Panasonic®

Operating Instructions

DVD/CD PLAYER
Model No. **DVD-S52**

Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.
Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference.

DVD AUDIO / VIDEO   **COMPACT disc** DIGITAL VIDEO   **RAM COMPATIBLE PLAYER**   **HDMI™** HIGH-DEFINITION MULTIMEDIA INTERFACE

Region number

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

Region	Number
The United Kingdom and Continental Europe	2
Asia	3
Australia and N.Z.	4

Example:

The United Kingdom and Continental Europe

2   ALL   2 3 5

Unless otherwise indicated, illustrations in these operating instructions are of the models for the United Kingdom and Continental Europe.

Note
"EB" on the packaging indicates the United Kingdom.

EB   E   GN   GCS GCU

Table of contents

RQT8519-B

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.

RQT8519

2

Asia
THIS UNIT IS INTENDED FOR USE IN TROPICAL
CLIMATES.

The United Kingdom, Continental Europe, Australia and N.Z.
THIS UNIT IS INTENDED FOR USE IN MODERATE
CLIMATES.

SUOMI

VAROITUS!

**LAITTEEN KÄYTTÄMINEN MUULLA KUIN TÄSSÄ
KÄYTTÖOHJEESSA MAINITULLA TAVALLA
SAATTAA ALTISTAA KÄYTTÄJÄN
TURVALLISUUSLUOKAN 1 YLITTÄVÄLLE
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 VASTAAVALLA
  ESINEELLÄ.**
- **ÄLÄ ASETA PALAVAA KYNTTILÄÄ TAI MUUTA
  AVOTULEN LÄHDETTÄ LAITTEEN PÄÄLLE.**
- **HÄVITÄ PARISTOT LUONTOA
  VAHINGOITTAMATTOMALLA 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.

Caution for AC Mains Lead

(For United Kingdom)

("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.

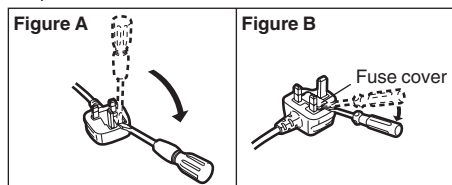#### THIS PLUG IS NOT WATERPROOF—KEEP DRY.

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.

Figure A | Figure B

Fuse cover

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

Figure A — Fuse (5 ampere) | Figure B — Fuse (5 ampere)
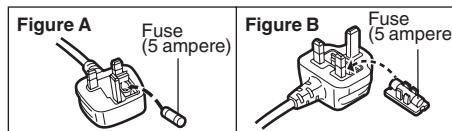
Accessories

Use numbers when asking for replacement parts.
(Product numbers correct as of March 2006. These may be subject to change.)

☐ 1 Remote control   (EUR7631200R)
☐ 2 Remote control batteries
☐ 1 Audio/video cable   (K2KA6BA00004)
☐ 1 AC mains lead
   The United Kingdom   (K2CT3CA00004)
   Continental Europe and Asia (K2CQ2CA00006)
   Australia and N.Z.   (K2CJ2DA00008)

Note

For use with this unit only. Do not use it with other equipment. Also, do not use cords for other equipment with this unit.

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.

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
DVD-Audio	`DVD-A`	High fidelity music discs[※1]
Video CD	`VCD`	Music discs with video Including SVCD (Conforming to IEC62107)
CD	`CD`	Music discs[※2]

[※1]Some DVD-Audio discs contain DVD-Video content. To play DVD-Video content, select "Play as DVD-Video" (➜ page 19, Other Menu).
[※2]This unit is compatible with HDCD (➜ page 27, Glossary), but does not support the Peak Extend function (a function which expands the dynamic range of high level signals). (During HDCD play, "HDCD" lights on the unit's display.)

Regarding DVD-Audio
Some multi-channel DVD-Audio will prevent down-mixing (➜ page 27, Glossary) of all or part of their contents if this is the manufacturer's intention. When playing such discs, or such parts of the disc, unless the number of connected speakers is the same as the disc's channel specification, audio will not be output properly (e.g. part of the audio is missing, multi-channel audio cannot be selected and audio is played in two channels). Refer to the disc's jacket for more information.

Recorded discs (√: Available, ✗: Not available)

Disc Logo	Recorded on a DVD recorder, etc.		Recorded on a personal computer, etc.					Finalizing[※6]
	`DVD-VR`[※2]	`DVD-V`[※4]	`WMA`	`MP3`	`JPEG`	`MPEG4`	`DivX`	
DVD-RAM	√	—	✗	√	√	√	√	Not necessary
DVD-R/RW	√	√	✗	√	√	√	√	Necessary
DVD-R DL	√[※3]	√	✗	✗	✗	✗	✗	Necessary
+R/+RW —	✗	(√)[※5]	✗	✗	✗	✗	✗	Necessary
+R DL —	✗	(√)[※5]	✗	✗	✗	✗	✗	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 play CD-R/RW recorded with CD-DA or Video CD format.
    `WMA` `MP3` `JPEG` This unit also plays HighMAT discs.
[※2] Discs recorded on DVD recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).
[※3] Discs recorded on DVD recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).
[※4] Discs recorded on DVD recorders or DVD video cameras using DVD-Video Format.
[※5] Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.
[※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
WMA	CD-R/RW	".WMA" ".wma"	• Compatible compression rate: between 48 kbps and 320 kbps • You cannot play WMA files that are copy protected. • This unit is not compatible with Multiple Bit Rate (MBR: a file that contains the same content encoded at several different bit rates).
MP3	DVD-RAM DVD-R/RW CD-R/RW	".MP3" ".mp3"	• Sampling frequency: DVD-RAM, 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 • Compatible compression rate: between 32 kbps and 320 kbps • This unit is not compatible with ID3 tags.
JPEG	DVD-RAM DVD-R/RW CD-R/RW	".JPG" ".jpg" ".JPEG" ".jpeg"	• JPEG files taken on a digital camera that conform 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.
MPEG4	DVD-RAM DVD-R/RW CD-R/RW	".ASF" ".asf"	• 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 recorders with this unit. • The recording date may differ from that of the actual date.
DivX	DVD-RAM DVD-R/RW CD-R/RW	".DIVX" ".divx" ".AVI" ".avi"	• 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. • GMC (Global Motion Compensation) is not supported. • DivX files greater than 2GB or have no index may not play properly on this unit. • This unit supports all resolutions up to maximum of 720 ×480 (NTSC)/720 ×576 (PAL). • You can select up to 8 types of audio and subtitles on this unit.

● If groups were created away from the root like "002 group" in the illustration right, the eighth one onwards is displayed on the same vertical line in the menu screen.
● 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 contents 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).

DVD-RAM
● Discs must conform to UDF 2.0.

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.

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.

■ Discs that cannot be played
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.

■ 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.

e.g. MP3
root
001 group
— 001 track.mp3
— 002 track.mp3
— 003 track.mp3
002 group
— 001 track.mp3
— 002 track.mp3
— 003 track.mp3
— 004 track.mp3
003 group
— 001 track.mp3
— 002 track.mp3
— 003 track.mp3

Discs that can be played

RQT8519

5
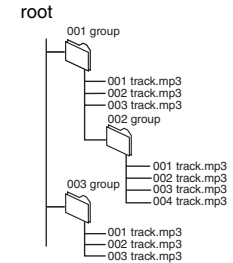
STEP 1 Connection

■ 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.

Television

With VIDEO IN or S VIDEO IN

AUDIO IN	VIDEO	S VIDEO
R L	IN	or	IN

With COMPONENT VIDEO IN

AUDIO IN	COMPONENT
R L	VIDEO IN

The United Kingdom and Continental Europe

With SCART (AV) IN

SCART (AV) IN

S video cable ※
Audio/video cable (included)

Audio/video cable (included)   Not used   **Video cables**

21-pin SCART cable

AV

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

To enjoy progressive video
Connect to a progressive output compatible television.
① The United Kingdom and Continental Europe
Select "Video/YPbPr" for the component terminals in QUICK SETUP (➜ page 8).
② Set "Video Output Mode" to "○○○p", then follow the instructions on the menu screen (➜ page 18, Picture Menu).

The United Kingdom and Continental Europe
Panasonic televisions with 625 (576)/50i · 50p, 525 (480)/60i . 60p input terminals are progressive compatible.

Back of the unit

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

● If the television is compatible with S-video, select "S-Video/YPbPr", or compatible with RGB, select "RGB/No Output" for the AV terminals in QUICK SETUP (➜ page 8). Also, set "Video Output" to "Off" (➜ page 21, "HDMI" tab) when "RGB/No Output" is selected.

■ Connect the AC mains lead last

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

AC mains lead (included)

AC IN ~

To household mains socket


Connection

RQT8519

6

■ Enjoying higher quality audio and video (HDMI connection) (➜ Page 27, Glossary)

By connecting to an HDMI compatible high-definition television, video recordings can be converted to, and output as, high-definition video (720p,1080i).
You can also enjoy multi-channel 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 multi-channel surround sound by connecting an amplifier with COAXIAL, OPTICAL or 5.1 ch AUDIO OUT terminal (➜ page 8).
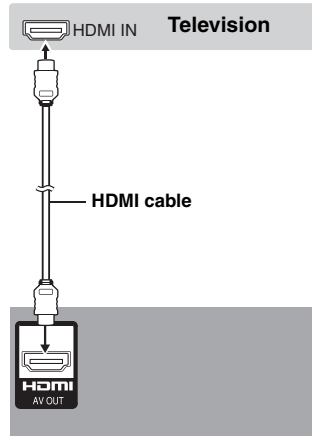
HDMI IN **Television**

HDMI cable

Back of the unit
● Set "Video Output" to "On" and "Audio Output" to "On" (➜ page 21, "HDMI" tab).

With HDMI compatible television and amplifier

To enjoy digital multi-channel surround sound in addition to digital high-definition video.
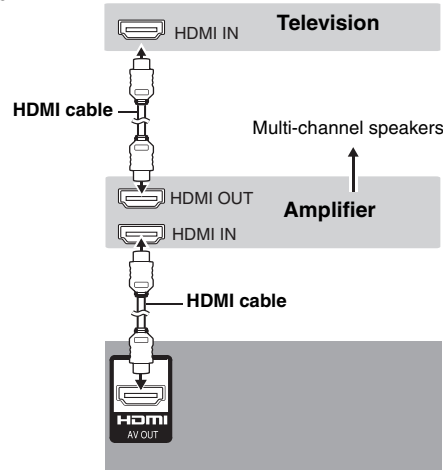
HDMI IN **Television**

HDMI cable

Multi-channel speakers

HDMI OUT **Amplifier**
HDMI IN

HDMI cable

Back of the unit
● Set "Video Output" to "On" and "Audio Output" to "On" (➜ page 21, "HDMI" tab).

With HDMI compatible amplifier

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

VIDEO IN **Television**
Not used

Multi-channel speakers

Amplifier HDMI IN

Audio/video cable (included)

※

Not used

※

HDMI cable

COAXIAL L Pᵣ

OPTICAL
DIGITAL AUDIO OUT R Pᵦ
(PCM/BITSTREAM) AUDIO OUT S VIDEO OUT VIDEO OUT COMPONENT VIDEO OUT
Please connect directly to TV.
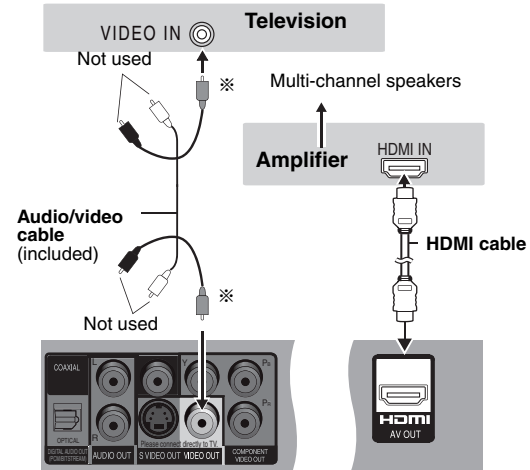
Back of the unit
● Set "Audio Output" to "On". When you connect to a television through the COMPONENT VIDEO terminal only, set "Video Output" to "Off", too (➜ page 21, "HDMI" tab).
※You can also use the S VIDEO and COMPONENT VIDEO terminals.

● To enjoy high-definition video, connect to an HDMI compatible high-definition television and set "Video Output Mode" (➜ page 18, Picture Menu).
● For stable operation and preventing deterioration of video quality, please purchase an HDMI cable 5 m or less in length with the HDMI logo.
● If the speaker setup cannot be completed on the amplifier, then use the "Speaker Settings" setting (➜ page 21, "Audio" tab).
● It is not compatible with the HDMI Control Function (CEC).
● Should you connect equipment that does not support CPPM (➜ page 27, Glossary), the audio from the CPPM copy protected DVD-Audio cannot be output from HDMI AV OUT terminal. Connect the audio cable (L, R) of the Audio/Video cable to an HDMI compatible AUDIO IN terminal.

STEP 1 Connection

■ Enjoying multi-channel surround sound with COAXIAL IN or OPTICAL IN

COAXIAL IN ◎

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

Coaxial cable

or

OPTICAL IN

Optical digital audio cable
Do not bend sharply when connecting.

Back of the unit
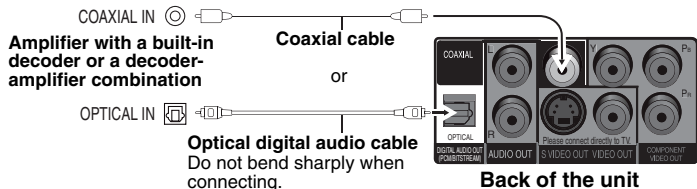
- You cannot use DTS Digital Surround decoders not suited to DVD.
- Even if using this connection, output will be only 2 channels when playing DVD-Audio. To enjoy multi-channel surround sound, connect with 5.1 ch AUDIO OUT terminals (➔ right) or HDMI terminals (➔ page 7).

Set "Audio Output" to "Off" (➔ page 21, "HDMI" tab), and change "PCM Digital Output", "Dolby Digital", "DTS Digital Surround" and "MPEG Except Asia "(➔ page 21, "Audio" tab).

■ Enjoying multi-channel surround sound with AUDIO IN 5.1ch

To obtain maximum performance of DVD-Audio multi-channel PCM sound, this connection is recommended.

Amplifier

(L) ◎ SURROUND (R) ●

CENTER ◎

SUBWOOFER ●

(L) ◎ FRONT (R) ●

Audio cable Connect cables to terminals corresponding to the speakers you have connected.

CENTER SURROUND FRONT L/L
SUBWOOFER R FRONT R/R

Back of the unit
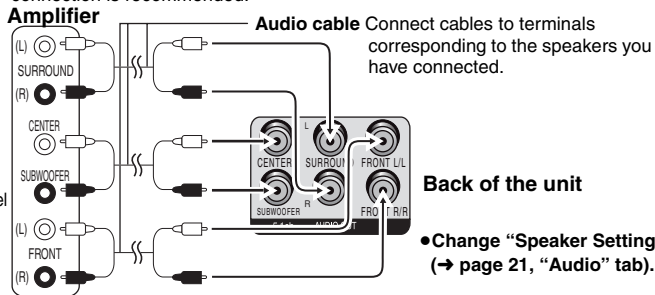
- Change "Speaker Settings" (➔ page 21, "Audio" tab).

STEP 2 The remote control

■ Batteries

R6/LR6, AA
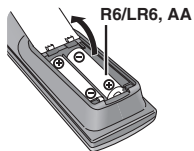
- Insert so the poles (+ and −) match those in the remote control.
- Do not use rechargeable type batteries.

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 9), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

STEP 3 QUICK SETUP
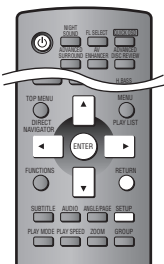
Turn on the television and select the appropriate video input on the television.

1	2	3	4	5
⏻	SETUP	↑ ← ENTER → ↓ RETURN	ENTER	SETUP
Power ON.	Shows QUICK SETUP screen.	Follow the message and make the settings.	Press to finish QUICK SETUP.	Press to exit.

To change these settings later, select "QUICK SETUP" (➔ page 21, "Others" tab).

Basic play

①Power ON.

⏻/I

②Open the disc tray.

⏏ OPEN/CLOSE

Stop Pause

■   ❙❙

Remote control sensor

③Load the disc.
- Load double-sided discs so the label for the side you want to play is facing up.
- DVD-RAM: Remove discs from their cartridges before use.
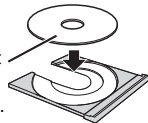
④Start play.

▶

Skip
- DVD-VR Can also skip to the markers.

Stop
The position is memorized when "▷" flashes on the display.
- Press [▶] (PLAY) to resume. **(Resume play)**
- Press [■] to clear the position.
- Even after the unit is turned off, the position is memorized (Normal playback only).

Repeat play
- Select "Repeat" (➜ page 12, Repeat play) or "A-B Repeat" (➜ page 17, Play Menu).

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

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.

- To play MP3, JPEG, MPEG4 or DivX contents on DVD-RAM that contain both DVD-VR and another format (e.g. JPEG), select "Play as Data Disc" (➜ Page 19, Other Menu).
- "D.MIX" on the display indicates that a soundtrack with three or more channels can be down-mixed to two channels (➜ Page 27, Glossary).
- 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.

RQT8519

Basic play

Group skip WMA MP3 JPEG MPEG4 DivX	[arrow keys with ENTER]	● Does not work while paused.

Frame-by-frame (during pause) DVD-VR DVD-V VCD	[arrow keys with ENTER]	● VCD forward direction only
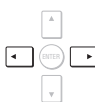
On-screen item select	[arrow keys with ENTER] Select Register	**Return to previous screen**	RETURN

Enter number

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⑩ ⓪ (ENTER)

DVD-VR DVD-A DVD-V VCD CD
e.g. To select 12: [≧10] → [1] → [2]

WMA MP3 JPEG MPEG4 DivX
e.g. To select 123: [1] → [2] → [3] → [ENTER]

Disc menu

TOP MENU
DVD-A DVD-V
Shows a disc top menu.
DVD-VR
Plays the programs (→ page 14).
WMA MP3 JPEG MPEG4 DivX
Plays data discs (→ page 15).

DIRECT NAVIGATOR

MENU
DVD-V
Shows a disc menu.
DVD-VR
Plays a playlist (→ page 14).
WMA MP3 JPEG MPEG4 DivX
Plays data discs (→ page 15).

PLAY LIST

RETURN
VCD with playback control
Shows a disc menu.

Main unit display	FL SELECT	Number display ↑ ↓ Time display	**Information screen** JPEG	SUBTITLE

RQT8519

10

Changing the play sequence

PLAY MODE	**All group/Program/Random play** Except DVD-VR

Disable HighMAT disc play to use random and program play. Select "Play as Data Disc" in Other Menu (→ page 19).

■ All group play DVD-A
1 While stopped, press [PLAY MODE] several times.
2 Press [▶] (PLAY).

All Group Playback

Press PLAY to start

■ Program play (up to 32 items)
1 While stopped, press [PLAY MODE] several times.
2 Press the numbered buttons to select the items (→ left, Enter number).
Repeat this step to program other items.
3 Press [▶] (PLAY).

e.g. DVD-V

Choose a title and chapter.
No. Title Chapter Time
1
Play
Clear
Clear all
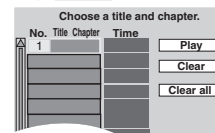
Selecting all the items (on the disc or in the title or group)
Press [ENTER] and [▲ ▼] to select "ALL", then press [ENTER] again to register.

Changing the program
Press [▲ ▼] to select an item.
–To change an item, repeat step 2.
–To clear an item, press [CANCEL] (or select "Clear" and press [ENTER]).
● Press [ANGLE/PAGE] to skip page by page.

Clearing the whole program
Select "Clear all" and press [ENTER]. The whole program is also cleared when the unit is turned off or the disc tray is opened.

■ Random play
1 While stopped, press [PLAY MODE] several times.
2 DVD-A DVD-V WMA MP3 JPEG MPEG4 DivX
Press the numbered buttons to select a group or a title (→ left, Enter number).
3 Press [▶] (PLAY).

e.g. DVD-V

Random Playback

Choose a title.
Title 1

▲▼ 0 – 9 to select   PLAY to start
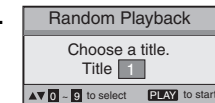
To exit the all group, program or random mode
Press [PLAY MODE] several times while stopped.

Convenient functions

QUICK OSD	○ QUICK OSD **(Main unit)**	**Displaying current playback condition (Quick OSD)**

Press [QUICK OSD].

Basics ⟶ Details
↑—— Off ←——┘

■ Basics

e.g. DVD-V

Current playback number   Elapsed play time

Title **1**   Chapter **1**   Time **0 : 00 : 22**

Playback condition ⟶

Program Playback

Play mode   Current position

■ Details

e.g. DVD-V
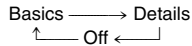
See page 13 for changing soundtracks
See page 13 for changing subtitles
See page 13, Angle select for changing angles
Aspect of current playback title

●Details-DVD-Video
—Audio   1 --- DTS 3/2.1ch
—Subtitle   – ---
—Angle   1/1
—Source Aspect 4:3
—Title Total Time 0:54:28

Total play time of current playback title

● MPEG4 DivX "Video" and "Audio" information is not displayed during search.

ADVANCED DISC REVIEW	**Reviewing titles/programs to play (Advanced Disc Review)** DVD-VR DVD-V (Except +R/+RW) (Normal playback only)

1 Press [ADVANCED DISC REVIEW].
Reviews each title/program.

Title **1**   Chapter **1**   Time **0 : 00 : 22**
▶---▶

2 Press [▶] (PLAY) when you find a title/program to play.

● You can also review each 10 minutes. Select "Interval Mode" (➜ page 20, "Advanced Disc Review" in "Disc" tab).
● This may not work depending on the play position.
● DVD-VR Does not work:
– with parts containing still pictures.
– when playing a playlist.

AV ENHANCER	**Recalling recommended audio/video setting (AV Enhancer)**

By pressing just one button the disc type is automatically determined and the best audio and video settings are configured.

☑ **Functions**
AV Enhancer Auto

Press [AV ENHANCER] to select "Auto", "User1", "User2" or "User3".
Off: Cancelled
Auto: The best audio and video settings are configured.
User1*:   Suitable for video (DVD-V).
User2*:   Suitable for music.
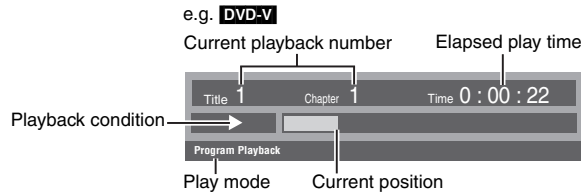User3*:   Suitable for video (DVD-VR).
*You can change the settings for User1–3 to your preference (➜ page 19, "AV Enhancer" in Other Menu).

When AV Enhancer(Auto) is on, you cannot change the individual settings indicated below.
Audio settings:
Night Sound Mode, H.Bass (➜ below),
Multi Re-master, Advanced Surround (➜ page 12),
Dialogue Enhancer (➜ page 18),
Sound Enhancement (➜ page 19)
Video settings:
Picture Mode (➜ page 17)

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

NIGHT SOUND	**Controlling louder portions of audio (Night Sound Mode)** Except JPEG MPEG4 DivX

You can enjoy movies and music late at night because the quieter parts of the audio are accentuated.

☑ **Functions**
Night Sound Mode   On

Press [NIGHT SOUND] to select "On".

● Audio output switches to 2 ch.
● This may not work depending on the disc's recording.
● This does not work with MP3 on DVD-RAM or DVD-R/RW.

H.BASS	**Enjoying heavy bass with the speakers (H.Bass)** DVD-V

Press [H.BASS] to select "On".

☑ **Functions**
H.Bass   On

● This is effective on 5.1 channel DVD video discs.
  This is also effective on some portions of 2 channel discs as well.
● Audio output switches to 2 ch.
● This may not work depending on the disc's recording.
● If the sound is distorted or there is noise, set to "Off".
● This does not work when Night Sound Mode (➜ above) is on.

Convenient functions

ADVANCED SURROUND

Enjoying virtual surround (Advanced Surround)
Motion pictures with 2 or more channels

Press [ADVANCED SURROUND] to select "SP 1", "SP 2", "HP 1" or "HP 2".

☑ Functions
Advanced Surround   SP1

SP (Speaker) 1 (Natural)   SP 2 (Enhanced)
HP (Headphone) 1 (Natural)   HP 2 (Enhanced)   Off

- When using discs recorded with surround sound, sound seems to come from speakers on either side of you.
- When using headphones from the connected equipment, select "HP 1" or "HP 2".
- 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.
- Audio output switches to 2 ch.
- This does not work when Night Sound Mode or H.Bass (➔ page 11) is on.

.

MULTI RE-MASTER

Reproducing more natural audio (Multi Re-master)

DVD-VR DVD-V (Discs recorded with 48 kHz only)
DVD-A (Discs recorded with 44.1 kHz and 48 kHz only)
VCD CD

- During multi-channel output of these discs, this feature reproduces the frequencies lost during recording to give you a sound closer to the original.
- During 2 ch output of these discs, this feature gives you a more natural sound by adding the higher frequency signals not recorded on the disc, for example, playing DVD-Video recorded with 48 kHz at 96 kHz. (➔ page 27, "Sampling frequency" in Glossary)

WMA MP3 (Disc recording is other than 8 kHz, 16 kHz, 32 kHz)
This feature reproduces the higher frequencies lost during recording to give you a sound closer to the original.

Press [MULTI RE-MASTER] to select "1", "2" or "3".

Setting	DVD-A DVD-V CD (LPCM/PPCM) Type of music	Other discs Effect level
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

☑ Functions
Multi Re-master   1

- When connecting with DIGITAL AUDIO OUT terminal, the actual output sampling frequency depends on "PCM Digital Output" setting in "Audio" tab (➔ page 21).
- This may not work depending on the disc's recording.
- This does not work when Night Sound Mode, H.Bass (➔ page 11) or Advanced Surround (➔ above) is on.
- This does not work with MP3 on DVD-RAM or DVD-R/RW.

FUNCTIONS

Repeat play (Only when the elapsed play time can be displayed
JPEG : You can use this feature even if the elapsed time is not displayed.)

1 **Press [FUNCTIONS].**
2 **Press [▲ ▼] to select "Other Settings"and press [▶].**
3 **Press [▲ ▼] to select "Play Menu" and press [▶].**
4 **Press [▲ ▼] to select "Repeat" and press [▶].**
5 **Press [▲ ▼] to select an item to be repeated and press [ENTER].**

- Depending on the disc, the items that can be selected will differ.

QUICK REPLAY

Quick replay (Only when the elapsed play time can be displayed)
DVD-A DVD-VR DVD-V WMA MP3 VCD CD

Press [QUICK REPLAY] to skip back a few seconds.

- This may not work depending on the disc's recording.
- This does not work with +R/+RW.

MANUAL SKIP

Skipping 30 seconds forward
DVD-VR DVD-V (Except +R/+RW)

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 parts containing still pictures.
  – when playing a playlist.

PLAY SPEED

Changing play speed DVD-VR DVD-V

During play, press [PLAY SPEED] to select "Fast", "Normal" or "Slow".

☑ Functions	
Play Speed ◀ x1.4	Normal
	✓Fast
	Slow

Fine adjustments
While the menu is displayed
Press [◀ ▶] to increase or decrease the playing speed from ×0.6 to ×1.4 in 0.1 units.

- Press [▶] (PLAY) to return to the normal play.
- After you change the speed
  – Night Sound Mode, H.Bass (➔ page 11), Advanced Surround (➔ left), Multi Re-master (➔ left) and Sound Enhancement (➔ page 19) do not work.
  – Audio output switches to 2 ch (Digital output switches to PCM).
  – 96 kHz sampling frequency is converted to 48 kHz.
- This may not work depending on the disc's recording.

Convenient functions

SUBTITLE	**Changing subtitles** *Discs with subtitles*

`DVD-V` `DivX`

Press [SUBTITLE] to select the subtitle language.
To clear/display the subtitles
Press [◄ ►] to select "On" or "Off".
● On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.

☑ **Functions**
Subtitle ‹ Off ›

`DVD-VR` (with subtitle on/off information)
Press [SUBTITLE] to select "On" or "Off".
● Only On or Off can be selected.
● Subtitle on/off information cannot be recorded using Panasonic DVD Recorders.

AUDIO	**Changing soundtracks** `DVD-A` `DVD-V` `DivX` (with multiple soundtracks) `DVD-VR` `VCD`

Press [AUDIO] to select the soundtrack.

`DVD-VR` `VCD`
You can use this button to select "L", "R" or "LR".

`DivX`
While the menu is displayed
Press [◄►] to select "L", "R" or "LR".

`DVD-V` (Karaoke discs)
While the menu is displayed
Press [◄ ►] to select "On" or "Off" of vocals. Read the disc's instructions for details.

☑ **Functions**
Audio 1

Signal type/data
LPCM/PPCM/🔲🔲 Digital/DTS/MP3/MPEG: Signal type
kHz (Sampling frequency)/bit/ch (Number of channels)
Example: 3/2 .1ch

```
          .1:  Low frequency effect (not displayed if there is no signal)
          0:  No surround
          1:  Mono surround
          2:  Stereo surround (left/right)
          1:  Center
          2:  Front left＋Front right
          3:  Front left＋Front right＋Center
```

● `DivX` It may take some time for play to start if you change the audio on a DivX video disc.

GROUP	**Starting play from a selected group** `DVD-A` `WMA` `MP3` `JPEG` `MPEG4` `DivX`

A folder on WMA/MP3, JPEG, MPEG4 and DivX video discs is treated as a "Group".
1 **While stopped, press [GROUP].**
2 **Press [▲ ▼] or the numbered buttons to select a group and press [ENTER].**

☑ **Functions**
Group Search ⁚1

● `DVD-A` To play all groups (➔ page 10, All group play)

ZOOM	**Zoom** *Motion pictures*

This feature expands a letterbox picture to fit the screen.
Press [ZOOM] to select the preset aspect ratio or "Auto". (Just Fit Zoom)

☑ **Functions**
Just Fit Zoom ×1.00 ›

`DVD-VR` `DVD-V` `VCD`
Auto → 4:3 Standard → European Vista → 16:9 Standard
↑ ↓
Cinemascope2 ←— Cinemascope1 ←— American Vista

● Depending on the disc, the preset aspect ratio may not be displayed.

`MPEG4` `DivX`
Standard → Original
↑— Full ←—

Fine adjustments (Manual Zoom)
Press [◄ ►] while the menu is displayed. (Press and hold to alter faster.)
–from ×1.00 to ×1.60 (in 0.01 units), from ×1.60 to ×2.00 (in 0.02 units)

`MPEG4` `DivX` only
–from ×2.00 to ×4.00 (in 0.05 units)
● It may not be possible to zoom up to ×4.00 depending upon the connected television and its settings.

ANGLE/PAGE	**Angle select** `DVD-V` *with multiple angles* **Still picture rotation** `JPEG` **/advance** `DVD-A`

Press [ANGLE/PAGE] to select the angle or rotate/ advance the still picture.

e.g. `DVD-V`

☑ **Functions**
Angle 1/4

Convenient functions

RQT8519

13

Using navigation menus

Playing programs/playlists DVD-VR

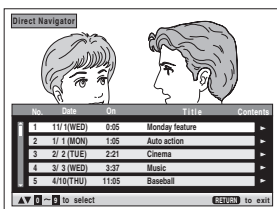DIRECT NAVIGATOR   PLAY LIST

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

Playing the programs

1 Press [DIRECT NAVIGATOR].
2 Press [▲ ▼] or the numbered buttons to select the program.
   - Press [ANGLE/PAGE] to skip page by page.
   - **To select a 2-digit number**
     e.g. 23: [≧10] ➔ [2] ➔ [3]
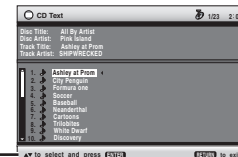   - Press [▶] to show the contents of the program.
3 Press [ENTER].

Direct Navigator

No.	Date	On	Title	Contents
1	11/ 1(WED)	0:05	Monday feature	▶
2	1/ 1 (MON)	1:05	Auto action	▶
3	2/ 2 (TUE)	2:21	Cinema	▶
4	3/ 3 (WED)	3:37	Music	▶
5	4/10(THU)	11:05	Baseball	▶

▲▼ 0 ~ 9 to select   RETURN to exit

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

1 Press [PLAY LIST].
2 Press [▲ ▼] or the numbered buttons to select the play list.
   - Press [ANGLE/PAGE] to skip page by page.
   - **To select a 2-digit number**
     e.g. 23: [≧10] ➔ [2] ➔ [3]
3 Press [ENTER].

Playlist

No.	Date	Total Time	Title	Contents
1	11/1	0:00:01	City Penguin	▷
2	1/1	0:01:20	Ashley at Prom	▷
3	2/2	1:10:04	Formula one	▷
4	3/3	0:10:20	Soccer	▷
5	4/10	0:00:01	Baseball	▷

▲▼ 0 ~ 9 to select and press ENTER   RETURN to exit

Playing a scene

1 Do steps 1–2 (➔ above, Playing a playlist).
2 Press [▶].
3 Press [▲ ▼] to select "Scene List" and press [ENTER].
   - Select "Contents" to show the contents of the program.
4 Press [▲▼◄►] to select a scene and press [ENTER].

Playing CD CD

MENU

Titles appear with CD text playback.

1 Press [MENU].
2 Press [▲ ▼] to select the track and press [ENTER].

- Press [ANGLE/PAGE] to skip page by page.
- To exit the screen, press [MENU].

e.g. CD text

CD Text   1/23   2 : 01
Disc Title: All By Artist
Disc Artist: Pink Island
Track Title: Ashley at Prom
Track Artist: SHIPWRECKED

1 Ashley at Prom
2 City Penguin
3 Formura one
4 Soccer
5 Baseball
6 Neanderthal
7 Cartoons
8 Trilobites
9 White Dwarf
10 Discovery

▲▼ to select and press ENTER   RETURN to exit

Press [FUNCTIONS] to switch between guide messages and the playback condition indicator.

Playing HighMAT™ discs WMA MP3 JPEG

TOP MENU   MENU

While the menu is displayed
Press [▲ ▼ ◄ ►] to select items then press [ENTER].

Menu:
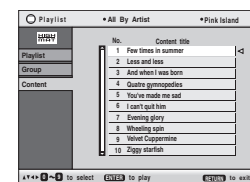Takes you to the next menu which shows playlists or another menu.

Playlist:
Play starts.

- To return to the menu screen, press [TOP MENU] then press [RETURN] several times.
- To change the menu background, press [FUNCTIONS].
  The background changes to the one recorded on the disc.
- To display/exit the screen, press [TOP MENU].

Selecting from the list

1 Press [MENU].
2 Press [◄] then [▲ ▼] to switch among "Playlist", "Group" and "Content" lists.
3 Press [►] then [▲ ▼] to select an item and press [ENTER].
- Press [ANGLE/PAGE] to skip page by page.
- To exit the screen, press [MENU].

Playlist   ● All By Artist   ● Pink Island

Playlist
Group
Content

No.	Content title
1	Few times in summer
2	Less and less
3	And when I was born
4	Quatre gymnopedies
5	You've made me sad
6	I can't quit him
7	Evening glory
8	Wheeling spin
9	Velvet Cuppermine
10	Ziggy starfish

▲▼◄► 0 ~ 9 to select   ENTER to play   RETURN to exit

TOP MENU	MENU	**Playing data discs** `WMA` `MP3` `JPEG` `MPEG4` `DivX`

Select "Play as Data Disc" (➜ page 19, Other Menu) in the following cases:
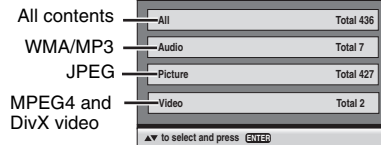-To play HighMAT discs without using the HighMAT function
-To play `MP3`, `JPEG`, `MPEG4` or `DivX` on DVD-RAM that contain both `DVD-VR` and another format (e.g. `JPEG`)

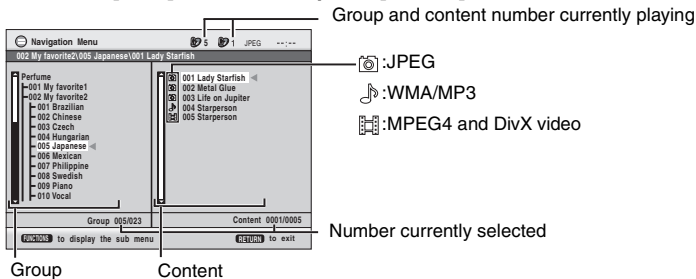### Playing items in order (Playback Menu)

While the menu is displayed
Press [▲ ▼] to select "All", "Audio", "Picture" or "Video" and press [ENTER].

● To display/exit the screen, press [TOP MENU].

All contents —— **All** Total 436
WMA/MP3 —— **Audio** Total 7
JPEG —— **Picture** Total 427
MPEG4 and DivX video —— **Video** Total 2

▷ Playback Menu

▲▼ to select and press [ENTER]

Playing from the selected item (Navigation Menu)

1 **Press [MENU].**
2 **Press [▲ ▼ ◄ ►] to select the group and press [ENTER].**
3 ●**To play content in the group in order**
      Press [ENTER].
   ●**To start play from the selected content**
      Press [▲ ▼] to select and press [ENTER].

Group and content number currently playing

Navigation Menu   5   1   JPEG   -- / ---
002 My favorite2\005 Japanese\001 Lady Starfish

Perfume
 001 My favorite1
 002 My favorite2
  001 Brazilian
  002 Chinese
  003 Czech
  004 Hungarian
  005 Japanese
  006 Mexican
  007 Philippine
  008 Swedish
  009 Piano
  010 Vocal

 001 Lady Starfish
 002 Metal Glue
 003 Life on Jupiter
 004 Starperson
 005 Starperson

:JPEG
♪ :WMA/MP3
:MPEG4 and DivX video

Group 005/023   Content 0001/0005
FUNCTIONS to display the sub menu   RETURN to exit

Number currently selected

Group   Content

● Press [ANGLE/PAGE] to skip page by page.
● **To listen to WMA/MP3 while showing a JPEG image on the screen**
   Select a JPEG first, and then select WMA/MP3.
   (The opposite order is not effective.)
● To exit the screen, press [MENU].

■ Using the submenu
1 **Press [MENU].**
2 **Press [FUNCTIONS].**
3 **Press [▲ ▼] to select an item and press [ENTER].**

⌄ **Multi** —— Groups and content
 List —— Content only
 Tree —— Groups only
 Thumbnail —— Thumbnail images `JPEG`
 Next group —— To the next group
 Previous group —— To the previous group
⌄ **All** —— WMA/MP3, JPEG, MPEG4 and DivX video
 Audio —— WMA/MP3 only
 Picture —— JPEG only
 Video —— MPEG4 and DivX video only
⌄ **Help display** —— To switch between guide messages and the playback condition indicator
 Find —— To search by content or group title (➜ see below)

■ Searching by a content or group title
1 **Press [MENU].**
   ●Press [◄ ►] to highlight a group title to search a group, or a content title to search its content.
2 **Press [FUNCTIONS].**
3 **Press [▲ ▼] to select "Find" and press [ENTER].**
4 **Press [▲ ▼] to select a character and press [ENTER].**
   ● Repeat to enter another character.
   ● Lower case is also searched.
   ● Press [◄◄ ►►] to skip between A, E, I, O and U.
   ● Press [◄] to erase a character.
   ● Erase the asterisk (∗) to search for the titles starting with that character.

✽ A   **Find**

5 **Press [►] to select "Find" and press [ENTER].**
   The search result screen appears.
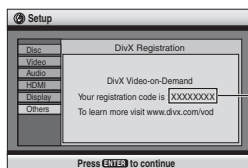6 **Press [▲ ▼] to select the content or group and press [ENTER].**

About DivX VOD content

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 on line 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.

Display the unit's registration code

(➜ page 21, "DivX Registration" in "Others" tab)

Setup
Disc / Video / Audio / HDMI / Display / Others — DivX Registration — DivX Video-on-Demand — Your registration code is XXXXXXXX — To learn more visit www.divx.com/vod — 8 alphanumeric characters — Press ENTER to continue

- 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 "DivX 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. ("Rented Movie Expired" or "Rental Expired" is displayed.)

When playing this content
- The number of remaining plays is reduced by one if
  –you press [⏻] or [SETUP].
  –you press [■] (STOP). [Press [▋▋] (PAUSE) to stop play.]
  –you press [|◀◀ ▶▶|] (SKIP) or [◀◀ ▶▶] (SEARCH) etc. and arrive at another content or the start of the content being played.
- Resume (➜ page 9, Stop) and Marker (➜ page 17, Play Menu) functions do not work.

Official DivX® Certified product.
Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files.
DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

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

"DTS" and "DTS Digital Surround" are registered 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.

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 http://www.mpegla.com.

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

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

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.

, HDCD®, High Definition Compatible Digital® and Pacific Microsonics™ are either registered trademarks or trademarks of Pacific Microsonics, Inc. in the United States and/or other countries.

HDCD system manufactured under license from Pacific Microsonics, Inc. This product is covered by one or more of the following: In the USA : 5,479,168, 5,638,074, 5,640,161, 5,808,574, 5,838,274, 5,854,600, 5,864,311, 5,872,531, and in Australia: 669114, with other patents pending.

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

Using On-Screen Menus

1

FUNCTIONS

◯

Press.

2

Select

Go to the next menu

Return to the previous menu   Register

Select the menu.

3

Select

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ⩾10

Register

Make the settings.

4

RETURN

◯

Press to exit.

Items shown differ depending on the type of software.

Main menus

Program, Group, Title Chapter, Track Playlist, Content	**To start from a specific item** ● Press **[▲ ▼]** to select and press **[ENTER]**. ● Press and hold **[▲ ▼]** to alter faster.
Time	**To skip incrementally or decrementally**※ **(Time Slip for play only)** 1. Press [ENTER] twice to show Time Slip indicator. 2. Press **[▲ ▼]** to select the time and press [ENTER]. ● Press and hold **[▲ ▼]** to alter faster. **To start from a specific time**※ **(Time Search)** **To change remaining/elapsed time display**
Video	**To display pixel number.** **DivX** fps (frame per second) is also displayed.
Audio	**(→ page 13, Changing soundtracks)**
	To display the current bitrate or sampling frequency
Still Picture	**To switch still picture**
Thumbnail	**To show thumbnail images**
Subtitle	**(→ page 13, Changing subtitles)**
Marker (VR)	**To recall a marker recorded on DVD recorders**
Angle	**(→ page 13, Angle select)**
Rotate Picture	**(→ page 13, Still picture rotation)**
Slideshow	**To turn on/off slideshow** **To change the slideshow timing (1 Fast ⟷ 5 Slow)** ● When using Slideshow, Skip/Rotate picture may not work correctly depending on the play position.
Other Settings	**(→ below)**

※ Except +R/+RW

Other Settings

Play Speed	**(→ page 12, Changing play speed)**

■ Play Menu
(Only when the elapsed play time can be displayed, **JPEG** The Repeat and Marker functions can be used.)

Repeat	**(→ page 12, Repeat play)**
A-B Repeat	**To repeat a specified section** Press [ENTER] at the starting and ending points. Press [ENTER] again to cancel. ● **DVD-VR** (parts containing still pictures): Does not work.
Marker Except **DVD-VR**	**To mark up to 5 positions to play again** Press [ENTER] (The unit is now ready to accept markers.) To mark a position: [ENTER] (at the desired point) To mark another position: [◄ ►] to select "✳"➜ [ENTER] To recall a marker: [◄ ►] ➜ [ENTER] To erase a marker: [◄ ►] ➜ [CANCEL] ● This feature doesn't work during program and random play. ● Markers you added will clear when you open the disc tray or switch the unit to standby.
Advanced Disc Review	**(→ page 11)**

■ Picture Menu

Picture Mode	**Normal:** Normal images **Cinema1:** Mellows images and enhances detail in dark scenes. **Cinema2:** Sharpens images and enhances detail in dark scenes. **Animation:** Suitable for animation **Dynamic:** Enhances the contrast for powerful images. **User** (Press [ENTER] to select **"Picture Adjustment"**) (→ below)
	Picture Adjustment **Contrast:** Increases the contrast between light and dark parts of the picture (−7 to +7). **Brightness:** Brightens the picture (0 to +15). **Sharpness:** Adjusts the sharpness of the edges of the horizontal lines (−7 to +7). **Colour:** Adjust the shade of the picture's colour (−7 to +7). **Gamma:** Adjusts the brightness of dark parts (0 to +5). **Depth Enhancer:** Reduce the rough noise in the background to give a greater feeling of depth (0 to +4). **MPEG DNR:** Smoothes block noise and reduces the smudging that appears around contrasting sections of the picture (0 to +3).

Video Output Mode	**With HDMI connection (When "Video Output" is set to "On") (➜ page 21, "HDMI" tab)** Video recordings will be converted to, and output as, high definition video.The picture quality will vary depending on the connected equipment. Choose the picture quality to your preference. **480p/576p (progressive)**∗ **720p (progressive)** **1080i (interlace)** ●"∗" will be displayed next to those video outputs possible with the connected equipment. Selecting an item without "∗" can result in the picture being distorted. Should the picture be distorted, press and hold [CANCEL] until the picture is displayed correctly. The setting will return to "480p" or "576p". ●Output from the COMPONENT VIDEO OUT terminal will be "480p" or "576p". **With HDMI connection (When "Video Output" is set to "Off") (➜ page 21, "HDMI" tab) or other connections** **480i/576i (interlace)**∗ **480p/576p (progressive)**∗ When you select "480p" or "576p" and a confirmation screen appears, select "Yes" only if connecting to a progressive output compatible television.
Transfer Mode	If you have chosen "480p", "576p", "720p" or "1080i" (➜ above), select the method of conversion to suit the type of material. ● When the tray is opened, the setting will return to Auto or Auto1. When playing PAL discs, MPEG4 or DivX video contents **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.

Source Select `DivX`	When you select "Auto" the constructing method of the DivX contents is automatically distinguished and output. If the picture is distorted, select "I (Interlace)" or "P (Progressive)" depending on which constructing method was used when the contents were recorded to disc. **Auto I (Interlace) P (Progressive)**
HD Picture Enhancer	**With HDMI connection (When "Video Output" is set to "On") (➜ page 21, "HDMI" tab)** Makes the quality of HDMI video output(720p,1080i) sharp. **Off**, **1**(weakest) to **3** (strongest)
HDMI Colour Space	**With HDMI connection (When "Video Output" is set to "On") (➜ page 21, "HDMI" tab)** The picture quality will vary depending on the connected equipment. Choose the picture quality to your preference. Should one of the items below not be possible with the connected equipment it will not be displayed. **RGB YCbCr (4:4:4) YCbCr (4:2:2)** ●"RGB Range" (➜ page 21, "HDMI" tab) is available when "RGB" is selected.

■ Audio Menu

Night Sound Mode	(➜ page 11)
H.Bass	(➜ page 11)
Advanced Surround	(➜ page 12)
Dialogue Enhancer	**To make the dialogue in movies easier to hear** `DVD-V` (Dolby Digital, DTS, MPEG `Except Asia`, 3-channel or over, with the dialogue recorded in the center channel) `DivX` (Dolby Digital, 3-channel or over, with the dialogue recorded in the center channel) **On ←——→ Off**
Multi Re-master	(➜ page 12)

∗480i, 480p : When playing NTSC discs
576i, 576p : When playing PAL discs

Sound Enhancement	**You can enjoy comfortable, analog-like sound.** **DVD-VR DVD-V** (Discs recorded with 48 kHz only) **DVD-A** (Discs recorded with 44.1 kHz and 48 kHz only) **VCD CD** **WMA MP3** (Disc recording is other than 8 kHz, 16 kHz or 32 kHz) **On ⟷ Off** ● This does not work when Night Sound Mode, H.Bass (➔ page 11), Advanced Surround or Multi Re-master (➔ page 12) is on. ● This may not work depending on the disc's recording. ● This does not work with **MP3** on DVD-RAM or DVD-R/RW.
Attenuator	**With 2ch or 5.1ch AUDIO OUT connections (➔ page 6, 8)** Switch on if sound is distorted. **On ⟷ Off**

■ Display Menu

Information	**On ⟷ Off**
Subtitle Position	**0 to −60 (in 2 units)**
Subtitle Brightness	**Auto, 0 to −7**
4:3 Aspect	**To select how to show images made for 4:3 aspect screens on a 16:9 aspect television** **Normal**: Laterally stretches images. **Auto**:　The standard setting is "Shrink". However, this automatically changes to "Zoom" with a letterbox picture. **Shrink**: Images appear in the center of the screen. **Zoom**:　Expands to 4:3 aspect ratio.
Just Fit Zoom	**(➔ page 13, Zoom)**
Manual Zoom	**(➔ page 13, Zoom)**
Bit Rate Display	*Motion pictures*　　　**On ⟷ Off**
GUI See-through	**Off, On, Auto (Switches on automatically when the images appear on the display.)**
GUI Brightness	**−3 to +3**
HDMI Status	Indicates various information when connected with HDMI AV OUT terminal. (➔ below, Confirming HDMI information)
Quick OSD	**(➔ page 11)**

■ Other Menu

AV Enhancer	**To preset the settings** You can preset your favorite video/audio effects onto "User1", "User2" and "User3". 　**Preparation** 　Adjust the settings indicated below to your preference. 　(When "Auto" is selected, this is not available.) 　**Audio settings:** 　Night Sound Mode/H.Bass (➔ page 11) 　Advanced Surround/Multi Re-master (➔ page 12) 　Dialogue Enhancer (➔ page 18, Audio Menu) 　Sound Enhancement (➔ left) 　**Video settings:** 　Picture Mode (➔ page 17, Picture Menu) 1.　Select "Save Settings" and press [ENTER]. 2.　Press [▲ ▼] to select the setting location (User1, User2 or User3) and press [ENTER]. 3.　Follow the instructions on the menu screen and press [ENTER] last. **To recall the settings (➔ page 11)** **To confirm the settings** 1.　Press [▲ ▼] to select "User1", "User2" or "User3" and press [ENTER]. 2.　Select "Save Settings" and press [ENTER] twice. To exit the screen, select "No" and press [ENTER].
Setup	**(➔ page 20, Changing the player settings)**
Play as DVD-Video or Play as DVD-Audio	Select "Play as DVD-Video" to play **DVD-V** on DVD-Audio.
Play as DVD-VR Play as HighMAT or Play as Data Disc	Select "Play as Data Disc" to play **MP3 JPEG MPEG4** or **DivX** on DVD-RAM that contain both **DVD-VR** and another format (e.g. **JPEG**) or to play HighMAT discs without using the HighMAT function.

■ Confirming HDMI information

●HDMI Status —HDMI is connected. ───── Connection status

HDMI Information

Audio Stream	PCM/Dolby Digital/DTS
Max Channel	6ch
Video Format	480p/576p/720p/1080i
Colour Space	YCbCr(4:4:4)/YCbCr(4:2:2)/RGB

(➔ page 13, Changing soundtracks)

Shows the maximum channel number of the connected equipment.

(➔ page 18, Video Output Mode)

(➔ page 18, HDMI Colour Space)

●All possible outputs are displayed.
●The current output for "Audio Stream", "Video Format" and "Colour Space" will be underlined.
●When "Off" is selected in "Audio Output" (➔ page 21, "HDMI" tab) "– – –" will be displayed in "Audio Stream" and "Max Channel".

Using On-Screen Menus

RQT8519

19

Changing the player settings

1 SETUP	**2** Select ↑ ◄ ENTER ► ↓ Go right	**3** Select ↑ ◄ ENTER ► ↓ Register	**4** Select ↑ ◄ ENTER ► ↓ Register ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⓪ ≧10	**5** SETUP
Shows Setup menu.	Select the tab.	Select the item.	Make the settings.	Press to exit.
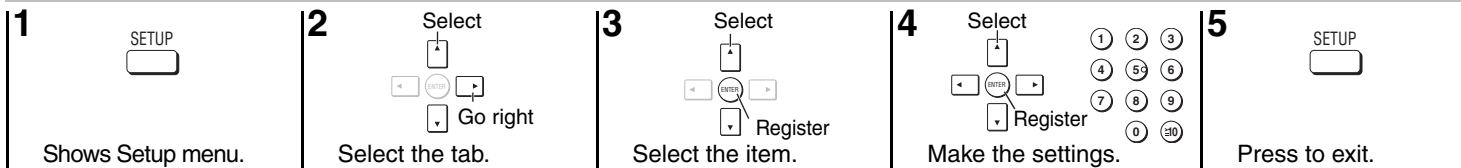
- Referring to pages 20 to 22, change as required.
- The settings remain intact even if you switch the unit to standby.
- Underlined items are the factory preset.

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

■ "Disc" tab

Audio Choose the audio language.	**English** (Language options)※1 Original※2 Other✱✱✱✱※3
Subtitle Choose the subtitle language.	**Automatic**※4 English (Language options)※1 Other✱✱✱✱※3
Menus Choose the language for disc menus.	**English** (Language options)※1 Other✱✱✱✱※3 • Changing the menu language from QUICK SETUP also changes this setting.
Advanced Disc Review Select how to review (➜ page 11).	**Intro Mode**: Reviews each title/program. **Interval Mode**: Reviews each 10 minutes.
Ratings Set a ratings level to limit DVD-Video play. • Follow the on-screen instructions.	Setting ratings (When level 8 is selected) **8 No Limit** **1 to 7**: To prohibit play of DVD-Video with corresponding ratings recorded on them. **0 Lock All**: To prevent play of discs without ratings levels. When setting a ratings level, a password screen is shown. Follow the on-screen instructions. **Do not forget your password.** A message screen will appear if a DVD-Video exceeding the ratings level is inserted in the unit. Follow the on-screen instructions.

※1 Language options
   The United Kingdom and Continental Europe :
   French, German, Italian, Spanish, Polish, Swedish and Dutch
   Australia and N.Z. :
   French, German, Italian, Spanish, Portuguese, Russian and Dutch
   Asia : Chinese
※2 The original language designated on the disc is selected.
※3 Input a code number referring to the language code list (➜ page 22).
※4 If the language selected for "Audio" is not available, subtitles appear in that language
   (If available on the disc).

■ "Video" tab

TV Aspect Choose the setting to suit your television and preference.	**4:3 Pan&Scan**: Regular aspect television (4:3) The sides of the widescreen picture are cut off so it fills the screen (unless prohibited by the disc). **4:3 Letterbox**: Regular aspect television (4:3) Widescreen picture is shown in the letterbox style.
	16:9: Widescreen television (16:9)
TV Type Select to suit the type of television.	**Standard (Direct View TV)** CRT Projector LCD TV/Projector Projection TV Plasma TV
Time Delay When connected with an AV amplifier and Plasma display, adjust if you notice the audio is out of sync with the video.	**0ms** 20ms 40ms 60ms 80ms 100ms
Video Out (AV/Component)※ 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
Still Mode Specify the type of picture shown when paused.	**Automatic** **Field**: The picture is not blurred, but picture quality is lower. **Frame**: Overall quality is high, but the picture may appear blurred.
NTSC Disc Output Choose PAL 60 or NTSC output when playing NTSC discs.	**PAL60**: NTSC discs can be viewed on PAL television. **NTSC**: Output signal from NTSC discs remains as NTSC. Asia : "NTSC" is the factory preset.
Picture/Video Output Choose the video signal format to be output for JPEG, MPEG4 and DivX video.	**Automatic: (Except Asia)** **PAL** **NTSC/PAL60**: Output will depend on "NTSC Disc Output" setting (➜ above). Asia : "NTSC/PAL60" is the factory preset. • If picture output is not smooth during playback, change the setting.

※ The United Kingdom and Continental Europe

Changing the player settings

■ "Audio" tab

PCM Digital Output[1] Check the digital input limitations of the equipment you connect using COAXIAL or OPTICAL terminal and select the maximum sampling frequency of PCM digital output.	**Off:** When not connected with COAXIAL or OPTICAL terminal **Up to 48 kHz:** When connected to equipment compatible with 44.1 or 48 kHz **Up to 96 kHz:** When connected to equipment compatible with 88.2 or 96 kHz **Up to 192 kHz:** When connected to equipment compatible with 176.4 or 192 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[1] With COAXIAL, OPTICAL or HDMI AV OUT connections (➜ page 7, 8)	**Bitstream** PCM	Select "**Bitstream**" when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select "**PCM**". (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 Digital Surround[1] With COAXIAL, OPTICAL or HDMI AV OUT connections (➜ page 7, 8)	**Bitstream** PCM	
MPEG[1,2] With COAXIAL, OPTICAL or HDMI AV OUT connections (➜ page 7, 8)	**PCM** Bitstream	
Dynamic Range Compression	**Off** **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)	
Speaker Settings Choose the settings to suit your audio system and the listening environment (➜ page 22, Changing the speaker setting to suit your speakers).	Speaker Type **Multi-channel**: when 3 or more speakers are connected. **2-channel**: when 2 speakers are connected. **Multi-channel Setting** (If you select "**Multi-channel**") Speaker presence and size Delay time Channel balance	

[1] 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.

[2] Except **Asia**

■ "HDMI" tab

RGB Range Set "HDMI Colour Space" to "RGB" (➜ page 18, Picture Menu).	**Standard** **Enhanced**: When the black and white images are not distinct.
Video Output (This setting is irrelevant when connected through the VIDEO or S VIDEO OUT terminal.)	**On**: Select this when connected through the HDMI terminal. Video is output from the HDMI terminal. Video is also output from the COMPONENT VIDEO OUT terminal, but only in 480p or 576p (progressive). **Off**: Select this when connected through the COMPONENT VIDEO OUT terminal. Video is not output from the HDMI terminal, but from the COMPONENT VIDEO OUT terminal according to the setting of the "Video Output Mode" (➜ page 18, Picture Menu). Also, select this when connected through the SCART terminal and "RGB/No Output" (➜ page 20, "Video" tab) is selected.
Audio Output	**On**: When audio output is from HDMI AV OUT terminal. (Depending on the capabilities of the connected equipment, audio output may differ from the audio settings.) **Off**: When audio output is not from HDMI AV OUT terminal. (The audio is output using the settings of this unit.)

■ "Display" tab

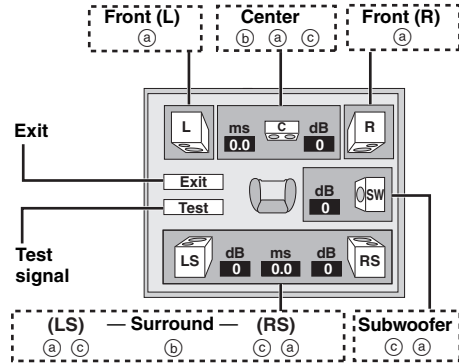| Menu Language	[1] **English** Français Deutsch Italiano Español
	   Polski Svenska Nederlands
	[2] **English** Français Deutsch Italiano Español
	   Português Русский Nederlands
	[3] **English** 中文	

On-Screen Messages	**On** Off	
Background during Play Select background during JPEG, MPEG4 and DivX video playback.	**Black** Grey	

■ "Others" tab

FL Dimmer Changes the brightness of the unit's display.	**Bright** Dim **Auto**: The display is dimmed, but brightens 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**
DivX Registration Displays the unit's registration code.	You need this registration code to purchase and play DivX Video-on-Demand (VOD) content. (➜ page 16, About DivX VOD content)
QUICK SETUP	**Yes** No
Re-initialise Setting This returns all values in the Setup menus to the default settings.	**Yes**: The password screen is shown if "Ratings" (➜ page 20) is set. Please enter the same password and press [ENTER]. After "INI" on the display disappears, turn the unit off and on again. **No**

[1] **The United Kingdom and Continental Europe** [2] **Australia and N.Z.** [3] **Asia**

RQT8519

Changing the player settings

Changing the speaker setting to suit your speakers

When connecting to an amplifier to enjoy multi-channel surround sound, use the following settings on this unit if they cannot be set on the amplifier.

Front (L)	Center	Front (R)
ⓐ	ⓑ ⓐ ⓒ	ⓐ

Exit

L | ms ⓒ dB | R
0.0 | 0

Exit
Test

dB
0 | SW

LS | dB ms dB | RS
0 0.0 0

Test signal

(LS) — Surround — (RS)	Subwoofer
ⓐ ⓒ ⓑ ⓒ ⓐ	ⓒ ⓐ

Speaker presence and size (ⓐ)

1. **Press [▲ ▼ ◄ ►] to select an item and press [ENTER].**
2. **Press [▲ ▼] to change the content and press [ENTER].**

Icon examples:
Surround speaker (LS)

LS	LS	
Large	**Small**	**No**

● **Large**: Select when the speaker supports low-frequency (under 100 Hz) reproduction.
● **Small**: Select when the speaker does not support low-frequency reproduction.

If the subwoofer is set to "No", the front speakers will automatically be set to "Large". (In this case, we recommend connecting a speaker that can reproduce bass below 100 Hz.)

Delay time (ⓑ)

(Effective when playing multi-channel audio)
If either distance ⓓ or ⓕ is less than ⓔ, find the difference in the relevant table and change to the recommended setting.

1. **Press [▲ ▼ ◄ ►] to select an item and press [ENTER].**
2. **Press [▲ ▼] to change the content and press [ENTER].**

⌐⌐⌐ : Recommended placement
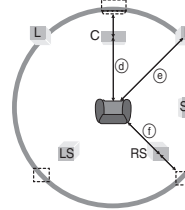
ⓓ **Center speaker**

Difference	Setting
Approx. 34 cm	1.0 ms
Approx. 68 cm	2.0 ms
Approx. 102 cm	3.0 ms
Approx. 136 cm	4.0 ms
Approx. 170 cm	5.0 ms

ⓕ **Surround speakers**

Difference	Setting
Approx. 170 cm	5.0 ms
Approx. 340 cm	10.0 ms
Approx. 510 cm	15.0 ms

Channel balance (ⓒ)

This does not work when connected with HDMI terminals and "Audio Output" (➔ page 21, "HDMI" tab) is set to "On".

1. **Select "Test" and press [ENTER].**
   A test signal is output.

   Front (L) ⟶ Center ⟶ Front (R)
   ↑   ↓
   Surround (LS) ⟵   Surround (RS)

2. **While listening to the test signal, press [▲ ▼] to adjust the volume of the center and surround speakers so they are the same apparent volume as the front speakers (−6 to +6 dB).**
   (The front speakers cannot be adjusted here.)
3. **Press [ENTER].**
   The test signal stops.
   ●No signal is output for the subwoofer. To adjust its volume, play something, then return to this screen to adjust to suit your taste.

To finish the speaker setting
Press [▲ ▼ ◄ ►] to select "Exit" and press [ENTER].

Language code list

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

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

No power.	● Insert the AC mains lead securely into the household mains socket. **(6)**
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. **(21)**

No operation

No response when any buttons are pressed.	● This unit cannot play discs other than the ones listed in these operating instructions. **(4)** ● 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 are pressed.	● Check that the batteries are installed correctly. **(8)** ● The batteries are depleted: Replace them with new ones. **(8)** ● Point the remote control at the remote control sensor and operate. **(9)**
No picture or sound.	● Check the video or audio connection. **(6-8)** ● Check the power or input setting of the connected equipment. ● Check that the disc has something recorded on it.
You have forgotten your ratings password. Reset all the settings to Factory Preset.	● While stopped, press and hold [QUICK OSD] and [❙❙] on the unit and then also press and hold [▲OPEN/CLOSE] on the unit until "Initialised" 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. ● This is normal on DivX video.
The program and random play 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).

The on-screen menu shows "2" as a soundtrack option when [AUDIO] is pressed, but the audio does not change.	● This is normal on DVD-Audio. Even if a second soundtrack isn't recorded, two numbers will be shown.
Play doesn't start.	● This unit may not play WMA and MPEG4 that contains still picture data. ● If playing DivX VOD content, refer to the homepage where you purchased it. (Example: www.divx.com/vod) ● If a disc contains CD-DA and other formats, proper playback may not be possible.
Play restarts from the beginning of the track when soundtrack is changed.	● This is normal on DVD-Audio.
Subtitle position is wrong.	● Adjust the position. ("Subtitle Position" in Display Menu) **(19)**
No subtitles.	● Display the subtitles. **(13)**
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 cancelled.	● A-B Repeat is cancelled when you press [QUICK REPLAY]. ● Repeat play may be cancelled when you press [MANUAL SKIP] or [ADVANCED DISC REVIEW].

Troubleshooting guide

Troubleshooting guide

Picture incorrect

Picture distorted.	● Ensure that the unit is not connected through a video cassette recorder. **(6)** ● Have you selected an item in "Video Output Mode" (➜ page 18, Picture Menu) that is incompatible with the connected equipment? Depending on the current connection status, perform corresponding steps. —When connecting to a television that is incompatible with progressive output using the COMPONENT VIDEO OUT terminal: Press and hold [CANCEL] until the picture displays correctly. The settings will return to "480i" or "576i". —When connecting to a television with an HDMI cable: Press and hold [CANCEL] until the picture displays correctly. The settings will return to "480p" or "576p". —When connecting to an amplifier with an HDMI cable, and to a television that is incompatible with progressive output using the COMPONENT VIDEO OUT terminal: 1. Disconnect the HDMI (remove the cable/switch off the amplifier). 2. Press and hold [CANCEL] until the picture displays correctly. The settings will return to "480i" or "576i". 3. Set "Video Output" to "Off" in the "HDMI" tab. **(21)** 4. Connect the HDMI (connect the cable/switch on the amplifier). ● DivX Change "Source Select" in Picture Menu. **(18)**
Picture size doesn't fit the screen.	● Change "TV Aspect" in "Video" tab. **(20)** ● Use the television to change the aspect. If your television does not have that function, change "4:3 Aspect" in Display Menu. **(19)** ● Change the Zoom setting. **(13)**
Picture stops.	● Picture may stop if the DivX files are greater than 2GB.
When playing PAL disc, picture distorted.	● Set "Transfer Mode" in Picture Menu to "Auto". **(18)**
The television may display incorrectly or colours 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 PAL 60 for viewing on a PAL television ("NTSC Disc Output" in "Video" tab). **(20)** ● Connect to a progressive output compatible television to enjoy progressive video. ● Picture may not be seen when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices.
Menu not displayed correctly.	● Restore the zoom ratio to ×1.00. **(13)** ● Set "Subtitle Position" in Display Menu to "0". **(19)** ● Set "4:3 Aspect" in Display Menu to "Normal". **(19)**
Auto zoom function does not work well.	● Turn off TV's zoom function. ● Use the other preset aspect ratios or manual adjustment. **(13)** ● Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc.
Video is not output from HDMI AV OUT.	● Change the HDMI video output settings by using either of the procedures below. – Connect the television using VIDEO OUT or S VIDEO OUT terminal, then set "Video Output" to "On" in the "HDMI" tab. **(21)** – Press and hold [CANCEL] until the picture is displayed. The settings will change to "On".
RGB video is not output from the SCART terminal.	● When connecting to an amplifier with an HDMI cable, set "Video Output" in the "HDMI" tab to "Off". **(21)**

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 Output Mode" in Picture Menu to "480i" or "576i". **(18)** When connecting with HDMI AV OUT terminal, connect with the other terminals and change the settings in the following order: 1. Select "Video Output"("HDMI" tab) to "Off". **(21)** 2. Select "Video Output Mode"(Picture Menu) to "480i"or "576i". **(18)**
Pictures not in progressive output.	● If the unit is connected to the television through VIDEO OUT, S VIDEO OUT or SCART terminal, output will be interlace.

Sound incorrect

Sound distorted.	● Select "Off" in "Advanced Surround". **(12)** ● Set "Attenuator" in Audio Menu to "On" if it causes distortion with 2ch or 5.1ch AUDIO OUT terminals. **(19)** ● Noise may occur when playing WMA files. ● DVD-A The disc may have restrictions on the method of audio output. With some multi-channel discs, unless the number of connected speakers is the same as the disc's channel specification, audio will not be output properly. Refer to the disc's jacket for more information. ● With HDMI AV OUT connections, audio may not be output from other terminals in the way that was set. ● Match the speaker settings with the connected equipment. **(21)**
Piercing noise comes from the speakers.	● If you have connected a digital amplifier which does not include decoder, be sure to select "PCM" in "Dolby Digital", "DTS Digital Surround" or "MPEG"※1 in "Audio" tab. **(21)**
Effects do not work.	● None of the audio effects work when the unit is outputting bitstream signals from the COAXIAL, OPTICAL or HDMI AV OUT terminal. **(7, 8)** ● Some audio effects do not work or have less effect with some discs. ● Night Sound Mode, H.Bass, Advanced Surround, Multi Re-master and Sound Enhancement do not work if you have changed the play speed. ● With HDMI AV OUT connections, HDCD discs are played as normal CDs.
No sound	● There may be a pause in sound when you change the play speed. ● Audio may not be heard when more than 4 devices are connected with HDMI cables. Reduce the number of connected devices. ● DivX Audio may not be output due to how files were created. **(5)**

Recording

Cannot record to digital recording equipment. (Incorrect sound recorded.)	● You cannot record WMA/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 **(12)** – PCM Digital Output: Up to 48 kHz **(21)** – Dolby Digital/DTS Digital Surround/MPEG※1: PCM **(21)**

Unit displays

"noPLAy"	● You inserted a disc the unit cannot play; insert one it can. **(4)** ● You inserted a blank disc. ● You inserted a disc that has not been finalized. **(4)**
"U11"	● The disc may be dirty. **(right)** ● You inserted a disc that has not been finalized. **(4)**
"H□□"or"F7□□" (□□ stands for a number.)	● Trouble may have occurred. The number following "H" and "F7" 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. **(9)**
"U70-1"	● The connected equipment is not HDMI compatible.
"U70-□" (□ stands for a number.) The actual number following "U70-" will depend on the state of this unit.	● The HDMI connection acts unusually. – The connected equipment is not HDMI compatible. – The HDMI cable is too long. – The HDMI cable is damaged.

Television displays

"⊘"	● The operation is prohibited by the unit or disc.
"Cannot play group xx, content xx" "Cannot display group xx, content xx"	● You are trying to play incompatible group or content. **(5)**
"Group xx, content xx is protected"	● You are trying to play protected group or content. You cannot play it.

"Cannot play audio" "No audio"	● Audio has not been recorded, or recorded in a format this unit cannot playback. Only video playback is possible. **(5)**
"Check the disc"	● This disc may be dirty. **(below)**
"Due to copyright protection, audio cannot be output from HDMI"	● Should you connect equipment that does not support CPPM **(27)**, the audio from the CPPM copy protected DVD-Audio cannot be output from HDMI AV OUT terminal. Connect the audio cable of the Audio/Video cable (L, R) to a HDMI compatible AUDIO IN terminal. **(7)**
While "HDMI Status" displayed, no items are underlined	● If you select an item without an "✳" in the "Video Output Mode" in Picture Menu, it will not be underlined. **(18)**
"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)**
No on-screen display.	● Select "On" in "On-Screen Messages" in "Display" tab. **(21)**
"Authorization Error"	● 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. **(16)**
"Rented Movie Expired"※2 "Rental Expired"※3	● The DivX VOD content has zero remaining plays. You cannot play it. **(16)**

※1 **MPEG:** `Except Asia`
※2 `Except Asia`
※3 `Asia`

Except Asia marked as boxed labels

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.

image of cleaning disc

vertical text

Troubleshooting guide/Maintenance

RQT8519

25

Specifications

Signal system: 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, DVD-Audio, DivX※6, 7)
(2) DVD-RAM (DVD-VR, JPEG※4, 7, MP3※2, 7, MPEG4※5, 7, DivX※6, 7)
(3) DVD-R (DVD-Video, DVD-VR, JPEG※4, 7, MP3※2, 7, MPEG4※5, 7, DivX※6, 7)
(4) DVD-R DL (DVD-Video, DVD-VR)
(5) DVD-RW (DVD-Video, DVD-VR, JPEG※4, 7, MP3※2, 7, MPEG4※5, 7, DivX※6, 7)
(6) +R/+RW (Video)
(7) +R DL (Video)
(8) CD, CD-R/RW [CD-DA, Video-CD, SVCD※1, MP3※2, 7, WMA※3, 7, JPEG※4, 7, MPEG4※5, 7, DivX※6, 7, HighMAT Level 2 (Audio and Image)]

Video output:
Output level: 1 Vp-p (75 Ω)
Output terminal:
  The United Kingdom and Continental Europe 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 Continental Europe S terminal (1 system)/AV
  Others S terminal (1 system)
Component video output:
(NTSC: 480p/480i, PAL: 576p/576i)
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
  5.1 channel discrete output (5.1 channel): 1 system
Audio performance:
(1) Frequency response:
  ●DVD (linear audio): 4 Hz to 22 kHz (48 kHz sampling)
    4 Hz to 44 kHz (96 kHz sampling)
  ●DVD-Audio: 4 Hz to 88 kHz (192 kHz sampling)
  ●CD Audio: 4 Hz to 20 kHz

(2) S/N ratio:
  ●CD Audio: 115 dB
(3) Dynamic range:
  ●DVD (linear audio): 102 dB
  ●CD Audio: 98 dB
(4) Total harmonic distortion:
  ●CD Audio: 0.0025 %
Digital audio output:
Optical digital output: Optical terminal
Coaxial digital output: Pin jack
HDMI AV output 19 pin
HDMI Ver.1.2a (EDID Ver.1.3)
Pickup:
Wave length: 662 nm/785 nm
Laser power: CLASS 2/CLASS 3A
NORSK
Pickup:
Bølgelengde: 662 nm/785 nm
Laserstyrke: Ingen farlig stråling sendes ut
Power supply:
  The United Kingdom, Australia and N.Z. AC 230 to 240 V, 50 Hz
  Continental Europe AC 230 V, 50 Hz
  Asia AC 110 to 240 V, 50/60 Hz
Power consumption:
  The United Kingdom and Continental Europe 14 W
  Others 13 W
Power consumption in standby mode: **approx. 1 W**
Dimensions (W×D×H): 430 mm ×251 mm×43 mm
Mass: 2.2 kg

Note

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

※1Conforming to IEC62107
※2MPEG-1 Layer 3, MPEG-2 Layer 3
※3Windows Media Audio Ver.9.0 L3
  Not compatible with Multiple Bit Rate (MBR)
※4Exif Ver 2.1 JPEG Baseline files
  Picture resolution: between 160×120 and 6144×4096 pixels (Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4)
  Extremely long and slender pictures may not be displayed.
※5MPEG4 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
※6Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile.
  GMC (Global Motion Compensation) is not supported.
※7The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

Glossary

CPPM (Content Protection for Prerecorded Media)
A copy protection system used for DVD-Audio files. This unit supports CPPM.

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.
Some DVD-Audio prevent down-mixing of all or part of their contents. When playing such discs, or such parts of the disc, unless the number of connected speakers is the same as the disc's channel specification, audio will not be output properly.

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.

HDCD (High-Definition Compatible Digital)
HDCD-encoded CDs sound better because they are encoded with 20 bits, as compared with 16 bits for all other CDs.

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 (720p,1080i) from HDMI AV OUT terminal. To enjoy high-definition video a high definition compatible television is required.

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.

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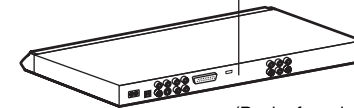
Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

CAUTION	LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.	FDA 21 CFR / Class II
CAUTION	VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.	IEC60825-1 / Class 3b
ATTENTION	RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.	
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.	
VARO!	AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.	
VARNING	SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.	
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.	
VORSICHT	SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.	
注意	打开时有可见及不可见激光辐射。避免激光束照射。	
注意	ここを開くと可視及び不可視レーザー光が出ます。 ビームを見たり、触れたりしないでください。	RQLCA0141

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

CLASS 1
LASER PRODUCT

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

(Back of product)

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

Glossary/Safety precautions

RQT8519

27

Index

–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.