Operating Instructions
DVD/CD PLAYER

Model No. **DVD-S1**

Panasonic®

If you have any questions contact
1-800-211-PANA(7262)

The warranty can be found on page 17.
La referencia rápida en español se puede encontrar en la página 19.

MULTI-FORMAT PLAYBACK

DVD-Video/Video CD/CD
sold on the market
Movie, Music etc.

DVD-R/DVD-RW
recorded and finalized with DVD video recorders etc.
Video (played as DVD-Video)

recorded and finalized with personal computers etc.
Music (MP3) & Still pictures (JPEG)

+R/+RW
recorded and finalized with DVD video recorders etc.
Video (played as DVD-Video)

CD-R/CD-RW
recorded and finalized with personal computers etc.
Music (MP3) & Still pictures (JPEG)

See page 5 for details.

Region number	Example:
The player plays DVD-Video marked with labels containing the region number "**1**" or "**ALL**".	1 ALL 1 2 4

P

RQTC0074-P

Dear customer

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

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Getting started

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Reference

Accessories

Please check and identify the supplied accessories.
Use numbers when asking for replacement parts.
(Product numbers correct as of February 2006. These may be subject to change.)

- ❒ 1 Remote control   (N2QAYB000011)
- ❒ 1 AC power supply cord   (K2CB2CB00020)
- ❒ 1 Audio/video cable   (K2KA6BA00004)
- ❒ 2 Remote control batteries

Note
- The included AC power supply cord is for use with this unit only. Do not use it with other equipment.
- Do not use an AC power supply cord from other equipment.

User memo:

DATE OF PURCHASE _____
DEALER NAME _____
DEALER ADDRESS _____
_____
TELEPHONE NUMBER _____

The model number and serial number of this product can be found on either the back or the bottom of the unit. Please note them in the space provided below and keep for future reference.

MODEL NUMBER _____ DVD-S1 _____
SERIAL NUMBER _____

IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these operating instructions handy for future reference.

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Product Service

1. **Damage requiring service**—The unit should be serviced by qualified service personnel if:
   (a) The AC power supply cord or AC adaptor has been damaged; or
   (b) Objects or liquids have gotten into the unit; or
   (c) The unit has been exposed to rain; or
   (d) The unit does not operate normally or exhibits a marked change in performance; or
   (e) The unit has been dropped or the cabinet damaged.
2. **Servicing**—Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
3. **Replacement parts**—When parts need replacing ensure the servicer uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
4. **Safety check**—After repairs or service, ask the servicer to perform safety checks to confirm that the unit is in proper working condition.

Product information

For product information or assistance with product operation:

Refer to "Customer Services Directory" on page 17.

Discs that can be played

Commercial discs

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

■ Discs that cannot be played

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

■ Built-in decoder

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

DD DOLBY DIGITAL

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

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

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

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

● It may not be possible to play the above discs in all cases due to the type of discs, the condition of the recording, the recording method and how the files were created (➔ page 16, Tips for making data discs).

*1 Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.
*2 Recorded using a format different from DVD-Video Format, therefore some functions cannot be used.
*3 A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.
*4 Closing the session will also work.
*5 This unit can also play CD-R/RW recorded with CD-DA or Video CD format.

■ Handling precautions

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

STEP 1 Connection to a television

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

Television

With VIDEO IN or S VIDEO IN

AUDIO IN
R   L   VIDEO
IN   S VIDEO
IN

S video cable*
Audio/video cable (included)
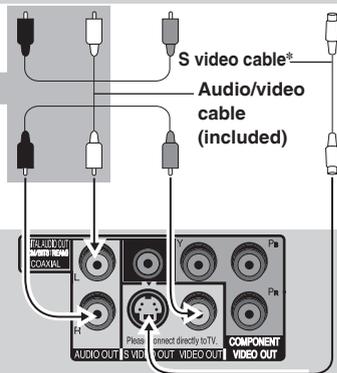
Back of the unit

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

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

With COMPONENT VIDEO IN

AUDIO IN
R   L   COMPONENT
VIDEO IN

Audio/video cable (included)   Not used   Video cable
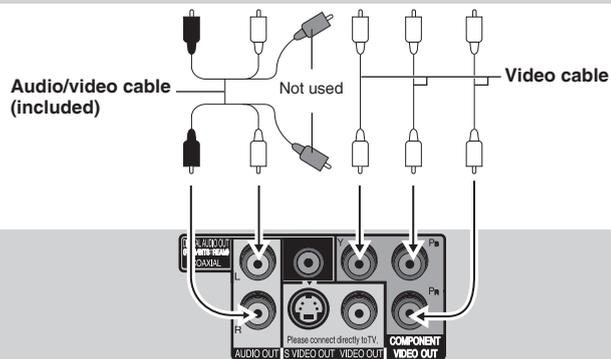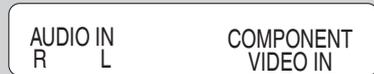
Select "DARKER" from the "BLACK LEVEL" (➔ page 13, "VIDEO" tab).

To enjoy progressive video
Connect to a progressive output compatible television.
Set "VIDEO OUT (I/P)" to "PROGRESSIVE", then follow the instructions on the menu screen (➔ page 13, "VIDEO" tab).
All Panasonic televisions with progressive input connectors are compatible. Consult the manufacturer if you have another brand of television.

■ Enjoying multi-channel surround sound

COAXIAL IN

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

Coaxial cable
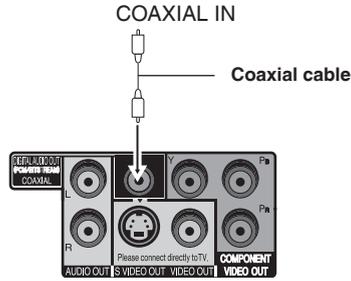
Change "DOWN SAMPLING", "DOLBY DIGITAL" and "DTS" (➔ page 14, "AUDIO" tab).

■ Connect the AC power supply cord last

AC power supply cord (included)

To household AC outlet

AC IN～
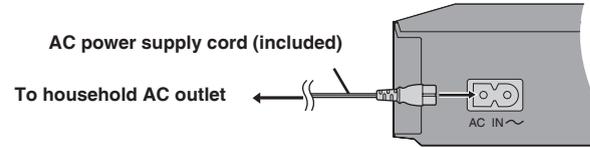
Conserving power

This unit consumes a small amount of power, even when it is turned off (1 W). To save power when the unit is not to be used for a long time, unplug it from the household AC outlet.

STEP 2 The remote control

■ Batteries

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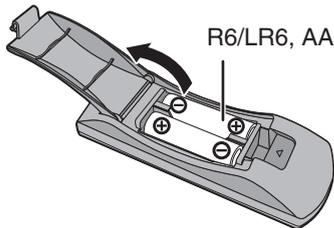
- Insert so the poles (+ and −) match those in the remote control.
- Do not use rechargeable type batteries.

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 8), avoiding obstacles, at a maximum range of 7 m (23 feet) directly in front of the unit.

Basic play

❶ Power ON.

⏻/❙ POWER

❷ Open the disc tray.

⏏ OPEN/CLOSE

Remote control sensor

DISC IN

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

❸ Load the disc.

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

❹ Start play.

▶

Search (during play)
Slow-motion (during pause)

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

Skip

- Press [⏮ ⏭] to skip chapters or tracks.

Stop

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

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

PLAY MODE   ADVANCED SURROUND QUICK OSD

⏻

SKIP   SLOW/SEARCH
⏮ ⏭   ◀◀ ▶▶

STOP PAUSE PLAY
■   ❙❙   ▶   ❹

TOP MENU   MENU

▲
◀ ENTER ▶
▼

FUNCTIONS   RETURN

Pause

- Press [▶] (PLAY) to restart play.

- Discs continue to rotate while menus are displayed. Press [■] when you finish to preserve the unit's motor and your television screen.
- Total title number may not be displayed properly on +R/+RW.

If you are experiencing problems, refer to troubleshooting guide (➜ page 15, 16).

Frame-by-frame (during pause) `DVD-V` `VCD`		• `VCD` forward direction only
Return to previous screen	RETURN	
Disc menu	TOP MENU	`DVD-V` Shows a disc top menu.
	MENU	`DVD-V` Shows a disc menu.
	RETURN	`VCD` with playback control Shows a disc menu.
On-screen item select	Select Register	
Number select	`VCD` with playback control 1. While the disc menu is displayed, Press [FUNCTIONS] to display On-Screen Menu 1. 2. Press [◄ ►] to select "1~99". 3. Press [▲ ▼] to select the track number and press [ENTER].	
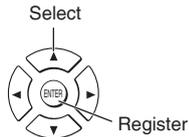
Playing MP3/JPEG discs `MP3` `JPEG`

While the menu is displayed
Press [▲ ▼ ◄ ►] to select an item and press [ENTER].

• Repeat this step if there are multiple layers.

```
DATA-DISC
  ROOT
    01 Ashley at Prom      Lady Starfish
    02 City Penguin        Life on Jupiter
    03 Neanderthal         Soccer
    04 Cartoons            Starperson
    05 Trilobites
    06 White Dwarf
    07 Discovery
    Formura one
    Starperson
    Baseball
        ROOT              Formura one
```

□ Group (Folder)*

♪ MP3 content (File)*

▣ JPEG content (File)*

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

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

■ Select the picture in thumbnails menu `JPEG`
1. While pictures are being displayed, press [MENU] to display the thumbnails.
2. To select a picture in a group
Press [▲ ▼ ◄ ►] to select the picture and press [ENTER].

To select a picture in other groups
1. Press [▲] to select the group name.
2. Press [◄ ►] to select the group and press [ENTER].
3. Press [▲ ▼ ◄ ►] to select the picture and press [ENTER].

Group name

Group and content number
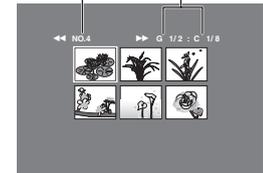
Convenient functions

[QUICK OSD]

Displaying current playback condition (Quick On Screen Display)

Press [QUICK OSD].

e.g. **CD**
Current playback number

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

Play mode
---: Normal Play
PRG: Program Play
RND: Random Play

```
T   1            TIME      0 : 05    ↕ - - -
▷ ▮
```

Current position

Playback condition

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

QUICK REPLAY

Quick replay (Only when the elapsed play time can be displayed)
DVD-V (Except + R/+ RW) **VCD** **CD** **MP3**

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

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

CM SKIP

Skipping about one minute forward
DVD-V (Except +R/+RW)

Convenient when you want to skip commercials etc.
During play, press [CM SKIP].

- This may not work depending on the play position.

ZOOM

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

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

e.g. **VCD**

🔍 NORMAL

```
×2  ⎯⎯⎯⎯→  ×4
└ NORMAL ↵
```

ADVANCED SURROUND

Enjoying advanced surround
DVD-V **VCD** (2 or more channels)

Motion picture with 2 or more channels only
Enjoy a surround-like effect when using 2 front speakers .
Press [ADVANCED SURROUND] to select "A. SURROUND1",
"A. SURROUND2", "A. SURROUND3" or "OFF".

```
OFF  →  A. SURROUND1  →  A. SURROUND2
  ↑⎯⎯⎯⎯⎯ A. SURROUND3  ←⎯⎯⎯┘
```

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

- When using discs recorded with surround sound, sound seems to come from speakers on either side of you.
- Optimum seating position is 3 to 4 times the distance between the front left and right speakers or the width of the television if using the television's speakers.
- Do not use in combination with surround effects on other equipment.

Changing the play sequences

<table>
<tr><td>PLAY MODE</td><td>**Program play** (up to 20 items)</td></tr>
</table>

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

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

e.g. `DVD-V`

```
DVD-V  PROGRAM
SELECT TITLE                 TITLE  CHAP.
TITLE 1                      1
TITLE 2                      2
TITLE 3                      3
TITLE 4                      4
                             5
                             6
                             7
                             8
                             9
                             10
START: PLAY        CLEAR  ALL
```
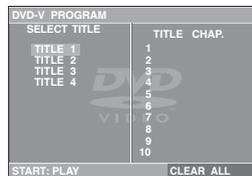
2. Press [▲ ▼] to select an item and press [ENTER].

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

```
DVD-V  PROGRAM
SELECT CHAPTER              TITLE  CHAP.
ALL                         1     4    1
CHAP. 1                     2     4    2
CHAP. 2                     3     4    3
CHAP. 3                     4
                            5
                            6
                            7
                            8
                            9
                            10
START: PLAY        CLEAR  ALL
```
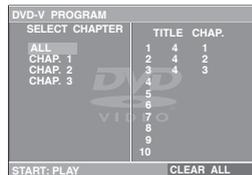
3. Press [▶] (PLAY) to start play.

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

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

To exit the program screen
Press [PLAY MODE] several times.

<table>
<tr><td>PLAY MODE</td><td>**Random play**</td><td>`CD` `VCD` (up to 20 tracks)
`MP3` `JPEG` (up to 24 groups/999 contents)</td></tr>
</table>

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

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

e.g. `VCD`

```
VCD RANDOM

PRESS PLAY TO START
```
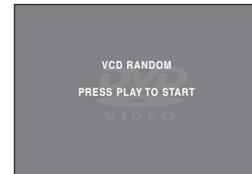
2. `MP3` `JPEG`
Only when the disc has a group (folder)
Press [▲ ▼] to select a group and press [ENTER].

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

3. Press [▶] (PLAY) to start play.

To exit the random screen
Press [PLAY MODE] several times.

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

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

Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, and 4,819,098, licensed for limited viewing uses only.

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.

Changing the play sequences

Using On-Screen Menus
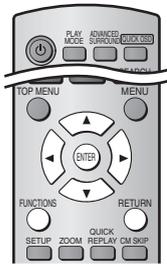
1

FUNCTIONS

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

2

Select

Select the item.

3

Select

Make the settings.

4

RETURN

Press to exit.

Items shown differ depending on the type of software.

On-Screen Menu 1

🎵	**Audio**	*Motion picture* Press [▲ ▼] to select the soundtrack. **VCD** **CD** Press [▲ ▼] to select "L", "R", "L+R"or "L R".
🌐	**Subtitle**	*Discs with subtitles* Press [▲ ▼] to select the subtitle language or "OFF". ● On +R/+RW, a subtitle number may be shown for subtitles that are not displayed.
🎥	**Angle**	**DVD-V** *with multiple angles* Press [▲ ▼] to select the angle.
🔄	**Repeat**	(Only when the elapsed play time can be displayed. **JPEG** : you can use even if there is no elapsed time display.) 1. Press [▲ ▼] to select an item to be repeated. 2. **A-B repeat only** Press [ENTER] at the starting and ending points. ● Press [ENTER] again to cancel.
1~99--	**PBC**	(→ page 9, Number select)
🔄	**Rotate**	**JPEG** During pause, press [▲ ▼] to select "0", "90", "180" or "270".

On-Screen Menu 2

🦋	**Advanced surround**	(→ page 10, Enjoying advanced surround)
🔍	**Zoom**	(→ page 10, Zoom)
🗣	**Dialogue enhancer**	**DVD-V** (Dolby Digital, 3-channel or over, with the dialogue recorded in the center channel) **To make the dialogue in movies easier to hear** Press [▲ ▼] to select "ON". **ON** **OFF**
📺	**Transfer mode**	If you have set "VIDEO OUT (I/P)" to "PROGRESSIVE" (→ page 13, "VIDEO" tab), press [▲ ▼] to select the method of conversion for progressive output to suit the type of material. ● When the tray is opened, the setting will return to AUTO1. **AUTO1** (normal): Automatically detects the film and video content, and appropriately converts it. **AUTO2**: In addition to AUTO1, automatically detects film contents with different frame rates and appropriately converts it. **VIDEO**: Select when using AUTO1 and AUTO2, and the content is distorted.
▤	**Picture mode**	Press [▲ ▼] to select the mode. **NORMAL**: Normal images. **CINEMA1**: Mellows images and enhances detail in dark scenes. **CINEMA2**: Sharpens images and enhances detail in dark scenes. **DYNAMIC**: Enhances the contrast for powerful images. **ANIMATION**: Suitable for animation.

Changing the player settings
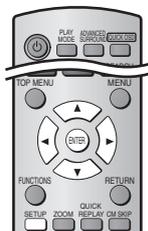
Step	Control	Description
1	SETUP	Shows Setup menu.
2	Select / Register (ENTER)	Select the tab.
3	Select / Register (ENTER)	Select the item.
4	Select / Register (ENTER)	Make the settings.
5	SETUP	Press to exit.

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

■ "DISC" tab

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

■ "VIDEO" tab

SETTING STATE	Display the current setting of the items below	
TV ASPECT Choose the setting to suit your television and preference. To select how to show images made for 16:9 aspect screens on a 4:3 aspect television. ● 4:3PAN&SCAN ● 4:3LETTERBOX ● 4:3ZOOM To select how to show images made for 4:3 aspect screens on a 16:9 aspect television. ● 16:9NORMAL ● 16:9SHRINK ● 16:9ZOOM	**4:3PAN&SCAN** The sides of the picture are cut off so it fills the screen (unless prohibited by the disc).	
	4:3LETTERBOX Picture is shown in the letterbox style.	
	4:3ZOOM If you select 4:3PAN&SCAN and there is no effect, select this and the image will display in 4:3PAN&SCAN.	
	16:9NORMAL Stretches a 16:9 aspect ratio image horizontally.	
	16:9SHRINK Displays a 4:3 aspect ratio image in the center of the screen.	
	16:9ZOOM Adjusts the horizontal width to display a full screen image in 16:9 aspect ratio.	
TV TYPE Select to suit the type of television.	**STANDARD CRT LCD PROJECTION PLASMA**	
STILL MODE Specify the type of picture shown when paused.	**AUTO** **FIELD:** The picture is not blurred, but picture quality is lower. **FRAME:** Overall quality is high, but the picture may appear blurred.	
BLACK LEVEL Change the black level of the picture if you connected a television through the COMPONENT VIDEO OUT terminals.	**LIGHTER:** When connected through VIDEO OUT or S VIDEO OUT. **DARKER:** When connected through COMPONENT VIDEO OUT.	
VIDEO OUT (I/P) Select "PROGRESSIVE" only if connecting to a progressive output compatible television.	**INTERLACE PROGRESSIVE** When you select "PROGRESSIVE", a message screen will appear. ● For progressive output, press [▲] and then press [ENTER]. ● Press [RETURN] to cancel.	

Changing the player settings

RQTC0074

13

■ "AUDIO" tab

SETTING STATE	Display the current setting of the items below
DOWN SAMPLING Check the digital input limitations of the equipment you connect using COAXIAL terminal and select the maximum sampling frequency of PCM digital output.	**ON:** When connected to equipment compatible with 44.1 or 48 kHz **OFF:** When connected to equipment compatible with 88.2 or 96 kHz ● Signals from copy-protected discs are converted to 48 or 44.1 kHz. ● Some equipment cannot handle sampling frequencies of 88.2 kHz, even if they can handle 96 kHz. Read your equipment's operating instructions for details.
DOLBY DIGITAL With COAXIAL connections (➔ page 7)	**BITSTREAM** PCM Select "**BITSTREAM**" when the equipment can decode the bitstream (digital form of multi-channel data). Otherwise, select "**PCM**" or "**OFF**". (If the bitstream is output to the equipment without a decoder, high levels of noise can be output and may damage your speakers and hearing.)
DTS With COAXIAL connections (➔ page 7)	**BITSTREAM** OFF
DYNAMIC RANGE	**ON:** Adjusts for clarity even when the volume is low through compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with Dolby Digital) **OFF**

■ "DISPLAY" tab

SETTING STATE	Display the current setting of the items below
LANGUAGE	**ENGLISH** FRANÇAIS ESPAÑOL

■ "OTHERS" tab

SETTING STATE	Display the current setting of the items below
JPEG TIME	To change the slideshow timing **1 SEC** to **15 SEC** (in 1 unit) **15 SEC** to **60 SEC** (in 5 unit) **60 SEC** to **180 SEC** (in 30 unit) ● "3 SEC" is the factory preset.
AUTO POWER OFF	**ON:** The unit switches to standby mode after about 30 minutes in the stop mode. **OFF**
DEFAULTS This returns all values in the Setup menus to the default settings.	**RESET** The password screen is shown if "RATINGS" (➔ page 13) is set. Please enter the same password with [▲ ▼] and [▶], then press [ENTER], then turn the unit off and on again.

*1 The original language designed on the disc is selected.
*2 Input a code number referring to the table (➔ below).
*3 If the language selected for "AUDIO" is not available, subtitles appear in that language (If available on the disc).

Language code list

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

Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, refer to the "Customer Services Directory" on page 17. (Reference pages are shown in parentheses.)

Power

No power.	● Insert the AC power supply cord securely into the household AC outlet. **(7)**
The unit is automatically switched to the standby mode.	● When "AUTO POWER OFF" is set to "ON", the unit automatically switches to standby after approximately 30 minutes in the stop mode. **(14)**

No operation

No response when any buttons pressed.	● This unit cannot play discs other than the ones listed in these operating instructions. **(5)** ● The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it. ● Condensation has formed: Wait 1 to 2 hours for it to evaporate.
No response when remote control buttons pressed.	● Check that the batteries are installed correctly. **(7)** ● The batteries are depleted: Replace them with new ones. **(7)** ● Point the remote control at the remote control sensor and operate. **(8)** ● When using On-Screen Menus, press [◄ ►] to select the item, then press [▲ ▼] to make the settings. **(12)**
No picture or sound.	● Check the video or audio connection. **(6, 7)** ● Check the power or input setting of the connected equipment.
You have forgotten your ratings password. Reset all the settings to Factory Preset.	● While stopped, remove the disc, and then press and hold [►] (PLAY) and [▲ OPEN/CLOSE] on the unit and then also press and hold [⏻/I POWER] on the unit until "INITIALIZED" disappears from the television. Turn the unit off and on again. All settings will return to the default values.

Specific operation impossible or incorrect

It takes time before play starts.	● Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed, however this is normal.
The program functions do not work.	● These functions do not work with some DVD-Videos.
Menu doesn't appear. **VCD** with playback control	● Press [■] twice and then press [►] (PLAY).
Play doesn't start.	● If a disc contains CD-DA and other formats, proper playback may not be possible.

No subtitles.	● Display the subtitles. **(12)**
The subtitles overlap closed captions recorded on discs.	● Clear the subtitles. **(12)**
In A-B Repeat, point B is automatically set.	● The end of an item becomes point B when it is reached.
Repeat play is automatically canceled.	● A-B Repeat is canceled when you press [QUICK REPLAY]. ● Repeat play may be canceled when you press [CM SKIP].

Picture incorrect

Picture distorted.	● Ensure that the unit is not connected through a video cassette recorder. **(6)** ● Make sure that progressive output has not been selected when the connected television is not progressive compatible. Press and hold [RETURN] until the picture displays correctly. The settings will return to "INTERLACE".
Picture size doesn't fit the screen.	● Change "TV ASPECT" in "VIDEO" tab. **(13)** ● Use the television to change the aspect. If your television does not have that function, change "TV ASPECT". **(13)** ● Change the zoom setting. **(10)**
The television may display incorrectly or colors appear faded.	● PAL discs cannot be played.
Menu not displayed correctly.	● Restore the zoom ratio to "NORMAL". **(10)** ● Change "TV ASPECT" in "VIDEO" tab. **(13)**

Progressive video

There is ghosting when progressive output is on.	● This problem is caused by the editing method or material used on DVD-Video, but should be corrected if you use interlace output. Change "VIDEO OUT (I/P)" in "VIDEO" tab to "INTERLACE". **(13)**
Pictures not in progressive output.	● If the unit is connected to the television through VIDEO OUT or S VIDEO OUT, output will be interlace.
Closed captions not displayed.	● When progressive output is on, closed captions will not be displayed.

Troubleshooting guide

Sound incorrect

Sound distorted.	● Set Advanced Surround to "OFF". **(10)**
Piercing noise comes from the speakers.	● If you have connected a digital amplifier which does not include decoder, be sure to set "DOLBY DIGITAL" to "PCM" and set "DTS" to "OFF" in "AUDIO" tab. **(14)**
Effects do not work.	● None of the audio effects work when the unit is outputting bitstream signals from the COAXIAL terminal. **(7)** ● Some audio effects do not work or have less effect with some discs.

Television displays

"ERR H □□" □□ stands for a number.	● Trouble may have occurred. The number following "H" depends on the status of the unit. Turn the unit off and then back to ON. Alternatively, turn the unit off, disconnect the AC power supply cord, and then reconnect it. ● If the service numbers fail to clear, note the service number and contact a qualified service person.
"ERR U11"	● The disc may be dirty. **(18)** ● You haven't inserted the disc correctly: Insert it correctly. **(8)**
"NODISC"	● You haven't inserted a disc: Insert one. ● You haven't inserted the disc correctly: Insert it correctly. **(8)**
"⊘"	● The operation is prohibited by the unit or disc.
"THIS DISC MAY NOT BE PLAYED IN YOUR REGION."	● You can only play DVD-Video if their region number is "1", "ALL" or multiple region number including "1". **(Cover)**
"THIS TYPE OF DISC CANNOT BE PLAYED. PLEASE INSERT A DIFFERENT DISC."	● You inserted a disc that has not been finalized. **(5)** ● You inserted a disc the unit cannot play; insert one it can. **(5)** ● You inserted a blank disc.

Recording

Cannot record to digital recording equipment. (Incorrect sound recorded.)	● You cannot record MP3.
	● You cannot record DVDs that have protection preventing digital recording.
	● You cannot record DVDs if the recording equipment cannot handle signals with a sampling frequency of 48 kHz.
	● Make the following settings:
	  – Advanced Surround: OFF **(10)**
	  – DOWN SAMPLING: ON **(14)**
	  – DOLBY DIGITAL: PCM **(14)**
	  – DTS: OFF **(14)**

Tips for making data discs

Format	Disc	Extension	Reference
MP3	DVD-R/RW CD-R/RW	".MP3" ".mp3"	● Sampling frequency: DVD-R/RW: 11.02, 12, 22.05, 24, 44.1, and 48 kHz CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1, and 48 kHz ● This unit is not compatible with ID3 tags.
JPEG	DVD-R/RW CD-R/RW	".JPG" ".jpg" ".JPEG" ".jpeg"	● JPEG files taken on a digital camera that conforms to DCF Standard Version 1.0 are displayed. – Files that have been altered, edited or saved with computer picture editing software may not be displayed. ● This unit cannot display moving pictures, MOTION JPEG and other such formats, still pictures other than JPEG (e.g. TIFF) or play pictures with attached audio.

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

Naming folders and files
(Files are treated as content and folders are treated as groups on this unit.)
At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times).

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

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

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
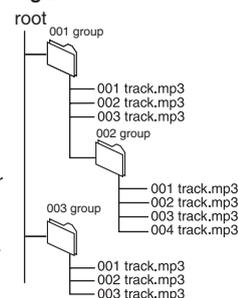
Limited Warranty

Panasonic Consumer Electronics Company,
Division of Panasonic Corporation of North America
One Panasonic Way Secaucus, New Jersey 07094

Panasonic Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Products Limited Warranty

Limited Warranty Coverage

If your product listed below does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Puerto Rico, Inc. (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
Radio, Clock Radio, Radio with Tape Player or Recorder, Portable CD Player, IC Recorder, Headphone Stereo, Tape Recorder, DVD player	One (1) Year	One (1) Year
Rechargeable batteries (in exchange for defective item)	Ten (10) Days	Not Applicable
SD Memory Card (in exchange for defective item)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty excludes both parts and labor for batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

To obtain service in the USA please contact:
Panasonic Services Company, Panasonic Plus Department
20421 84th Avenue South
Kent, WA 98032
Tel: 1-800-833-9626   Fax: 1-800-237-9080

For assistance in Puerto Rico call Panasonic Puerto Rico, Inc. (787)-750-4300 or fax (787)-768-2910.

When shipping the unit carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a day time phone number where you can be reached.

Customer Services Directory

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicenter; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:
http://www.panasonic.com/consumersupport
or, contact us via the web at:
http://www.panasonic.com/contactinfo
You may also contact us directly at:
1-800-211-PANA (7262),
Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE".

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but are for illustration only.)

ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Accessory Purchases

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at: *http://www.pasc.panasonic.com*
or, send your request by E-mail to: *npcparts@us.panasonic.com*
You may also contact us directly at:
1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday – Friday 9 am to 8 pm, EST.)
Panasonic Services Company
20421 84th Avenue South, Kent, WA 98032
(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277

Service in Puerto Rico

Panasonic Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985
Phone (787)750-4300, Fax (787)768-2910

Maintenance

■ Clean this unit with a soft, dry cloth

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

■ Clean discs

- Wipe with a damp cloth and then wipe dry.

Specifications

Signal system: NTSC
Operating temperature range: $+5$ to $+35$ °C
Operating humidity range:
　　　　5 to 90 % RH (no condensation)
Discs played [8 cm (3 ") or 12 cm (5 ")]:
　(1) DVD (DVD-Video)
　(2) DVD-R (DVD-Video, MP3*2, 4, JPEG*3, 4)
　(3) DVD-R DL (DVD-Video)
　(4) DVD-RW (DVD-Video, MP3*2, 4, JPEG*3, 4)
　(5) $+$R/$+$RW (Video)
　(6) $+$R DL (Video)
　(7) CD, CD-R/RW (CD-DA, Video CD, SVCD*1, MP3*2, 4, JPEG*3, 4)
Video output:
　Output level: 1 Vp-p (75 Ω)
　Output connector: Pin jack (1 system)
S-video output:
　Y output level: 1 Vp-p (75 Ω)
　C output level: 0.286 Vp-p (75 Ω)
　Output connector: S terminal (1 system)
Component video output:
　　　　[NTSC: 525(480)p/525(480)i]
　Y output level: 1 Vp-p (75 Ω)
　P$_B$ output level: 0.7 Vp-p (75 Ω)
　P$_R$ output level: 0.7 Vp-p (75 Ω)
　Output connector:
　　Pin jack (Y: green, P$_B$: blue, P$_R$: red) (1 system)
Audio output:
　Output level: 2 Vrms (1 kHz, 0 dB)
　Output connector: Pin jack
　Number of connectors: 2 channel: 1 system
Audio performance:
　Frequency response:
　● DVD (linear audio):
　　　　4 Hz to 22 kHz (48 kHz sampling)
　　　　4 Hz to 44 kHz (96 kHz sampling)
　● CD-Audio: 4 Hz to 20 kHz
　S/N ratio:
　● CD-Audio: 115 dB
　Dynamic range:
　● DVD (linear audio): 92 dB
　● CD-Audio: 90 dB
　Total harmonic distortion:
　● CD-Audio: 0.003 %
Digital audio output:
　Coaxial digital output: Pin jack

Pickup:
　Wave length: 653 nm/790 nm
　Laser power: CLASS I/CLASS I
Power supply: AC 120 V, 60 Hz
Power consumption: 10 W
Power consumption in standby mode: **approx. 1 W**
Dimensions (W x D x H): 360 mm x 251 mm x 43 mm
　　　　($14 ^3/_{16}$" x $9 ^{14}/_{16}$" x $1 ^{11}/_{16}$")
Mass: approx. 1.9 kg (4.2 lbs.)

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

*1 Conforming to IEC62107
*2 MPEG-1 Layer 3, MPEG-2 Layer 3
*3 Exif Ver 2.1 JPEG Baseline files
　Picture resolution: between 320×240 and 6144×4096 pixels (sub sampling is 4:2:2 or 4:2:0)
*4 The total combined maximum number of recognizable audio and picture contents and groups: 1000 audio and picture contents and 256 groups.

Referencia rápida en español

Conexión

■ Televisor

AUDIO IN   VIDEO
R   L   IN

Cable de audio/vídeo (incluido)

DIGITAL AUDIO OUT
PCM/BITSTREAM
COAXIAL
L

R

Please connect directly to TV.
AUDIO OUT   S VIDEO OUT   VIDEO OUT

Y   Pᴮ

Pᴿ

COMPONENT
VIDEO OUT
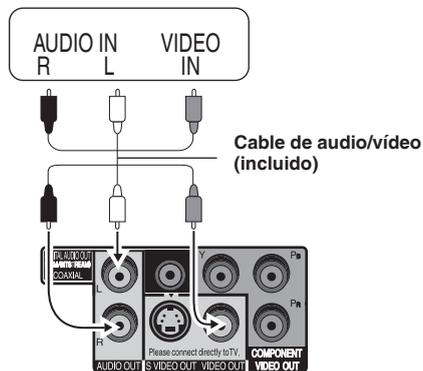
■ A una toma de CAConecte el cable de alimentación de CA el último

Cable de alimentación de CA (incluido)

A una toma de CA ←

AC IN〜
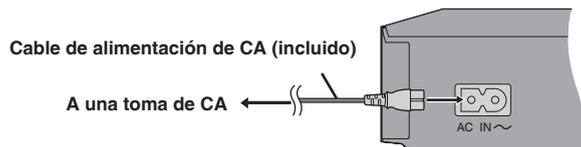
Reproducción básica

1. **[⏻/I POWER]** Encienda.
2. **[▲ OPEN/CLOSE]** Abra la bandeja del disco.
3. Introduzca el disco.
4. **[▶] (PLAY)** Inicie la reproducción.

Cuadro a cuadro (durante la pausa) `DVD-V` `VCD`		● `VCD` Sentido de avance solamente
Vuelta a la pantalla anterior	RETURN	
Menú del disco	TOP MENU	`DVD-V` Muestra el menú inicial de un disco.
	MENU	`DVD-V` Muestra un menú del disco.
	RETURN	`VCD` con control de reproducción Muestra un menú del disco.
Selección de elementos en la pantalla	Seleccionar Registrar	
Selección del número	`VCD` con control de reproducción 1. Mientras se muestra el menú del disco, pulse [FUNCTIONS] para visualizar el menú en pantalla 1. 2. Pulse [◀ ▶] para seleccionar "$1\sim99$". 3. Pulse [▲ ▼] para seleccionar el número de pista y pulse [ENTER].	
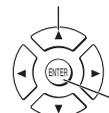
Main feature index (Reference pages are shown in parentheses.)

Program/random play **(11)**

Displays current playback condition **(10)**

Enjoys advanced surround **(10)**

Skips about one minute forward **(10)**

Skips back about 10 seconds **(10)**

Changes the zoom ratio **(10)**
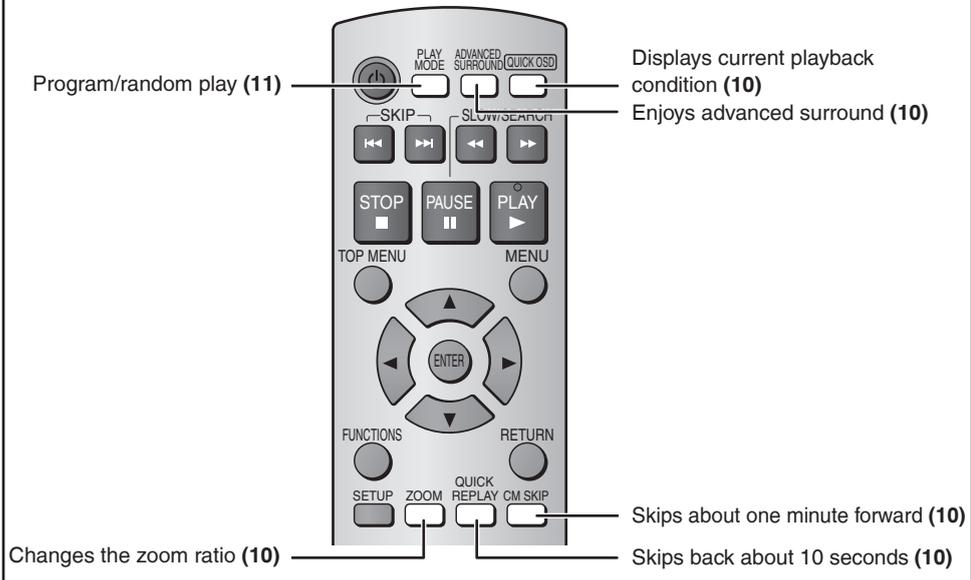
As an ENERGY STAR® Partner, Panasonic has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

-If you see this symbol-

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.

RQTC0074-P
H0206HM0