÄLÄ KATSO SÄTEESEEN.
VARNING	- SYNLIG OCH USYNLIG LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL	- SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG. WENN ABDECKUNG GEÖFFNET NICHT DEN STRAHLEN 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

Back of product,
see page 12.

På baksiden
av produktet
(Norsk).
Laitteen takaosa
(Suomi).



LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

The model and serial number of this product can be found on the back of the unit. Please note them and keep for future reference.

Model No. Serial No.

SUOMI

VAROITUS:

TULIPALO-, SÄHKÖISKUVAARAN TAI TUOTETTA KOHTAAVAN MUUN VAHINGON VÄHENTÄMISEKSI EI LAITETTA SAA ALTISTAA SATEELLE, KOSTEUDELLE, VESIPISAROILLE TAI ROISKEELLE, EIKÄ NESTETTÄ SISÄLTÄVIÄ ESINEITÄ, KUTEN ESIMERKIKSI MALJAKOITA, SAA ASETTAA LAITTEEN PÄÄLLE.

VAROITUS!

- ÄLÄ ASENNATA TAI LAITA TÄTÄ LAITETTA KABINETTITYYPPISEEN KIRJAKAAPPIIN TAI MUUHUN SULJETTUUN TILAAN, JOTTA TUULETUS ONNISTUISI. VARMISTA, ETTÄ VERHO TAI MIKÄÄN MUU MATERIAALI EI HUONONNA TUULETUSTA, JOTTA VÄLTETTÄISIIN YLIKUUMENEMISESTA JOHTUVA SÄHKÖISKU TAI TULIPALOVAARA.
- ÄLÄ PEITÄ LAITTEEN TUULETUSAUKKOJA SANOMALEHDellä, PÖYTÄLINALLA, VERHOLLA TAI MUULLA VASTAVALLLA ESINEELLÄ.
- ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
- HÄVITÄ PARISTOT LUONTOA VAHINGOITTAMATTOMALLA TAVALLA.

VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITUN TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

Tämä tuotteen toimintaan saattaa tulla häiriöitä lähellä olevasta matkapuhelimesta. Mikäli matkapuhelimesta johtuvia häiriöitä ilmenee, siirrä matkapuhelin mahdollisimman kauas laitteesta jotta häiriöt poistuvat.

Laite tulee asettaa lähelle verkkipistorasia ja pistokkeen täytyy olla sellaisessa asennossa, että siihen on helppo tarttua ongelman sattuessa.

NORSK

ADVARSEL:

FOR Å REDUSERE FAREN FOR BRANN, ELEKTRISK STØT ELLER SKADER PÅ PRODUKTET, MÅ DETTE APPARATET IKKE UTSETTES FOR REGN, FUKTIGHET, VANNDRÅPER ELLER VANNSPRUT. DET MÅ HELLER IKKE Plasseres GJENSTANDER FYLT MED VANN, SLIK SOM BLOMSTERVASER, OPPÅ APPARATET.

ADVARSEL!

- APPARATET MÅ IKKE Plasseres I EN BOKHYLLE, ET INNEBYGGET KABINETT ELLER ET ANNET LUKKET STED HVOR VENTILASJONSFORHOLDENE ER UTILSTREKKELIGE. SØRG FOR AT GARDINER ELLER LIGNENDE IKKE FORVERRER VENTILASJONSFORHOLDENE, SÅ RISIKO FOR ELEKTRISK SJOKK ELLER BRANN FORÅRSAKET AV OVERHETING UNNGÅS.
- APPARATETS VENTILASJONSÅPNINGER MÅ IKKE DEKKES TIL MED AVISER, BORDDUKER, GARDINER OG LIGNENDE.
- Plasser IKKE ÅPEN ILD, SLIK SOM LEVENDE LYS, OPPÅ APPARATET.
- BRUKTE BATTERIER MÅ KASSERES UTEN FARE FOR MILJØET.

ADVARSEL!

DETTE PRODUKTET ANVENDER EN LASER. BETJENING AV KONTROLLER, JUSTERINGER ELLER ANDRE INNGREP ENN DE SOM ER BESKREVET I DENNE BRUKSANVISNING, KAN FØRE TIL FARLIG BESTRÅLING. DEKSLER MÅ IKKE ÅPNES, OG FØRSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

Dette apparatet kan under bruk fange opp høyfrekvente forstyrrelser forårsaket av en mobiltelefon som benyttes i nærheten. Hvis slik forstyrrende påvirkning konstateres, bør mobiltelefonen benyttes på større avstand fra dette apparatet.

Utstyret bør plasseres i nærheten av AC-stikkontakten, og støpslet må være lett tilgjengelig hvis det skulle oppstå problemer.

Remote control

General functions

Stand-by/on switch

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

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

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

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

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

Numeric keypad

Direct input via numeric key pad (18= 1 8)

CANCEL/RESET: Undoes entries or selections

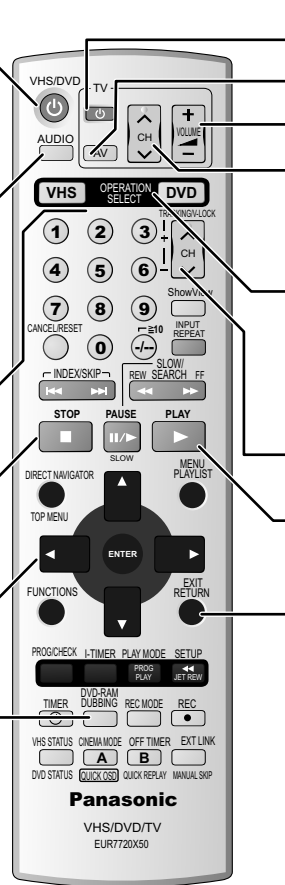
To eject cassette or disc

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

OSD menu selection buttons.

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

To copy a DVD-RAM to VHS cassette.



TV functions

TV Stand-by / on.

TV set AV input selection.

TV set volume control.

To select the respective TV program memory location.

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

VCR functions are enabled.

DVD functions (blue labels) are enabled.

Channel selector

Press **PLAY** to start playback.


Quits a menu.


Remote control VCR functions


Tape counter


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


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

Finding the start of a recording.  26

Pause a recording session.
Still or slow motion playback.  26


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


Defines programmes transmitted to the same program memory location at the same time.  22

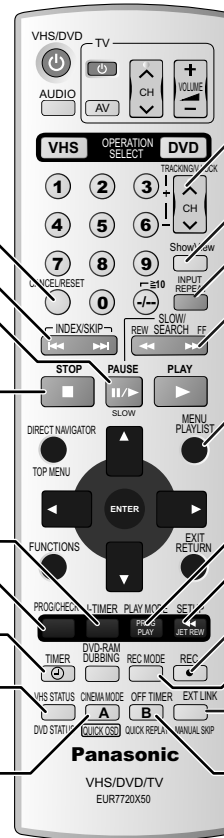
To display the Timer recording menu.  20


Activates the recording timer.


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

Cinema Mode  27

A: To delete tagged station.  16





Tracking control of disturbed images during playback  25


ShowView menu (not for VP23)  23


AV input select button

Toggles between input A1, A2, A3 (front) or dc (DVD internal).


Goes from Stop into Fast Forward or Fast Rewind mode. Forward and backward search during playback.  26

Displays the VCR menu.  14


Plays back programmed recordings.  21

For fast rewinding to the beginning of the tape.  26

Video recording

Sets the tape speed.  19

To record using the external recording level control.  24

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

B: Move tagged station.  16

Remote control DVD functions

Skip chapters, titles or frames

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

Stop playback

- Press **STOP** twice.

Resume

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

Cancel the Resume function

- Press **STOP** until the disc logo in the display is no longer blinking.
- * Opening the disc tray or the unit going into stand-by mode also clears the stored position on the disc.

Pause playback (still image)

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

Displays the DVD-RAM menu.

Displays the main menu.

Displays the Functions menu.

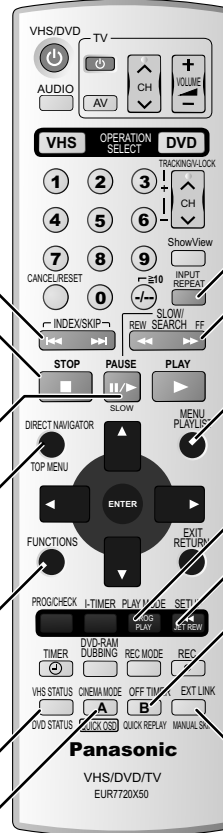
36

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

Hides the playback status display.

36

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



Repeat

- Press **REPEAT** during playback. 29
There is no mode for repeatedly playing back entire discs.

Slow motion (backwards/forwards)

- Press **SLOW** in Pause mode. Keeping the button pressed increases the speed of search at 5 steps.
- Press **PLAY** to resume normal playback.
- * VCDs do not support reverse slow motion playback.

Search

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

Displays a Playlist. 29

Displays the Navigation menu. 33

Program Playback / Random Playback 31

Displays the SETUP menu. 40

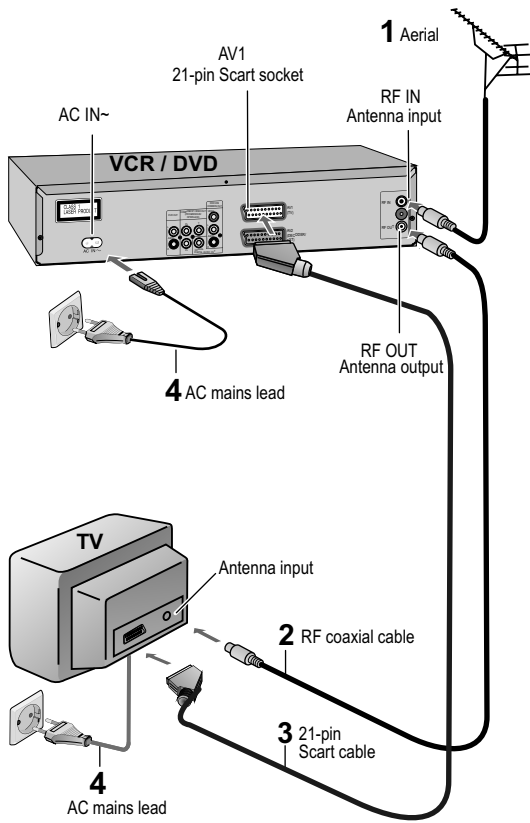
Scene replay (not with +R/+RW media)

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

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

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

Connecting with a 21-pin Scart cable



Follow the steps described below.

Disconnect power to all devices.

1 Connect antenna to the RF IN (Antenna input) connector of the VCR/DVD.

2 Connect the VCR/DVD's RF OUT (Antenna output) to the television set's antenna input connector.

3 Connect the VCR/DVD's AV1 socket (21-pin Scart socket) to the TV set's Scart In socket.

4 Connect VCR/DVD and TV set to the AC mains supply.

VCR Auto Setup with 21-pin Scart cable

(Automatic tuning)

Country		
Belgien	Italia	Sverige
Belgique	Nederland	Schweiz
België	Norge	Suisse
Danmark	Österreich	Svizzera
España	Deutschland	others
Ελλάδα	Portugal	
France	Suomi	

* If the Country menu does not appear after turning the device on, you may reset the device to its factory defaults (page 16). Upon doing so the VCR Auto Setup will start again.

- Turn on your television set and select the appropriate AV input.
- With the **Stand-by/on switch** turn on the VCR/DVD. The Country menu appears.
- With the arrow buttons **◀▶** select the according country, and confirm by pressing **ENTER**. Automatic tuning for all receivable TV stations begins. Approximate duration is 5 minutes.

If menu Clock set appears

If time and date are not transmitted by a TV station, they must be set manually.

- Enter Time and Date with **▲▼◀▶** or **① ② ③...④**, then save with **ENTER**.
- * Mind that a wrong date or time will influence the programmed recording of TV programmes (don't forget to change summer time and winter time).

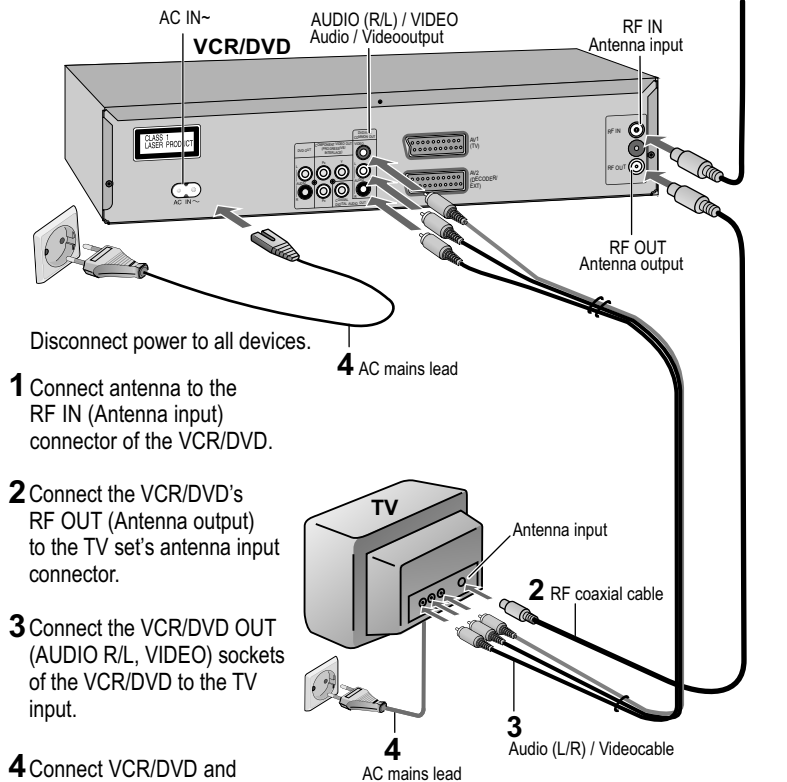
Optionally, you can have a **QUICK SETUP** following VCR Auto Setup for the DVD player.

Connection with RF Coaxial Cable

If connecting the VCR/DVD with the antenna input of the television only via the RF OUT output, no VCR/DVD picture will be displayed. You need an additional 21-pin Scart cable.

Connecting with Audio-Videocable

Follow the steps described below.



1 Connect antenna to the RF IN (Antenna input) connector of the VCR/DVD.

2 Connect the VCR/DVD's RF OUT (Antenna output) to the TV set's antenna input connector.

3 Connect the VCR/DVD OUT (AUDIO R/L, VIDEO) sockets of the VCR/DVD to the TV input.

4 Connect VCR/DVD and television set to the AC mains supply.

VCR Auto Setup with Audio-Videocable

(Automatic tuning)

Country		
Belgien	Italia	Sverige
Belgique	Nederland	Schweiz
België	Norge	Suisse
Danmark	Österreich	Svizzera
España	Deutschland	others
Ελλάδα	Portugal	
France	Suomi	

* If the Country menu does not appear after turning the device on, you may reset the device to its factory defaults (page 16). Upon doing so the VCR Auto Setup will start again.

- Turn on your television set and select the appropriate AV input.
- With the **Stand-by/on switch** turn on the VCR/DVD. The Country menu appears.
- With the arrow buttons **◀▶** select the according country, and confirm by pressing **ENTER**. Automatic tuning for all receivable TV stations begins. Approximate duration is 5 minutes.

If menu Clock set appears

If time and date are not transmitted by a TV station, they must be set manually.

- Enter Time and Date with **▲▼◀▶** or **① ② ③...⑩**, then save with **ENTER**.
- * Mind that a wrong date or time will influence the programmed recording of TV programmes (don't forget to change summer time and winter time).

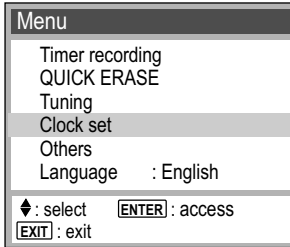
Optionally, you can have a QUICK SETUP following VCR Auto Setup for the DVD player.

28

Connection with RF Coaxial Cable

If connecting the VCR/DVD with the antenna input of the television only via the RF OUT output, no VCR/DVD picture will be displayed. You need an additional 21-pin Scart cable.

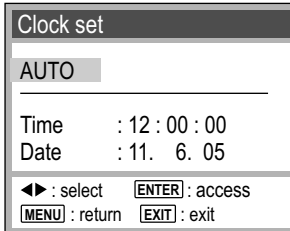
Setting Time and Date



VHS DVD

- Press **MENU**.
The Menu screen appears.
- With **▲▼** select Clock set.
- Press **ENTER**.

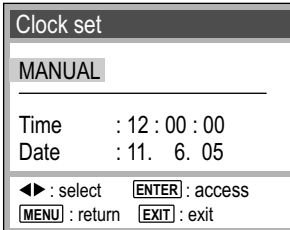
Automatic tuning (not for VP23)



- Select [AUTO] and confirm with **ENTER**.

If the device does not find a TV station broadcasting the time signal, set Time and Date manually.

Manual tuning









- Select [MANUAL] and confirm with **ENTER**.
- With **▲▼◀▶** or **①②③...⑩** enter Time and Date, then store with **ENTER**.

External Devices

Others		1 / 2
Tape length	: AUTO (◀E-240)	
AV2	: EXT	
TV system	: AUTO	
SQPB	: AUTO	
OSD	: 4 : 3	
Remote	: VCR 1	
EXT LINK	: 2	

Others		1 / 2
Tape length	: AUTO (◀E-240)	
AV2	: DECODER	
TV system	: AUTO	
SQPB	: AUTO	
OSD	: 4 : 3	
Remote	: VCR 1	
EXT LINK	: 2	

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	ARD	7	6	VOX	8
2	ZDF	4	7	PRO7	95
3	N3	2	8	RTL2	85
4	RTL	12	9	PREM	97
5	SAT1	13	10	SRTL	98

 : delete	 : move
 : select	 : access
 : return	 : exit

Connecting a Set Top Box, satellite receiver, decoder or a second recorder.


You can connect a Set Top Box to receive digital broadcast by antenna (DVB-T) signals, a satellite receiver (digital/analogue) or a decoder to decrypt encrypted programmes.

Disconnect power to all devices.



Connect the external device to the AV2 input of the VCR/DVD by using a 21-pin Scart cable.

Connect VCR/DVD, television set and the external unit to the AC mains supply and switch them on.



 

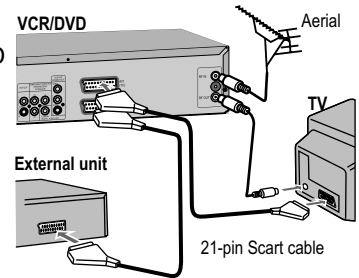
- Press **MENU**.
- With  select the Others menu and confirm with **ENTER**.

Set Top Box, satellite receiver, second recorder:






- Select AV2 with , and set to [EXT] with .

Decoder:




- Select AV2 with , and set to [DECODER] with .
- Press **MENU** to return to the Menu screen.
- When using a decoder switch channel to decoder.



Setting the channel to decoder

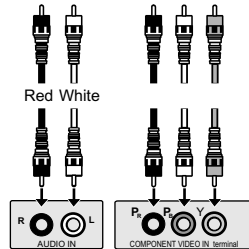
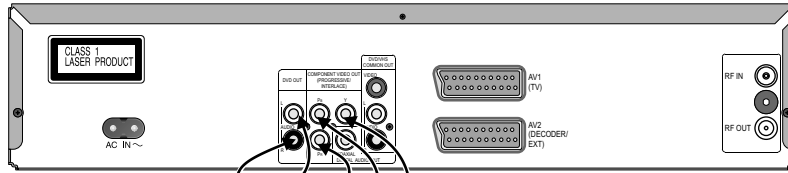
- Press **MENU**.
- With  select menu Tuning.
- With **ENTER** select Manual.
- With ,  select the encrypted channel and confirm with **ENTER**.
- With  select Decoder, then select [ON] with .
- Press **MENU** to return to the Tuning menu.

Pos	: 9
Name	: PREM
Channel	: 97
Fine tuning	: AUTO
Decoder	: ON
Video system	: PAL
Mono	: OFF
Audio mode	: BG

 : select	 : return	 : exit
--	---	---

* Not every model supports all of the functions.

Connectors



Back of television set (example)

DVD connectors

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

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

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



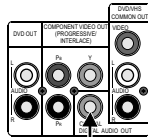
COMPONENT VIDEO OUT - Connection

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

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



Connectors



Amplifier (example)

Digital connectors (COAXIAL) (only DVD)

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

Prerequisites for making recordings with an external digital recorder

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

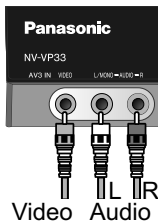
- * Adapt the Audio SETUP menu settings to the following:
PCM Digital Output: [Up to 48 kHz]
Dolby Digital / DTS Digital Surround / MPEG: [PCM]
- * Deactivate function Advanced Surround.



VCR

Connection to AV3 (front panel)

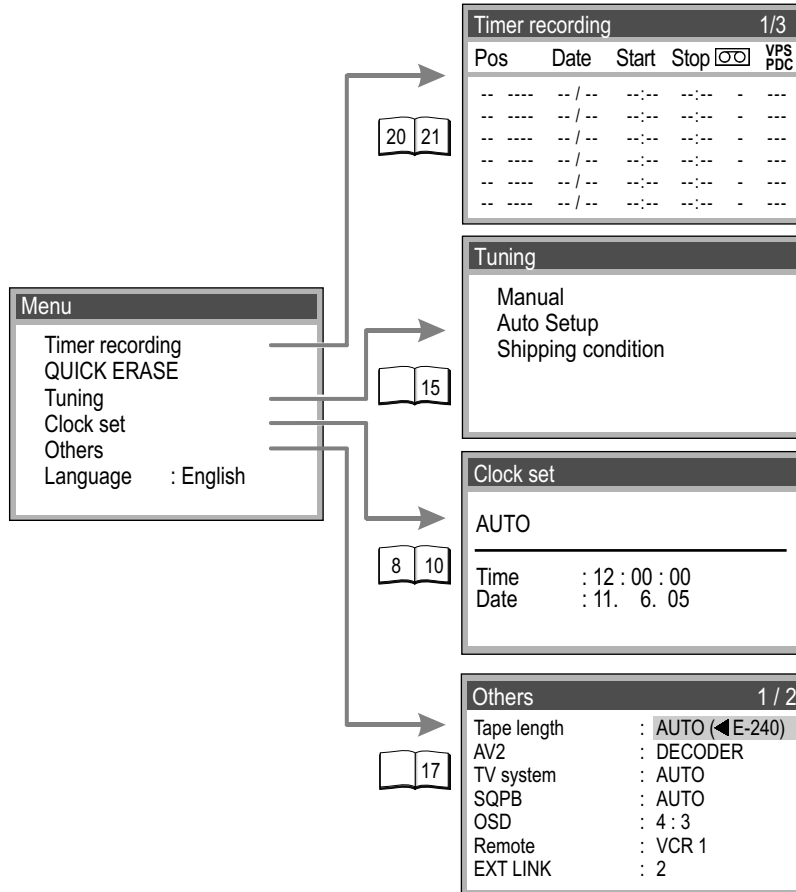
- Connect your external unit (e.g. a video camcorder) with the front panel input.
Just seize the L/Mono port for mono recording of the audio signal.
- Use **INPUT** to select A3.



Video Audio



VCR menu control



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



- Press **MENU**. The menu screen appears.
 - With **▲▼** select the desired sub-menu.
 - Press **ENTER**. The selected menu appears.
 - With **▲▼** select the entry you would like to change, then confirm with **ENTER**.
 - Make your changes following the menu steps.
 - With **MENU** return to the previous menu.
 - Press **EXIT** to leave the menu.
- * Not every model supports all of the functions.

Manual Setup

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	ARD	7	6	VOX	8
2	ZDF	4	7	----	---
3	N3	2	8	-	-
4	RTL	12	9	-	-
5	SAT1	13	10	-	-

Pos	: 9
Name	: PREM
Channel	: 97
Fine tuning	: AUTO
Decoder	: ON
Video system	: PAL
Mono	: OFF
Audio mode	: BG

Creating a new station table

- Press **MENU**. The Menu screen appears.
- Select the Tuning menu by pressing **▼** and confirming with **ENTER**.
- Confirm Manual by pressing **ENTER**.
- With the **◀▶▲▼** buttons, select an open storage position and press **ENTER**.
- Enter channel with the **◀▶** or **① ② ③...⑩** buttons.
Channel tuning starts. Wait until the desired station has been set.
Fine tuning may help to minimise any interference.
- Press **MENU** to return to the Tuning screen.

Options available for tuning the channels

Pos		Station position.
Name		Station name setting.
Channel		Channel setting.
Fine tuning	AUTO / MAN.	Fine tuning of disturbed picture.
Decoder	ON / OFF	For reception of encrypted channels.
Video system	AUTO / PAL / MESECAM	TV system setup.
Mono	ON / OFF	Switch stereo to mono.
Audio Mode	BG / I / DK	Audio system set-up

* Not every model supports all of the functions.

Changing the name of TV stations

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

Tuning					
Pos	Name	Ch	Pos	Name	Ch
1	ARD	7	6	VOX	8
2	ZDF	4	7	PRO7	95
3	N3	2	8	R	K
4	RTL	12	9	K	S
5	SAT1	13	10	S	S

Pos	: 1
Name	: ARD
Channel	: 7
Fine tuning	: AUTO
Decoder	: OFF
Video system	: AUTO
Mono	: OFF
Audio mode	: BG

Manual Setup

Tuning					
Pos	Name	Ch	Pos	Name	Ch
▶ 1	ARD	7	6	VOX	8
2	ZDF	4	7	PRO7	95
3	N3	2	8	RTL2	85
4	RTL	12	9	KABE	97
5	SAT1	13	10	SRTL	98

A : delete **B** : move
◀▶ : move **ENTER** : store
MENU : return **EXIT** : exit

Tuning

Manual

Auto Setup

Shipping condition

OK?

ENTER : yes **EXIT** : no

Auto Setup

Country : others (OIRT)

Tuning : Ch 1

Tuning

Manual

Auto Setup

Shipping condition

OK?

ENTER : yes **EXIT** : no

Changing the order of TV stations or deleting a station

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

Creating a new station table

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

The Country menu appears.

- Select country with **◀▶▲▼** and confirm with **ENTER**.

The Auto Setup menu will be displayed.

The Automatic Tuning will start.

Shipping condition/factory defaults

- Press **MENU**. The Menu screen appears.
 - With **▼** select the Tuning menu, confirm with **ENTER**.
 - With **▼** select Shipping condition and confirm with **ENTER**.
 - Press **ENTER** to confirm.
- * To restore factory defaults briefly unplug the AC mains lead. Afterwards you will have to run VCR Auto Setup again.

Manual Setup

VHS DVD

Menu Others

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

Others		1 / 2
Tape length	: AUTO (◀E-240)	
AV2	: DECODER	
TV system	: AUTO	
SQPB	: AUTO	
OSD	: 4 : 3	
Remote	: VCR 1	
EXT LINK	: 2	

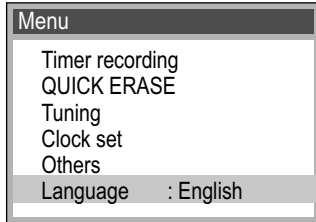


Press **▲▼** to display the 2nd screen.

Others		2 / 2
Timer Rec. LED	: ON	

Tape length	Sets the tape length of the cassette you use. AUTO (◀E - 240), E - 195, E - 260, E - 300
AV2	Selects the type of external unit connected to the VCR/DVD's AV2 socket. DECODER : If a decoder is connected. EXT : If another video recorder or satellite receiver is connected.
TV system	AUTO : Automatically detects PAL or MESECAM. PAL : If you are using the PAL system. MESECAM : If you are using the MESECAM system.
SQPB	AUTO : The VCR automatically detects the type of recording. ON : Plays back S-VHS format cassettes in quasi S-VHS format. OFF : Plays back cassettes recorded in VHS format only.
OSD	4 : 3 : Displays appear at the edge of the screen displays not visible on 16:9 format screens). WIDE : Displays appear at the edge of the screen (displays appear in the middle on 4:3 format screens). OFF : No on-screen displays.
Remote	The device and the remote control may be switched to alternative frequencies. In the Menu select VCR1 or VCR2 to switch the device settings. Then press and hold the ENTER and ① or ② keys of the remote control, to switch it to the according device frequency. If the remote control and the device are not set to the same frequency, the VCR display shows the current setting of the device. In this case, please change the frequency of the remote control using ENTER and the appropriate number.
EXT LINK	2 : External recording control by satellite receivers or digital receivers (video signal). 1 : For digital receivers transmitting a special recording control signal, e.g. the F.U.N. receiver (TU-DSF41).
Timer Rec. LED	ON : Timer Rec button lights up when the device is in timer mode. OFF : The LED feature of the Timer Rec button is turned off.

Manual Setup

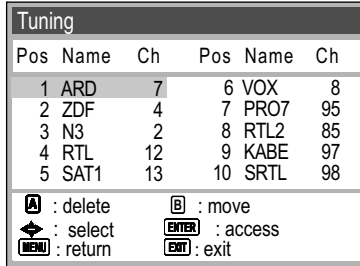


Menu language

The language set for the Video menu does not depend on the DVD SETUP menu language



- Press **MENU**
- Select Language **▲▼**
- Select Language **◀▶**
- Press **EXIT** to quit the Menu screen.



NICAM sound system (not for EG models)

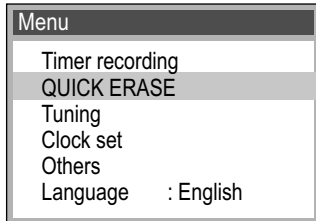
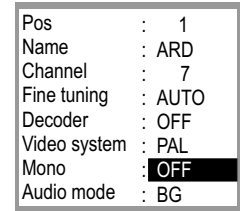
This unit can receive programmes transmitted together with NICAM sound. NICAM is a digital sound system featuring two audio channels that can be set to either two-channel stereo sound or two separate mono channels (M1 and M2).

OFF: Records stereo sound.

ON : Used during NICAM programmes to record normal (mono) sound on the Hi-Fi audio tracks or if the stereo sound is bad.



- Press **MENU**
- Select Tuning **▼**, press **ENTER** to confirm
- Select Manual, press **ENTER** to confirm
- Select the channel **◀▶▲▼**, press **ENTER** to confirm
- Mono to [ON] or [OFF] **◀▶**.



QUICK ERASE






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



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

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

Recording


Recording functions	
REC	
Direct recording of the VCR - TV picture.	 19
Timer recording	
Recording controlled by timer.	 20
Recording with INTELLIGENT TIMER	
Repeating programmed recordings.	 22
Recording with ShowView	
Programming recordings using the ShowView function.	 23
Recording with external recording controls	
Recording is controlled by an external device.	 24



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

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



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

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



Tape speed

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



- | | |
|-----------------------------------|---------------------------|
| SP : normal recording time | - optimal picture quality |
| LP : double recording time | - simple picture quality |
| EP : triple recording time | - reduced picture quality |

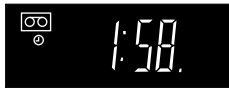
When playing back LP or EP recordings, interferences may occur when using certain types of cassettes (e.g. Type E-300). These are not indicative of a VCR malfunction.

Timer recording

The Timer recording allows you to programme the recording time of TV programmes up to 1 month in advance. Use the on-screen menu to programme a maximum of 16 recordings.

Timer recording						1 / 3	
Pos	Date	Start	Stop	 VPS	 PDC		
1	ARD	31/12	10:30	11:30	SP	ON	
1	ARD	31/12	11:30	12:30	SP	ON	
2	ZDF	31/12	12:30	13:30	SP	ON	
4	RTL	31/12	13:30	14:30	SP	ON	
6	VOX	31/12	14:30	15:30	SP	ON	
--	----	-/-	-:-	-:-	SP	---	

 : select **ENTER** : store
CANCEL : delete **EXIT** : exit



PROG/CHECK




- Press **PROG/CHECK** and select a free storage position **▲▼**.
- Confirm with **ENTER**.
- Select a station **▲▼**, and use **▶** to set date, week or weekday **▲▼**.
- Then enter start and stop time **▲▼**, **▶**.
- Hold buttons down to change time in 30-minute steps.
- Select tape speed: **A** (Automatic), **SP**, **LP**, **EP** **▲▼**, **▶**.

- The VPS/PDC settings may be changed with **▲▼** (does not apply to VP23).
- Press **ENTER** to save timer programme.
- Repeat these steps for further recordings you may wish to programme.

TIMER




- Press **TIMER** to activate the VCR's timer mode. Make sure the VCR symbol  is displayed. The Timer Rec button on the device also lights up if the function was not turned off.
- * The Timer Rec button blinks for 5 seconds if the timer is turned on and you try to perform a function. Most buttons are blocked when the timer is turned on.
- * Do not forget to verify that there is enough tape left. The length of the recording must not exceed the tape left on the video cassette.

TIMER



Quitting the timer mode

- Press **TIMER**. The VCR symbol  will turn off. You can now play back a cassette or make a manual recording. Press **TIMER** again to reactivate the previously entered timer programme.

Timer recording

Checking the timer programme



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

Changing or cancelling a timer programme



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

Playing back programmed recordings



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

Automatic SP/LP selection

A: If there is not enough tape left at the beginning of a timer programme to complete it, the SP/LP function will automatically run the tape at LP speed.

This ensures that the entire programme will be recorded. If the LP mode is not enough to 'stretch' the remaining tape to fit, you will not be able to record all of the TV programmes.

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

VPS/PDC function (not for VP23)

If a TV programme begins or ends earlier or later than planned, this function synchronises the beginning and end of the recording session with the actual beginning and end of the TV programme through a VPS/PDC signal transmitted by the TV station.

ON : The station transmits VPS/PDC signals. You must set the timer to the time specified in the TV magazines. Use the special VPS time the TV magazine may indicate.

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

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

Recording with INTELLIGENT TIMER

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

To use the INTELLIGENT TIMER function, at least one recording session must be programmed in the Timer recording menu (page 20). This information will be copied into the INTELLIGENT TIMER menu.

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

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

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

[I-TIMER] : select [TIMER] : store
 [ENTER] : edit : unlock : lock
 [CANCEL] : delete [EXIT] : exit

I-TIMER



Copying stored recording sessions

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

I-TIMER



Editing a programme

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

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

: select [ENTER] : store
 [CANCEL] : delete [EXIT] : exit

I-TIMER



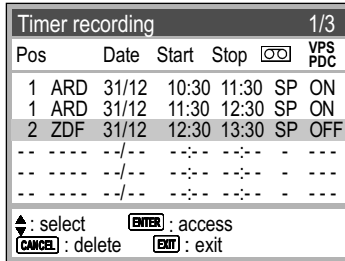
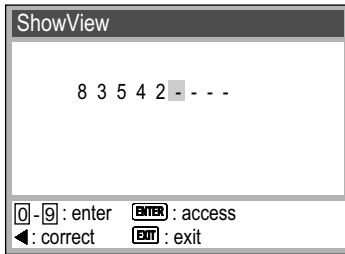
Protecting I-TIMER programmes

If there are 5 entries in the INTELLIGENT TIMER menu, the next and every following entry overwrites the oldest programme setting.

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

Recording with ShowView

(not for VP23)



ShowView
 is a trademark of Gemstar Development Corporation. The ShowView system is manufactured under licence from Gemstar Development Corporation.

Programming recordings with the ShowView function

The ShowView code simplifies entering programme information to record TV and SAT programmes.



- Press **ShowView**.
- Enter the ShowView number (◀ to correct entry).
- Confirm entry with **ENTER**.

The Timer recording screen appears.

If the device fails to recognise the TV station automatically, it must be entered manually with ▲▼. The VCR will store this information so it will not have to be entered again.



Activating timer mode

- Press **TIMER** to activate the timer mode.

The ⌚ symbol appears on the VCR display. The Timer Rec button on the device also lights up if the function was not turned off.

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



Modifying programmed data

- Press **PROG/CHECK**.
- The Timer recording menu appears.
- With ▲▼ select the entry to be modified, confirm with **ENTER**.
- Select station ▲▼ and use ▶ to set date, week or weekday ▲▼, ▶.
- Then enter start and stop time ▲▼, ▶.
- Select tape speed: **A** (Automatic), **SP**, **LP**, **EP** ▲▼, ▶ and confirm with **ENTER**.



- Press **TIMER** to activate the VCR's timer mode.

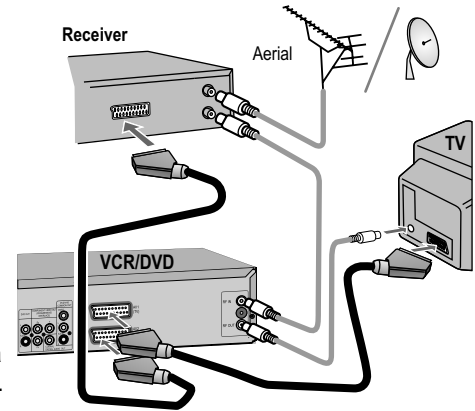
Recording with external recording controls

Others		1 / 2
Tape length	: AUTO (◀E-240)	
AV2	: DECODER	
TV system	: AUTO	
SQPB	: AUTO	
OSD	: 4 : 3	
Remote	: VCR 1	
EXT LINK	: 2	

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

EXT LINK 2: External recording control for some satellite or digital receivers (video signal).

EXT LINK 1: For digital receivers transmitting a special recording control signal, e.g. the F.U.N. receiver (TU-DSF41).



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

* Be sure that the timer programmes stored by your VCR do not overlap with the ones of the satellite or digital receiver.



Quitting recording stand-by mode

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

Playback

Optimising the playback picture quality

Normally the VCR automatically adjusts the playback picture to the highest possible quality. Sometimes it may be necessary though to adjust the picture manually.

Picture noise or unclear picture during playback. (Tracking)

While in regular playback or in slow motion press programme selection button \vee (-) or \wedge (+) until the noise disappears. If noise appears in a still picture, first switch VCR to slow motion, then adjust tracking.



* In some video cassettes tracking can not be adjusted. This is not indicative of a VCR malfunction.

Automatic tracking control

• Simultaneously press \vee (-) and \wedge (+).

The still picture runs up or down

• In still playback mode hold \vee (-) or \wedge (+) until the picture stands still.

* On some TV sets special playback functions may cause the picture to shift up or down. This is not a VCR malfunction.



Normal playback

- Turn on the VCR.
- Be sure the TV set is turned on and set to the appropriate AV input.
- Insert a video cassette.
- Press **PLAY** \blacktriangleright to start playback.
- Press **STOP** \blacksquare to end playback.

Playback from power stand-by mode

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

Starting automatic playback

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

Repeat playback

R 0:05.57

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

- In stop or playback mode press **PLAY** \blacktriangleright for longer than 5 seconds.
- Press **STOP** \blacksquare to end playback.



Time limited recording or playback

OFF 60

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

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

OFF TIMER



The set time appears in the VCR's display.

- Press **OFF TIMER**

General convenient functions

Auto-Start

When inserting a cassette the VCR will automatically switch on.

Automatic rewinding

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

* This function is not available during programmed recording sessions.

Search forward ►► or backwards ◀◀

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



Fast winding forward ►► or backwards ◀◀

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



JET REW

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

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



Quick search for a beginning of a recording

While playing back or in stop-mode.



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

Still playback

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

Slow playback

- During playback press **PAUSE/SLOW** for longer than 2 seconds.
- To exit slow motion playback press **PLAY ►**.

Automatic stop function

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

General convenient functions

S-VHS cassette playback (SQPB=S-VHS Quasi Playback)



You can play cassettes that were recorded on a S-VHS VCR.

- The quality of the picture will be that of a VHS recording.
- You cannot make S-VHS recordings on this VCR.

CVC Super - Crystal View Control Super

The CVC function provides a picture of perfect quality. The picture is automatically rendered as clear and sharp as possible.

AV Link function

Switch from television reception to the appropriate AV input.

- Press the **ENTER** and **0** buttons on the remote control at the same time.
VCR appears in the display.



- To quit, press **ENTER** and **0** again at the same time.

Playing back NTSC video cassettes (NV-VP33)

You can play NTSC video cassettes for viewing on a PAL-type TV set (PAL 60).

You cannot record on, or copy video cassettes to NTSC-format cassettes.

Cinema Mode

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

Device only operation.

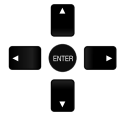
Automatic shut down and removing cassettes

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

DVD-QUICK SETUP



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



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



DVD QUICK SETUP may follow VCR Auto Setup.

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



Select your TV's aspect ratio.

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

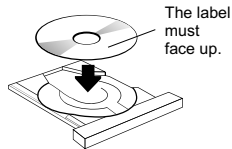
Following QUICK SETUP, you can use the options of the DVD Setup menu to make further settings.



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



Playback functions



Playback

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

MP3, WMA, JPEG:

The Playback menu appears on the screen.

Pause playback (still image)

- Press **PAUSE** during playback.

Interrupt playback

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

Stop playback

- Press **STOP** twice.

Repeat

- Press **REPEAT** during playback.

You can choose from the following settings, depending on the disc you use:

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

Repeating a VCD using playback control (PBC)

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

To play tracks from a Playlist

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

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



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

Playback functions

DVD-Video Video CD RAM

Single frame mode

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

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

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

Playback of a particular track or title

DVD-Video Video CD CD RAM
MP3 WMA JPEG

Type in a number using the RC unit's numeric key pad.

For example, to select title 23:

DVD/RAM/VCD/CD : Press 20 + 2 + 3.

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

The unit automatically starts playing the selected track.

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

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

Playback Menu

JPEG MP3 WMA

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

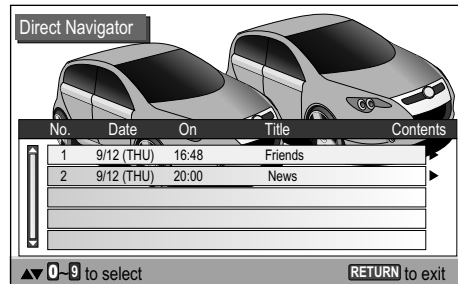
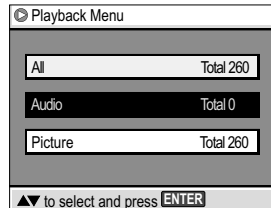
* To display the Navigation Menu for HighMAT Discs select the [Play as Data Disc] option (page 39) in the Others menu via **FUNCTIONS** while in Stop mode.

DVD-RAM Direct Navigator

RAM

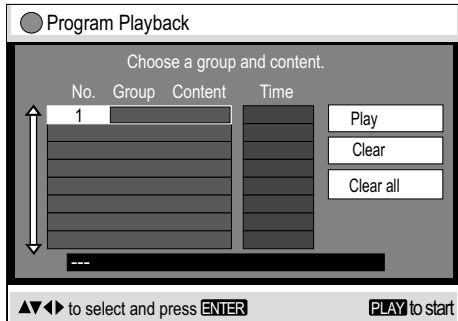
- Press **DIRECT NAVIGATOR** to enter or exit the menu screen. Programme names are shown only if they were entered when the RAM was produced. Press ▶ to display the programme information. Press ◀▶ to browse. Press **RETURN** to go back to the previous screen.
- Press ▲▼ or use the numeric keys to select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

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



Playback functions

DVD-Video	Video CD	CD
MP3	WMA	JPEG



Program Playback

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

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



To quit the Program Playback mode

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

DVD-Video	Video CD	CD
MP3	WMA	JPEG



Random Playback

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

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

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

VCR-DVD functions





DVD-Video	CD	RAM	Video CD
	MP3	WMA	JPEG

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



Synchronous recording


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


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

DVD RAM DUBBING

RAM



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

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

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

Navigation Menu

MENU
PLAYLIST

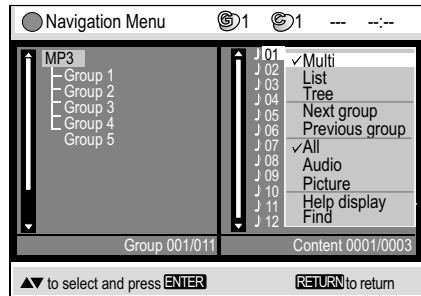


To display the Navigation Menu

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


To display the selection menu

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



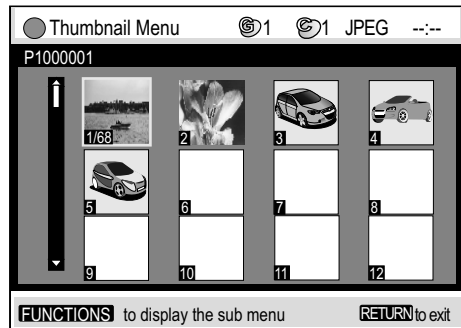
Search with asterisk: The match list covers all entries containing the word you specified.
Search without asterisk: To look for the first word in a title press **◀** to delete the asterisk.

Navigation Menu / Selection menu options

Multi	The Group and Content panels are tiled vertically. Press ◀▶ to move the cursor from Group to Content and back.
List	Shows the Content of the selected Group.
Tree	Displays a tree view of the groups. Press ▲▼ and ENTER to select a Group. The Group's contents are shown.
Thumbnail	Displays the JPEG Thumbnail Menu. 
Next group Previous group	Moves to Next group or Previous group.
All / Audio / Picture	Selects the formats shown on the Navigation Menu.
Help display	Displays help on the menu control or the status indicator.
Find	<p>To find groups or content</p> <ul style="list-style-type: none"> • Press ▲▼ to enter the target word into the text box. Press ENTER to confirm every letter. Press ◀. To make corrections. • Press ▶ to select [Find] and ENTER to confirm. The match list contains the matching entries. If there are no matching entries you will see: Not found. • Press ▲▼ and ENTER to start playing the track you looked for. <p>* In the Multi view press ◀▶ to select the Group or Content panel. The search is performed in the selected area.</p>



Navigation Menu



HighMAT

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

JPEG

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

JPEG Thumbnail Menu

JPEG

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

Rotate pictures

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



Activate on-screen displays

JPEG HighMAT

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



Select Group/Content

JPEG MP3 WMA

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

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

This unit is not compatible with MBR. (Multiple Bit Rate (MBR): a file that contains the same content encoded at several different bit rates.)

* MP3: The appliance is incompatible with ID3 tags.

* WMA, MP3, JPEG (CD-R / CD-RW): Make sure the discs are compatible with ISO 9660 (level 1 or level 2).

HighMAT


HighMAT




HighMAT (High Performance Media Access Technology) is a joint Panasonic and Microsoft technology development. Diverse HighMAT-level2 format data (WMA, MP3 and/or JPEG) stored on a disc by a PC can be quickly played back by the appliance with the additional help of a menu.

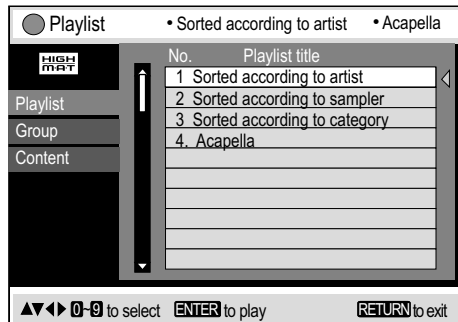
While the HighMAT menu is displayed:

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

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

 Playlist: Starts playback

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

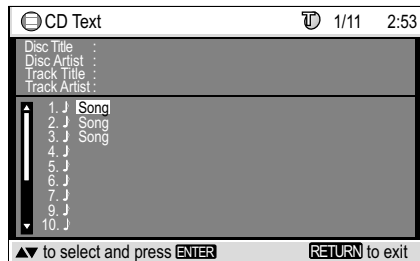


Selecting from a Playlist

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

CD Text

CD-Text

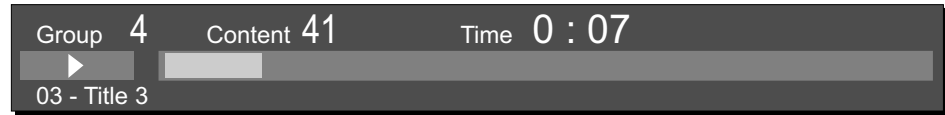


CD Text menu

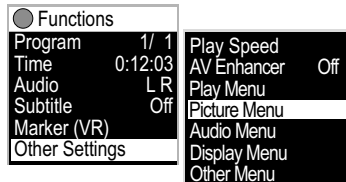
- Press **PLAYLIST**.
The CD Text menu appears on the screen.
The screen contains information on the disc and a list of tracks.
- Press **▲▼** to select a title.
- To play the selected track, press **ENTER**.
- Press **RETURN** to quit the menu.

Functions menu

Playback status indicator



- Press **QUICK OSD** twice to activate the playback status indicator.
- Press **SLOW/SEARCH** ◀▶▶ to change the playback speed.
- Press **QUICK OSD** again to hide the status indicator.
- * The status indicator automatically appears when a CD is inserted.



DVD-RAM menu illustration



FUNCTIONS



To display the Functions menu.

- Press **FUNCTIONS** to invoke the Functions menu of the current disc. The available options depend on the current disc.
- Press ▲▼ to select a sub-menu, then press ▶ or **ENTER**.
- Press ▲▼ to select a setting as described on pages 38 and 39.
- Press **ENTER** to confirm. Press ▶ to display another sub-menu; press ▲▼ to select a setting as appropriate. Press ◀ to return to the previous menu.
- Press **ENTER** to confirm your selection. The items of the menus may vary depending on the contents of the disc.
- Press **RETURN** or **FUNCTIONS** to quit the menu.

FUNCTIONS



Advanced Disc Review

- Press **FUNCTIONS**. The Functions menu for the inserted disc appears. The available options depend on the current disc.
- Select Other Settings with ▲▼ and **ENTER**.
- Select Play Menu with ▲▼ and **ENTER**.
- Select Advanced Disc Review with ▲▼ and **ENTER**. Depending on whether [Intro Mode] or [Interval Mode] was selected in the Setup menu, several scenes are briefly played as a preview of the disc. In Intro Mode, approx. 7 seconds of each title/programme (RAM) is played. If the title/programme (RAM) is longer than approx. 7 minutes, the preview begins at 6:45 min. For shorter recordings, the preview starts at 0:00 min. In Interval Mode, scenes are played that are 10 minutes apart.
- Press **PLAY** ▶ to return to normal playback.



This function can be compromised depending on the type of disc (DVD). Only normal playback is possible for +R / +RW media.

Functions menu

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

Title/Track Search: Allows you direct access to a title/track if the disc hosts several.
* An incorrect full title display can result for +R and +RW media.

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

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

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

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

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

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

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

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

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



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

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

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

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



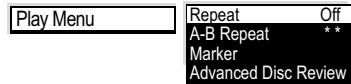
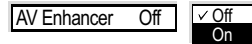
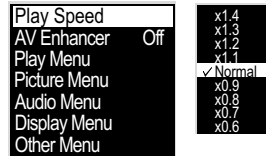
Rotate Picture: Select [Right] or [Left] to rotate the image on the screen in the selected direction.

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

Functions menu

These settings are not available for every disc.

Other Settings



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

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



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

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



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

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

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



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

Picture Mode: Changes the image display settings

Normal: Factory default

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

Cinema2: Enhances brighter areas of dark scenes.

Animation: Intensifies the colours.

Dynamic: Brightens up the picture.

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



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

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

Transfer Mode:

For a PAL output signal

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

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

For an NTSC output signal

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

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

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

Functions menu

These settings are not available for every disc.

Audio Menu

Advanced Surround Off
 Dialogue Enhancer Off
 Sound Enhancement Off

Display Menu

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

Other Menu

Setup
 Play as Data Disc

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

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

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

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

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

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

Subtitle Position : Vertically moves the subtitle shown.

Subtitle Brightness: Modifies the brightness of the subtitle shown.

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

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

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

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

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

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

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

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

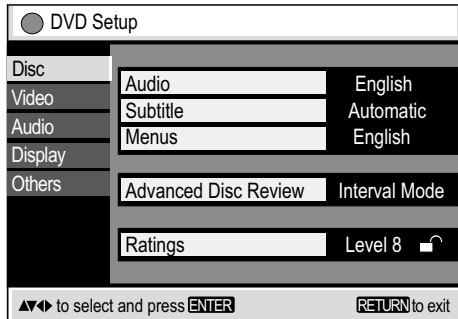
Play as HighMAT / Play as Data Disc: Stop the HighMAT disc and choose to play it as a data disc or as a HighMAT-format disc.

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

SETUP menus

To display the Setup menu

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



4:3 TV aspect ratio

Letterbox:



Pan&Scan:



Menu Disc

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

Menu Video

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

SETUP menus

Dolby Digital / DTS Digital Surround / MPEG:

Please choose the correct settings matching your audio system:

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

Menu Audio

PCM Digital Output

PCM is the standard method used to record digital music signals on Audio CDs. For reasons of copyright protection the digital output of PCM audio signals may be limited to 48 kHz/16 bit. Choose [Up to 48 kHz] if the digital audio outlet is used to connect your player to an amplifier that only processes sampling frequencies of up to 48 kHz. For 96 kHz check the digital-in requirements of your connected device.

Dolby Digital DTS Digital Surround MPEG

Change the setting to PCM if the connected equipment fails to decode the relevant signal. High noise levels may otherwise damage your ears or the loudspeakers. Adapt the settings to the ratings of your audio system.

Dynamic Range Compression

Available in the Dolby Digital (DVD) format only. The volume range is compressed by dynamically putting up the level of soft passages and lowering the level of loud passages.

Menu Display

Menu Language

Select the language of the appliance's menus as appropriate.

On-Screen Messages

Select [Off] to suppress the display of OSD text.

Menu Others

QUICK SETUP

Lets you change the basic settings or your appliance.



Re-initialise Setting

Resets the appliance to factory defaults. Following reset and initialisation, press **SETUP** to run the QUICK SETUP utility again.



Information

Region codes



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

Disc forms



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

HighMAT and the HighMAT logo



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

Windows Media and the Windows logo



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

Dolby Digital

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

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

DTS (Digital Theater Systems)

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

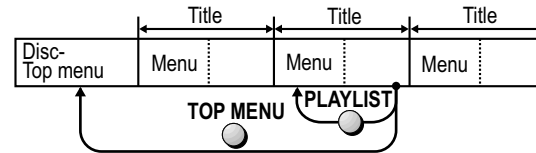
"DTS" and "DTS 2.0 + Digital Surround" are trademarks of Digital Theater Systems, Inc.

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, 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. The player may take some time to read all of the disc information!

DVD menu

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



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

MP3 or MPEG 1 Audio Layer 3 is a file compression format used for digital audio files. It provides files of an extremely small size and may cause a consequential loss of quality. WMA is a file compression format developed by Microsoft. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3. MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

This product features a copyright protection implement whose technology is protected by US patents and intellectual property rights owned by Macrovision Corporation and other copyright proprietors. The use of this copyright protection implement is subject to permission of Macrovision Corporation and is restricted to purely private use only. It is prohibited to examine this appliance for the purpose of unlicensed construction.









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.



Before requesting service

GENERAL DISTORTIONS

<p>There is no audio output and the sound is distorted:</p>	<ul style="list-style-type: none"> • Check the connections. • Deactivate the Advanced Surround effect. 	
<p>The VCR display is not lit:</p>	<ul style="list-style-type: none"> • Check AC mains connection. 	
<p>The VCR display is lit, the device does not respond to controls:</p>	<ul style="list-style-type: none"> • Device is set to recording stand-by or timer mode. Quit with TIMER button. • External recording control is turned on. Quit this with the EXT LINK button. 	
<p>Error code «U □ □ » or «H □ □ » appears:</p>	<ul style="list-style-type: none"> • H □ □: This is indicative of a malfunction. The digits following «H» depend on what state your player is in. • Press $\odot/$ to put the player into stand-by mode, then briefly unplug and re-attach the AC mains cable. • Contact the aftersales service if this does not remove the problem. Please state the error code displayed by the set. 	
<p>The picture is disturbed when searching:</p>	<ul style="list-style-type: none"> • This is a technical issue and not indicative of a malfunction. 	
<p>No picture appears on the screen:</p>	<ul style="list-style-type: none"> • Check the connections. • Verify that the correct video input of the TV set has been selected. 	
<p>The picture is cut off at its left or right edge:</p>	<ul style="list-style-type: none"> • Check the Video menu's TV Aspect setting on the Setup screen. • Check that the player is directly plugged into the TV set's AV output and not to a video cassette recorder between the two units. • Check the Zoom setting. 	 
<p>The remote control unit does not work properly:</p>	<ul style="list-style-type: none"> • The remote control is sending the wrong frequency. Check whether VCR 1 or 2 is listed in the display and change the frequency of the remote control. • Check the distance between the RC unit and the appliance (max. 7 metres). • Check the batteries in the remote control unit. • Point the remote control unit straight at the remote control signal sensor on the front panel. 	 
<p>No messages are output to the screen:</p>	<ul style="list-style-type: none"> • Go to the DVD SETUP screen and set DISPLAY menu option On-screen Messages- to [On]. • Go to the DVD SETUP screen and change the TV Aspect setting in the Video menu. • Go to the VCR menu Others and change the OSD setting. 	 

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 activate automatic correction. Some video cassettes do not support tracking control. This is not indicative of a malfunction.

Automatic Clock set doesn't work properly:

- Set Clock set to [AUTO] (not for VP23).
- If the device cannot find a TV station transmitting the time signal, set Time and Date manually.




Bad picture or sound:

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



The recording functions do not work properly:

- If  flashes on the device, check if the protection tab of the video cassette is still in.
- Check Time and Date.
- Check the start and stop time of the timer programme.
- Check if the **TIMER** button has been pressed to put the device into timer mode after programming a recording.
- Check the start and stop time of a VPS/PDC recording. (not for VP23). Not all stations currently support the VPS/PDC control times (turn on/off).













The Timer Rec button on the device is blinking:

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

Before requesting service


DVD DISTORTIONS

<p>The loudspeakers emit loud noise:</p>	<ul style="list-style-type: none"> Go to the Setup screen and check the Audio menu settings of Dolby Digital, DTS Digital Surround and MPEG. 	
<p>The message "NO PLAY" appears:</p>	<ul style="list-style-type: none"> The player cannot play discs of the current format. The disc contains no recorded material. The function Ratings is active. 	
<p>The OSD displays are cut off along their top edge:</p>	<ul style="list-style-type: none"> Check the TV Aspect setting. 	
<p>The player does not respond to function key commands:</p>	<ul style="list-style-type: none"> Certain control operations are not available with some discs. There may be interference caused by lightning or static charge. Press [⏻] to put the player into stand-by mode. Restart the player. 	
<p>Playback does not start after pressing PLAY:</p>	<ul style="list-style-type: none"> Condensation has accumulated inside the player. Wait for 1 to 2 hours. The player only supports DVDs with regional code 2, ALL or from a group of regional codes containing regional code 2. The disc is dirty or damaged. The disc is in the wrong way round. The label of the disc you wish to play must face up. 	
<p>Unable to change the audio track or the subtitle language:</p>	<ul style="list-style-type: none"> You can only choose from the languages actually recorded on the disc Some discs require you to change the setting via the Disc menu. 	
<p>The subtitles are not shown:</p>	<ul style="list-style-type: none"> The disc does not provide any subtitles. You deactivated the display of subtitles. The subtitles are at the wrong position. Move the position of subtitles. 	
<p>The audio track or subtitles do not use the language selected from the menu:</p>	<ul style="list-style-type: none"> The disc does not provide the language you selected. 	
<p>Unable to change the aspect angle:</p>	<ul style="list-style-type: none"> It depends on the disc whether this function is available. 	
<p>You forgot your password:</p>	<ul style="list-style-type: none"> Stop the player and keep pressing player button  (VCR) together with  (DVD) and also  until [Initialised] disappears from the screen. This restores all factory defaults. When you are done switch off the unit and back on afterwards. Afterwards, display the QUICK SETUP menu to re-initialise the appliance to your preferences. 	
<p>COMPONENT VIDEO OUT connection does not work:</p>	<ul style="list-style-type: none"> Check whether the AV1 Output is set to [RGB] and change it to [Video]. 	

Remote control codes

Remote control codes

For TV set control change the remote control unit's code.

- Press and hold TV Stand-by / on. 
- Enter the two-digit code of your TV set. Try a different code if your TV set does not respond correctly.
You will have to re-enter the code when replacing the batteries.

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

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

Problem caused by a disc

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

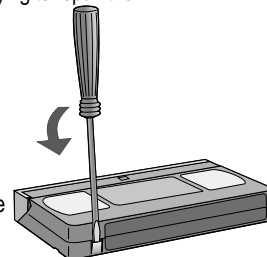


Video cassette handling

- We recommend to use branded, e.g. Panasonic, cassettes of superior quality.
- Whenever not in use, remove the cassettes from the recorder and keep them in a cover.
- For recordings always try to make full use of the entire tape.
- To prevent the tape from sustaining untimely wear and tear, do not re-use the same tape section for several recording sessions.
- To prevent the cassette from sustaining damage, employ due care while inserting it into the video recorder.
- Protect the cassettes against humidity or heat.
- Do not expose the cassettes to dust.
- Directly dispose of defective cassettes without trying to repair them.
- Never open the cassette's housing.
- Do not open the protective front flap.
Never touch the recording tape.

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

Power supply: 220-240 V AC, 50 Hz
Power consumption: 22 W (in operation)

Controls multifunctional remote control (VCR, TV and DVD), VCR / DVD, main functions on the unit

VCR playback functions PAL and NTSC Playback on PAL TV / S-VHS Quasi Playback (SQPB)

Video- and Audio heads 4 Video heads, 2 heads Hi-Fi

VCR Recording system 2 rotary heads, helical scanning system

VCR tape speed SP: 23.39 mm/s , 240 min / LP: 11.7 mm/s, 480 min (E-240 cassette)

VCR fast forward/fast rewind time approx. 60 sec. (E-180 cassette)

Video TV system VCR: PAL 625/50
 DVD: PAL 625/50, PAL 525/60, NTSC

Video input and output level 1.0 Vpp (75 Ohm)

DVD RGB-Video output RGB-output connector: 0.7 Vpp (75 Ohm) / output connector: AV1

DVD COMPONENT VIDEO OUT Y: 1.0 Vss (75 Ohm)

Output Pb: 0.7 Vss (75 Ohm)
 Pr: 0.7 Vss (75 Ohm)

Horizontal resolution VCR more than 240 lines (SP)

S/N ratio VCR video more than 43 dB (SP)

Input level audio 0.5V eff., more than 10 kOhm

Output level audio VCR: 0.5V eff., 300 Ohm - 1 kOhm / DVD: 2V eff. (1 kHz, 0 dB Fs)
 output connector: Pin jack, AV, 2 channel (L/R)

Dynamic range Audio VCR: more than 90 dB (Hi-Fi sound tracks)
 DVD: (linear audio): 100dB / CD audio: 96dB,

Total harmonic distortion CD audio: 0.0025 %,
S/N ratio CD audio: 115dB

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

Frequency response DVD audio (linear audio) 4 Hz to 22 kHz (sampling frequency 48 kHz) / 4 Hz to 44 kHz (sampling frequency 96 kHz), CD audio: 4 Hz to 20 kHz

DVD digital tone output COAXIAL
 Output connector: Cinch connector
 Output level: 0.5 Vss (75 Ohm)

Pick up:

Wave length: 662 nm/785 nm

Laser classification: CLASS 1 / CLASS 3A

Norsk:






Bølgelengde: 662 nm/785 nm

Laserstyrke: Ingen farlig stråling sendes ut.

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

Weight and dimensions approx. value: 3.9 kg / 430 (width) x 89 (height) x 270 mm (depth)

Technical specifications are subject to change without notice.

DVD-Video	DVD-R/RW	DVD+R/+RW	DVD-RAM	VCD/SVCD	CD	CD-R/RW
		---	 (without Cartridge)			---
DVD-V			RAM JPEG	VCD	CD	WMA MP3 JPEG

Compatible disc formats:
 DVD-V, DVD-RAM, DVD-R/DVD-RW (Video format), DVD+R/DVD+RW (Video format), VCD, SVCD, CD-Audio (CD-DA), CD-R/CD-RW (discs formatted as CD-DA or Video CD).
 WMA, MP3, JPEG :4000 tracks max. / 400 groups.

Compatible compression rate:
 MP3 : 32 - 320 kbps
 WMA : 48 - 192 kbps.
 JPEG format : Exif version 2.1.
 Resolution between 320 x 240 and 6144 x 4096;
 sub sampling: 4:2:2 or 4:2:0;
 HighMAT : Level 2 (audio and image)

- * Depending on the disc type and the conditions of recording, the appliance may sometimes fail to play the listed discs.
- * **DVD-RAM with JPEG:** Recorded with Panasonic DVD-Video recorders. To play JPEG files, select [Play as Data Disc] in Functions menu (page 39).

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Country codes

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