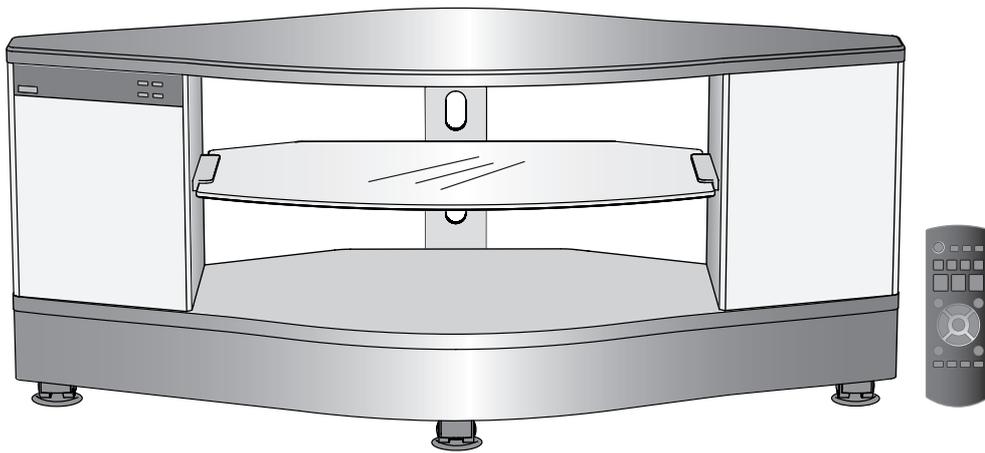


## Operating Instructions *Home Theater Audio System*

Model No. **SC-HTX5**



### ***Dear customer***

Thank you for purchasing this product.

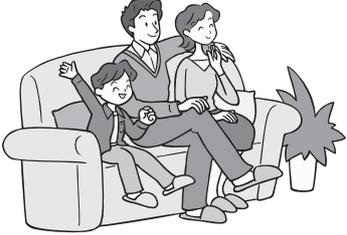
For optimum performance and safety, please read these instructions carefully.

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

### **Note**

“EB” on the packaging indicates the United Kingdom.

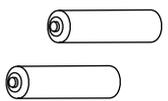
# Table of contents

<p><b>Before use</b></p>	<p><b>Supplied accessories..... 3</b>  <b>Caution for AC Mains Lead..... 4</b>  <b>Safety precautions ..... 4</b>  <b>Control guide ..... 5</b>  <b>Remote control preparation ..... 6</b></p>	
<p><b>Connection</b></p>	<p><b>Installing and assembling the rack..... 7</b>  <b>Home Theater connections .... 10</b>          <b>Basic connections ..... 10</b>          <b>Connecting equipment with HDMI terminal (TV, DVD recorder, etc.)..... 10</b>          Connecting STB etc. .... 11          Setting for automatically switching the input source to STB .... 11          <b>Connecting equipment without HDMI terminal (DVD player, VCR, etc.)..... 12</b>          <b>Other connections ..... 13</b>          To connect a second set of equipment that supports HDMI ..... 13          To connect audio equipment (CD player, etc.)..... 13</p>	<p><b>AC mains supply connection ..... 13</b>  <b>Connecting the wireless surround speakers ..... 14</b>  <b>Checking speaker output..... 15</b>          <b>Checking audio output with a test signal..... 15</b>          Adjusting speaker (subwoofer, wireless surround speaker) output..... 15</p> 
<p><b>Play</b></p>	<p><b>Enjoying movies and music ..... 16</b>  <b>Enjoying sound field effects..... 17</b>          Dolby Virtual Speaker..... 17          SFC (Sound Field Control) ..... 17          Cancelling sound field effects..... 17          When connecting the wireless surround speakers .... 17              Surround playback ..... 17              SFC (Sound Field Control)..... 17              Dolby Pro Logic II..... 17  <b>Using the VIERA Link “HDAVI Control™” ..... 18</b>          What you can do with VIERA Link “HDAVI Control” ..... 18  <b>Functions and settings ..... 20</b>          Using “WHISPER-MODE SURROUND” ..... 20          Using “GAME” ..... 20          Muting ..... 20          Adjusting speaker (subwoofer, wireless surround speaker) output during playback.... 20          Setup menu items ..... 21</p>	<p>Adjusting sound quality ..... 21          Adjusting the volume balance of front speakers... 21          Setting distances..... 21          Reducing standby power consumption (HDMI off mode).... 21          VIERA Link “HDAVI Control” setting ..... 22          Adjusting the time lag between audio and video by delaying audio output ..... 22          Switching between dual sounds..... 22          Clear audio at low volume..... 22          Switching the attenuator ..... 23          Switching the input signal detection setting..... 23          Reset (factory settings) ..... 23          When other equipment (mini component system, AV amp, etc.) manufactured by Panasonic operates with the remote control operations of this system..... 23</p> 
<p><b>Troubleshooting and other information</b></p>	<p><b>Error messages ..... 24</b>  <b>Digital signals that can be played on this system ..... 24</b>  <b>Maintenance..... 24</b>  <b>Glossary ..... 25</b>  <b>Specifications ..... 25</b>  <b>Troubleshooting guide..... 26</b></p>	

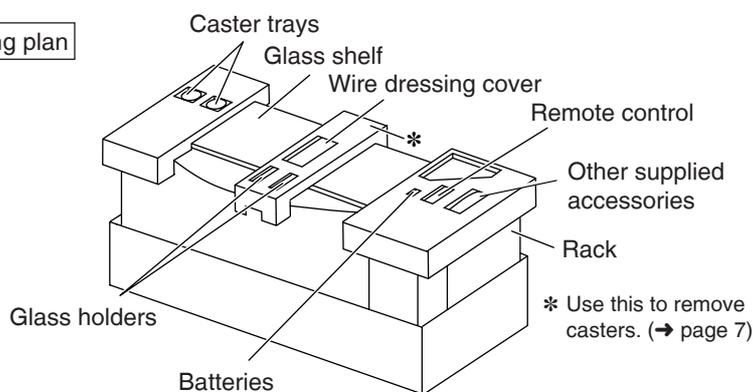
# Supplied accessories



Please check and identify the supplied accessories.  
Use numbers indicated in parentheses when asking for replacement parts.  
(Product numbers correct as of April 2009. These may be subject to change.)  
Keep the screws out of reach of children to prevent swallowing.

<input type="checkbox"/> 1 Glass shelf (RXQ1713A) 	<input type="checkbox"/> 2 Glass holders (RMQ1649) 	<input type="checkbox"/> 4 Screws (THEC1139) 
<input type="checkbox"/> 1 Wire dressing cover (RGQ0533-H) 	<input type="checkbox"/> 4 Caster trays (TBLB3008) 	<input type="checkbox"/> 2 Screws (XTW4+16JFJK) 
<input type="checkbox"/> 1 AC mains lead (K2CZ3YY00005) 	<input type="checkbox"/> 2 Batteries (R6, AA) 	<input type="checkbox"/> 1 Remote control (N2QAYB000417) 

Packing plan



## ■ Sales and Support Information

### Customer Care Centre

- For customers within the UK: 0844 844 3852
- For customers within the Republic of Ireland: 01 289 8333
- Visit our website for product information
- E-mail: [customer.care@panasonic.co.uk](mailto:customer.care@panasonic.co.uk)

### Direct Sales at Panasonic UK

- For customers: 0844 844 3856
- 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](http://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](http://www.panasonic.co.uk/guarantee).

# Caution for AC Mains Lead

# Safety precautions

Before use

Caution for AC Mains Lead/Safety precautions

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  $\perp$  OR COLOURED GREEN OR GREEN/YELLOW.**

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

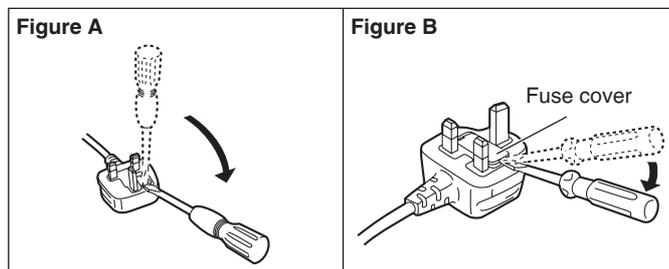
## Before use

Remove the connector cover.

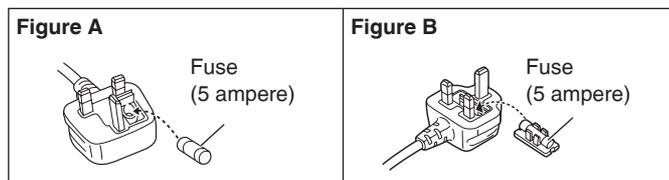
## How to replace the fuse

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.



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



## Placement

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

Do not hang from or climb on the system. This may result in serious injury.

Place the television properly on the system. Use the Fall-prevention band to prevent the television from falling over and causing serious damage or injury.

Do not place items heavier than the recommended weight on the system or the shelves.

Be careful not to get hit by the protruded TV.

When you use a stand with a rotating function, install it so it does not protrude from the top plate of the rack and do not put hands or objects within the rotation range.

When you use a stand with a rotating function, install the rack keeping the distance from the wall so the TV does not hit the wall.

Do not apply oil on the casters (wheels).

Be careful not to catch your fingers when installing the rack.

Do not insert your toe into the opening at the bottom of the rack when moving or installing the rack.

## Voltage

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

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

## AC mains lead protection

Ensure the AC mains lead is connected correctly and not damaged. Poor connection and lead damage can cause a fire or electric shock.

Do not pull, bend, or place the system on the lead.

Grasp the plug firmly when unplugging the lead. Do not move the system if AC mains lead is still connected to socket outlet. Pulling the AC mains lead can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock. Remove AC mains plug from socket outlet when not using for a long period.

## Foreign matter

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

Do not let liquids get into the system. This can cause electric shock or malfunction. If this occurs, immediately disconnect the system from the AC mains lead and contact your dealer.

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

## Glass shelf

Protect the board from scratching.

Do not touch the board if they crack. Consult your dealer for immediate replacement.

Do not damage the glass or make an impact on it.

## Service

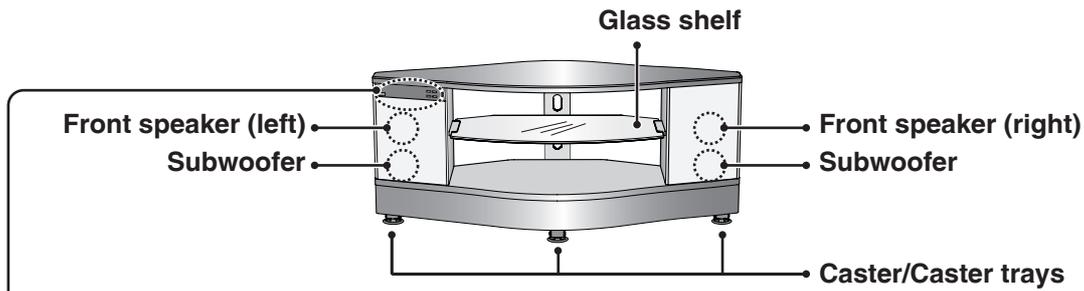
Do not attempt to repair this system by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC mains lead and contact your dealer or an authorized service centre. Electric shock or damage to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

Extend operating life by disconnecting the system from the AC mains if it is not to be used for a long time.

# Control guide

## This system (Rack)

### ■ Front view



### (Control panel)

Display (→ below)

Standby/on switch (⏻/⏻)  
(→ page 16)

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.

VOLUME - + For adjusting volume (→ page 16)

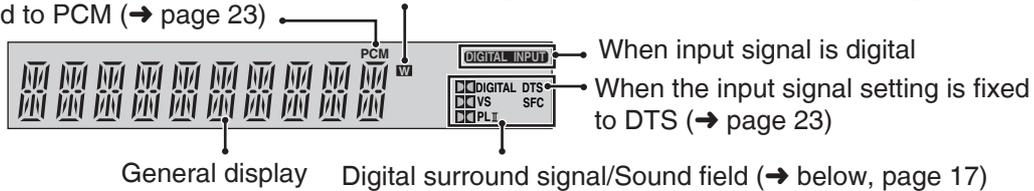
WHISPER-MODE SURROUND INPUT SELECTOR "INPUT SELECTOR" switch (→ page 16)

For using "WHISPER-MODE SURROUND" (→ page 20)

### (Display)

When PCM signal is being input or the input signal setting is fixed to PCM (→ page 23)

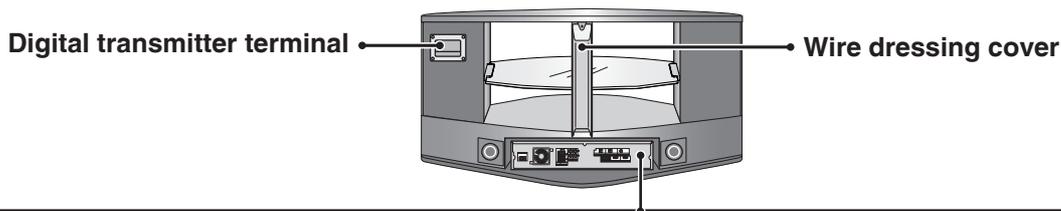
When the digital transmitter is operating (→ page 14)



- DIGITAL : Dolby Digital sources
- DTS : DTS sources
- VS : When Dolby Virtual Speaker is working
- SFC : When SFC mode is being used

- PL II : When Dolby Pro Logic II decoder is being used (When using Dolby Virtual Speaker for 2 channel stereo source)

### ■ Rear view

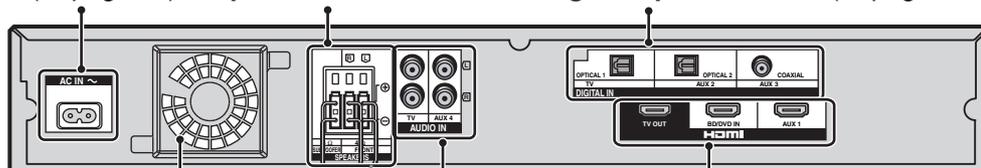


### (Amplifier)

AC inlet (→ page 13)

Speaker terminals

Digital input terminals (→ pages 10 to 12, 19)



Exhaust hole (Cooling fan)

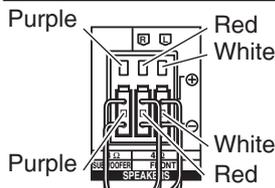
Audio input terminals (→ pages 10, 12, 13)

HDMI terminals (→ pages 10, 11, 13, 19)

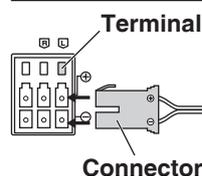
#### Speaker terminals

The speakers are already connected. Do not touch the connectors unless absolutely necessary. If the connectors become disconnected, refer to the illustrations at right for connection.

#### Connector connection



#### How to attach the connectors



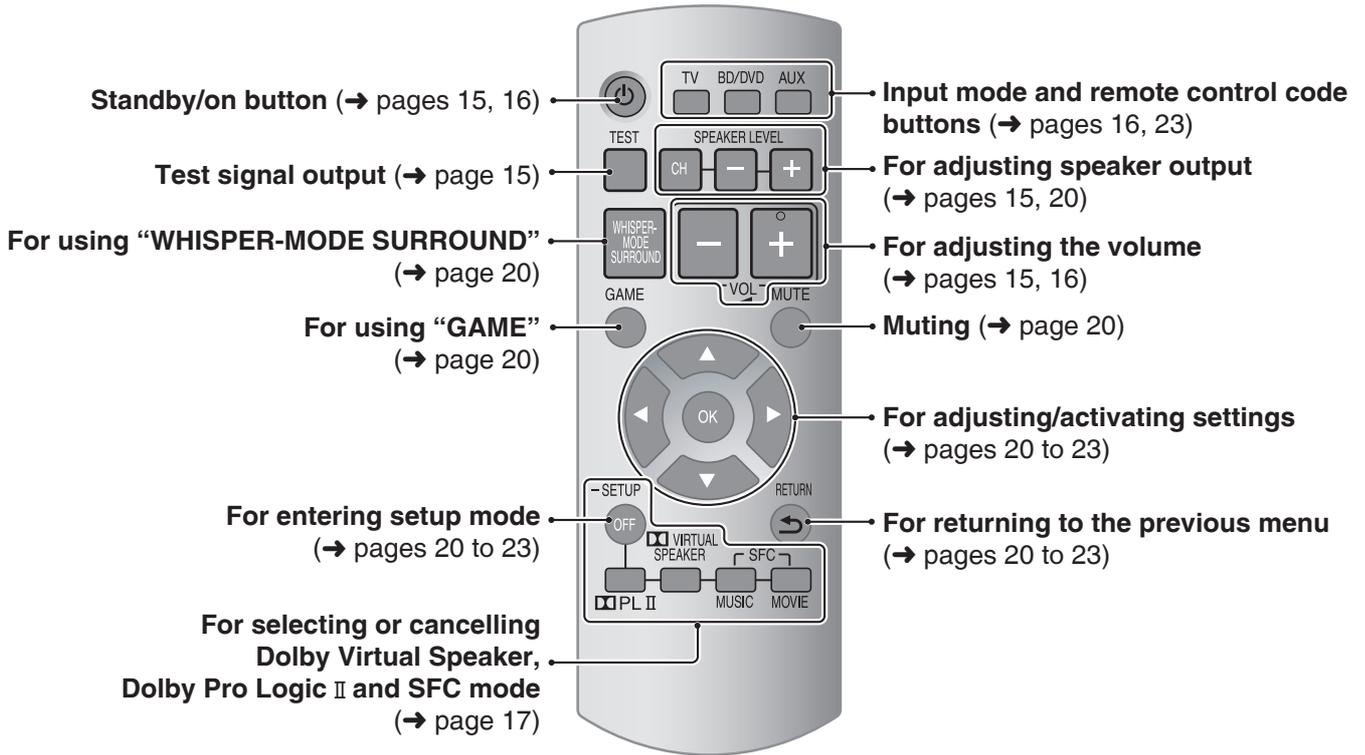
The connectors and terminals are colour-coded and can only be inserted in one direction. Insert each connector into the terminal of the same colour until it clicks in position.

# Control guide

## Remote control

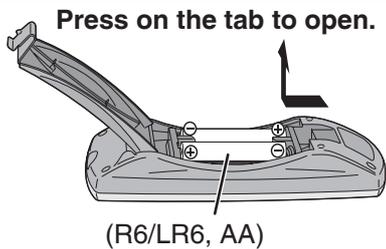
Before use

Control guide/Remote control preparation



## Remote control preparation

### Inserting the batteries



Insert so the poles (+ and -) match those in the remote control.  
Use manganese batteries or alkaline batteries.

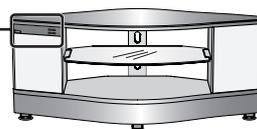
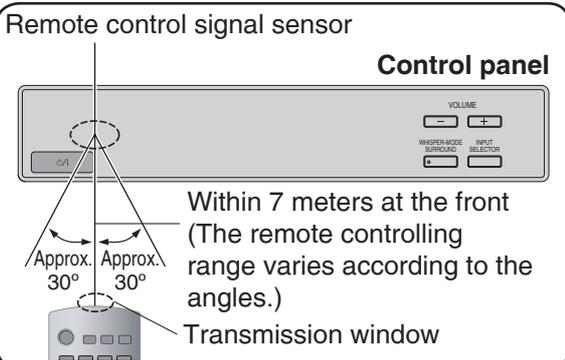
- Do not mix old and new batteries.
- Do not use different types of batteries at the same time.
- Do not take apart or short circuit.
- Do not attempt to recharge alkaline or manganese batteries.
- Do not use batteries if the covering has been peeled off.
- Do not heat or expose to flame.
- Do not leave the batteries in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Mishandling of batteries can cause electrolyte leakage which can severely damage the remote control.  
Remove the batteries if the remote control is not going to be used for a long period of time. Store them in a cool, dark place.

### CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

### Using the remote control

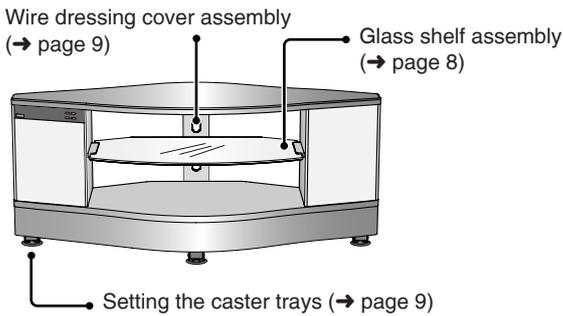


### Note

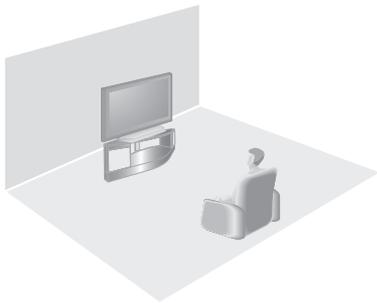
- Do not place an object between the signal sensor and the remote control.
- Do not expose the signal sensor to the direct sunlight or the strong light of a fluorescent lamp.
- Keep the transmission window and the system's sensor free from dust.

# Installing and assembling the rack

## Installation

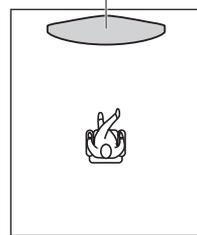


- **At least 2 people are necessary for installation.**
- **Use a phillips-head screwdriver. (Do not use an electric screwdriver.)**
- **Choose a stable location for installation.**
- **Handle the glass shelf with enough carefully.**



### Setup example

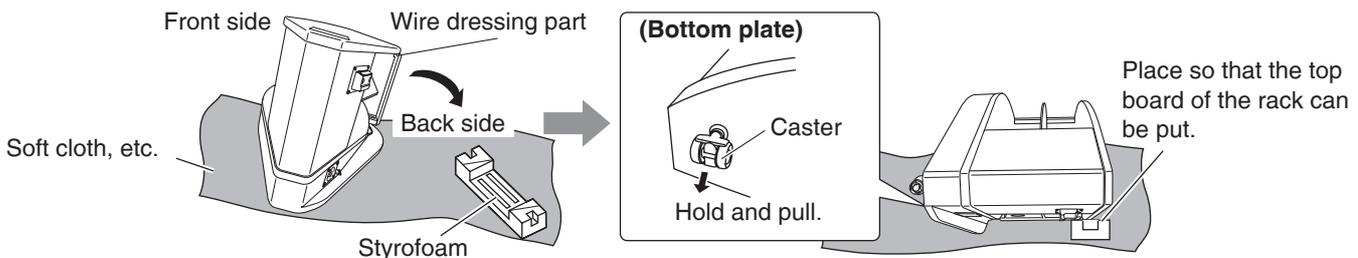
This system



- Make sure to place the rack on a flat, stable surface so there is no danger of it falling over. Take enough safety measures to prevent the television from falling down. Make sure to set the caster trays when the casters are attached.
- You can install this system so that it is flush with the wall at the back. Note that you will require some space for working during setup and connection.
- Do not place in front of curtains as they may obstruct the system's exhaust hole.
- Avoid pressing on the speaker nets during installation.
- If the surface of the wooden floor is soft, the caster mark may remain.
- See below for removing casters.

## Removing casters

- Remove casters at unstable places. (thick-piled carpet, floor made of soft materials, etc.)
- To remove the casters, reversely place the Styrofoam (marked with \* on page 3, packing plan) used at the upper center when shipped, and then tip the rack back so that the top board can be put on the Styrofoam. At least 2 people are necessary for this. If you do not have the Styrofoam, spread soft cloth such as a blanket and tip the rack to the front side slowly.
- Do not apply the load to the wire dressing part when tipping the rack back. (Remove the wire dressing cover (→ page 9) when it is attached.)
- Hold and pull to remove.
- Do not put anything on and in the rack when removing casters. (You do not need to remove the amplifier and speakers as they are fixed.)
- Make sure that at least 2 people hold the back side of the top board firmly with hands when moving the rack after removing the casters. (Do not hold the wire dressing part.) See the following instructions about how to lift the rack.



## How to lift the rack

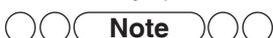
From front and back of the rack, 2 people lift the top board at the center of the rack.

Make sure that your hands do not touch the wire dressing part.



## About the rack

- **Do not put anything except for a TV. Do not put the following things in particular.**
- **Hot objects**  
This may leave the mark and it may not come off.
- **Vase, etc. with water in it**  
Water may splash over this system when it falls down and this can cause malfunction.



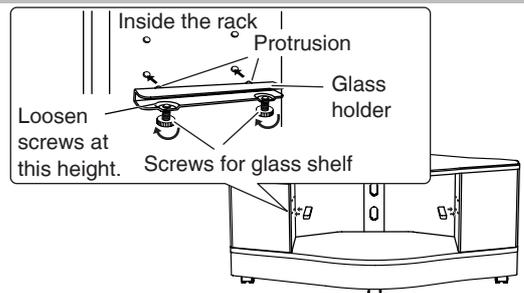
When moving a thing placed on the top board, lift it for moving. Dragging it may damage the top board of the rack.

# Installing and assembling the rack

## Glass shelf assembly

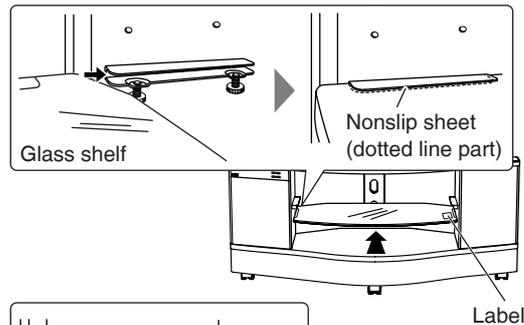
### 1 Loosen the screws (included) for the glass shelf and insert the protrusions of the glass holders (included) to the holes inside the rack.

- Insert to the left and right holes with the same height.
- The height of the shelf can be adjusted at 2 different levels.
- Change the positions of holes for the glass holder to adjust the height of shelf.
- When you do not install the shelf, keep the glass holders in a safe place.



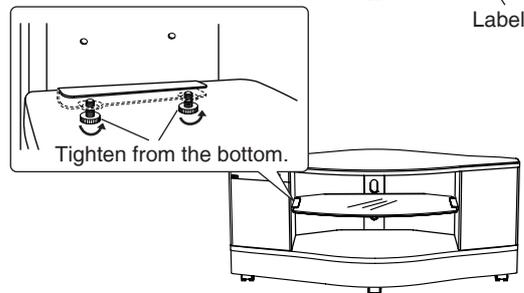
### 2 Insert the glass shelf (included) from front to between the glass holders.

- Insert the glass shelf with its label side up and at right.
- Make sure the glass shelf has been set between both glass holders before inserting.
- Set the glass shelf so its nonslip sheets are hidden under the glass holders.



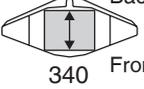
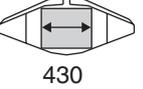
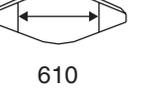
### 3 Tighten the screws for the glass shelf from the bottom.

- Tighten the screws for the glass shelf firmly and fix it so it does not move.
- You can tighten the screws easily when you slightly lift the glass shelf.



## About equipment stored on the shelf

unit (mm)

Setting position	Shelf board position	Height of compartment	Maximum depth for storing equipment	Recommended width of equipment	Width of compartment
<b>Upper shelf</b> ① 	<b>Upper</b>	117	(Upper view) Back  340 Front	 430	 610
	<b>Lower</b>	144			
<b>Lower shelf</b> ② 	<b>Upper</b>	147			
	<b>Lower</b>	114			

### Note

- Do not put equipment weighing more than 12 kg on the upper shelf ① and lower shelf ②.
- Image interference may occur if you put recording equipment such as a DVD recorder on the upper shelf ①. Put it on the lower shelf ② if this occurs.
- When you install equipment with a heat dissipation louvers on the back side, make sure the heat dissipation louvers are not blocked by the wire dressing part at the back center of the rack.

## Installing the television (Please also refer to the television's operating instructions.)

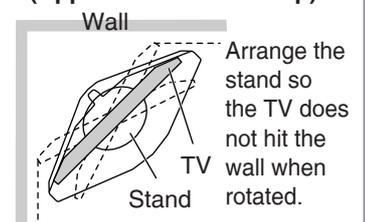
Recommended: 42 inches or less

Place the TV stand in the center of the top board of the rack.

### Note

- Do not put equipment weighing more than 80 kg on the top board.
- The TV stand may be sold separately.
- Lift the television when placing it on the rack. Dragging it may damage the top panel. (For details, refer to the television's operating instructions.)
- When you use a stand with a rotating function, keep distance so the TV does not hit the wall.
- This system is not magnetically shielded. Do not put a CRT-based television.

### (Upper view of the setup)



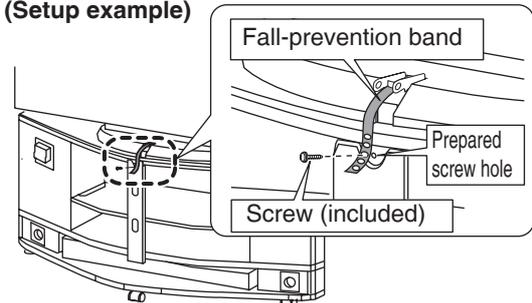
## Stabilising the television

### Attach the television to the rack to prevent it from falling over.

#### ■ Fixing to the rack

- Make sure to use the supplied fall-prevention screw to attach the fall-prevention band etc. as illustrated at right. (If the fall-prevention band is not supplied with TV, use a commercially available band to fix.) Attach the fall-prevention band to the prepared hole at the back bottom of the rack.

(Setup example)



The illustration is an example.  
The shape may differ from the actual product.

#### Note

- If you fasten the screw too tightly, it goes around in circles and the TV cannot be fixed.
- Make sure to use the fall-prevention screw supplied with this system.
- When you attach the fall-prevention band supplied with the TV, follow the operating instructions for the TV.

## Wire dressing cover assembly

### 1 Collect cables connected to each equipment.

- For connections with other equipment stored in this system, refer to "Home Theater connections" (→ pages 10 to 13).
- Pull the cables of equipment on the shelf board out of the wire dressing hole.

### 2 Match the end of wire dressing cover with the wire dressing case.

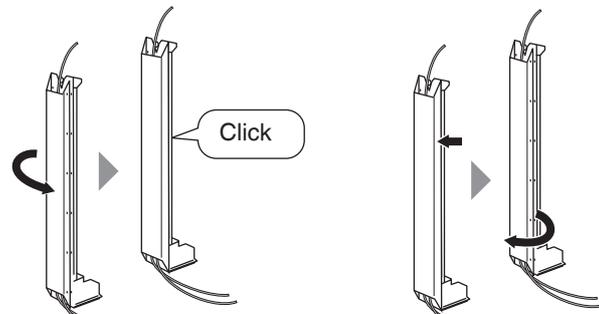
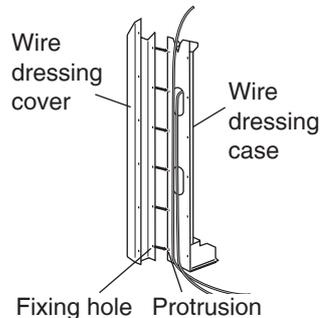
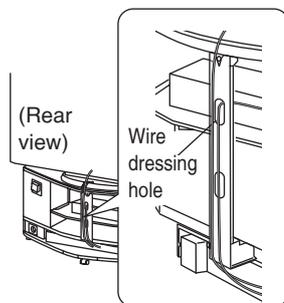
- Match the fixing hole of wire dressing cover with the protrusion of case.
- The wire dressing cover does not have directions.

### 3 Match the other end, press and set it until it clicks.

- If the wire dressing cover is misaligned, move it up and down to align the position.

#### ■ To remove

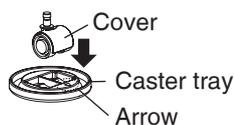
- Press and hold the end of the wire dressing cover to remove.



## Setting the caster trays

### Set the caster trays under all 4 casters to fix this system and prevent it from moving.

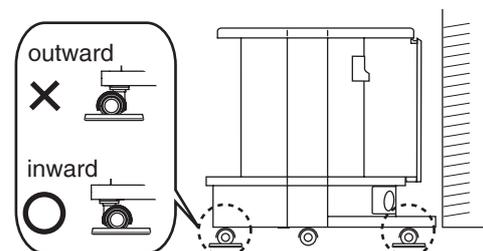
- When setting the caster trays, match the caster cover with the arrow of the caster trays as illustrated below.



- At least 2 people are necessary for setting the caster trays. Be careful not to catch your fingers.
- Lift the rack to remove caster trays. See page 7 about how to lift the rack.

#### (Caster direction)

Make the direction of front and back casters inward so the caster trays do not run out.



# Home Theater connections

## Basic connections

### Connection cable

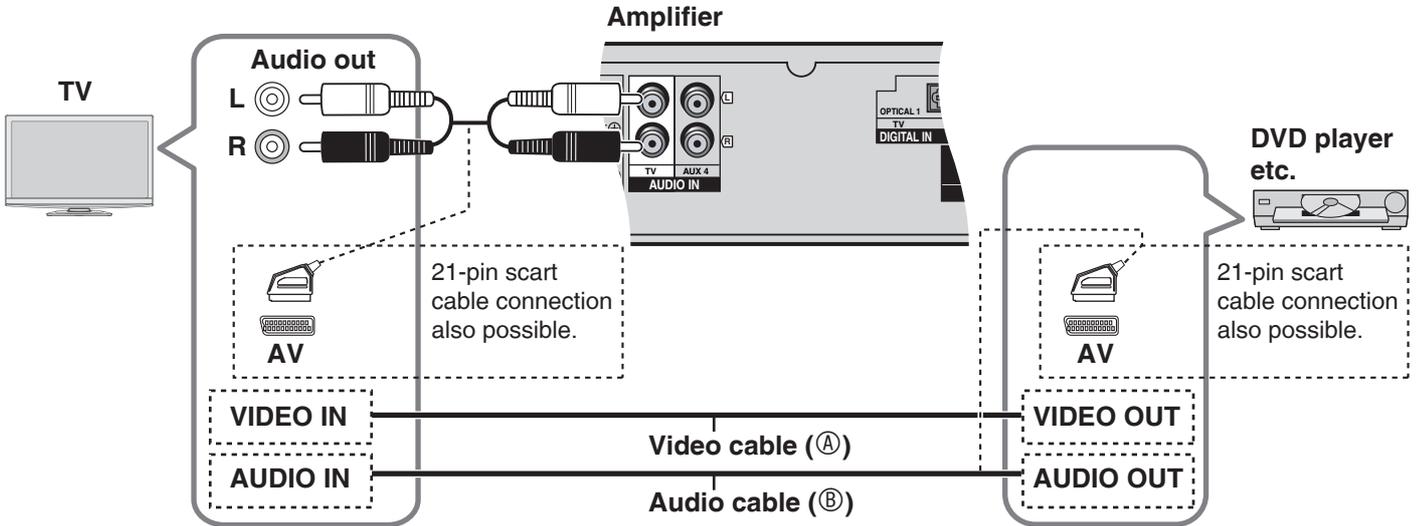
Stereo phono cable (not included)



21-pin scart cable (not included)



- Refer to the operating instructions for the equipment you are connecting for the correct type of video cable.



Ⓐ: Connect the video cable directly from the other equipment to the television.

Ⓑ: Use this connection so audio from the equipment can be heard through the television's speakers even if this system is in standby mode.

Reduce the volume on the television and select "TV" after you have made connections as above if you want to use this system.

## Connecting equipment with HDMI terminal (TV, DVD recorder, etc.)

### Connection cable

HDMI cable (not included)



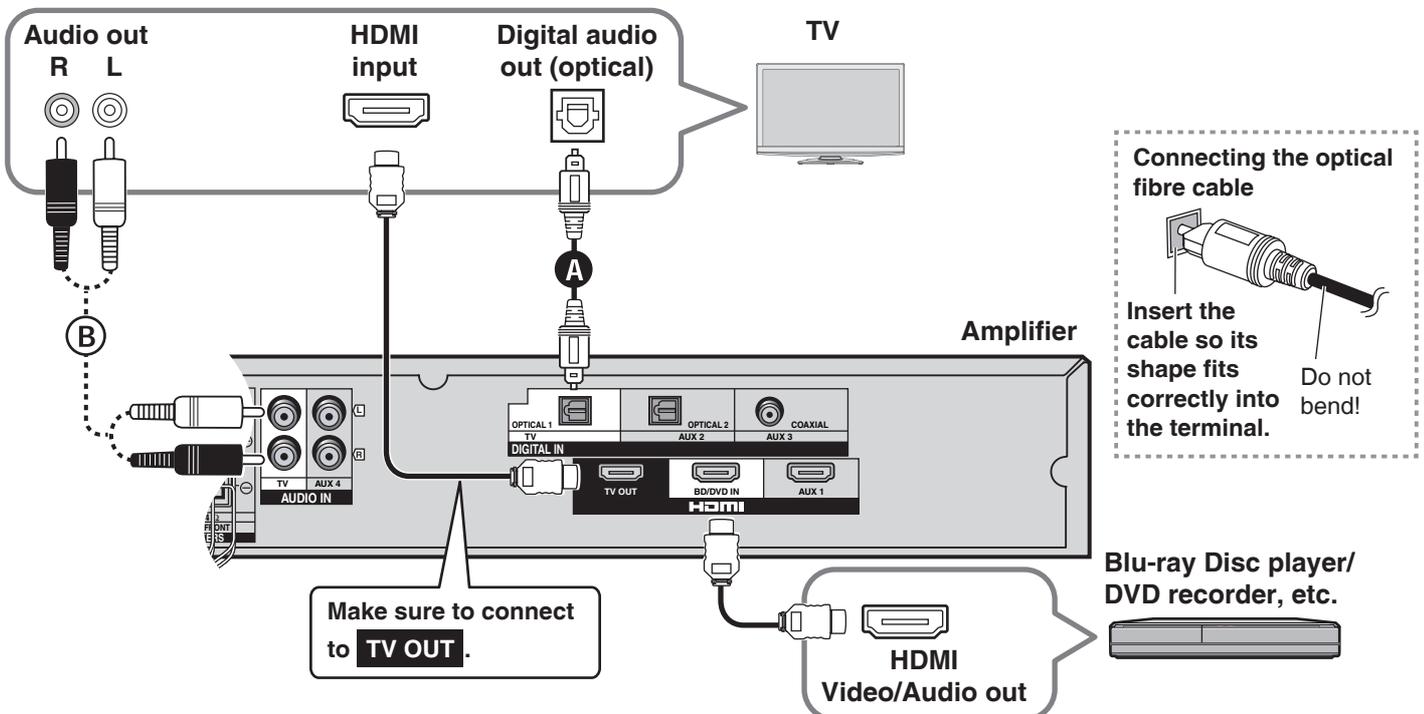
Stereo phono cable (not included)



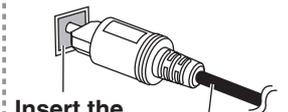
Optical fibre cable (not included)



If connection Ⓐ is not possible, make connection Ⓑ. When both are already connected, connection Ⓐ takes priority over connection Ⓑ.



Connecting the optical fibre cable



Insert the cable so its shape fits correctly into the terminal. Do not bend!

Blu-ray Disc player/  
DVD recorder, etc.



- Turn off all equipment before making any connections.
- To connect equipment, refer to the appropriate operating instructions.

### ■ HDMI cable notes

- It is recommended that you use Panasonic's HDMI cables.
- Please use High Speed HDMI Cables that have the HDMI logo (as shown on the cover).
- When outputting 1080p signal, please use the HDMI cables 5.0 meters or less.

### ■ Enjoying only with TV speaker

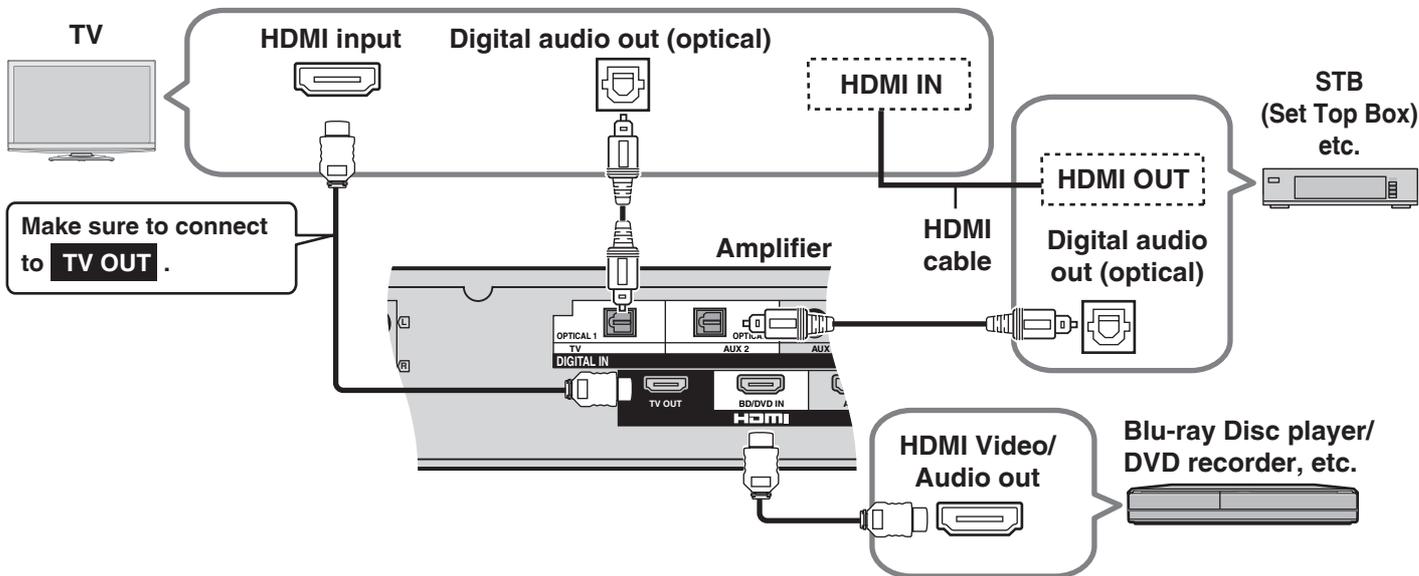
- When image equipment such as TV and Blu-ray Disc player/DVD recorder etc. is connected to HDMI terminal (→ pages 10, 11, 13) of this system, images/audio signals from the Blu-ray Disc player/DVD recorder, etc. go through this system and are transmitted to TV even if this system is turned off using the standby/on button of this system. (**Standby through function**) This is convenient to enjoy only with TV speaker.
- Images recorded with x.v.Colour or Deep Colour (→ page 25) are also supported.

#### ○ ○ Note ○ ○

- When you turn this system off using the standby/on button of this system, the audio/video signals from equipment connected to HDMI input are output through the television, even if you have set input on this system to anything other than HDMI input (“**BD/DVD**” or “**AUX 1**”) before turning off this system. (The selector returns to the previous setting when you turn this system on again.)
- When equipment is connected to both BD/DVD IN terminal and AUX1 terminal, images/audio signals of equipment whose input is lastly selected are output.

## Connecting STB etc.

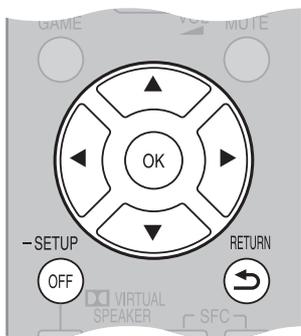
Use this connection to enjoy STB multi-channel sources on this system.



## Setting for automatically switching the input source to STB

When you make the above connection and you use Panasonic TV (VIERA), you can automatically switch this system's input by switching the input source of TV (VIERA) to STB in the following procedure.

Preparation: Make sure that this system has been turned on. (→ page 16)



1. Switch the input source of TV (VIERA) with the above connection and show STB pictures.
2. Press and hold [–SETUP, OFF] for about 2 seconds.  
The setting items are displayed. (→ page 21)
3. Press [◀][▶] to select “**STB AUDIO**” and press [OK].
4. Press [▲][▼] to select “**SET**” and press [OK].  
**SET**: The setting is automatically switched to “**AUX2 / STB**”.  
**OFF**: The setting is not automatically switched to “**AUX2 / STB**”. (factory setting)
5. Press [↵ RETURN] several times to select “**EXIT**” and press [OK] to finish the setting.

To return to the previous display/To cancel during setting operation in steps 2 to 5: Press [↵ RETURN].

#### ○ ○ Note ○ ○

- “**STB AUDIO**” in step 3 is displayed only when the unit is connected to the Panasonic TV (VIERA). Also, this is not displayed when the step 1 operation is not performed.
- If you change the connection after setting, select “**OFF**” once and “**SET**” again.
- Select “**EXIT**” and press [OK] to finish the setup mode in step 3.

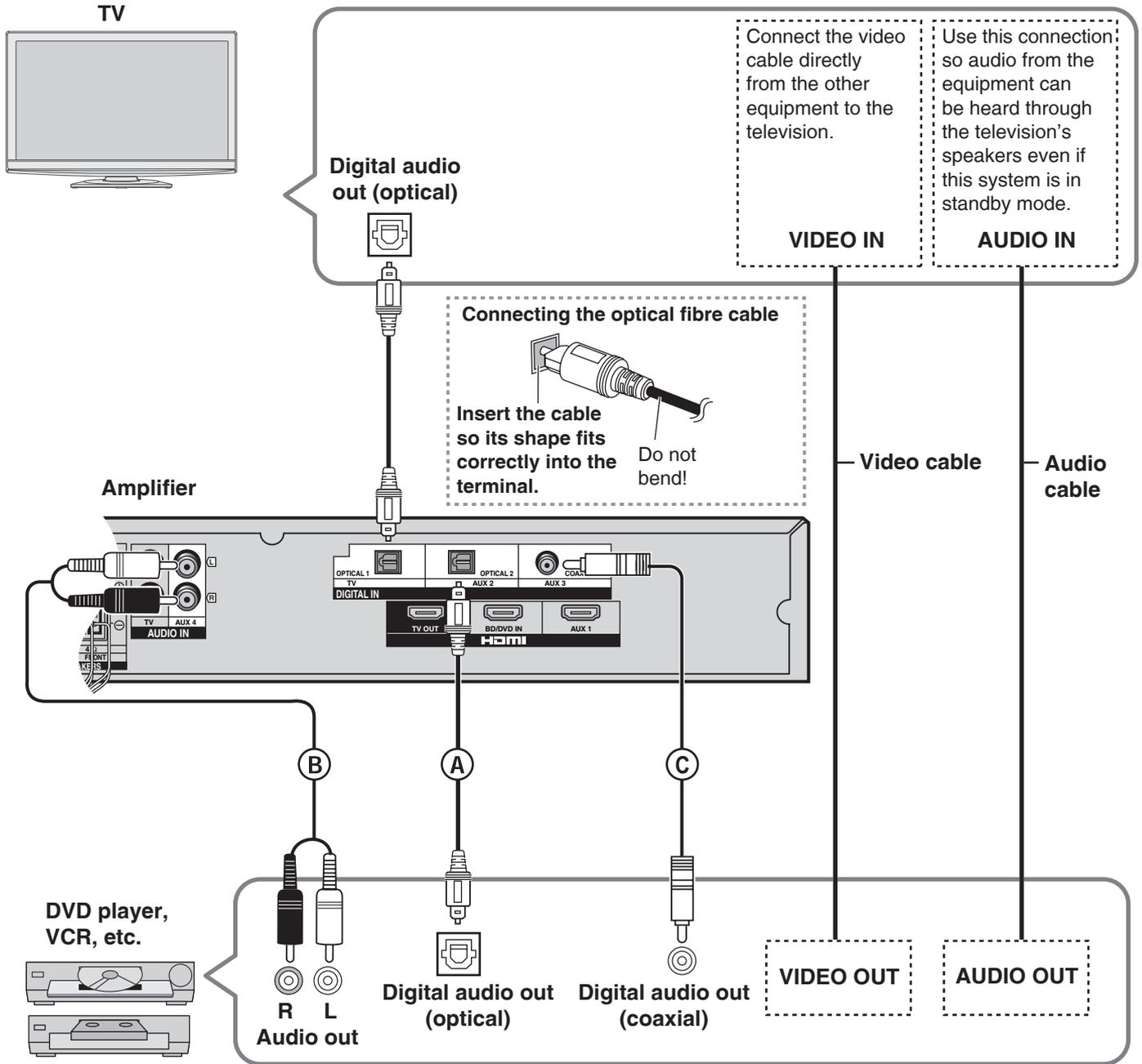
# Home Theater connections

## Connecting equipment without HDMI terminal (DVD player, VCR, etc.)

### Connection cable

<b>Optical fibre cable</b> (not included) 	<b>Stereo phono cable</b> (not included) 	<b>Coaxial cable</b> (not included) 
--	---	--

- For the correct type of video cable, refer to the operating instructions for the equipment you are connecting.



Make the connection either ①, ② or ③ according to the suitability for your equipment.

**👉 To connect a DVD recorder with built-in VCR**

(When the DVD recorder has DVD output terminal and DVD/VHS output terminal, make the following connections.)

**Make the above connection ① for DVD output terminal.**

**Make the above connection ② for DVD/VHS output terminal.**

- Turn off all equipment before making any connections.
- To connect equipment, refer to the appropriate operating instructions.

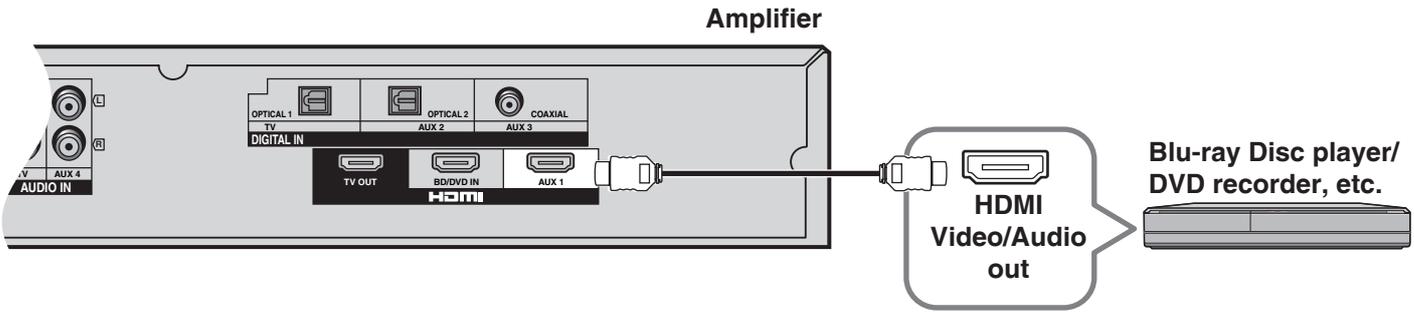
## Other connections

### Connection cable

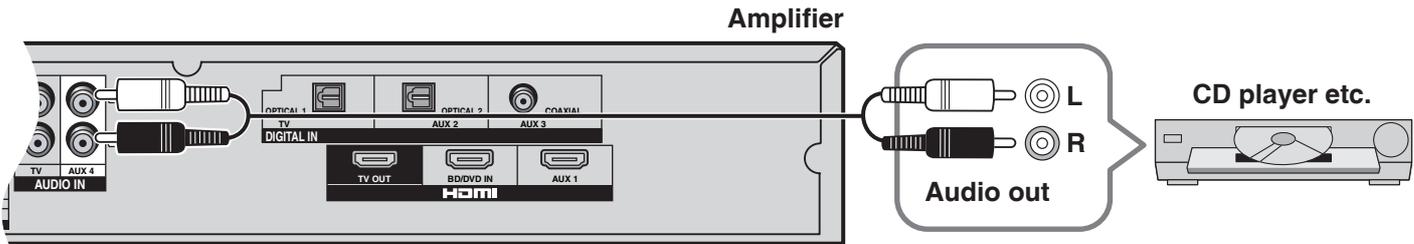
<b>HDMI cable (not included)</b> 	<b>Stereo phono cable (not included)</b> 
---	--

### To connect a second set of equipment that supports HDMI

\* See page 10 for connecting this system to TV.



### To connect audio equipment (CD player, etc.)



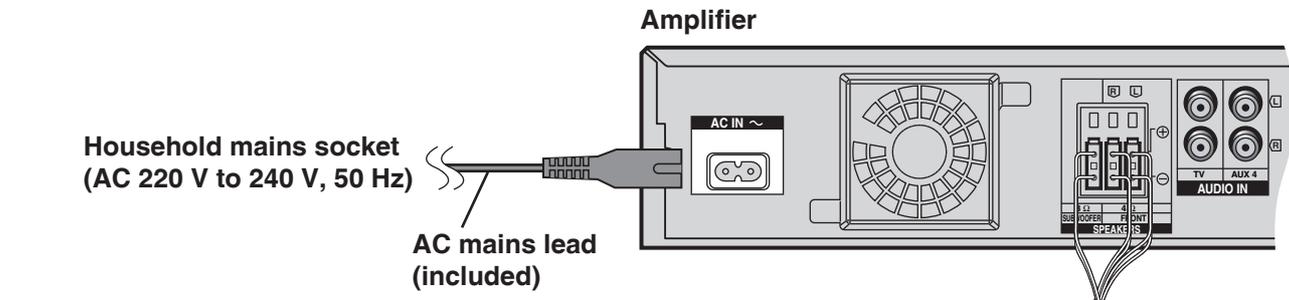
# AC mains supply connection

Connect AC mains lead after all other cables are connected.

**READ THE CAUTION FOR THE AC MAINS LEAD ON PAGE 4 BEFORE CONNECTION.**

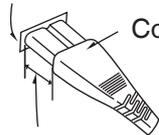
This system consumes approx. 0.4 W when AC mains lead is connected to the household mains socket (approx. 0.1 W (HDMI off mode) (→ page 21)). To save power when the system is not to be used for a long time, unplug it from the household mains socket.

Make sure to turn this system off before unplugging the AC mains lead.



**Insertion of connector**

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the system.



**Appliance inlet**

**Connector**

**Approx. 6 mm**

**Note**

- The included AC mains lead is for use with this system only. Do not use it with other equipment. Also, do not use AC mains lead for other equipment with this system.

Home Theater connections/AC mains supply connection

# Connecting the wireless surround speakers

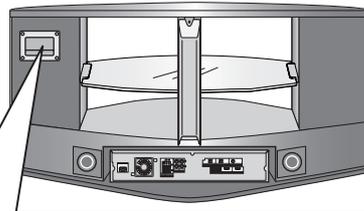
**The surround speakers are not included.**

You can connect left and right surround speakers wirelessly by using Panasonic SH-FX70 (a set consisted of a digital transmitter and a wireless system sold separately) with the system.

To use these options, insert the digital transmitter into the system's digital transmitter terminal and connect surround speakers to SH-FX70's wireless system. See SH-FX70's operating instructions for details.

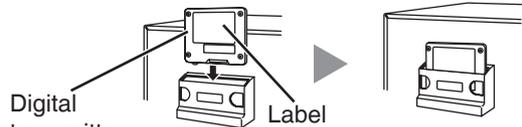
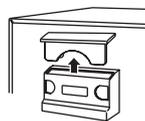
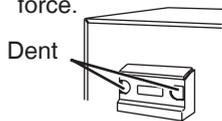
See page 17 for sound field effects when the wireless surround speakers are connected.

- **Turn off this system before making any connections.**
- To connect equipment, refer to the appropriate operating instructions.



## How to insert the digital transmitter

- ① Press the dents on both sides with force.
  - Use care because the cover may pop out.
- ② Remove the cover.
  - Keep the cover in a safe place after removal.
- ③ Insert firmly with the label side (with 4 screws) facing front.



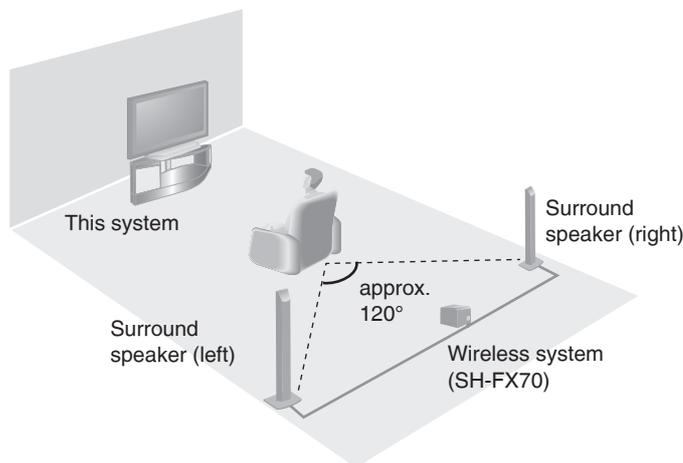
## Setup of the surround speakers

SH-FX70 is necessary to install the surround speakers.

**Surround speakers (left, right):** Place them slightly at the back right and left of the listening-viewing position.

### Setup example

When connecting the speaker system SB-HS100A (not included)



■ **SH-FX70 (not included) is a combined unit of digital transmitter and wireless system.**

○ ○ **Note** ○ ○

The surround speakers (left and right) are not included.

○ ○ **Note** ○ ○

Set the distance from each speaker to the listening-viewing position. (→ page 21)

You can adjust the delayed time of the sound arriving at the listening-viewing position.

When the system is turned on (→ page 16) after the digital transmitter is inserted, the digital transmitter is detected and “W” lights up on the display.

(Blinks during detecting operation and lights when detected.)



**Display**

“W” lights on while the digital transmitter is inserted, but in the following cases, it goes off or flashes.

**OFF:** When the surround playback using the wireless surround speakers is not possible such as when the playback mode is stereo (2-channel) or the multi-channel broadcasting including digital terrestrial broadcasting (DTTV) is received.

**Flashing:** When electric waves are cut off (When SH-FX70 is off)

# Checking speaker output

Aim the remote control toward the signal sensor (→ page 6) on the control panel of this system.



## Checking audio output with a test signal

1. Press to turn on the system.

2. Press to output the test signal.

Speaker display

*L* : Front left, *R* : Front right, *SUBW* : Subwoofer,  
*RS* : Wireless surround right, *LS* : Wireless surround left

• The test signal is output from one speaker at a time for two seconds in the following order.  
**TEST L** → **TEST R** → **TEST SUBW**

When using the wireless surround speakers (→ page 14)

• The test signal is output from one speaker at a time for two seconds in the following order.  
**TEST L** → **TEST R** → **TEST RS** → **TEST LS** → **TEST SUBW**

3. Press to adjust the volumes of front speakers to the normal listening level. Adjustment range: 0 (Min) to 50 (Max)

4. Press to stop the test signal.

**Note**

Check connections when the speaker does not output the test signal. (→ page 5)

## Adjusting speaker (subwoofer, wireless surround speaker) output

If you feel the output of subwoofer and surround speakers (only when connected → page 14) is not balanced with front speakers, adjust the speaker output according to your preference.

1. Output the test signal. (→ above, steps 1 to 3)

2. Press to select a speaker for adjustment.

When not using the wireless surround speakers  
**SUBW** (Subwoofer)

When using the wireless surround speakers (→ page 14)  
**SUBW** (Subwoofer) → **RS** (Wireless surround right) → **LS** (Wireless surround left)

3. Press to adjust each speaker's output level.

- The test signal comes from the speaker being adjusted.
- The test signal is output again in the above order 2 seconds after adjustment.

■ Repeat steps 2 and 3 to adjust the level of each speaker.

4. Press to stop the test signal.

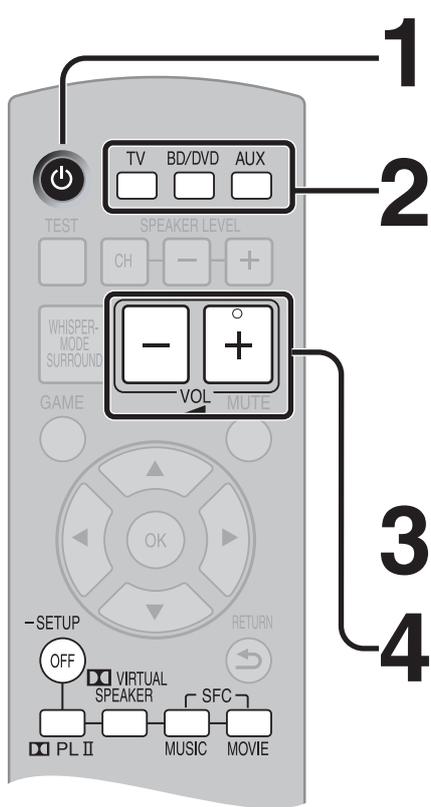
Adjustment range:  
**SUBW: OFF, MIN, 1 to 19, MAX**  
**RS, LS: -10 to +10**

**Note**

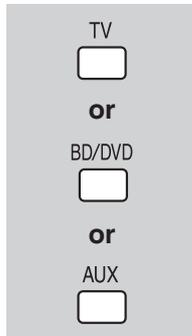
- The front speakers cannot be adjusted with this operation. To adjust the volume balance of left and right front speakers, see "Adjusting the volume balance of front speakers". (→ page 21)
- When you select "OFF" for subwoofer adjustment, there is no output from the subwoofer.
- Even if you adjust each channel level in this adjustment, each channel level setting in each SFC mode (→ page 17) does not change.
- When you make this adjustment, Dolby Virtual Speaker functions. When playing 2-channel sources, Dolby Pro Logic II also works in conjunction. (→ page 17)
- You can adjust the speaker level while playing movies and music. (→ page 20)

# Enjoying movies and music

**Preparation** Turn on the TV and switch its input to match the connection (HDMI, for example) using the TV's remote control.



**To turn on the system**  
Press the button.

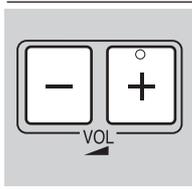


**To select the source**  
Press one of these buttons.

- TV** : TV
  - BD/DVD** : Blu-ray Disc player/DVD recorder
  - AUX 1** : AUX1 terminal
  - AUX 2** : AUX2 terminal
  - AUX 3** : AUX3 terminal
  - AUX 4** : AUX4 terminal
- "AUX 1", "AUX 2", "AUX 3" and "AUX 4" switch every time you press [AUX].

**3 Start play on the connected equipment.**

■ You can enjoy the variety of surround effects. (→ page 17)



**To adjust the volume**  
Press the buttons.

Adjustment range: 0 (Min) to 50 (Max)

■ After playback, reduce the volume level and turn off.

## Operation on the control panel

**1 Turn on the system.**  
Press

**2 Select the source.**  
Press (The input source switches each time you press the button.)

- TV** : TV
- BD/DVD** : Blu-ray Disc player/DVD recorder
- AUX 1** : AUX1 terminal
- AUX 2** : AUX2 terminal
- AUX 3** : AUX3 terminal
- AUX 4** : AUX4 terminal

**3 Start play on the connected equipment.**

**4 To adjust the volume.**  
Press

Control panel (→ page 5)

**Note**

- See page 24 for digital signals that can be played on this system.
- Depending on the playback signal, you may feel the volume of subwoofer or surround speakers (when used → page 14) is not balanced with the volume of the front speakers. In this case, you can adjust the speaker volume during playback. (→ page 20)
- Even if you switch input to "TV", images (or audio) of the equipment connected to BD/DVD IN terminal or AUX1 terminal are output from TV OUT terminal. When the equipment is connected to both BD/DVD IN terminal and AUX1 terminal, signals of equipment whose input is lastly selected are output.
- **When using a DVD recorder with built-in VCR (with the DVD output terminal and DVD/VHS output terminal mounted), select the input as follows in step 2 above.**  
To enjoy DVD (when connected to AUX2): select "AUX 2".  
To enjoy video (when connected to AUX4): select "AUX 4".

## Enjoying sound field effects

Sound field effects differ depending on input sources. Select the mode you prefer after listening to the actual sound.

### Dolby Virtual Speaker

You can enjoy surround effects as if you were listening to 5.1 channel sources. (Dolby Pro Logic II also works for stereo signals of video, CD, etc.)

#### ■ Using Dolby Virtual Speaker

Press  **VIRTUAL SPEAKER**  • The mode switches each time you press the button. (→ below)

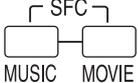
<b>REFERENCE (Standard mode)</b>	Standard sound effect.
<b>WIDE (Wide mode)</b>	Broadens the effect to the left and right.

### SFC (Sound Field Control)

You can enjoy more dynamic and broader surround effects when using SFC with Dolby Digital, DTS, and stereo signals (video, CD, etc.).

#### ■ Using SFC (Sound Field Control)

You can enjoy by adding your favourite surround effect to the Dolby Virtual Speaker (→ above) effect.

Press  **SFC**  • The mode switches each time you press the button. (→ below)

#### ☞ To cancel SFC mode

Press  **VIRTUAL SPEAKER** 

MUSIC	
<b>LIVE</b>	Sound reflection and spread as if you were in a large concert hall.
<b>POP/ROCK</b>	Best suited for pop and rock music.
<b>VOCAL</b>	Enhancing vocals.
<b>JAZZ</b>	Sound reflections as if you were in a small Jazz club.
<b>DANCE</b>	Sound spread echoing in a large space such as a dance hall.
MOVIE	
<b>NEWS</b>	Best suited for dialogues in news and drama movies.
<b>ACTION</b>	Best suited for action movies with impact.
<b>STADIUM</b>	Enjoying a feeling of being at a live sporting event.
<b>MUSICAL</b>	Enjoying a feeling of being at a live musical performance.
<b>GAME</b>	Enjoying games with greater audio impact.
<b>MONO</b>	Enjoying older monaural audio movies.

## Cancelling sound field effects

Press  **OFF**

- The surround effects disappear for 2-channel sources such as CD and TV.
- When the input signals are multi-channel LPCM signals or surround digital signals such as Dolby Digital or DTS, those signals are converged to 2.1-channel and are output from the left and right front speakers and subwoofer. When you connect the wireless surround speakers, the surround playback (4.1 channel) (→ below) is achieved.

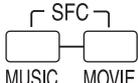
### When connecting the wireless surround speakers

#### Surround playback

Multi-channel signals are distributed to left and right front speakers, left and right surround speakers and subwoofer to output. When playing back 7.1 channel LPCM signals in particular, you can enjoy wider sound field effects as if another speaker is added.

#### SFC (Sound Field Control) (→ left)

#### ■ Using SFC (Sound Field Control)

Press  **SFC**  • The mode switches each time you press the button. (→ left)

#### ☞ To cancel SFC mode

Press [–SETUP, OFF].

#### Dolby Pro Logic II

You can enjoy 2-channel sources such as CD with the surround effect.

#### ■ Using Dolby Pro Logic II

Press  **PL II**

#### ☞ To cancel sound field effects

Press [–SETUP, OFF]. (→ above)

#### ○ ○ Note ○ ○

- See page 5 about how to display the surround digital signal/sound field.
- If the input signal is 2-channel, Dolby Virtual Speaker also works in conjunction by pressing  PL II]. (Only when not connecting the wireless surround speakers)
- SFC is not available for multi-channel LPCM signal.
- You cannot use Dolby Virtual Speaker, Dolby Pro Logic II and SFC when the source contains PCM signals with sampling frequencies of over 48 kHz. They are automatically cancelled if those signals are input. To use the effect when playing back other sources, press  VIRTUAL SPEAKER],  PL II] or [SFC MUSIC, MOVIE] again to select.
- You can also press [GAME] on the remote control to select “GAME” mode (→ left) of SFC. (→ page 20)
- When using the wireless surround speakers, Dolby Pro Logic II cannot be used for surround signals such as Dolby Digital and DTS, and multi-channel LPCM signals.

# Using the VIERA Link “HDAVI Control™”

## What is VIERA Link “HDAVI Control” ?

VIERA Link “HDAVI Control” is a convenient function that offers linked operations of this system, and a Panasonic TV (VIERA) or Blu-ray Disc player/DVD recorder (DIGA) under “HDAVI Control”. You can use this function by connecting the equipment with the HDMI cable. See the operating instructions for connected equipment for operational details.

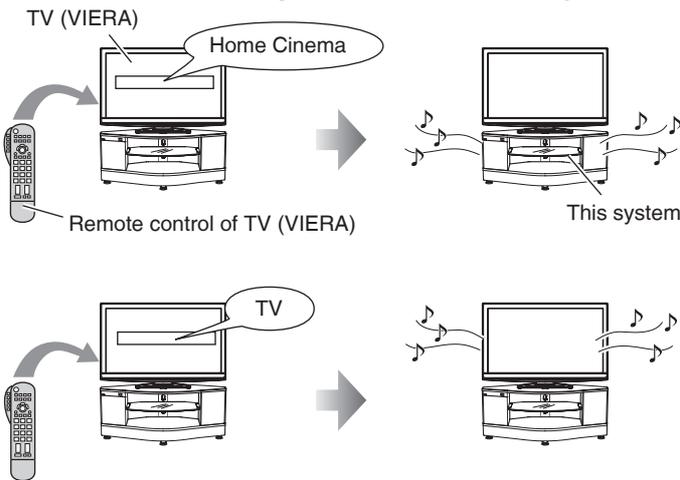
- VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC cannot be guaranteed.
- **This system supports “HDAVI Control 4” function.**  
“HDAVI Control 4” is the newest standard (current as of December, 2008) for Panasonic’s HDAVI Control compatible equipment. This standard is compatible with Panasonic’s conventional HDAVI equipment.
- Please refer to individual manuals for other manufacturers’ equipment supporting VIERA Link function.

## What you can do with VIERA Link “HDAVI Control”

Use the remote control of TV (VIERA) for operation. Operations differ depending on the type of TV.

- The following illustrations and displays are examples, which may differ from the actual product.
- When you do operations other than the following, use this system’s remote control.
- See operating instructions of TV (VIERA) as well.

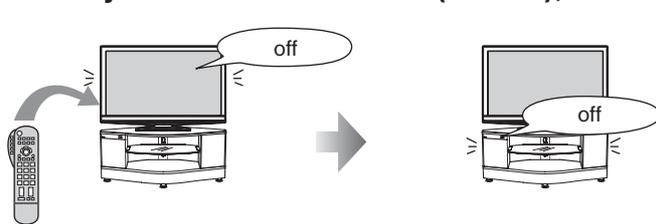
### 1. You can select “Speaker Selection” (“Home Cinema” or “TV”).



When audio is input, this system will be automatically turned on if it is in standby\* mode and the sound is output from this system’s speaker. You can also adjust the volume level by using the volume control buttons.  
\* “Standby” condition means the condition that this system is off.

TV (VIERA) speakers become active. When using with the Panasonic TV (VIERA) supporting HDAVI Control 4 and later version, this system is automatically turned off. (Intelligent Auto Standby)  
See operating instructions of TV (VIERA) as well.

### 2. When you switch off the TV (VIERA), this system automatically turns off.



When the VIERA Link “HDAVI Control” compatible Blu-ray Disc player/DVD recorder (DIGA) is connected with HDMI cable, the Blu-ray Disc player/DVD recorder (DIGA) also turns off.

### Note

- When using with Panasonic TV (VIERA) supporting HDAVI Control 4 and latest version, when this system is turned on, TV (VIERA) is set to “Home Cinema”.  
When using with Panasonic TV (VIERA) supporting HDAVI Control 3 and older version, when this system is turned on, “**TV SPEAKER**” is displayed and audio is output from TV (VIERA).
- When using with Panasonic TV (VIERA) supporting HDAVI Control when this system is turned off, TV (VIERA) is set to “TV”.
- If you do operations such as selecting a channel on the remote control of TV (VIERA), this system’s input is switched to “TV”.
- When you play back the Blu-ray Disc player/DVD recorder (DIGA) etc. connected to BD/DVD IN terminal or AUX1 terminal, this system’s input is automatically switched to “**BD/DVD**” or “**AUX 1**”.

### For correct use of VIERA Link "HDAVI Control"

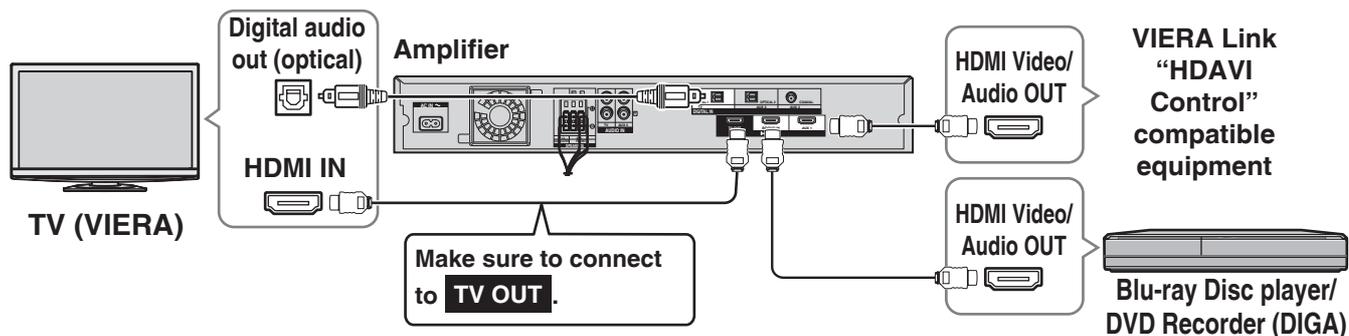
Use TV (VIERA)'s remote control to select "Home Cinema" without turning on this system with this system's standby/on button (including the remote control). (This system is automatically turned on.)

See TV (VIERA)'s operating instructions for details.



## Connection

Connect this system with VIERA Link "HDAVI Control" compatible TV (VIERA) and Blu-ray Disc player/DVD recorder (DIGA) with an HDMI cable.



### HDMI Cable notes

- Please use High Speed HDMI Cables that have the HDMI logo (as shown on the cover).
- When outputting 1080p signal, please use the HDMI cables 5.0 meters or less.
- It is recommended that you use Panasonic's HDMI cables. (Non-HDMI-compliant cables cannot be utilized.)  
Recommended part number: RP-CDHG10 (1.0 m), RP-CDHG15 (1.5 m), RP-CDHG20 (2.0 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m), etc.

### Note

- Only with HDMI cable connection, you cannot enjoy TV (VIERA) sounds on this system. Connect TV (VIERA) to this system with the optical fibre cable (or stereo phono cable) to enjoy TV (VIERA) sound.
- See the operating instructions of TV (VIERA) for VIERA Link "HDAVI Control" operation of connected equipment.

## Setup

**Preparations: Check "VIERA Link "HDAVI Control" setting" (→ page 22) of this system is "ON". Make the setting to activate VIERA Link "HDAVI Control" function in the menu operation of TV (VIERA).**

1. Turn on all equipment other than TV.
2. Turn on the TV (VIERA).
3. Switch TV (VIERA) input to HDMI terminal that this system is connected to.
4. Ensure that pictures from the Blu-ray Disc player/DVD recorder (DIGA), etc. are shown correctly after this system's input is switched to "BD/DVD" or "AUX 1".

### Note

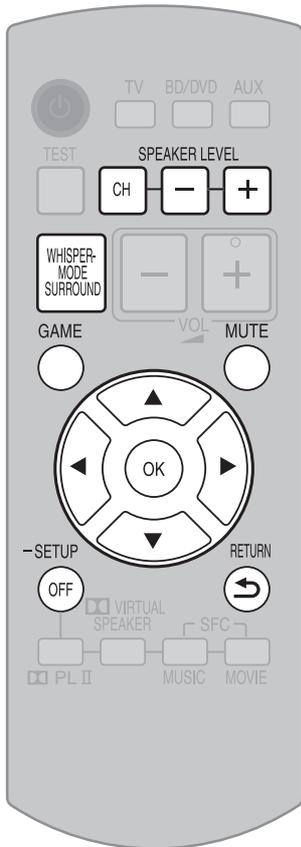
Make this setting in the following cases:

- when this system is connected for the first time after purchase
- when adding or reconnecting equipment
- when changing the settings for "Reducing standby power consumption (HDMI off mode)" (→ page 21) and "VIERA Link "HDAVI Control" setting" (→ page 22)

## When not using this function

Set "VIERA Link "HDAVI Control" setting" to "OFF". (→ page 22)

# Functions and settings



To return to the previous display/To cancel during setting operation (→ page 21): Press [↵ RETURN].

## Using “WHISPER-MODE SURROUND”

This function is effective during surround playback only. You can enjoy the dynamic effect even if the sound volume level is low during surround playback.

Press [WHISPER-MODE SURROUND].

“W.S. ON” is displayed.

- **To cancel** Press again.  
If cancelled, “W.S. OFF” is displayed.

This setting can be made on the control panel as well.



[WHISPER-MODE SURROUND] indicator

- When this function is on, [WHISPER-MODE SURROUND] indicator lights up on the control panel.

### Note

WHISPER-MODE SURROUND is not effective in the following cases.

When not using the wireless surround speakers:

When Dolby Virtual Speaker is off

When using the wireless surround speakers:

When Dolby Pro Logic II and SFC are off with 2-channel signal input

If the above setting is made when this function is on, [WHISPER-MODE SURROUND] indicator disappears and this function temporarily becomes off.

## Using “GAME”

Enjoy gaming with more dynamic sound.

Press [GAME].

- “GAME” mode (→ page 17) in SFC is selected.
- **To cancel** Press again.  
If cancelled, SFC’s effect itself is cancelled.

## Muting

“MUTE” blinks on the display while the volume is muted.

Press [MUTE].

- **To cancel** Press again.

### Note

- Muting is cancelled when you switch the system to standby.
- Muting is also cancelled when you adjust the volume.

## Adjusting speaker (subwoofer, wireless surround speaker) output during playback

Depending on the playback signal, you may feel the volume of the subwoofer or surround speakers (when used → page 14) is not balanced with the volume of the front speakers. In this case, you can adjust the speaker volume during playback.

**1. Press [CH] to select a speaker for adjustment.**

(The speaker is switched each time you press the button.)

☞ When not using the wireless surround speakers: **SUBW** (Subwoofer)

☞ When using the wireless surround speakers (→ page 14):

**SUBW** (Subwoofer) → **RS** (Wireless surround right) → **LS** (Wireless surround left)

**2. Press [SPEAKER LEVEL +, -] to adjust each speaker’s output level.**

Adjustment range: **SUBW: OFF, MIN, 1 to 19, MAX**

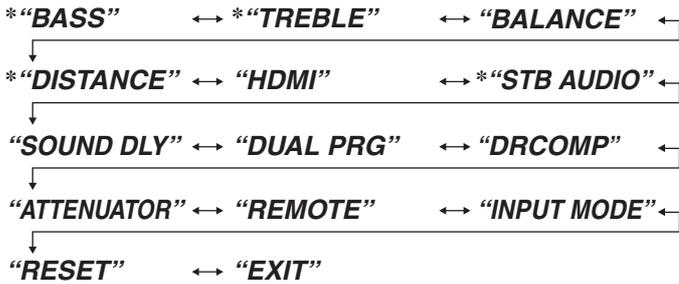
**RS, LS: -10 to +10**

- Repeat steps 1 and 2 to adjust the level of each speaker.

### Note

- You cannot adjust the front speakers with this operation. To adjust the volume balance of left and right front speakers, see “Adjusting the volume balance of front speakers”. (→ page 21)
- There is no output from the subwoofer if you select “OFF”.
- If the sound is distorted, lower the level.
- You cannot adjust the output level of speakers if the sound field effect is off and the speakers’ audio output is set to off. (→ page 17)
- You can adjust the speaker’s output level in SFC’s each mode respectively. (→ page 17)

## ■ Setup menu items



- \* appears only when audio adjustment can be made.
- Select "EXIT" and press [OK] to finish the setup mode.

## Adjusting sound quality

You can adjust the level of bass and treble. This setting is effective only when you perform stereo playback of 2-channel analogue and PCM signals. This setting is not displayed in other conditions. Be sure to make this setting in the above condition.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ above)

### 2. Press [◀][▶] to select "BASS" or "TREBLE" and press [OK].

### 3. Press [▲][▼] for adjustment, and press [OK].

Adjustment range: –6 to +6  
Factory setting: 0

### 4. Press [↵ RETURN] several times to select "EXIT" and press [OK] to finish the setting.

## Adjusting the volume balance of front speakers

You can adjust the balance of the front speakers.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ above)

### 2. Press [◀][▶] to select "BALANCE" and press [OK].

### 3. Press [◀][▶] for adjustment, and press [OK].

L : Front left  
R : Front right

Move the bar to left and right on the display to adjust.

- As the bar gets closer to "L", the sound moves to left front.
- As the bar gets closer to "R", the sound moves to right front.

### 4. Press [↵ RETURN] several times to select "EXIT" and press [OK] to finish the setting.



The bar indication is approximate.

## Setting distances

You can make this setting when connecting the wireless surround speakers with SH-FX70. (→ page 14) This setting is not displayed in other conditions.

By setting the distance from front/surround speakers to the listening-viewing position, the sound delay time is automatically calculated and adjusted so that sound reaches the listener at the same time.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ left)

### 2. Press [◀][▶] to select "DISTANCE" and press [OK].

### 3. Press [◀][▶] to select a speaker to set and press [OK].

FRONT : Front speakers  
SURR : Surround speakers

### 4. Press [▲][▼] to select the distance and press [OK].

Adjustment range: 1.0 to 10.0 m  
Factory setting: Front 3.0 m  
Surround 1.5 m

### 5. Press [↵ RETURN] several times to select "EXIT" and press [OK] to finish the setting.

## Reducing standby power consumption (HDMI off mode)

Standby through function (→ pages 11 and 25) does not work in this mode if you have connected through the HDMI terminal. VIERA Link "HDAVI Control" (→ page 18) will not function when this system is off.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ left)

### 2. Press [◀][▶] to select "HDMI" and press [OK].

### 3. Press [◀][▶] to select "STNBY" and press [OK].

### 4. Press [▲][▼] to select "OFF" and press [OK].

OFF : Standby power consumption reduced (approx. 0.1 W)

ON : "Standby through" is activated when this system is turned off. (Normal power consumption)

Factory setting: ON

### 5. Press [↵ RETURN] several times to select "EXIT" and press [OK] to finish the setting.



To return to the previous display/To cancel during setting operation: Press [↵ RETURN].

## VIERA Link “HDAVI Control” setting

When you do not wish to use VIERA Link “HDAVI Control” (→ page 18), you can set the unlinked operation by selecting “OFF”.

The normal setting is “ON” (Linked operation).

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

### 2. Press [◀][▶] to select “HDMI” and press [OK].

### 3. Press [◀][▶] to select “CTRL” and press [OK].

### 4. Press [▲][▼] to select “ON” or “OFF” and press [OK].

ON : When the operation is linked OFF : When the operation is not linked

Factory setting: ON

### 5. Press [↵ RETURN] several times to select “EXIT” and press [OK] to finish the setting.

## Adjusting the time lag between audio and video by delaying audio output

You can adjust audio timing to video timing by delaying audio output when pictures arrive after sounds.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

### 2. Press [◀][▶] to select “SOUND DLY” and press [OK].

### 3. Press [▲][▼] to select the setting and press [OK].

AUTO, OFF, 10, 20, 30, 40, 60, 80, 100, 120, 140, 160, 180, 200

Factory setting: AUTO

### 4. Press [↵ RETURN] several times to select “EXIT” and press [OK] to finish the setting.

#### Note

- If delaying audio output is not necessary, select “OFF”.
- “AUTO” is effective only when connecting the Panasonic TV (VIERA) supporting HDAVI Control 3 and later versions. (Auto Lip Synchronization Function)
- When you connect the Panasonic TV incompatible with HDAVI Control 3 and later versions or non-Panasonic TV, if “AUTO” is set, “40” (msec) is set.

## Switching between dual sounds

You can switch between dual sounds of Dolby Digital signals.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

### 2. Press [◀][▶] to select “DUAL PRG” and press [OK].

### 3. Press [▲][▼] to select the audio and press [OK].

M1 : Main audio M2 : Sub channel audio output

M1+M2 : Main + Sub channel audio output

Factory setting: M1

### 4. Press [↵ RETURN] several times to select “EXIT” and press [OK] to finish the setting.

## Clear audio at low volume

Dynamic range compression function for Dolby Digital. It compresses the dynamic range so that you can still hear dialogue and leave the sound field unaffected.

Use this function when you have to turn the volume down, such as late at night.

### 1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

### 2. Press [◀][▶] to select “DRCOMP” and press [OK].

### 3. Press [▲][▼] to select the setting and press [OK].

OFF : Normal playback

STANDARD : The best suited playback for each audio source

MAX : Always compressed at the maximum level Factory setting: OFF

### 4. Press [↵ RETURN] several times to select “EXIT” and press [OK] to finish the setting.

## Switching the attenuator

Switch the attenuator “**ON**” when big sounds become distorted while playing an analogue input source.

1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

2. Press [◀][▶] to select “**ATTENUATOR**” and press [OK].

3. Press [▲][▼] to select “**ON**” and press [OK].

**ON, OFF**

Factory setting: **OFF**

4. Press [↵ RETURN] several times to select “**EXIT**” and press [OK] to finish the setting.

## Switching the input signal detection setting

Most sources can be played with “**AUTO**” (factory setting). However, in the following cases, change the input signal detection setting.

- When the beginning of the song is cut during playback of CD, set to “**PCM**” (PCM FIX).
- When the signal is not detected during playback of DTS sources, set to “**DTS**” (DTS FIX).
- When noise occurs, return the setting to “**AUTO**”.

1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

2. Press [◀][▶] to select “**INPUT MODE**” and press [OK].

3. Press [◀][▶] to select the input and press [OK].

Input: **TV, DVD, AUX1, AUX2, AUX3**

4. Press [▲][▼] to select the detection method of input signal and press [OK].

**AUTO** : Automatic detection

**PCM** : PCM (from CDs) digital input fixed

**DTS** : DTS digital input fixed

Factory setting: **AUTO**

- Repeat steps 3 and 4 to change setting.

5. Press [↵ RETURN] several times to select “**EXIT**” and press [OK] to finish the setting.

## Reset (factory settings)

The operation settings for the system will be initialized to the settings made at the time of shipment.

1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

2. Press [◀][▶] to select “**RESET**” and press [OK].

3. Press [▲][▼] to select “**YES**” and press [OK].

**YES** : Choice for resetting

**NO** : Choice against resetting

- To cancel, select “**NO**”.



- All the settings are reset when you select “**YES**” and the input selector automatically switches to “**BD/DVD**”.
- If you select “**NO**”, you will return to step 2. To exit setup mode, press [↵ RETURN] a few times to display “**EXIT**”, and then press [OK].

**When other equipment (mini component system, AV amp, etc.) manufactured by Panasonic operates with the remote control operations of this system**

When using this system’s remote control, other equipment may operate. In this case, switch this system’s remote control code to “**REMOTE 1**”. Do the following **to set the same code number for this system and remote control**.

### Setting this system

1. Press and hold [–SETUP, OFF] for about 2 seconds.

The setting items are displayed. (→ page 21)

2. Press [◀][▶] to select “**REMOTE**” and press [OK].

3. Press [▲][▼] to select “**1**” and press [OK].

Factory setting: **2**

- You cannot finish the setting mode until the setting on the remote control is changed. Go to step 4.
- To set the remote control code to 2, select “**2**” in step 3 and press [OK].

### Setting the remote control

4. Press and hold [OK], and then press [TV] (more than 2 seconds).

**TV**: Remote control code 1

**BD/DVD**: Remote control code 2 (factory setting)

- Select the same number as the code number you have selected in step 3.
- To set the remote control code to 2, press and hold [OK] in step 4, and then press [BD/DVD] more than 2 seconds.

5. Press [↵ RETURN] several times to select “**EXIT**” and press [OK] to finish the setting.



If different codes are set between this system and remote control, the error message “**REMOTE 2**” or “**REMOTE 1**” is displayed.

# Error messages

Display	Check point/Cause/Countermeasure	Page
<b>CANCEL MUTE FUNCTION</b> (Scrolling)	<ul style="list-style-type: none"> <li>The test signal is not output while muting is on. Cancel muting for operation.</li> </ul>	20
<b>MUTE</b> (Blinking)	<ul style="list-style-type: none"> <li>This is always displayed while muting is on.</li> </ul>	20
<b>NOT POSSIBLE FOR THIS INPUT SOURCE</b> (Scrolling)	<ul style="list-style-type: none"> <li>You cannot use Dolby Virtual Speaker, SFC and Dolby Pro Logic II for dual sounds.</li> </ul>	—
<b>NOT POSSIBLE FOR THIS PCM SOURCE</b> (Scrolling)	<ul style="list-style-type: none"> <li>You cannot use Dolby Virtual Speaker, SFC and Dolby Pro Logic II effect with PCM signals with sampling frequency of over 48 kHz.</li> <li>SFC is not available for multi-channel LPCM signal.</li> </ul>	17 17
<b>REMOTE 2</b> <b>REMOTE 1</b>	<ul style="list-style-type: none"> <li>Set the same remote control code for this system and remote control. When “<b>REMOTE 2</b>” is displayed, set the code to “<b>2</b>” on the remote control in step 4 of procedure “When other equipment (mini component system, AV amp, etc.) manufactured by Panasonic operates with the remote control operations of this system”. When “<b>REMOTE 1</b>” is displayed, set the code to “<b>1</b>” on the remote control in step 4 in the same way.</li> </ul>	23
<b>SWITCH OFF POWER</b> (Scrolling)	<ul style="list-style-type: none"> <li>While “<b>F70</b> □□□□” is displayed, all operations but turning ON/OFF operation are not available. Turn off the system, unplug the AC mains lead, and consult your dealer.</li> </ul>	—
<b>TURN OFF DTS FIX MODE</b> (Scrolling)	<ul style="list-style-type: none"> <li>When each input is fixed to DTS (DTS FIX), the sound field effects cannot be cancelled even if you press [–SETUP, OFF]. Cancel DTS FIX.</li> </ul>	23
<b>U701</b>	<ul style="list-style-type: none"> <li>The equipment connected by the HDMI cable is not compatible with this system’s copyright protection technology.</li> </ul>	—
<b>U703</b>	<ul style="list-style-type: none"> <li>A problem has occurred with the HDMI connection. Try the following to correct the problem. Consult your dealer if the error code remains on the display. <ul style="list-style-type: none"> <li>– Turn the connected equipment off and on again.</li> <li>– Disconnect the HDMI cable then reconnect it.</li> <li>– Do not connect more than 2 sets of equipment to this system’s output.</li> </ul> </li> </ul>	—
<b>U704</b>	<ul style="list-style-type: none"> <li>The system received incompatible video signals through HDMI connection. Check the settings of the connected equipment.</li> </ul>	—

## Digital signals that can be played on this system

- **Dolby Digital**  
Blu-ray disc, DVD etc.
- **DTS**  
Blu-ray disc, DVD etc.
- **PCM (2-channel)**  
CD, DVD audio etc.
- **Multi-channel LPCM (Linear PCM)**  
Blu-ray disc, DVD audio etc.

### Note

- With HDMI connection, this system can play back multi-channel LPCM signals with sampling frequencies of over 48 kHz and PCM signals of over 96 kHz in addition to multi-channel LPCM of up to 48 kHz and PCM of up to 96 kHz. (If frequency exceeds these figures, playback equipment performs down-sampling and plays back as 48 kHz signals. However, playback may be impossible depending on the discs. See operating instructions of playback equipment for more information.)
- With the digital connection, this system can play multi-channel LPCM signals with sampling frequencies of up to 48 kHz and PCM signals of up to 96 kHz.
- See “Glossary” (→ page 25) for more detailed information on each signal.

## Maintenance

Unplug the AC mains lead from the household mains socket and wipe the system using a soft and dry cloth.

- When the system is very dirty, wring the cloth soaked in water thoroughly, wipe the dirt and wipe moisture off with a dry cloth.
- Do not use solvents such as benzine, thinner, alcohol, etc. because they may cause casing to deform and coating to go off.
- Before using chemically treated cloth, read the instructions that come with the cloth carefully.

# Glossary

## Analogue

Audio signals produced from L/R audio output terminals of general equipment is called analogue audio.

## CPM (Content Protection for Pre-recorded Media)

This is the copyright protection technology which prevents file copy of DVD audio.

## Decoder, Decode

Decoder is the device to enable us to hear audio data that is encoded on DVD, etc., as a normal audio signal. This process is called Decode.

## Deep Colour

This system can reproduce greater colour gradation (4096 steps) when connected to compatible TV and recorder, etc. You can enjoy exceptionally rich, natural-looking colours, with smooth, detailed gradation and minimal colour banding.

## Digital

Blu-ray Disc players, DVD recorders, DVD players, and CD players are usually equipped with digital output terminals. Connect through the digital terminal to enjoy digital surround sounds such as Dolby Digital and DTS.

## Dolby Digital

Digital sound compression technology developed by Dolby Laboratories. Compatible with surround sound as well as 2-channel stereo sound. With this technology, you can keep massive amount of audio data in a disc efficiently.

## Dolby Pro Logic II

This system can process not only Dolby Surround, but also other 2-channel sources to produce a 5.1-channel sound for a more realistic sound field. It is also possible to enhance old movies recorded in stereo with this dynamic 5.1-channel sound. This system uses Dolby Pro Logic II to add surround effects to stereo sources such as video cassettes and CDs.

## Dolby Virtual Speaker

This system allows you to enjoy a surround effect with two front speakers and a subwoofer. This is not merely a "virtual surround" effect, but rather uses the optimal speaker arrangements and listening positions for 5.1-channel sound.

## Down-sampling

This is the process of resampling by reducing the sampling rate of a signal that was sampled at a certain rate.

## DTS (Digital Theater Systems)

Surround system used in most movie theatres. Separation works well between channels, resulting in realistic surround effects.

## 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.

## HDMI (High Definition Multimedia Interface)

HDMI enables you to transmit digital audio and video signals using a single cable. You can also transmit control signals using HDMI connections.

## Multi-channel LPCM (Linear PCM)

This is the uncompressed audio signal encoded digitally. Multi-channel LPCM signals used for Blu-ray Disc, DVD audio, etc. offer playback with higher-sound quality. Up to 7.1 channel LPCM signals can be input to this system. Also, you can enjoy 7.1-channel with wider surround effects with SH-FX70 (not included) connection.

## Optical

Using optical fibre cable for digital signal input/output from DVD, CD, etc., provides better sound quality for playback or recording compared to analogue. Only possible with equipment that has an optical terminal.

## PCM (Pulse Code Modulation)

This is one of the methods that enable analogue sounds to be converted to digital sounds without compression. This method is used for music CD, etc.

## Sampling frequency

Sampling is the process of converting the heights of sound wave (analogue signal) samples taken at set periods into digits (digital encoding). Sampling frequency is the number of samples taken per second, so larger numbers mean faithful reproduction of the original sound.

## Standby through function

When this system and TV and Blu-ray Disc player/DVD recorder etc. are connected with HDMI cables, image/audio from Blu-ray Disc player/DVD recorder etc. can still be transmitted to TV through this system even though the system is turned off.

This is useful when you want to enjoy late night viewing only with the television's speakers.

Images recorded with x.v.Colour or Deep Colour are also supported.

## Surround signal

Audio signal made up with front speakers, center speaker and surround speakers. For this system, surround signal is automatically played by Dolby Virtual Speaker.

## WHISPER-MODE SURROUND

Even when the sound volume level is low, you can enjoy dynamic surround playback similarly as during normal playback. This is convenient when listening at night.

## x.v.Colour

This is a name of products compliant with ISO Standard for wider colour space: "xvYCC". This system supports x.v.Colour.

## 1080p

This is one of the digital hi-vision images.

1080 is the number of effective scanning lines that constitute the actual screen. This enables every detail to be beautifully expressed. Images are less flickered with progressive method that scans in order from the top. This system supports 1080p.

## 5.1-channel surround

Monaural and stereo use 1 channel and 2 channels respectively to reproduce sound, but 5.1-channel surround uses 5 speakers and 1 subwoofer. The 5 channels are: 1 center speaker, 2 front speakers, and 2 surround speakers at the side of or to the rear of the sitting position. Sound output of the subwoofer is much narrower than the other speakers, and so is considered as 0.1. This is called 5.1-channel surround when played through all 5.1 channels, and with this system you can achieve a similar effect with Dolby Virtual Speaker.

# Specifications

## ■ AMPLIFIER SECTION

### RMS Output Power (each channel driven)

1 kHz, 10 % total harmonic distortion  
Front (L/R) 90 W per ch (4 Ω)

100 Hz, 10 % total harmonic distortion  
Subwoofer 105 W per ch (3 Ω)

Total Power Output 285 W

### Input sensitivity/Input impedance

AUDIO IN (TV, AUX4) 450 mV/47 kΩ

### S/N ratio

HDMI (BD/DVD IN, AUX1), DIGITAL IN (TV, AUX2, AUX3) 80 dB

### Tone controls

BASS 50 Hz, +6 dB to -6 dB

TREBLE 20 kHz, +6 dB to -6 dB

### Input/Output Terminals

<b>AUDIO IN</b>	
Analogue Input (TV, AUX4)	2
<b>DIGITAL IN</b>	
Optical (TV, AUX2)	2
Coaxial (AUX3)	1
<b>HDMI</b>	
Input (BD/DVD IN, AUX1)	2
Output (TV OUT)	1

This system supports "HDAVI Control 4" function.

## ■ GENERAL

Power supply AC 220 V to 240 V, 50 Hz

Power consumption 73 W

In standby condition	Approx. 0.4 W
HDMI off mode	Approx. 0.1 W

Operating temperature range 0°C to 40°C

Operating humidity range 35% to 80% RH (no condensation)

## ■ RACK SYSTEM SECTION

Dimensions (W x H x D) 1050 mm x 444 mm x 482 mm

Mass Approx. 30 kg

Maximum loading Weight 80 kg

Shelf Board Max loading weight Top 12 kg/Bottom 12 kg

## ■ SPEAKER SYSTEM SECTION

FRONT (L/R) 1-Way 1 Speaker System (Bass Reflex)

6.5 cm Cone Type Full Range x2

SUBWOOFER 1-Way 2 Speaker System (Bass Reflex)

13 cm Cone Type Woofer x2

## Note

- Specifications are subject to change without notice.
- Total harmonic distortion is measured by the digital spectrum analyser.

# Troubleshooting guide

Before requesting service, make the following checks.

If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

	Problem	Possible solution	Pages
Common problems	No power.	<ul style="list-style-type: none"> <li>Ensure the AC mains lead is connected.</li> </ul>	13
	No sound or image after playback starts.	<ul style="list-style-type: none"> <li>Select the correct source.</li> <li>Turn the muting off.</li> <li>Check that the digital signals can be decoded by this system. With the digital connection, cannot playback PCM signal with sampling frequency of over 96 kHz.</li> <li>Check connections to other equipment.</li> <li>When using SH-FX70 (not included), check the connections of the digital transmitter and surround speakers.</li> <li>Set "<b>AUTO</b>" in "Switching the input signal detection setting".</li> <li>Turn this system off then on again.</li> <li>Output the test signals of speakers and adjust the speakers.</li> <li>Check the connectors of speaker terminals on the rear panel (amplifier) are properly connected.</li> <li>If the connections are normal, this may be a cable-related problem. Use other cables and make connections again.</li> </ul>	16 20 24 10 to 13 14
	The remote control does not work.	<ul style="list-style-type: none"> <li>Replace the batteries if they are worn.</li> <li>Make sure the remote control code has been properly set.</li> </ul>	6 23
	No sound from microphone connected to DVD player (karaoke).	<ul style="list-style-type: none"> <li>No sound is output from microphone if this system is digitally connected with DVD player. Change to analogue connection and input. Make analogue connection to AUX4.</li> </ul>	12, 13
	There is no DTS audio output. There is audio output, but the DTS decoder indicator is not lit.	<ul style="list-style-type: none"> <li>Set the DTS Digital Audio Output setting on the DVD player, Blu-ray Disc player or DVD recorder to Bitstream.</li> <li>Set "<b>DTS</b>" in "Switching the input signal detection setting".</li> </ul>	— 23
	Sound is not heard when playing DVD audio.	<ul style="list-style-type: none"> <li>This may occur due to digital copyright protection of the disc if using digital connection. This system may not be able to play sources with sampling frequency of over 48 kHz.</li> </ul>	—
	Sound stops. ("F61" appears on the display for about a second.) The protection circuit is activated when some abnormality is detected, and turns off the system automatically.	<ul style="list-style-type: none"> <li>Amplifier output is abnormal.</li> <li>Straining of the speakers through excessive volume or power.</li> <li>This may occur if you use the system in an extremely hot environment.</li> <li>Curtains or other objects may be blocking the exhaust hole.</li> <li>⇒ Determine and correct the cause, then turn the system on. (The protection circuit is reset.) (Consult your dealer if the problem persists.)</li> </ul>	— — — —
	"F70 □□□□" appears on the display. ("DSP" or "HDMI" is displayed in □.)	<ul style="list-style-type: none"> <li>Turn off the system, unplug the AC mains lead, and consult your dealer.</li> </ul>	—
	"F76" appears on the display. (After displayed, the system turns off.)	<ul style="list-style-type: none"> <li>Unplug the AC mains lead, and consult your dealer.</li> </ul>	—
	Sound field	No sound in surround mode.	<ul style="list-style-type: none"> <li>Set to Dolby Virtual Speaker, SFC or Dolby Pro Logic II.</li> <li>(When the audio is not heard from TV) Check if this system is connected to TV with the optical fibre cable or the stereo phono cable, etc. properly.</li> </ul>
Cannot use Dolby Virtual Speaker, Dolby Pro Logic II or SFC.		<ul style="list-style-type: none"> <li>You cannot use these features with PCM signals with sampling frequency of over 48 kHz. Make analogue connection to AUX4.</li> <li>You cannot use for Dolby Digital dual sounds.</li> </ul>	12, 13 —
HDMI	When using an HDMI connection, the first few seconds of sound is cut off.	<ul style="list-style-type: none"> <li>This may occur if you start play from a chapter on a DVD. The following will correct the problem.</li> <li>① Change the audio output setting on the Blu-ray Disc player, DVD recorder or DVD player from Bitstream to PCM.</li> <li>② Change input signal setting to "<b>PCM</b>" in "Switching the input signal detection setting".</li> </ul>	— 23
	The system does not work properly.	<ul style="list-style-type: none"> <li>The system does not work properly if you have connected the HDMI input and output terminals incorrectly. Turn the system off, unplug the AC mains lead, and make the connection again.</li> </ul>	10

Problem		Possible solution	Pages
HDMI	<b>VIERA Link “HDAVI Control” does not function properly.</b>	<ul style="list-style-type: none"> <li>• Confirm “VIERA Link “HDAVI Control” setting” is set to “<b>ON</b>” (when the operation is linked). When it is “<b>OFF</b>”, change to “<b>ON</b>”.</li> </ul>	22
		<ul style="list-style-type: none"> <li>• VIERA Link “HDAVI Control” does not function in standby condition when this system is turned off. See “Reducing standby power consumption (HDMI off mode)” and set to “<b>ON</b>” (normal power consumption).</li> </ul>	21
		<ul style="list-style-type: none"> <li>• Check VIERA Link “HDAVI Control” settings of the connected equipment.</li> </ul>	—
		<ul style="list-style-type: none"> <li>• VIERA Link “HDAVI Control” may not function when you change the connections for HDMI equipment, insert and remove the outlet, or during blackout. Do the following operations in this case. <ul style="list-style-type: none"> <li>– Turn on the TV (VIERA) again while all the equipment connected with HDMI cables is on.</li> <li>– Set “VIERA Link “HDAVI Control” (HDMI equipment control)” of TV (VIERA) to “OFF” and then set to “ON” again. (For details, refer to the operating instructions for TV (VIERA).)</li> <li>– Connect this system to TV (VIERA) using the HDMI cable, switch the TV (VIERA) on, unplug this system’s AC mains lead, and insert it into a household mains socket again.</li> </ul> </li> </ul>	—
Could watch TV (VIERA) when installed, but now cannot watch TV.	<ul style="list-style-type: none"> <li>• When using this system in combination with TV (VIERA) only, check if HDMI cable is not connected to “BD/DVD IN” of this system. If it is connected to “BD/DVD IN”, connect to “TV OUT”.</li> </ul>	—	
Even if multi-channel audio sources, such as DVD, Blu-ray disc, are played back, “  DIGITAL” or “DTS” is not displayed.	<ul style="list-style-type: none"> <li>• When using VIERA Link “HDAVI Control” and the speaker is set to “TV”, press VIERA Link button on the remote control of TV (VIERA) and set the speaker to “Home Cinema”.</li> </ul>	18	
This system’s input automatically switches to “AUX2 / STB”, but sound is not heard. Or unexpected sound from other equipment is heard.	<ul style="list-style-type: none"> <li>• After “Setting for automatically switching the input source to STB”, the connection might have been changed. Select “<b>OFF</b>” once and “<b>SET</b>” again.</li> </ul>	11	

#### Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you 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.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

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]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



#### Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Cd

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## 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.

## 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.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

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.



**Panasonic Corporation**

**Web Site:** <http://panasonic.net>

Pursuant to at the directive 2004/108/EC, article 9(2)

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