



# Panasonic®

## Operating Instructions

### DVD/CD PLAYER

Model No. **DVD-S54**

#### *Dear customer*

Thank you for purchasing this product.

Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.

#### Region number

The player plays DVD-Video marked with labels containing the region number or "ALL".

Region	Number
The United Kingdom and Republic of Ireland	2
Asia	3
Australia and N.Z.	4

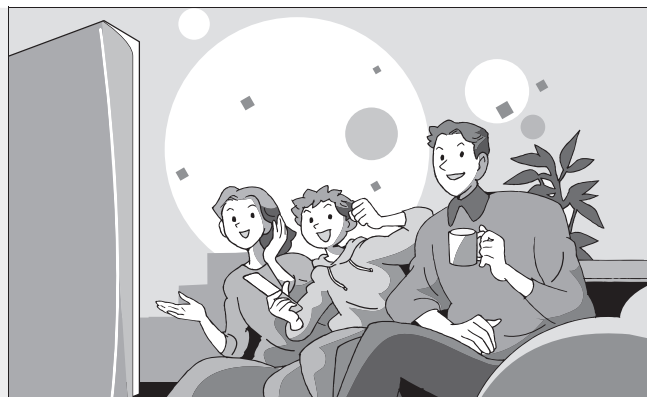
**Example:** The United Kingdom and Republic of Ireland



Unless otherwise indicated, illustrations show the model for The United Kingdom and Republic of Ireland.



EB GN GCS



## MULTI-FORMAT PLAYBACK

See page 4 for details

#### Note

"EB" on the packaging indicates the United Kingdom and Republic of Ireland

Getting started

Operations

Reference

RQTC0156-B

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## Accessories



Please check and identify the supplied accessories.  
Use numbers when asking for replacement parts.  
(Product numbers are correct as of January 2008. These may be subject to change.)

- ☐ 1 Remote control (EUR7631300)
- ☐ 2 Remote control batteries
- ☐ 1 Audio/video cable (K2KA6BA00004)
- ☐ 1 AC mains lead

**The United Kingdom and Republic of Ireland**

**Asia**

**Australia and N.Z.**

(K2CT3CA00004)

(K2CQ2CA00006)

(K2CP2CA00001)

(K2CJ2DA00008)

### Note

- The included AC mains lead is for use with this unit only. Do not use it with other equipment.
- Do not use an AC mains lead from other equipment.

**The United Kingdom and Republic of Ireland**

### ■ Sales and Support Information

#### Customer Care Centre

- For customers within the UK: 0844 844 3852
- For customers within the Republic of Ireland: 01 289 8333
- Visit our website for product information
- E-mail: [customer.care@panasonic.co.uk](mailto:customer.care@panasonic.co.uk)

#### Direct Sales at Panasonic UK

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

*Interested in purchasing an extended guarantee?*

*Please call 0870 240 6284 or visit our website [www.panasonic.co.uk/guarantee](http://www.panasonic.co.uk/guarantee).*

## Caution for AC Mains Lead

### (For The United Kingdom and Republic of Ireland)

("EB" area code model only)

For your safety, please read the following text carefully.

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

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

#### CAUTION!

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

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

#### IMPORTANT


The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

**WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL  OR COLOURED GREEN OR GREEN/YELLOW.**

**THIS PLUG IS NOT WATERPROOF—KEEP DRY.**

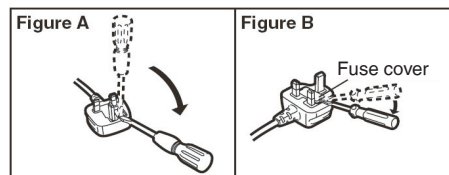
#### Before use

Remove the connector cover.

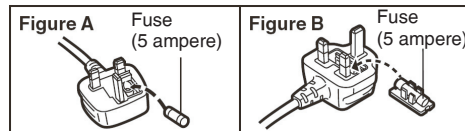
#### How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



## Safety precaution

### Placement

Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life. Do not place heavy items on the unit.

### Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire. Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

### AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock. Do not handle the plug with wet hands. This can cause electric shock.

### Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction. Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.




### Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service centre. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

# Discs that can be played

## Commercial discs

Disc Logo	Indicated in these instructions by	Remarks
	<b>DVD-V</b>	High quality movie and music discs
	<b>VCD</b>	Including SVCD (Conforming to IEC62107)
	<b>CD</b>	Music discs

## Discs that cannot be played

Blu-ray, HD DVD, DVD-Audio, Version 1.0 of DVD-RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

## Playing DVDs and Video CDs




The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions (for example if the play time is not displayed or if a Video CD has menus).

Read the disc's instructions carefully.

## Handling precautions

- Do not attach labels or stickers to discs (this may cause disc warping, rendering it unusable).
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
  - Discs with exposed adhesive from removed stickers or labels (rented discs etc.).
  - Discs that are badly warped or cracked.
  - Irregularly shaped discs, such as heart shapes.

## Recorded discs (○: Available, -: Not available)

Disc Logo	Recorded on a DVD video recorder, etc.		Recorded on a personal computer, etc.					Finalizing*6
	DVD-V *2	DVD-VR *4	WMA	MP3	JPEG	MPEG4	DivX *5	
	-	○	-	○	○	○	○	Not necessary
	○	○	-	○	○	○	○	Necessary
	○	-	-	-	-	-	-	Necessary
+R/+RW	(○)*3	-	-	-	-	-	-	Necessary
+R DL	(○)*3	-	-	-	-	-	-	Necessary
CD-R/RW*1	-	-	○	○	○	○	○	Necessary*7

- It may not be possible to play the above discs in all cases due to the type of discs, the condition of the recording, the recording method and how the files were created (➡ page 5, Tips for making data discs).

\*1 This unit can also play CD-R/RW recorded with CD-DA or Video CD format.

\*2 Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.

\*3 Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.

\*4 Discs recorded on DVD video recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).

\*5 Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.

\*6 Certified to the DivX Home Theater Profile. GMC (Global Motion Compensation) is not supported.

\*6 A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.

\*7 Closing the session will also work.

## ■ Tips for making data discs

Format	Disc	Extension	Reference
<b>WMA</b>	CD-R/RW	“.WMA” “.wma”	<ul style="list-style-type: none"> <li>You cannot play WMA files that are copy protected.</li> <li>This unit is not compatible with Multiple Bit Rate (MBR: a file that contains the same content encoded at several different bit rates).</li> </ul>
<b>MP3</b>	DVD-RAM DVD-R/RW CD-R/RW	“.MP3” “.mp3”	<ul style="list-style-type: none"> <li>Sampling frequency: <b>DVD-RAM, DVD-R/RW:</b> 11.02, 12, 22.05, 24, 44.1, and 48 kHz <b>CD-R/RW:</b> 8, 11.02, 12, 16, 22.05, 24, 32, 44.1, and 48 kHz</li> <li>This unit is not compatible with ID3 tags.</li> </ul>
<b>JPEG</b>	DVD-RAM DVD-R/RW CD-R/RW	“.JPG” “.jpg” “.JPEG” “.jpeg”	<ul style="list-style-type: none"> <li>JPEG files taken on a digital camera that conforms to DCF Standard Version 1.0 are displayed. <ul style="list-style-type: none"> <li>Files that have been altered, edited or saved with computer picture editing software may not be displayed.</li> </ul> </li> <li>This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF) or play pictures with attached audio.</li> </ul>
<b>MPEG4</b>	DVD-RAM DVD-R/RW CD-R/RW	“.ASF” “.asf”	<ul style="list-style-type: none"> <li>You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/ MPEG4 (Simple Profile) video system/G.726 audio system] recorded with the Panasonic SD multi cameras or DVD video recorders with this unit.</li> <li>The recording date may differ from that of the actual date.</li> </ul>
<b>DivX</b>	DVD-RAM DVD-R/RW CD-R/RW	“.DIVX” “.divx” “.AVI” “.avi”	<ul style="list-style-type: none"> <li>Plays all versions of DivX video (including DivX® 6) [DivX video system/MP3, Dolby Digital or MPEG audio system] with standard playback of DivX® media files. Functions added with DivX Ultra are not supported.</li> <li>GMC (Global Motion Compensation) is not supported.</li> <li>DivX files greater than 2GB or have no index may not play properly on this unit.</li> <li>This unit supports all resolutions up to maximum of 720 x 480 (NTSC)/720 x 576 (PAL).</li> <li>You can select up to 8 types of audio and subtitles on this unit.</li> </ul>

## Naming folders and files

(Files are treated as content and folders are treated as groups on this unit.)

At the time of recording, prefix folder and file names. This should be done with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times).

### DVD-RAM

- Discs must conform to UDF 2.0.

### CD-R/RW

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit is compatible with multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

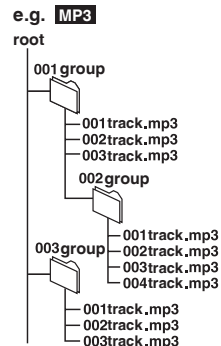
### DVD-R/RW

- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit is not compatible with multi-session. The default session only is played.

- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

### Note about using a DualDisc

The digital audio content side of a DualDisc does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so play may not be possible.



## Maintenance

### ■ Clean this unit with a soft, dry cloth

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using a chemically treated cloth, read the instructions that came with the cloth carefully.
- Cleaning of the lens is generally unnecessary although this depends on the operating environment.
- Do not use commercially available lens cleaners as they may cause a malfunction.

### ■ Clean discs

Wipe with a damp cloth and then wipe dry.



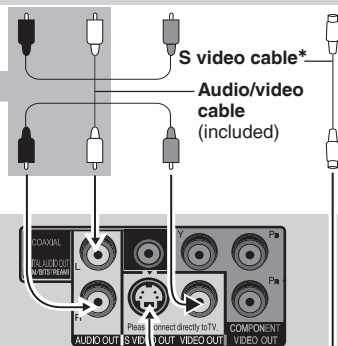
# STEP 1 Connection

## ■ Connection to a television

- Do not place the unit on amplifiers or equipment that may become hot. The heat can damage the unit.
- **Do not connect through the video cassette recorder.** Due to copy guard protection, the picture may not display properly.
- Turn off all equipment before connection and read the appropriate operating instructions.
- Connect the terminals of the same colour.

### With VIDEO IN or S VIDEO IN

AUDIO IN R L VIDEO IN S VIDEO IN



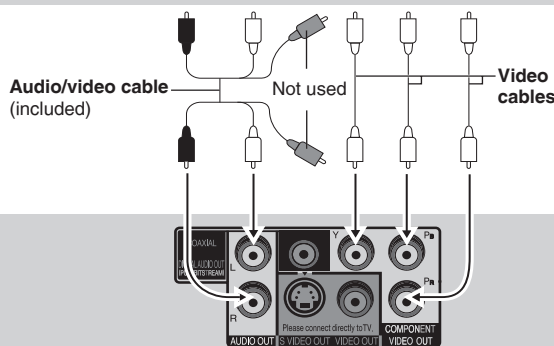
\*When using this connection, the audio cable (red and white plugs) should also be connected.

You can connect the audio cable to the 2-channel audio input terminals of an analog amplifier or component receiver to enjoy stereo sound.

### Television

### With COMPONENT VIDEO IN

AUDIO IN R L COMPONENT VIDEO IN



### To enjoy progressive video

- Connect to a progressive output compatible television.
- **The United Kingdom and Republic of Ireland**  
Set "VIDEO OUT-SCART" to "VIDEO/YPbPr" for component terminals. (➡ page 17, "VIDEO" menu).
- Set "VIDEO PRIORITY" to "OFF" (➡ page 18, "HDMI" menu).
- Set "VIDEO OUT (I/P)" to "PROGRESSIVE", then follow the instructions on the menu screen (➡ page 17, "VIDEO" menu).

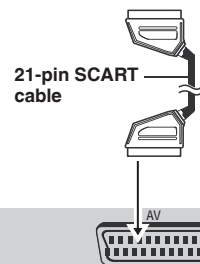
### The United Kingdom and Republic of Ireland

Panasonic televisions with 625 (576)/50i · 50p, 525 (480)/60i · 60p input terminals are progressive compatible.

### The United Kingdom and Republic of Ireland

### With SCART (AV) IN

SCART (AV) IN



- If the television is compatible with S-video, set "VIDEO OUT-SCART" to "S-VIDEO/YPbPr", or compatible with RGB, select "RGB/NO OUTPUT" for the AV terminals (➡ page 17, "VIDEO" menu). Also, set "VIDEO PRIORITY" to "OFF" (➡ page 18, "HDMI" menu) when "RGB/NO OUTPUT" is selected.

Back of the unit

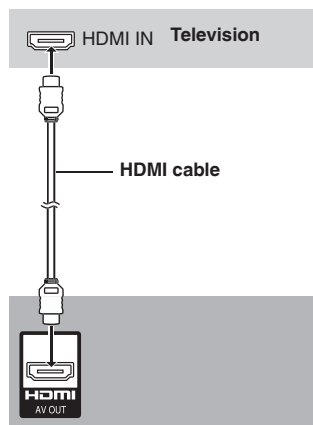
## ■ Enjoying higher quality audio and video (HDMI connection) (⇒ Page 26, Glossary)

By connecting to an HDMI compatible high-definition television, video recordings can be converted to, and output as, high-definition video (1080p, 1080i). You can also enjoy surround sound by connecting to an HDMI compatible amplifier with multi-channel output terminals.

### With HDMI compatible television

To enjoy digital high-definition video and high quality audio with a single cable.

- You can enjoy surround sound by connecting an amplifier with COAXIAL terminal (⇒ page 8).

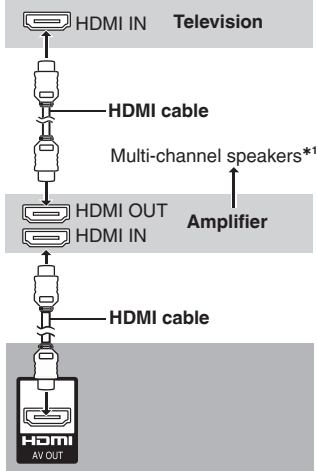


Back of the unit

- Set "VIDEO PRIORITY" to "ON" and "AUDIO OUT" to "ON" (⇒ page 18, "HDMI" menu).

### With HDMI compatible television and amplifier

To enjoy digital surround sound in addition to digital high-definition video.

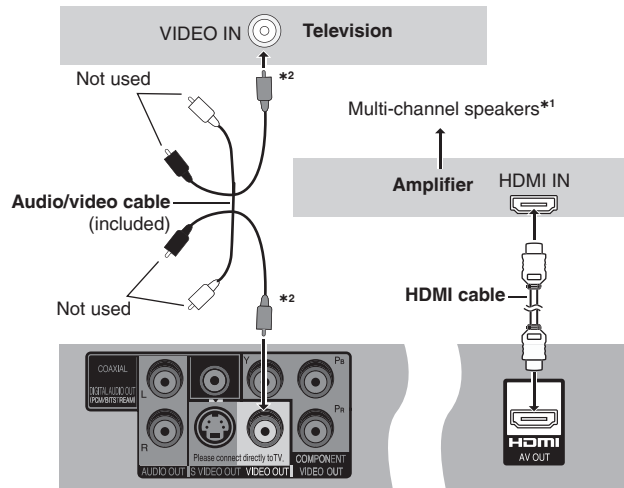


Back of the unit

- Set "VIDEO PRIORITY" to "ON" and "AUDIO OUT" to "ON" (⇒ page 18, "HDMI" menu).

### With HDMI compatible amplifier

You can still enjoy surround sound when your television is not HDMI compatible by connecting an HDMI compatible amplifier.



Back of the unit

- Set "AUDIO OUT" to "ON". When you connect to a television through the COMPONENT VIDEO terminal only, set "VIDEO PRIORITY" to "OFF", too (⇒ page 18, "HDMI" menu).

\*1 **DVD-V** Audio will be output in 2 channels when output as PCM. Change "DOLBY DIGITAL" and "DTS" (⇒ page 18, "AUDIO" menu).

\*2 You can also use the S VIDEO and COMPONENT VIDEO terminals.

- To enjoy high-definition video, connect to an HDMI compatible high-definition television and set "VIDEO FORMAT" (⇒ page 16, On-Screen Menu 4).
- For stable operation and preventing deterioration of video quality, please purchase an HDMI cable 5.0 m or less in length with the HDMI logo.
- It is compatible with the VIERA Link "HDAVI Control"™ function (⇒ page 23 to 24).

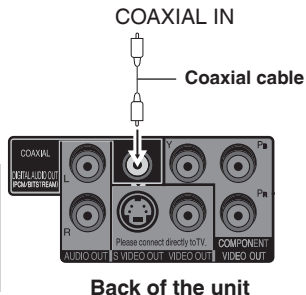
## STEP 1 Connection

### ■ Enjoying surround sound

Amplifier with a built-in decoder or a decoder-amplifier combination

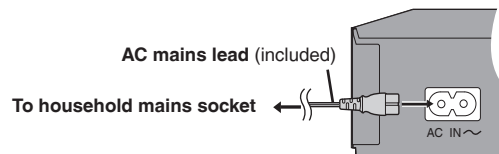
- You cannot use DTS Digital Surround decoders incompatible with DVD.

Set "AUDIO OUT" to "OFF" (→ page 18, "HDMI" menu), and change "PCM OUTPUT", "DOLBY DIGITAL", "DTS" and "MPEG" (→ page 18, "AUDIO" menu).



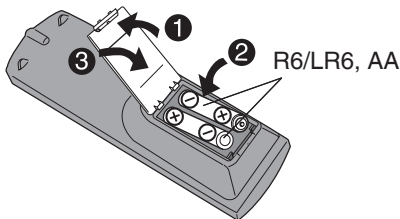
### ■ Connect the AC mains lead last

FOR THE UNITED KINGDOM AND REPUBLIC OF IRELAND ONLY  
READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 BEFORE CONNECTION.



## STEP 2 The remote control

### ■ Batteries



- Insert so the poles (+ and -) match those in the remote control.
- Do not use rechargeable type batteries.
- Do not heat or expose to flame.
- Do not leave the batteries in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Do not:

- mix old and new batteries.
- use different types at the same time.

- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire. Remove batteries if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

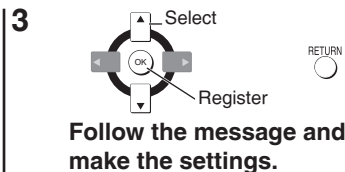
### ■ Use

Aim at the remote control sensor (→ page 9), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

## STEP 3 QUICK SETUP



Turn on the television and select the appropriate video input on the television.



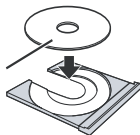
To change these settings later, select "QUICK SETUP" (→ page 18, "OTHERS" menu).

## Basic play

 OPEN/CLOSE

Remote control sensor

- Load double-sided discs so the label for the side you want to play is facing up.



- Press [**◀▶**] to skip titles, chapters, tracks, etc.
- **DVD-VR** Can also skip to the markers.

The position is memorized when "RESUME STOP" is displayed on your television screen.

- Press [▶] (PLAY) to resume. (**Resume play**)
- Press [■] to clear the position.

- Up to 5 steps
- Press [▶] (PLAY) to restart play.
- **VCD** Slow-motion: Forward direction only
- **MPEG4 DivX** Slow-motion: Does not work.

- Press **[▶]** (PLAY) to restart play.

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

**Standby/on indicator (⏻)**

When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

- **DISCS CONTINUE TO ROTATE WHILE MENUS ARE DISPLAYED.** Press **[ ]** when you finish to preserve the unit's motor and your television screen.
- To play **MP3** or **JPEG** contents on DVD-RAM, set "DVD-VR/DATA" to "DATA" (➡ page 18, "OTHERS" menu).
- Total title number may not be displayed properly on +R/+RW.

If you are experiencing problems, refer to “Troubleshooting guide” (➡ page 20 to 22).

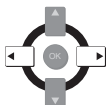
## Basic play

### Frame-by-frame

(during pause)

**DVD-VR** **DVD-V**

**VCD**



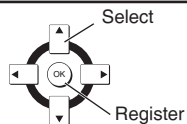
**DVD-VR** **VCD** forward direction only

### Return to previous screen

RETURN



### On-screen item select



### Disc menu

TOP MENU



DIRECT NAVIGATOR

**DVD-V**

Shows a disc top menu.

**DVD-VR**

Plays the programs (→ page 12).

MENU



PLAY LIST

**DVD-V**

Shows a disc menu.

**DVD-VR**

Plays a playlist (→ page 12).

RETURN



**VCD** with playback control  
Shows a disc menu.

### Enter number



**DVD-V** **DVD-VR** **CD** **VCD**

e.g. To select 12: [ ≥ 10 ] → [1] → [2]

**WMA** **MP3** **JPEG** **MPEG4** **DivX**

e.g. To select 123: [ ≥ 10 ] → [1] → [2] → [3] → [OK]

### Main unit display

FL SELECT



Number display ↔ Time display

### Information screen

**JPEG**

SUBTITLE



# Changing the play sequences

PLAY MODE

Program play (up to 30 items)  
(except DVD-VR)

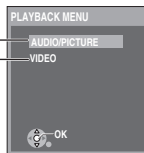
## 1. WMA MP3 JPEG MPEG4 DivX

Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

While the "PLAYBACK MENU" is displayed

Press [▲▼] to select  
"AUDIO/PICTURE" or  
"VIDEO" and press  
[OK].

MP3, WMA, JPEG  
DivX, MPEG4



PLAY MODE

Random play  
(except DVD-VR)

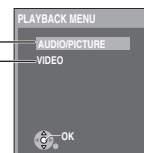
## 1. WMA MP3 JPEG MPEG4 DivX

Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

While the "PLAYBACK MENU" is displayed

Press [▲▼] to select  
"AUDIO/PICTURE" or  
"VIDEO" and press  
[OK].

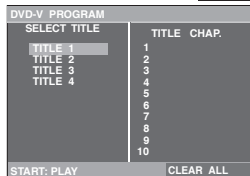
MP3, WMA, JPEG  
DivX, MPEG4



## 2. While stopped, press [PLAY MODE] several times to select "\*\*\* PROGRAM".

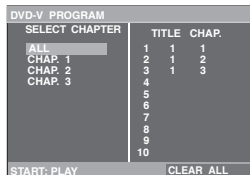
- When playing a disc with both MP3 and JPEG recorded, select "MUSIC PROGRAM" for MP3 or "PICTURE PROGRAM" for JPEG pictures. You cannot set both "MUSIC PROGRAM" and "PICTURE PROGRAM".

e.g. DVD-V



## 3. Press [▲▼] to select an item and press [OK].

- Repeat this step to program other items.
- To select all items in a disc, title, or group, select "ALL" and press [OK].
- Press [ANGLE/PAGE] to skip page by page.
- Press [RETURN] to return to the previous menu.



## 4. Press [▶] (PLAY) to start play.

### Clearing the program

Press [▶] and then press [▲▼] to select the item and press [CANCEL].

### Clearing the whole program

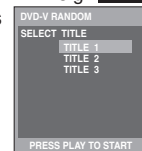
Press [▶] several times to select "CLEAR ALL" and press [OK]. The whole program is also cleared when the unit is turned off or the disc tray is opened.

To exit program mode, press [PLAY MODE] several times.

## 2. While stopped, press [PLAY MODE] several times to select "\*\*\* RANDOM".

- When playing a disc with both MP3 and JPEG recorded, select "MUSIC RANDOM" for MP3 or "PICTURE RANDOM" for JPEG pictures.

e.g. DVD-V



## 3. WMA MP3 JPEG MPEG4 DivX

Only when the disc has a group (folder)

Press [▲▼] to select a group and press [OK].

- "★" will be displayed next to the selected groups. Press [OK] again to clear.
- To select multiple groups, repeat this step.
- Press [ANGLE/PAGE] to skip page by page.
- To select all items in a disc, select "ALL".

### DVD-V

Only when the disc has multiple titles

Press [▲▼] to select a title and press [OK].

- "★" will be displayed next to the selected title.

## 4. Press [▶] (PLAY) to start play.

To exit random mode, press [PLAY MODE] several times.

# Using navigation menus



## Playing audio (WMA/MP3), picture (JPEG) and video (DivX/MPEG4) discs

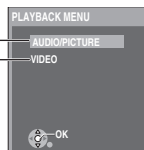
### 1. WMA MP3 JPEG MPEG4 DivX

Discs that contain both video (DivX/MPEG4) and other format (WMA/MP3/JPEG) contents only

While the "PLAYBACK MENU" is displayed

Press [▲ ▼] to select "AUDIO/PICTURE" or "VIDEO" and press [OK].

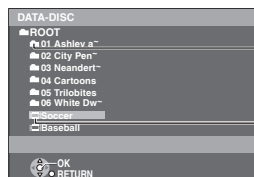
MP3, WMA, JPEG  
DivX, MPEG4



### 2. While the menu is displayed

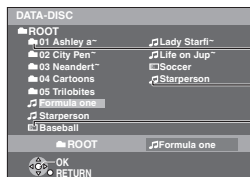
Press [▲ ▼ ◀ ▶] to select an item and press [OK].

- Repeat this step if there are multiple layers.



Group (Folder)\*

MPEG4/DivX  
content (File)\*



Group (Folder)\*

MP3, WMA  
content (File)\*

JPEG content (File)\*

\*Files are treated as contents and folders are treated as groups in these instructions.

- Press [ANGLE/PAGE] to skip page by page.
- Press [RETURN] to go back to previous screen.
- Press [MENU] to display/exit the screen.

**DivX** The video content is distorted according to the recorded method to the discs. This unit cannot play these kinds of discs normally.



## Playing programs/playlists DVD-VR

- Titles appear only if they have been entered.
- You cannot edit playlists and titles.

### Playing the programs

#### 1. While stopped, press [DIRECT NAVIGATOR].

#### 2. Press [▲ ▼] to select the program.

Press [◀ ▶] to skip page by page.

#### 3. Press [OK].

Program menu

PG	DATE	LENGTH	TITLE
1	01/25 04:31	0:55:31	MOVIE PICTURE PLAYBACK
2	01/25 05:20	0:28:20	STILL PICTURE PLAYBACK
3	01/28 10:00	0:36:00	HYBRID PICTURE PLAYBACK

### Playing the playlist (Only when the disc contains a playlist)

#### 1. While stopped, press [PLAY LIST].

#### 2. Press [▲ ▼] to select the play list.

Press [◀ ▶] to skip page by page.

#### 3. Press [OK].

Playlist menu

PL	DATE	LENGTH	TITLE
1	01/10 10:00	0:30:11	MOVIE PICTURE PLAYBACK
2	01/15 08:00	0:55:30	STILL PICTURE PLAYBACK
3	01/18 08:01	0:55:31	HYBRID PICTURE PLAYBACK

### ■ Select the picture in thumbnails menu

#### JPEG

#### 1. While pictures are being displayed, press [TOP MENU] to display the thumbnails.

#### 2. To select a picture in a group

Press [▲ ▼ ◀ ▶] to select the picture and press [OK].

- Press [▶▶] to skip forward page by page.
- Press [◀◀] to skip backward page by page.

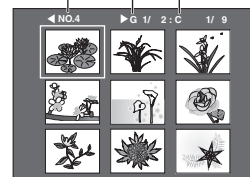
#### To select a picture in other groups

##### 1. Press [▲] to select the group name.

##### 2. Press [◀ ▶] to select the group and press [OK].

##### 3. Press [▲ ▼ ◀ ▶] to select the picture and press [OK].

Group name  
Group and content  
number



## Convenient functions

QUICK OSD

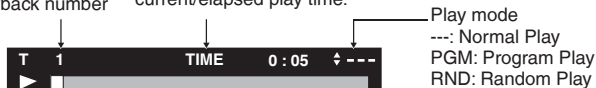
### Displaying current playback condition (Quick On Screen Display)

Press [QUICK OSD].

e.g. **CD**

Current playback number

Press [▲▼] to change  
current/elapsed play time.



Play mode

---: Normal Play

PGM: Program Play

RND: Random Play

Playback condition

- To exit the screen, press [QUICK OSD].

ADVANCED SURROUND

### Enjoying advanced surround Motion pictures with 2 or more channels

Enjoy a surround-like effect when using 2 front speakers.

Press [ADVANCED SURROUND] to select

“A. SURROUND1”, “A. SURROUND2”, “A. SURROUND3” or “OFF”.

**A. SURROUND1**

OFF → A. SURROUND1 → A. SURROUND2

↑ A. SURROUND3 ↓

**A. SURROUND1**: Light effect

**A. SURROUND2**: Medium effect

**A. SURROUND3**: Strong effect

**OFF**: Off

- When using discs recorded with surround sound, sound seems to come from speakers on either side of you.
- Optimum seating position is 3 to 4 times the distance between the front left and right speakers or the width of the television if using the television's speakers.
- Do not use in combination with surround effects on other equipment.
- The settings remain even when the unit is turned off or the disc tray is opened.
- Turn off if sound is distorted.

REPEAT

### Repeat play

(Only when the elapsed play time can be displayed.)

**JPEG**: you can use even if there is no elapsed time display.)

Press [REPEAT] to select an item to be repeated.

- To cancel, press [REPEAT] to select “OFF”.

e.g. **DVD-V**

**CHAP.**

PICTURE MODE

### Changing picture mode (Discs with pictures)

Press [PICTURE MODE] to select the picture quality for movie viewing.

**NORMAL**

**NORMAL**: Normal images.

**CINEMA1**: Mellow images and enhances detail in dark scenes.

**CINEMA2**: Sharpens images and enhances detail in dark scenes.

**DYNAMIC**: Enhances the contrast for powerful images.

**ANIMATION**: Suitable for animation.

**SOFT SKIN**: Softens the skin of people in the images.

PLAY SPEED

### Changing play speed **DVD-V** **DVD-VR**

(Only when the elapsed play time can be displayed)

During play, press [PLAY SPEED].

**×1.4**

Press [▲▼] to change play speed

–from “×0.6” to “×1.4” (in 0.1 units)

- Press [▶] (PLAY) to return to the normal play.
- After you change the speed
  - Advanced surround (↔ left) does not work.
  - Digital audio output switches to PCM 2ch.
- This may not work depending on the disc's recording.

QUICK REPLAY

### Quick replay (Only when the elapsed play time can be displayed)

**DVD-V** **DVD-VR** **WMA** **MP3** **VCD** **CD**

Press [QUICK REPLAY] to skip back about 10 seconds.

- This may not work depending on the disc's recording.

SUBTITLE

### Changing subtitles (Discs with subtitles)

Press [SUBTITLE] to select the subtitle language.

e.g. **DVD-V**

- On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.

**1: ENG**

- This may not work depending on the disc's recording.

DNR

### Reducing noise in pictures

Smooths block noise and reduces the smudging that appears around contrasting sections of the picture.

**1**

Press [DNR] to select “OFF”, “1”, “2”, or “3”.

**1**: Light effect

**2**: Medium effect

**3**: Strong effect

**OFF**: Off

## Convenient functions

### Changing soundtracks

**DVD-V** **DivX** (with multiple soundtracks)

**DVD-VR** **VCD**

**DVD-V** **DivX** e.g. **DivX**

Press **[AUDIO]** to select the soundtrack. **1: MP3 160kbps 44.1kHz 2ch**

**DVD-VR** **VCD**

You can use this button to select "L", "R", "L+R" or "L R".

### Dialogue enhancer

**DVD-V** (Dolby Digital, DTS, MPEG\*, 3-channel or over, with the dialogue recorded in the centre channel)

**DivX** (Dolby Digital, MPEG\*, 3-channel or over, with the dialogue recorded in the centre channel)

To make the dialogue in movies easier to hear

Press **[DIALOGUE ENHANCER]** to select "ON".

**ON**

To cancel, press **[DIALOGUE ENHANCER]** to select "OFF".

- The settings remain even when the unit is turned off or the disc tray is opened.

\* **Except Asia**

### Skipping about 30 seconds forward

**DVD-V** **DVD-VR**

Convenient when you want to skip commercials etc.

During play, press **[MANUAL SKIP]**.

- This may not work depending on the play position.
- DVD-VR** Does not work:
  - with still picture part.
  - when playing a playlist.

### Angle select **DVD-V** (with multiple angles)

Still picture rotation **JPEG**

Press **[ANGLE/PAGE]** to select the angle.

e.g. **DVD-V**

**JPEG** During pause,

Press **[ANGLE/PAGE]** to rotate the still picture.

**1**

### Transfer mode (Discs with pictures)

With **COMPONENT VIDEO OUT** connection

**AUTO1**

If you have set "VIDEO OUT (I/P)" to "PROGRESSIVE" (→ page 17, "VIDEO" menu).

Press **[TRANSFER MODE]** to select the method of conversion for progressive output to suit the type of material.

- When the tray is opened, the setting will return to AUTO or AUTO1.

When playing PAL discs,

**AUTO**: Automatically detects the film and video content, and appropriately converts it.

**VIDEO**: Select when using AUTO, and the content is distorted.

**FILM**: Select this if the edges of the film content appear jagged or rough when AUTO is selected. However, if the video content is distorted, then select AUTO.

When playing NTSC discs,

**AUTO1** (normal): Automatically detects the film and video content, and appropriately converts it.

**AUTO2**: In addition to AUTO1, automatically detects film contents with different frame rates and appropriately converts it.

**VIDEO**: Select when using AUTO1 and AUTO2, and the content is distorted.

With **HDMI AV OUT** connection

If you have set "VIDEO FORMAT" to "480p", "576p", "720p", "1080p", or "1080i" (→ page 16, On-Screen Menu 4).

Select between **AUTO1**, **AUTO2**, and **VIDEO** for the method of conversion for progressive output.

### Zoom

**DVD-V** **DVD-VR** **VCD** **JPEG** **MPEG4** **DivX**

1. **JPEG** Press **[ ]**.

e.g. **VCD**

2. Press **[ZOOM]** to select the zoom ratio.

**NORMAL**

NORMAL → AUTO ( **DVD-V** **DVD-VR** **VCD** only ) → X 2 → X 4

**NORMAL**: Displayed in the size used for recording.

**AUTO**: Automatically zooms in and adjusts the size of images with upper and lower black bands.

**X 2**: 2X zoom

**X 4**: 4X zoom

- Zoom ratio will return to "NORMAL" while stopped, "RESUME STOP", or when the disc tray is opened.

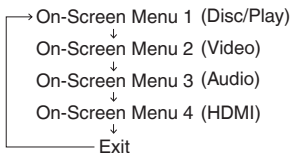
# Using On-Screen Menus

## 1 FUNCTIONS

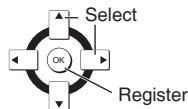


**Press.**

Each time you press the button:

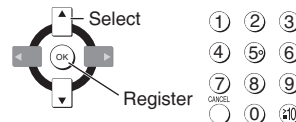


## 2



**Select the item.**

## 3



**Make the settings.**

## 4



**Press to exit.**

### Note

Press [FUNCTIONS] will display only “On-Screen Menu 4” during “noDISC” or when the disc tray is opened.

Items shown differ depending on the type of software.

### On-Screen Menu 1 (Disc/Play)

e.g. <b>DVD-V</b> T9 C99	<b>PG SEARCH, PL SEARCH, TITLE SEARCH, CHAPTER SEARCH, TRACK SEARCH, CONTENT SEARCH</b>	<b>To start from a specific item</b> • Press [▲ ▼] to select and press [OK], or, press the numbered buttons. <b>VCD</b> This does not work when using playback control (➡ page 26, Glossary).
	<b>AUDIO</b>	(➡ page 14, Changing soundtracks)
	<b>PLAY SPEED</b>	(➡ page 13, Changing play speed)
	<b>REPEAT MODE</b>	(➡ page 13, Repeat play) <b>A-B Repeat</b> (To repeat a specified section) Except still picture on <b>JPEG DivX MPEG4</b> Press [OK] at the starting and ending points. • Select “OFF” to cancel.
	<b>SUBTITLE</b>	(➡ page 13, Changing subtitles)
	<b>ANGLE</b>	(➡ page 14, Angle select)
	<b>DATE DISPLAY</b>	<b>JPEG</b> Displays the photograph date OFF ← → ON
	<b>ROTATION</b>	(➡ page 14, Still picture rotation)

### On-Screen Menu 2 (Video)

	<b>PICTURE MODE</b>	(➡ page 13, Changing picture mode)
	<b>ZOOM</b>	(➡ page 14, Zoom)
	<b>DNR</b>	(➡ page 13, Reducing noise in pictures)
	<b>TRANSFER MODE</b>	(➡ page 14, Transfer mode)
	<b>SOURCE SELECT</b> <b>DivX</b> (depends on disc)	When you select “AUTO” the constructing method of the DivX contents is automatically distinguished and output. If the picture is distorted, select “INTERLACE” or “PROGRESSIVE” depending on which constructing method was used when the contents were recorded to disc. <b>AUTO, INTERLACE, PROGRESSIVE</b>

## On-Screen Menu 3 (Audio)



### DIALOGUE ENHANCER

(➔ page 14, Dialogue enhancer)

### RE-MASTER

**DVD-V DVD-VR CD** Discs recorded with multi channels LPCM at 44.1 kHz or 48 kHz  
This feature gives you a more natural sound by adding the higher frequency signals not recorded on the disc.

**WMA MP3** Discs recorded at 44.1 kHz or 48 kHz  
This feature reproduces the frequencies lost during recording to give you a sound closer to the original.

Press [▲ ▼] to select "OFF", "1", "2" or "3".

Setting	Type of music	<b>DVD-V CD</b>	Effect level
			<b>WMA MP3</b>
1	High tempo (e.g., pop and rock)		Light
2	Various tempos (e.g., jazz)		Medium
3	Low tempo (e.g., classical)		Strong
OFF	Off		Off

- When connecting with DIGITAL AUDIO OUT terminal, the actual output sampling frequency depends on "PCM OUTPUT" setting in "AUDIO" menu (➔ page 18).
- This feature may not work when connected with HDMI AV OUT terminals.
- This may not work depending on the disc's recording.
- This does not work with **MP3** on DVD-RAM or DVD-R/RW.



### ADVANCED SURROUND

(➔ page 13, Enjoying advanced surround)

#### Note

You cannot use settings in On-Screen Menu 3 during pause, slow-motion, and search.

## On-Screen Menu 4 (HDMI)

### HDMI STATUS

Indicates various information when connected with HDMI AV OUT terminal (➔ below, Confirming HDMI information).

#### ■ Confirming HDMI information

e.g. **DVD-V**

HDMI - INFORMATION	
CONNECTED STATE	CONNECTED
AUDIO STREAM	PCM
MAX CHANNEL	2 ch
VIDEO FORMAT	480p
COLOUR SPACE	YCbCr 4:4:4

➔ below, COLOUR SPACE

➔ below, VIDEO FORMAT

Shows the maximum channel number of the connected equipments.

➔ page 14, Changing soundtracks  
Connection status



### HD ENHANCER

With HDMI connection (When "VIDEO PRIORITY" is set to "ON") (➔ page 18, "HDMI" menu)

Makes the quality of HDMI video output (720p, 1080i, 1080p) sharp.

OFF, 1 (weakest) to 3 (strongest)



### VIDEO FORMAT

With HDMI connection (When "VIDEO PRIORITY" is set to "ON") (➔ page 18, "HDMI" menu)

480p/576p/720p/1080p (progressive)  
480i/576i/1080i (interlace)

- The item will vary depending on the connected equipment.



### COLOUR SPACE

With HDMI connection (When "VIDEO PRIORITY" is set to "ON") (➔ page 18, "HDMI" menu)

RGB YCbCr 4:4:4 YCbCr 4:2:2

- An "\*" mark will only appear for the corresponding connected equipment model.

# Changing the player settings

**1**

SETUP

**Shows Setup menu.**

**2**

Select

Select the menu.

Register

**3**

Select

Select the item.

Register

**4**

Select

Register

① ② ③

④ ⑤ ⑥

⑦ ⑧ ⑨

CANCEL ⑩

**Make the settings.**

**5**

SETUP

**Press to exit.**

- The settings remain intact even if you switch the unit to standby.
- Underlined items are the factory preset.

The QUICK SETUP enables successive settings of the items in the shaded area.

## ■ “DISC” menu

SETTING STATE	Display the current setting of the items below
<b>AUDIO</b> Choose the audio language.	<u>ENGLISH</u> (LANGUAGE OPTIONS)* <sup>1</sup> <u>ORIGINAL</u> * <sup>2</sup> OTHER ----* <sup>3</sup>
<b>SUBTITLE</b> Choose the subtitle language.	<u>AUTO</u> * <sup>4</sup> <u>ENGLISH</u> (LANGUAGE OPTIONS)* <sup>1</sup> OTHER ----* <sup>3</sup>
<b>MENUS</b> Choose the language for disc menus.	<u>ENGLISH</u> (LANGUAGE OPTIONS)* <sup>1</sup> OTHER ----* <sup>3</sup>
<b>RATINGS</b> Set a ratings level to limit DVD-Video play.	Setting ratings (When level 8 is selected) <b>0 LOCK ALL:</b> To prevent play of discs without ratings levels. <b>1 to 7:</b> To prohibit play of DVD-Video with corresponding ratings recorded on them. <b>8 NO LIMIT</b> When setting a ratings level, a password screen is shown. Follow the on-screen instructions. <b>Do not forget your password.</b> A message screen will be shown if a DVD-Video exceeding the ratings level is inserted in the unit. Follow the on-screen instructions.
<b>PASSWORD</b> Change the password for “RATINGS” (↻ above).	1. Select “CHANGE” and press [OK]. 2. Enter the current password with the numbered buttons, then press [OK]. 3. Enter the new password with the numbered buttons, then press [OK]. If “VERIFY” is displayed, please verify the password and insert it again.

## ■ “VIDEO” menu

<b>SETTING STATE</b>	Display the current setting of the items below		
<b>TV ASPECT</b> Choose the setting to suit your television and preference.	<b>4:3PAN&amp;SCAN</b>	<b>4:3LETTERBOX</b>	<b>4:3ZOOM</b>
	<b>16:9NORMAL</b>	<b>16:9SHRINK</b>	<b>16:9ZOOM</b>
<b>TV TYPE</b> Select to suit the type of television.	<b>STANDARD CRT LCD PROJECTION PLASMA</b>		
<b>TIME DELAY</b> When connected with an AV amplifier and Plasma display, adjust if you notice the audio is out of sync with the video.	<b>0 ms</b> <b>60 ms</b>	<b>20 ms</b> <b>80 ms</b>	<b>40 ms</b> <b>100 ms</b>
<b>NTSC DISC OUT</b> Choose PAL60 or NTSC output when playing NTSC discs.	<b>NTSC:</b> Output signals from NTSC discs remains as NTSC. <b>PAL60:</b> NTSC discs can be viewed on PAL television. <b>Asia</b> : "NTSC" is the factory preset.		
<b>STILL MODE</b> Specify the type of picture shown when paused.	<b>AUTO</b> <b>FIELD:</b> The picture is not blurred, but picture quality is lower. <b>FRAME:</b> Overall quality is high, but the picture may appear blurred.		
<b>VIDEO OUT-SCART*5</b> Choose the video signal format to be output from the SCART and COMPONENT VIDEO OUT terminals	<b>VIDEO/YPbPr</b> <b>S-VIDEO/YPbPr</b> <b>RGB/NO OUTPUT</b>		
<b>VIDEO OUT (I/P)</b> Select "PROGRESSIVE" only if connecting to a progressive output compatible television.	<b>INTERLACE PROGRESSIVE</b> When you select "PROGRESSIVE", a message screen will appear. • For progressive output, press [▲] and then press [OK]. • Press [RETURN] to cancel.		

## Changing the player settings

### ■ “AUDIO” menu

<b>SETTING STATE</b>	Display the current setting of the items below	
<b>PCM OUTPUT*</b> Check the digital input limitations of the equipment you connect using COAXIAL terminal and select the maximum sampling frequency of PCM digital output.	<b>UP TO 48kHz:</b> When connected to equipment compatible with 44.1 or 48 kHz <b>UP TO 96kHz:</b> When connected to equipment compatible with 88.2 or 96 kHz <ul style="list-style-type: none"><li>• Signals from copy-protected discs are converted to 48 or 44.1 kHz.</li><li>• Some equipment cannot handle sampling frequencies of 88.2 kHz, even if they can handle 96 kHz. Read your equipment's operating instructions for details.</li></ul>	
<b>DOLBY DIGITAL*</b> With COAXIAL or HDMI AV OUT connections (➡ page 7 and 8)	<b><u>BITSTREAM</u></b> <b>PCM</b>	Select “ <b>BITSTREAM</b> ” when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select “ <b>PCM</b> ”. (If the bitstream is output to the equipment without a decoder, high levels of noise can be output and may damage your speakers and hearing.)
<b>DTS*</b> With COAXIAL or HDMI AV OUT connections (➡ page 7 and 8)	<b><u>BITSTREAM</u></b> <b>PCM</b>	
<b>MPEG*6</b> With COAXIAL or HDMI AV OUT connections (➡ page 7 and 8)	<b><u>BITSTREAM</u></b> <b>PCM</b>	
<b>DYNAMIC RANGE</b>	<b>ON:</b> Adjusts for clarity even when the volume is low through compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with Dolby Digital.) <b>OFF</b>	

\* When audio is output from HDMI AV OUT terminal, and the connected equipment does not support the item selected, the actual output will depend on the performance of this connected equipment.

### ■ “DISPLAY” menu

<b>SETTING STATE</b>	Display the current setting of the items below			
<b>LANGUAGE</b>	*5,6	ENGLISH	FRANÇAIS	ESPAÑOL DEUTSCH
		ITALIANO	SVENSKA	NEDERLANDS POLSKI
	*7	ENGLISH	繁體中文	

### ■ “HDMI” menu

<b>SETTING STATE</b>	Display the current setting of the items below	
<b>VIDEO PRIORITY</b>	<b>ON:</b> When connected through the HDMI AV OUT terminal. Video is output from the HDMI terminal. Video is also output from the COMPONENT VIDEO OUT terminal, but only in 480i/576i (interlace). <b>OFF:</b> When connected through the COMPONENT VIDEO OUT terminal. Video is output from the COMPONENT VIDEO OUT terminal according to the setting of “VIDEO OUT (I/P)” (➡ page 17, “VIDEO” menu). Video is also output from the HDMI terminal.	

<b>AUDIO OUT</b>	<b>ON:</b> Audio output is from HDMI AV OUT terminal. <b>OFF:</b> Audio output is not from HDMI AV OUT terminal.
<b>RGB RANGE</b>	<b>STANDARD</b> <b>ENHANCED:</b> When the black and white images are not distinct. <ul style="list-style-type: none"> <li>• It only works when the COLOUR SPACE (➡ page 16, On-Screen Menu 4) is set to RGB.</li> </ul>
<b>VIERA Link</b>	<b>ON:</b> The VIERA Link “HDMI Control™” function is available (➡ page 23 to 24). <b>OFF</b>

### ■ “OTHERS” menu

<b>SETTING STATE</b>	Display the current setting of the items below	
<b>REGISTRATION</b> Displays the unit's registration code.	<b>SHOW CODE:</b> You need this registration code to purchase and play DivX Video-on-Demand (VOD) content (➡ page 24, About DivX VOD contents).	
<b>JPEG TIME</b>	To change the slideshow timing <b>1 SEC to 15 SEC</b> (in 1 unit) <b>15 SEC to 60 SEC</b> (in 5 unit) <b>60 SEC to 180 SEC</b> (in 30 unit) • “3 SEC” is the factory preset.	
<b>FL DIMMER</b> Changes the brightness of the unit's display.	<b>BRIGHT DIM</b>	<b>AUTO:</b> The display is dimmed, but brightens only when you perform some operations.
<b>AUTO POWER OFF</b>	<b>ON:</b> The unit switches to standby mode after about 30 minutes in the stop mode. <b>OFF</b>	
<b>QUICK SETUP</b>	<b>SET:</b> Display the QUICK SETUP settings	
<b>DVD-VR/DATA</b> Select format to play DVD-RAM discs.	<b>DVD-VR:</b> To play <b>DVD-VR</b> on DVD-RAM. <b>DATA:</b> To play <b>MP3</b> or <b>JPEG</b> contents on DVD-RAM.	
<b>DEFAULTS</b> This returns all values in the Setup menus to the default settings.	<b>RESET</b>	The password screen is shown if “RATINGS” (➡ page 17) is set. Please enter the same password and press [OK], then turn the unit off and on again.

#### \*1 Language options

**The United Kingdom, Republic of Ireland, Australia and N.Z.**

FRENCH, SPANISH, GERMAN, ITALIAN, SWEDISH, DUTCH and POLISH  
**Asia** : CHINESE TRAD.

\*2 The original language designated on the disc is selected.

\*3 Input a code number referring to the table (➡ page 19).

\*4 If the language selected for “AUDIO” is not available, subtitles appear in that language (if available on the disc).

\*5 **The United Kingdom and Republic of Ireland**

\*6 **Except Asia**

\*7 **Asia**

## Language code list

Abkhazian:	6566	Hebrew:	7387	Samoan:	8377
Afar:	6565	Hindi:	7273	Sanskrit:	8365
Afrikaans:	6570	Hungarian:	7285	Scots Gaelic:	7168
Albanian:	8381	Icelandic:	7383	Serbian:	8382
Ameharic:	6577	Indonesian:	7378	Serbo-Croatian:	8372
Arabic:	6582	Interlingua:	7365	Shona:	8378
Armenian:	7289	Irish:	7165	Sindhi:	8368
Assamese:	6583	Italian:	7384	Singhalese:	8373
Aymara:	6589	Japanese:	7465	Slovak:	8375
Azerbaijani:	6590	Javanese:	7487	Slovenian:	8376
Bashkir:	6665	Kannada:	7578	Somali:	8379
Basque:	6985	Kashmiri:	7583	Spanish:	6983
Bengali; Bangla:	6678	Kazakh:	7575	Sundanese:	8385
Bhutani:	6890	Kirghiz:	7589	Swahili:	8387
Bihari:	6672	Korean:	7579	Swedish:	8386
Breton:	6682	Kurdish:	7585	Tagalog:	8476
Bulgarian:	6671	Laotian:	7679	Tajik:	8471
Burmese:	7789	Latin:	7665	Tamil:	8465
Byelorussian:	6669	Latvian, Lettish:	7686	Tatar:	8484
Cambodian:	7577	Lingala:	7678	Telugu:	8469
Catalan:	6765	Lithuanian:	7684	Thai:	8472
Chinese:	9072	Macedonian:	7775	Tibetan:	6679
Corsican:	6779	Malagasy:	7771	Tigrinya:	8473
Croatian:	7282	Malay:	7783	Tonga:	8479
Czech:	6783	Malayalam:	7776	Turkish:	8482
Danish:	6865	Maltese:	7784	Turkmen:	8475
Dutch:	7876	Maori:	7773	Twi:	8487
English:	6978	Marathi:	7782	Ukrainian:	8575
Esperanto:	6979	Moldavian:	7779	Urdu:	8582
Estonian:	6984	Mongolian:	7778	Uzbek:	8590
Faroese:	7079	Nauru:	7865	Vietnamese:	8673
Fiji:	7074	Nepali:	7869	Volapük:	8679
Finnish:	7073	Norwegian:	7879	Welsh:	6789
French:	7082	Oriya:	7982	Wolof:	8779
Frisian:	7089	Pashto, Pushto:	8083	Xhosa:	8872
Galician:	7176	Persian:	7065	Yiddish:	7473
Georgian:	7565	Polish:	8076	Yoruba:	8979
German:	6869	Portuguese:	8084	Zulu:	9085
Greek:	6976	Punjabi:	8065		
Greenlandic:	7576	Quechua:	8185		
Guarani:	7178	Rhaeto-Romance:	8277		
Gujarati:	7185	Romanian:	8279		
Hausa:	7265	Russian:	8285		

## About DivX subtitles text display

### The United Kingdom and Republic of Ireland

You can display subtitles text recorded onto the DivX video disc on this unit. This function has no relation to the subtitles specified in DivX standard specifications and has no clear standard. Depending on the methods used to create the file, the following functions may not work.

### ■ Displaying subtitles text

During play, press [SUBTITLE] to select “TEXT ON”.

 TEXT ON

- DivX video files that do not display “TEXT ON” do not contain subtitles text. Subtitles text cannot be displayed.
- If the subtitles text are not displayed correctly, try changing the language settings (→ below).

### ■ Subtitles text language settings

- Only works when the language in “DISPLAY” menu is set to English (→ page 18).

1. During play, press [SETUP].

2. Press [▲ ▼] to select “DISC” and press [OK].

3. Press [▲ ▼] to select “SUBTITLE TEXT” and press [OK].

4. Press [▲ ▼] to select “LATIN1”, “LATIN2”, “CYRILLIC” or “TURKISH” then press [OK].

- The initial setting is “LATIN2”.

To exit the screen, press [SETUP].

### ■ Types of subtitles text file that can be displayed

Subtitles text that satisfy the following conditions can be displayed on this unit.

- File format: MicroDVD, SubRip, or TMLPlayer
- File extension: “.SRT”, “.srt”, “.SUB”, “.sub”, “.TXT”, or “.txt”
- File name: No more than 44 characters excluding the file extension
- The DivX video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions.
- If there are more than one subtitles text files inside the same folder, they are displayed in the following order of priority: “.srt”, “.sub”, “.txt”.

### ■ Limitations of this unit

In the following situations, the subtitles cannot be displayed as recorded.

Furthermore, depending on the methods used to create the file or the state of the recording, only parts of the subtitles may be displayed, or the subtitles may not be displayed at all.

- When special text or characters are included in the subtitles text.
- When the file size is larger than 256KB.

When characters with styling specified are included in the subtitle data.

Codes that specify the character style within files are displayed as subtitle characters.

When data with a different format exists within the subtitle data.

- If the file name of the DivX video file is not displayed correctly on the menu screen (the file name is displayed as “\_”), the subtitles text may not be displayed correctly.
- The subtitles text cannot be displayed when search (→ page 9) and other such operations are being performed.
- The subtitles text cannot be displayed when Quick OSD (→ page 13) and other such menu screens are being displayed.

# Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated in the chart do not solve the problem, consult your dealer for instructions. (Reference pages are shown in parentheses.)

## Power

<b>No power.</b>	<ul style="list-style-type: none"> <li>Insert the AC mains lead securely into the household mains socket. <b>(8)</b></li> </ul>
<b>The unit is automatically switched to the standby mode.</b>	<ul style="list-style-type: none"> <li>When "AUTO POWER OFF" is set to "ON", the unit automatically switches to standby after approximately 30 minutes in the stop mode. <b>(18)</b></li> </ul>

## No operation

<b>No response when any buttons pressed.</b>	<ul style="list-style-type: none"> <li>This unit cannot play discs other than the ones listed in these operating instructions. <b>(4)</b></li> <li>The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it.</li> <li>Condensation has formed: Wait 1 to 2 hours for it to evaporate.</li> </ul>
<b>No response when remote control buttons pressed.</b>	<ul style="list-style-type: none"> <li>Check that the batteries are installed correctly. <b>(8)</b></li> <li>The batteries are depleted: Replace them with new ones. <b>(8)</b></li> <li>Point the remote control at the remote control sensor and operate. <b>(9)</b></li> </ul>
<b>No picture or sound.</b>	<ul style="list-style-type: none"> <li>Check the video or audio connection. <b>(6 to 8)</b></li> <li>Check the power or input setting of the connected equipment.</li> </ul>
<b>You have forgotten your ratings password.</b> Reset all the settings to Factory Preset.	<ul style="list-style-type: none"> <li>While stopped, remove the disc, and then press and hold <b>[▶]</b> (PLAY) and <b>[■]</b> on the unit and then also press and hold <b>[⏻]</b> on the unit until "INITIALIZED" disappears from the television. Turn the unit off and on again. All settings will return to the default values.</li> </ul>

## Specific operation impossible or incorrect

<b>It takes time before play starts.</b> <b>MP3 DivX</b>	<ul style="list-style-type: none"> <li>Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed, however this is normal.</li> <li>This is normal on DivX video.</li> </ul>
<b>The program functions do not work.</b>	<ul style="list-style-type: none"> <li>These functions do not work with some DVD-Videos.</li> </ul>
<b>Menu doesn't appear.</b> <b>VCD</b> with playback control	<ul style="list-style-type: none"> <li>Press <b>[■]</b> twice and then press <b>[▶]</b> (PLAY).</li> </ul>
<b>Play doesn't start.</b>	<ul style="list-style-type: none"> <li>If a disc contains CD-DA and other formats, proper playback may not be possible.</li> <li>This unit may not play WMA and MPEG4 that contains still picture data.</li> <li>If playing DivX VOD content, refer to the home page where you purchased it. (Example: <a href="http://www.divx.com/vod">www.divx.com/vod</a>)</li> </ul>
<b>No subtitles.</b>	<ul style="list-style-type: none"> <li>Display the subtitles. <b>(13)</b></li> </ul>
<b>In A-B Repeat, point B is automatically set.</b>	<ul style="list-style-type: none"> <li>The end of an item becomes point B when it is reached.</li> </ul>
<b>Repeat play is automatically canceled.</b>	<ul style="list-style-type: none"> <li>A-B Repeat is canceled when you press [QUICK REPLAY].</li> <li>Repeat play may be canceled when you press [MANUAL SKIP].</li> </ul>

## Progressive video

<b>There is ghosting when progressive or HDMI output is on.</b>	<ul style="list-style-type: none"> <li>This problem is caused by the editing method or material used on DVD-Video, but should be corrected if you use interlace output. Change "VIDEO OUT (I/P)" in "VIDEO" menu to "INTERLACE". <b>(17)</b></li> </ul>
<b>Pictures not in progressive output.</b>	<ul style="list-style-type: none"> <li>If the unit is connected to the television through VIDEO OUT, S VIDEO OUT, or AV*1 terminal, output will be interlace.</li> </ul>

\*1 The United Kingdom and Republic of Ireland

## Picture incorrect

<b>Picture distorted.</b>	<ul style="list-style-type: none"> <li>Ensure that the unit is not connected through a video cassette recorder. (6)</li> <li>Make sure that progressive output has not been selected when the connected television is not progressive compatible. Press and hold [RETURN] until the picture displays correctly. The settings will return to "INTERLACE".</li> <li><b>DivX</b> Change "SOURCE SELECT" in On-Screen Menu 2. (15)</li> </ul>
<b>Picture size doesn't fit the screen.</b>	<ul style="list-style-type: none"> <li>Change "TV ASPECT" in "VIDEO" menu. (17)</li> <li>Use the television to change the aspect. If your television does not have that function, change "TV ASPECT". (17)</li> <li>Change the zoom setting. (14)</li> </ul>
<b>Picture stops.</b>	<ul style="list-style-type: none"> <li>Picture may stop if the DivX files are greater than 2GB.</li> </ul>
<b>The television may display incorrectly or colours appear faded.</b>	<ul style="list-style-type: none"> <li>The unit and television are using different video systems. <ul style="list-style-type: none"> <li><b>Asia</b> Use a multi-system or NTSC television.</li> <li><b>Others</b> Use a multi-system or PAL television.</li> </ul> </li> <li>The system used on the disc doesn't match your television. <ul style="list-style-type: none"> <li>–PAL discs cannot be correctly viewed on an NTSC television.</li> <li>–This unit can convert NTSC signals to PAL60 for viewing on a PAL television ("NTSC DISC OUT" in "VIDEO" menu). (17)</li> </ul> </li> <li>Connect to a progressive output compatible television to enjoy progressive video.</li> <li>Picture may not be seen when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices.</li> </ul>
<b>Menu not displayed correctly.</b>	<ul style="list-style-type: none"> <li>Restore the zoom ratio to "NORMAL". (14)</li> <li>Change "TV ASPECT" in "VIDEO" menu. (17)</li> </ul>

## Sound incorrect


<b>Sound distorted.</b>	<ul style="list-style-type: none"> <li>Set Advanced surround to "OFF". (13)</li> <li>Noise may occur when playing WMA files.</li> <li>With HDMI AV OUT connections, audio may not be output from other terminals in the way that was set.</li> </ul>
<b>No sound.</b>	<ul style="list-style-type: none"> <li>Turn the volume up.</li> <li><b>DivX</b> Audio may not be output due to how files were created.</li> <li>Audio may not be heard when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices.</li> <li>When using the HDMI connection, ensure that "AUDIO OUT" in the "HDMI" menu is set to "ON".</li> </ul>
<b>Piercing noise comes from the speakers.</b>	<ul style="list-style-type: none"> <li>If you have connected a digital amplifier which does not include decoder, be sure to select "PCM" in "DOLBY DIGITAL", "DTS" or "MPEG*2" in "AUDIO" menu. (18)</li> </ul>
<b>Effects do not work.</b>	<ul style="list-style-type: none"> <li>None of the audio effects work when the unit is outputting bitstream signals from the COAXIAL or HDMI AV OUT terminal. (7, 8)</li> <li>Some audio effects do not work or have less effect with some discs.</li> <li>Advanced surround and Re-master do not work if you have changed the play speed.</li> </ul>

## Recording

<b>Cannot record to digital recording equipment. (Incorrect sound recorded.)</b>	<ul style="list-style-type: none"> <li>You cannot record WMA/MP3.</li> <li>You cannot record DVDs that have protection preventing digital recording.</li> <li>You cannot record DVDs if the recording equipment cannot handle signals with a sampling frequency of 48 kHz.</li> <li>Make the following settings: <ul style="list-style-type: none"> <li>– ADVANCED SURROUND: OFF (13)</li> <li>– PCM OUTPUT: UP TO 48kHz (18)</li> <li>– DOLBY DIGITAL: PCM (18)</li> <li>– DTS: PCM (18)</li> </ul> </li> </ul>
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\*2 Except Asia

## Unit displays

	<ul style="list-style-type: none"> <li>• Trouble may have occurred. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it.</li> <li>• If the service numbers fail to clear, note the service number and contact a qualified service person.</li> </ul>
noPLAY	<ul style="list-style-type: none"> <li>• You inserted a disc the unit cannot play; insert one it can. <b>(4)</b></li> <li>• You inserted a blank disc.</li> <li>• You inserted a disc that has not been finalized. <b>(4)</b></li> </ul>
noDISC	<ul style="list-style-type: none"> <li>• You haven't inserted a disc: Insert one.</li> <li>• You haven't inserted the disc correctly: Insert it correctly. <b>(9)</b></li> </ul>
U 11	<ul style="list-style-type: none"> <li>• The disc may be dirty. <b>(5)</b></li> <li>• You haven't inserted the disc correctly: Insert it correctly. <b>(9)</b></li> </ul>
U 70-1	<ul style="list-style-type: none"> <li>• The connected equipment is not HDMI-compatible.</li> </ul>
U 70-2	<ul style="list-style-type: none"> <li>• The HDMI connection acts unusually. <ul style="list-style-type: none"> <li>– The connected equipment is not HDMI-compatible.</li> <li>– The HDMI cable is too long.</li> <li>– The HDMI cable is damaged.</li> </ul> </li> </ul>
U 70-3	

## Television displays

“ERR H □□” □□ stands for a number.	<ul style="list-style-type: none"> <li>• Trouble may have occurred. The number following “ERR H” depends on the status of the unit. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it.</li> <li>• If the service numbers fail to clear, note the service number and contact a qualified service person.</li> </ul>
“ERR U11”	<ul style="list-style-type: none"> <li>• The disc may be dirty. <b>(5)</b></li> <li>• You haven't inserted the disc correctly: Insert it correctly. <b>(9)</b></li> </ul>
“⊙”	<ul style="list-style-type: none"> <li>• The operation is prohibited by the unit or disc.</li> </ul>
“NO DISC”	<ul style="list-style-type: none"> <li>• You haven't inserted a disc: Insert one.</li> <li>• You haven't inserted the disc correctly: Insert it correctly. <b>(9)</b></li> </ul>
“CANNOT PLAY AUDIO” “NO AUDIO”	<ul style="list-style-type: none"> <li>• Audio has not been recorded, or recorded in a format this unit cannot playback. Video playback only is possible. <b>(5)</b></li> </ul>
“THIS DISC MAY NOT BE PLAYED IN YOUR REGION.”	<ul style="list-style-type: none"> <li>• You can only play DVD-Video if their region number is the same or includes the same region number as the unit or if the DVD-Video is marked “ALL”. Confirm the region number for the unit on the rear panel. <b>(Cover)</b></li> </ul>
“THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC.”	<ul style="list-style-type: none"> <li>• You inserted a disc that has not been finalized. <b>(4)</b></li> <li>• You inserted a disc the unit cannot play; insert one it can. <b>(4)</b></li> <li>• You inserted a blank disc.</li> </ul>
“AUTHORIZATION ERROR THIS PLAYER IS NOT AUTHORIZED TO PLAY THIS VIDEO.” <b>DivX</b>	<ul style="list-style-type: none"> <li>• You are trying to play the DivX VOD content that was purchased with a different registration code. You cannot play the content on this unit. <b>(24)</b></li> </ul>
“RENTAL EXPIRED” <b>DivX</b>	<ul style="list-style-type: none"> <li>• The DivX VOD content has zero remaining plays. You cannot play it. <b>(24)</b></li> </ul>

# VIERA Link “HDAVI Control”™

## What is VIERA Link “HDAVI Control”?

VIERA Link “HDAVI Control” is a convenient function that offers linked operations of this unit, and a Panasonic TV (VIERA) or receiver under “HDAVI Control”. You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment for operational details.

- VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturer's equipment that supports HDMI CEC cannot be guaranteed.
- This unit supports “HDAVI Control 2” function.  
“HDAVI Control 2” is the newest standard (current as of February, 2007) for Panasonic's HDAVI Control compatible equipment. This standard is compatible with Panasonic's conventional HDAVI equipment.
- Please refer to individual manuals for other manufacturers' equipment supporting VIERA Link function.
- **It is recommended that you use Panasonic's HDMI cable.**  
Recommended part number: RP-CDHG10 (1.0 m), RP-CDHG15 (1.5 m), RP-CDHG20 (2.0 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.
- **Non-HDMI-compliant cables cannot be utilized.**

### Preparation

- 1 Connect this unit to your TV or amplifier with an HDMI cable (➡ 7).
  - 2 Set “VIERA Link” to “ON” (➡ 18, “HDMI” menu).
  - 3 Set the “HDAVI Control” operations on the connected equipment (e.g., TV).
    - **When using HDMI2 terminal of VIERA as HDAVI Control, set the input channel to HDMI2 on VIERA.**
  - 4 Turn on all VIERA Link “HDAVI Control” compatible equipment and select this unit's input channel on the connected TV so that the VIERA Link HDAVI Control function works properly.
- Also when the connection or settings are changed, repeat this procedure.**

## Automatic input switching

When play starts on the unit, the television input will automatically switch to the HDMI input mode and the television displays the corresponding action.

## Power on link

When the television is off and play starts on the unit, the television will automatically turn on.

(Picture or sound may not be available for the first few seconds.)

## Power off link

All connected equipment compatible with VIERA Link “HDAVI Control” including this unit automatically turns off when you switch the television off.

- When this unit is connected to an “HDAVI Control” compatible Panasonic receiver with an HDMI cable, the receiver will also turn off.
- Only this unit turns off when you press the power button of the unit or the remote control for shutting it down. Other connected equipment compatible with VIERA Link “HDAVI Control” stay on.

## Easy control only with VIERA remote control

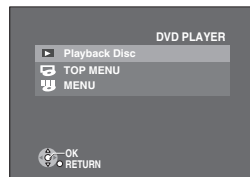
If you connect this unit to the TV that has “HDAVI Control 2” function with an HDMI cable, you can operate this unit using the following buttons on the TV remote control. [▲ ▼ ◀ ▶], [OK], [RETURN], [EXIT], [OPTION] and the coloured buttons.

- Refer to the TV operating instructions for operating TV.

## Using the VIERA Link window to operate this unit

By using the TV remote control, you can play discs using the “Playback Disc” (➡ 24) and display the Top Menu (for DVD-Video).

- 1 Press the button for VIERA Link on the remote control, select the player.



“Playback Disc”: (➡ 24)

“TOP MENU”: Shows a disc top menu (➡ 10) or program list (➡ 12).

“MENU”: Shows a disc menu (➡ 10) or playlist (➡ 12).

- 2 Select an item then press [OK].

## VIERA Link "HDAVI Control"™

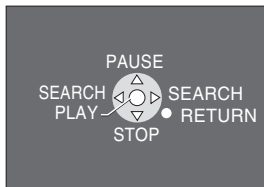
### Using the Playback Disc

Using the Playback Disc, you can operate search backward, search forward, stop, etc., with the TV remote control.

Perform steps **1** and **2** of "Using the VIERA Link window to operate this unit" (➡ 23), or press [OPTION].

The Playback Disc is displayed (➡ right).

- When playing DVD-Video, etc.
  - [▲]: Pause, [▼]: Stop,
  - [◀]: Search backward,
  - [▶]: Search forward,
  - [OK]: Play, [RETURN]: Exit the screen.
- While playing still pictures
  - [▲]: Pause, [▼]: Stop,
  - [◀]: View previous picture,
  - [▶]: View next picture,
  - [OK]: Play, [RETURN]: Exit the screen.



### When you want to leave the TV on and set only this unit to standby mode

Press [⏻] on this unit's remote control and set to standby mode.

### When not using "HDAVI Control"

Set "VIERA Link" in the setup menu to "OFF" (➡ 18, "HDMI" menu).

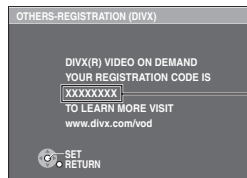
## About DivX VOD contents

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the online instructions for purchasing DivX VOD content to enter the unit's registration code and register the unit. For more information about DivX VOD, visit [www.divx.com/vod](http://www.divx.com/vod).

### Display the unit's registration code

(➡ page 18, "REGISTRATION" in "OTHERS" menu)



8 alphanumeric characters

- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for the first time, another registration code is then displayed in "REGISTRATION". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.
- If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("AUTHORIZATION ERROR" is displayed.)

### Regarding DivX content that can only be played a set number of times

Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ("RENTAL EXPIRED" is displayed.)

When playing this content

- The number of remaining plays is reduced by one if
  - you press [⏻] or [SETUP].
  - you press [■]. (Press [II] to stop play.)
  - you press [◀◀▶▶] or [◀▶▶▶] etc. and arrive at another content or the start of the content being played.
- Resume (➡ page 9, Stop) function does not work.

# Specifications

**Signal system:** PAL 625/50, PAL 525/60, NTSC  
**Operating temperature range:** + 5 to + 35 °C  
**Operating humidity range:** 5 to 90 % RH (no condensation)

## Discs played [8 cm (3") or 12 cm (5")]:

- (1) DVD (DVD-Video, DivX<sup>\*6,7</sup>)
- (2) DVD-RAM (DVD-VR, JPEG<sup>\*4,7</sup>, MP3<sup>\*2,7</sup>, DivX<sup>\*6,7</sup>, MPEG4<sup>\*5,7</sup>)
- (3) DVD-R (DVD-Video, DVD-VR, MP3<sup>\*2,7</sup>, JPEG<sup>\*4,7</sup>, DivX<sup>\*6,7</sup>, MPEG4<sup>\*5,7</sup>)
- (4) DVD-R DL (DVD-Video)
- (5) DVD-RW (DVD-Video, DVD-VR, MPEG4<sup>\*5,7</sup>, DivX<sup>\*6,7</sup>, MP3<sup>\*2,7</sup>, JPEG<sup>\*4,7</sup>)
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW (CD(CD-DA), Video CD, SVCD<sup>\*1</sup>, MP3<sup>\*2,7</sup>, WMA<sup>\*3,7</sup>, JPEG<sup>\*4,7</sup>, MPEG4<sup>\*5,7</sup>, DivX<sup>\*6,7</sup>)

## Video output:

Output level: 1 Vp-p (75 Ω)  
 Output terminal:

**The United Kingdom and Republic of Ireland**

Pin jack (1 system)/AV

**Others**

Pin jack (1 system)

## S-video output:

Y output level: 1 Vp-p (75 Ω)  
 C output level: NTSC 0.286 Vp-p (75 Ω)  
 PAL 0.300 Vp-p (75 Ω)

Output terminal:

**The United Kingdom and Republic of Ireland**

S terminal (1 system)/AV

**Others**

S terminal (1 system)

## Component video output:

[NTSC: 525(480)p/525(480)i; PAL: 625(576)p/625(576)i]

Y output level: 1 Vp-p (75 Ω)  
 P<sub>B</sub> output level: 0.7 Vp-p (75 Ω)  
 P<sub>R</sub> output level: 0.7 Vp-p (75 Ω)  
 Output terminal: Pin jack (Y: green, P<sub>B</sub>: blue, P<sub>R</sub>: red) (1 system)

## RGB video output:

**The United Kingdom and Republic of Ireland**

R output level: 0.7 Vp-p (75 Ω)  
 G output level: 0.7 Vp-p (75 Ω)  
 B output level: 0.7 Vp-p (75 Ω)  
 Output terminal: AV

## Audio output:

Output level: 2 Vrms (1 kHz, 0 dB)

Output terminal:

**The United Kingdom and Republic of Ireland**

Pin jack/AV

**Others**

Pin jack

Number of terminals:

2 channel: 1 system

## Audio performance:

Frequency response:

- DVD (linear audio): 4 Hz to 22 kHz (48 kHz sampling)  
4 Hz to 44 kHz (96 kHz sampling)  
4 Hz to 20 kHz
- CD-Audio: 115 dB
- S/N ratio: 100 dB
- Dynamic range: 0.003 %
- Total harmonic distortion:

## Digital audio output:

Coaxial digital output:

Pin jack

## HDMI AV output

Type A Connector (19-pin)

## Pickup:

Wave length:

653 nm/790 nm

Laser power:

CLASS 1/CLASS 1M

## Power supply:

**The United Kingdom, Republic of Ireland, Australia and N.Z.**

AC 230 to 240 V, 50 Hz

**Asia**

AC 110 to 240 V, 50/60 Hz

## Power consumption:

9 W

## Power consumption in standby mode:

**approx. 1 W**

## Dimensions (W x D x H):

430 mm x 231 mm x 43 mm (excluding protrusions)

430 mm x 239 mm x 43 mm (including protrusions)

approx. 2.0 kg

## Mass:

<sup>\*1</sup> Conforming to IEC62107

<sup>\*2</sup> MPEG-1 Layer 3, MPEG-2 Layer 3

<sup>\*3</sup> Windows Media Audio Ver.9.0 L3

Not compatible with Multiple Bit Rate (MBR)

<sup>\*4</sup> Exif Ver2.1 JPEG Baseline files

Picture resolution: between 160 × 120 and 6144 × 4096 pixels (Sub sampling is 4:2:2 or 4:2:0)

<sup>\*5</sup> MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders Conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system

<sup>\*6</sup> Official DivX<sup>®</sup> Certified product.

Plays all versions of DivX<sup>®</sup> video (including DivX<sup>®</sup>6) with standard playback of DivX<sup>®</sup> media files.

DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

<sup>\*7</sup> The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 256 groups.

## DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size.

## Down-mixing

This is a process of remixing the multi-channel audio (surround sound) on some discs into two channels. When you want to listen to the audio on a DVD with a 5.1 channel digital surround track through your television speakers, the down-mixed audio will be output.

## Film and video

DVD-Videos are recorded using either film or video. This unit can determine which type has been used, then uses the most suitable method of progressive output.

**Film:** Recorded at 25 frames per second (PAL discs) or 24 frames per second (NTSC discs). (NTSC discs recorded at 30 frames per second as well). Generally appropriate for motion picture films.

**Video:** Recorded at 25 frames/50 fields per second (PAL discs) or 30 frames/60 fields per second (NTSC discs). Generally appropriate for TV drama programs or animation.

## HDMI (High-Definition Multimedia Interface)

HDMI is a next-generation digital interface for consumer electronic products. Unlike conventional connections, it transmits uncompressed digital video and audio signals on a single cable. This unit supports high-definition video output (1080p, 1080i) from HDMI AV OUT terminal. To enjoy high-definition video a high definition compatible television is required.

HDMI can transmit more video data in Deep Colour mode for expressing more colours. To enjoy video in Deep Colour mode a television which supports Deep Colour mode is required.

Connected to the Deep Colour compatible television, this unit can automatically output video in Deep Colour mode.

## MPEG4

A compression system for use on mobile devices or a network, that allows highly efficient recording at a low bit rate.

## Sampling frequency

Sampling is the process of converting the heights of sound wave (analog signal) samples taken at set periods into digits (digital encoding). Sampling frequency is the number of samples taken per second, so larger numbers mean more faithful reproduction of the original sound.

## Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus. (This unit is compatible with version 2.0 and 1.1.)

## Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

## For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

## Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

## 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.

## 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.
- USE ONLY THE RECOMMENDED  
ACCESSORIES.
- DO NOT REMOVE THE COVER (OR BACK);  
THERE ARE NO USER SERVICEABLE PARTS  
INSIDE. REFER SERVICING TO QUALIFIED  
SERVICE PERSONNEL.

## CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN  
A BOOKCASE, BUILT-IN CABINET OR IN  
ANOTHER CONFINED SPACE. ENSURE THE  
UNIT IS WELL VENTILATED. TO PREVENT RISK  
OF ELECTRIC SHOCK OR FIRE HAZARD DUE  
TO OVERHEATING, ENSURE THAT CURTAINS  
AND ANY OTHER MATERIALS DO NOT  
OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION  
OPENINGS WITH NEWSPAPERS,  
TABLECLOTHS, CURTAINS, AND SIMILAR  
ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES,  
SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN  
ENVIRONMENTALLY FRIENDLY MANNER.

This 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.  
The mains plug of the power supply cord shall remain  
readily operable.  
To completely disconnect this apparatus from the AC  
Mains, disconnect the power supply cord plug from AC  
receptacle.

### Asia

THIS UNIT IS INTENDED FOR USE IN TROPICAL  
CLIMATES.

### The United Kingdom, Republic of Ireland, Australia and N.Z.

THIS UNIT IS INTENDED FOR USE IN MODERATE  
CLIMATES.

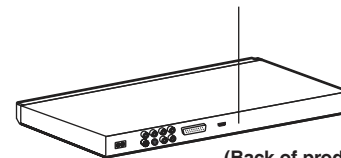
## CAUTION

Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type  
recommended by the manufacturer. Dispose of used  
batteries according to the manufacturer's instructions.

<b>CAUTION</b> - VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA21 CFR/Class IIa	
<b>CAUTION</b> - CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 -A2/Class 1M	
<b>WARNING</b> - KLASS 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄTTA EJ STRÅLEN DIREKT GENOM OPTISKE INSTRUMENT.	
FORSÖKT - SYNLIG OCH OSYNLIG LASERSTRÅLNING KLASS 1M. NÄR LÄGET ÄR ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	
<b>VARO</b> - AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYYVÄ JA NÄKYMÄTÖNÄ LASERSTRÄLKYÄ. ÄLÄ KATSO OPTISELLÄ LAITTEELLA SUORAAN SÄTEESEEN.	
<b>VORSICHT</b> - SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 1M. NICHT ABBECKUNG GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.	
<b>ATTENTION</b> - RAYONNEMENT LASER VISIBLE ET INVISIBLE - CLASSE 1M. EN CAS D'OUVERTURE. NE PAS REGARDER DIRECTEMENT A L'AIDE D'INSTRUMENTS D'OPTIQUE.	
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、触れたりしないでください。
注意	・打开時有可能及不可見激光辐射。 避免光束照射。
RQLCA0581	

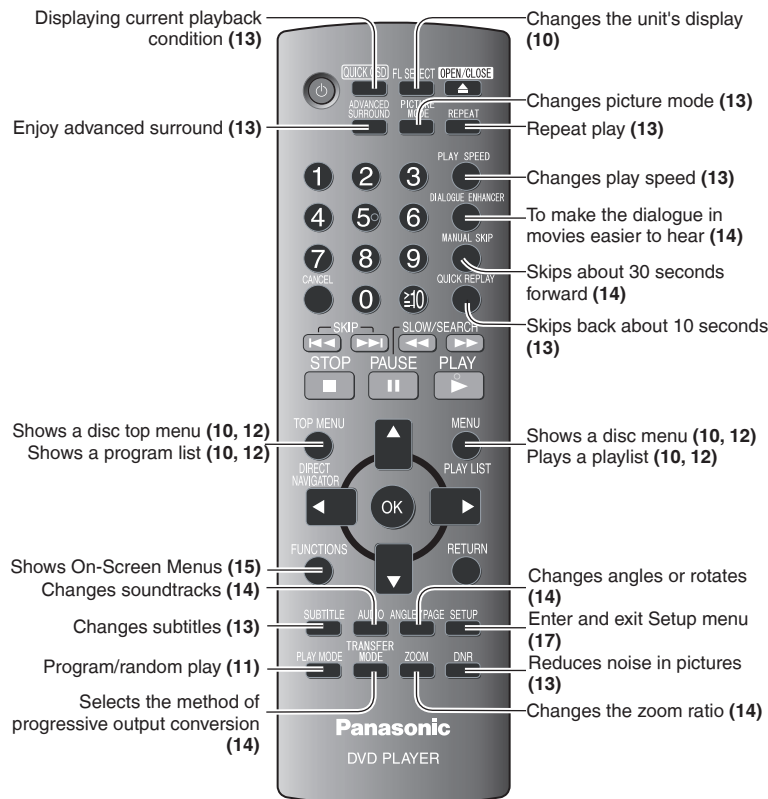
(Inside of product)

CLASS 1  
LASER PRODUCT



(Back of product)

## Main feature index (Reference pages are shown in parentheses.)



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U.S. Patent Nos. 6,836,549; 6,381,747; 7,050,698; 6,516,132; and 5,583,936.
This product is licensed under the MPEG-4 Visual patent portfolio license for the personal and non-commercial use of a consumer for (i) encoding video in compliance with the MPEG-4 Visual Standard ("MPEG-4 Video") and/or (ii) decoding MPEG-4 Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed by MPEG LA to provide MPEG-4 Video. No license is granted or shall be implied for any other use. Additional information including that relating to promotional, internal and commercial uses and licensing may be obtained from MPEG LA, LLC. See <a href="http://www.mpegla.com">http://www.mpegla.com</a> .
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WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.
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**Matsushita Electric Industrial Co., Ltd.**

Web Site: <http://panasonic.net>

**The United Kingdom and Republic of Ireland**

Pursuant to at the directive 2004/108/EC, article 9(2)

Panasonic Testing Centre

Panasonic Marketing Europe GmbH.

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(En)

**RQTC0156-B**

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