

# Panasonic

## DVD/VIDEO CD/CD PLAYER

### Operating Instructions



Model No. **DVD-RP56**



Before connecting, operating or adjusting this product, please read these instructions completely.

Please keep this manual for future reference.



This manual was printed with soy based ink.

#### ■ Region number supported by this unit

Region numbers are allocated to DVD players and software according to where they are sold.

- The region number of this unit is "1".
- You can play DVDs marked with labels containing "1" or "ALL".

See page 3 for details.

#### For U.S.A. only

The servicer list and warranty can be found on pages 28 and 29.

En la página 31 hay una guía de referencia rápida en español.

# Dear customer

Thank you for purchasing this product.  
For optimum performance and safety, please read these instructions carefully.

Getting started

## 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:

**TO PREVENT ELECTRIC SHOCK MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

<b>DANGER</b>	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM. (FDA 21 CFR)
<b>CAUTION</b>	- VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC60825-1)
<b>ATTENTION</b>	- RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
<b>ADVARSEL</b>	- SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
<b>VARO!</b>	- AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
<b>VARNING</b>	- SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRakta EJ STRÅLEN.
<b>ADVARSEL</b>	- SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLING.
<b>VORSICHT</b>	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
<b>注意</b>	- 打开时有可见及不可见激光辐射。避免激光束照射。
<b>注意</b>	- ここを開くと可視及び不可視のレーザー光が出ます。ビームを直接見たり、触れたりしないでください。 RQLS0233

(Inside of product)

## THE FOLLOWING APPLIES ONLY IN THE U.S.A.

### CAUTION:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## Accessories

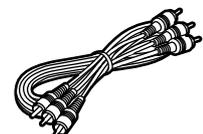
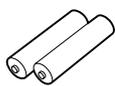


Please check and identify the supplied accessories. Use numbers indicated in parentheses when asking for replacement parts.

**(Only for U.S.A.): To order accessories contact 1-800-332-5368 or web site (<http://www.panasonic.com>).**

**(Only for Canada): To order accessories, call the dealer from whom you have made your purchase.**

- Remote control ..... 1 (N2QAHB000012)     Batteries ..... 2 for remote control     AC power supply cord ..... 1 (RJA0065-A)     Audio/video cable ..... 1 (VJA0788-D)



### Note

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

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## Disc information

### Discs that can be played

Disc type	Logo	Region number	Video system	Indication used in instructions
DVD-Video		  	NTSC	
Video CD		—	NTSC	
Audio CD		—	—	

### Discs that cannot be played

DVD-Audio, PAL discs, DVD-ROM, DVD-R/DVD-RAM, CD-ROM, CDV, CD-G, +RW, DVD-RW, CVD, SVCD, SACD, Divx Video Discs and Photo CD.

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### DVDs that can be played

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

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

### Region Management Information (DVD only)

This unit responds to the Region Management Information recorded on DVDs. This unit's region number is "1". You cannot play the disc if the region number on the DVD does not correspond to the region number on the unit.

You can play discs with labels containing the region number "1" and "ALL". Read the disc's instructions carefully.

### Playing DVDs and Video CDs

The producer of the material can control how these discs are played. This means that you may not be able to control play of a disc with some operations described in these operating instructions. Read the disc's instructions carefully.

# IMPORTANT SAFETY INSTRUCTIONS

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

## Safety

1. **Power source**—Connect the unit to a power source of the type described in these instructions or as marked on the unit.
2. **Polarization**—The unit is equipped with a polarized power plug where one blade is wider than the other. This safety feature ensures that the plug fits into your household AC outlet only one way. If the plug doesn't fit one way, try reversing it. If the plug still doesn't fit, contact an electrician to replace the obsolete outlet. Do not attempt to defeat the safety purpose of the plug.
3. **Power cord protection**—Route the AC power supply cord so that it will not be walked on or pinched by items placed on or against it. Never take hold of the plug or cord with wet hands. Always grasp the plug body firmly when connecting and disconnecting it.
4. **Overloading**—When connecting the AC power supply cord, be careful not to overload the household AC outlet, extension cord, or outlet from any other device as this can result in fire or electric shock.
5. **Nonuse periods**—Turn the unit off when it is not in use. Unplug the unit from the household AC outlet if it is not to be used for a long time. Unplug the unit during lightning storms.
6. **Attachments and accessories**—Use only the attachments and accessories recommended in these operating instructions.

## Installation

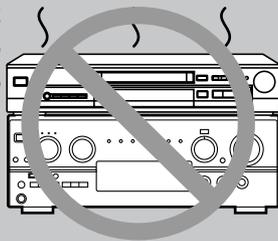
### Placement

1. **Ventilation**—Situate the unit so that it receives proper ventilation. Do not install in a confined space such as a bookcase or cabinet. Allow at least 10 cm (4 inches) clearance from the rear of the unit. To prevent the risk of electric shock or fire due to overheating ensure curtains and other materials do not obstruct the unit's ventilation.
2. **Foreign material**—Ensure objects and liquids do not get into the unit. Avoid exposing the unit to excessive smoke, dust, mechanical vibration, and shock.
3. **Magnetism**—Situate the unit away from equipment and devices that generate strong magnetic fields.
4. **Stacking**—Do not place heavy objects on top of this unit.
5. **Surface**—Place the unit on a flat, level surface.
6. **Carts and stands**—Use the unit only with carts and stands recommended by the manufacturer. Move carts with care. Sudden stops, excessive force, and uneven surfaces can cause carts to overturn.
7. **Wall and ceiling mounting**—Do not mount the unit on walls or ceilings unless specified in the instructions.



**Do not place the unit on amplifiers or equipment that may become hot.**

The heat can damage the unit.



### Environment

1. **Water and moisture**—Do not use the unit near water, such as near a bathtub or swimming pool. Avoid damp basements.
2. **Heat**—Situate the unit away from heat sources, such as radiators.  
Do not situate where temperatures fall below 5°C (41°F) or rise above 35°C (95°F).

## Maintenance

(See page 27 for details.)

Unplug the unit from the household AC outlet before cleaning. Clean with a damp cloth.  
Do not use abrasive pads, scouring powders, or solvents.

## Service

1. **Damage requiring service**—The unit should be serviced by qualified service personnel if:
  - (a) The AC power supply cord or the plug 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.

### User memo:

DATE OF PURCHASE \_\_\_\_\_  
DEALER NAME \_\_\_\_\_  
DEALER ADDRESS \_\_\_\_\_  
TELEPHONE NUMBER \_\_\_\_\_

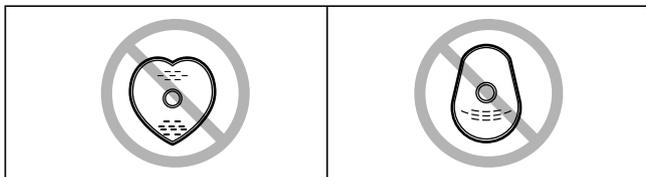
The model number and serial number of this product can be found on either the back or the bottom of the unit. Please note them in the space provided below and keep for future reference.

MODEL NUMBER \_\_\_\_\_ DVD-RP56 \_\_\_\_\_

SERIAL NUMBER \_\_\_\_\_

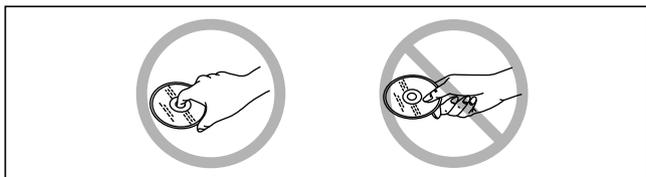
## Disc handling

Do not use irregularly shaped discs, such as heart-shaped. (These can damage the unit.)



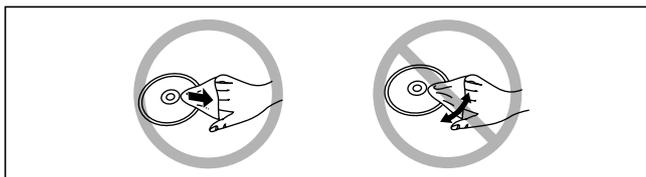
### ■ How to hold a disc

Do not touch the recorded surface.



### ■ If the surface is dirty

Wipe it with a damp cloth and then wipe dry.



### ■ If the disc is brought from a cold to a warm environment, moisture may form on the disc

Wipe with a soft, dry, lint-free cloth before using the disc.

### ■ Handling precautions

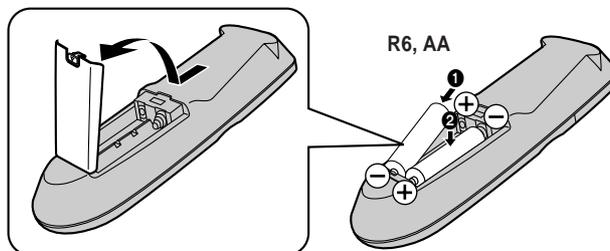
- Do not write on the label side with a ball-point pen or other writing instrument.
- Do not use record cleaning sprays, benzene, thinner, static electricity prevention liquids or any other solvent.
- Do not attach labels or stickers to discs. (Do not use discs with exposed adhesive from tape or left over peeled-off stickers.)
- Do not use scratch-proof protectors or covers.
- Do not use discs printed with label printers available on the market.

### ■ Do not place or store discs in the following places

- Locations exposed to direct sunlight
- Humid or dusty locations
- Locations directly exposed to a heat vent or heating appliance

## The remote control

### Batteries



- Insert so the poles (+ and -) match those in the remote control.
- Do not use rechargeable type batteries.

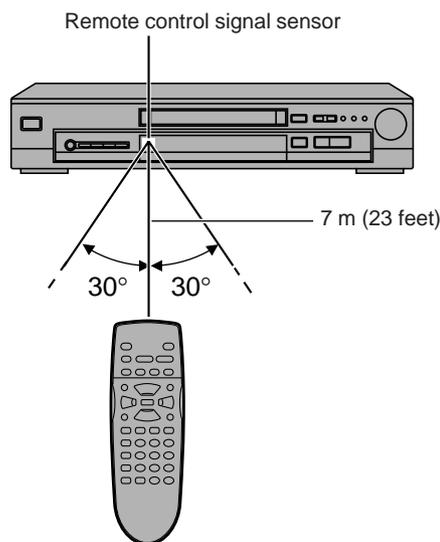
### Do not;

- mix old and new batteries.
  - use different types at the same time.
  - heat or expose to flame.
  - take apart or short circuit.
  - attempt to recharge alkaline or manganese batteries.
  - use batteries if the covering has been peeled off.
- Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire. If electrolyte leaks from the batteries, consult your dealer. Wash thoroughly with water if electrolyte comes in contact with any part of your body.

Remove if the remote control is not going to be used for a long period of time. Store in a cool, dark place.

Replace if the unit does not respond to the remote control even when held close to the front panel.

### Use



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

- Keep the transmission window and the unit's sensor free from dust.
- Operation can be affected by strong light sources, such as direct sunlight, and the glass doors on cabinets.

### Do not;

- put heavy objects on the remote control.
- take the remote control apart.
- spill liquids onto the remote control.

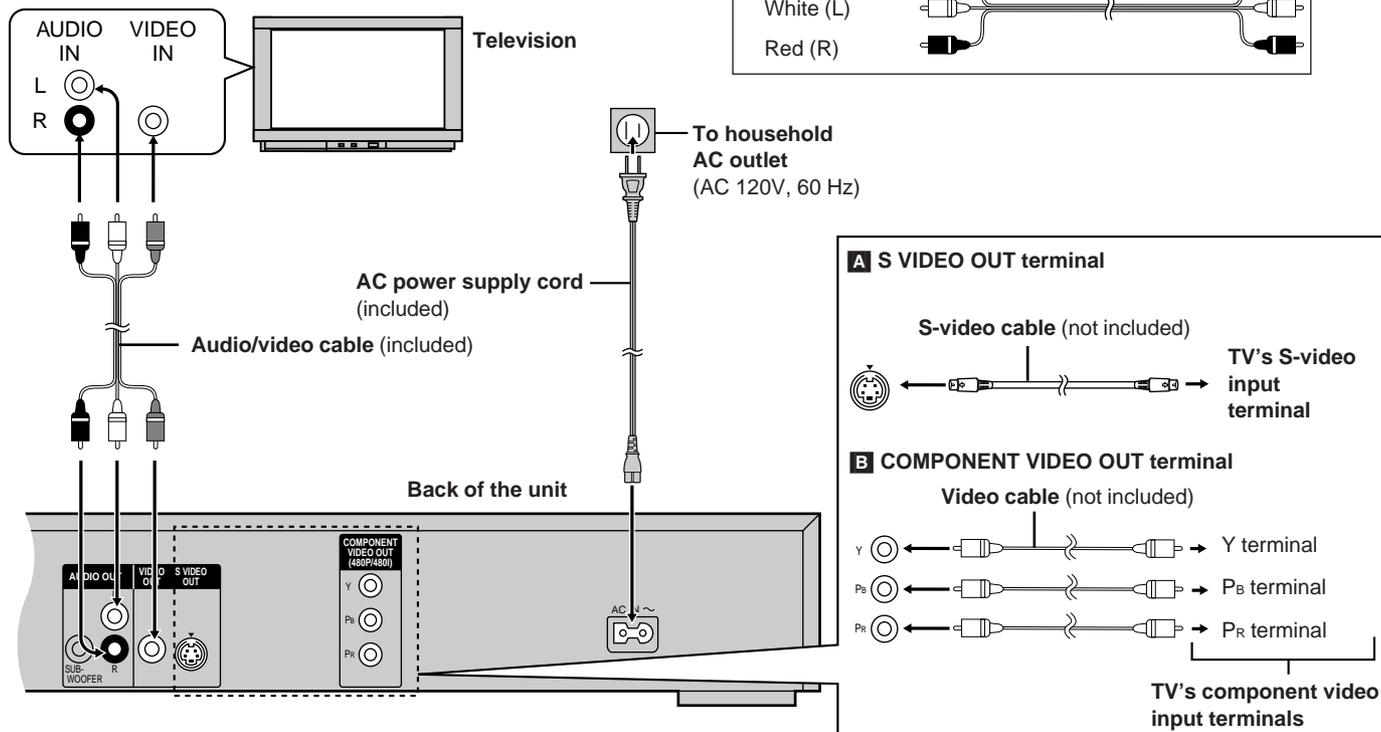
# Connection to a television

This page explains how to connect the unit to a television and set it up so you hear the audio through the television's speakers. Connections and procedures that enable you to enjoy more powerful sounds are described beginning on page 23.

## Before connection

- Disconnect the AC power supply cord.
- Refer to the television's operating instructions.

Getting started



## A S VIDEO OUT terminal

The S-video terminal achieves a more vivid picture than the VIDEO OUT terminal by separating the chrominance (C) and luminance (Y) signals. (Actual results depend on the television.)

## B COMPONENT VIDEO OUT terminal

These terminals can be used for either interlace or progressive output and provide a purer picture than the S VIDEO OUT terminal.

Connection using these terminals outputs the color difference signals (P<sub>B</sub>/P<sub>R</sub>) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.

- The description of the component video input terminals depends on the television or monitor (e.g. Y/P<sub>B</sub>/P<sub>R</sub>, Y/B-Y/R-Y, Y/C<sub>B</sub>/C<sub>R</sub>). Connect to terminals of the same color.
- After making this connection, change the black level for a better picture (⇒ page 21, Video—Black Level Control).

## To enjoy progressive video

1. Connect to the component video (480p) input terminals on a television compatible with this unit's copy guard system.
2. Press [PROGRESSIVE OUT] on the front panel so the indicator lights (⇒ page 9).

### Note

- The screen may shift off center when using progressive output. Adjust the position of the screen if this occurs (⇒ page 19, Video—Horizontal position).
- Video will not be displayed correctly if you connect to a television that is incompatible with this unit's copy guard system.
- The unit does not output video signals from the VIDEO OUT and S VIDEO OUT terminals when the "PROGRESSIVE OUT" indicator is on.

### For your reference

All televisions manufactured by Panasonic and that have 480p input connectors are compatible. Consult the manufacturer if you have another brand of television.

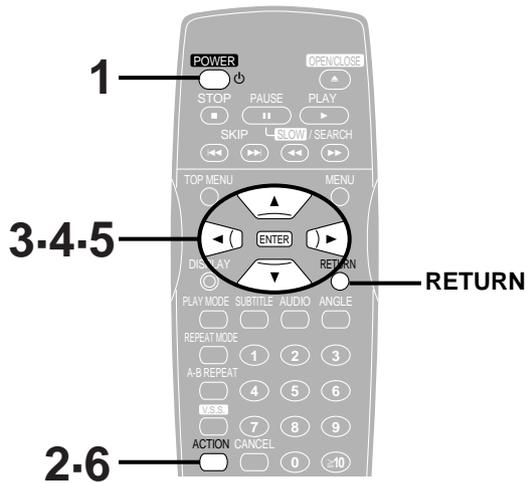
## Conserving power

This unit consumes a small amount of power, even when it is turned off (approx. 2 W). To save power when the unit is not to be used for a long time, unplug it from the household AC outlet.

## Connect Your Unit Directly To Your Television.

Do not connect the unit through your video cassette recorder when setting up your home entertainment system, because the picture may not be played correctly due to the copy guard.

# Selecting TV screen type



## Remote control only

Change the setting to suit your television.

The menu language is set to English, but you can change it to French or Spanish (➔ page 21, Display–Menu Language). English is used in the examples.

## Preparation

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

- 1 Press [POWER] to turn on the unit.
- 2 Press [ACTION] to show the menus.
- 3 Press [◀, ▶] to select the Video tab.
- 4 Press [▲, ▼] to select “TV Aspect” and press [ENTER].
- 5 Press [▲, ▼] to select the item and press [ENTER].

- **4:3 Pan&Scan** (Factory preset)  
Select if you have a regular television and to view 16:9 software\* in the pan and scan style (a).
- **4:3 Letterbox**  
Select if you have a regular television and to view 16:9 software in the letterbox style (b).
- **16:9**  
Select if you have a widescreen television.

\*16:9 software prohibited from being shown in the pan and scan style will appear in the letterbox style despite the setting here.

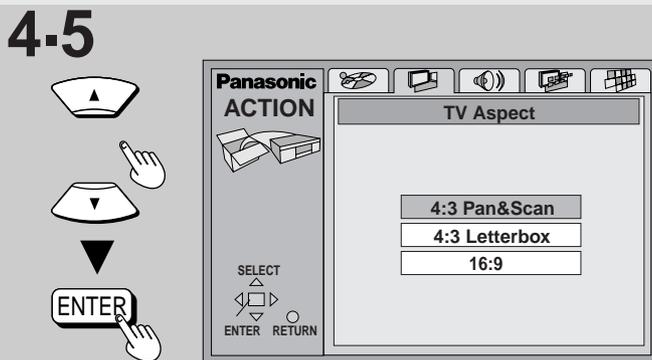
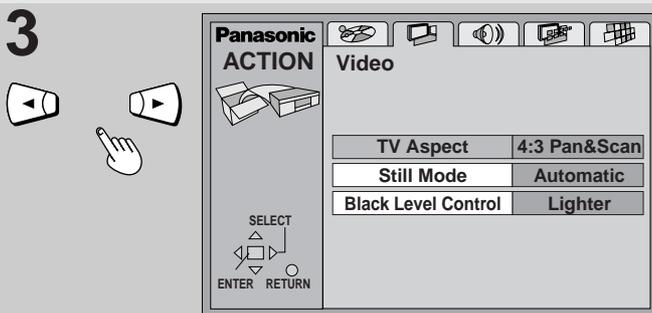
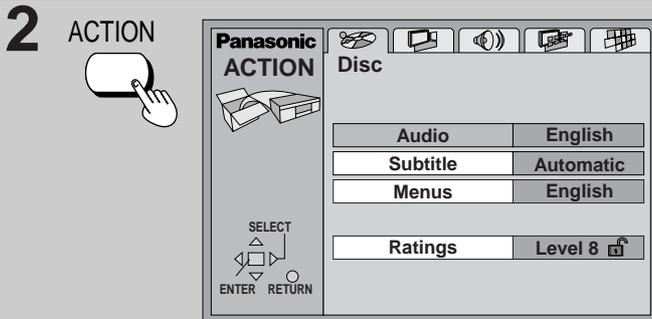
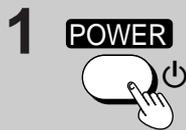
The Video menu is shown.

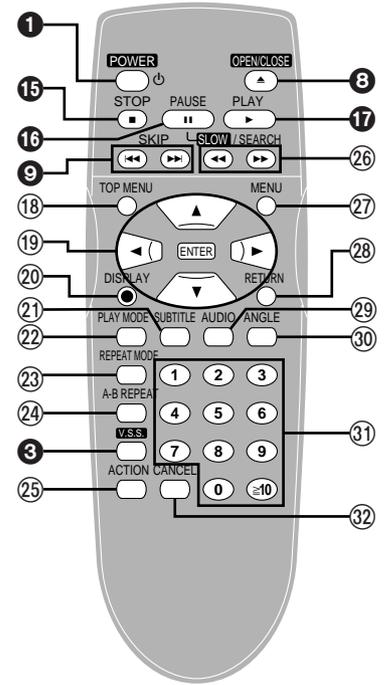
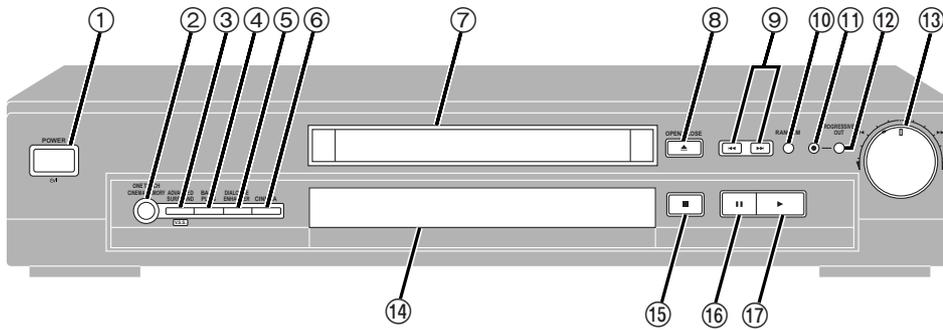
- 6 Press [ACTION] to end the settings.

**To return to the previous screen**  
Press [RETURN].

## For your reference

DVDs are recorded in a variety of aspect ratios. You can change the way software is shown on a regular television (4:3) with the above operation. If you have a widescreen television (16:9), use the television's screen modes.





Buttons such as 1 function the same as the controls on the unit.

## Main unit

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1	Standby/on switch (⏻/I, POWER)	7
2	One touch cinema memory button (ONE TOUCH CINEMA MEMORY)	15
3	Advanced Surround (V.S.S.) button (ADVANCED SURROUND, (V.S.S.))	14
4	Bass plus button (BASS PLUS)	14
5	Dialogue Enhancer button (DIALOGUE ENHANCER)	15
6	Cinema button (CINEMA)	15
7	Disc tray	9
8	Disc tray open/close button (▲, OPEN/CLOSE)	9
9	Skip buttons (◀◀, ▶▶)	11
10	Random play button (RANDOM)	13
11	Progressive out indicator	9
12	Progressive out button (PROGRESSIVE OUT)	9
13	Shuttle dial (◀◀, ▶▶)	11
14	Display	
15	Stop button (■)	9
16	Pause button (⏸)	9
17	Play button (▶)	9

## Remote control

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18	Top menu button (TOP MENU)	9
19	Cursor buttons (▲, ▼, ◀, ▶)/Enter button (ENTER)	9
20	Display button (DISPLAY)	17
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25	Action button (ACTION)	7, 20
26	Slow/Search buttons (◀◀, ▶▶ SLOW/SEARCH)	11
27	Menu button (MENU)	9
28	Return button (RETURN)	9
29	Audio button (AUDIO)	16
30	Angle button (ANGLE)	16
31	Numbered buttons (1-9, 0, ≧10)	9
32	Cancel button (CANCEL)	13

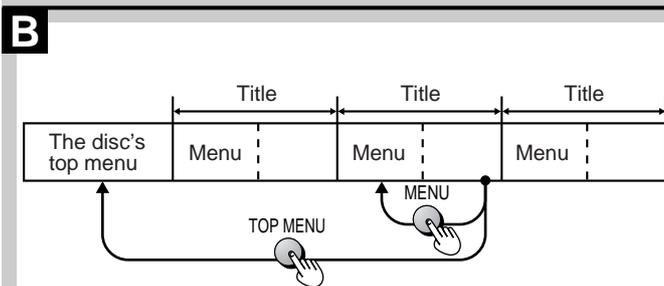
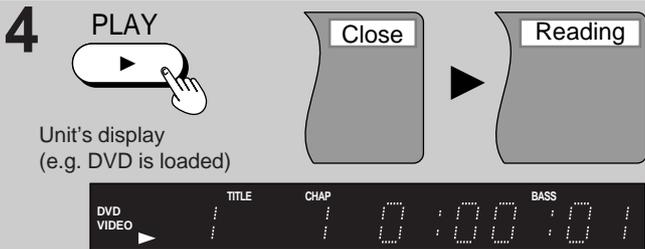
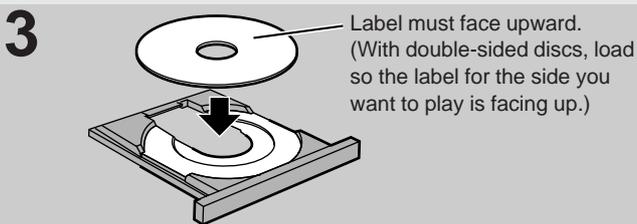
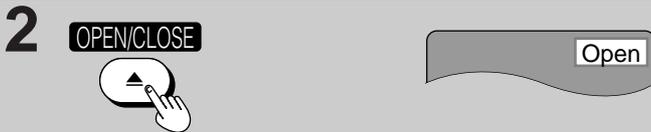
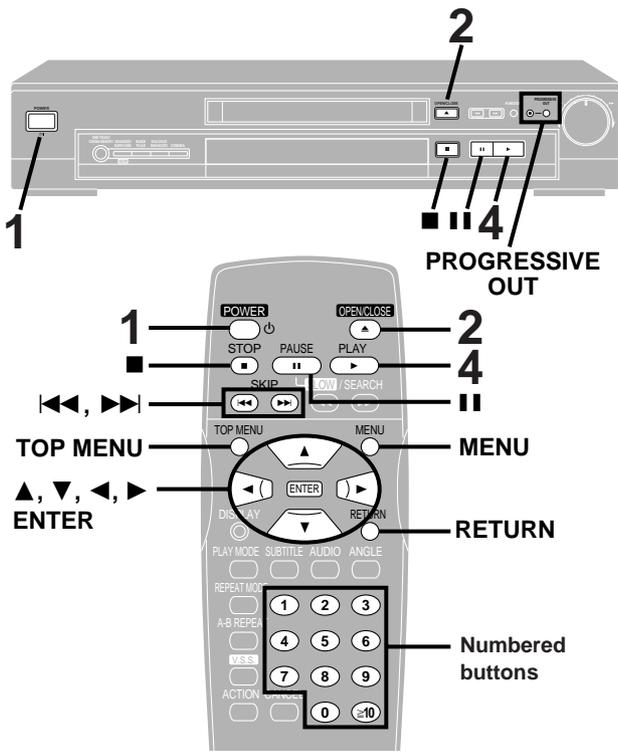
# Basic play

DVD VCD CD

## Preparation

Turn on the television and select the appropriate video input on the television to suit the connections for the player.

- 1 Press [POWER] to turn on the unit.  
For progressive output  
Press [PROGRESSIVE OUT] so the indicator lights.
- 2 Press [▲] to open the disc tray.
- 3 Place the disc on the disc tray.
- 4 Press [▶] (PLAY).  
The disc tray closes and play begins.



## To stop play

Press [■] (→ page 10, Resume function).

## To pause play A

Press [||] during play.

Press [▶] (PLAY) to restart play.

## Note

### • If "⊘" appears on the television

The operation is prohibited by the unit or disc.

• The disc continues to rotate while the menu is displayed even after you finish playing an item. Press [■] when you finish to preserve the unit's motor and your television screen.

• Volume may be lower when playing DVDs than when playing other discs or during television broadcasts.

If you turn the volume up on the television or amplifier, be sure to reduce the volume again before playing other sources so that a sudden increase in output does not occur.

## Auto power-off

The unit switches to the standby mode after about 30 minutes in the stop mode.

**When a menu screen appears on the television**

## Remote control only

DVD

Press the cursor buttons [▲, ▼, ◀, ▶] to select an item and press [ENTER].

You can also use the numbered buttons.

VCD

Press the numbered buttons to select an item.

## To select a 2-digit number

Example: To select item 23, press [≧10], then [2] and [3].

Play of the selected item now begins.

## Other buttons used to operate menus

Read the disc's instructions for further details about operation.

[▶▶]: Shows the next menu.

[◀◀]: Shows the previous menu.

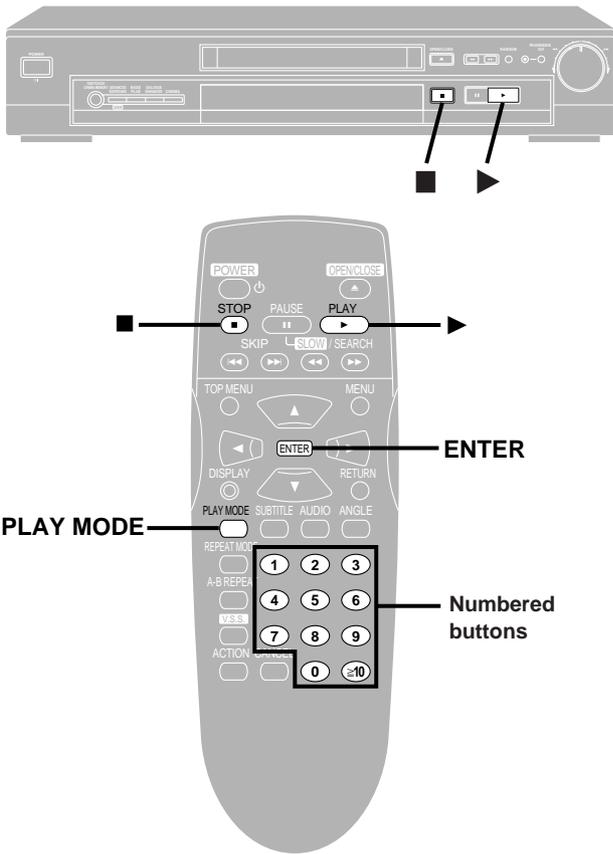
[RETURN]: Shows the menu screen. **VCD**

[TOP MENU]: Shows the first menu screen. **DVD**

[MENU]: Shows the menu screen. **DVD**

## B DVD menus

DVDs can have several menus. The menu displayed when you press [TOP MENU] may be different from the menu displayed when you press [MENU].



## Basic play

### A Playing CD-R/RW and MP3

#### CD

This unit can play CD-R and CD-RW if they are formatted as CD-DA (digital audio) or video CD and finalized (a process that allows CD-R and CD-RW to be played on compatible equipment). It may not be able to play some CD-R or CD-RW due to the condition of the recording.

**Discs recorded using MP3 differ to CDs in the following ways.**

- **Structure of the disc (example) ①**
- **Starting play from a selected chapter**  
Press the numbered buttons and press [ENTER].  
Example: Chapter 23: [2] → [3] → [ENTER]  
(Pressing [≧10] is unnecessary.)
- **Repeat play**  
You can use chapter repeat or title repeat.
- **Program play, random play**  
You cannot use program play or random play.
- **Display during play ②**
- **On-Screen Menu Icons for disc information during play ③**

#### Note

- If you play an MP3 track that includes still picture data, it will take some time before the music itself starts playing and the elapsed time will not be displayed during this time. Even after the track starts, the correct play time will not be displayed.
- This unit is not compatible with ID3 tags.

Refer to the glossary on page 25 for more information about MP3.

### B Resume function

#### DVD VCD CD

If you press [■] during play, the unit remembers the position. If you press [▶] (PLAY) while “▷” is flashing, play restarts from the position you stopped it.

**To start play from a memorized position after switching the unit to standby**

Press [PLAY MODE] during play. (The message “Position memorized” appears on the television.) Now when you press [▶] (PLAY) after switching the unit to standby and back on, play starts from the memorized position.

Even after you memorize a position by pressing [PLAY MODE], play will start from the point you stopped play if you press [▶] (PLAY) before switching the unit to standby.

If you are playing DVD, the illustrated message ④ also appears. Press [▶] (PLAY) while the message is displayed and the beginning portions of each chapter up to the current one are played. Full play resumes from the point where you stopped play or you pressed [PLAY MODE].  
(This feature works only within a title.)

If you do not press [▶] (PLAY), the message disappears and play starts from where you stopped it or you pressed [PLAY MODE].

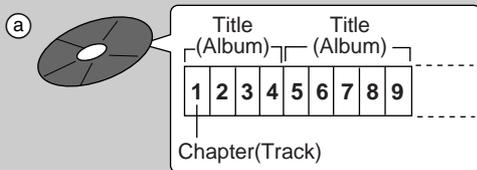
#### To cancel

Press [■] until “▷” disappears from the unit's display.

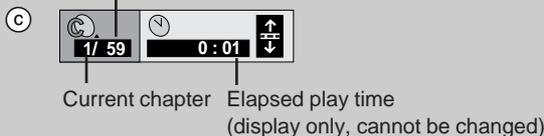
#### Note

- The resume function does not work if the disc's play time is not displayed.
- The position is cleared when the disc tray is opened.
- The position memorized when you press [■] is cleared if you switch the unit to standby or it switches to standby automatically (→ page 9, Auto power-off).

### A

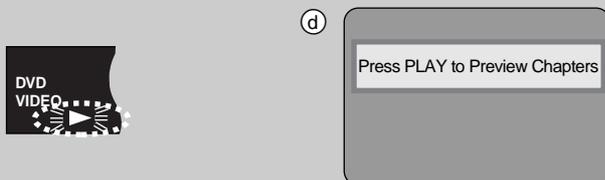


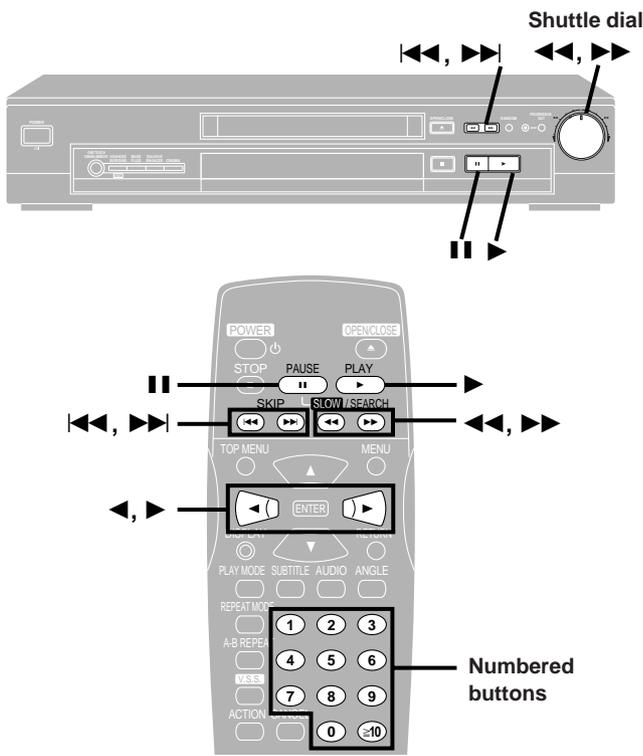
Total number of chapters



Current chapter Elapsed play time  
(display only, cannot be changed)

### B





## A Skipping chapters or tracks

DVD VCD CD

During play or while paused

Press [**⏮**] or [**⏭**].

- Each press increases the number of skips.

## B Frame-by-frame viewing

DVD VCD

Remote control only

While paused

Press [**◀**] or [**▶**].

The frame changes each time you press the buttons.

- The frames change in succession if you press and hold the button.
- Pressing [**⏮**] also activates forward frame-by-frame.

## C Fast forward and rewind—SEARCH

DVD VCD CD

During play

Press [**⏮**] or [**⏭**].

- Turn the shuttle dial [**◀**, **▶**] on the main unit.

- Play starts again when you release the shuttle dial.
- Audio will be heard during search for most discs. You can turn this audio off if you want to (DVD and Video CD only → page 21, Audio—Audio during Search).

## D Slow-motion play

DVD VCD

While paused

Press [**⏮**] or [**⏭**].

- Turn the shuttle dial [**◀**, **▶**] on the main unit.

- The picture stills again when you release the shuttle dial.

### Notes

- The speed of search and slow-motion increases up to 5 steps.
- Press [**▶**] (PLAY) to restart play.
- You cannot move backwards with Video CD during frame-by-frame and slow-motion.
- [**⏮**], [**◀**] or [**◀◀**]: Backward  
[**⏭**], [**▶**] or [**▶▶**]: Forward

### When playing Video CDs with playback control

Turning the shuttle dial or pressing buttons to perform skip, search or slow-motion may take you to a menu screen.

## E Starting play from a selected title or track

DVD VCD CD

Remote control only

Press the numbered buttons to select the item.

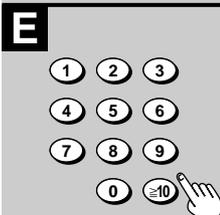
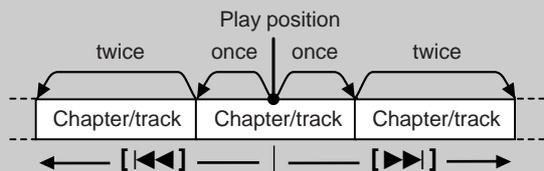
To select a 2-digit number

Example: To select track 23, press [**≥10**], then [**2**] and [**3**].  
Play starts from the selected item.

### Note

- This works only when stopped with some discs.
- This may not work with some discs.

### A SKIP



# Repeat play

DVD VCD CD

Remote control only

## A Repeat play

During play

Press [REPEAT MODE].

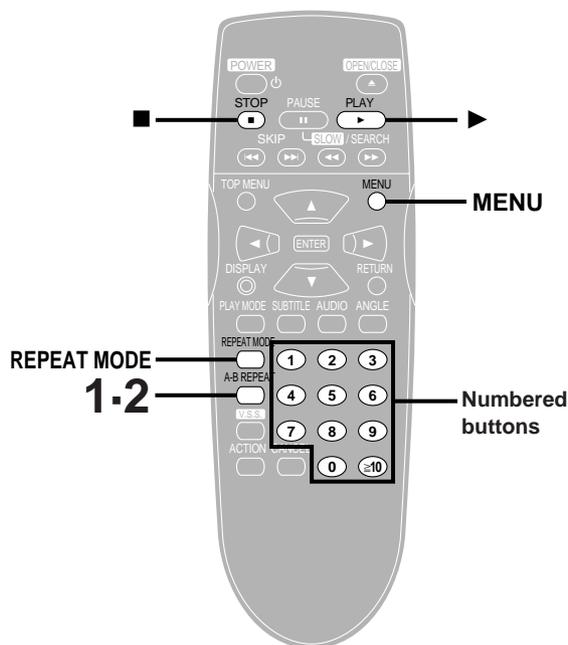
Each time you press the button:

•DVD

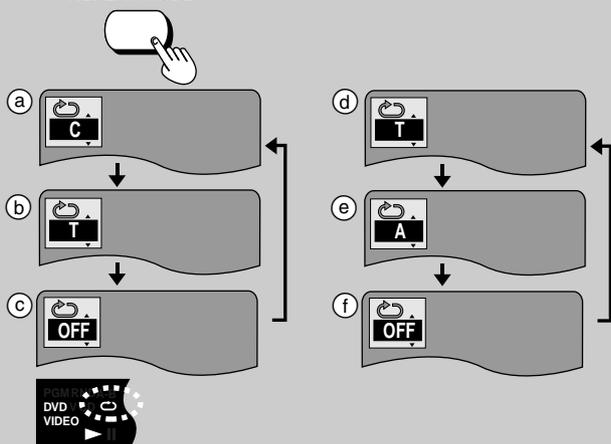
Chapter (a) → Title (b) → off (c)

•Video CD/CD

Track (d) → Entire disc (e) → off (f)



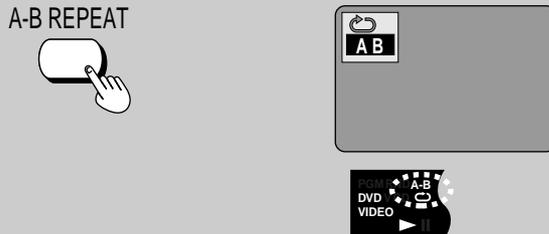
### A REPEAT MODE



### B 1 A-B REPEAT



### 2 A-B REPEAT



If the Video CD has playback control

Cancel menu play first.

1. Press [■] so "PBC PLAY" is cleared from the unit's display.
2. Press the numbered buttons to select a track to start play.
3. Press [REPEAT MODE] (⇒ above).

To return to menu play, press [■] and press [MENU].

**Note**

- Repeat play may not work as desired with some DVDs.
- Repeat play does not work if the disc's elapsed play time is not shown on the unit's display.
- You cannot use repeat play to repeat an entire DVD.

**To repeat only your favorite tracks**

VCD CD

1. Program the tracks you want (⇒ page 13).
2. Press [▶] (PLAY). Play will start.
3. Press [REPEAT MODE] to display "↻T" or "↻A".

## B A-B repeat play

You can repeat a section between points A and B within a title or track.

**1** During play  
Press [A-B REPEAT] at the starting point (A).

**2** Press [A-B REPEAT] at the finishing point (B).

To cancel

Press [A-B REPEAT] until "↻\*\*" is displayed.

**Note**

- A-B repeat play does not work if the DVD's elapsed play time is not shown on the unit's display.
- Some subtitles recorded around point A or B may fail to appear (DVD).
- The unit automatically determines the end of a title/track as point B when the end of the title/track is reached.

# Changing the play sequence

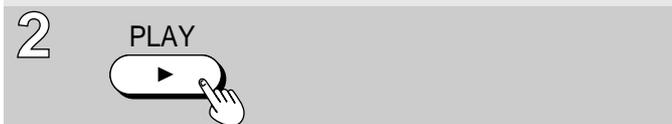
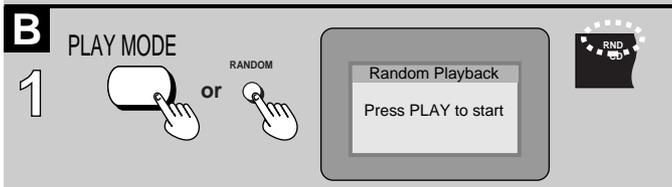
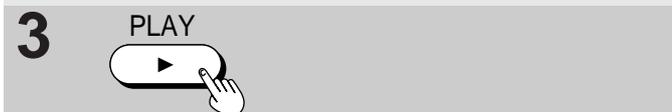
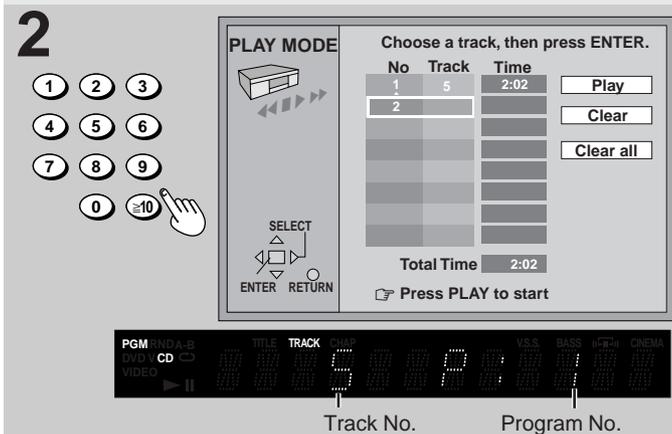
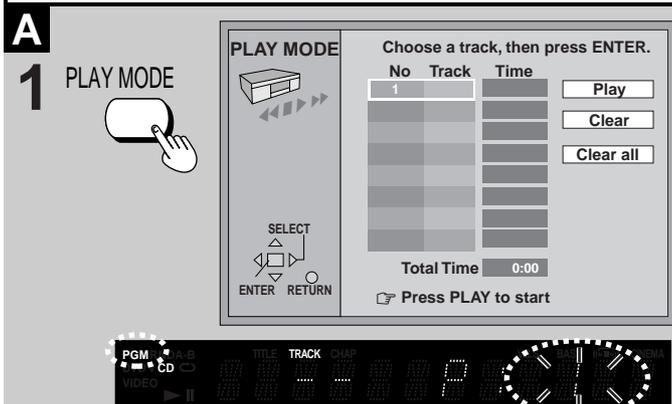
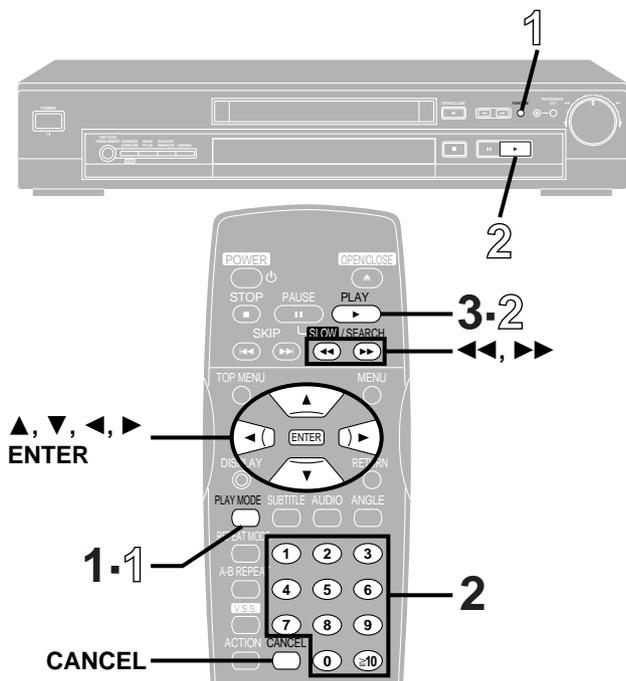
VCD CD

## A Program play

### Remote control only

You can select up to 32 tracks to play in the order you choose.

- 1 While stopped  
Press [PLAY MODE] until the program play screen appears.
- 2 Press the numbered buttons to select the track.
  - To select a 2-digit number  
Example: To select track 23, press [ $\geq 10$ ], then [2] and [3].
  - To select a track using the cursor buttons  
Press [ENTER] and [ $\blacktriangle$ ,  $\blacktriangledown$ ] to select a track, then press [ENTER] again to register the track number.
  - Repeat step 2 to program other tracks.
  - “Total Time” tells you the total time of the programmed tracks.
- 3 Press [▶] (PLAY).  
Play now begins in the programmed sequence.



### To add or change tracks

Press [ $\blacktriangle$ ,  $\blacktriangledown$ ] to select an available item, then repeat step 2.

### To move to the page before or after the one shown

Press [ $\blacktriangleleft$ ,  $\blacktriangleright$ ].

### To clear the programmed tracks one by one

Press [ $\blacktriangle$ ,  $\blacktriangledown$ ] to select the track and press [CANCEL]. (Alternatively you can select “Clear” with [ $\blacktriangle$ ,  $\blacktriangledown$ ,  $\blacktriangleleft$ ,  $\blacktriangleright$ ] and press [ENTER].)

### To clear the whole program

Move to “Clear all” with [ $\blacktriangle$ ,  $\blacktriangledown$ ,  $\blacktriangleleft$ ,  $\blacktriangleright$ ] 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 mode

Press [PLAY MODE] while stopped until the program play screen disappears.

- The program is retained in memory.

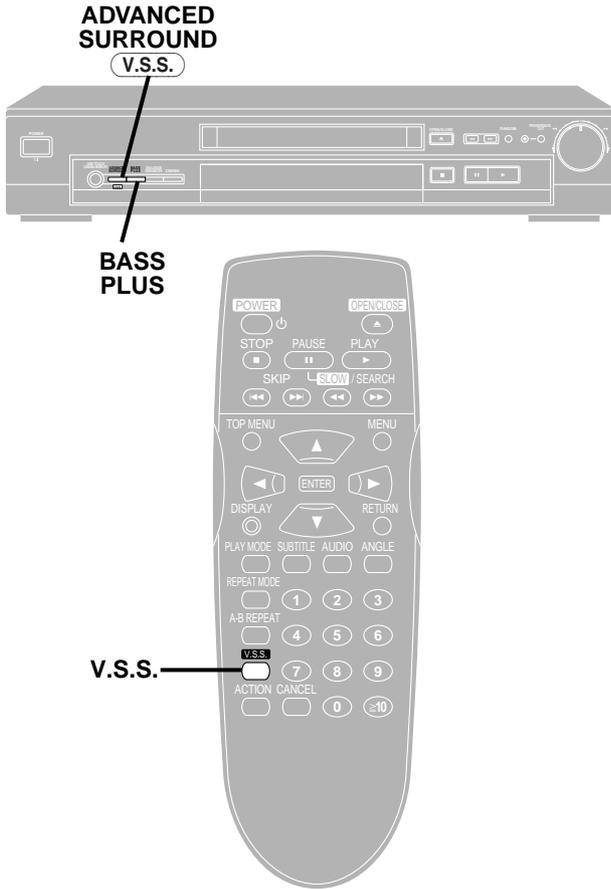
## B Random play

The unit plays the tracks on a disc in random order.

- 1 While stopped  
Press [PLAY MODE] until the random play screen appears.  
The random play screen also appears if you press [RANDOM] on the main unit.
- 2 Press [▶] (PLAY).  
Play now begins in random order.

### To exit random mode

Press [PLAY MODE] while stopped until the random play screen disappears.



## Increasing your enjoyment of movies

You can easily control the following features, used for increasing your enjoyment of movies, with the buttons on the main unit.

- **ADVANCED SURROUND** (V.S.S.)
- **BASS PLUS**
- **DIALOGUE ENHANCER**
- **CINEMA**
- **ONE TOUCH CINEMA MEMORY**

The one touch cinema memory allows you to reselect the settings you made for the above features with a single button press.

### A ADVANCED SURROUND (V.S.S.)

**DVD** (Dolby Digital, 2-channel or over only)

Use Advanced Surround (V.S.S.) (Virtual Surround Sound) to enjoy a surround-like effect if you are using 2 front speakers. If you are playing a disc with surround effects recorded on it, the effect is broadened and sound seems to come from virtual speakers on either side.

#### Press [V.S.S.].

● Press [ADVANCED SURROUND (V.S.S.)] on the main unit. Each time you press the button:

- 1: Natural effect
- ↓
- 2: Emphasized effect
- ↓
- OFF: Cancel (Factory preset)

● The V.S.S. indicator on the FL display lights up when Advanced Surround is on.

#### Note

- Advanced Surround will not work or will have less effect with some discs, even if you select "1" or "2".
- Turn off the surround sound effects on the equipment you have connected when using this effect.
- Turn Advanced Surround off if it causes distortion.

### B BASS PLUS

**DVD VCD CD**

**Main unit only**

Turn BASS PLUS on when you have connected an active subwoofer to the SUBWOOFER terminal on the rear of the unit (→ page 24).

#### Press [BASS PLUS].

Each time you press the button:

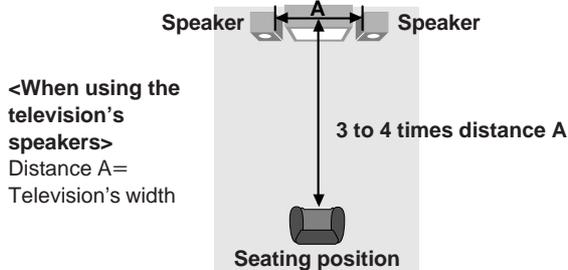
**OFF:** Cancel



**ON** (Factory preset): Indicator on the FL display lights up.



#### Optimum seating position



Main unit only

**A DIALOGUE ENHANCER**

**DVD** (Dolby Digital, 3-channel or over, where the dialogue is recorded in the center channel)

This mode makes the dialogue in movies easier to hear.

**Press [DIALOGUE ENHANCER].**

Each time you press the button:

**ON:** Indicator on the FL display lights up.



**OFF:** Cancel (Factory preset)

**Note**

Dialogue Enhancer will not work or will have less effect with some discs, even if you select "ON".

**B CINEMA**

**DVD VCD**

You can enjoy better pictures by changing the picture quality.

**Press [CINEMA].**

Each time you press the button:

**C:** Cinema mode: Indicator on the FL display lights up.

Mellows movies, enhances detail in dark scenes.



**N:** Normal mode (Factory preset)

You can make finer adjustments to the picture if desired (→ page 19, Digital picture mode—User mode).

**C ONE TOUCH CINEMA MEMORY**

This feature allows you to reselect the settings you made for **ADVANCED SURROUND (v.s.s.)**, **BASS PLUS**, **DIALOGUE ENHANCER** and **CINEMA** with one button press.

**Putting the settings into memory**

After making the settings

**Press and hold [ONE TOUCH CINEMA MEMORY] until it lights.**

The settings remain in the memory even if you turn the unit off.

**Recalling the settings**

**Press [ONE TOUCH CINEMA MEMORY].**

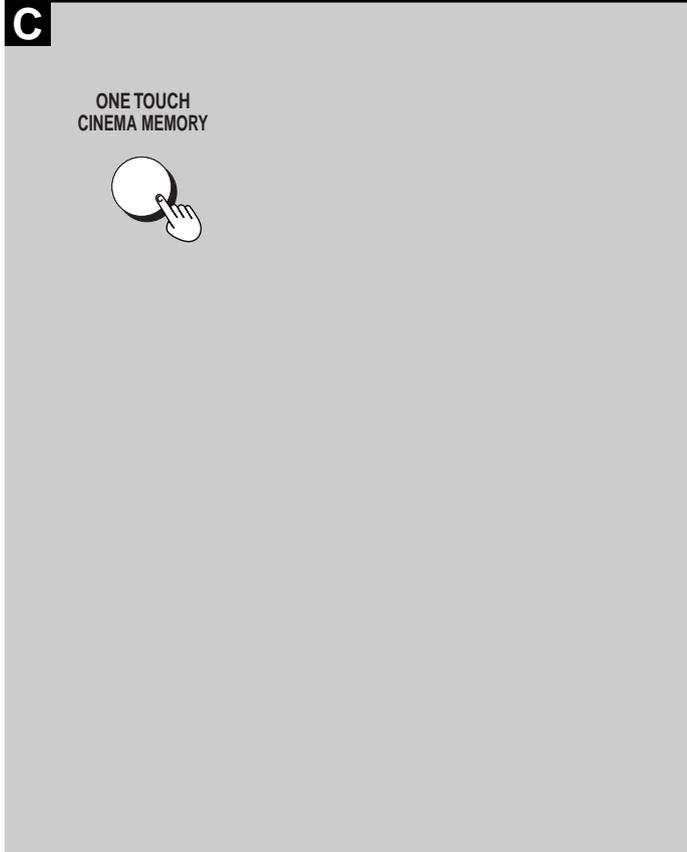
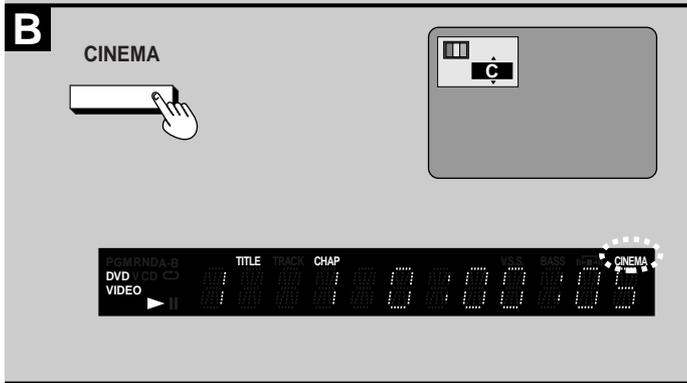
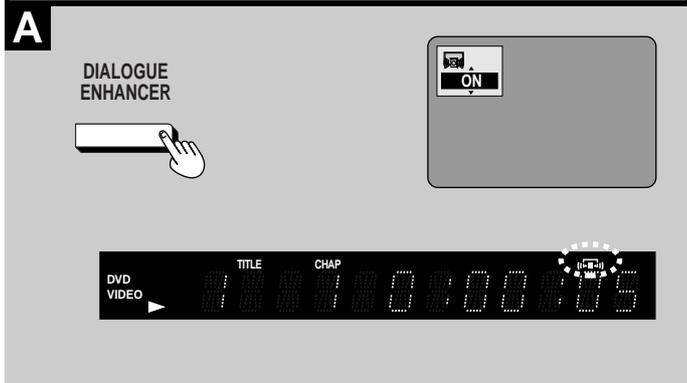
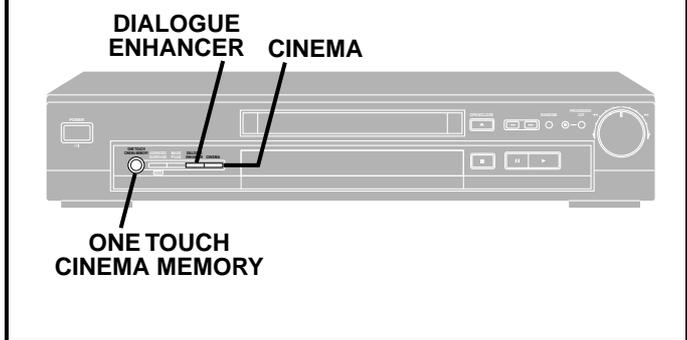
The button's light comes on.

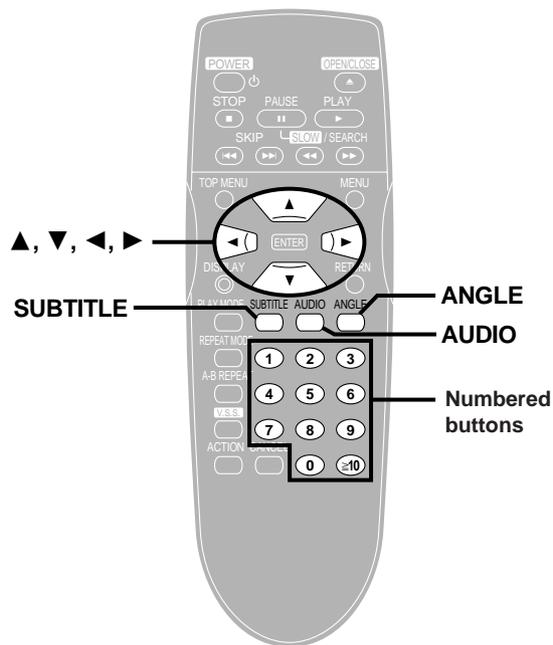
**To cancel**

Press [ONE TOUCH CINEMA MEMORY] to turn it off and return the settings for the features to the factory preset.

- **ADVANCED SURROUND (v.s.s.):** OFF
- **BASS PLUS:** ON
- **DIALOGUE ENHANCER:** OFF
- **CINEMA:** N (normal)

The button's light also turns off if you press any of the other buttons to change the settings.





# Changing soundtracks, subtitle languages and angles

DVD

## Remote control only

Some DVDs have multiple soundtracks, subtitle languages and camera angles, and you can change these during play.

### A Soundtracks

During play

#### Press [AUDIO].

The number changes each time you press the button.

- You can also use this button to turn the vocals on and off on karaoke discs. Read the disc's instructions for details.
- Refer to **A** and **B** on page 18 for language abbreviations and audio signal type details.

### B Subtitles

During play

#### Press [SUBTITLE].

The number changes each time you press the button.

- Refer to **A** on page 18 for language abbreviations.

#### To clear/display the subtitles

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

### C Angles

During play

#### Press [ANGLE].

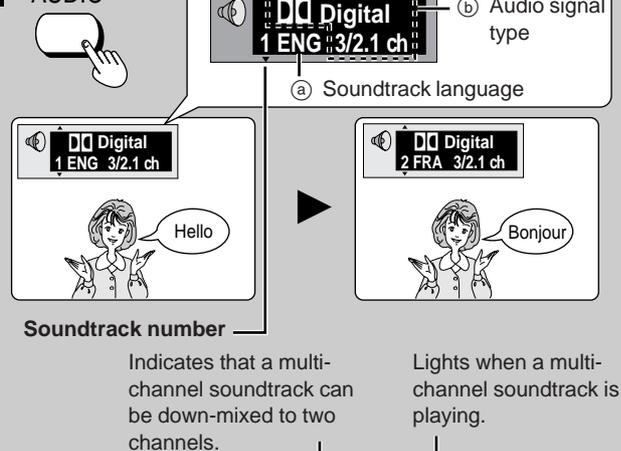
The number changes each time you press the button.

#### Notes regarding soundtracks, subtitle languages and angles

- You can also use [▲, ▼] or the numbered buttons to change the soundtracks, subtitle languages and angles.
- Some discs allow changes to soundtracks, subtitle languages and angles only by using the disc's menus.
- Soundtrack and subtitle languages can be set before play with the initial settings (➔ page 21, Disc—Audio and Subtitle).
- "—" or "--" is displayed instead of the language number in circumstances such as when no language is recorded on the disc.
- Some discs allow you to set angles before multi-angle scenes are played. Read the instructions that come with the DVD.
- In some cases, the subtitle language is not changed to the selected one immediately.
- If the subtitles overlap closed captions recorded on discs, turn the subtitles off.

### A

#### AUDIO



#### Soundtrack number

Indicates that a multi-channel soundtrack can be down-mixed to two channels.

Lights when a multi-channel soundtrack is playing.



### B

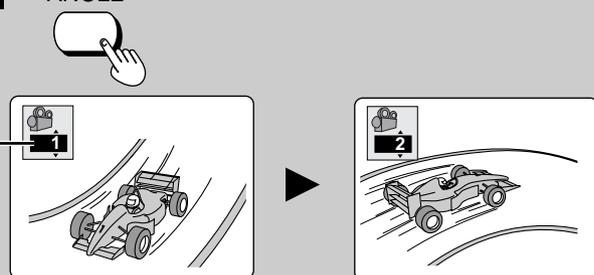
#### SUBTITLE



#### Subtitle language number

### C

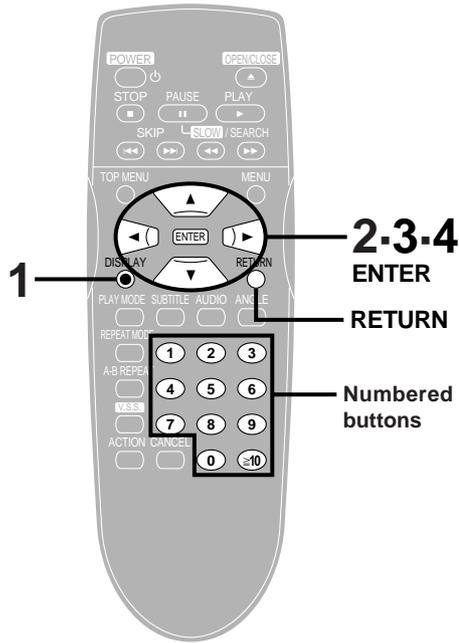
#### ANGLE



#### Angle number

DVD VCD CD

On-Screen Menu Icons are menus that contain information about the disc or unit. These menus allow you to perform operations by changing this information.

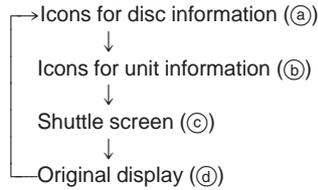


## Common procedures

### Remote control only

#### 1 Press [DISPLAY].

Each time you press the button:



• The screens depend on the disc contents.

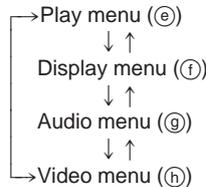
#### 2

### Icons for unit information only

While the leftmost icon is highlighted

#### Press [▲, ▼] to select the menu.

Each time you press the button:



#### 3

#### Press [◀, ▶] to select the item.

#### 4

#### Press [▲, ▼] to select the setting.

- Items with “▲” or “▼” above and below can be changed by [▲, ▼].
- Press [ENTER] if the setting does not change after pressing the cursor buttons [▲, ▼].
- Some items require different operations. Read the explanations on the following pages.

### For your reference

- Depending on the condition of the unit (playing, stopped, etc.) and the type of software you are playing, there are some items that you cannot select or change.
- When numbers are displayed (e.g. title No.), the numbered buttons are also effective for setting. When numbers are entered with the numbered buttons, press [ENTER] to register the setting.

### To clear the icons

Press [RETURN] until the menus disappear.

### ■ To change the position of the icons

You can lower the position of the icons on the screen if they are cut off for some reason. There are 5 positions to choose from.

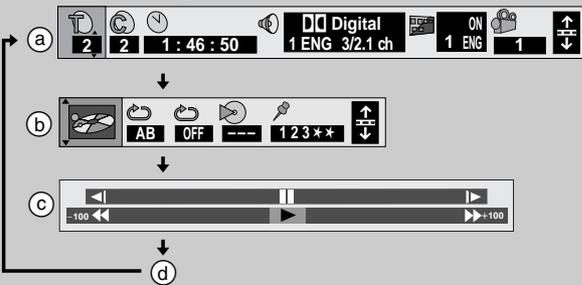
1. Press [◀, ▶] to select the rightmost icon.
2. Press [▲, ▼] to move the icons.

#### 1

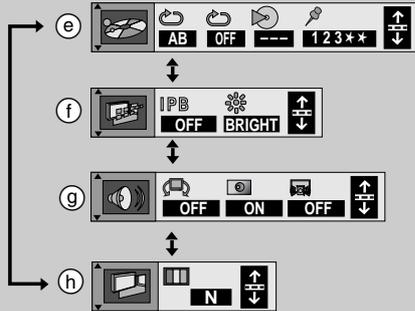
DISPLAY



Example: DVD



#### 2



#### 3



#### 4



## Icons for disc information

e.g. DVD



Icon	Content
	<b>DVD</b> Title number <b>VCD CD</b> Track number
	<b>DVD</b> Chapter number
	<b>DVD</b> Time (select a position to start play by specifying a time with the numbered buttons) ----- <b>VCD CD</b> Changing the time display → Track elapsed time ↓ ↑ Track remaining time ↓ ↑ Disc remaining time
	<b>VCD</b> Audio mode LR ↔ L ↔ R ↑ ↔ ↓
	<b>DVD</b> Soundtrack a) Soundtrack language (See <b>A</b> at right for language abbreviations.) b) Audio signal type (See <b>B</b> at right for details.)
	<b>Karaoke vocal on/off</b> (Karaoke DVD only) Solo : OFF or ON Duet: OFF, V1+V2, V1 or V2
	<b>DVD</b> Subtitle language (See <b>A</b> at right for language abbreviations.)
	<b>Subtitles on/off</b> ON ↔ OFF
	<b>DVD</b> Angle number
	<b>VCD</b> (with playback control only) Menu play Indicates whether menu play (playback control) is on or off.

### A Audio/Subtitle language

ENG: English	SVE: Swedish	CHI: Chinese
FRA: French	NOR: Norwegian	KOR: Korean
DEU: German	DAN: Danish	MAL: Malay
ITA: Italian	POR: Portuguese	VIE: Vietnamese
ESP: Spanish	RUS: Russian	THA: Thai
NLD: Dutch	JPN: Japanese	*: Others

### B Signal type/data

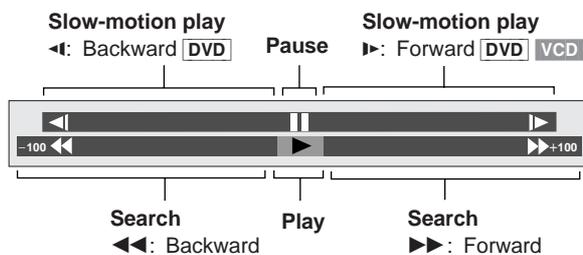
LPCM/Digital/DTS: Signal type  
k (kHz): Sampling frequency  
b (bit): Number of bits  
ch (channel): Number of channels

Example:

3/2 .1ch

.1: Subwoofer signal (not displayed if there is no subwoofer 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

## Shuttle screen



### Note

- There are five speeds for both backward and forward slow-motion and search.
- The numbers on either side of the shuttle screen indicate the maximum speeds of the search.

## Icons for unit information

### Play menu



Icon	Content
	<b>A-B repeat</b> (⇒ page 12) [ENTER] (start point) ⇒ [ENTER] (finish point) To cancel: [ENTER]
	<b>Repeat play</b> (⇒ page 12) DVD C (Chapter) ↔ T (Title) ↔ OFF VCD CD T (Track) ↔ A (All) ↔ OFF
	<b>VCD CD Play mode display</b> ---: Off PGM: Program play RND: Random play
	<b>Marker</b> You can mark up to 5 positions to play again. [ENTER] (The unit is now ready to accept markers.) To mark a position [ENTER] (at the desired point) To mark another position: [◀, ▶] ⇒ [ENTER] To recall a marker: [◀, ▶] ⇒ [ENTER] To erase a marker: [◀, ▶] ⇒ [CANCEL]

### Audio menu



Icon	Content
	DVD (Dolby Digital, 2-channel or over only) <b>Advanced Surround (V.S.S.)</b> (⇒ page 14) 1 ↔ 2 ↔ OFF
	<b>Bass Plus</b> (⇒ page 14) OFF ↔ ON
	DVD (Dolby Digital, 3-channel or over only) <b>Dialogue Enhancer</b> (⇒ page 15) ON ↔ OFF

### Display menu



Icon	Content
	DVD <b>IPB display</b> (⇒ page 25) Displays the picture type (I/P/B) in the still picture mode. ON ↔ OFF
	<b>Display dimmer</b> Changes the brightness of the unit's display. BRIGHT ↔ DIM ↔ AUTO* *The display is dimmed during play, but brightens when you perform operations such as slow-motion, search, and pause.

### Video menu



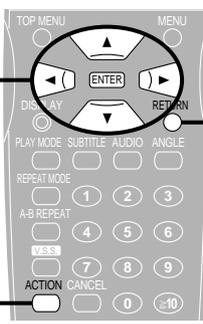
When the progressive out indicator is on (⇒ page 9):

Icon	Content
	DVD VCD <b>Digital picture mode</b> N: Normal mode C: Cinema mode (⇒ page 15)
	DVD VCD <b>Transfer MODE</b> Select the method of conversion for progressive output to suit the type of material being played (⇒ page 25, "Film and video"). <b>Auto (normal):</b> for viewing film material <b>Video:</b> for video material
	<b>Horizontal position</b> Press the numbered buttons to change the horizontal position of the picture. After highlighting the icon shown at left: 1. Press [1]. 2. Press [1] to move the picture to the left or [3] to move the picture to the right. • Pressing [2] returns the position to the factory preset. 3. Press [4] to confirm the position. This position is saved even if you turn the unit off.

When the progressive out indicator is off:

Icon	Content
	DVD VCD <b>Digital picture mode</b> N: Normal mode C: Cinema mode (⇒ page 15) U: User mode The following items are also displayed when you select "U".
	<b>Contrast</b> (-7 to +7) Increases the contrast between white and black parts of the picture.
	<b>Brightness</b> (0 to +15) Brightens the picture.
	<b>Color</b> (-7 to +7) Adjust the shade of the picture's color.

2-3-4



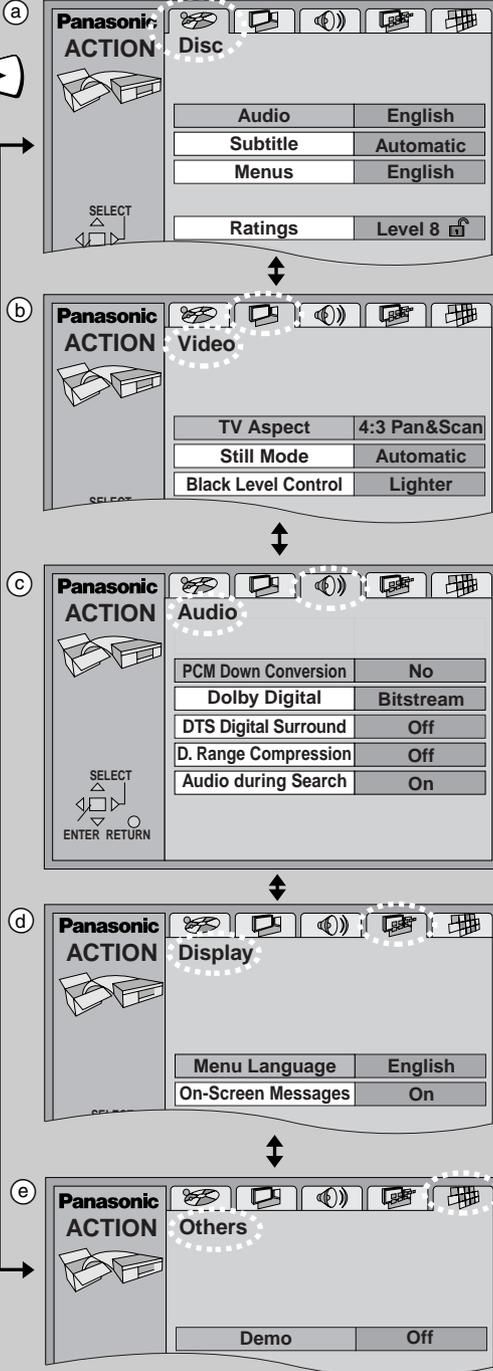
RETURN

1

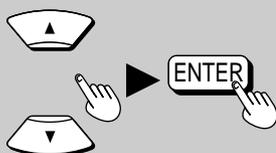
1 ACTION



2



3-4



## Changing initial settings

DVD VCD CD

### Remote control only

Change the settings to suit your preferences and to suit the unit to the environment in which it is being used. These settings are retained in memory until they are changed, even if the unit is turned off.

## Common procedures

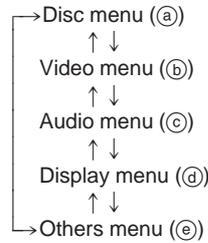
See page 21 for menu and option details.

### 1 Press [ACTION] to show the menus.

The screen shows the disc settings menu (a) first.

### 2 Press [◀, ▶] to select the menu's tab.

The screen changes to display the menu.



### 3 Press [▲, ▼] to select the item you want to change and press [ENTER].

### 4 Press [▲, ▼] to select the option and press [ENTER].

The screen now shows the menu again.

To return to the previous screen

Press [RETURN].

When you are finished

Press [ACTION].

## Summary of initial settings

This chart shows the initial settings for this unit. See page 20 for details on menu operation.

- Underlined items are the factory presets.
- The menu and on-screen message language has been factory preset to English. You can change the language by going to “Menu Language” in the Display menu.

Menus	Items	Options
<b>Disc</b> <b>DVD</b> (⇒ <b>Remarks</b> below)	<b>Audio</b> Choose the preferred audio language.	<u>English</u> French Spanish Original Other ****
	<b>Subtitle</b> Choose the preferred subtitle language.	<u>Automatic</u> English French Spanish Other ****
	<b>Menus</b> Choose the preferred language for disc menus.	<u>English</u> French Spanish Other ****
	<b>Ratings</b> Set a ratings level to limit DVD play. • The password screen is shown if you choose levels 0 to 7 or if you choose “Ratings” when levels 0 to 7 have been selected (⇒ page 22). • Select “Level 0” to prevent play of discs that do not have ratings levels recorded on them.	<b>Setting ratings (When level 8 is selected)</b> 8 No Limit: All DVDs can be played. 1 to 7: Prohibits play of DVDs with corresponding ratings recorded on them. 0 Lock All: Prohibits play of all DVDs. ----- <b>Changing ratings (When level 0–7 is selected)</b> Unlock Player Change Level Change Password Temporary Unlock
<b>Video</b> <b>DVD</b> <b>VCD</b>	<b>TV Aspect</b> Choose the setting to suit your television and preference (⇒ page 7).	<u>4:3 Pan&amp;Scan</u> 4:3 Letterbox 16:9
	<b>Still Mode</b> (⇒ <b>Remarks</b> below) Specify the type of picture shown when paused.	<u>Automatic</u> Field Frame
	<b>Black Level Control</b> Change the black level of the picture if you connected a television through the COMPONENT VIDEO OUT terminals.	<u>Lighter</u> : when connected to a TV through the VIDEO OUT or S VIDEO OUT terminal. Darker: when connected to a TV through the COMPONENT VIDEO OUT (Y/P <sub>B</sub> /P <sub>R</sub> ) terminals.
<b>Audio</b>	<b>PCM Down Conversion</b> <b>DVD</b> Digital output of 96-kHz linear PCM signals (⇒ page 22)	<u>No</u> Yes
	<b>Dolby Digital</b> <b>DVD</b> Digital output of Dolby Digital signals (⇒ page 22)	<u>Bitstream</u> PCM
	<b>DTS Digital Surround</b> <b>DVD</b> Digital output of DTS Digital Surround signals (⇒ page 22)	<u>Off</u> Bitstream
	<b>D. Range Compression</b> <b>DVD</b> (Dolby Digital only) Change the dynamic range for late night viewing. Dynamic range is the difference between the loudest sound and the softest sound. By compressing this range, you can listen at low volume but still enjoy clear dialogue.	<u>Off</u> On
	<b>Audio during Search</b> <b>DVD</b> <b>VCD</b> Choose whether to have sound during search.	<u>On</u> Off
<b>Display</b>	<b>Menu Language</b> Choose the preferred language for these menus and the on-screen messages.	<u>English</u> Français Español
	<b>On-Screen Messages</b> Choose whether to show on-screen messages or not.	<u>On</u> Off
<b>Others</b>	<b>Demo</b> A demonstration of the unit’s on-screen displays starts when you select “On”. The demonstration stops when you press a button and the setting reverts to “Off”.	<u>Off</u> On

### Remarks

#### ■ Disc—Audio, Subtitle and Menus

“Original”: The original language of each disc will be selected.

“Other \*\*\*\*”: Input a code number with the numbered buttons (⇒ page 22).

“Automatic”: If the language selected for “Audio” is not available, subtitles of that language will automatically appear if available on that disc.

- Some discs are designed to start in a certain language despite any changes you make here.

#### ■ Video—Still Mode

**Automatic:** The unit automatically selects field still or frame still.

**Field:** Less blurred field stills are shown. Select if jittering occurs when “Automatic” is selected.

**Frame:** Sharper frame stills are shown. Select if small text or fine patterns cannot be seen clearly when “Automatic” is selected.

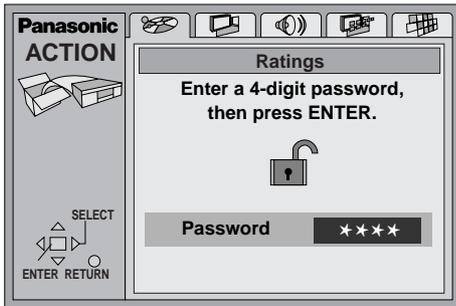
## Entering a password

**DVD**

Refer also to "Common procedures" (⇒ page 20) and the Disc menu in "Summary of initial settings" (⇒ page 21).

### When setting ratings (When the level is 8)

The password screen is shown when you select levels 0 to 7.



- Input a 4-digit password with the numbered buttons and press [ENTER].
  - If you enter a wrong number, press [CANCEL] to erase it before you press [ENTER].

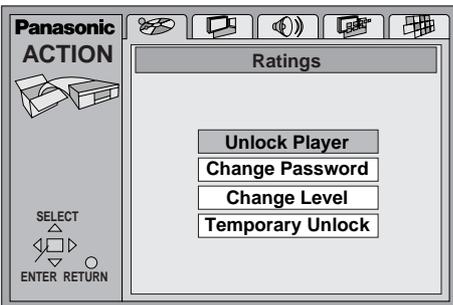
The lock symbol appears closed to show the rating is locked.  
**Do not forget your password.**
- Press [ENTER] to confirm the 4 digits.

Now, when you insert a DVD that exceeds the ratings limit you set, a message appears on the television. Follow the on-screen instructions.

### When changing ratings (When the level is 0 to 7)

The password screen is shown when you select "Ratings".

- Input your 4-digit password with the numbered buttons and press [ENTER].



- Select the item with [▲, ▼] and press [ENTER], and follow the on-screen instructions.

Advanced operations

## Digital output

**DVD**

Refer also to "Common procedures" (⇒ page 20) and the Audio menu in "Summary of initial settings" (⇒ page 21).

### PCM Down Conversion

**No** (Factory preset):

When you have connected an amplifier with audio cables.

**Yes:**

When you have connected an amplifier with an optical digital audio cable.

Copyright protection limits digital output to 48 kHz/16 bit.

**When playing DVDs recorded in 96 kHz**

Sound is output as follows in accordance with the connections and settings you have made.

Setting	Connection	
	Digital	Analog
No	No output (If there is no copyright protection, audio is output at 96 kHz.*1)	Output as 96 kHz
Yes	Converted and output as 48 kHz/16 bit	Converted and output as 48 kHz

\*1 The connected equipment must be able to handle 96 kHz LPCM in order to take advantage of high quality audio found on these discs.

### Dolby Digital

**Bitstream** (Factory preset):

When you have connected a unit with a built-in Dolby Digital decoder.

**PCM:**

When you have connected a unit that doesn't have a built-in Dolby Digital decoder.\*2

### DTS Digital Surround

**Off** (Factory preset):

When you have connected a unit that doesn't have a built-in DTS decoder.\*2 (No digital signal is output.)

**Bitstream:**

When you have connected a unit with a built-in DTS decoder.

\*2 These changes to digital audio output must be made, otherwise bitstream signals the decoder cannot handle will be output. If these signals are output, "noise" will be output which can cause harm to your ears and speakers.

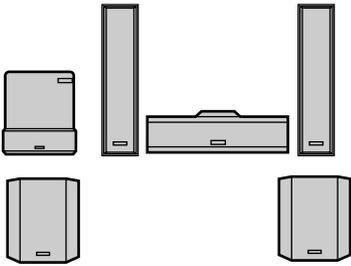
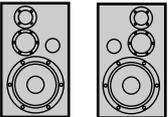
## Language code list

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

# Home Theater—Enjoying more powerful sound

This unit can play Dolby Digital, but only in two channels. This unit does not have a DTS decoder. You must connect a unit with a Dolby Digital or DTS decoder to enjoy surround sound.

Use analog connection to enjoy audio recorded with high sampling frequencies (over 48 kHz). To protect the rights of the producers of this kind of material, this audio will be down-sampled to 48 kHz if you use digital connection.

What you want to do	How to do it	Reference page	Settings	Reference page
<b>To enjoy 5.1-channel surround sound</b> 	<b>Digital connection</b> Connect to an amplifier with built-in decoder or a separate decoder-amplifier combination.	23 <b>A</b>	<b>PCM Down Conversion</b> Select "Yes".  <b>Dolby Digital</b> <b>DTS Digital Surround</b> Settings depend on your decoding equipment.  Make the speaker settings on the amplifier or decoder.	22   —
<b>To enjoy stereo or Dolby Pro Logic</b> 	<b>Analog connection</b> Connect to an analog amplifier or system component.	24 <b>B</b>	<b>PCM Down Conversion</b> Select "No".	22
	<b>Digital connection</b> Connect to a digital amplifier or system component.	24 <b>C</b>	<b>PCM Down Conversion</b> Select "Yes". <b>Dolby Digital</b> Select "PCM". <b>DTS Digital Surround</b> Select "Off".	22
<b>To enjoy heavy bass with a subwoofer</b>	Connect an active subwoofer.	24	<b>BASS PLUS</b> Select "ON".	14

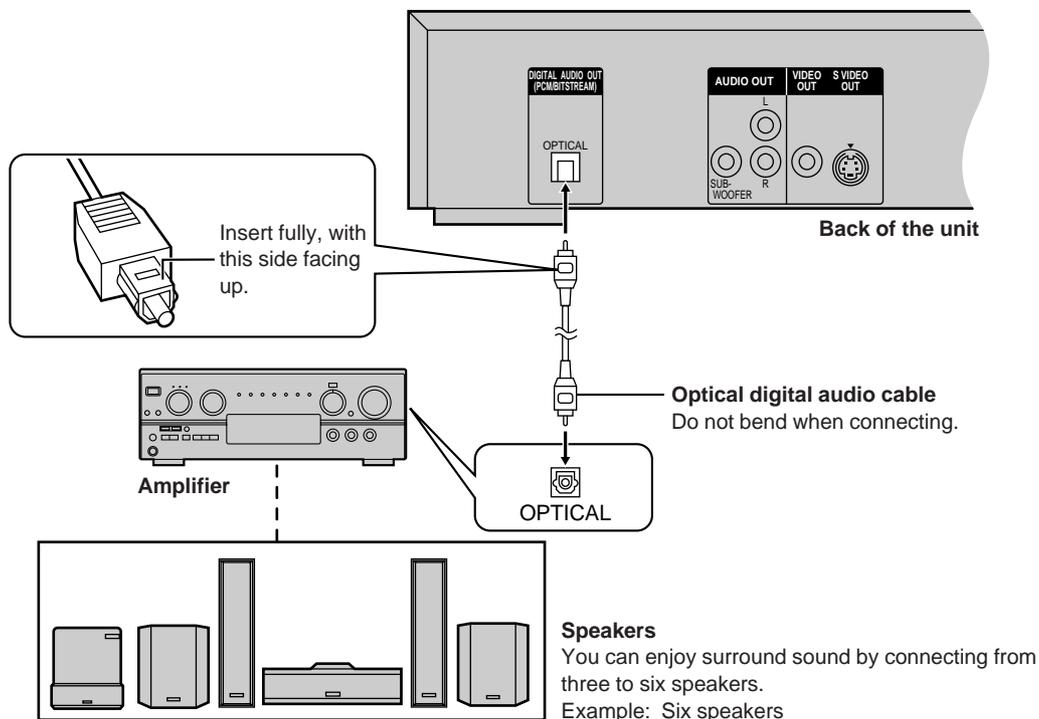
### Other uses

Recording to MDs or cassette tapes (⇒ page 24).

### Note

- The equipment connections described are examples.
- Peripheral equipment and optional cables sold separately unless otherwise indicated.
- Before connection, turn off all equipment and read the appropriate operating instructions.

## A Connecting an amplifier with a built-in decoder or a decoder-amplifier combination

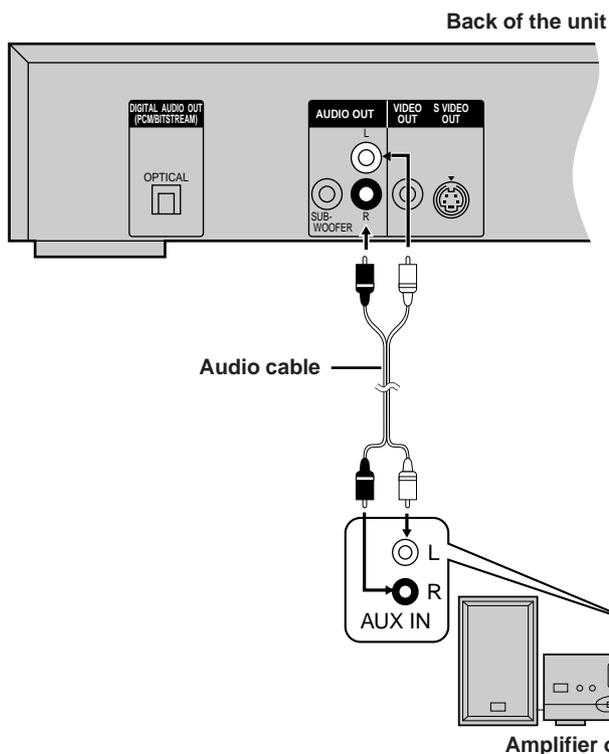
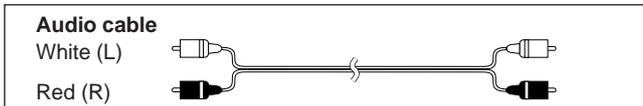


Adjust the settings to suit the equipment you have connected (⇒ "Digital output" page 22).

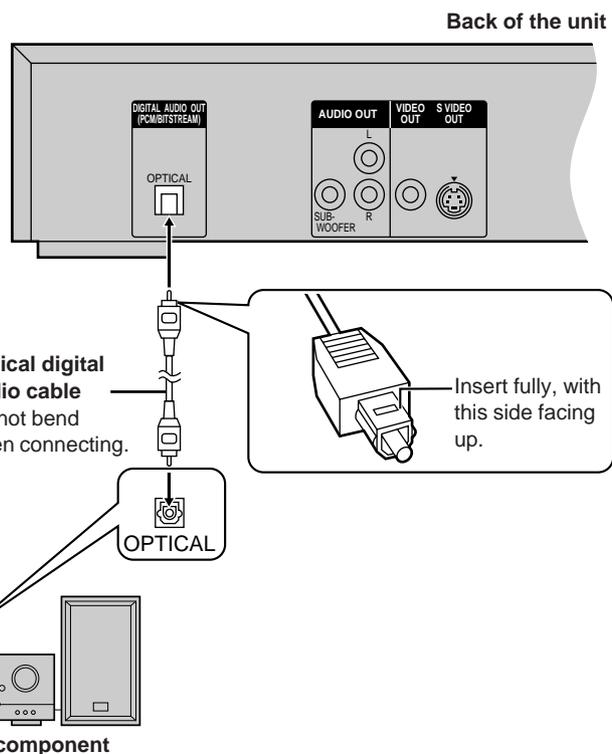
### Note

You cannot use DTS Digital Surround decoders not suited to DVD.

## B Connecting an analog amplifier or system component



## C Connecting a digital amplifier or system component



• Select “No” in “PCM Down Conversion” (⇒ page 22).

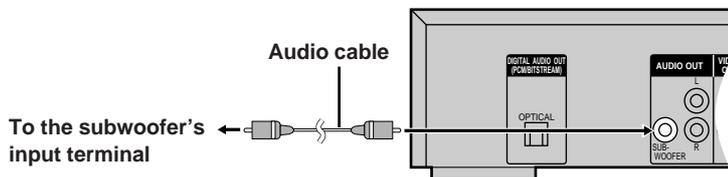
Adjust the settings to suit the equipment you have connected (⇒ “Digital output” page 22).

### To enjoy Dolby Pro Logic

- If you connect an amplifier that can decode Dolby Pro Logic, you will also need to connect center and surround speakers to enjoy surround sound. Read the instructions for the equipment for connection details.
- Turn Advanced Surround and Bass Plus off (⇒ page 14). Dolby Pro Logic will not function correctly if Advanced Surround or Bass Plus is on.

## Connecting an active subwoofer (optional)

You can enjoy more powerful bass by connecting an active subwoofer.



- Place the subwoofer as close as possible to the front center.
- Turn BASS PLUS on to boost the output from the subwoofer (⇒ page 14).
- Adjust the volume on the subwoofer to suit your preference.

## Recording to MDs or cassette tapes

### ■ Analog recording

You can record to an MD or cassette tape. Using analog connection means sound will be unaffected by the copy guards found on DVDs.

### To make an analog recording

Connect the recording equipment with an audio cable (⇒ B above).

### ■ Digital recording

You can record the digital signal directly onto an MD.

The signals on DVDs will be converted to 48 kHz/16 bit linear PCM. Ensure the following conditions are met.

- There is no copy guard recorded on the disc.
- The recording equipment can handle a sampling frequency of 48 kHz/16 bit.

### To make a digital recording

1. Connect the recording equipment with an optical digital audio cable (⇒ C above).
2. When recording DVDs, change the digital audio output settings.

ADVANCED SURROUND (V.S.S.): OFF (⇒ page 14)  
 PCM Down Conversion: Yes (⇒ page 22)  
 Dolby Digital: PCM (⇒ page 22)  
 DTS Digital Surround: Off (⇒ page 22)

## Bitstream

This is the digital form of multiple channel audio data (e.g., 5.1 channel) before it is decoded into its various channels.

## Dolby Digital

This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be 5.1-channel audio. A large amount of audio information can be recorded on one disc using this method.

## Dolby Pro Logic

A surround system where a 4-channel audio track is recorded as 2 channels and then is restored to 4 channels for play. The surround channel is monaural and can reproduce up to 7 kHz.

## DTS (Digital Theater Systems)

This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

## Dynamic range

Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

## Film and video

DVDs are recorded using either film or video. Usually, film is recorded at 24 frames per second, the rate movies are filmed at, while video is recorded at 30 frames per second.

## Frame

Frames are the still pictures that go together to make a moving picture. There are about 30 frames shown each second.

## Interlace and progressive output

NTSC, the video signal standard, has 480 interlaced (i) scan lines, whereas progressive scanning uses twice the number of scan lines. This is called 480p. The 480i video signals output from this unit's COMPONENT VIDEO OUT terminals (Y, P<sub>B</sub>, P<sub>R</sub>) allow you to enjoy higher quality pictures than if the signals were output from the video output terminal or S VIDEO OUT terminal. The COMPONENT VIDEO OUT terminals are also able to handle 480p (progressive) video signals which are of even greater resolution.

## I/P/B

MPEG 2, the video compression standard adopted for use with DVD-Video, codes frames using these 3 picture types.

### I: Intra coded picture (I-picture)

This is the standard picture and is a complete picture in itself.

This means it has the best picture quality and is the best to use when adjusting the picture.

### P: Predictive coded picture (P-picture)

This picture is calculated based on past I or P-pictures.

### B: Bidirectionally-predictive coded picture (B-picture)

This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

## Linear PCM (pulse code modulation)

PCM is the usual digital method used for music CDs. DVDs have a greater volume so they use linear PCM, which has a higher sampling rate. Compressed PCM signals are called packed PCM (PPCM).

## MP3

A method of compressing audio, MPEG Audio Layer 3 (MP3) allows audio to be reduced to up to one tenth its original size without overtly hurting audio quality.

### When creating MP3 files to play on this unit

- Disc formats: ISO9660 level 1 and level 2 (except for extended formats)

Files: MP3 files with the suffix ".mp3" or ".MP3"

- To have this unit play files in a certain order, prefix folder and file names with numbers in the order you want to play them. This may not work in all cases.

- 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.

## Playback control

If a Video CD has "playback control" written on it or its jacket, it means that particular scenes or information can be selected for viewing interactively with the television using the menu screen. This unit can play Video CDs with playback control.

Using menus to control play of a Video CD is called "menu play" in these operating instructions.

## Title/Chapter

DVDs are divided up into large sections, titles, and smaller sections, chapters. The numbers allocated to these sections are called title numbers and chapter numbers.

## Track

Video CDs and CDs are divided up into sections called tracks, and the numbers allocated to these sections are called track numbers.

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

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

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

Before requesting service, make the below 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:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail [consumerproducts@panasonic.com](mailto:consumerproducts@panasonic.com), or web site (<http://www.panasonic.com>).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 1-800-561-5505, web site ([www.panasonic.ca](http://www.panasonic.ca)), or an authorized Servicentre closest to you.

Reference pages are shown as black circled numbers ❸.

## Power

No power.	<ul style="list-style-type: none"> <li>● Insert the AC power supply cord securely into the household AC outlet. ❹</li> </ul>
The unit is automatically switched to the standby mode.	<ul style="list-style-type: none"> <li>● To conserve power, the unit automatically switches to standby after approximately 30 minutes in the stop mode. Turn the power back to ON.</li> </ul>

## Operation

No response when buttons pressed.	<ul style="list-style-type: none"> <li>● Some operations may be prohibited by the disc.</li> <li>● The unit may not be operating properly due to lightning, static electricity or some other external factor. <b>Reset procedure:</b> Press [⏻/I, POWER] to switch the unit to the standby mode and then back to ON. Alternatively, press [⏻/I, POWER] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it.</li> </ul>
No operations can be performed with the remote control.	<ul style="list-style-type: none"> <li>● Check the batteries are installed with the correct polarities (+ and -). ❺</li> <li>● The batteries are depleted: Replace them with new ones. ❺</li> <li>● Point the remote control at the remote control sensor and operate. ❺</li> </ul>
Play fails to start even when [▶] (PLAY) is pressed. Play starts but then stops immediately.	<ul style="list-style-type: none"> <li>● Condensation has formed: Wait 1 to 2 hours for it to evaporate.</li> <li>● This unit cannot play discs other than DVD, Video CD and CD. ❸</li> <li>● This unit cannot play DVDs with a region number other than "1", "ALL" or multiple region numbers including "1". ❸</li> <li>● The disc may be dirty and may require cleaning. ❺</li> <li>● Ensure that the disc is installed with the label of the side to be played facing upwards. ❾</li> </ul>
Alternative languages fail to be selected.	<ul style="list-style-type: none"> <li>● An alternative language is not selected with discs which do not contain more than one language.</li> <li>● In the case of some discs, the alternative language cannot be selected with [AUDIO] or [SUBTITLE]. Try selecting it from the disc's menu if one is available. ❾</li> </ul>
No subtitles.	<ul style="list-style-type: none"> <li>● Subtitles appear only with discs that contain them.</li> <li>● Subtitles are cleared from the television. Display the subtitles. ❿</li> </ul>
Soundtrack and/or subtitle language is not the one selected with the ACTION menus.	<ul style="list-style-type: none"> <li>● The language is not recorded on the disc.</li> </ul>
Angle cannot be changed.	<ul style="list-style-type: none"> <li>● This function is dependent on software availability. Even if a disc has a number of angles recorded, these angles may be recorded for specific scenes only. ❿</li> </ul>
You have forgotten your ratings password. Reset all the settings to Factory Preset.	<ul style="list-style-type: none"> <li>● While stopped, press and hold [◀◀] and [▶▶] on the unit and then also press and hold [▲] on the unit until "Initialized" disappears from the television. Turn the unit off and on again. All initial settings will return to the default values.</li> </ul>

## Sound

No sound. Distorted sound.	<ul style="list-style-type: none"> <li>● Check the connections. ❻ 23 24</li> <li>● Check the volume on the equipment you have connected.</li> <li>● Ensure that the input settings for the television and stereo system are correct.</li> <li>● Turn Advanced Surround off if it causes distortion. 14</li> </ul>
Piercing noise comes from the speakers.	<ul style="list-style-type: none"> <li>● If you have connected this unit to other equipment through the DIGITAL AUDIO OUT terminal, ensure you have selected the correct settings for "Dolby Digital" and "DTS Digital Surround" in the ACTION menu's Audio menu. 21 22</li> </ul>

## Picture

Picture distorted during search.	<ul style="list-style-type: none"> <li>•The picture will be somewhat distorted at times: This is normal.</li> </ul>
No picture.	<ul style="list-style-type: none"> <li>•Ensure that the equipment is connected properly. <b>6</b></li> <li>•Make sure the television is on.</li> <li>•Ensure the television's video input setting (e.g., VIDEO 1) is correct.</li> <li>•The unit does not output video signals from the VIDEO OUT and S VIDEO OUT terminals when the "PROGRESSIVE OUT" indicator is on. Press [PROGRESSIVE OUT] to turn progressive out off. <b>9</b></li> </ul>
The picture shown on the television is not normal. (The sides of the picture are cut off or black bands appear at the top and bottom of the screen.)	<ul style="list-style-type: none"> <li>•Go to the Video menu in the ACTION screen, and change "TV Aspect" to suit your television. You may also need to change the screen mode on the television itself. <b>7</b></li> <li>•Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder.</li> </ul>
There is ghosting when progressive output is on.	<ul style="list-style-type: none"> <li>•Turn progressive output off. This problem is caused by the editing method or material used on the DVD, but should be corrected if you use interlace output. <b>9</b></li> </ul>
Picture quality is poor.	<ul style="list-style-type: none"> <li>•Check the settings in the on-screen menu's video menu. <b>19</b></li> </ul>
The picture is off center when using progressive output.	<ul style="list-style-type: none"> <li>•Adjust the horizontal position with the on-screen menu icons. <b>19</b></li> </ul>

## Displays

"NO PLAY" appears on the unit's display.	<ul style="list-style-type: none"> <li>•You inserted a disc the unit cannot play; insert one it can. <b>3</b></li> </ul>
No on-screen display.	<ul style="list-style-type: none"> <li>•Go to Display in the ACTION menus, and select "On" for "On-Screen Messages". <b>21</b></li> </ul>
On-Screen Menu Icons not displayed or only partially displayed on the television.	<ul style="list-style-type: none"> <li>•Press [▲, ▼] while the rightmost icon is highlighted to move them down. <b>17</b></li> </ul>
The disc's menu is displayed in a different language.	<ul style="list-style-type: none"> <li>•Go to Disc in the ACTION menus, and select the preferred language for "Menus". <b>21</b></li> </ul>
No menu play.	<ul style="list-style-type: none"> <li>•Menus are only displayed if they are recorded on the disc.</li> </ul>
"CHECK THE DISC" appears on the unit's display.	<ul style="list-style-type: none"> <li>•Disc is dirty. Wipe the disc clean. <b>5</b></li> </ul>
"H□□" appears on the unit's display.  □□ stands for a number.	<ul style="list-style-type: none"> <li>•Trouble is likely to have occurred. The number following "H" depends on the status of the unit. <b>Reset procedure:</b> Press [⏻/I, POWER] to switch the unit to the standby mode and then back to ON. Alternatively, press [⏻/I, POWER] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it.</li> <li>•If the service numbers fail to clear, note the service number and contact a qualified service person.</li> </ul>
"NO DISC" appears on the unit's display.	<ul style="list-style-type: none"> <li>•You haven't inserted a disc; insert one.</li> <li>•You haven't inserted the disc correctly; insert it correctly. <b>9</b></li> </ul>

## Maintenance

To clean this unit, wipe 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.

**Panasonic**

**Technics**

**Quasar**

*For Product Information, Operating Assistance, Literature Request, Dealer Locations, and all Customer Service inquiries please contact:  
1-800-211-PANA (7262), Monday–Friday 9 am–9 pm; Saturday–Sunday 9 am–7 pm, EST.*

*Web Site: <http://www.panasonic.com>  
You can purchase parts, accessories or locate your nearest servicenter by visiting our Web Site.*

**Accessory Purchases:**

1-800-332-5368 (Customer Orders Only)  
Panasonic Services Company 20421 84th Avenue South, Kent, WA 98032  
(6 am to 5 pm Monday–Friday; 6 am to 10:30 am Saturday; PST)  
(Visa, MasterCard, Discover Card, American Express, Check)

**Factory Servicenters Locations**

**CALIFORNIA**  
6550 Katella Avenue  
Cypress, CA 90630

800 Dubuque Avenue  
S. San Francisco  
CA 94080

3878 Ruffin Road  
Suite A  
San Diego, CA 92123

**COLORADO**  
1640 South Abilene Street  
Suite D  
Aurora, CO 80012

**FLORIDA**  
3700 North 29<sup>th</sup> Avenue  
Suite 102  
Hollywood, FL 33020

**GEORGIA**  
8655 Roswell Road  
Suite 100  
Atlanta, GA 30350

**ILLINOIS**  
9060 Golf Road  
Niles, IL 60714

1703 North Randall Road  
Elgin, IL 60123  
(Pick-up/Drop-off only)

**MARYLAND**  
62 Mountain Road  
Glen Burnie, MD 21061

**MASSACHUSETTS**  
60 Glacier Drive  
Suite G  
Westwood, MA 02090

**MINNESOTA**  
7850-12<sup>th</sup> Avenue South  
Airport Business Center  
Bloomington, MN 55425

**OHIO**  
2236 Waycross Road  
Civic Center Plaza  
Forest Park, OH 45240

**PENNSYLVANIA**  
2221 Cabot Blvd. West  
Suite B  
Langhorne, PA 19047

**TEXAS**  
13615 Welch Road  
Suite 101  
Farmers Branch  
TX 75244

**WASHINGTON**  
20425-84<sup>th</sup> Avenue South  
Kent, WA 98032

**HAWAII**  
99-859 Iwaiwa Street  
Aiea, Hawaii 96701  
Phone (808) 488-1996  
Fax (808) 486-4369

Reference

**Service in Puerto Rico**

*Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicenter:  
Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985  
Phone (787) 750-4300 Fax (787) 768-2910*

# Limited Warranty (U.S.A.)

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

Panasonic Sales Company, Division of Matsushita Electric  
of Puerto Rico, Inc.  
Ave. 65 de Infantería, Km. 9.5  
San Gabriel Industrial Park, Carolina, Puerto Rico 00985

## Panasonic/Technics DVD Player Limited Warranty

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the Warrantor") will repair or replace this product with new or refurbished parts or equivalent product, free of charge in the USA or Puerto Rico, in the event of a defect in materials or workmanship as follows (all time periods commence from the date of original purchase):

**Parts**—New or rebuilt parts in exchange for defective parts for one (1) year from the date of original purchase.

**Labor**—Carry-in or mail-in service for ninety (90) days from the date of original purchase. After the ninety (90) day labor period, purchaser pays for all labor charges.

**Batteries**—(if included) New rechargeable batteries in exchange for defective rechargeable batteries for ten (10) days from the date of the original purchase. Non-rechargeable batteries are not warranted.

Carry-in or mail-in service in the USA can be obtained during the warranty period by contacting a Panasonic Services Company (PASC) Factory Servicenter listed in the Servicenter Directory. Or call, toll free, 1-800-211-7262 to locate an authorized PASC Servicenter. Carry-in or mail-in service in Puerto Rico can be obtained during the warranty period by calling the local telephone number in the Servicenter Directory.

This warranty is extended only to the original purchaser.

A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered.

This warranty only covers failures due to defects in materials and workmanship which occur during normal use and does not cover normal maintenance. The warranty 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 accident, misuse, abuse, neglect, mishandling, faulty installation, misapplication, improper set-up adjustments, operation or maintenance, alteration, modification, power line surge, lightning damage, interference, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or serviced by anyone other than an PASC Factory Servicenter or an authorized PASC Servicenter, or damage that is attributable to acts of God.

### LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

THE WARRANTOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING WITHOUT LIMITATIONS, DAMAGE TO DISCS. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

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 above exclusions or limitations 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 Consumer Affairs Department at the company address indicated above.

### If you ship the product

Carefully pack and send it prepaid, adequately insured and preferably in the original carton.

Attach a postage-affixed letter, detailing the complaint, to the outside of the carton.

*Do NOT send the product to the Executive or Regional Sales offices. They are NOT equipped to make repairs.*

## 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

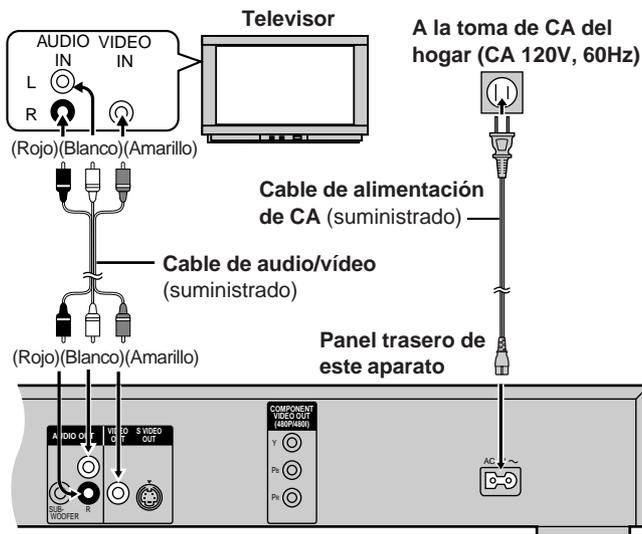
For product information or assistance with product operation:

In the U.S.A., contact the Panasonic Customer Call Center at 1-800-211-7262, or e-mail [consumerproducts@panasonic.com](mailto:consumerproducts@panasonic.com), or web site (<http://www.panasonic.com>).

In Canada, contact Panasonic Canada Inc. Customer Care Centre at 1-800-561-5505, web site ([www.panasonic.ca](http://www.panasonic.ca)), or an authorized Servicentre closest to you.



## Conexión a un televisor



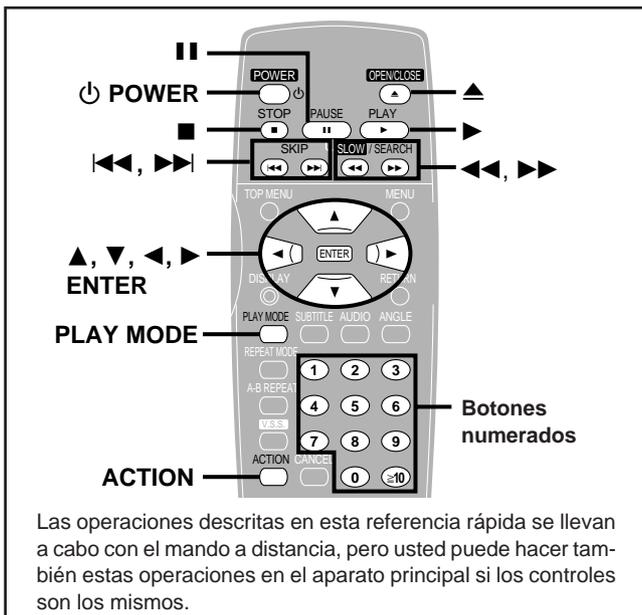
### Para disfrutar del vídeo progresivo

1. Conecte este aparato a los terminales de entrada de vídeo componente (480p) de un televisor compatible con el sistema de protección contra copiado de este aparato. El vídeo no se visualizará correctamente si usted hace la conexión a un televisor que no es compatible con el sistema de protección contra copiado de este aparato.
2. Pulse [PROGRESSIVE OUT] del panel delantero para que se encienda el indicador.

## Cambio del idioma de la pantalla

### Mando a distancia solamente

- 1 Pulse [POWER] para encender el aparato.
- 2 Pulse [ACTION] para visualizar los menús.
- 3 Pulse [◀, ▶] para seleccionar la lengüeta Display.
- 4 Pulse [▲, ▼] para seleccionar "Menu Language" y pulse [ENTER].
- 5 Pulse [▲, ▼] para seleccionar "Español" y pulse [ENTER].
- 6 Pulse [ACTION] para finalizar los ajustes.



Las operaciones descritas en esta referencia rápida se llevan a cabo con el mando a distancia, pero usted puede hacer también estas operaciones en el aparato principal si los controles son los mismos.

## Selección del tipo de pantalla del televisor

### Mando a distancia solamente

- 1 Pulse [ACTION] para visualizar los menús.
- 2 Pulse [◀, ▶] para seleccionar la lengüeta Video.
- 3 Pulse [▲, ▼] para seleccionar "Pantalla de la TV" y pulse [ENTER].
- 4 Pulse [▲, ▼] para seleccionar el elemento y pulse [ENTER].  
4:3 Pan&Scan (ajuste de fábrica)/4:3 Letterbox/16:9
- 5 Pulse [ACTION] para finalizar los ajustes.

## Reproducción básica

DVD VCD CD

- 1 Pulse [▲] para abrir la bandeja del disco y coloque el disco.

### Para salida progresiva

Pulse [PROGRESSIVE OUT] para que se enciendan los indicadores.

- 2 Pulse [▶] (PLAY).

La bandeja del disco se cierra y la reproducción empieza.

• Para detener la reproducción, pulse [■].

• Para hacer una pausa, pulse [⏸] durante la reproducción.

■ Cuando una pantalla de menús aparece en el televisor

DVD VCD

### Mando a distancia solamente

Pulse los botones numerados para seleccionar un elemento.

■ Función de reanudación

#### Parada-reanudación

El aparato recuerda el punto donde usted detuvo la reproducción siempre que se encuentra encendido.

#### Espera-reanudación

Durante la reproducción, pulse [PLAY MODE] en el punto donde desee empezar de nuevo la reproducción. El aparato recuerda el punto aunque usted lo ponga en el modo de espera.

#### Para reanudar la reproducción

Pulse [▶] (PLAY) mientras parpadea "▷" en el visualizador del aparato.

■ Salto de capítulos o pistas

Durante la reproducción o durante la pausa

Pulse [◀◀] o [▶▶].

■ Visión cuadro a cuadro

DVD VCD

Durante la pausa

Pulse [◀] o [▶].

■ Avance rápido y rebobinado—SEARCH

Durante la reproducción

Pulse [◀◀] o [▶▶].

■ Reproducción a cámara lenta

DVD VCD

Durante la pausa

Pulse [◀◀] o [▶▶].

- Pulse [▶] (PLAY) para iniciar la reproducción.
- Durante la visión cuadro a cuadro y la reproducción a cámara lenta, con CDs de vídeo no puede retroceder.
- [◀◀], [◀], [◀◀]: Retroceso
- [▶▶], [▶], [▶▶]: Avance

# Specifications

**Signal system:** NTSC  
**Operating temperature range:** +5 to +35 °C (+41 to +95 °F)  
**Operating humidity range:** 5 to 90 % RH  
(no condensation)

**Discs played:**  
(1) DVD-Video  
(2) CD-Audio (CD-DA)  
(3) Video CD  
(4) CD-R/CD-RW (CD-DA, Video CD formatted discs)

**Video output:**  
Output level: 1 Vp-p (75 Ω)  
Output connector: Pin jack  
Number of connectors: 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  
Number of connectors: 1 system

**Component video output (480P/480i):**  
Y output level: 1 Vp-p (75 Ω)  
P<sub>B</sub> output level: 0.7 Vp-p (75 Ω)  
P<sub>R</sub> output level: 0.7 Vp-p (75 Ω)  
Output connector: Pin jack  
(Y: green, P<sub>B</sub>: blue, P<sub>R</sub>: red)  
Number of connectors: 1 system

**Audio output:**  
Output level: 2 Vrms (1 kHz, 0 dB)  
Output connector: Pin jack  
Number of connectors:  
2CH: 1 system  
Subwoofer output (0.1ch): 1 system

## Audio signal output characteristics:

- (1) Frequency response:
  - DVD (linear audio): 4 Hz–22 kHz (48 kHz sampling)  
4 Hz–44 kHz (96 kHz sampling)
  - CD audio: 4 Hz–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  
**Pickup:** Wave length: 658 nm/790 nm  
Laser power: CLASS IIa/CLASS I

**Power supply:** AC 120 V, 60 Hz

**Power consumption:** 14 W

**Dimensions:** 430 (W)×247 (D)×82 (H) mm  
[16<sup>15/16</sup>" (W)×9<sup>3/4</sup>" (D)×  
3<sup>1/4</sup>" (H)]  
(excluding protrusions)

**Mass:** 2.6 kg (5.7 lb.)

**Power consumption in standby mode:** approx. 2 W

### Note

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

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.

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