Operations Guide

Panasonic

Operating Instructions **DVD Home Theater Sound System**

Model No. SC-PT150



Before connecting, operating or adjusting this product, please read the instructions completely. Please keep this manual for future reference. Your unit may not look exactly the same as illustrated.

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

Example:







USB connection for MP3 players

page **32**









Dear customer

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

Operations in these instructions are described mainly with the remote control, but you can perform the operations on the main unit if the controls are the same.

System	SC-PT150
Main unit	SA-PT150
Front speakers	SB-HF150
Center speaker	SB-HC150
Surround speakers	SB-HS151
Subwoofer	SB-W340

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.
- USE ONLY THE RECOMMENDED ACCESSORIES.
- DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

The socket outlet shall be installed near the equipment and easily accessible.

The mains plug of the power supply cord shall remain readily operable.

To completely disconnect this apparatus from the AC Mains, disconnect the power supply cord plug from AC receptacle.

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

Caution for AC Mains Lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark * or the BSI mark * on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below.

If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.

The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL & OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF—KEEP DRY.

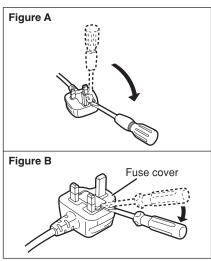
Before use

Remove the connector cover.

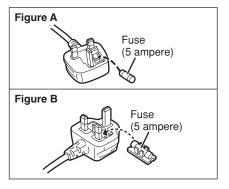
How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below. Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



Replace the fuse and close or attach the fuse cover.





Information on Disposal for Users of Waste

Electrical & Electronic Equipment (private households)



This symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

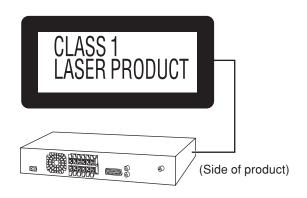
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



CAUTION	LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA:	21 CFR / Class II
CAUTION	CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OF DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60	
VARNING	 KLASS 1M SYNLIG OCH OSYNLIG LASERSTRÄLNING NÄR DEN BETRAKTA EJ STRÄLEN DIREKT GENOM OPTISKT INSTRUMENT 	
FORSIGTIG	- SYNLIG OG USYNLIG LASERSTRÅLING KLASS 1M, NÅR LÅGET ÅBENT. UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.	ER
VARO!	 AVATTAESSA OLET ALTTIINA LUOKAN 1M NÄKYVÄÄ JA NÄKYM. LASERSÄTEILYÄ. ÄLÄ KATSO OPTISELLA LAITTEELLA SUORAA 	
VORSICHT	 SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG KLASSE 1 GEÖFFNET. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN B 	
ATTENTION	 RAYONNEMENT LASER VISIBLE ET INVISIBLE, CLASSE 1M, EN NE PAS REGARDER DIRECTEMENT À L'AIDE D'INSTRUMENTS D 	
注意	ここを開くと可視及び不可視レーザ光が出ます ビームを見たり、触れたりしないでください。	٠.
注意	- 打开时有可见及不可见激光辐射,避免光束照射。 GB7241.1-2001/3B 类	RQLXS0075

Inside of product

Safety precautions

Placement



Set the unit up on an even surface away from direct sunlight, high temperatures, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Do not place heavy items on the unit.

Voltage



Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other places where DC is used.

AC mains lead protection



Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.



Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service



Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

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

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Accessories



Please check and identify the supplied accessories.

□1 Remote control (N2QAYB000091)



□1 FM indoor antenna (RSA0007-L)



□1 Antenna plug adaptor (K1YZ02000013)



□1 Sheet of speaker cable stickers



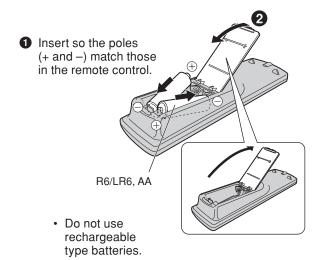
□ 2 Remote control batteries



□1 AC mains lead (K2CT3CA00004)



$^{ m O}_{ m O}$ Preparing the remote control



- mix old and new batteries.
- use different types of batteries at the same time.
- heat or expose batteries to flame.
- take apart or short circuit the batteries.
- attempt to recharge alkaline or manganese batteries.
- · use batteries if the covering has been peeled

Mishandling of batteries can cause electrolyte leakage which can severely damage the remote

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

■ Use

Aim at the display (→ page 14), avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

Placement of speakers

How you set up your speakers can affect the bass and the sound field. Note the following points:

- · Place speakers on flat secure bases.
- · Placing speakers too close to floors, walls, and corners can result in excessive bass. Cover walls and windows with thick curtains.

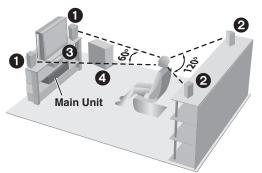
SPEAKERS



Other speaker setup options (⇒ page 10).

SETUP EXAMPLE

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



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.

Main unit

- · Keep your speakers at least 10 mm away from the system for proper ventilation.
- To allow proper ventilation and to maintain good airflow around the main unit, position it with at least 5 cm of space on all sides.
- Do not block the ventilation holes of the main unit.

Center speaker

- · 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.
- To prevent the speakers from falling, do not place directly on top of the television.

Subwoofer

· Place to the right or left of the television, on the floor or a sturdy shelf so that it will not cause vibration. Leave a space of 30 cm from the television.

Caution

 Refrain from holding the speaker's net.





Note

- 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 reverberating due to a 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.

If irregular coloring occurs on your television

The front and center 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.

Caution

- Use the speakers only with the recommended system. Failure to do so can damage the amplifier and speakers, and can cause fire. Consult a qualified service person if damage occurs or if a sudden change in performance is apparent.
- Do not attempt to attach these speakers to walls using methods other than those described in this manual.



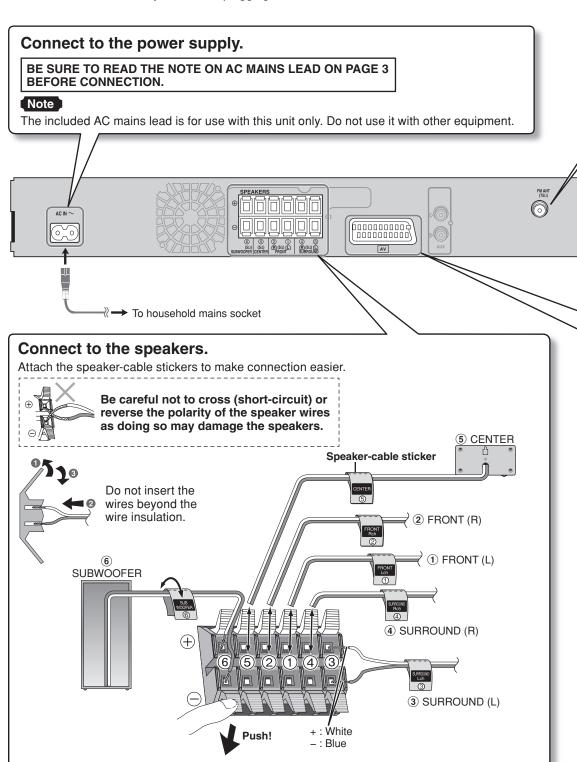
Making the connections

Connect the AC mains lead only after all other connections have been made.

Ensure that you have the complete accessories before making the connections.

Conserving power

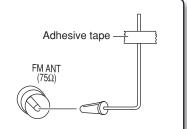
The main unit consumes a small amount of power, even when it is in standby mode (approx. 1 W). To save power when the unit is not to be used for a long time, unplug it from the household mains socket. You will need to reset some memory items after plugging in the unit.



Connect to the antenna.

■ FM indoor antenna

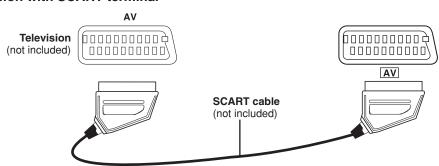
Tape the antenna where reception is the best.



Connect to the television's SCART terminal.

- Do not connect the unit through a video cassette recorder.
- Due to copy guard protection, the picture may not be displayed correctly.
- Turn the television off before connecting, and refer to the television's operating instructions.

■ Television with SCART terminal



Using the SCART (AV) terminal

You can change the video signal output from the SCART (AV) terminal from "RGB" to either "VIDEO" or "S-VIDEO" to suit the type of television you are using. Select "VIDEO" or "S-VIDEO" from "VIDEO OUT-SCART" in "VIDEO" tab (➡ page 25).

This connection will also enable you to play audio from your television through your home theater system. Refer to "Operating other equipment" (→ page 31).

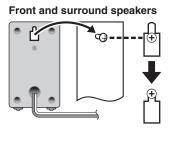


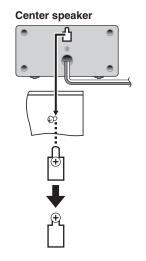
Other speaker setup options

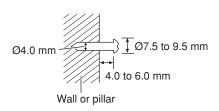
■ Attaching to a wall

You can attach the front, surround and center speakers to the wall.

- The wall or pillar on which the speakers are to be attached should be capable of supporting 10 kg per screw. Consult a qualified building contractor when attaching the speakers to a wall. Improper attachment may result in damage to the wall and speakers.
- 1 Drive a screw (not included) into a wall.
- 2 Fit the speaker securely onto the screw(s) with the hole(s).





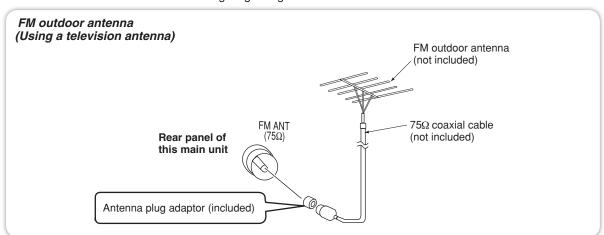


Optional antenna connections

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 a lightning storm.



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

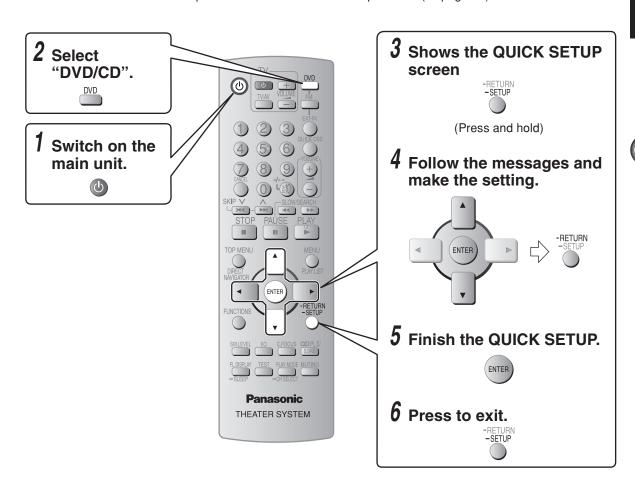
Performing QUICK SETUP

The QUICK SETUP screen assists you to make necessary settings.

To display the picture from this main unit, switch on the television and change the television's input mode which is connected to this main unit (example : VIDEO 1, AV 1, etc.).

To change your television's input mode, refer to its operating instructions.

This remote control is able to perform some basic television operations (→ page 33).



To change these settings later

Select "QUICK SETUP" in "OTHERS" tab (→ page 25).

■ Details of settings			
Menu language Choose the language for the on-screen messages.	• ENGLISH • DEUTSCH • NEDERLANDS	• FRANÇAIS • ITALIANO • POLSKI	• ESPAÑOL • SVENSKA
TV Type Select to suit the type of television.	• <u>STANDARD</u> • PROJECTION	• CRT • PLASMA	• LCD
TV's Aspect Ratio Choose the setting to suit your television and preference.	• <u>4:3 PAN&SCAN</u> • 16:9 NORMAL	• 4:3 LETTERBOX • 16:9 SHRINK	• 4:3 ZOOM • 16:9 ZOOM

· Underlined items in the above table are the factory preset.

Discs that can be played

		, , , , , , , , , , , , , , , , , , , ,	Indicated in	
	Disc	Logo	Logo Indicated in these instructions by	
	DVD- Video	VIDEO VIDEO	DVD-V	High quality movie and music discs.
\	Video CD	DIGITAL VIDEO COMPACT COMPAC	VCD	Music discs with video. Including SVCD (Conforming to IEC62107).
	CD	DIGITAL AUDIO	CD	Music discs.

■ Disc handling precautions (O: Playable, X: Not playable)

Disc	Logo	Recorded on a DVD video recorder, etc.		Recorded on a personal computer, etc.		Finalizing [∞]	
		DVD-VR] ^{×2}	DVD-V] ^{※4}	WMA	MP3	JPEG	
DVD-RAM	R A M R A M 4.7	0	_	×	0	0	Not necessary
DVD-R/RW	R R W R W	0	0	×	0	0	Necessary
DVD-R DL	R DL	O ^{%3}	0	×	×	×	Necessary
+R/+RW	_	×	(O) ^{**5}	×	×	×	Necessary
+R DL	_	×	(O) ^{**5}	×	×	×	Necessary
CD-R/RW ^{×1}	_	_	_	0	0	0	Necessary ^{×7}

It may not be possible to play all the above-mentioned discs in some cases due to the type of disc, the
condition of the recording, the recording method, or how the files were created (→ page 26, Tips for making
data discs).

- *2Discs recorded on DVD video recorders or DVD video cameras, etc. using Version 1.1 of the Video Recording Format (a unified video recording standard).
- [∞]Discs recorded on DVD video recorders or DVD video cameras using Version 1.2 of the Video Recording Format (a unified video recording standard).
- **4Discs recorded on DVD video recorders or DVD video cameras using DVD-Video Format.
- *5Recorded using a format different from DVD-Video Format, therefore, some functions cannot be used.
- ³⁶A process that allows play on compatible equipment. To play a disc that is displayed as "Necessary" on this unit, the disc must first be finalized on the device it was recorded on.
- *7 Closing the session will also work.

■ Video systems

- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- · This unit can convert NTSC signals to PAL 60 for viewing on a PAL television (→ page 25, "NTSC DISC OUT" in "VIDEO" tab).

Note about using a DualDisc

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

■ Discs that cannot be played

DVD-RW version 1.0, DVD-Audio, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridge, 2.6-GB and 5.2-GB DVD-RAM, and "Chaoji VCD" available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

Main unit



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.

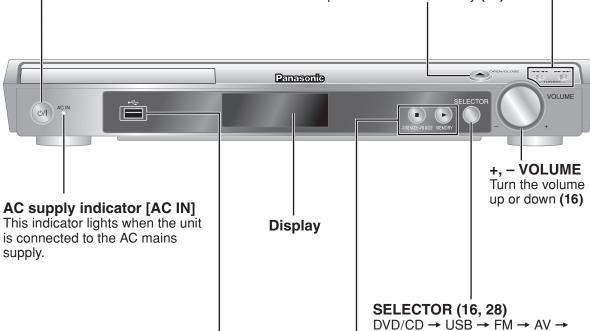
|**◄◄/◀◀, ▶▶/▶**|/∨ TUNING ∧

Skipping or slow-search play, Select the radio stations (28)

AUX → Returns to DVD/CD

▲ OPEN/CLOSE

Open or close the disc tray (16)



■/-TUNE MODE/-FM MODE

Stop playback. Select the tuning mode (28), Adjust the FM reception condition (28)

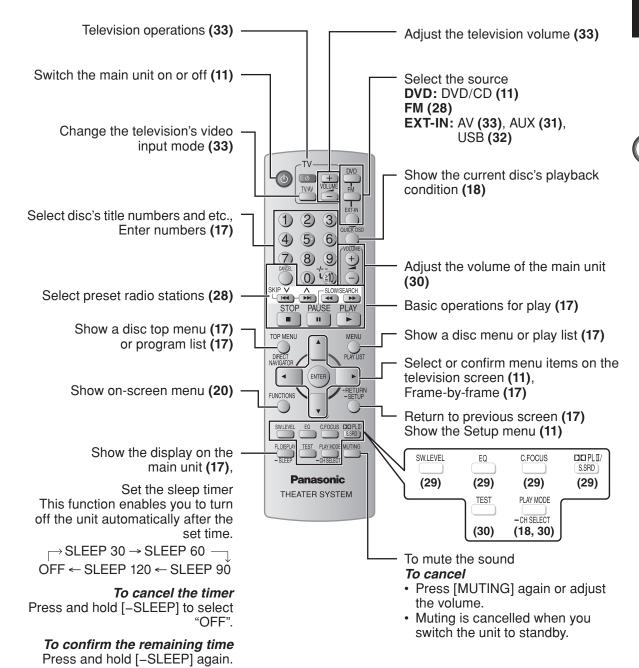
►/MEMORY

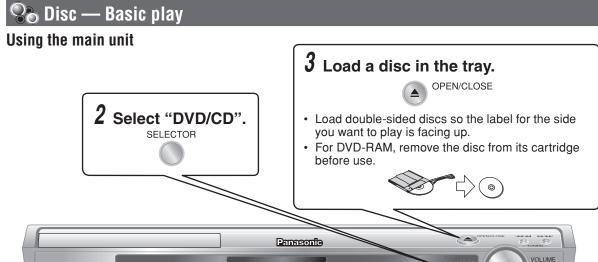
Disc playback (16), Memorize the receiving radio stations (28)

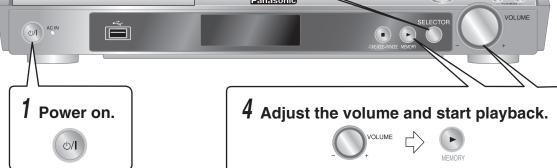
•<- USB port -

Connect a USB device (32)

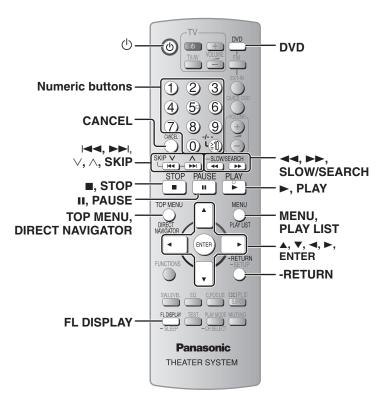
Remote control







Using the remote control



Stop



The position is memorised while

- "RESUME" is on the display.
- Press [►, PLAY] to resume.
- Press [■, STOP] again to clear the position.

Pause



PAUSE • Press [▶, PLAY] to resume playback.

Search (during play)



- Play speed increases up to 5 steps.
- Press [▶, PLAY] to resume normal playback.

Slow-motion play (during pause)



- Play speed increases up to 5 steps.
- VCD Slow motion play is for forward direction only.
- Press [►, PLAY] to resume normal playback.

Main unit display



DVD-V DVD-VR WMA MP3

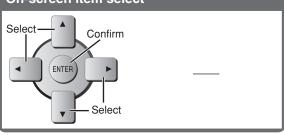
Time display ↔ Information display

SLIDE ↔ Information display

Skip



On-screen item select



Enter numbers







DVD-V (while stopped) DVD-VR

VCD CD Example: To select 12,











VCD with Playback control (PBC) Press [, STOP] and then press the numeric buttons to cancel the PBC functions.

Note

· The numeric buttons that can function depend on the number of tracks on the VCD.

Cancel the numbers



Disc menus

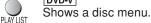


TOP MENU DVD-V

Shows a disc top menu.

DVD-VR Shows the program (→ page 19).





DVD-VR Shows the playlist (→ page 19).

vcp with Playback control (PBC) Shows a disc menu.

Frame-by-frame (during pause)



DVD-V DVD-VR VCD • DVD-VR VCD Forward direction only.

Return to previous screen



Note

DISC CONTINUES TO ROTATE WHILE MENUS ARE DISPLAYED.

Press [■, STOP] when you finish to preserve the unit's motor and your television screen.

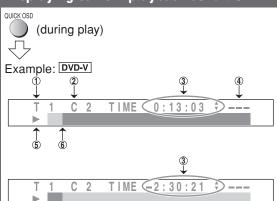
Total title number may not be displayed properly on +R/+RW.





$\mathbb{Q}_{\mathcal{O}}$ Advanced play

Displaying current playback condition



The OSD's (on-screen display) abbreviations are as described below:

① Current playback item

example: T = Title (DVD-V) or Track (CD VCD)

C = Content (WMA MP3)

PG = Program or

PL = Playlist (DVD-VR)

- ② Current playback chapter example: C = Chapter ([DVD-V])
- 3 Elapsed or remaining play time (Press [▲, ▼] to view the elapsed or remaining play time.)
- 4 Play mode condition
- ⑤ Playback condition
- 6 Current playback position

Note

WMA MP3

Remaining play time cannot be viewed.

Program and Random play



→ Program → Random -Example: DVD-V Off (Normal play)←

To exit program or random play mode while stopped.

PLAY MODE (several times)

DVD-V Some items cannot be played even if you have programmed them.

Program play (up to 30 items)

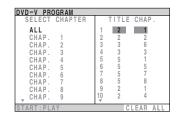
1 To select the items.



- Press [-RETURN] to select from the previous
- Repeat this step to program other items.

Example: DVD-V

DVD-V PROGRAM	
SELECT TITLE	TITLE CHAP.
TITLE 1	1
TITLE 2	2
TITLE 3	3
TITLE 4	4
TITLE 5	5
TITLE 6	6
TITLE 7	7
111122 /	8
	9
	10
START: PLAY	CLEAR ALL
_	1



PLAY

To select all the items

Press [▲, ▼] to select "ALL".

Then press [ENTER] again to confirm.

To clear the selected program

- 1. Press [▶, ▲, ▼] to select the program number.
- 2. Press [CANCEL].

To clear the whole program

Select "CLEAR ALL" with [▶] and press [ENTER]. The whole program is also cleared when the unit is turned off, the disc tray is opened or another source is selected.

Random play

1 To select a title.



Example: DVD-V





Press [ENTER] again to cancel the selection.



RQTX0029



$\mathbb{R}_{\mathcal{O}}$ Playing data discs using navigation menus

Playing data discs

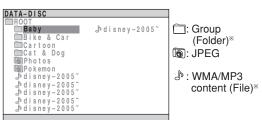
Select "DATA" in "OTHERS" tab (→ page 25) to play WMA, MP3 or JPEG content.

WMA MP3 JPEG

Playing from the selected item







- * Files are treated as contents and folders are treated as groups in these instructions. Maximum file or folder name: approximate 12 characters
- 2 To select the group.



3 To start play from the selected content.



To exit the screen Press [MENU].

Playing RAM and DVD-R/-RW (DVD-VR)

DVD-VR

- Titles appear only if the titles are recorded on the disc.
- You cannot edit programs, play lists and disc

Playing the programs

TOP MENU (during stop) NAVIGATOR



2 To select from the program.



3 ENTER

To exit the screen Press [DIRECT NAVIGATOR].

Playing a play list

Applicable only when the disc contains a play list.

1 MENU PLAY LIST



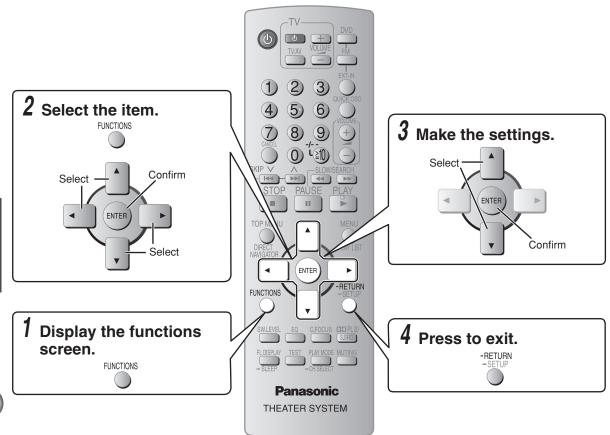
2 To select from the play list.



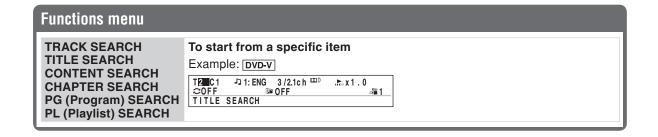
3 ENTER

To exit the screen Press [PLAY LIST].





Items shown differ depending on the type of disc as well as the recording format.

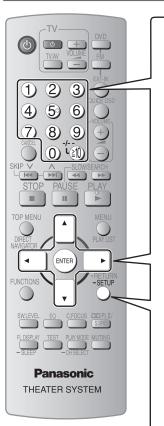


Functions menu (continued) Example: DVD-V 1: ENG 3/2.1ch □□0x1.0 T2 C1 ™ OFF AUDIO DVD-V To select audio soundtrack DVD-VR VCD To select "L", "R", "L+R" or "L R" DVD-V (Karaoke disc) To select "ON" or "OFF" for vocals To select "OFF", "V2", "V1" or "V1+V2" for different vocal selections · Read the disc's instructions for details. **AUDIO** Signal type/data LPCM/PPCM/DDDigital/DTS/MP3/MPEG: Signal type kHz (Sampling frequency)/bit/ch (Number of channels) Example: 3 /2 .1ch .1: Low frequency effect (not displayed if there is no signal) 0: No surround 1: Mono surround 2: Stereo surround (left/right) 1: Center 2: Front left + Front right 3: Front left + Front right + Center JPEG: OFF ↔ ON 0FF G+0 **DATE DISPLAY** DATE DISPLAY To change play speed - from "x0.6" to "x1.4" (in 0.1-unit steps) Example: DVD-V . x1.0 COFF PLAY SPEED **å** 1 **PLAY SPEED** DVD-V DVD-VR Press [►, PLAY] to resume normal playback. · After you change the speed. -Dolby Pro Logic II has no effect. -Audio output switches to 2-channel stereo. -Sampling frequency of 96 kHz is converted to 48 kHz. This function may not work depending on the disc's recording. To rotate a picture (during pause) $\boxed{\text{JPEG}}: 0 \rightarrow 90 \rightarrow 180 \rightarrow 270$ ROTATION C)0 0FF ≈OFF ROTATION Example: DVD-V T2 C2 J1:*** 2/0ch DD № 1:ENG ©FF REPEAT MODE (Only when the elapsed play time can be displayed.) $\boxed{\text{DVD-V}}$: OFF \rightarrow TITLE \rightarrow CHAP. (Chapter) \rightarrow A-B **REPEAT MODE** DVD-VR : OFF → ALL → PG (Program) or PL (Playlist) → A-B VCD CD : OFF → ALL → TRACK → A-B [WMA] [MP3]: OFF \rightarrow ALL \rightarrow GROUP* \rightarrow CONTENT \rightarrow A-B JPEG: OFF → ALL → GROUP* leps "GROUP" will not be displayed during program or random play.



So using on-screen menus (continueu)				
Functions menu (continued)				
	To select subtitle language Example: DVD-V			
	T2 C2			
SUBTITLE	DVD-V VCD (SVCD only)			
	 On +R/+RW, a subtitle number may be shown for subtitles that are not displayed. DVD-VR "ON" or "OFF" appears only with discs that contain subtitle on/off information (Subtitle on/off information cannot be recorded using Panasonic DVD Recorders). 			
	(with multiple angles) To select a video angle Example: DVD-V			
ANGLE	T2 C2			
	Example: DVD-V			
	□ NORMAL QNORMAL			
	PICTURE MODE			
PICTURE MODE	NORMAL : Normal images. CINEMA1 : Mellows images and enhances detail in dark scenes. CINEMA2 : Sharpens images and enhances detail in dark scenes. DYNAMIC : Enhances the contrast for powerful images. ANIMATION : Suitable for animation.			
	To select various zoom sizes			
	Example: DVD-V			
	MORMAL NORMAL			
ZOOM	Z00M			
	NORMAL AUTO			
	x2			
	x4 To make the dialogue in movies easier to hear			
	Example: DVD-V			
DIALOGUE ENHANCER	© OFF			
	DIALOGUE ENHANCER			
	DVD-V (Dolby Digital, DTS, MPEG, 3-channel or higher, with the dialogue recorded in the center channel)			
	OFF ↔ ON			
	OFF → MOVIE → MUSIC			
Dolby PLII	(⇒ page 29, Enhancing the stereo sound : Dolby Pro Logic II) Example: DVD-V			
	© OFF			
	Dolby PLII			

$\mathbb{Q}_{f b}$ Changing the player settings

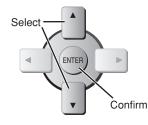


1 Display the MAIN menu.

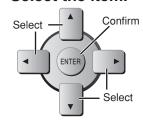


(Press and hold)

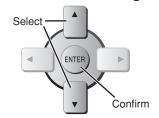
2 Select the tab.



3 Select the item.



4 Make the settings.





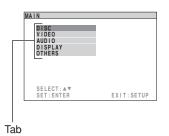


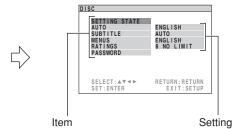




5 Press to exit.







- If you have not performed QUICK SETUP (→ page 11), the QUICK SETUP screen appears.
- The settings remain intact even if you switch the unit to standby.
- · Underlined items are the factory settings in the following table.

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

MAIN menu ■ "DISC" tab ENGLISH FRENCH SPANISH GERMAN Choose the audio language. • ITALIAN SWEDISH DUTCH POLISH ORIGINAL*1 • OTHER ----**SUBTITLE** • AUTO^{*3} ENGLISH FRENCH SPANISH Choose the subtitle language. GERMAN ITALIAN SWEDISH DUTCH • OTHER ----*2 POLISH

- *1 The original language designated on the disc is selected.
- ^{∞2} Input a code number referring to the table (→ page 36).
- *3 If the language selected for "AUDIO" is not available, subtitle appears in that language (if available on the disc).

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

MAIN menu (continued)

MAIN III (Continucu)				
MENUS Choose the language for disc menus. Changing the menu language in QUICK SETUP also changes this setting.	• ENGLISH • ITALIAN	• FRENCH • SWEDISH	• SPANISH • DUTCH	• GERMAN • POLISH
	• OTHER	_ *2		
RATINGS Set a ratings level to limit DVD-Video play.	• 0 LOCK ALL: 1	ibit play of DVD-V	elected) discs without rat /ideo with corresp	
	Enter your pass Do not forget y A message scre level is inserted	word and then fol your password. en will be shown		
PASSWORD Change the password for	SETTING Changing rating	s (When level 0 t	o 7 is selected)	

Changing ratings (When level 0 to 7 is selected)

Follow the on-screen instructions.

• CHĂNĞE

■ "VIDEO" tab

"RATINGS".

■ VIDEO tab	
TV ASPECT Choose the setting to suit your television and preference.	 4:3 PAN&SCAN: Regular aspect television (4:3) The sides of the widescreen picture are cut off so it fills the screen (unless prohibited by the disc). 4:3 LETTERBOX: Regular aspect television (4:3) Widescreen picture is shown in the letterbox style. 4:3 ZOOM: Regular aspect television (4:3) The picture zooms in and out.
	16:9 NORMAL: Widescreen television (16:9) Laterally stretches image. 16:9 SHRINK: Widescreen television (16:9) Images appear in the center of the screen. 16:9 ZOOM: Widescreen television (16:9) Expands to 4:3 aspect ratio.
TV TYPE Select to suit the type of television.	• <u>STANDARD</u> • CRT • LCD • PROJECTION • PLASMA
TIME DELAY When connected with a Plasma display, adjust if you notice the audio is out of sync with the video.	• <u>0 ms</u> • 20 ms • 40 ms • 60 ms • 80 ms • 100 ms
*2 Input a code number referring	to the table (→ page 36).

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

MAIN menu (continued)	
NTSC DISC OUT Choose PAL 60 or NTSC output when playing NTSC discs (→ page 13, Video systems).	NTSC: When connected to a NTSC television. PAL60: When connected to a PAL television.
STILL MODE Specify the type of picture shown when paused.	• AUTO • FIELD*4: The picture is not blurred, but picture quality is lower. • FRAME*4: Overall quality is high, but the picture may appear blurred.
VIDEO OUT – SCART Choose the video signal format to be output from the SCART (AV) terminal.	• VIDEO • S-VIDEO • RGB
■ "AUDIO" tab	
DYNAMIC RANGE	ON: Adjust for clarity even when the volume is low by compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing. (Only works with Dolby Digital) OFF
SPEAKER SETTINGS (→ page 26) Set the delay time for your center and surround speakers	• SETTINGS • C DELAY: • Oms • 1ms • 2ms • 3ms • 4ms • 5ms • 5ms • 10ms • 15ms
■ "DISPLAY" tab	
LANGUAGE	• <u>ENGLISH</u> • FRANÇAIS • ESPAÑOL • DEUTSCH • ITALIANO • SVENSKA • NEDERLANDS • POLSKI
■ "OTHERS" tab	
JPEG TIME Set the speed of the slideshow.	• 1 SEC • 2 SEC • 3 SEC • 4 SEC to 15 SEC • 15 SEC to 60 SEC (in 5-unit steps) • 60 SEC to 180 SEC (in 30-unit steps)
FL DIMMER Change the brightness of the unit's display.	BRIGHT DIM AUTO: The display is dimmed, but brightens when you perform some operations.
QUICK SETUP	• SET • <u>YES</u> • NO
DVD-VR/DATA Select to play only DVD-VR or DATA format (→ page 19).	• <u>DVD-VR</u> • DATA
DEFAULTS This returns all values in the MAIN menu to the default settings.	• RESET The password screen is shown if "RATINGS" (→ page 24) is set. Please enter the same password, then turn the unit off and on again.
*4 Refer to "Frame still and field s	still" (⇒ page 37, Glossary).



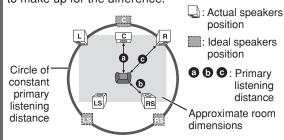


Changing the delay time of the speakers

Effective when playing multi-channel audio

(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.



If either distance (a) or (b) is less than (c), find the difference in the table and change to the recommended setting.

5 ms

a Center sp	eaker	6 Surround s	peaker
Difference (Approx.)	Setting	Difference (Approx.)	Setting
30 cm	1 ms	150 cm	5 ms
60 cm	2 ms	300 cm	10 ms
90 cm	3 ms	450 cm	15 ms
120 cm	4 ms		•

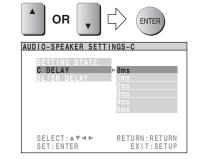
■ To enter the speaker setting

1 To select the speaker.



C DELAY = Center delay SL / SR DELAY = Surround left / Surround right delay

2 To select the delay time.



To exit the setup Press and hold [-SETUP].

Tips for making data discs

150 cm

- When there are more than eight groups, the eighth group onwards will be displayed on one vertical line in the menu screen.
- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

DVD-RAM

· Discs must conform to UDF 2.0.

DVD-R/RW

- Discs must conform to UDF bridge (UDF 1.02/ISO9660).
- This unit does not support multi-session. Only the default session is played.

CD-R/RW

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are many sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.

Naming folders and files

Files are treated as contents and folders are treated as groups on this unit.

At the time of recording, prefix folder and file names. This should be with numbers that have an equal number of digits, and should be done in the order you want to play them (this may not work at times). Files must have the extension (\Rightarrow see below).

WMA (Extension: ".WMA" or ".wma")

- Compatible compression rate: between 48 kbps and 320 kbps.
- · You cannot play WMA files that are copy-protected.
- This unit does not support Multiple Bit Rate (MBR).

MP3 (Extension: ".MP3" or ".mp3")

- · Compatible compression rate: between 32 kbps and 320 kbps.
- · This unit does not support ID3 tags.
- · Compatible sampling rates:
 - DVD-RAM, DVD-R/RW: 11.02, 12, 22.05, 24, 44.1 and 48 kHz
 - CD-R/RW: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz

JPEG (Extension: ".JPG", ".jpg", ".JPEG" or ".jpeg")

- JPEG files taken on a digital camera that conform to DCF Standard (Design rule for Camera File system)
 Version 1.0 are displayed. Files that have been altered, edited or saved with computer picture editing software may not be displayed.
- This unit cannot display moving pictures, MOTION JPEG and other such formats, and still pictures other than JPEG (Example: TIFF), or play pictures with attached audio.

Disc handling precautions

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

■ To clean discs

Wipe with a damp cloth and then wipe dry.







brace Using the radio

Manual tuning

1 To select "FM".

SELECTOR

OR



(main unit)

(remote control)

2 To select "MANUAL".



-TUNE MODE/-FM MODE

(main unit)

3 To select the frequency.





(main unit)

(remote control)

Press and hold [∨ TUNING ∧] until the frequency starts scrolling to start automatic tuning. Tuning stops when a station is found.

Presetting the channel

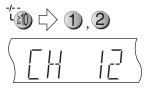
Remote control only

Up to 30 stations can be set for FM.

- 1. While listening to the radio broadcast Press [ENTER].
- 2. While the frequency and "PGM" are flashing on the

Press the numeric buttons to select a channel.

· To select a 2-digit number Example: To select 12,



 Alternatively, press [∨, ∧], then press [ENTER].

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

Automatic presetting

1 To select "FM".

SELECTOR





(main unit)

(remote control)

2 Press and hold.



(main unit)

ENTER (remote

control)

Release the button when "FM AUTO" is displayed.

The tuner tunes to the lowest frequency and starts to preset all the stations it can receive into the channels in ascending order.

- · "SET OK" is displayed when the stations are set, and the radio tunes to the last preset station.
- "ERROR" is displayed when automatic presetting is unsuccessful. Preset the channels manually (→ see left).

Selecting the preset channels

1 To select "FM".



2 To select the channel.



TO

 Alternatively, press [∨, ∧]. When a stereo FM broadcast is being received, "ST" lights in the display.



If noise is excessive in FM

Main unit only

Press and hold [-FM MODE] to display "MONO".

Press and hold [-FM MODE] again to cancel the

The mode is also cancelled when you change the frequency.

8 Using sound effects

Note `

- The following sound effects may not be available or have no effect depending on the type of source.
- You may experience a reduction in sound quality when these sound effects are used with some sources. If this occurs, turn the sound effects off.

Enhancing the sound from the center speaker: Center Focus

This applies to discs where the dialogue is recorded in the center channel.

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





C FOCUS ON ↔ C FOCUS OFF

· This also works when Dolby Pro Logic II is turned on.

Adjusting the amount of bass: Subwoofer level

You can adjust the amount of bass. The unit automatically selects the most suitable setting according to the type of playback source.





SUB W 2 (factory preset) → SUB W 3 - SUB W 1 ← SUB W 4 ←

- When AV or AUX source is selected SUB W 1 (factory preset) → SUB W 2 — SUB W 4 ← SUB W 3 ←
- To check the current setting, press [SW.LEVEL].
- The setting you make is retained, and recalled every time you play the same type of source.

Changing the sound quality: Equalizer Mode (EQ)



SOFT*: For background music. **HEAVY**: Adds punch to rock. **CLEAR**: Clarifies higher sounds. **FLAT**: Cancel (no effect is added)

(factory preset).

- To check the current setting, press [EQ].
- You can adjust the volume of the surround speakers to get the best surround effect (→ page 30, Adjusting the volume of each speaker: Speaker level adjustments).
- Factory preset when AV or AUX source is selected.

Enhancing the stereo sound: Dolby Pro Logic II

Dolby Pro Logic II is an advanced decoder that derives 5-channel surround (Left and Right Front, Center, Left and Right Surround) from stereo sound sources, whether or not it has been specifically Dolby Surround encoded.





MOVIE: Movie software, recorded in

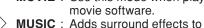
Dolby Surround. MUSIC: Stereo sources.

OFF : Cancel.

- This function is only available for DVD/CD and USB mode.
- "DDPLII" lights when there is effect.

Enhancing the stereo sound: Super Surround

MOVIE: Use this mode when playing





stereo sources. **OFF** : Cancel.

- Super Surround and EQ can be turned on simultaneously.
- This function is only available for FM, AV and AUX mode.



Adjusting the volume of each speaker: Speaker level adjustments

This is one of the ways to get appropriate surround effects.

Preparation



1 While stopped and no on-screen display is shown To output a test signal.



L: Front left

C: Center

R: Front right

RS: Right surround

LS: Left surround

- There is no output from SW (subwoofer) channel.
- **2** To set the volume level normally used for listening.



3 To adjust the speaker level for each speaker.





 Adjust the speaker levels to the same level as the front speakers. C, RS, LS: -6 dB to +6 dB

To stop the test signal

Press [TEST] again.

To adjust speaker level during play

(Effective when playing multi-channel audio or when Dolby Pro Logic II is on.)

1. Press and hold [-CH SELECT] to select the speaker.

$$\underset{\uparrow}{L} \rightarrow C \rightarrow R \rightarrow RS \rightarrow LS \rightarrow SW$$

SW: Subwoofer

- · You can adjust SW only if the disc includes a subwoofer channel.
- "SW" does not appear on the display and is not adjustable when "□□PLII" is lit.
- "S" appears on the display when "MOVIE", "MUSIC" is selected with Super Surround (→ page 29).

In this case, you can adjust both surround speaker levels at the same time using $[\blacktriangle, \blacktriangledown]$. S: -6 dB to +6 dB

2. Press [▲] (increase) or [▼] (decrease) to adjust the speaker level for each speaker.

C, RS, LS, SW: -6 dB to +6 dB

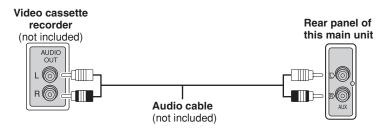
(L, R: Only the balance is adjustable.)

· To adjust the balance of the front speakers, while "L" or "R" is selected, press [◄, ►].

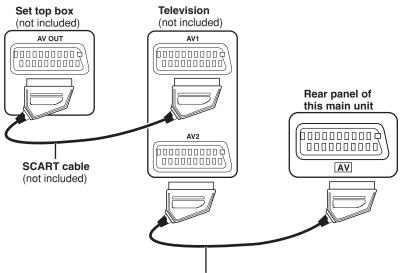
Optional audio connection for video cassette recorder

This audio connection will enable you to play audio from your video cassette recorder through your home theater system.

Press [EXT-IN] (→ page 15) to select "AUX" as the source to operate the audio input.



Optional connection for set top box



SCART cable (not included)

 To listen to the sound from the television, select the appropriate audio out (example: Monitor) on the television.

Sound from the television

 Press [EXT-IN] (→ page 33) to select the "AV" audio input from the remote control.





Optional USB connection and operation

WMA MP3 JPEG

The USB connectivity enables you to connect and play tracks or files from USB mass storage class devices.

Typically, USB memory devices. (Bulk only transfer)

Preparation

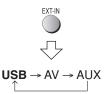
Before connecting any USB mass storage device to the unit, ensure that the data stored therein has been backed up.

It is not recommended to use a USB extension cable. The USB device might not be recognised by this unit.

1 Connect the USB mass storage device (not included).



2 To select "USB" as the source, press several



Select the desired item for playback.



Example:

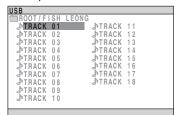


3 Adjust the volume of the main unit.



4 Begin playback by selecting the track from the USB mass storage device.

Example:





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

For other operating functions, they are similar as those described on "DISC OPERATION" (→ page 16 to 27).

Compatible devices

- Devices which are defined as USB mass storage class:
- USB devices that support bulk only transfer.
- USB devices that support USB 2.0 full speed.

Supported Formats

	File name	File extension
Still pictures	JPG*	.jpg .jpeg
Music	MP3 WMA	.mp3 .wma

^{*} It may not be possible to play all the files due to the condition on how they were created.

Note

- · CBI (Control/Bulk/Interrupt) is not supported.
- Digital Cameras that use PTP protocol or which require additional program installation when connected to a PC are not supported.
- A device using NTFS file system is not supported. [Only FAT 16/32 (File Allocation Table 16/32) file system is supported].
- Depending on the sector size, some files may not work.
- It will not operate with Janus enabled MTP (Media Transfer Protocol) devices.
- · Maximum folder: 256 folders
- · Maximum file: 4000 files
- Maximum file name: 12 characters
- · Maximum folder name: 12 characters
- Only one memory card will be selected when connecting a multiport USB card reader. Typically the first memory card inserted.

Operating the television

You can use the remote control to operate a Panasonic television.

Aim the remote control at the television.

To switch the television on or off



To switch the television's video input mode



Adjust the volume



To play audio from your television through your home theater system

Preparation

Connect your equipment referring to "Connect to the television's SCART terminal" (→ page 9).

Press [EXT-IN] to select "AV" as the source. Then reduce the volume on the television to its minimum, and control the volume on this main unit.

Note

- The remote control may not work properly with some models.
- You can enjoy 5.1-channel surround sound when you turn on Super Surround (MOVIE, MUSIC) (→ page 29).



% Troubleshooting guide

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

■Power			Page
No power.	•	Insert the AC mains lead securely.	8
The unit is automatically switched to the standby mode.	٠	The Sleep timer was working and had reached the set time limit.	15

■ Unresponsive or inoperable function

a chicoponoive of moperable function			
No response when any buttons are pressed.	 This unit cannot play discs other than the ones listed in these operating instructions. The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit off and then back to on. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it. Condensation has formed: Wait 1 to 2 hours for it to evaporate. 	12 —	
No response when remote control buttons are pressed.	 Check that the batteries are installed correctly. The batteries are depleted. Replace them with new ones. Aim the remote control at the display and operate. 	6 6 14	
No picture or sound.	 Check the video or speaker connection. Check the power or input setting of the connected equipment and the main unit. Check that the disc has something recorded on it. 	8, 9 —	
You have forgotten your ratings password. Reset all the settings to Factory Preset.	• While stopped and "DVD/CD" is the source, press and hold [■] on the main unit and [≥10] on the remote control until "INITIALIZED" disappears from the television. Turn the unit off and on again. All settings will return to the default values.	_	

■ Specific operation undesirable or unexpected

It takes time before play starts.	٠	Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed. This is normal. MP3	_
Folders on a data CD are not displayed correctly. WMA MP3 JPEG	٠	Folders deeper than the eighth layer are displayed as the eighth layer.	_
A menu screen appears during skip or search. VCD	•	This is normal for Video CDs.	_
Playback control menu does not appear. VCD with playback control	٠	Press [■, STOP] twice and then press [►, PLAY].	_
The program and random play functions do not work.	٠	These functions do not work with some DVD-Videos.	_
Play does not start.	:	This unit may not play WMA that contains still picture data. If a disc contains CD-DA and other formats, proper playback may not be possible.	_

■ Subtitle

No subtitles.	Display the subtitles. ("SUBTITLE" in Functions menu)	22
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■ A-B repeat

Point B is automatically set.	The end of an item becomes point B when it is reached.	

■ Menus		Page
The Setup menu cannot be accessed.	 Select "DVD/CD" as the source. Cancel program and random play. Cancel JPEG's playback. 	18 —
■ Sound abnormal or impro	per	
Sound is distorted.	Noise may occur when playing WMA.	_
Effects do not work.	 Some audio effects do not work or have less effect with some discs. Dolby Pro Logic II does not work if you have changed the play speed. 	_
Humming is heard during play.	An AC mains lead or fluorescent light is near the main unit. Keep other appliances and cables away from the main unit.	_
No sound.	There may be a slight pause in sound when you change the play speed.	_
■ Picture abnormal or unvi	ewable	
The picture on the television is not displayed correctly or disappears.	 The unit and television are using different video systems. Use a multi-system or PAL television. The system used on the disc does not match your television. PAL discs cannot be correctly viewed on an NTSC television. 	_
	 This unit can convert NTSC signals to PAL 60 for viewing on a PAL television ("NTSC DISC OUT" in "VIDEO" tab). Ensure that the unit is connected directly to the television, and is 	25 31
	not connected through a video cassette recorder. Mobile telephone chargers can cause some disturbance. If you are using an indoor television antenna, change to an	_
	 outdoor antenna. The television antenna wire is too close to the unit. Move it away from the unit. 	_
Picture size does not fit the screen.	 Change "TV ASPECT" in the "VIDEO" tab. Use the television to change the aspect. Change the zoom setting. ("ZOOM" in Functions menu.) 	24 — 22
Menu is not displayed correctly.	Restore the zoom ratio to "NORMAL". ("ZOOM" in Functions menu.)	22
Auto zoom function does not work well.	 Turn off television zoom function. Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc. 	_
■ Unit displays		
The display is dark.	Select "BRIGHT" in "FL DIMMER" in the "OTHERS" tab.	25
"NO PLAY"	 You inserted a disc the unit cannot play; insert one it can. You inserted a blank disc. You inserted a disc that has not been finalized. 	12 — —
"NO DISC"	 You have not inserted a disc; insert one. You have not inserted the disc correctly; insert it correctly. 	-
"OVER CURRENT ERROR"	The USB device is drawing too much power. Switch to DVD/CD mode, remove the USB and turn the unit off.	_
"F61"	Check and correct the speaker cable connections. If this does not fix the problem, consult the dealer.	8
"F76"	There is a power supply problem. Consult the dealer.	
"DVD U11"	Disc may be dirty. Wipe it clean.	27
"ERROR"	Incorrect operation performed. Read the instructions and try again.	_
"DVD H □ □" "DVD F □ □ □" □ stands for a number.	Trouble may have occurred. The numbers following "H" and "F" depend on the status of the unit. Turn the unit off and then back on. Alternatively, turn the unit off, disconnect the AC mains lead, and then reconnect it. If the service numbers fail to clear, note the service number and	_

If the service numbers fail to clear, note the service number and contact a qualified service person.



Troubleshooting guide (continued)

■ Television displays

" o "	•	The operation is prohibited by the unit or disc.	_
"ERROR"	•	You are trying to display an incompatible group or content. You are trying to play a protected group or content. You cannot play it.	_
"Check the disc"	•	This disc may be dirty.	_
"This disc may not be played in your region"	•	Only DVD-Video discs that include or have the same region number as the one on the rear panel of this unit can be played.	Cover

■ USB

The USB drive or its contents cannot be read.	system. The USB host function of this product may not work with s USB devices. USB devices with storage capacity of more than 32 GB m work in some instances.		_ _ _	
Slow operation of the USB device.	•	Large file size or high memory USB flash drive takes longer time to read and display on the TV.	_	

■ Listening to the radio

Distorted sound or noise is heard. "ST" flickers or does not light.	Use an outdoor antenna.		<u> </u>
A beat sound is heard.	•	Turn the television off or move it away from the unit.	_

🗞 Language code list

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



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 multi-channel audio. A large amount of audio information can be recorded on one disc using this method.

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

DVD-Videos are recorded using either film or video. This unit can determine which type has been used, then uses the most suitable method of progressive output.

Film: Recorded at 25 frames per second (PAL discs) or 24 frames per second (NTSC discs). (NTSC discs recorded at 30 frames per second as well). Generally appropriate for motion picture films.

Video: Recorded at 25 frames/50 fields per second (PAL discs) or 30 frames/60 fields per second (NTSC discs). Generally appropriate for TV drama programs or animation.

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.

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
 - This picture has the best quality and is the best to use when adjusting the picture.
- P: Predictive coded picture
 - This picture is calculated based on past I or Ppictures.
- B: Bidirectionally-predictive coded picture This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

JPEG (Joint Photographic Experts Group)

This is a system used for compressing/decoding color still pictures. If you select JPEG as the storage system on digital cameras, etc., the data will be compressed to 1/10-1/100 of its original size. The benefit of JPEG is less deterioration in picture quality considering the degree of compression.

Linear PCM (Pulse Code Modulation)

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

MP3 (MPEG Audio Layer 3)

An audio compression method that compresses audio to approximately one tenth of its size without any considerable loss of audio quality.

Playback control (PBC)

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

Sampling frequency

Sampling is the process of converting the heights of sound wave (analog signal) samples taken at set periods into digits (digital encoding).

Sampling frequency is the number of samples taken per second, so larger numbers mean more faithful reproduction of the original sound.

WMA (Windows Media™ Audio)

WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.





AMPLIFIER SECTION

RMS Output Power: Dolby Digital Mode

Front Ch

55 W per channel (5 Ω), 1 kHz, 10 % THD Surround Ch

55 W per channel (5 Ω), 1 kHz, 10 % THD

Center Ch

55 W per channel (5 Ω), 1 kHz, 10 % THD

Subwoofer Ch

55 W per channel (5 Ω), 100 Hz, 10 % THD Total RMS Dolby Digital mode power 330 W

DIN Output Power: Dolby Digital Mode

Front Ch

25 W per channel (5 Ω), 1 kHz, 1 % THD

Surround Ch

25 W per channel (5 Ω), 1 kHz, 1 % THD

Center Ch

25 W per channel (5 Ω), 1 kHz, 1 % THD

Subwoofer Ch

25 W per channel (5 Ω), 100 Hz, 1 % THD Total DIN Dolby Digital mode power 150 W

FM TUNER, TERMINALS SECTION

Preset Memory FM 30 stations Frequency Modulation (FM)

Frequency range

87.50 to 108.00 MHz (50-kHz step) Sensitivity 1.8 μ V (IHF) S/N 26 dB 1.4 μ V Antenna terminals 75 Ω (unbalanced)

DISC SECTION

Discs played (8 cm or 12 cm)

- (1) DVD (DVD-Video)
- (2) DVD-RAM (DVD-VR, MP3*1, *4, JPEG*1, *2)
- (3) DVD-R (DVD-Video, DVD-VR, MP3*1, *4, JPEG*1, *2)
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, MP3*1, *4, JPEG*1, *2)
- (6) +R/+RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW (CD-DA, Video CD, SVCD*3, MP3*1,*4, WMA*1,*5, JPEG*1,*2)
- The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.
- Exif Ver 2.1 JPEG Baseline files
 Picture resolution: between 160 x 120 and
 6144 x 4096 pixels (Sub sampling is 4:0:0, 4:2:0,
 4:2:2 or 4:4:4).

Extremely long and narrow pictures may not be displayed.

- *3 Conforming to IEC62107
- *4 MPEG-1 Layer 3, MPEG-2 Layer 3
- Windows Media Audio Ver.9.0 L3 Not compatible with Multiple Bit Rate (MBR)

Pick up

Wavelength (DVD/CD) 662/785 nm Laser power (DVD/CD) CLASS 1/CLASS 1M

Audio output (Disc)

Number of channels

5.1ch (FL, FR, C, SL, SR, SW)

USB SECTION

USB Port

USB Standard USB2.0 full speed 2.0

Supported media file format

MP3 (*.mp3) WMA (*.wma)

JPEG (*.Jpg, *.JPEG)
USB device file system

FAT16 FAT32

USB port power 500 mA (Max)

VIDEO SECTION

Video system PAL625/50, PAL525/60, NTSC

Composite video output

Output level 1 Vp-p (75 Ω) Terminal Scart jack (1 system)

S-video output

Y output level 1 Vp-p (75 Ω) C output level PAL; 0.3 Vp-p (75 Ω) NTSC; 0.286 Vp-p (75 Ω) Terminal Scart jack (1 system)

RGB video output

 $\begin{array}{lll} \mbox{R output level} & 0.7 \mbox{ Vp-p } (75 \ \Omega) \\ \mbox{G output level} & 0.7 \mbox{ Vp-p } (75 \ \Omega) \\ \mbox{B output level} & 0.7 \mbox{ Vp-p } (75 \ \Omega) \\ \mbox{Terminal} & \mbox{Scart jack } (1 \mbox{ system}) \\ \end{array}$

SPEAKER SECTION

Front speakers SB-HF150

Type 1 way, 1 speaker system (Bass reflex)

Input power (IEC) 55 W* (Max)

Output sound pressure 80 dB/W (1.0 m)

Frequency range 96 Hz to 25 kHz (-16 dB) 120 Hz to 22 kHz (-10 dB)

Dimensions (W x H x D)

92 mm x 135 mm x 95.4 mm

Mass 0.6 kg

Surround speakers SB-HS151

Dimensions (W x H x D)

92 mm x 135 mm x 95.4 mm **Mass** 0.6 kg

Center speakers SB-HC150

Dimensions (W x H x D)

135 mm x 92 mm x 95.4 mm Mass 0.6 kg

Subwoofer SB-W340

Dimensions (W x H x D)

152 mm x 339 mm x 258 mm 3 kg

Main unit

GENERAL

Power supply AC 230 to 240 V, 50 Hz Power consumption

ower consumption

430 mm x 60 mm x 342 mm

Dimensions (W x H x D)

Mass

Mass

5 % to 90 % RH (no condensation)

Power consumption in standby mode

approx. 1 W

105 W

Note

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

S Maintenance

Clean this unit with a soft, dry cloth.

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

Before moving the unit, ensure the disc tray is empty.

Failure to do so will risk severely damaging the disc and the unit.



^{*} Rating with low-cut filter equipped amplifier

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WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

■ Sales and Support Information

Customer Care Centre

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

Direct Sales at Panasonic UK

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

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