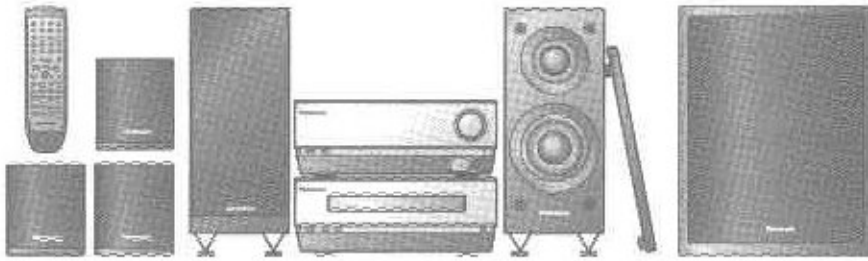


Panasonic

DVD System

Operating Instructions



The illustration shows SC-DT300.

Model No. **SC-DT300**
SC-DT100



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.



As an ENERGY STAR® Partner, Panasonic has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

P PC

Region number supported by this player

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

- The region number of this player is "1".
- The player will play DVD-Video marked with labels containing "1" or "ALL".

Example:



For U.S.A. only

The warranty can be found on page 38 .

RQT6534-P

Dear customer

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

These operating instructions are applicable to models SC-DT300 and SC-DT100.
Unless otherwise indicated, illustrations in these operating instructions are of SC-DT300.

DT300: indicates features applicable to SC-DT300 only.

DT100: SC-DT100 only.

System	SC-DT300	SC-DT100
DVD/CD player	SL-DT300	SL-DT100
AV control receiver	SA-DT300	SA-DT100
Front speakers	SB-DT300	SB-DT100
Center speaker	SB-AFC301	SB-AFC301
Surround speakers	SB-AFC301	SB-AFC301
Subwoofer	SB-W300	SB-W300

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

CAUTION!

DO NOT INSTALL, OR PLACE THIS UNIT, IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.

CAUTION:

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

DANGER - VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EXPOSURE TO BEAM. (FDA 21 CFR)
CAUTION - VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. (IEC60825-1)
ATTENTION - RAYONNEMENT LASER VISIBLE ET INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
ADVARSEL - SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO! - AVATTAESSÄ OLET ALTTIINA NÄKYMÄÄ JA NÄKYMÄTÖN LASERSÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING - SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN.
ADVARSEL - SYNLIG OG USYNLIG LASERSTRÅLING NÄR DEKSEL ÅPNES. UNDGÅ EKSPONERING FOR STRÅLEN.
VORSICHT - SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHLE AUSSETZEN.
注意 - 打开时有可见及不可见激光辐射, 避免激光束照射。
注意 - ここを覗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、射りたりしないでください。 RGL80233

(Inside of product)

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

Notice:

This product has parts that contains a small amount of mercury.

It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations.

For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

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.



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



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.


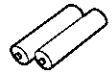
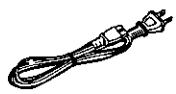




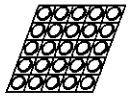
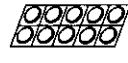

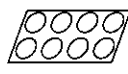

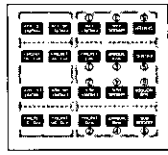



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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.

- 1 Remote control
DT300 (EUR7702KG0)
DT100 (EUR7702KH0)
 
- 2 Batteries for remote control

- 1 AC power supply cord (RJA0065-A)

- 1 AM loop antenna (REK0063)

- 1 FM indoor antenna (RSA0007)

- 1 Video cable (RJL1P019B15)

- 2 Speaker cables DT300 (REX1129)

- 1 Sheet of speaker feet (small) (25 feet)

- 1 Sheet of speaker feet (large) (10 feet)

- 4 Spikes DT300 (RGG0210-S)

- 1 Sheet of speaker pads DT300 (8 pads)

- 1 Cleaning cloth for main unit (RFE0088-1)

- 1 Sheet of speaker-cord stickers (RQCA0950)

- 1 Antenna plug (K2RC021B0001)


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

Getting started

Accessories 3
IMPORTANT SAFETY INSTRUCTIONS 4
Disc information 4
Control reference guide 5

Simple setup

- STEP 1 Locating** 6
- STEP 2 Connecting the speakers** DT100 7
 Connecting the speakers DT300 8
- STEP 3 Television and flat cable** 10
- STEP 4 Antennas and AC power supply cord** .. 11
- STEP 5 The remote control** 11
- STEP 6 Selecting TV screen type** 12

Disc operations

Discs—Basic play 13

- Playing MP3/Resume function 14
- Skipping chapters or tracks 15
- Fast forward and rewind—SEARCH 15
- Slow-motion play/Frame-by-frame viewing 15
- Starting play from a selected title or track 15
- Selecting groups to play 15
- Selecting still pictures—Page Skip 15

Discs—Convenient functions 16

- A-B repeat play/Repeat play 16
- All group play/Program play/Random play 17

Features to increase your enjoyment of movies and music 18

- Soundtracks 18
- To enjoy even higher quality sound—AUDIO ONLY 18
- Other features 18

Using On-Screen Menu Icons 19

- Common procedures 19
- Disc information/Shuttle screen 20
- Unit information 21

Radio operations

The radio: manual tuning 22
The radio: preset tuning 23

Sound quality/sound field operations

Sound field 24

- DOLBY DIGITAL and DTS/DOLBY PRO LOGIC 25
- SUPER SURROUND/CENTER FOCUS 26
- Changing sound field and quality 26
- Adjusting the bass with SUBWOOFER LEVEL 26
- Turning the subwoofer off 26

Other functions

Convenient functions 27

- Muting the volume/Turning off the display 27
- Timer functions/Using headphones 27

Changing settings 28

- Common procedures/Entering a password (Ratings) 29
- Changing the delay time 29

Using the remote control with other equipment .. 30

- Operating a television/Operating a video cassette recorder .. 30
- Changing the remote control code 31
- Language code list 31

**Listening to an external source/
 Recording to other equipment** 32

Optional antenna connections 33


Reference

Troubleshooting guide 34
Disc handling 36
Glossary 36
Specifications 37
Maintenance 37
Limited Warranty (U.S.A.) 38
Product Service 39

Getting started






IMPORTANT SAFETY INSTRUCTIONS

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

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

Disc information

■ Discs that can be played

Disc type	Logo	Indication used in instructions
DVD-Audio		DVD-A
DVD-Video		DVD-V
DVD-R		
Audio CD		CD (Including CD-R/RW and discs recorded with MP3)
Video CD		VCD

■ Discs that cannot be played

PAL discs (the audio on DVD-Audio can be played), DVD-ROM, DVD-RAM, CD-ROM, CDV, CD-G, +RW, DVD-RW, CVD, SVCD, SACD, Divx Video Discs and Photo CD.

■ Playing DVDs and Video CDs

The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions. Read the disc's instructions carefully.

■ CD-R and CD-RW discs

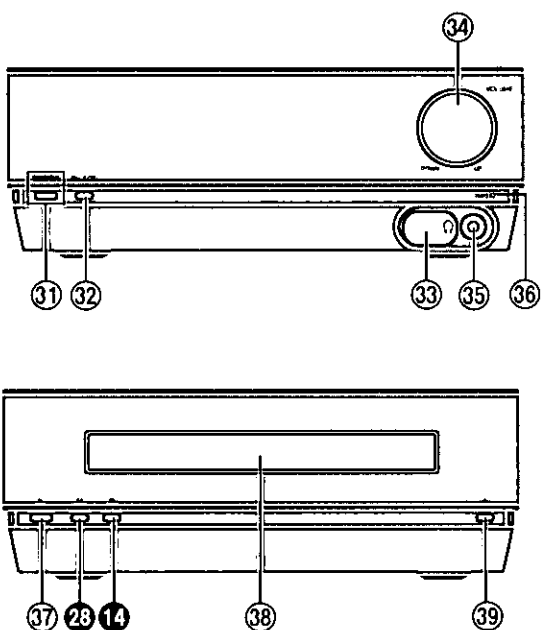
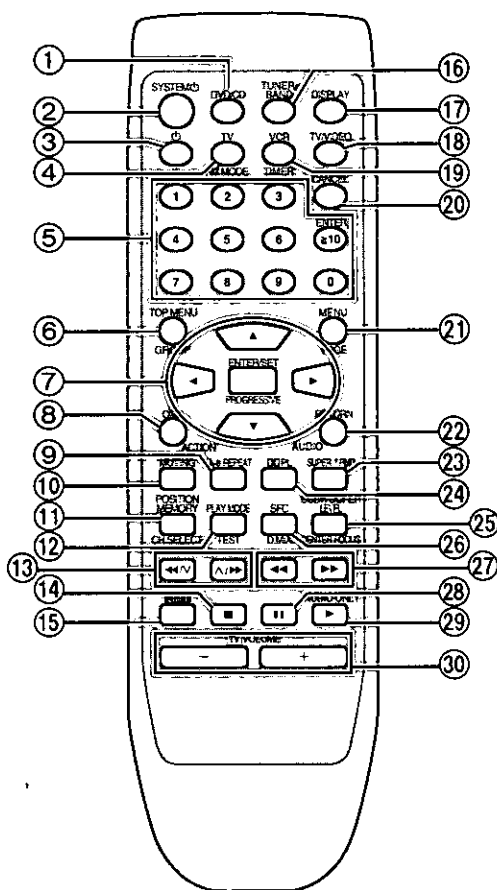
This unit can play CD-DA (digital audio) and video CD format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording.

It may not be able to play some CD-R or CD-RW due to the condition of the recording.

■ DVD-R discs

Panasonic DVD-R recorded and finalized on a Panasonic DVD video recorder are played as DVD-Video on this unit.

It may not be possible to play these discs in all cases due to the type of disc or condition of the recording.



Remote control

- ① DVD/CD button [DVD/CD] 12
- ② Power button [SYSTEM] 12
- ③ Power button for other equipment [] 30
- ④ TV+FM mode button [TV, FM MODE] 22, 30
- ⑤ Numbered buttons [1-9, 0, ≥10, ENTER] 14
- ⑥ Top menu+Group button [TOP MENU, GROUP] 14, 15
- ⑦ Cursor buttons [▲, ▼, ◀, ▶] and
DT300 Enter/Set+Progressive button
 [ENTER/SET, PROGRESSIVE] 12, 13, 23
- DT100** Enter/Set button [ENTER/SET] 12, 23
- ⑧ On-screen menu+Action menu button
 [OSD, ACTION] 12, 19
- ⑨ Repeat+A-B Repeat button [REPEAT, A-B REPEAT] ... 16
- ⑩ Muting button [MUTING] 27
- ⑪ Position memory+Speaker channel select button
 [POSITION MEMORY, CH SELECT] 14, 25
- ⑫ Play mode+Test button [PLAY MODE, TEST] 17, 25
- ⑬ Skip, Channel select buttons
 [◀◀/v, ▲/▶▶] 15, 22, 30
- ⑭ Stop button [■] 13
- ⑮ Shift button [SHIFT]

To use functions labeled in orange:
 While pressing [SHIFT], press the corresponding button
 (indicated with "+" in the instructions).

- ⑯ Tuner/Band button [TUNER/BAND] 22
- ⑰ FL display button [DISPLAY] 27
- ⑱ TV/Video button [TV/VIDEO] 30
- ⑲ VCR+Timer button [VCR, TIMER] 27, 30
- ⑳ Cancel button [CANCEL] 15
- ㉑ Menu+Page button [MENU, PAGE] 14, 15
- ㉒ Return+Audio button [RETURN, AUDIO] 12, 18
- ㉓ Super surround button [SUPER SRND] 26
- ㉔ Dolby Pro Logic button [DDPL] 25
- ㉕ Subwoofer level+Center focus button
 [SUBWOOFER LEVEL, CENTER FOCUS] 26
- ㉖ Sound field control+Down mix button [SFC, D.MIX] . 25, 26
- ㉗ Slow/Search buttons [◀◀, ▶▶] 15
- ㉘ Pause button [||] 13
- ㉙ Play+Audio only button [▶, AUDIO ONLY] 13, 18
- ㉚ Volume+TV Volume buttons
 [VOLUME, TV VOLUME, -, +] 13, 30

Main unit

Buttons ⑬ and ⑭ function the same as the controls on the remote control.

- ⑳ Standby/on switch [PWR] /
- Press to switch the unit from on to standby mode or vice versa.
 In standby mode, the unit is still consuming a small amount of power.
- Standby/on indicator**
 When the unit is connected to the AC mains supply, this indicator lights red in standby mode and lights green when the unit is turned on.
- ㉑ Select button [SELECT] 13
- ㉒ Remote control signal sensor
- ㉓ Volume control [VOLUME, DOWN, UP] 13
- ㉔ Headphone jack [] 27
- ㉕ Wake timer indicator [WAKE] 27
- ㉖ Play button [▶] 13
- ㉗ Disc tray 13
- ㉘ Open/close button [▲] 13

Simple setup

STEP 1 Locating DT300 DT100

Use only supplied speakers

Using other speakers can damage the unit and sound quality will be negatively affected.

Set the speakers up on an even surface to prevent them from falling. Take proper precautions to prevent the speakers from falling if you cannot set them up on an even surface.

Place the front, center, and surround speakers at approximately the same distance from the seating position. The angles in the diagram are approximate.

Front speakers (① Left ② Right)

DT300 SB-DT300

DT100 SB-DT100



- Place at least 15 cm (5 1/16") away from wall surfaces to avoid distortion and unwanted acoustical effects.
- The left and right speakers are the same.

Center speaker (⑤) SB-AFC301

- You can also put this speaker directly under the television.
- Do not place the center speaker on the main unit as sound quality will be affected.
- Vibration caused by the center speaker can disrupt the picture if it is placed directly on the television. Put the center speaker on a rack or shelf.

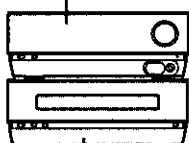
Main unit

Note

Keep your speakers at least 10 mm (1 3/16") away from the system for proper ventilation.

Stacking

AV control receiver



DVD/CD Player

Subwoofer (⑥) SB-W300

Place near the television, on the floor or a sturdy shelf so that it won't cause vibration.

Surround speakers (③ Left ④ Right) SB-AFC301

Place either side of the seating position, or slightly to the rear, about 1 meter (3 feet) higher than ear level.

- The left and right speakers are the same.

- After you have completed setup and connection, wind the excess cord and keep together with string.
- The front speaker nets can be removed.

Notes on speaker use

- You can damage your speakers and shorten their useful life if you play sound at high levels over extended periods.
- Reduce the volume in the following cases to avoid damage.
 - When playing distorted sound.
 - When the speakers are receiving howling from a microphone or record player, noise from FM broadcasts, or continuous signals from an oscillator, test disc, or electronic instrument.
 - When adjusting the sound quality.
 - When turning the unit on or off.

Caution

- Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- Do not attempt to attach these speakers to walls using methods other than those described in this manual.



If irregular coloring occurs on your television

These speakers are designed to be used close to a television, but the picture may be affected with some televisions and setup combinations.

If this occurs, turn the television off for about 30 minutes.

The television's demagnetizing function should correct the problem. If it persists, move the speakers further away from the television.

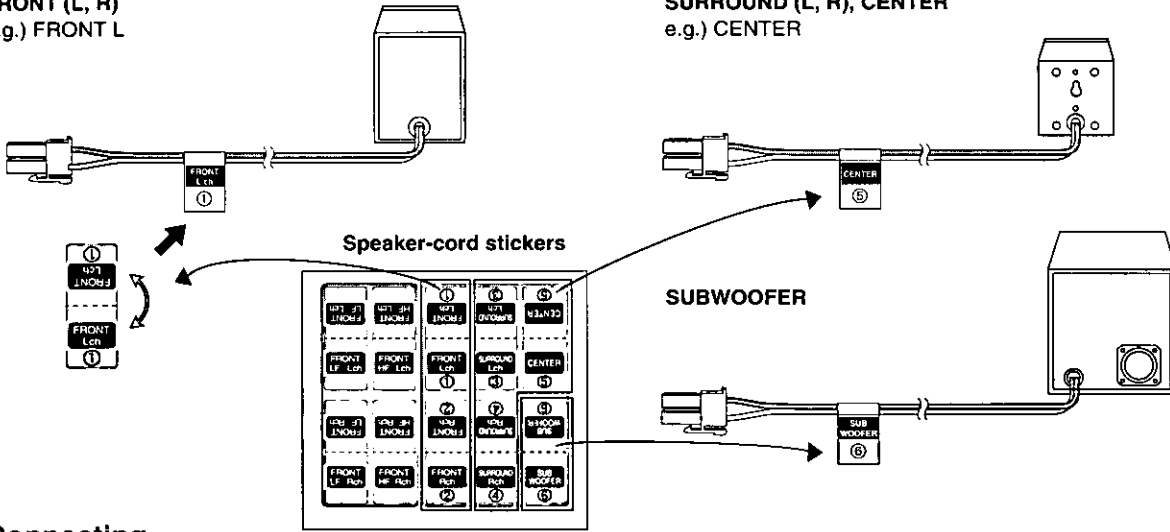
STEP 2 Connecting the speakers DT100

1 Attach the stickers to the speaker cords.

Attach the speaker-cord stickers to make connection easier.

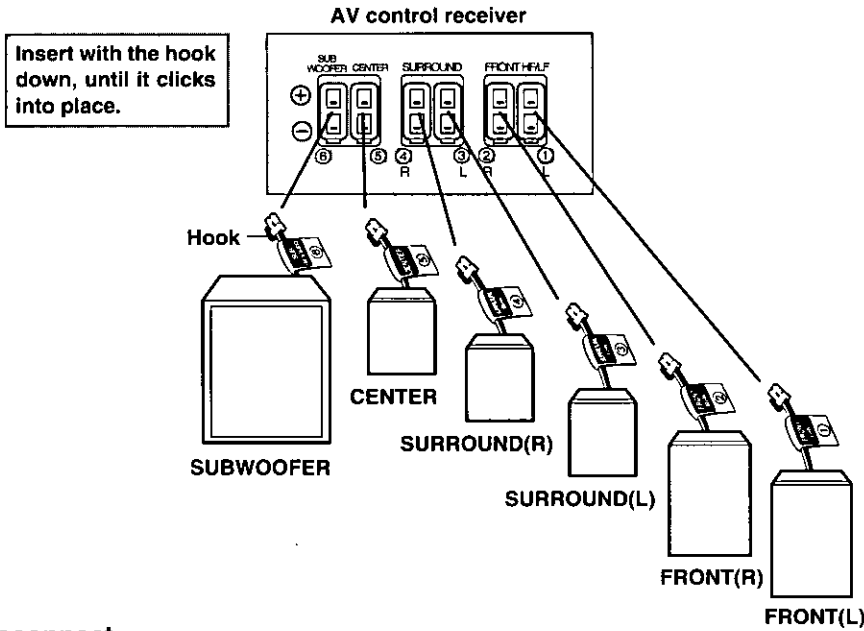
FRONT (L, R)
e.g.) FRONT L

SURROUND (L, R), CENTER
e.g.) CENTER



2 Connecting

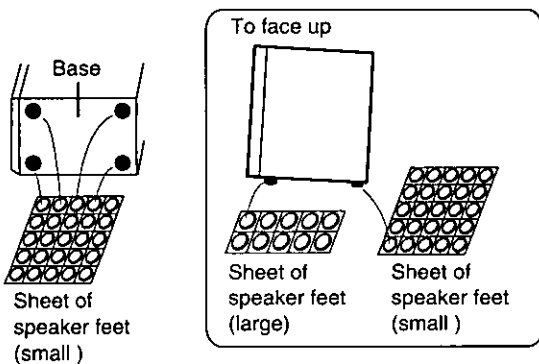
Match the labels on the speaker stickers with the labels on the terminals.



To disconnect
Press on the hook and pull.

3 Attach the speaker feet.

- Attach the speaker feet to the bases of the speakers to help stop them from moving due to vibration.
- You can set the speakers up at an angle by attaching two large speaker feet to the front of each speaker.



To attach center and surround speakers to a wall or speaker stands (→ page 9)

Simple setup

Simple setup

STEP 2 Connecting the speakers DT300

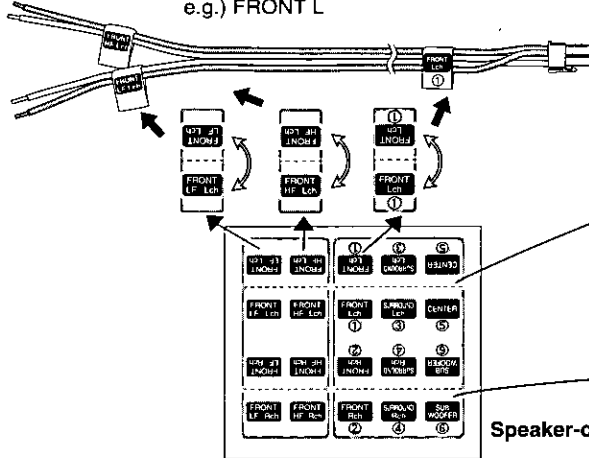
These front speakers are bi-wired for high quality sound reproduction.

1 Attach the stickers to the speaker cords.

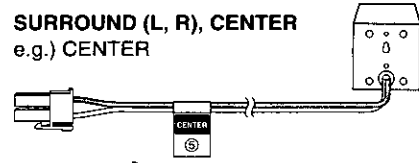
Attach the speaker-cord stickers to make connection easier.

FRONT (L, R)

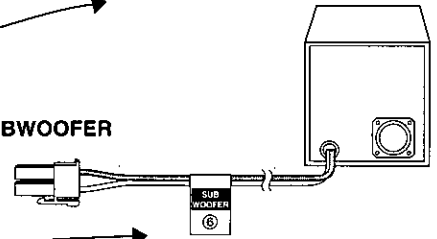
e.g.) FRONT L



SURROUND (L, R), CENTER
e.g.) CENTER



SUBWOOFER

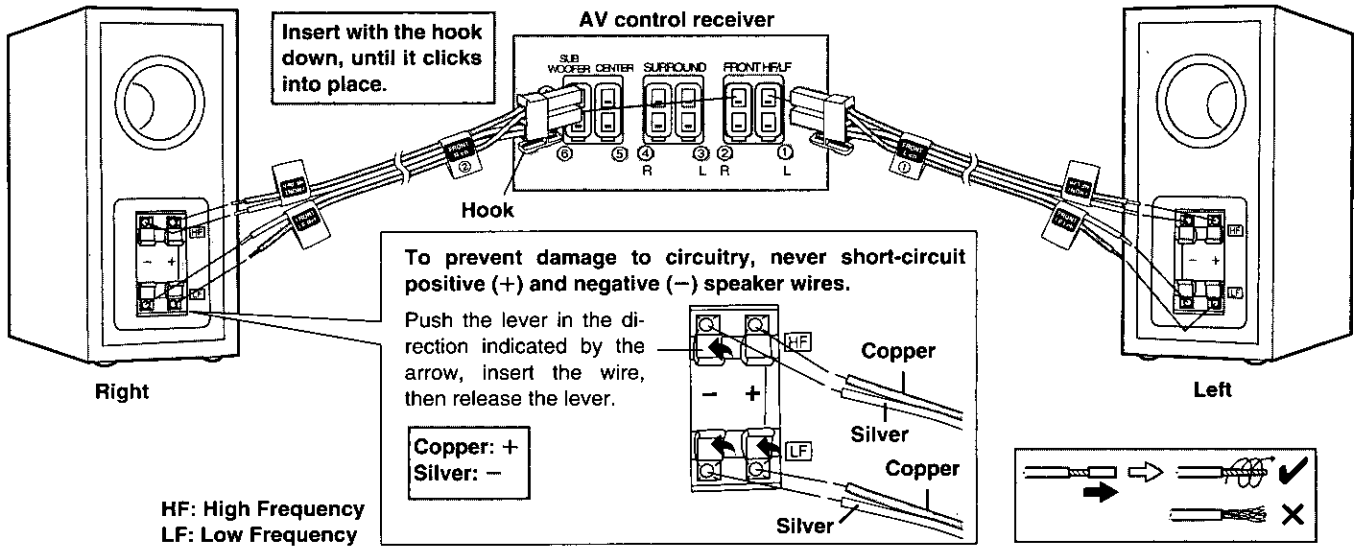


Speaker-cord stickers

2 Connecting

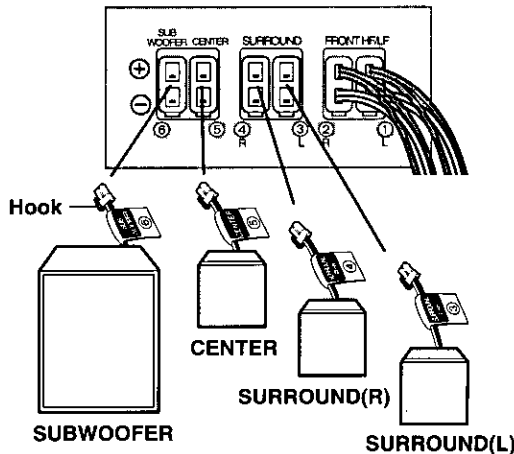
Match the labels on the speaker stickers with the labels on the terminals.

FRONT



SURROUND, CENTER, SUBWOOFER

AV control receiver

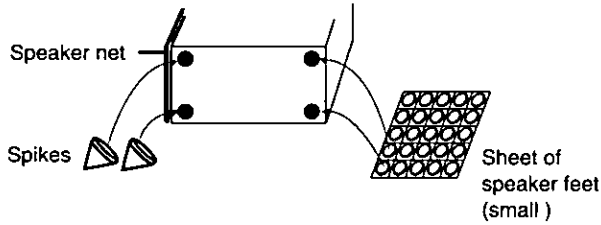


To disconnect

Press on the hook and pull.

3 Attach the spikes and speaker feet to the bases of the front speakers.

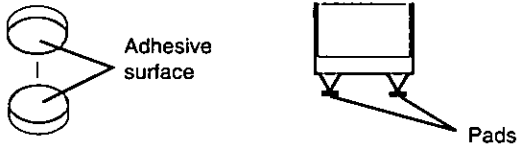
These help stop the speakers from moving due to vibration and also change their angle.



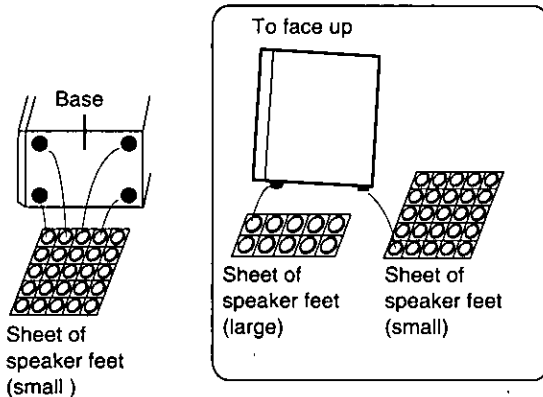
- Remove the seals from the adhesive surfaces of the spikes and speaker feet.
- Be sure to attach the spikes to the front of the speaker's base.

To protect surfaces from scratching

1. Adhere two pads together.
2. Place the pads under the spikes.



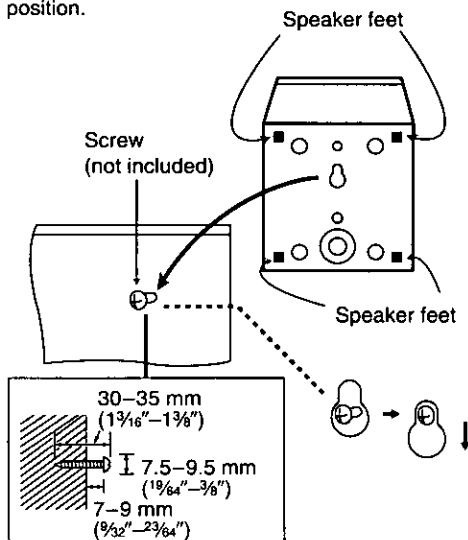
- If you put the speakers in a position where it is not appropriate to attach the spikes, attach speaker feet in their place.
- Use speaker feet for the remaining speakers.
- You can set the surround and center speakers up at an angle by attaching two large speaker feet to the front.



DT300 DT100

Attaching to a wall

Center and surround speakers can be attached to a wall. Set the speaker onto screw and slide through bracket to lock into position.



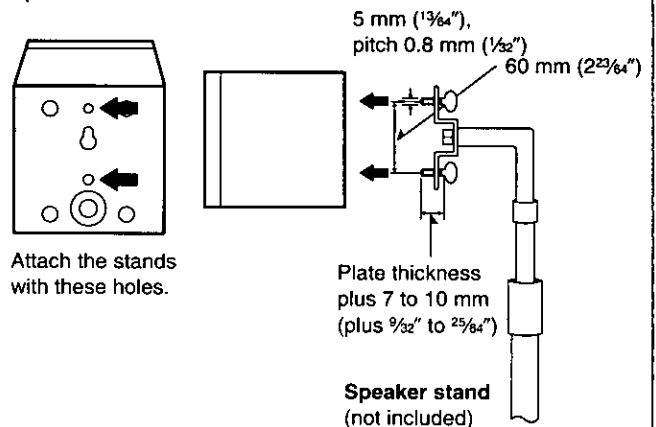
Note

The wall or pillar on which the speakers are to be attached should be capable of supporting 10 kg (22 lb.) per screw.

Attaching to speaker stands

Ensure the following conditions are met when you purchase your speaker stands.

- Observe the diameter and length of the screws and the distance between screws as shown in the diagram.
- The stands must be able to support over 10 kg (22 lb.).
- The stands must be stable even if the speakers are in a high position.



Simple setup

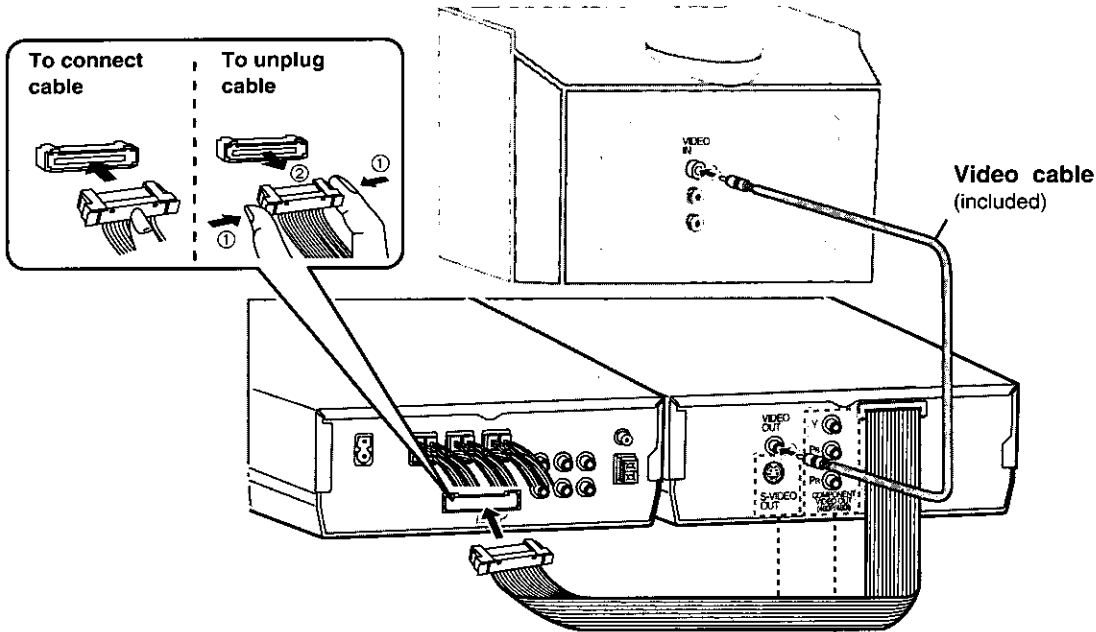
STEP 3

Television and flat cable **DT300** **DT100**

Connect directly to your television.

Do not connect the unit through a video cassette recorder, because the picture may not be played correctly due to the copy guard.

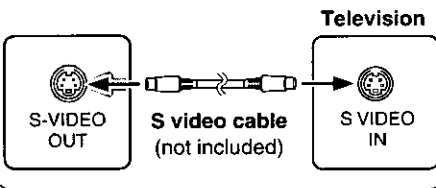
Simple setup



For better images S-VIDEO OUT terminal

The S-VIDEO OUT terminal achieves a more vivid picture than the VIDEO OUT terminal by separating the chrominance (C) and luminance (Y) signals before transmitting them to the television.

(Actual results depend on the television.)



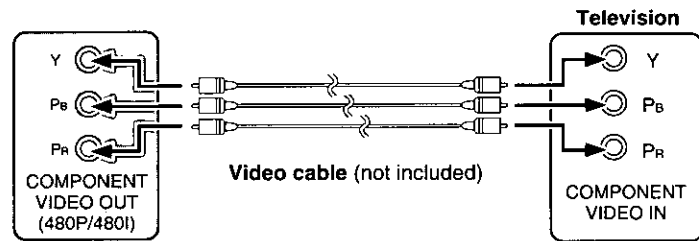
For better images

DT300

COMPONENT VIDEO OUT terminal (see below)

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_B/P_R) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors.



DT300

COMPONENT VIDEO OUT terminal

- The description of the component video input terminals depends on the television or monitor (e.g. Y/P_B/P_R, Y/B-Y/R-Y, Y/C_B/C_R). Connect to terminals of the same color.
- After making this connection, change the black level for a better picture (⇒ page 28, 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 [SHIFT]+[PROGRESSIVE] on the remote control so the "PROGRESSIVE" indicator lights (⇒ page 13).

NOTE

This unit does not output video signals from the VIDEO OUT and S-VIDEO OUT terminals when the "PROGRESSIVE" indicator is on.

Note

- The screen may shift off center when using progressive output. Adjust the position of the screen if this occurs (⇒ page 21, Video menu—Horizontal position).
- Video will not be displayed correctly if you connect to a television that is incompatible with this unit's copy guard system.

For your reference

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

STEP 4

Antennas and AC power supply cord

DT300 DT100

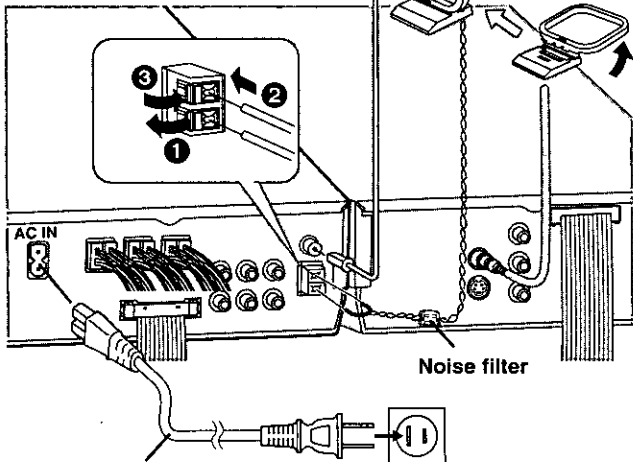
FM indoor antenna

Fix the other end of the antenna where reception is best.

Adhesive tape

AM loop antenna

Stand the antenna up on its base.
Keep loose antenna cord away from other wires and cords.



AC power supply cord (included)

To household AC outlet (AC 120V, 60 Hz)

•Leave the noise filter attached.

Conserving power

The unit consumes power (approx. 0.5 W) even when it is turned off with [SYSTEM]. To save power when the unit is not to be used for a long time, unplug it from the household AC outlet. Remember to reset the radio stations and any other memory items before using the unit again.

For your reference

Information you enter into the unit's memory remains intact for up to a week after the AC power supply cord is disconnected.

STEP 5

The remote control

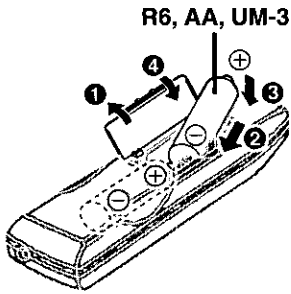
DT300 DT100

Batteries

Do not;

- mix old and new batteries.
 - use different types at the same time.
 - heat or expose to flame.
 - take apart or short circuit.
 - attempt to recharge alkaline or manganese batteries.
 - use batteries if the covering has been peeled off.
- Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire.

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



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

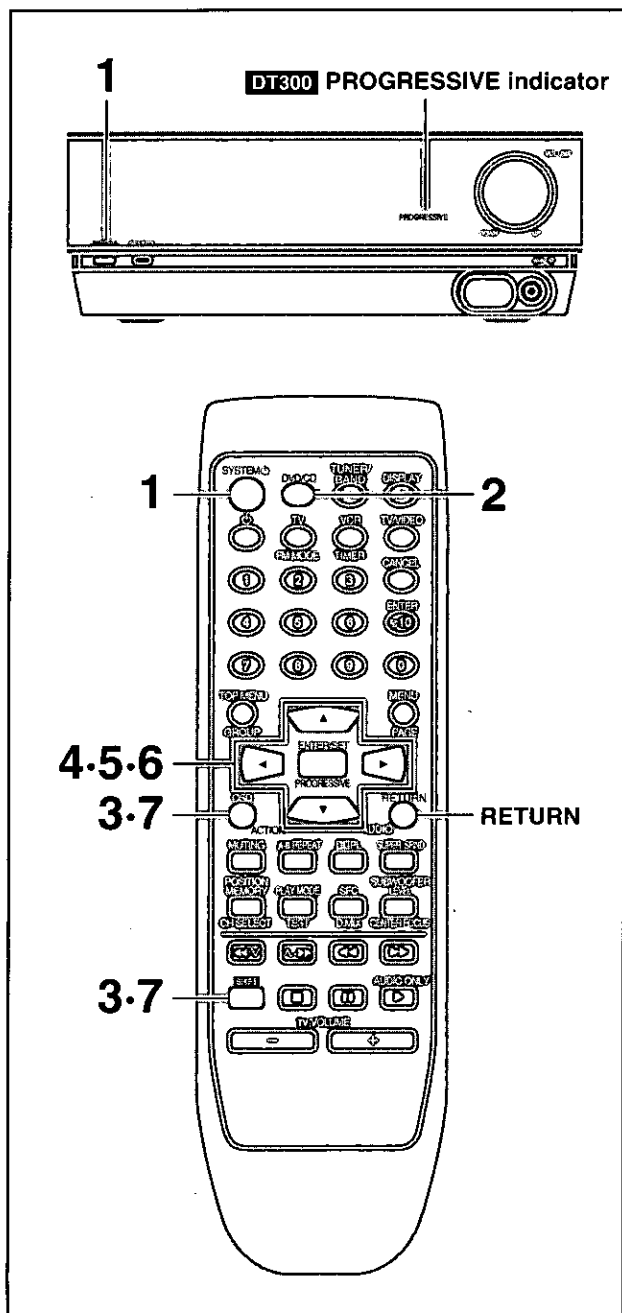
Use

Aim at the sensor (→ page 5), avoiding obstacles, at a maximum range of 7 m (23 feet) directly in front of the unit.

Simple setup

Simple setup

STEP 6 Selecting TV screen type **DT300** **DT100**



Change the setting to suit your television.

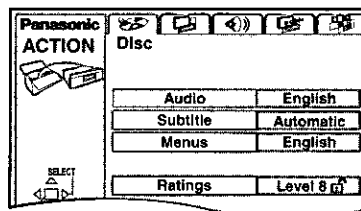
The menu language is set to English, but you can change it (→ page 28, Display—Menu Language). English is used in the examples.

Preparation

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

- 1 Press [SYSTEM] to turn on the unit.
- 2 Press [DVD/CD] to select "DVD".

- 3 Press [SHIFT]+[ACTION] to show the menus.



- 4 Press [◀, ▶] to select the "Video" tab.
- 5 Press [▲, ▼] to select "TV Aspect" and press [ENTER/SET].
- 6 Press [▲, ▼] to select the item and press [ENTER/SET].

•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.



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

•4:3 Letterbox

Select if you have a regular television and to view 16:9 software in the letterbox style.



•16:9

Select if you have a widescreen (16:9) television. Use the television's screen modes to change the way the picture is shown.

- 7 Press [SHIFT]+[ACTION] to end the settings.

To return to the previous screen
Press [RETURN].

DT300

- When viewing video made for a standard 4:3 aspect television on a wide 16:9 aspect television using progressive output

This unit shows the correct aspect when playing wide 16:9 aspect software, but when showing standard 4:3 aspect software, the picture is stretched horizontally to fill the screen.

- If your television can change the aspect when input is progressive

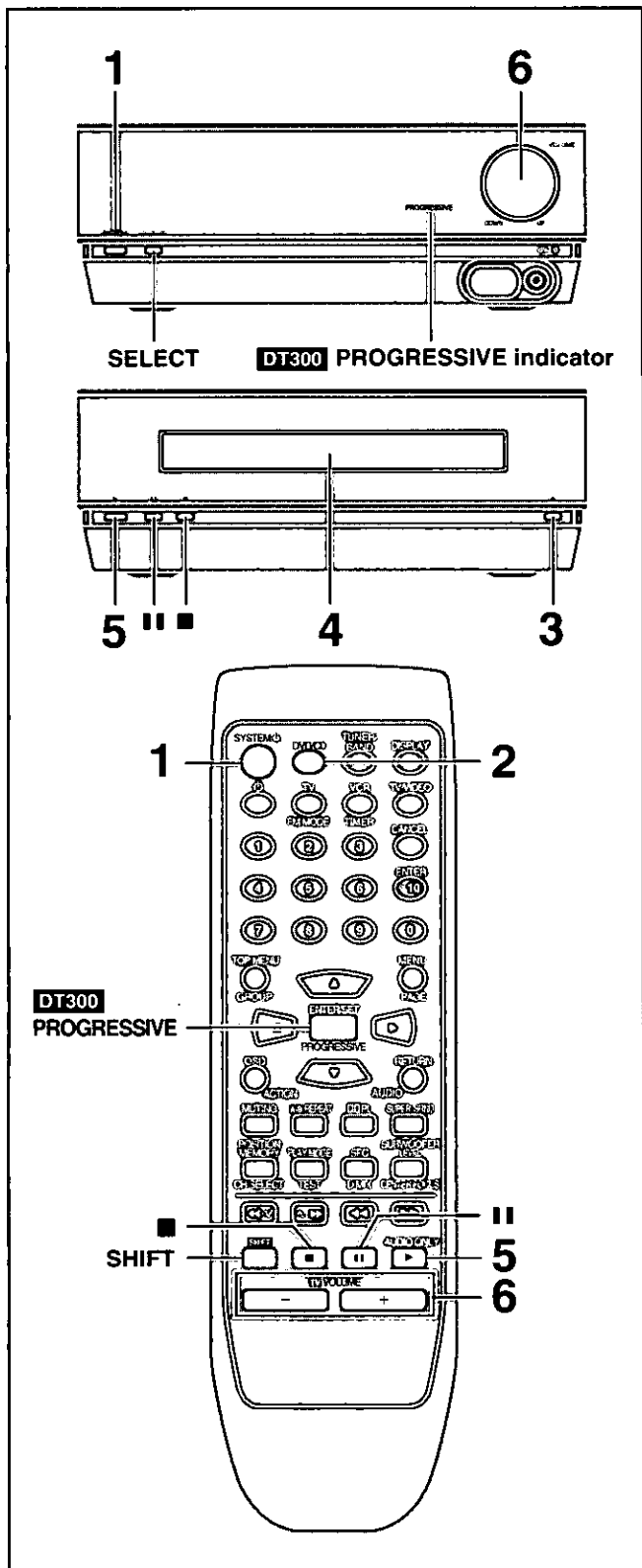
Use the television to change the aspect to the correct one.

- If your television cannot change the aspect when input is progressive

Press [SHIFT]+[PROGRESSIVE] so the "PROGRESSIVE" indicator goes out. Output will now be interlace.

NOTE

This unit does not output video signals from the VIDEO OUT and S-VIDEO OUT terminals when the "PROGRESSIVE" indicator is on.



DVD-A DVD-V CD VCD

Preparation

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

- 1 Press [SYSTEM] to turn on the unit.
- 2 Press [DVD/CD] to select "DVD" as the source.

•Main unit: Press [SELECT].
Each time you press the button:
DVD→TV<AUX>→VCR<EXT>→FM→AM

DT300

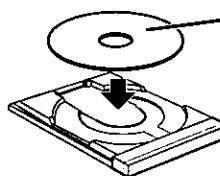
For progressive output:

Press [SHIFT]+[PROGRESSIVE] so the "PROGRESSIVE" indicator lights.

NOTE

This unit does not output video signals from the VIDEO OUT and S-VIDEO OUT terminals when the "PROGRESSIVE" indicator is on.

- 3 Press [▲] to open the disc tray.
- 4 Place the disc on the disc tray.
Press again [▲] to close and start play.



Label must face upward.
(With double-sided discs, load so the label for the side you want to play is facing up.)

- 5 If play doesn't start after step 4
Press [▶] (PLAY).
- 6 Adjust the volume.

■ When "D.MIX" is flashing (⇒ page 25)

■ To stop play

Press [■] (⇒ page 14, Resume function).

■ To pause play

Press [⏸] during play.

Press [▶] (PLAY) to restart play.

Note

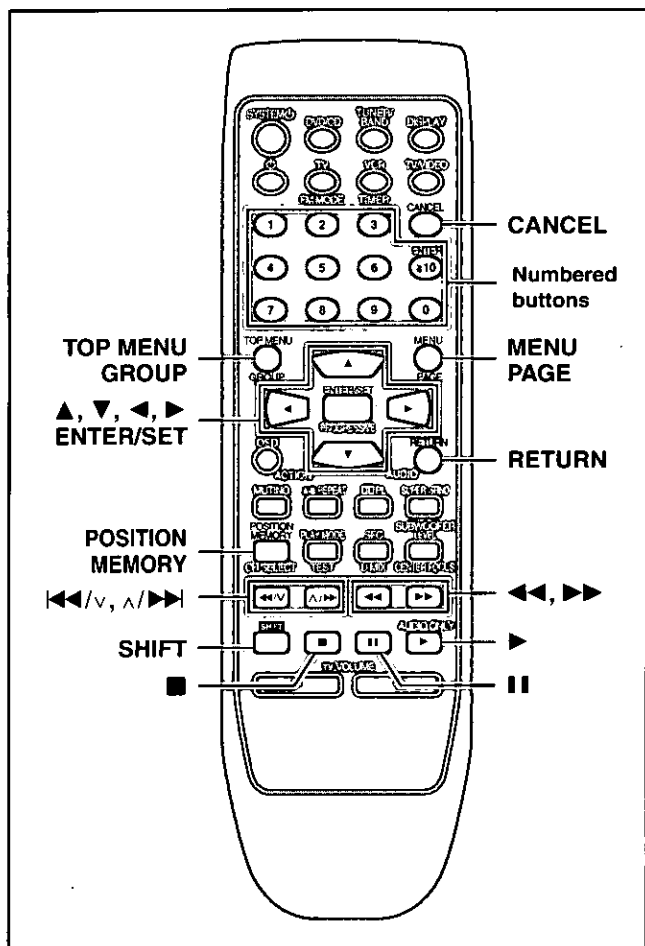
•If "⊘" appears on the television

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, be sure to reduce the volume again before playing other sources so that a sudden increase in output does not occur.



When a menu appears on the television

DVD-A DVD-V VCD

Press the numbered buttons to select an item.

To select a 2-digit number

Example: To select item 23, press [≥ 10 , ENTER] \rightarrow [2] \rightarrow [3].

- When playing DVDs, you can also use [\blacktriangle , \blacktriangledown , \blacktriangleleft , \blacktriangleright] to select items. Press [ENTER/SET] to confirm your selection.

Play of the selected item now begins.

Other buttons used to operate menus

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

[\blacktriangleleft / \blacktriangleright]: Shows the next menu.

[\blacktriangleright / \blacktriangleleft]: Shows the previous menu.

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

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

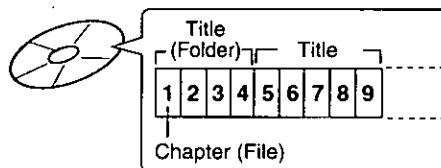
[MENU]: Shows the menu screen. **DVD-V**

Playing MP3

CD

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

- Structure of the disc (example)



- Starting play from a selected chapter

Press the numbered buttons and press [ENTER/SET].

Example: Chapter 23: [2] \rightarrow [3] = [ENTER/SET]

(Pressing [≥ 10 , ENTER] is unnecessary.)

- Repeat play

You can use chapter repeat or title repeat (\Rightarrow page 16).

- Program play, random play

You cannot use program play or random play.

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.
- This unit is not compatible with files with a sampling rate of 32 kHz.

Refer to the glossary on page 36 for more information about MP3.

Resume function

DVD-A DVD-V CD VCD

(When the elapsed play time is displayed)

"RESUME" lights on the display when the unit has recorded the position at which you stopped play.

Press [\blacktriangleright] (PLAY) to start play from that position.

(When playing DVD-Video \Rightarrow Chapter Preview below)

- The position is cleared when you:
 - Turn the unit off.
 - Open the disc tray or select another source.
- Press [\blacksquare] to clear the position.

Position Memory function **DVD-V CD VCD**

During play

Press [POSITION MEMORY] to memorize a position.

Position memorized

This position is saved if you turn the unit off or change the source.

When you turn the unit on or reselect "DVD", "RESUME" lights on the display.

Press [\blacktriangleright] (PLAY) to start play from the memorized position.

The position is cleared.

(When playing DVD-Video \Rightarrow Chapter Preview below)

- The position is cleared when you open the disc tray.

Chapter Preview **DVD-V**

The following message appears immediately after you press [\blacktriangleright] (PLAY).

Press PLAY to Preview Chapters

Press [\blacktriangleright] (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 pressed [\blacksquare] or [POSITION MEMORY]. (This feature works only within a title.)

If you do not press [\blacktriangleright] (PLAY), the message disappears and play starts from where you pressed [\blacksquare] or [POSITION MEMORY].

Skipping chapters or tracks

DVD-A DVD-V CD VCD

During play or while paused

Press [**⏮**/V] or [^/▶▶].

•Each press increases the number of skips.

Fast forward and rewind—SEARCH

DVD-A DVD-V CD VCD

During play

Press [**⏮**] or [**▶▶**].

•Audio will be heard during search for most discs. You can turn this audio off if you want to (⇒ page 28, Audio—Audio during Search).

Slow-motion play

DVD-A DVD-V VCD

While paused

Press [**⏮**] or [**▶▶**].

Frame-by-frame viewing

DVD-A DVD-V VCD

While paused

Press [**◀**] or [**▶**].

The frame changes each time you press the button.

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

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 slow-motion and frame-by-frame.
- Slow-motion and frame-by-frame only work on the moving picture parts of DVD-Audio.

When playing Video CDs with playback control

Pressing buttons to perform skip, search or slow-motion may take you to a menu screen.

Starting play from a selected title or track

DVD-A DVD-V CD VCD

Press the numbered buttons to select the item.

To select a 2-digit number

Example: To select track 23, press [**≥10**, ENTER] ⇒ [2] ⇒ [3].

Play starts from the selected item.

Note

This works only when stopped with some discs.

Selecting groups to play

DVD-A

The tracks on DVD-Audio are divided into groups. How these groups are played differs with the disc so read the instructions that came with the disc for further details.

1 Press [SHIFT]+[GROUP].



2 Press the numbered buttons to select the group and press [ENTER/SET].

3 Press the numbered buttons to select the track number and press [ENTER/SET].

The selected group and track begin to play.

Playing all the groups in succession (⇒ page 17, All group play)

Playing bonus groups

Some discs contain bonus groups. To enjoy these groups you may have to enter a password. Refer to the disc's jacket.

1. Press [SHIFT]+[GROUP] to select the bonus group and press [ENTER/SET].
2. Enter the 4-digit password with the numbered buttons and press [ENTER/SET].
 - If you enter the wrong password, you can erase a digit by pressing [CANCEL].
3. Press the numbered buttons to select a track and press [ENTER/SET].

•The password is cleared when you:

- Turn the unit off.
- Open the disc tray.
- Select another source.

Selecting still pictures—Page Skip

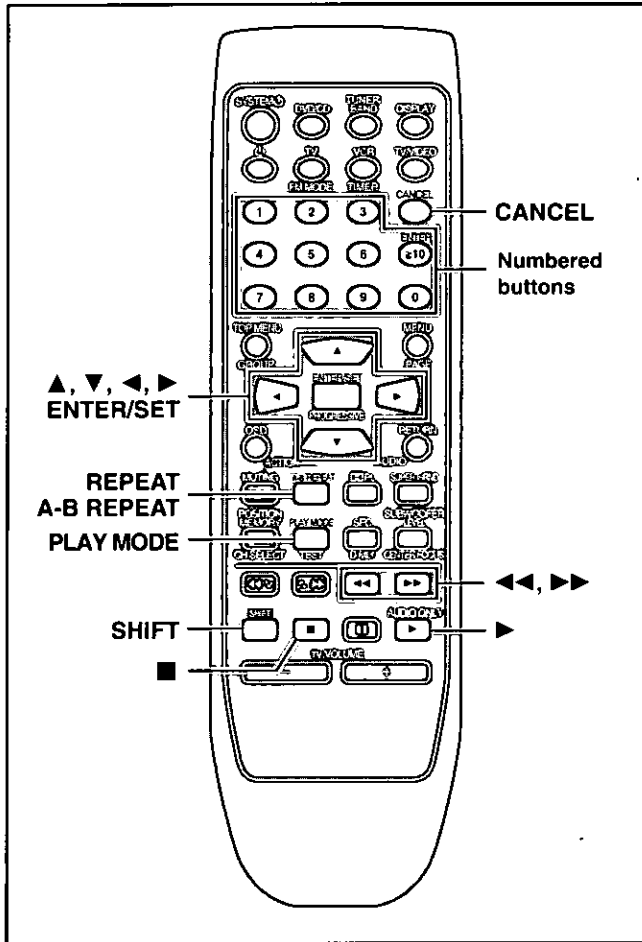
DVD-A

During play

Press [SHIFT]+[PAGE].

The page changes each time you press the buttons.

PAGE 1



A-B repeat play

DVD-A DVD-V CD VCD

(When the elapsed play time is displayed)

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

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



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



A-B repeat starts.

To cancel

Press **[SHIFT]+[A-B REPEAT]** until "  " is displayed.

Note

- Some subtitles recorded around point A or B may fail to appear.
- The unit automatically determines the end of a title/track as point B when the end of the title/track is reached.

Repeat play

DVD-A DVD-V CD VCD

(When the elapsed play time is displayed)

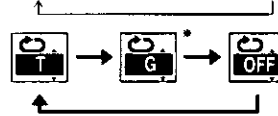
During play

Press **[REPEAT]**.

Each time you press the button:

DVD-A

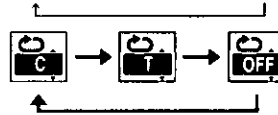
Track → Whole group → OFF



* During All group, Program, or Random play mode, "A" is displayed instead of "G".

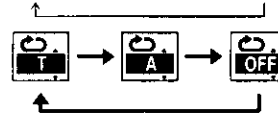
DVD-V CD (MP3 disc)

Chapter → Title → OFF



CD VCD

Track → Entire disc → OFF



If the Video CD has playback control

1. Press **[■]**.
2. Press the numbered buttons to select a track to start play (⇒ page 15).
3. Press **[REPEAT]** (⇒ above).

Note

You cannot use repeat play to repeat an entire DVD-Video or an entire MP3 disc.

■ To repeat only your favorite tracks

DVD-A CD VCD

Start program play (⇒ page 17) and press **[REPEAT]** to select the repeat mode.

All group play/Program play/Random play

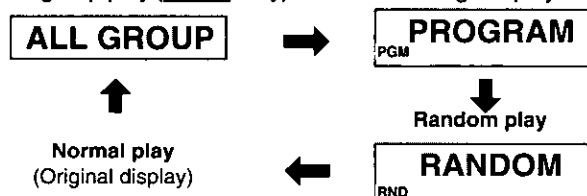
DVD-A **CD** **VCD**

While stopped

Press **[PLAY MODE]** to select the play mode.

The mode changes as follows each time you press the button.

All group play (**DVD-A** only)

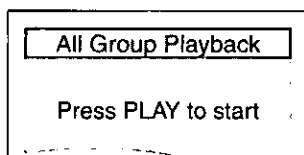


After selecting the mode, follow the steps for the mode.

DVD-A If you select bonus groups, you will have to enter a 4-digit password (→ page 15).

All group play **DVD-A**

To play all the groups in succession

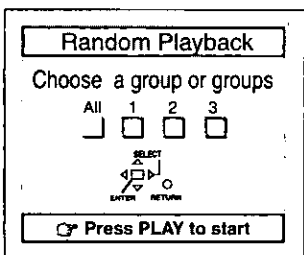


Press **[▶]** (PLAY).

Random play

To play tracks randomly

e.g. **DVD-A** (three groups)



1 **DVD-A**
Press **[◀, ▶]** to select a group and press **[ENTER/SET]**.

• You can select more than one group.

2 Press **[▶]** (PLAY).

Play now begins in random order.

To clear a group **DVD-A**

Press **[◀, ▶]** to select the group you want to clear, then press **[ENTER/SET]**.

Normal play

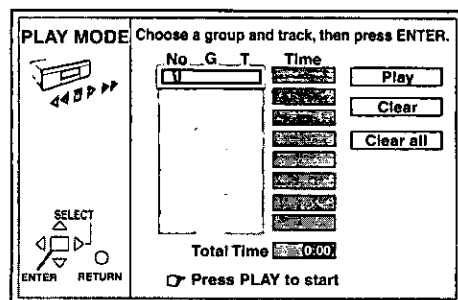
Play modes are canceled and the program is cleared when you:

–Turn the unit off.

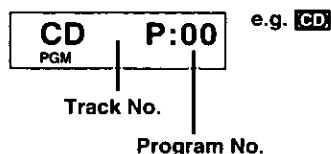
–Open the disc tray or select another source.

Program play

To play a maximum of 24 tracks in a programmed order



e.g. **DVD-A**



1 **DVD-A**
Press the numbered buttons to select a group.

2 Press the numbered buttons to select a track.

• Repeat steps 1 and 2 to program other tracks.

• To select a track using the cursor buttons

Press **[ENTER/SET]** and **[▲, ▼]** to select a group or track, then press **[ENTER/SET]** again to register the number.

All the tracks in the group or on the disc are selected when you select "ALL".

3 Press **[▶]** (PLAY).

Play now begins in the programmed sequence.

• Changing the program

Press **[▲, ▼]** to select an item.

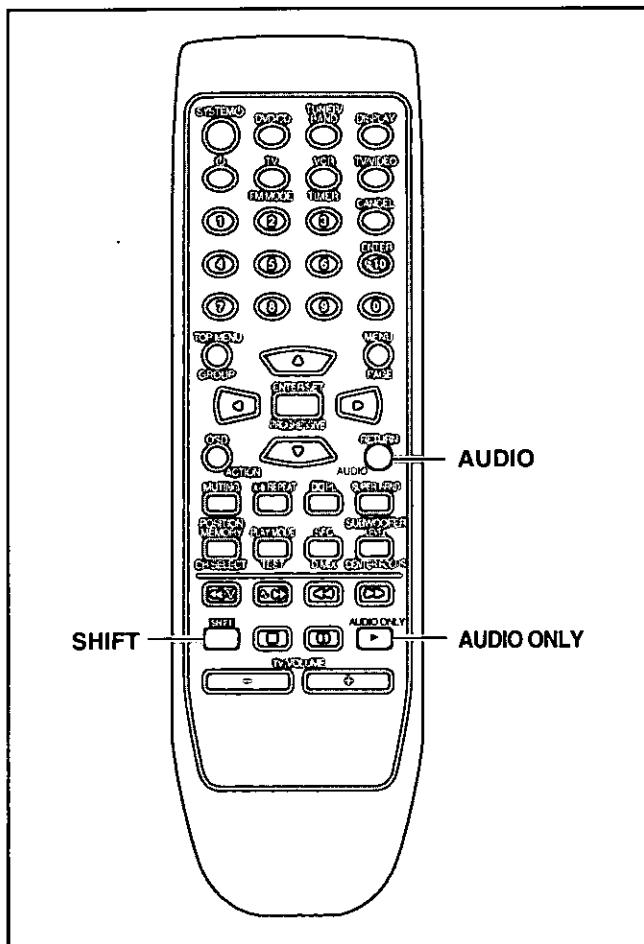
–To change an item, repeat steps 1 and 2.

–To clear an item, press **[CANCEL]** (or select "Clear" and press **[ENTER/SET]**).

Press **[◀◀]** or **[▶▶]** to change pages.

• To clear the whole program

Select "Clear all" and press **[ENTER/SET]**.



To enjoy even higher quality sound —AUDIO ONLY

DVD-A | DVD-V | CD | VCD

You can enjoy higher quality audio by stopping the video signal.

Press [SHIFT]+[AUDIO ONLY].

AUDIO ONLY

AUDIO ONLY is canceled if you press the buttons again or turn the unit off.

Note

- Video signals are output while the disc is stopped and when operations such as searching are performed. The television screen can appear unusual while video signals are not being output.
- The television may be distorted when video signals are turned on and off when you turn AUDIO ONLY on and off, but this is not a malfunction.

Other features

You can access the following features with the on-screen menu (see pages 19 to 21 for details):

- **Subtitles:** change the language and turn subtitles on and off.
- **Angle:** change the camera angle if available on the disc.
- **Dialogue Enhancer:** makes the dialogue in movies easier to hear.
- **Re-master:** converts standard CD signals so sound quality approaches that of DVD-Audio.
- **Digital picture mode:** select the preset Cinema mode to mellow images and enhance details in dark scenes, or make your own settings with the User mode.

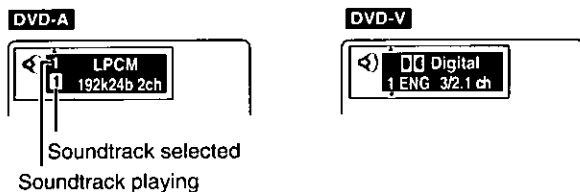
Soundtracks

DVD-A | DVD-V

During play

Press [SHIFT]+[AUDIO].

The number changes each time you press the button.

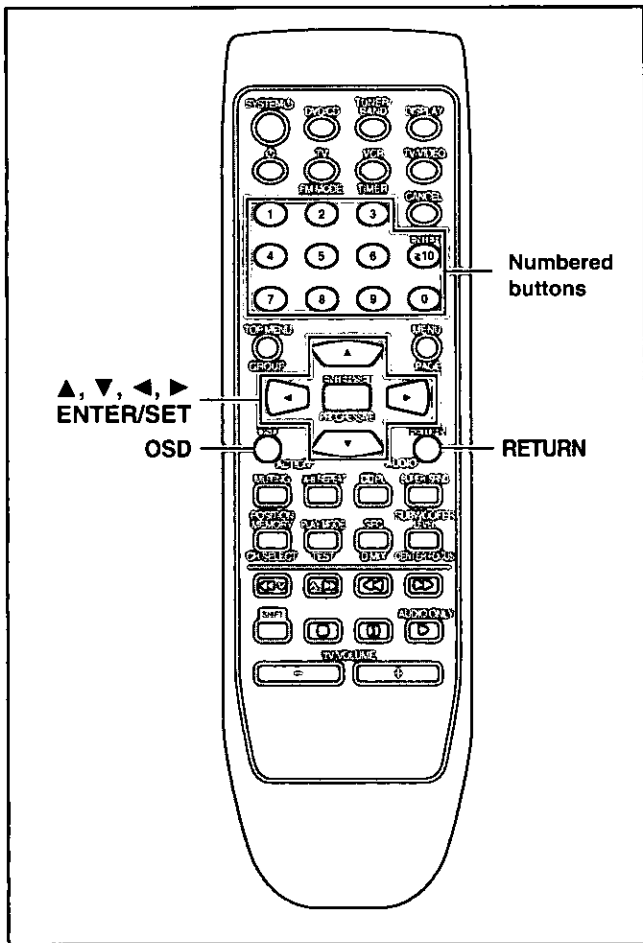


- “-” or “--” is displayed instead of the language number in circumstances such as when no language is recorded on the disc.
- Play restarts from the beginning of the soundtrack when changing DVD-Audio soundtracks that are accompanied by still pictures.
- Even if a second soundtrack isn't recorded on a DVD-Audio, two soundtrack numbers will normally be shown when you press [SHIFT]+[AUDIO]. The soundtrack currently playing is number 1.
- 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 20 for language abbreviations and audio signal type details.

VCD

Audio changes as follows each time you press [SHIFT]+[AUDIO]:

LR→L→R



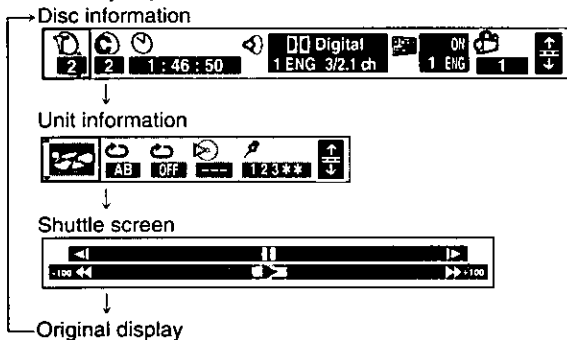
On-Screen Menu Icons are menus that contain information about the disc or unit. These menus allow you to perform operations by changing this information.

DVD-A DVD-V CD VCD

Common procedures

1 Press [OSD].

Each time you press the button:



•The screens depend on disc contents.

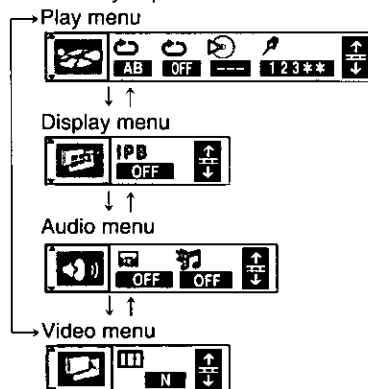
2

Unit information only

While the leftmost icon is highlighted

Press [\blacktriangle , \blacktriangledown] to select the menu.

Each time you press the button:



3

Press [\blacktriangleleft , \blacktriangleright] to select the item.

4

Press [\blacktriangle , \blacktriangledown] to select the setting.

- Items with " \blacktriangle " or " \blacktriangledown " above and below can be changed by [\blacktriangle , \blacktriangledown].
- Press [ENTER/SET] if the setting does not change after pressing [\blacktriangle , \blacktriangledown].
- 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. After entering the numbers, press [ENTER/SET] to register the setting.

To clear the menus

Press [RETURN] until the menus disappear.

■ To change the position of the menus

1. Press [\blacktriangleleft , \blacktriangleright] to select the rightmost menus.
2. Press [\blacktriangle , \blacktriangledown] to move the menus. (There are 5 positions.)



Disc information

e.g. DVD-Video



Icon	Content
	DVD-A Group number
	DVD-A CD VCD Track number DVD-V Title number
	DVD-V Chapter number
	DVD-A DVD-V Time Select a position to start play by specifying a time with the numbered buttons. DVD-A CD VCD Changing the time display Press [▲ , ▼] to show the elapsed play time, remaining time for the track, or remaining time for the disc/group.
	DVD-A DVD-V Soundtrack <ul style="list-style-type: none"> Ⓐ Soundtrack language (See A below for language abbreviations.) Ⓑ Audio signal type (See B below for details.)
	Karaoke vocal on/off (Karaoke DVD only) Solo: OFF or ON Duet: OFF, V1+V2, V1 or V2

Icon	Content
	DVD-A DVD-V Subtitle language (See A below for language abbreviations.)
	Subtitles on/off ON ↔ OFF
	DVD-A DVD-V Angle number
	DVD-A Still picture number Selected picture is shown during play.
	VCD Audio mode LR ↔ L ↔ R ↑ ↔ ↓
	VCD (with playback control only) Menu play Indicates whether playback control is on or off.

Notes on subtitles

- 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.

Shuttle screen

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.

Icon	Content
	Pause
	Slow-motion play ◀: Backward DVD-A DVD-V ▶: Forward DVD-A DVD-V VCD
	Play
	Search ◀◀: Backward ▶▶: Forward

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/PPCM/□□ 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

Unit information


Play menu

Icon	Content
	A-B repeat (⇒ page 16) [ENTER/SET] (start point) ⇒ [ENTER/SET] (finish point) To cancel: [ENTER/SET]
	Repeat play (⇒ page 16)
	DVD-A CD VCD Play mode display (⇒ page 17) --- : Normal play PGM : Program play RND : Random play ALL : All group play (DVD-A)
	Marker You can mark up to 5 positions to play again. [ENTER/SET] (The unit is now ready to accept markers.) To mark a position: [ENTER/SET] (at the desired point) To mark another position: [◀, ▶] ⇒ [ENTER/SET] To recall a marker: [◀, ▶] ⇒ [ENTER/SET] To erase a marker: [◀, ▶] ⇒ [CANCEL]



Notes on marker

- Only when the elapsed play time is displayed.
- Some subtitles may fail to appear around the marker.
- All the markers are cleared when you:
 - Turn the unit off.
 - Open the disc tray or select another source.





Display menu

Icon	Content
	I/P/B display (⇒ page 36) ON ↔ OFF Displays the picture type (I/P/B) in the still picture mode.

Audio menu




Icon	Content
	(Dolby Digital/DTS, 3-channel or over only) DVD-V Dialogue Enhancer ON ↔ OFF The volume of the dialogue from the center channel is raised when you select "ON".
	CD RE-MASTER The re-master circuit improves the sound quality of 44.1-kHz audio signals from CDs. 1: for fast tracks (pop and rock) 2: for tracks with a variety of tempos (jazz) 3: for slow tracks (classical) OFF: The re-master circuit is off.

Video menu

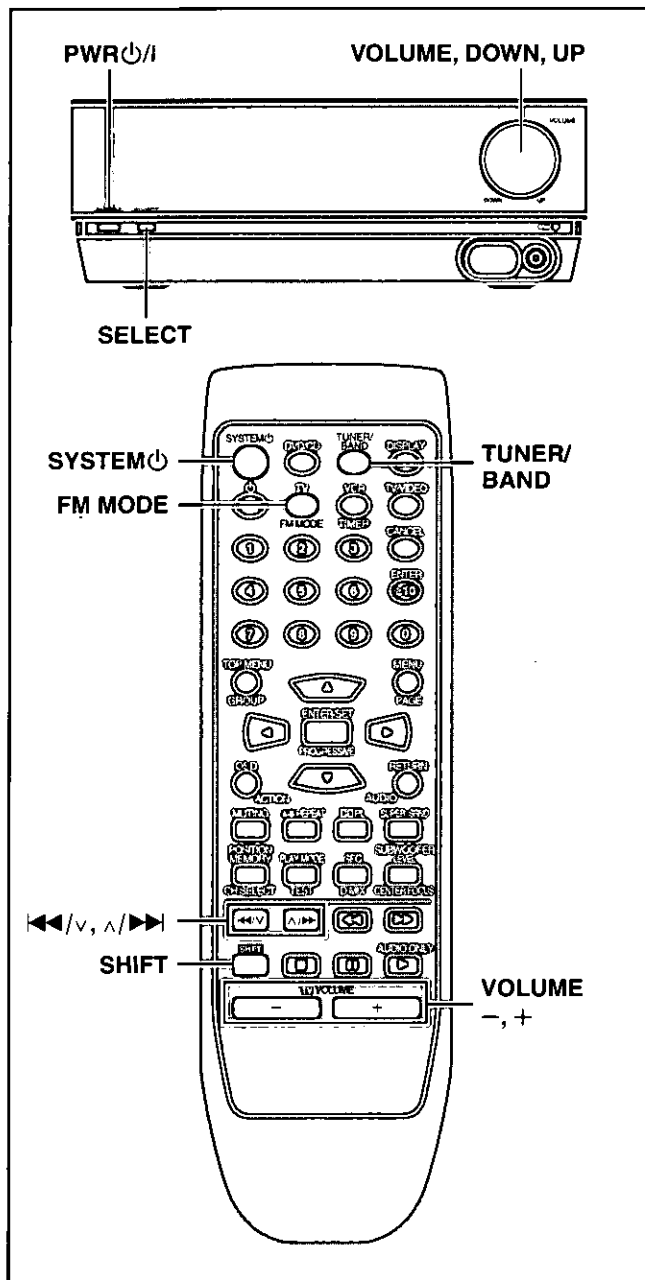
Icon	Content
	Digital picture mode DVD-A DVD-V VCD N: Normal mode C: Cinema mode U: User mode The following items are also displayed when you select "U".
	Contrast (–7 to +7) Increases the contrast between white and black parts of the picture.
	Brightness (0 to +15) Brightens the picture.
	Color (–7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

DT300

When the progressive indicator is on (⇒ page 13):

Icon	Content
	Digital picture mode DVD-A DVD-V VCD N: Normal mode C: Cinema mode
	Transfer mode Select the method of conversion for progressive output to suit the type of material being played (⇒ page 36, "Film and video"). Auto (normal) : for viewing film material Video : for video material
	Horizontal position 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. This position is saved even if you turn the unit off.

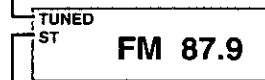
The radio: manual tuning



Radio stations can be tuned manually by selecting the station's frequency or they can be preset into channels to make it easy to tune (→ page 23).

- 1** Press [SYSTEM] to turn on the unit.
- 2** Press [TUNER/BAND] to select "FM" or "AM".
Each time you press the button:
FM ↔ AM
- 3** Press [◀◀/V] or [^/▶▶] to select the frequency of the required station.

Displayed when a radio station is tuned.



Displayed when a stereo FM broadcast is being received.

Press and hold [◀◀/V] or [^/▶▶] until the frequency starts scrolling to start automatic tuning. Tuning stops when a station is found.

- 4** Adjust the volume.

If noise is excessive in FM

Press [SHIFT]+[FM MODE] to display "MONO".



This mode improves sound quality if reception is weak but broadcasts are heard in monaural.

Press [SHIFT]+[FM MODE] again to cancel the mode.

The mode is also canceled when you changed the frequency.

Turn "MONO" off for normal listening.

Stereo and monaural broadcasts are automatically played as they are received.

FM frequency step

Main unit only

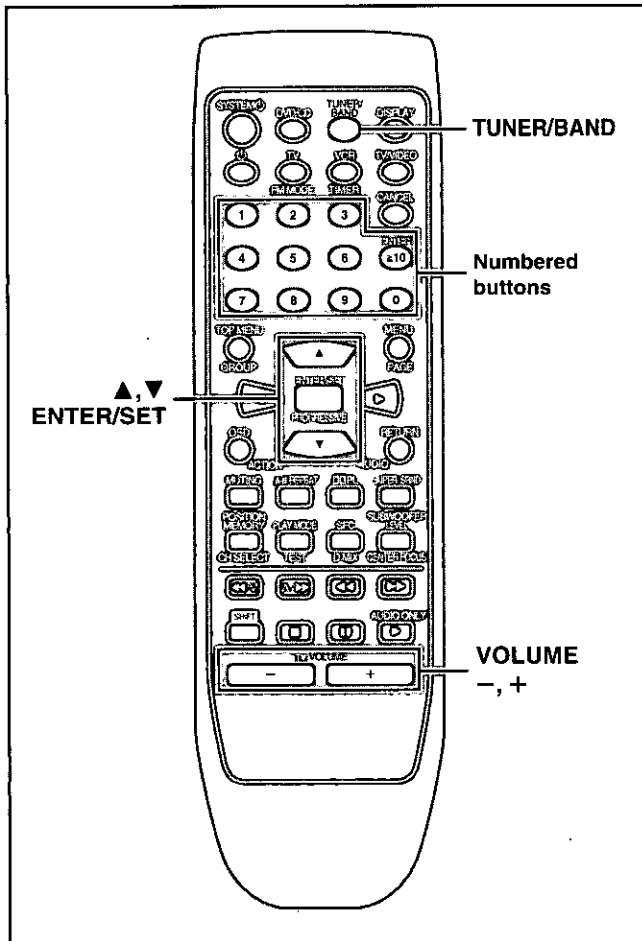
The step is factory-set to 0.2 MHz, but you can change it to receive broadcasts allocated 0.1-MHz steps.

- ① Press [SELECT] to select "FM".
- ② Press and hold [SELECT].
After a few seconds the display changes to show the current minimum frequency. Continue to hold the button down. The minimum frequency changes and the step is changed.

To return to the original step, repeat the above steps.

Note

Any FM frequencies preset in channels will be changed by this procedure. Preset them again.



There are two methods of presetting stations.

Automatic presetting: The stations the tuner can receive are preset.

Manual presetting: You can select the stations to preset and the order they are preset in.

Up to 39 stations can each be set in the FM and AM bands.

Automatic presetting

- 1 Tune to "FM 87.9" (or "FM 87.5") (→ page 22).

FM 87.9

- 2 Press and hold [ENTER/SET].
The FM stations the unit can receive are preset.
Release the button when "AUTO MEMORY" appears.

- 3 Tune to "AM 520".

- 4 Press and hold [ENTER/SET].
The AM stations the unit can receive are preset.
Release the button when "AUTO MEMORY" appears.

The tuner presets all the stations it can receive into the channels in ascending order. FM and AM stations are preset into channels 1 to 39.

"SET OK" is shown when presetting is complete and the last station to be preset is played.

"ERROR" is displayed if the tuner doesn't receive any stations. Do presetting manually if this happens (see below).

Manual presetting

Preset the stations one at a time.

- 1 Tune to the station (→ page 22).
 - 2 Press [ENTER/SET].
- ME - CH -
- 3 Press [▲, ▼] to select a channel.
 - 4 Press [ENTER/SET].

The station occupying a channel is erased if another station is preset in that channel.

Selecting channels

- 1 Press [TUNER/BAND] to select "FM" or "AM".
Each time you press the button:
FM ↔ AM

- 2 Press the numbered buttons to select the channel.

To select a 2-digit number
Example: To select channel 12, press [≥10, ENTER] → [1] → [2]

2 FM 87.9

Channel




- 3 Adjust the volume.

Radio operations

Sound field

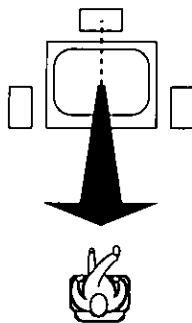
Note

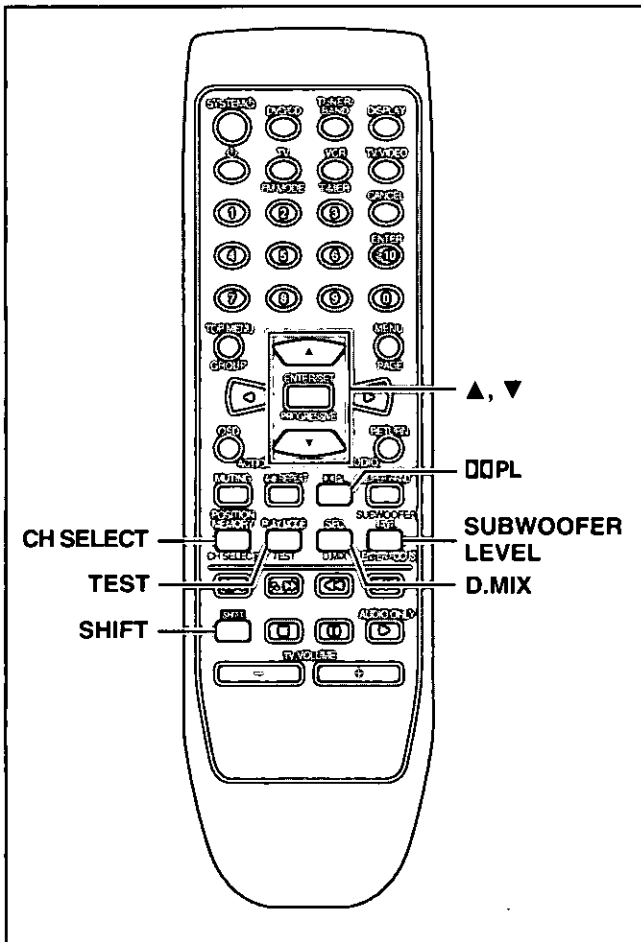
- Dolby Pro Logic, Super Surround and Center focus cannot be used if headphones are connected.
- You may experience a reduction in sound quality when these sound field systems are used with some sources. If this occurs, turn the sound field system off.

Sound field system	Features	Software			
<p>DOLBY DIGITAL and DTS (→ page 25)</p>	<ul style="list-style-type: none"> •Dolby Digital and DTS are digital encoding systems used on DVD to carry surround sound. Both were originally developed for use in cinemas. •This unit automatically recognizes and decodes these systems. 	<p>Software encoded with Dolby Digital can be identified with this mark.</p>  <p>Software encoded with DTS can be identified with this mark.</p>  <p>•DVD</p>			
<p>DOLBY PRO LOGIC (→ page 25)</p>	<p>Dolby Pro Logic is a decoding system that was developed to get a better sense of presence from sources encoded with Dolby Surround. The feeling of position has been improved by the addition of a separate center speaker channel.</p>	<p>Software encoded with Dolby Surround can be identified with this mark.</p>  <p>•DVD •CD, Video CD •Laser Disc •Video tape</p>			
<table border="1"> <tr> <td data-bbox="111 889 362 1058" rowspan="2"> <p>SUPER SURROUND (→ page 26)</p> </td> <td data-bbox="365 889 542 1058"> <p>MOVIE</p> </td> </tr> <tr> <td data-bbox="365 1058 542 1236"> <p>MUSIC</p> </td> </tr> </table>	<p>SUPER SURROUND (→ page 26)</p>	<p>MOVIE</p>	<p>MUSIC</p>	<ul style="list-style-type: none"> •This mode adds surround effects to movie software that hasn't been recorded with the above systems. •You can adjust the volume of the surround speakers to get the best surround effect. •This mode adds surround effects to stereo sources. •You can adjust the volume of the surround speakers to get the best surround effect. 	<p>Any stereo sound source.</p>
<p>SUPER SURROUND (→ page 26)</p>		<p>MOVIE</p>			
	<p>MUSIC</p>				
<p>Sound Field Control (→ page 26)</p>	<p>Use sound field control effects to change the sound quality and add reverberation.</p>	<p>Any source.</p>			

CENTER FOCUS (→ page 26)

- This mode makes it seem like the sound from the center speaker is coming from within the television.
- Effective when using Dolby Digital, DTS, and Dolby Pro Logic.





DOLBY DIGITAL and DTS

Play a DOLBY DIGITAL or DTS source.

The unit automatically determines the type of signal and processes it.

To add power to the bass from the subwoofer ⇒ page 26.

To down-mix Dolby Digital or DTS (5.1 ch) signals to 2 channels

Press [SHIFT]+[D.MIX] during play.

To cancel, press [SHIFT]+[D.MIX] again.

When "D.MIX" is flashing

The DVD-Audio disc you are playing contains multiple-channel signals that cannot be down-mixed ("No Down-Mix" also appears).

DOLBY PRO LOGIC

1 Press [DOLBY DIGITAL].

DDPL Lights up

2 Play a Dolby Surround source.

To cancel

Press [DOLBY DIGITAL].

Note

Turn Dolby Pro Logic off when playing a DVD recorded with Dolby Digital or DTS. The surround effects will not be reproduced correctly if this is left on.

Speaker level adjustments

If the level of the speakers appears to be different while listening to a source, adjust the level of the speakers to the same apparent level.

Preparation

DOLBY DIGITAL and DTS: Turn off the other surround systems.

DOLBY PRO LOGIC: Press [DOLBY DIGITAL].

- Press [SHIFT]+[TEST] to output a test signal.

TEST Lch

- Lch: Front left
- Cch: Center
- Rch: Front right
- RSch: Right surround
- LSch: Left surround

•The surround channel for Dolby Pro Logic is monaural so the indicator appears as "Sch" instead.

- Press [▲] (to increase) or [▼] (to decrease).

To stop the test signal, press [SHIFT]+[TEST] again.

To adjust speaker level during play

- Press [SHIFT]+[CH SELECT] to select the speaker.

Lch→Cch→Rch→RSch→LSch→SWch

↑

SWch: Subwoofer

Dolby Pro Logic

•The surround channel is monaural so the indicator appears as "Sch" instead.

•"SWch" does not appear.

- Press [▲] (to increase) or [▼] (to decrease).

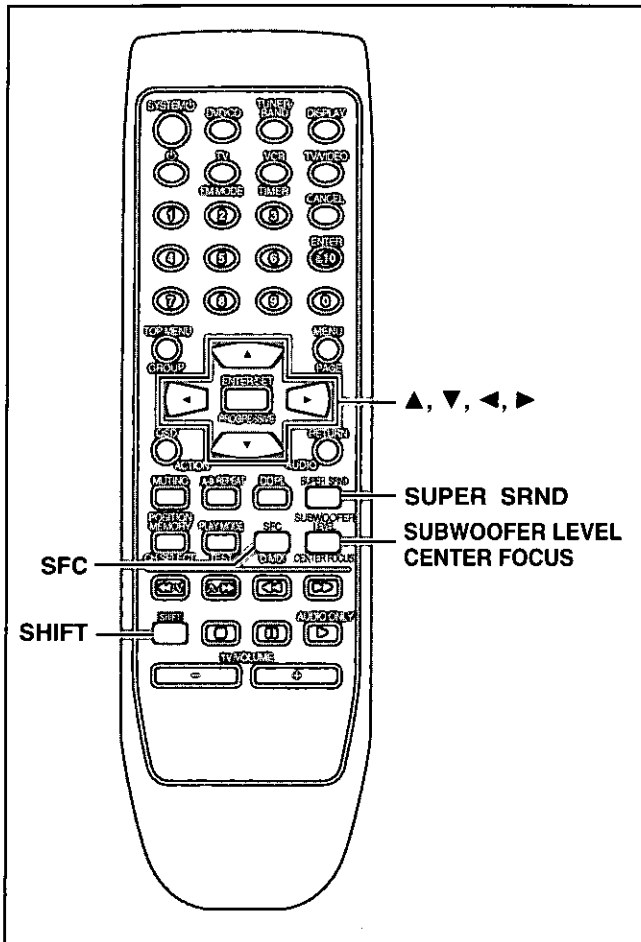
L, R : -16 dB to 0 dB

C, RS, LS, S : -10 dB to +6 dB

SW : -10 dB to +10 dB

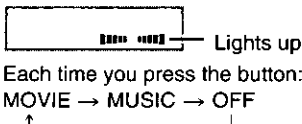
Note

You can also adjust subwoofer level by pressing [SUBWOOFER LEVEL] (⇒ page 26).



SUPER SURROUND

Press [SUPER SRND] to select "MOVIE" or "MUSIC".



To cancel
Press [SUPER SRND] to select "OFF".

Note
Turn super surround off when playing a DVD recorded with Dolby Digital or DTS. The surround effects will not be reproduced correctly if this is left on.

CENTER FOCUS

You can make the sound of the center speaker seem like it is coming from within the television. Place the center speaker above the television.

Press [SHIFT]+[CENTER FOCUS].



Each time you press the button:
CENTER FOCUS ↔ Off

Changing sound field and quality

Press [SFC] to select a setting.

HEAVY

- Each time you press the button:
- HEAVY:** Adds punch to rock.
 - CLEAR:** Clarifies higher sounds.
 - SOFT:** For background music.
 - HALL:** Expands sound to make you feel like you were in a hall.
 - MANUAL:** → below
 - FLAT:** Canceled (no effect is added) (factory preset).

In MANUAL
You can select LOW, MID, or HIGH, and then adjust them in a range between -3 and +3.

1. Press and hold [SFC].
2. Press [◀, ▶] to select LOW, MID, or HIGH.
3. Press [▲, ▼] to choose a level between -3 and +3.

Repeat steps 2 and 3 to adjust the sound quality to your taste.

Adjusting the bass with SUBWOOFER LEVEL

Press [SUBWOOFER LEVEL].

SUB W 1

Each time you press the button:
SUB W 1 → SUB W 2 → SUB W 3 → SUB W 4 → SUB W 0

- 0 : 0 dB
- 1 : +3 dB
- 2 : +6 dB
- 3 : +8 dB
- 4 : +10 dB

Note

- You cannot adjust the bass while you are using headphones.
- You can only adjust the bass with [SUBWOOFER LEVEL] when a DVD is loaded. These adjustments are only effective when the DVD contains a separate subwoofer signal, although the display will change to reflect the adjustments even if this is not the case.

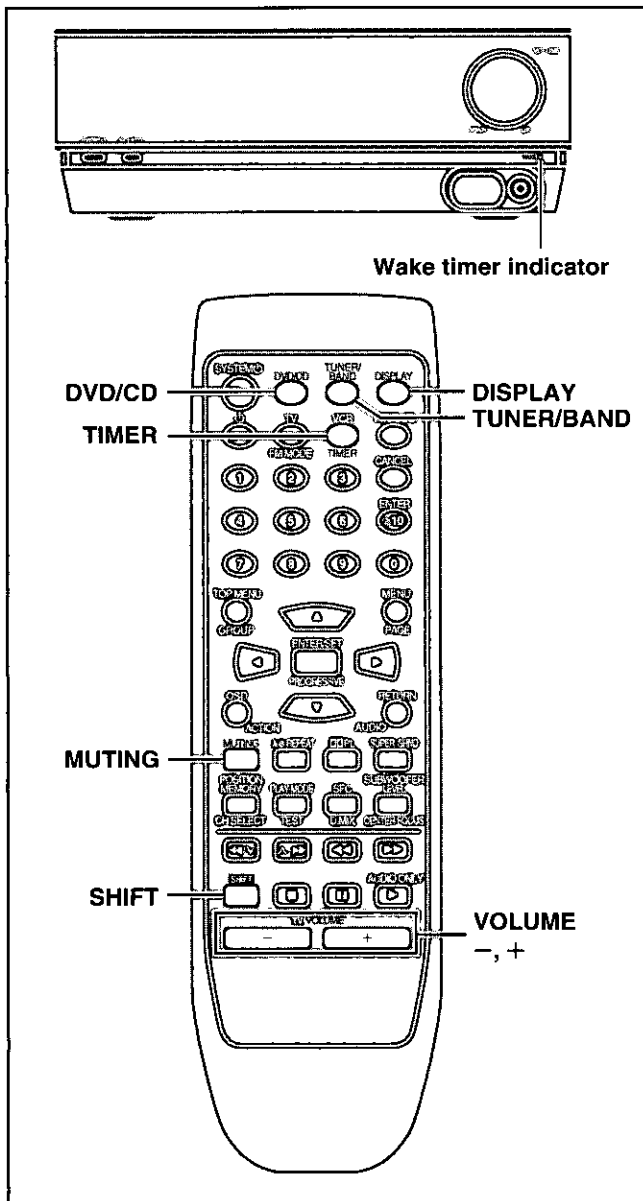
Turning the subwoofer off

You can improve the sound quality of stereo sources by turning the subwoofer off.

Press and hold [SUBWOOFER LEVEL].

SUB W OFF

Each time you do this:
SUB W OFF ↔ SUB W ON



Muting the volume

Press [MUTING].



Volume is reduced to minimum.

To cancel

Press [MUTING] again or reduce the volume to minimum (--- dB), then raise it to the required level. Muting is also canceled when the unit is turned off.

Turning off the display

Turn the display off for better viewing in a darkened room.

Press [DISPLAY].

To cancel, press [DISPLAY] again.

Timer functions

The SLEEP timer can turn the unit off after a set time and the WAKE timer can turn it on. You can use only one timer at a time.

Preparation

Select the desired source.

•Disc

Press [DVD/CD] to display "DVD", and insert an Audio CD, etc.

•The radio

Press [TUNER/BAND] to select "FM" or "AM" and tune in the desired station.

1 Press [SHIFT]+[TIMER] to select the timer.

Each time you press the buttons:

SLEEP → WAKE → OFF



The WAKE indicator lights when the wake timer is on.

2 Within 5 seconds, Press and hold [SHIFT]+[TIMER] and release when the timer you require is displayed.

The display changes as follows:

•SLEEP (in minutes)

30 → 60 → 90



•WAKE (in hours)

5H → 7H → 9H



•SLEEP starts working immediately.

•The unit turns off shortly after you turn the WAKE timer on.

To check the SLEEP setting

Press [SHIFT]+[TIMER] once.

•The time remaining appears.

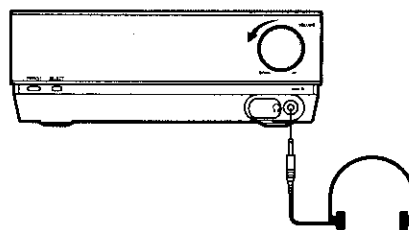
To change the setting

Repeat the procedure from the beginning.

Using headphones

1 Reduce the volume and connect the headphones (not included).

Headphone plug type: 3.5 mm (1/8") stereo



2 Adjust headphone volume with [VOLUME].

Audio is automatically switched to stereo (2-channel). If sound is distorted, turn on dynamic range compression (→ page 28, Audio—D. Range Compression).






Note

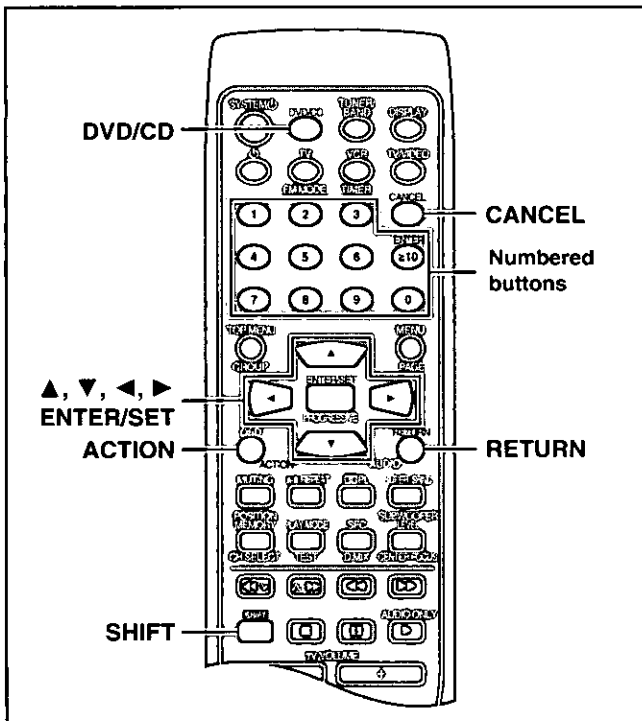
Avoid listening for prolonged periods of time to prevent hearing damage.

Changing settings

This chart shows the settings for this unit. 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. See page 29 for details on menu operation.

• Underlined items are the factory preset.

Menus	Items	Options
Disc 	Audio DVD-A DVD-V Choose the preferred audio language.	<u>English</u> French Spanish Original Other**** Original: The original language of each disc will be selected. Other****: Input a code number with the numbered buttons (⇒ page 31).
	Subtitle DVD-A DVD-V Choose the preferred subtitle language.	<u>Automatic</u> English French Spanish Other**** Automatic: If the language selected for "Audio" is not available, subtitles of that language will automatically appear if available on that disc.
	Menus DVD-A DVD-V Choose the preferred language for disc menus.	<u>English</u> French Spanish Other****
	Ratings DVD-V (⇒ page 29) Set a ratings level to limit DVD-Video 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. • Select level "0" to prevent play of discs that do not have ratings levels recorded on them.	Setting ratings (When level 8 is selected) <u>8 No Limit</u> : All DVD-Video can be played. 1 to 7: Prohibits play of DVD-Video with corresponding ratings recorded on them. 0 Lock All: Prohibits play of all DVD-Video. Changing ratings (When level 0-7 is selected) Unlock Player Change Level Change Password Temporary Unlock
Video 	TV Aspect (⇒ page 12) Choose the setting to suit your television and preference.	<u>4:3 Pan&Scan</u> 4:3 Letterbox 16:9
	Still Mode (⇒ page 36) Specify the type of picture shown when paused.	<u>Automatic</u> Field Frame
	Black Level Control Change the black level of the picture.	<u>Lighter</u> Darker DT300 Select "Darker" if you connected using the COMPONENT VIDEO OUT terminals.
Audio 	Speaker Setting DVD-V (⇒ page 29) (Dolby Digital only) Set the delay time for your center and surround speakers.	Center: 0/1.3/2.6/3.9/5.3 ms Surround (L/R): 0/5.3/10.6/15.9 ms
	D. Range Compression DVD-V (Dolby Digital only) Change the dynamic range for late night viewing.	<u>Off</u> On Turn dynamic range compression on in the following cases. • For clear dialogue when listening at low volume. • When sound is distorted while playing multi-channel DVD audio through two channels (when headphones are connected or when using the D.MIX mode.)
	Audio during Search DVD-A DVD-V VCD Choose whether to have sound during search.	<u>On</u> Off: Audio will still be heard during search with some DVD-Audio.
Display 	Menu Language Choose the preferred language for these menus and the on-screen messages.	<u>English</u> Français Español
	On-Screen Messages Choose whether to show on-screen messages or not.	<u>On</u> Off
Others 	DVD-Video Mode DVD-A Select how to play pictures contained on some DVD-Audio. The setting returns to "Off" when you remove the disc, turn the unit off or change the source.	<u>Off</u> : DVD-Audio are played as DVD-Audio. On: DVD-Video contents found on DVD-Audio can be played.



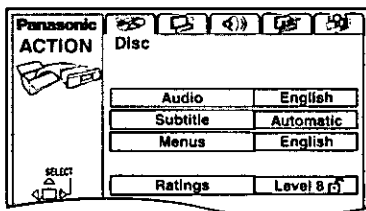
Common procedures

See page 28 for menu and option details.

Preparation

Press [DVD/CD] to select "DVD".

- 1 Press [SHIFT]+[ACTION] to show the menus.



- 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/SET].

- 4 Press [▲, ▼] to select the option and press [ENTER/SET]. The screen now shows the menu again.

To return to the previous screen

Press [RETURN].

When you are finished

Press [SHIFT]+[ACTION].

Entering a password (Ratings)

DVD-V

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

1. Input a 4-digit password with the numbered buttons and press [ENTER/SET].
 - If you enter a wrong number, press [CANCEL] to erase it before you press [ENTER/SET].
 - The lock symbol appears closed to show the rating is locked.
 - Do not forget your password.
2. Press [ENTER/SET] to confirm the 4 digits.

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

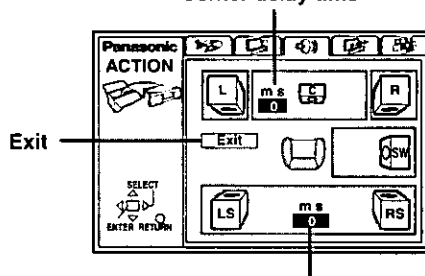
Changing the delay time

DVD-V

(Dolby Digital, center and surround speakers only)

For optimum listening with 5.1-channel sound, all the speakers, except for the subwoofer, should be the same distance from the seating position. If you have to place the center or surround speakers closer to the seating position, adjust the delay time to make up for the difference.

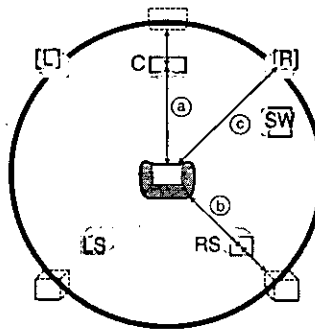
Center delay time



Surround delay time

Changing the delay time

1. Press [▲, ▼, ▶, ◀] to select the delay time box and press [ENTER/SET].
2. Press [▲, ▼] to adjust the delay time and press [ENTER/SET].



Values

If distance ① or ② is greater than or equal to distance ③, set to "0". If distance ① or ② is less than distance ③, set as follows.

① Center speaker

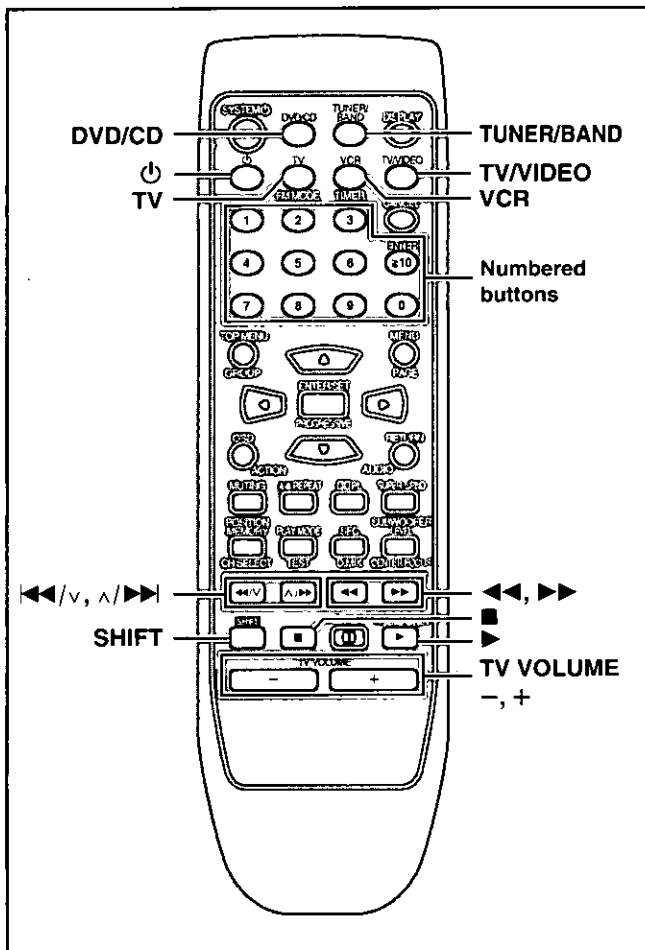
Difference	Setting
Approx. 50 cm (1½ feet)	1.3 ms
Approx. 100 cm (3 feet)	2.6 ms
Approx. 150 cm (5 feet)	3.9 ms
Approx. 200 cm (6 feet)	5.3 ms

② Surround speakers

Difference	Setting
Approx. 200 cm (6 feet)	5.3 ms
Approx. 400 cm (12 feet)	10.6 ms
Approx. 600 cm (18 feet)	15.9 ms

When you are finished

Press [▲, ▼, ▶, ◀] to select "Exit" and press [ENTER/SET].



Other functions

Operating a television

Switching to television operation mode

Press [TV].
The main unit also switches to television input.

Turning the television on/off

Press [⏻].

Changing channels

Press [◀/v] or [^/▶▶].
You can also select the channel with the numbered buttons.
[≥10, ENTER] is used to confirm channel selection on some televisions manufactured by other companies.

Adjusting the volume

Press [SHIFT]+[TV VOLUME, -, +].

Switching the television's video input mode

Press [TV/VIDEO].

Operating a video cassette recorder

Switching to video cassette recorder operation mode

Press [VCR].
The main unit also switches to VCR input.

Turning the video cassette recorder on/off

Press [⏻].

Changing channels

Press [◀/v] or [^/▶▶].
You can also select the channel with the numbered buttons.
[≥10, ENTER] is used to confirm channel selection on some VCRs manufactured by other companies.

Starting play

Press [▶] (PLAY).

Fast-forwarding and rewinding

Press and hold [◀◀] or [▶▶].

To stop play

Press [■].

Note

- Some models cannot be operated by this remote control.
- To prevent accidental operation, press [DVD/CD] or [TUNER/BAND] after operation so the unit is ready to operate this unit.

Changing the remote control code

This remote control can operate Panasonic and Technics audiovisual equipment that have remote control sensors. You may need to change the remote control code.

It can also operate some other brands of televisions and video cassette recorders. Check the table for the brand and enter the code as follows.

Aim the remote control at the television or video cassette recorder, carefully and slowly

While pressing and holding [TV] or [VCR], press the numbered buttons to enter the code number.

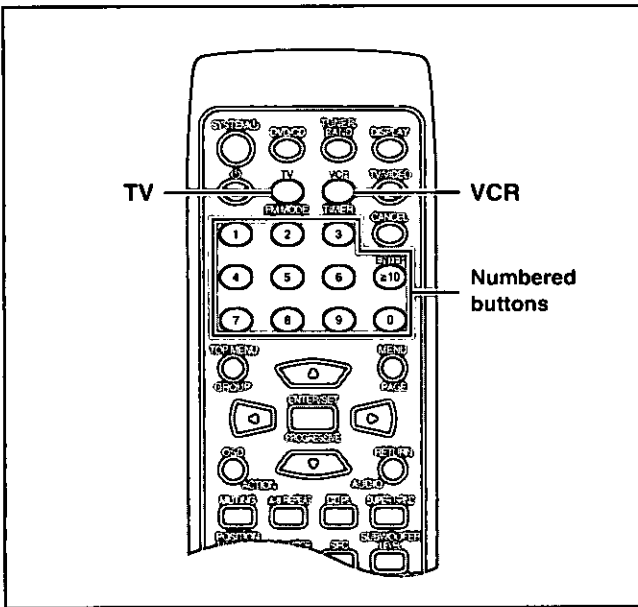
The remote control outputs the on/off signal.

If the code is correct, the equipment turns on or off.

If it doesn't, try entering another code.

• Note that this remote control cannot operate some equipment and that it may not be able to perform some operations.

• Reenter the codes after you change the batteries.



Television code list

Panasonic:	01, 02, 26	Philco:	06, 07
Sony:	04	Philips:	06
Fisher:	14	Pioneer:	02, 10, 19
G-E:	02, 03, 07, 09	Quasar:	02
Gold Star:	07, 15	RCA:	03, 07, 09, 13, 23, 24, 25
Hitachi:	05, 07	Sanyo:	14
JVC:	12	Sharp:	08, 21
LXI:	03, 06, 07, 10, 14, 15	Sylvania:	06, 07, 15
Magnavox:	06, 07, 11, 15, 22	Symphonic:	17
Mitsubishi:	07, 15, 16, 21	Toshiba:	10, 21
NEC:	07, 15	Zenith:	18, 20

Video cassette recorder code list

Panasonic:	01, 02, 09, 33	NEC:	19, 25, 31, 38
Sony:	05, 06, 07, 35, 36, 37	Philco:	02, 09, 12, 30
Fisher:	13, 14, 15, 18, 34	Philips:	02, 09, 12
Funai:	08, 30	Pioneer:	09
G-E:	02, 03, 11	Quasar:	01, 02, 09, 33
Gold Star:	27	RCA:	02, 03, 04, 09, 10, 11, 12, 23, 24, 26
Hitachi:	09, 10, 11	Sanyo:	14, 18, 34
JVC:	19, 25, 31, 38, 39, 40	Sharp:	16, 17
LXI:	10, 13, 14, 15, 18, 27, 30	Shintom:	32
Magnavox:	02, 09, 12	Sylvania:	02, 09, 12, 30
Mitsubishi:	21, 22, 28, 29	Symphonic:	30
		Toshiba:	23, 24
		Zenith:	20

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		

Optional antenna connections

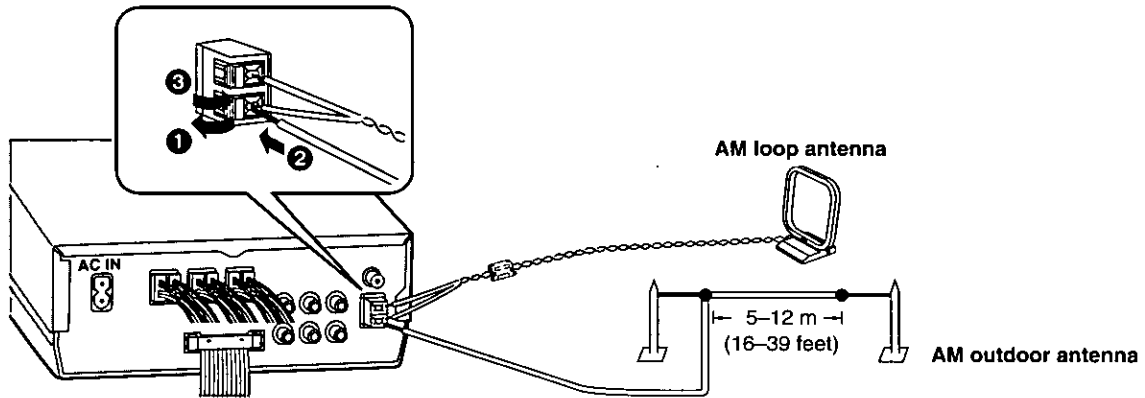
Use outdoor antennas if radio reception is poor.

Note

Disconnect the outdoor antenna when the unit is not in use.
Do not use the outdoor antenna during an electrical storm.

AM outdoor antenna (Using a vinyl wire)

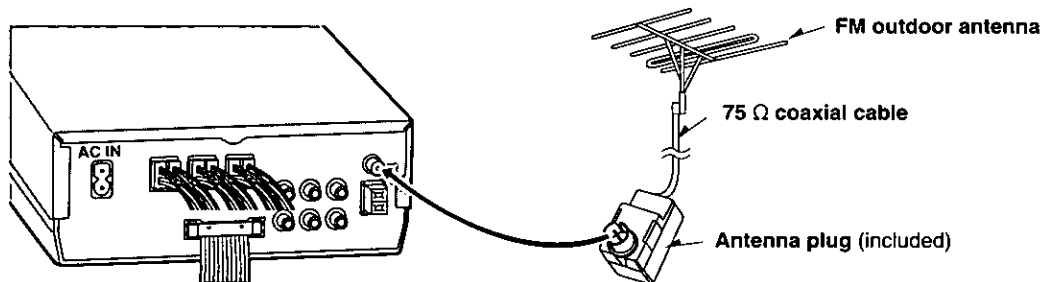
Run a piece of vinyl wire horizontally across a window or other convenient location.
Leave the loop antenna connected.



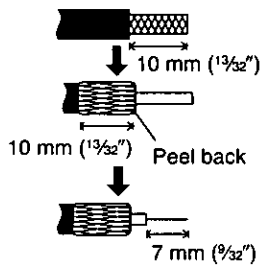
FM outdoor antenna (Using a television antenna)

- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician.

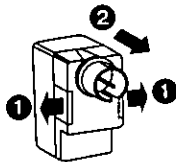
Rework your outdoor antenna's 75 Ω coaxial cable as follows.



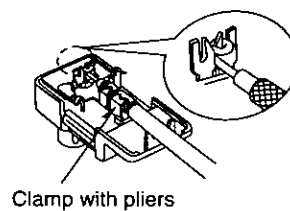
- ① Remove a piece of the outer vinyl insulator.



- ② Carefully pull the tabs apart to remove the cover.



- ③ Install the coaxial cable. Clamp the cable conductor, and wind it on so that it does not contact anything else.



- ④ Attach the cover.

Troubleshooting guide

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, 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), or an authorized Servicentre closest to you.

Reference pages are shown as black circled numbers ❶.

Power

No power.	<ul style="list-style-type: none"> ● Insert the AC power supply cord securely into the household AC outlet. ❶
The unit is automatically switched to the standby mode.	<ul style="list-style-type: none"> ● The unit was switched to standby by the sleep timer. ❷

Operation

No response when buttons pressed.	<ul style="list-style-type: none"> ● Some operations may be prohibited by the disc. ● The unit may not be operating properly due to lightning, static electricity or some other external factor. <p>Reset procedure: Press [SYSTEM⏻] to switch the unit to the standby mode and then back to ON. Alternatively, press [SYSTEM⏻] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it.</p>
No operations can be performed with the remote control.	<ul style="list-style-type: none"> ● Check the batteries are installed correctly. ❶ ● The batteries are depleted: Replace them with new ones. ❶ ● Point the remote control at the remote control sensor and operate. ❺ ● It may be in the television or video cassette recorder operation mode. Press [DVD/CD] or [TUNER/BAND] to operate this unit. ● If the remote control doesn't operate the television or video cassette recorder, try changing the code. This remote control cannot operate some televisions or video cassette recorders. ❸❹
Play fails to start even when [▶] (PLAY) is pressed. Play starts but then stops immediately.	<ul style="list-style-type: none"> ● Condensation has formed: Wait 1 to 2 hours for it to evaporate. ● This unit cannot play discs other than DVD-Audio, DVD-Video, CD and Video CD. ❹ ● This unit cannot play DVD-Video with a region number other than "1", "ALL" or multiple region numbers including "1". ❶ ● The disc may be dirty and may require cleaning. ❸❺ ● Ensure that the disc is installed with the label of the side to be played facing upwards. ❶
Alternative languages fail to be selected.	<ul style="list-style-type: none"> ● This function is dependent on software availability. Try selecting it from the disc's menu if one is available. ❶
No menu play.	<ul style="list-style-type: none"> ● This function is dependent on software availability.
No subtitles.	<ul style="list-style-type: none"> ● Subtitles are cleared from the television. Display the subtitles. ❷ ● This function is dependent on software availability.
Soundtrack and/or subtitle language is not the one selected with the ACTION menus.	<ul style="list-style-type: none"> ● This function is dependent on software availability.
Angle cannot be changed.	<ul style="list-style-type: none"> ● 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.
The ACTION menu cannot be accessed.	<ul style="list-style-type: none"> ● Select "DVD" as the source. ● Cancel program and random play. ❶
You have forgotten your ratings password. Reset all the settings to Factory Preset.	<ul style="list-style-type: none"> ● While stopped, press and hold [■] on the unit and [≥10, ENTER] on the remote control for about 3 seconds until "Initialized" disappears from the television. Turn the unit off and on again. All settings will return to the default values.

Sound

No sound. Distorted sound.	<ul style="list-style-type: none"> ● Check the connections. ❷-❶, ❷❷, ❸❸ ● Turn the volume up. ● Turn muting off. ❷ ● Switch off the unit, determine and correct the cause, then switch the unit on. <p>Causes include:</p> <ul style="list-style-type: none"> - Shorting (bare wires touching) of positive and negative speaker wires. ❸ - Using speakers with an impedance lower than that rated for this unit. ❷ - Straining of the speakers through excessive volume or power. - Using the unit in a hot environment without proper ventilation.
Humming heard during play.	<ul style="list-style-type: none"> ● An AC power supply cord or fluorescent light is near the cables. Keep other appliances and cords away from this unit's cables.
No sound from the subwoofer.	<ul style="list-style-type: none"> ● Check that the subwoofer has not been set to "SUB W OFF". ❸

Picture

Picture distorted.	<ul style="list-style-type: none"> Some distortion is normal during SEARCH. The screen may be disrupted briefly when you turn on and off the AUDIO ONLY feature. ⑬
No picture.	<ul style="list-style-type: none"> Ensure that the television is connected properly. ⑩ Make sure the television is on. Ensure the television's video input setting (e.g., VIDEO 1) is correct. If "This disc is PAL system. The output is sound only." is on the television, then you have loaded a PAL system DVD-Audio and only the audio portion of the disc can be played. <p>DT300</p> <ul style="list-style-type: none"> The unit does not output video signals from the VIDEO OUT and S-VIDEO OUT terminals when the "PROGRESSIVE" indicator is on. Press [SHIFT]+[PROGRESSIVE] to turn progressive out off.
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"> Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder. 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. ⑫ <p>DT300</p> <p>If your television cannot change the aspect when input is progressive Press [SHIFT]+[PROGRESSIVE] so the "PROGRESSIVE" indicator goes out. Output will now be interlace.</p>
DT300 There is ghosting when progressive output is on.	<ul style="list-style-type: none"> 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.
Picture quality is poor.	<ul style="list-style-type: none"> Check the settings in the On-Screen Menu Icon's video menu. ⑭
DT300 The picture is off center when using progressive output.	<ul style="list-style-type: none"> Adjust the horizontal position with the On-Screen Menu Icons. ⑮
The picture on the television disappears or stripes appear on the screen.	<ul style="list-style-type: none"> The location and orientation of the antenna are incorrect. If you are using an indoor antenna, change to an outdoor antenna. ⑯ The television antenna wire is too close to the unit. Separate the antenna wire of the television from the unit.

Listening to the radio

Noise is heard. The stereo indicator flickers or doesn't light. Sound is distorted.	<ul style="list-style-type: none"> Adjust the position of the FM or AM antenna. ① Use an outdoor antenna. ②
A beat sound is heard.	<ul style="list-style-type: none"> Turn the television off or separate it from the unit.
A low hum is heard during AM broadcasts.	<ul style="list-style-type: none"> Separate the antenna from other cables and cords.

Unit displays

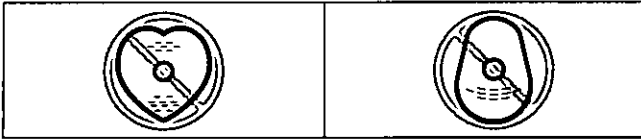
This unit's display is off.	<ul style="list-style-type: none"> Press [DISPLAY] to turn the display on.
"NO PLAY"	<ul style="list-style-type: none"> You inserted a disc the unit cannot play; insert one it can. ③
"NO DISC"	<ul style="list-style-type: none"> You haven't inserted a disc; insert one. You haven't inserted the disc correctly; insert it correctly. ⑬
"F61"	<ul style="list-style-type: none"> Check and correct the speaker cord connections. If this does not fix the problem, there is a power supply problem. Consult the dealer.
"DVD U11"	<ul style="list-style-type: none"> The disc is dirty. Wipe it with a soft cloth. ④
"ERROR"	<ul style="list-style-type: none"> Incorrect operation performed. Read the instructions and try again.
"DVD H□□" □□ stands for a number.	<ul style="list-style-type: none"> Trouble is likely to have occurred. The number following "H" depends on the status of the unit. <p>Reset procedure: Press [SYSTEM⏻] to switch the unit to the standby mode and then back to ON. Alternatively, press [SYSTEM⏻] to switch the unit to the standby mode, disconnect the AC power supply cord, and then reconnect it. <ul style="list-style-type: none"> If the service numbers fail to clear, note the service number and contact a qualified service person. </p>

Television displays

No on-screen display.	<ul style="list-style-type: none"> Go to Display in the ACTION menus, and select "On" for "On-Screen Messages". ⑭
On-Screen Menu Icons not displayed or only partially displayed on the television.	<ul style="list-style-type: none"> Press [▲, ▼] while the rightmost icon is highlighted to move them down. ⑮
The disc's menu is displayed in a different language.	<ul style="list-style-type: none"> Go to Disc in the ACTION menus, and select the preferred language for "Menus". ⑯

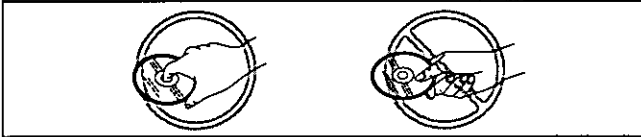
Disc handling

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



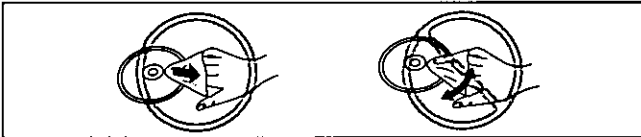
■ How to hold a disc

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

Glossary

Bitstream

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

Decoder

A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

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 still and field still

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

One frame is made up of two fields. A regular television shows these fields one after the other to create frames.

A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high.

A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

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_B, P_R) 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)

These are uncompressed digital signals, similar to those found on CDs.

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.

Not compatible with multi-session recordings

If you record MP3 onto CD-R/CD-RW over a number of sessions, this unit can play only the recordings made in the first session.

Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus.

Specifications

AV CONTROL RECEIVER

■ Amplifier section

Power output

RMS power output (THD 10 %, 6 Ω)	
FRONT (1 kHz both channel driven)	2×35 W
SURROUND (1 kHz both channel driven)	2×35 W
CENTER (1 kHz)	40 W
SUBWOOFER (100 Hz)	40 W
FTC power output (THD 1.0 %, 6 Ω)	
FRONT (100 Hz–39 kHz both channel driven)	2×28 W
SURROUND (100 Hz–22 kHz both channel driven)	2×27 W
CENTER (100 Hz–22 kHz)	35 W
SUBWOOFER (45 Hz–120 Hz)	35 W
Load impedance	6 Ω

■ Pre amplifier section

Input terminal	VCR (EXT), TV (AUX)
Output terminal	VCR (EXT)

■ FM tuner section

Frequency range	87.9–107.9 MHz (0.2 MHz steps)
	87.5–108.0 MHz (0.1 MHz steps)
Antenna terminals	75 Ω (unbalanced)

■ AM tuner section

Frequency range	520–1710 kHz (10 kHz steps)
-----------------	-----------------------------

■ Timer section

Sleep timer	30/60/90 minutes
Wakeup timer	5/7/9 hours

■ Headphone

Jack type	3.5 mm (1/8") stereo
Load impedance	16–32 Ω

■ GENERAL

Power supply	AC 120 V, 60 Hz
Power consumption	92 W
Standby condition	0.5 W
Dimensions (W×H×D)	190×73×360 mm (7½"×27/8"×14½")
Mass	4.0 kg (8.82 lb.)

DVD/CD PLAYER

■ Discs played

DVD-Audio
DVD-Video, DVD-R (DVD-Video format discs)
CD (CD-DA), Video-CD
CD-R/RW (CD-DA, Video-CD, MP3 format discs)

■ Audio

Number of channels	5.1 (FL, FR, SL, SR, C, SW)
--------------------	-----------------------------

■ Video

Signal system	NTSC
Output terminal	RCA terminal (composite video) S terminal (Y, C)
Progressive scan DT300	RCA terminal (component video)

■ Pickup

Beam source	Semiconductor laser
Wavelength	658/790 nm

■ GENERAL

Dimensions (W×H×D)	190×73×335 mm (7½"×27/8"×13¾")
Mass	1.8 kg (3.97 lb.)

FRONT SPEAKER **DT300**

Type	2 way, 2 speaker, Bass reflex
Speaker(s)	
Woofer	8 cm (3/8") cone type
Tweeter	2.5 cm (1") dome type
Impedance	6 Ω
Input power	60 W (Music)
Sound pressure level	79 dB/W (1.0 m)
Crossover frequency	2.5 kHz
Frequency range	58 Hz–40 kHz (–16 dB) 65 Hz–36 kHz (–10 dB)
Dimensions (W×H×D)	103×227×220 mm (4¼"×8½"×8¾")
Mass	2.6 kg (5.7 lb.)

FRONT SPEAKER **DT100**

Type	2 way, 2 speaker, Closed
Speaker(s)	
Woofer	8 cm (3/8") cone type
Tweeter	2.5 cm (1") semi-dome type
Impedance	6 Ω
Input power	60 W (Music)
Sound pressure level	79 dB/W (1.0 m)
Crossover frequency	3 kHz
Frequency range	70 Hz–25 kHz (–16 dB) 90 Hz–22 kHz (–10 dB)
Dimensions (W×H×D)	103×170×162 mm (4¼"×6½"×6¾")
Mass	1.4 kg (3.1 lb.)

CENTER, SURROUND SPEAKER

Type	1 way, 1 speaker, Closed
Speaker(s)	
Woofer	6.5 cm (2½") cone type
Impedance	6 Ω
Input power	60 W (Music)
Sound pressure level	79 dB/W (1.0 m)
Frequency range	150 Hz–25 kHz (–16 dB) 200 Hz–22 kHz (–10 dB)
Dimensions (W×H×D)	84×105×93 mm (3¼"×4¼"×3¾")
Mass	0.75 kg (1.7 lb.)

SUBWOOFER

Type	1 way, 1 speaker, Bass reflex
Speaker	
Woofer	17 cm (6¾") cone type
Impedance	6 Ω
Input power	60 W (Music)
Sound pressure level	80 dB/W (1.0 m)
Frequency range	43 Hz–5 kHz (–16 dB) 48 Hz–3 kHz (–10 dB)
Dimensions (W×H×D)	200×260×294 mm (7¾"×10¼"×11¾")
Mass	4.0 kg (8.8 lb.)

Power consumption in standby mode	0.5 W
-----------------------------------	-------

Note

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

Maintenance

The surface of the cabinet is polished.

Use the included cloth to clean it.

- Never use alcohol, paint thinner or benzine to clean this unit.

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 Audio Products Limited Warranty

Limited Warranty Coverage

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

Product or Part Name	Parts	Labor
Audio Products (except items listed below)	One (1) year	One (1) year
All Audio Racks (cabinets)	Thirty (30) days	Not Applicable
Technics Stand Alone Speakers, Subwoofer Speakers	Three (3) years	Three (3) years
USB Reader-Writer, Personal Computer Card Adapters (in exchange for defective item)	One (1) year	Not Applicable
Accessories: Headphones, Cartridges, Microphones, Adapters	Ninety (90) days	Ninety (90) days
Rechargeable Batteries (in exchange for defective item)	Ten (10) days	Not Applicable
SD Memory Cards, Rechargeable Battery Packs (in exchange for defective item)	Ninety (90) days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In or Mail-In Service

For Carry-In or Mail-In Service in the United States call 1-800-211-PANA (1-800-211-7262) or visit Panasonic web site: <http://www.panasonic.com>
For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

Limited Warranty Limits And Exclusions

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

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, loss of media or images, data or other memory content. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you. This warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

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

**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)

Service in Puerto Rico

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

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.

The servicer will require all components to service your system.
Therefore, should service ever be necessary, be sure to bring the entire system.

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, 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), or an authorized Servicentre closest to you.

Listening caution



Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion—and, most importantly, without affecting your sensitive hearing.

We recommend you to avoid prolonged exposure to excessive noise.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing.

Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

User memo:

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

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

Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc. © 1996, 2000 Digital Theater Systems, Inc. All rights reserved.

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 _____
SERIAL NUMBER _____

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.

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America
One Panasonic Way Secaucus,
New Jersey 07094
<http://www.panasonic.com>

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

Panasonic Canada Inc.
5770 Ambler Drive
Mississauga, Ontario
L4W 2T3
www.panasonic.ca

En