



Operating Instructions

DVD/CD PLAYER

Model No. **DVD-S1**

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

Asia

The player plays DVD-Video marked with labels containing the region number "3" or "ALL".

Others

The player plays DVD-Video marked with labels containing the region number "2" or "ALL".

Example:



Example:



Panasonic®

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Note

"EB" on the packaging indicates the United Kingdom. RQTC0077-B

Accessories

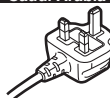


Please check and identify the supplied accessories.

Use numbers when asking for replacement parts.

(Product numbers correct as of February 2006. These may be subject to change.)

- ☐ 1 Remote control
The United Kingdom and Continental Europe (N2QAYB000014)
Others (N2QAYB000012)
- ☐ 1 AC mains lead
The United Kingdom (K2CT3CA00004)
Continental Europe, United Arab Emirates, South Africa and Asia (K2CQ2CA00006)
- ☐ 2 AC mains leads
The Middle East except United Arab Emirates (K2CT3CA00004)
Saudi Arabia (K2CQ2CA00006)



- ☐ 1 Audio/video cable **Except the United Kingdom and Continental Europe** (K2KA6BA00004)

- ☐ 2 Remote control batteries

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

Direct Sales at Panasonic UK

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

Interested in purchasing an extended guarantee? Please call 0870 240 6284 or visit our website www.panasonic.co.uk/guarantee.

Safety precautions

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 center. 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.

Caution for AC Mains Lead

(For United Kingdom and Middle East except United Arab Emirates)

("EB" or "GC" 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 $\perp$ OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

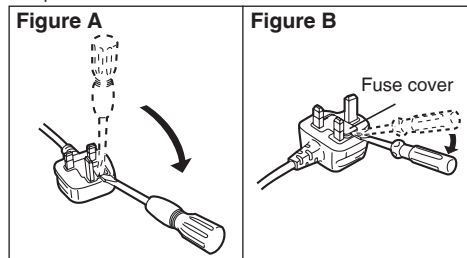
Before use

Remove the connector cover.

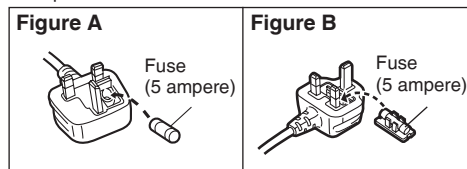
How to replace the fuse

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.

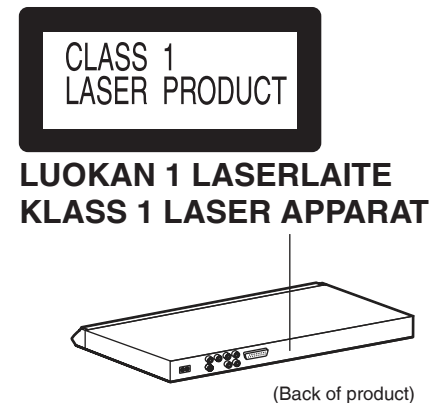


2. Replace the fuse and close or attach the fuse cover.



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

(Inside of product)
(Produktets innsida)
(Tuotteen sisällä)



The illustration shows the models for the United Kingdom and Continental Europe.

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.

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 or the mains plug or an appliance coupler shall remain readily operable.

The Middle East, South Africa and Asia

THIS UNIT IS INTENDED FOR USE IN TROPICAL CLIMATES.

The United Kingdom and Continental Europe

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

SUOMI

VAROITUS!

LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ KÄYTTÖOHJEESSA MAINITULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITÄVÄLLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

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 ASENNA 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, PÖYTÄLIINALLA, VERHOLLA TAI MUULLA VASTA-AVALLA ESINEELLÄ.
- ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.
- HÄVITÄ PARISTOT LUONTOA VAHINGOITAMATTOMALLA TAVALLA.

TÄMÄ LAITE ON TARKOITETTU KÄYTETTÄVÄKSI LEUDOSSA ILMASTOSSA.

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

NORSK

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 FORSØK ALDRI Å REPARERE APPARATET PÅ EGENHÅND. ALT SERVICE OG REPARASJONSARBEID MÅ UTFØRES AV KVALIFISERT PERSONELL.

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.

DETTE APPARATET ER BEREGNET TIL BRUK UNDER MODERATE KLIMAFORHOLD.

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

Discs that can be played

Commercial discs

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

Discs that cannot be played

DVD-Audio, DVD-RAM, Version 1.0 of DVD-R/RW, DVD-ROM, CD-ROM, CDV, CD-G, SACD, WMA Discs, Divx Video Discs, Photo CD, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

Built-in decoder

This unit has a Dolby Digital decoder so you can play DVDs with this mark.



This unit does not have a DTS decoder.
Connect this unit to equipment that has a DTS decoder to enjoy DTS sound.

Recorded discs (✓:Available, X :Not available)

Disc Logo	Recorded on a DVD video recorder, etc.	Recorded on a personal computer, etc.		Necessity of finalize*3
	DVD-V *1	MP3	JPEG	
DVD-R/RW 	✓	✓	✓	Necessary
DVD-R DL 	✓	X	X	Necessary
+R/+RW	(✓)*2	X	X	Necessary
+R DL	(✓)*2	X	X	Necessary
CD-R/RW *5	X	✓	✓	Necessary*4

- 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 16, Tips for making data discs).

- *1 Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.
- *2 Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.
- *3 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.
- *4 Closing the session will also work.
- *5 This unit can also play CD-R/RW recorded with CD-DA or Video CD format.

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.

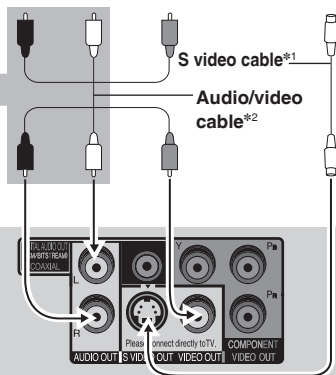
STEP 1 Connection to a television

- 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.
- Unless otherwise indicated, illustrations are of areas except the United Kingdom and Continental Europe.
(**The United Kingdom and Continental Europe** :There is no S VIDEO OUT terminal on the unit.)

Television

With VIDEO IN or S VIDEO IN

AUDIO IN R L VIDEO IN S VIDEO IN

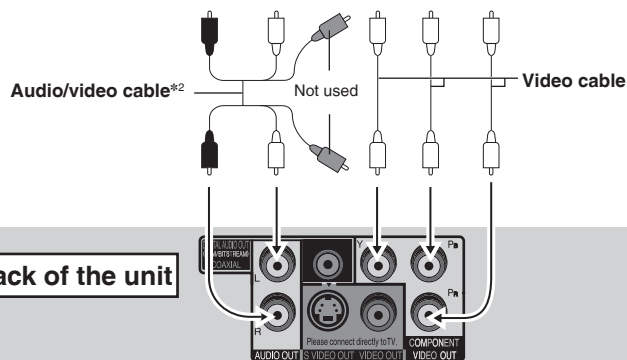


*1 When using this connection, the audio cable (red and white plugs) should also be connected.

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

With COMPONENT VIDEO IN

AUDIO IN R L COMPONENT VIDEO IN



Back of the unit

To enjoy progressive video

Connect to a progressive output compatible television.

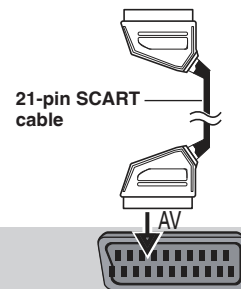
- The United Kingdom and Continental Europe**
Set "VIDEO OUT-SCART" to "VIDEO/YpPr" for component terminals. (→ page 15, "VIDEO" tab).
- Set "VIDEO OUT (I/P)" to "PROGRESSIVE", then follow the instructions on the menu screen (→ page 15, "VIDEO" tab).

The United Kingdom and Continental Europe

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

The United Kingdom and Continental Europe With SCART (AV) IN

SCART (AV) IN

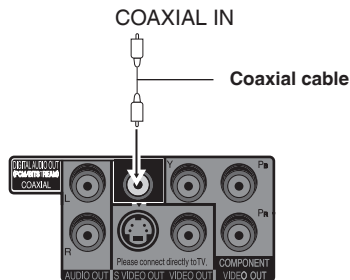


- If the television is compatible with S-video, set "VIDEO OUT-SCART" to "S-VIDEO/YpPr", or compatible with RGB, set "VIDEO OUT-SCART" to "RGB/NO OUTPUT" (→ page 15, "VIDEO" tab).

*2 (**Except the United Kingdom and Continental Europe** included)

■ Enjoying multi-channel surround sound

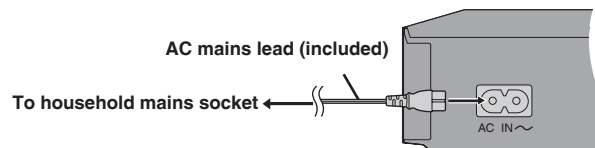
Amplifier with a built-in decoder or
a decoder-amplifier combination



Change "DOWN SAMPLING", "DOLBY DIGITAL", "DTS" and "MPEG **Except Asia**"
(→ page 15, "AUDIO" tab).

■ Connect the AC mains lead last

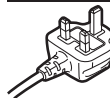
FOR THE UNITED KINGDOM AND THE MIDDLE EAST ONLY (EXCEPT UNITED ARAB EMIRATES)
READ THE CAUTION FOR AC MAINS LEAD ON PAGE 3 BEFORE CONNECTION.



The Middle East except United Arab Emirates

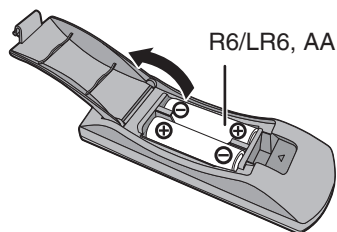
Use the AC mains lead that matches the socket for area you live in.

Saudi Arabia



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:

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- 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 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 8), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

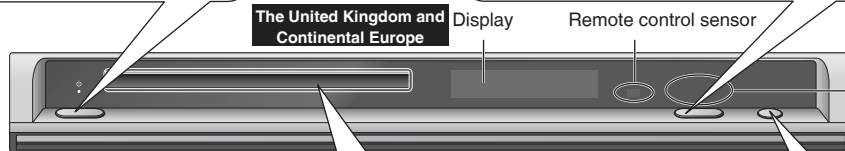
Basic play

① Power ON.

⏻/I

② Open the disc tray.

▲ OPEN/
CLOSE



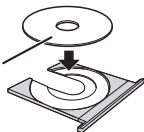
Except the United Kingdom and Continental Europe

DISC IN

- When the unit is switched off, the light goes off.
- When there is no disc or during loading, the indicator blinks every 0.5 sec.
- The indicator lights up during play.
- When the disc cannot be read, the indicator blinks every 0.25 sec.

③ Load the disc.

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



④ Start play.



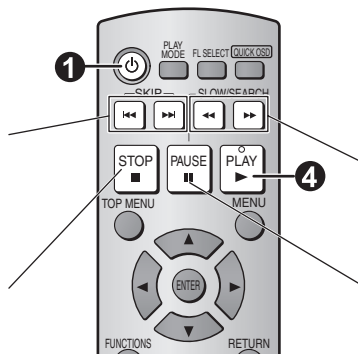
Skip

- Press [◀◀ ▶▶] to skip chapters or tracks.

Stop

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

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



Search (during play)

Slow-motion (during pause)

- Up to 5 steps
- Press [▶] (PLAY) to restart play.
- **VCD** Slow-motion, forward direction only

Pause

- Press [▶] (PLAY) to restart play.

Standby/on switch (⏻/I)

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.
- Total title number may not be displayed properly on +R/+RW.

If you are experiencing problems, refer to troubleshooting guide (➔ page 17, 18).

Frame-by-frame
(during pause)
DVD-V VCD



- **VCD** forward direction only

Return to previous screen



Disc menu



DVD-V
Shows a disc top menu.

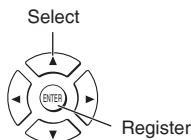


DVD-V
Shows a disc menu.



VCD with playback control
Shows a disc menu.

On-screen item select



Number select

- VCD** with playback control
1. While the disc menu is displayed, Press [FUNCTIONS] to display On-Screen Menu 1.
 2. Press [◀▶] to select "1~99".
 3. Press [▲▼] to select the track number and press [ENTER].

Main unit display
The United Kingdom
and Continental Europe

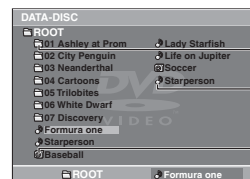


Number display ↔ Time display

While the menu is displayed

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

- Repeat this step if there are multiple layers.



Group (Folder)*

MP3 content (File)*

JPEG content (File)*

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

- Press [RETURN] to go back to previous screen.
- Press [MENU] to display/exit the screen.

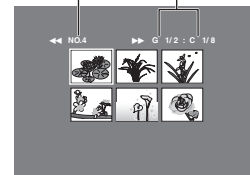
■ Select the picture in thumbnails menu **JPEG**

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

2. To select a picture in a group

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

Group name
Group and content number



To select a picture in other groups

1. Press [▲] to select the group name.
2. Press [◀▶] to select the group and press [ENTER].
3. Press [▲▼◀▶] to select the picture and press [ENTER].

Convenient functions



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

PRG: Program Play

RND: Random Play



Current position

Playback condition

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



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

DVD-V (Except + R/+ RW) **VCD** **CD** **MP3**

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

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



Skipping about 30 seconds forward

DVD-V (Except +R/+RW)

Convenient when you want to skip commercials etc.

During play, press [M. SKIP].

- This may not work depending on the play position.



Zoom **DVD-V** **VCD** **JPEG**

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

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

e.g. **VCD**



×2 → ×4

↑ NORMAL ↓



Except the United Kingdom and Continental Europe

Enjoying advanced surround

DVD-V **VCD** (2 or more channels)

Motion picture with 2 or more channels only

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

Press [ADVANCED SURROUND] to select "A. SURROUND1",

"A. SURROUND2", "A. SURROUND3" or "OFF".

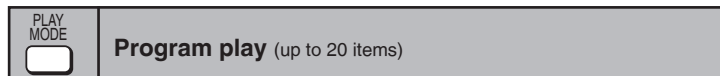
OFF → A. SURROUND1 → A. SURROUND2

↑ A. SURROUND3 ↓

A. SURROUND1: Light effect
A. SURROUND2: Medium effect
A. SURROUND3: Strong effect
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.

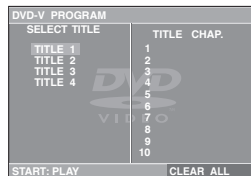
Changing the play sequences



1. While stopped, press [PLAY MODE] several times to select “○○○ PROGRAM”.

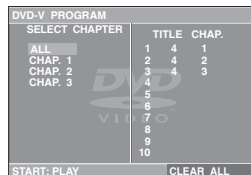
- When playing a disc with both MP3 and JPEG recorded, select “MUSIC PROGRAM” for MP3 or “PICTURE PROGRAM” for JPEG pictures. You cannot set both “MUSIC PROGRAM” and “PICTURE PROGRAM”.

e.g. **DVD-V**



2. Press [▲ ▼] to select an item and press [ENTER].

- Repeat this step to program other items.
- To select all items in a disc, title, or group, select “ALL” and press [ENTER].
- Press [▲ ▼] several times to go to the next page or previous page if any.
- Press [RETURN] to return to the previous menu.



3. Press [▶] (PLAY) to start play.

Clearing the program

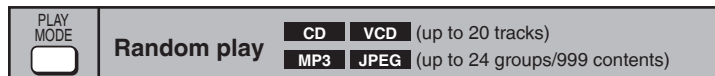
Press [▶] and then press [▲ ▼] to select the item and press [RETURN].

Clearing the whole program

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

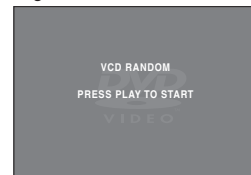
To exit the program screen

Press [PLAY MODE] several times.



1. While stopped, press [PLAY MODE] several times to select “○○○ RANDOM”.

e.g. **VCD**



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

2. **MP3** **JPEG**

Only when the disc has a group (folder)

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

- “*” will be displayed next to the selected groups. Press [ENTER] again to clear.
- To select multiple groups, repeat this step.
- To select all items in a disc, select “ALL”.

3. Press [▶] (PLAY) to start play.

To exit the random screen

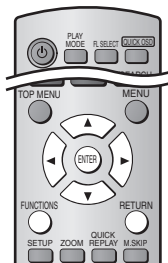
Press [PLAY MODE] several times.

Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

“DTS” and “DTS Digital Out” are trademarks of Digital Theater Systems, Inc.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Using On-Screen Menus



1

FUNCTIONS

Press.
Each time you press the button:
On-Screen Menu 1 → On-Screen Menu 2 → exit

2

Select

Select the item.

3

Select

Make the settings.

4

RETURN

Press to exit.

Items shown differ depending on the type of software.

On-Screen Menu 1

	Audio	Motion picture Press [▲ ▼] to select the soundtrack. VCD CD Press [▲ ▼] to select "L", "R", "L+R" or "L R".
	Subtitle	Discs with subtitles Press [▲ ▼] to select the subtitle language or "OFF". • On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.
	Angle	DVD-V with multiple angles Press [▲ ▼] to select the angle.

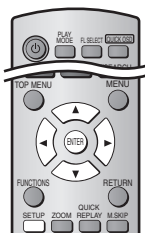
	Repeat	(Only when the elapsed play time can be displayed. JPEG ; you can use even if there is no elapsed time display.) 1. Press [▲ ▼] to select an item to be repeated. 2. A-B repeat only Press [ENTER] at the starting and ending points. • Press [ENTER] again to cancel.
1~99--	PBC	(→ page 9, Number select)
	Rotate	JPEG During pause, press [▲ ▼] to select "0", "90", "180" or "270".

On-Screen Menu 2

	Advanced surround	<i>Motion picture with 2 or more channels</i> Enjoy a surround-like effect when using 2 front speakers. Press [▲ ▼] to select the item. A.SURROUND1: Light effect A.SURROUND2: Medium effect A.SURROUND3: Strong effect 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.
	Zoom	(→ page 10, Zoom)
	Dialogue enhancer	DVD-V (Dolby Digital, MPEG*, 3-channel or over, with the dialogue recorded in the center channel) To make the dialogue in movies easier to hear Press [▲ ▼] to select "ON". ON OFF * Except Asia

	Transfer mode	If you have set "VIDEO OUT (I/P)" to "PROGRESSIVE" (→ page 15, "VIDEO" tab), press [▲ ▼] 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. CINEMA: Select this if the edges of the film content appear jagged or rough when AUTO is selected. However, if the video content is distorted as shown in the illustration to the right, 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.
	Picture mode	Press [▲ ▼] to select the mode. 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.

Changing the player settings



- 1** Shows Setup menu.
- 2** Select the tab. Register
- 3** Select the item. Register
- 4** Select. Register Make the settings.
- 5** Press to exit.

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

■ “DISC” tab

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

■ “VIDEO” tab

SETTING STATE	Display the current setting of the items below
TV ASPECT Choose the setting to suit your television and preference.	4:3PAN&SCAN The sides of the picture are cut off so it fills the screen (unless prohibited by the disc).  4:3LETTERBOX Picture is shown in the letterbox style.  4:3ZOOM If you select 4:3PAN&SCAN and there is no effect, select this and the image will display in 4:3PAN&SCAN.  16:9NORMAL Stretches a 16:9 aspect ratio image horizontally.  16:9SHRINK Displays a 4:3 aspect ratio image in the center of the screen.  16:9ZOOM Adjusts the horizontal width to display a full screen image in 16:9 aspect ratio. 
TV TYPE Select to suit the type of television.	STANDARD CRT LCD PROJECTION PLASMA
NTSC DISC OUT Choose PAL60 or NTSC output when playing NTSC discs.	NTSC: Output signals from NTSC discs remain as NTSC. PAL60: NTSC disc can be viewed on PAL television.
STILL MODE Specify the type of picture shown when paused.	Asia: “NTSC” is factory preset. AUTO FIELD: The picture is not blurred, but picture quality is lower. FRAME: Overall quality is high, but the picture may appear blurred.

VIDEO OUT-SCART* ⁵ Choose the video signal format to be output from the SCART and COMPONENT VIDEO OUT terminals (→ page 6).	VIDEO/YPbPr S-VIDEO/YPbPr RGB/NO OUTPUT
VIDEO OUT (I/P) Select “PROGRESSIVE” only if connecting to a progressive output compatible television.	INTERLACE PROGRESSIVE When you select “PROGRESSIVE”, a message screen will appear. - For progressive output, press [▲] and then press [ENTER]. - Press [RETURN] to cancel.

■ “AUDIO” tab

SETTING STATE	Display the current setting of the items below	
DOWN SAMPLING Check the digital input limitations of the equipment you connect using COAXIAL terminal and select the maximum sampling frequency of PCM digital output.	ON: When connected to equipment compatible with 44.1 or 48 kHz OFF: When connected to equipment compatible with 88.2 or 96 kHz • Signals from copy-protected discs are converted to 48 or 44.1 kHz. • 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.	
DOLBY DIGITAL With COAXIAL connections (→ page 7)	<u>BITSTREAM</u> PCM	Select “ BITSTREAM ” when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select “ PCM ” or “ OFF ”. (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.)
DTS With COAXIAL connections (→ page 7)	<u>BITSTREAM</u> OFF	
MPEG**6 With COAXIAL connections (→ page 7)	<u>BITSTREAM</u> PCM	
DYNAMIC RANGE	ON: 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) OFF	

■ “DISPLAY” tab

SETTING STATE	Display the current setting of the items below		
LANGUAGE	^{*5} ENGLISH	FRANÇAIS	ESPAÑOL DEUTSCH
	ITALIANO	SVENSKA	NEDERLANDS POLSKI
	^{*6} ENGLISH	FRANÇAIS	ESPAÑOL DEUTSCH
	ITALIANO	РУССКИЙ	NEDERLANDS PORTUGUÊS
	^{*7} ENGLISH	繁體中文	

■ “OTHERS” tab

SETTING STATE	Display the current setting of the items below	
JPEG TIME	To change the slideshow timing 1 SEC to 15 SEC (in 1 unit) 15 SEC to 60 SEC (in 5 unit) 60 SEC to 180 SEC (in 30 unit) “3 SEC” is the factory preset.	
FL DIMMER* ⁵	BRIGHT DIM	
Changes the brightness of the unit's display	AUTO: The display is dimmed, but brightness only when you perform some operations.	
AUTO POWER OFF	ON:	The unit switches to standby mode after about 30 minutes in the stop mode.
	OFF	
DEFAULTS	RESET	
This returns all values in the Setup menus to the default settings.	The password screen is shown if “ RATINGS ” (→ page 14) is set. Please enter the same password with [▲ ▼] and [►], then press [ENTER], then turn the unit off and on again.	

*1 Language options

The United Kingdom and Continental Europe

FRENCH, SPANISH, GERMAN, ITALIAN, SWEDISH, DUTCH and POLISH

The Middle East and South Africa

FRENCH, SPANISH, GERMAN, ITALIAN, RUSSIAN, DUTCH and PORTUGUESE

Asia

CHINESE TRAD

*2 The original language designed on the disc is selected.

*3 Input a code number referring to the table (→ page 16).

*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 Continental Europe**

*6 **The Middle East and South Africa**

*7 **Asia**

Language code list

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

Format	Disc	Extension	Reference
MP3	DVD-R/RW CD-R/RW	“.MP3” “.mp3”	- Sampling frequency: DVD-R/RW: 11.02, 12, 22.05, 24, 44.1, and 48 kHz CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1, and 48 kHz - This unit is not compatible with ID3 tags.
JPEG	DVD-R/RW CD-R/RW	“.JPG” “.jpg” “.JPEG” “.jpeg”	- JPEG files taken on a digital camera that conforms to DCF Standard Version 1.0 are displayed. – Files that have been altered, edited or saved with computer picture editing software may not be displayed. - 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.

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

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 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).

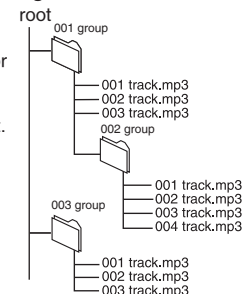
e.g.MP3

CD-R/W

- 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.



Troubleshooting guide

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

Power

No power.	Insert the AC mains lead securely into the household mains socket. (7)
The unit is automatically switched to the standby mode.	When "AUTO POWER OFF" is set to "ON", the unit automatically switches to standby after approximately 30 minutes in the stop mode. (15)

No operation

No response when any buttons pressed.	- This unit cannot play discs other than the ones listed in these operating instructions. (5) - 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. - Condensation has formed: Wait 1 to 2 hours for it to evaporate.
No response when remote control buttons pressed.	- Check that the batteries are installed correctly. (7) - The batteries are depleted: Replace them with new ones. (7) - Point the remote control at the remote control sensor and operate. (8) - When using On-Screen Menus, press [◀▶] to select the item, then press [▲▼] to make the settings.
No picture or sound.	- Check the video or audio connection. (6, 7) - Check the power or input setting of the connected equipment.
You have forgotten your ratings password. Reset all the settings to Factory Preset.	While stopped, remove the disc, and then press and hold [▶] (PLAY) and [▲ OPEN/CLOSE] on the unit and then also press and hold [Ⓢ/Ⓜ] on the unit until "INITIALIZED" disappears from the television. Turn the unit off and on again. All settings will return to the default values.

Specific operation impossible or incorrect

It takes time before play starts.	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.
The program functions do not work.	These functions do not work with some DVD-Videos.
Menu doesn't appear. [VCD] with playback control	Press [■] twice and then press [▶] (PLAY).
Play doesn't start.	If a disc contains CD-DA and other formats, proper playback may not be possible.

No subtitles.	Display the subtitles. (12)
In A-B Repeat, point B is automatically set.	The end of an item becomes point B when it is reached.
Repeat play is automatically canceled.	- A-B Repeat is canceled when you press [QUICK REPLAY]. - Repeat play may be canceled when you press [M. SKIP].

Picture incorrect

Picture distorted.	- Ensure that the unit is not connected through a video cassette recorder. (6) - 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".
Picture size doesn't fit the screen.	- Change "TV ASPECT" in "VIDEO" tab. (14) - Use the television to change the aspect. If your television does not have that function, change "TV ASPECT". (14) - Change the zoom setting. (10)
The television may display incorrectly or colors appear faded.	- The unit and television are using different video systems. Asia Use a multi-system or NTSC television. Others Use a multi-system or PAL television. - The system used on the disc doesn't match your television. –PAL discs cannot be correctly viewed on an NTSC television. –This unit can convert NTSC signals to PAL60 for viewing on a PAL television ("NTSC DISC OUT" in "VIDEO" tab). (14)
Menu not displayed correctly.	- Restore the zoom ratio to "NORMAL". (10) - Change "TV ASPECT" in "VIDEO" tab. (14)
When playing PAL disc, picture distorted.	Set Transfer mode to "AUTO". (13)

Progressive video

There is ghosting when progressive output is on.	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" tab to "INTERLACE". (15)
Pictures not in progressive output.	If the unit is connected to the television through VIDEO OUT or S VIDEO OUT *, output will be interlace. * Except the United Kingdom and Continental Europe

Sound incorrect

Sound distorted.	Set Advanced surround to "OFF". (10, 13)
Piercing noise comes from the speakers.	If you have connected a digital amplifier which does not include decoder, be sure to set "DOLBY DIGITAL", "MPEG Except Asia" to "PCM" and set "DTS" to "OFF" in "AUDIO" tab. (15)
Effects do not work.	- None of the audio effects work when the unit is outputting bitstream signals from the COAXIAL terminal. (7) - Some audio effects do not work or have less effect with some discs.

Unit displays **The United Kingdom and Continental Europe**

"noPLAY"	- You inserted a disc the unit cannot play; insert one it can. (5) - You inserted a blank disc. - You inserted a disc that has not been finalized. (5)
"U11"	- The disc may be dirty. (19) - You haven't inserted the disc correctly: Insert it correctly. (8)
"H □□" □□ stands for a number.	- Trouble may have occurred. The number following "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 mains lead, and then reconnect it. - If the service numbers fail to clear, note the service number and contact a qualified service person.
"nodISC"	- You haven't inserted a disc: Insert one. - You haven't inserted the disc correctly: Insert it correctly. (8)

Television displays

"ERR H □□" □□ stands for a number.	- Trouble may have occurred. The number following "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 mains lead, and then reconnect it. - If the service numbers fail to clear, note the service number and contact a qualified service person.
"ERR U11"	- The disc may be dirty. (19) - You haven't inserted the disc correctly: Insert it correctly. (8)
"NODISC"	- You haven't inserted a disc: Insert one. - You haven't inserted the disc correctly: Insert it correctly. (8)
"⊙"	The operation is prohibited by the unit or disc.
"THIS DISC MAY NOT BE PLAYED IN YOUR REGION."	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. (Cover)
"THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC."	- You inserted a disc that has not been finalized. (5) - You inserted a disc the unit cannot play; insert one it can. (5) - You inserted a blank disc.

Recording

Cannot record to digital recording equipment. (Incorrect sound recorded.)	- You cannot record MP3. - You cannot record DVDs that have protection preventing digital recording. - You cannot record DVDs if the recording equipment cannot handle signals with a sampling frequency of 48 kHz. - Make the following settings: - Advanced surround: OFF (10, 13) - DOWN SAMPLING: ON (15) - DOLBY DIGITAL/MPEG Except Asia: PCM (15) - DTS: OFF (15)
--	--

Maintenance

■ Clean this unit with a soft, dry cloth

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

■ Clean discs

- Wipe with a damp cloth and then wipe dry.



Specifications

Signal system: **Asia** NTSC, PAL 625/50, PAL525/60
Others PAL 625/50, PAL525/60, NTSC

Operating temperature range: + 5 to + 35 °C

Operating humidity range: 5 to 90 % RH (no condensation)

Discs played (8 cm or 12 cm):

- (1) DVD (DVD-Video)
- (2) DVD-R (DVD-Video, MP3*2, 4, JPEG*3, 4)
- (3) DVD-R DL (DVD-Video)
- (4) DVD-RW (DVD-Video, MP3*2, 4, JPEG*3, 4)
- (5) +R/+RW (Video)
- (6) +R DL (Video)
- (7) CD, CD-R/RW (CD-DA, Video CD, SVCD*1, MP3*2, 4, JPEG*3, 4)

Video output:

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

The United Kingdom and Continental Europe

Pin jack (1 system)/AV
 Pin jack (1 system)

Others

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 Continental Europe 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_B output level: 0.7 Vp-p (75 Ω)
 P_R output level: 0.7 Vp-p (75 Ω)
 Output terminal:
 Pin jack (Y: green, P_B: blue, P_R: red) (1 system)

RGB video output:

The United Kingdom and Continental Europe

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 Continental Europe

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)
- CD-Audio: 4 Hz to 20 kHz

• CD-Audio:

S/N ratio:

115 dB

• CD-Audio:
Dynamic range:

• DVD (linear audio): 92 dB

• CD-Audio: 90 dB

Total harmonic distortion:

• CD-Audio: 0.003 %

Digital audio output:

Coaxial digital output: Pin jack

Pickup:

Wave length: 653 nm/790 nm
 Laser power: CLASS 1/CLASS 3A

NORISK

Pickup:

Bølgelengde 653 nm/790 nm
 Laserstyrke Ingen farlig stråling sendes ut

Power supply:

Continental Europe AC 230 V, 50 Hz
The United Kingdom AC 230 to 240 V, 50 Hz
Others AC 110 to 240 V, 50/60 Hz

Power consumption:

Power consumption in standby mode: approx. 1 W

Dimensions (W x D x H): 360 mm x 251 mm x 43 mm

Mass: approx. 1.8 kg

Note

Specifications are subject to change without notice.
 Mass and dimensions are approximate.

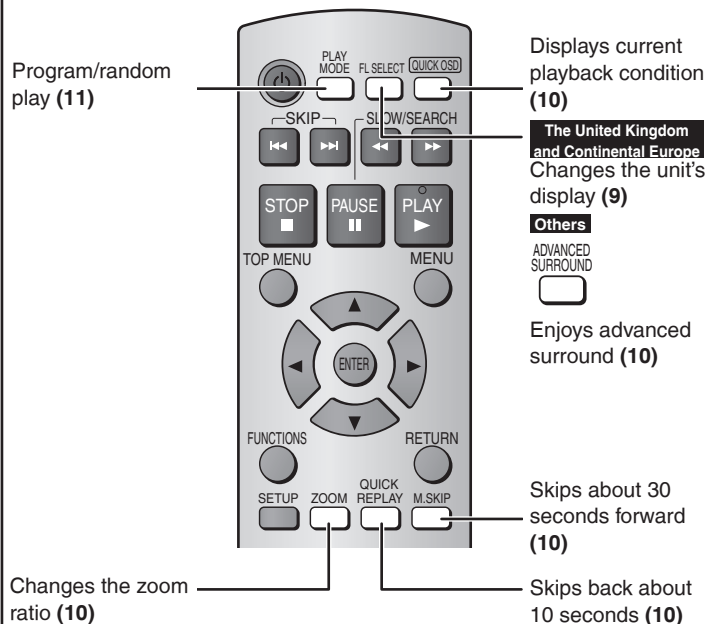
*1 Conforming to IEC62107

*2 MPEG-1 Layer 3, MPEG-2 Layer 3

*3 Exif Ver 2.1 JPEG Baseline files
 Picture resolution: between 320×240 and 6144×4096 pixels (sub sampling is 4:2:2 or 4:2:0)

*4 The total combined maximum number of recognizable audio and picture contents and groups: 1000 audio and picture contents and 256 groups.

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



-If you see this symbol-

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.