



Owner's Manual

Home Theater Audio System

Model No. SC-HTB20



Thank you for purchasing this product.

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

Please keep this manual for future reference.

If you have any questions, contact:

U.S.A. and Puerto Rico : 1-800-211-PANA (7262)

Canada : 1-800-561-5505

IMPORTANT SAFETY INSTRUCTIONS

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

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



WARNING

Unit

- To reduce the risk of fire, electric shock or product damage,
 - Do not expose this unit to rain, moisture, dripping or splashing.
 - Do not place objects filled with liquids, such as vases, on this unit.
 - Use only the recommended accessories.
 - Do not remove covers.
 - Do not repair this unit by yourself. Refer servicing to qualified service personnel.

Button-type battery (Lithium battery)

- Risk of fire, explosion and burns. Do not disassemble, heat above **60 °C (140 °F)** or incinerate.

If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.

If any electrolyte should come into contact with your eyes, never rub the eyes. Rinse eyes thoroughly with water, and then consult a doctor.

<For USA-California only>

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material — special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate.

CAUTION

Unit

- Do not place sources of naked flames, such as lighted candles, on this unit.

Placement

- To reduce the risk of fire, electric shock or product damage,
 - Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
 - Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.

Button-type battery (Lithium battery)

- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing of the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.
- Insert with poles aligned.
- Do not touch the terminals (+ and –) with metal objects.
- Do not recharge, disassemble, remodel, heat or throw into fire.
- Keep out of reach of children.
- Mishandling of batteries can cause electrolyte leakage and may cause a fire.
 - Remove the battery if you do not intend to use the remote control for a long period of time. Store in a cool, dark place.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car exposed to direct sunlight for a long period of time with doors and windows closed.



CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN



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



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



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

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

FCC Note:

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

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

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

FCC Caution: To assure continued compliance, follow the attached installation instructions and use only shielded interface cables when connecting to peripheral devices. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Responsible Party:

Panasonic Corporation of North America
One Panasonic Way, Secaucus, NJ 07094

Support Contact:

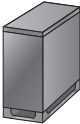
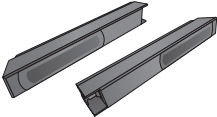
Panasonic Consumer Marketing Company of North America
Telephone No.: 1-800-211-PANA (7262)

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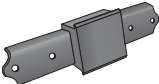
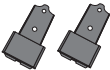
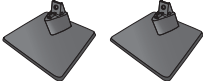
- The illustrations shown may differ from your unit.
- Operations in this Owner's Manual are described mainly with the remote control, but you can perform the operations on the active subwoofer if the controls are the same.

Supplied items

System (SC-HTB20)	
☐ 1 Active subwoofer (SU-HTB20) 	☐ 2 Front speakers (SB-HTB20) 

Accessories

Check the supplied accessories before using the system.

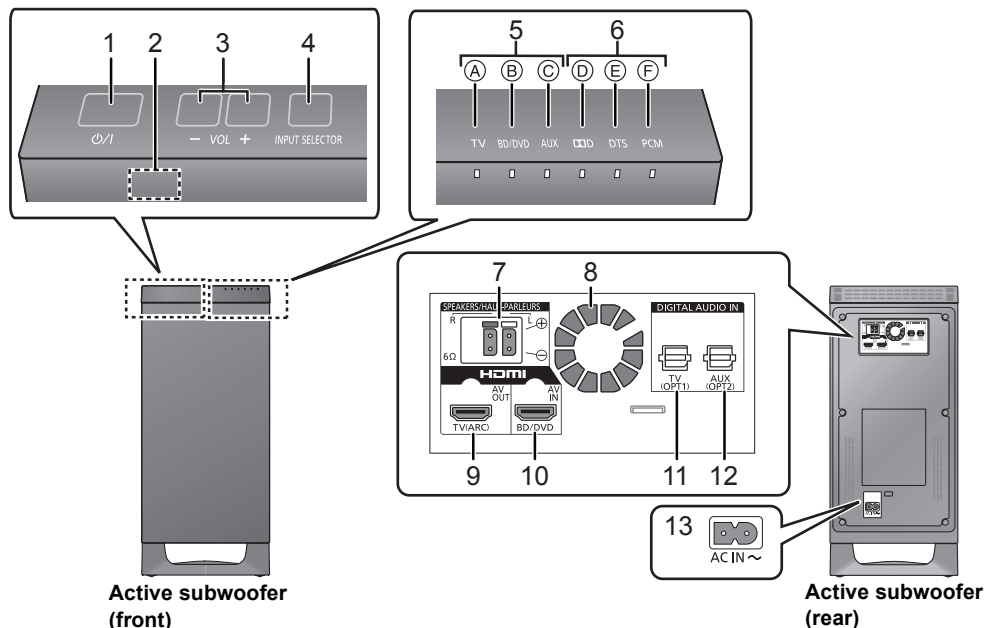
☐ 1 Remote control (with a battery) (N2QAYC000064) 	☐ 1 AC power supply cord (K2CB2CB00021) 	☐ 2 Speaker cables (Length: 3 m (9.8 ft)) (REEX1266A: RED) (REEX1267A: WHITE) 	
☐ 1 Speaker joint (RAQ0087) 	☐ 6 Screws (XYN5+J14FJK) 	☐ 4 Speaker feet (RKAX0028-K) 	☐ 2 Front ornaments (RAQ0088) 
☐ 2 Speaker bases (RYK1688-K) 	☐ 2 Stands (RYQ0853-KJ) 	(ONLY FOR CANADA) The enclosed French Canadian label sheet corresponds to the English display on the remote control and the top and rear of the active subwoofer.	



- Product numbers are correct as of January 2012. These may be subject to change.
- For U.S.A. and Puerto Rico:
To order accessories, refer to "Accessory Purchases (United States and Puerto Rico)" on page 30.
- For Canada: To order accessories, call the dealer from whom you have made your purchase.
- The supplied AC power supply cord is for use with the active subwoofer.
Do not use it with other equipment. Also, do not use cords for other equipment with the active subwoofer.

Control reference guide

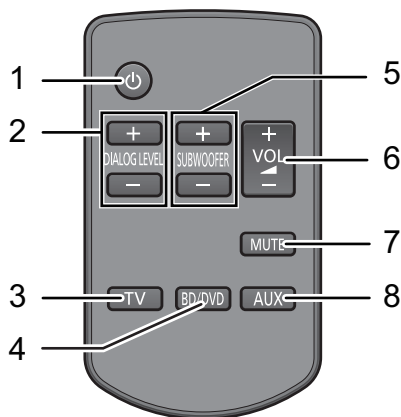
Active subwoofer



- 1 **Standby/on switch (⏻/⏻)**
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.
- 2 Remote control signal sensor (⇒ 9)
- 3 Adjust the volume of the speakers
- 4 Select the input source
TV → BD/DVD → AUX
↑
- 5 Input selector indicators*
 - Ⓐ TV indicator
Lights green when the TV is the audio source
 - Ⓑ BD/DVD indicator
Lights amber when the device connected to the BD/DVD terminal is the audio source
 - Ⓒ AUX indicator
Lights amber when the device connected to the AUX terminal is the audio source
- 6 Audio format indicators*
 - Ⓓ Dolby Digital indicator
Lights when Dolby Digital is the current audio format
 - Ⓔ DTS indicator
Lights when DTS is the current audio format
 - Ⓕ PCM indicator
Lights when PCM (2ch, Multi-channel) is the current audio format
- 7 Speaker terminals (⇒ 20)
- 8 Cooling fan
- 9 HDMI OUT terminal (ARC compatible) (⇒ 18, 19)
- 10 HDMI IN terminal (BD/DVD) (⇒ 19)
- 11 OPTICAL DIGITAL AUDIO IN terminal (TV) (⇒ 19)
- 12 OPTICAL DIGITAL AUDIO IN terminal (AUX) (⇒ 19)
- 13 AC IN terminal (⇒ 20)

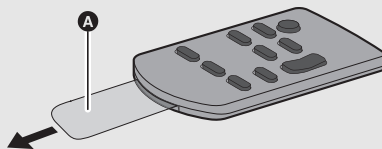
※The indicators will also blink in various conditions (⇒ 28)

Remote control



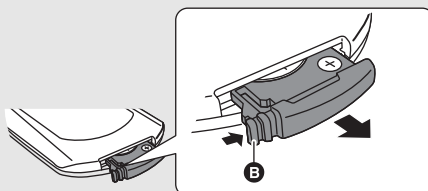
- 1 Turn the system on or off (⇒ 21)
- 2 Adjust the dialog effect level (⇒ 22)
- 3 Select the TV as the source (⇒ 21)
- 4 Select the BD/DVD as the source (⇒ 21)
- 5 Adjust the output level of the active subwoofer (bass sound) (⇒ 21)
- 6 Adjust the volume of the speakers (⇒ 21)
- 7 Mute the sound (⇒ 21)
- 8 Select the AUX as the source (⇒ 21)

Remove the insulation sheet **A** before using.

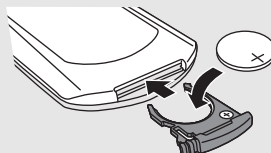


■ To replace a button-type battery

- ① While pressing the stopper **B**, pull out the battery holder.



- ② Set the button-type battery with its (+) mark facing upward and then put the battery holder back in place.



- When replacing the battery, use:
CR2025 (Lithium battery)
- Keep the button-type battery out of reach of children to prevent swallowing.

Before use

Unit care

■ Clean the system with a soft, dry cloth

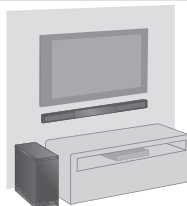
- When the system becomes very dirty, wring a cloth moistened in water tightly to wipe the dirt, and then wipe it with a dry cloth.
- When cleaning the system, use a fine cloth. Do not use tissues or other materials (towels, etc.) that can fall apart. Small grains may get stuck inside the speaker cover.
- Never use alcohol, paint thinner or benzine to clean the system.
- Before using chemically-treated cloth, carefully read the instructions that came with the cloth.

Step 1 **Selecting the placement method**

- Choose a placement method that suits you best.

When placing the speakers on a wall

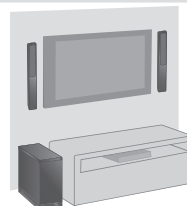
▶ **Place the speakers horizontally**



Page 10



▶ **Place the speakers vertically**



Page 12



When placing the speakers on a table

▶ **Place the speakers using the stands**



Page 13



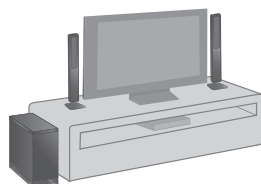
▶ **Place the speakers using the speaker feet**



Page 14



▶ **Place the speakers using the speaker bases**



Page 15





Caution

- The active subwoofer and supplied speakers are to be used only as indicated in these instructions. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- Do not attempt to attach these speakers to a wall using methods other than those described in this manual.

Speaker system

- Use a screwdriver (+) for assembling the speakers.
- Do not hold the speakers in one hand to avoid injury by dropping the speakers when carrying.

■ When attaching the speakers to a wall

The wall or pillar to which the speakers are to be attached should be capable of supporting 33 kg (72.8 lbs) per screw. Consultation with a qualified building contractor is recommended when attaching the speakers to a wall. Improper attachment may result in damage to the wall and speakers, and cause personal injury.

■ When placing the speakers in front of the TV

The speakers may block or interfere with the TV's various sensors (C.A.T.S. (Contrast Automatic Tracking System) sensor, remote control sensor, etc.) and the 3D Eyewear transmitters on a 3D compatible TV.

• If the stands are being used

Move the speakers farther away from the TV. If the TV still does not function properly, try removing the stands.

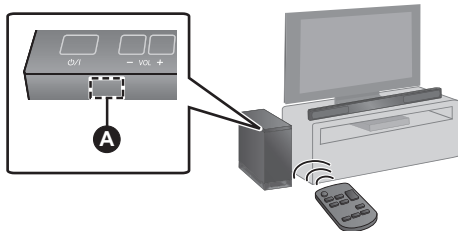
• If the stands are not used

Move the speakers farther away from the TV. If the TV still does not function properly, try placing them beside the TV (⇒ 8).

Active subwoofer

The remote control signal sensor is located on the active subwoofer.

- Use the remote control within the correct operation range.



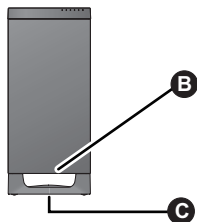
Ⓐ Remote control signal sensor

• Remote control operation range

Distance: Within approx. 7 m (23 ft.) directly in front

Angle: Approx. 30° left and right

■ When carrying the active subwoofer



Ⓑ Do not hold the active subwoofer from this opening.

The parts inside (speaker unit) may be damaged.

Ⓒ Always hold the bottom of the active subwoofer when moving it.



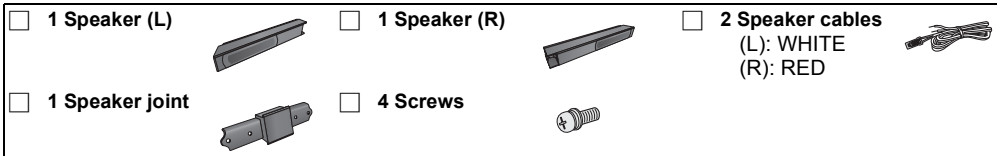
- Place the active subwoofer in a horizontal position with the top panel faced upward.
- Placing the active subwoofer and the speakers too close to walls and corners can result in excessive bass. Cover walls and windows with thick curtains.
- If irregular coloring occurs on your TV, turn the TV off for about 30 minutes. If it persists, move the speakers further away from the TV.
- Keep magnetized items away. Magnetized cards, watches, etc., can be damaged if placed too close to the system.

Step 2 Assembling the speakers

When placing the speakers on a wall



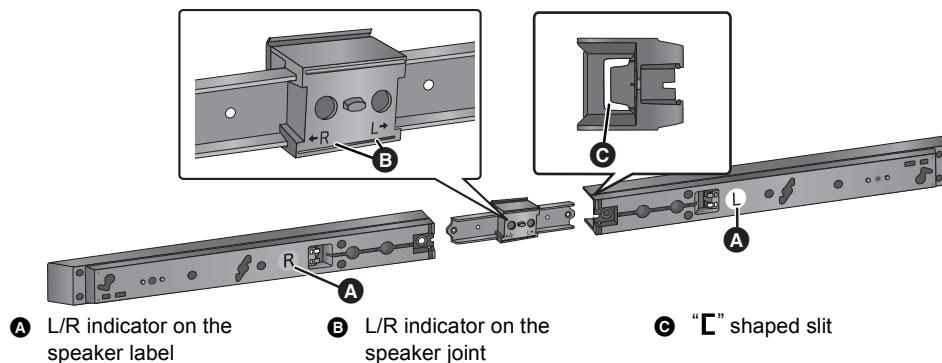
Place the speakers horizontally



- For a safety measure to prevent the speakers from falling, refer to page 16.
- To prevent damage or scratches, lay down a soft cloth and perform the assembly on it.

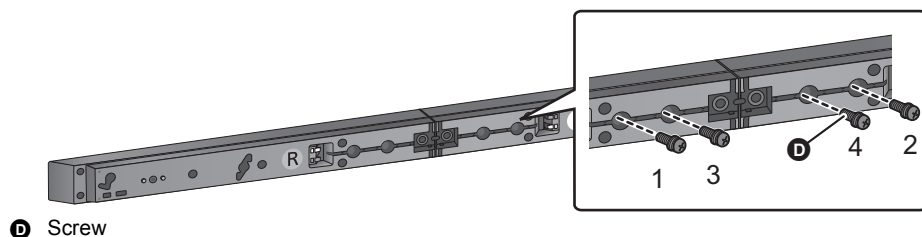
1 Match the L/R indicator **A** on the speaker with the L/R indicator **B** on the speaker joint, then insert the metal part of the speaker joint fully into **C**.

- Do not connect the left speaker to the right speaker joint or vice versa. Be sure to verify the orientation of the speaker with the label on the rear of the speaker.



2 Use the screws to secure the speakers to the speaker joint.

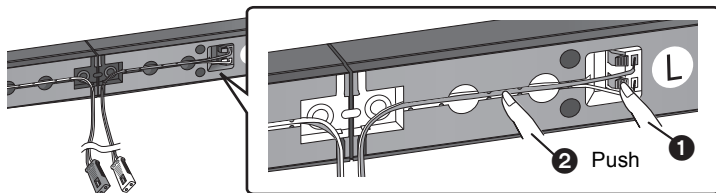
- Keep the screws out of reach of children to prevent swallowing.



- Be sure to insert the screws following the order as indicated in the illustration.

3 Connect the speaker cables.

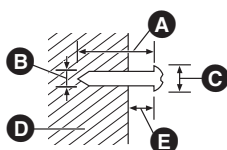
- To make sure that the speaker cable is connected to the correct speaker, match the color of the speaker connector with the color of the L/R indicator on the speaker label so as not to connect the speaker cable to the wrong speaker.
- Insert the wire fully, taking care not to insert beyond the wire insulation.



- 1 Insert the wire fully.
+: White
-: Blue line
- 2 Press into the groove.

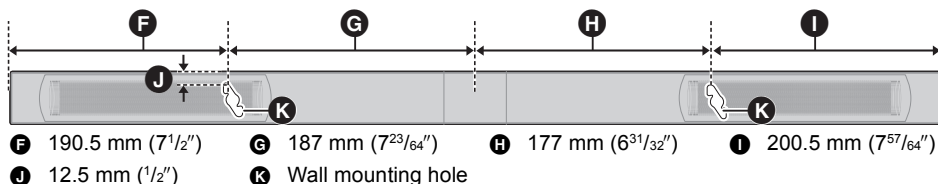
4 Drive a screw (not supplied) into the wall.

- Use the measurements indicated below to identify the screwing positions on the wall.
- Leave at least 20 mm ($\frac{25}{32}$ ") of space above and on each side of the speaker to allow enough space for fitting the speaker.
- The position in the wall where the screw is to be attached as well as the screw should be capable of supporting over 33 kg (72.8 lbs).
- Keep the screws out of reach of children to prevent swallowing.

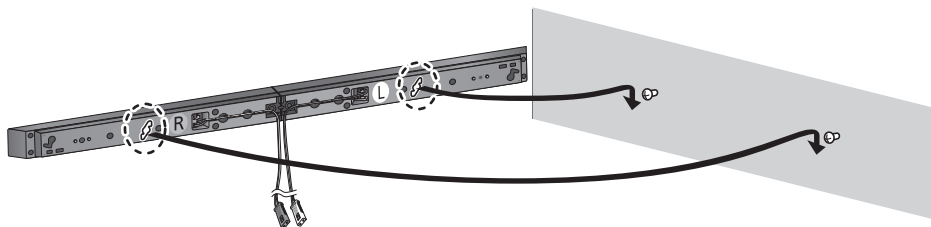


- A At least 30 mm ($1\frac{3}{16}$ ")
- B $\varnothing 4.0$ mm ($\frac{5}{32}$ ")
- C $\varnothing 7.0$ mm to $\varnothing 9.4$ mm ($\frac{9}{32}$ " to $\frac{3}{8}$ ")
- D Wall or pillar
- E 5.5 mm to 6.5 mm ($\frac{7}{32}$ " to $\frac{1}{4}$ ")

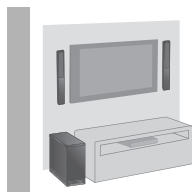
Front view (semi-transparent image)



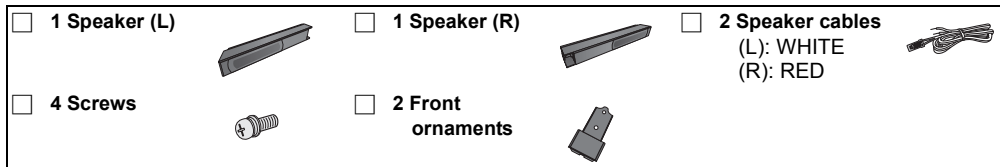
5 Fit the speaker securely onto the screw(s) with the hole(s).



DO	DO NOT
• Move the speaker so that the screw is in this position.	• In this position, the speaker will likely fall if moved to the left or right.



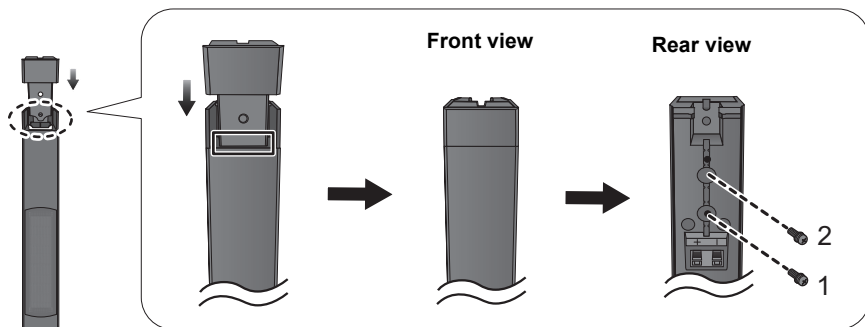
Place the speakers vertically



- For a safety measure to prevent the speakers from falling, refer to page 16.
- To prevent damage or scratches, lay down a soft cloth and perform the assembly on it.

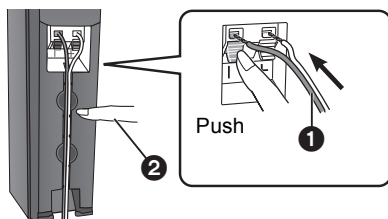
1 Attach the front ornaments.

- Keep the screws out of reach of children to prevent swallowing.
- Be sure to insert the screws following the order as indicated in the illustration.



2 Connect the speaker cables.

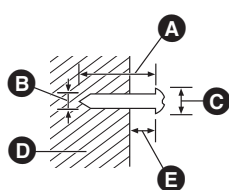
- Insert the wire fully, taking care not to insert beyond the wire insulation.
- To make sure that the speaker cable is connected to the correct speaker, match the color of the speaker connector with the color of the L/R indicator on the speaker label so as not to connect the speaker cable to the wrong speaker.



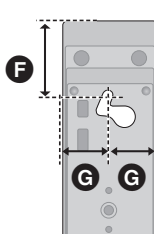
- 1 Insert the wire fully.
+ : White
- : Blue line
- 2 Press into the groove.

3 Drive a screw (not supplied) into the wall.

- Use the measurements indicated below to identify the screwing positions on the wall.
- Leave at least 20 mm ($\frac{25}{32}$ ") of space above and on each side of the speaker to allow enough space for fitting the speaker.
- The position in the wall where the screw is to be attached as well as the screw should be capable of supporting over 33 kg (72.8 lbs).
- Keep the screws out of reach of children to prevent swallowing.



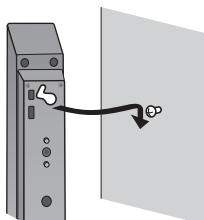
- A** At least 30 mm ($1\frac{3}{16}$ ")
- B** $\varnothing 4.0$ mm ($\frac{5}{32}$ ")
- C** $\varnothing 7.0$ mm to $\varnothing 9.4$ mm ($\frac{9}{32}$ " to $\frac{3}{8}$ ")
- D** Wall or pillar
- E** 5.5 mm to 6.5 mm ($\frac{7}{32}$ " to $\frac{1}{4}$ ")



- F** 46.5 mm ($1\frac{53}{64}$ ")
- G** 24.5 mm ($\frac{31}{32}$ ")

4 Fit the speaker(s) securely onto the screw(s) with the hole(s).

- Place the speaker that is connected with the speaker cable with a red connector on the observers' right, and connect with the speaker cable with a white connector on the observers' left.



DO	DO NOT
Move the speaker so that the screw is in this position.	In this position, the speaker will likely fall if moved to the left or right.

When placing the speakers on a table



Place the speakers using the stands

☐ 1 Speaker (L)		☐ 1 Speaker (R)		☐ 2 Speaker cables (L): WHITE (R): RED	
☐ 1 Speaker joint		☐ 2 Stands		☐ 6 Screws	

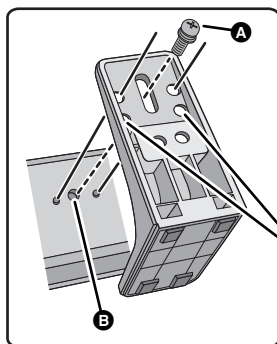
- For a safety measure to prevent the speakers from falling, refer to page 16.
- To prevent damage or scratches, lay down a soft cloth and perform the assembly on it.

1 Assemble the speakers following steps 1 to 3 of "Place the speakers horizontally" ($\Rightarrow$ 10).

2 Attach the stands.

- Keep the screws out of reach of children to prevent swallowing.

(Continued on the next page)



Align the holes with the projecting parts on the speaker.

- Do not use these holes for alignment as the screw will not fit into the screw hole.

A Screw (supplied)

B Screw hole



Place the speakers using the speaker feet

☐ 1 Speaker (L)



☐ 1 Speaker (R)



☐ 2 Speaker cables

(L): WHITE
(R): RED



☐ 1 Speaker joint



☐ 4 Screws



☐ 4 Speaker feet

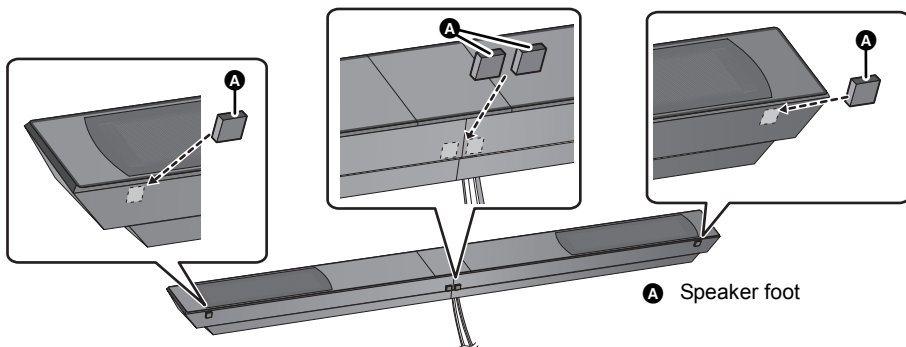


- For a safety measure to prevent the speakers from falling, refer to page 16.
- To prevent damage or scratches, lay down a soft cloth and perform the assembly on it.

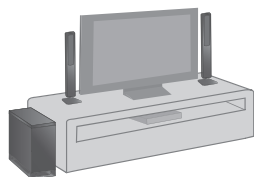
1 Assemble the speakers following steps 1 to 3 of “Place the speakers horizontally” (⇒ 10).

2 Attach the speaker feet to the bottom of the speakers.

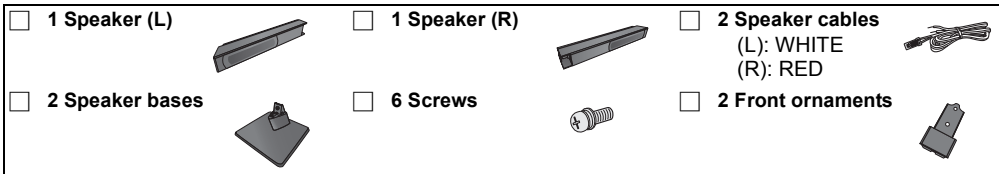
- Keep the speaker feet out of reach of children to prevent swallowing.



A Speaker foot



Place the speakers using the speaker bases

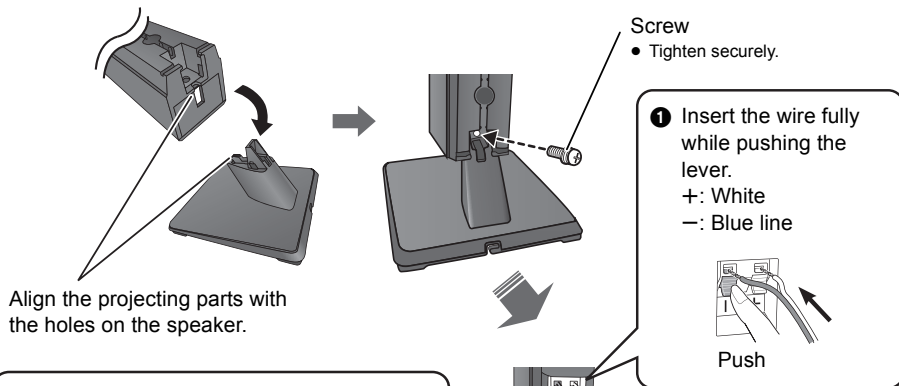


- For a safety measure to prevent the speakers from falling, refer to page 16.
- To prevent damage or scratches, lay down a soft cloth and perform the assembly on it.

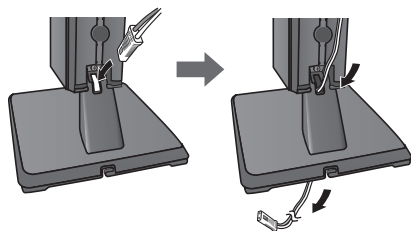
1 Assemble the speakers following step 1 of “Place the speakers vertically” (⇒ 12)

2 Assemble the speakers.

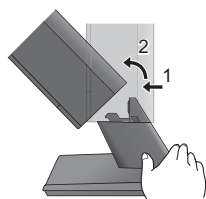
- To make sure that the speaker cable is connected to the correct speaker, match the color of the speaker connector with the color of the L/R indicator on the speaker label so as not to connect the speaker cable to the wrong speaker.
- Be sure to insert the speaker cable through the threading hole as indicated in the illustration.
- Keep the screws out of reach of children to prevent swallowing.



2 Thread the speaker cable.

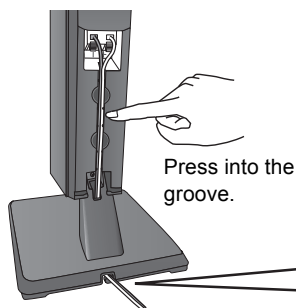


To detach the speaker.



- Insert the wire fully, taking care not to insert beyond the wire insulation.

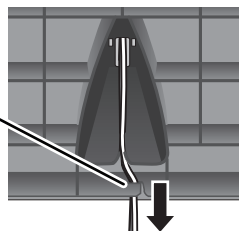
(Continued on the next page)



Pull the cable straight along the line and slide into the groove.

- Be sure to insert the cable in under the projecting part.

Back of the speaker base



- Place the speaker that is connected with the speaker cable with a red connector on the observers' right, and connect with the speaker cable with a white connector on the observers' left.

Speaker fall prevention measures

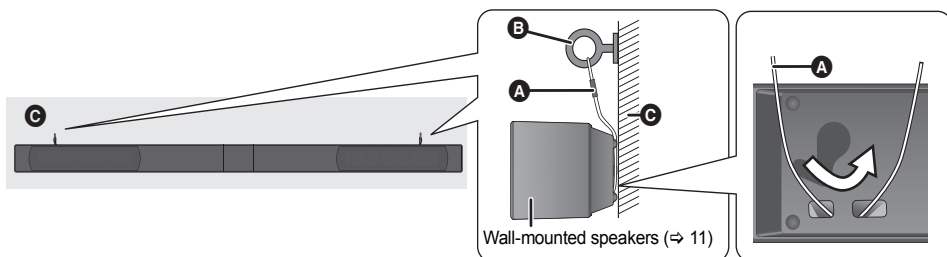
To prevent the speakers from falling, it is recommended, as an additional protection measure, to attach the speakers to the wall or table with a fall prevention cord (hereafter "cord").



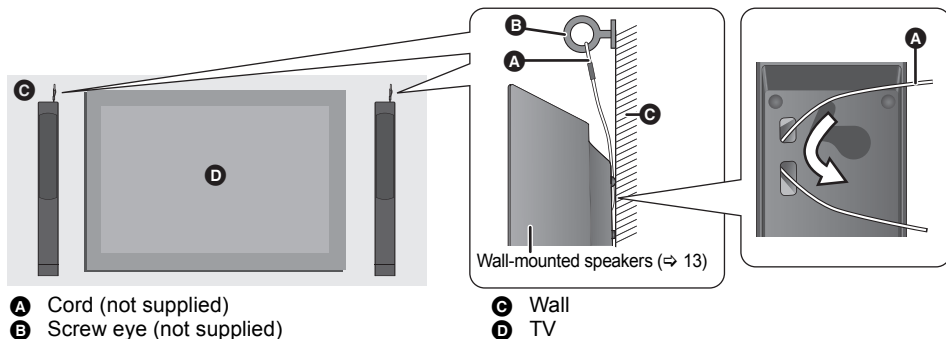
- Consult a qualified housing contractor concerning the appropriate procedure when attaching to a concrete wall or a surface that may not have strong enough support (⇒ 11, 13). Improper attachment may result in damage to the wall and speakers, and personal injury.
- Use a cord of less than $\varnothing 1.5$ mm ($1/16$ "), which is capable of supporting over 10 kg (22.05 lbs).
- Keep the screws out of reach of children to prevent swallowing.
- Make sure that the slack of the cord is minimal.

When placing the speakers on a wall

Horizontal placement

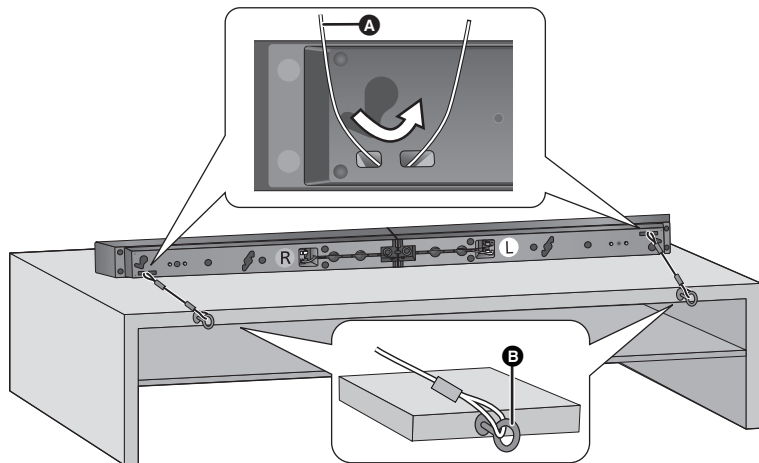


Vertical placement

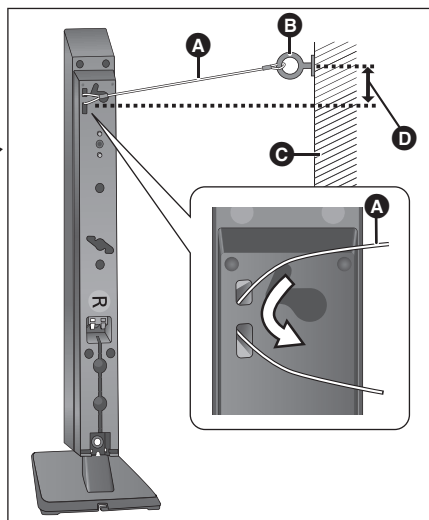
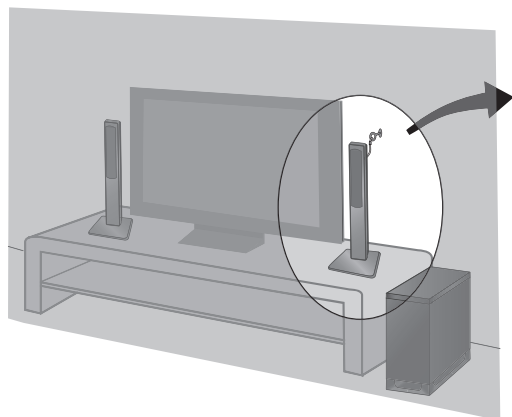


When placing the speakers on a table

Horizontal placement



Vertical placement



- A** Cord (not supplied)
- B** Screw eye (not supplied)
 - Depending on the placement of the speakers, the screwing position of the screw eye may differ.

- C** Wall
- D** Approx. 150 mm ($5\frac{29}{32}$ "")

Step 3 Connections

- Turn off all equipment before connection and read the appropriate owner's manual.
- Do not connect the AC power supply cord until all other connections are complete.**

HDMI

The HDMI connection supports VIERA Link "HDAVI Control" (⇒ 24) when used with a compatible Panasonic TV.

- Use the High Speed HDMI cables. Non-HDMI-compliant cables cannot be utilized. It is recommended that you use Panasonic's HDMI cables.

Recommended part number (High Speed HDMI cable):

RP-CDHS15 (1.5 m/4.9 ft), RP-CDHS30 (3.0 m/9.8 ft), RP-CDHS50 (5.0 m/16.4 ft), etc.

3D compatibility

Compatible with FULL HD 3D TV and Blu-ray Disc Player

- This system can pass through the 3D video signal from a 3D compatible Blu-ray Disc Player to a FULL HD 3D TV.

Basic connection

1 Verify if the TV's HDMI terminal is labeled "HDMI (ARC)".

The connection will differ when the TV's HDMI terminal is labeled "HDMI (ARC)" and when it is not.

Labeled "HDMI (ARC)": Connection A

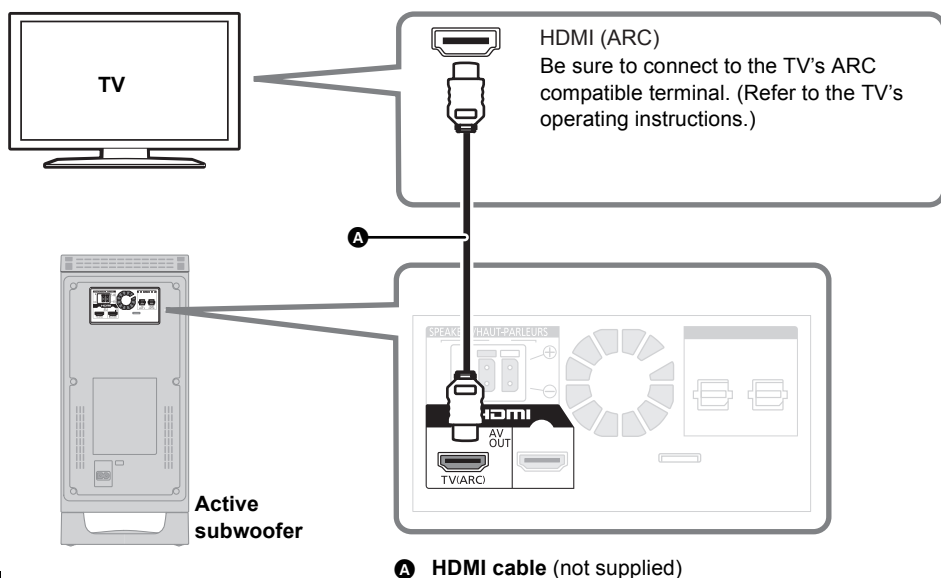
Not labeled "HDMI (ARC)": Connection B (⇒ 19)

What is ARC?

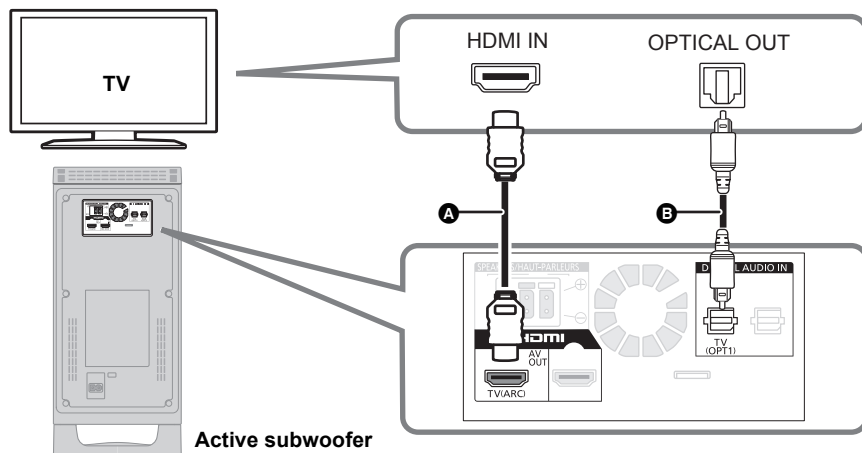
ARC is an abbreviation of Audio Return Channel, also known as HDMI ARC. It refers to one of the HDMI functions. When you connect the active subwoofer to the terminal labeled "HDMI (ARC)", the optical digital audio cable that is usually required in order to listen to sound from a TV is no longer required, and TV pictures and sound can be enjoyed with a single HDMI cable.

2 Make the connection.

A Labeled "HDMI (ARC)"



B Not labeled “HDMI (ARC)”



- A HDMI cable (not supplied)
- B Optical digital audio cable (not supplied)

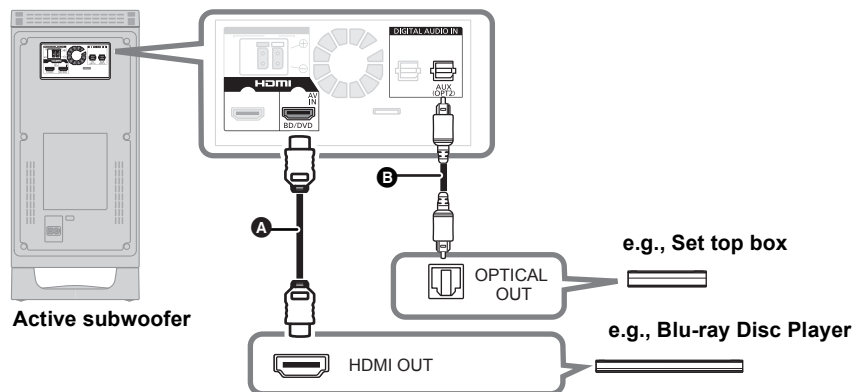
Connection with other devices

You can direct the audio signal from the connected Blu-ray Disc player, DVD player, Set Top Box, etc. to this system.

- Refer to the operating instructions of the set top box for the optimal video connection.

Preparation

- Connect this system to the TV. (⇒ 18)



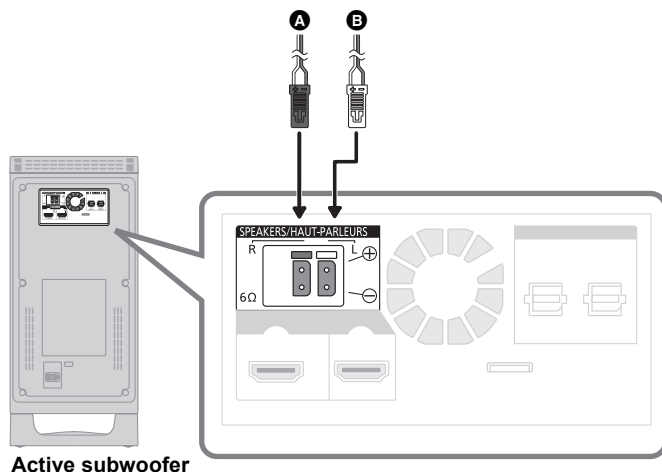
- A HDMI cable (not supplied)
- B Optical digital audio cable (not supplied)

HDMI standby pass-through

Even if this system is in standby mode, the audio and/or video signal from the device connected to the HDMI IN terminal (BD/DVD) will be sent to the TV connected to the HDMI OUT terminal (ARC) (The sound will not be output from this system).

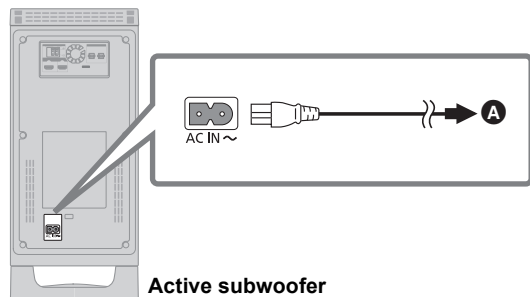
Speaker cable connection

Connect to the terminals of the same color.



AC power supply cord connection

- Connect only after all other connections are complete.



- The active subwoofer consumes a small amount of AC power even when it is in standby mode (Approx. 0.07 W). In the interest of power conservation, if you will not be using this system for a long time, unplug it from the household AC outlet.

Install this unit so that the power cord can be unplugged from the socket outlet immediately if any problem occurs.

Saving energy

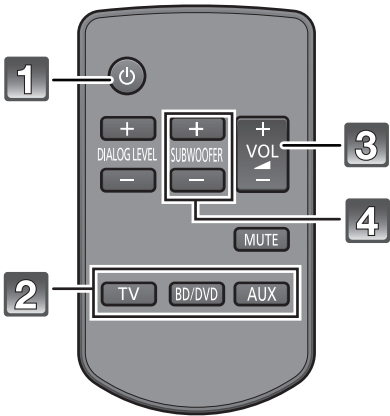
This system is designed to conserve its power consumption and save energy.

- **This system will automatically switch to standby mode** when no signal is input and no operation is performed for approx. 30 minutes.

Using this unit

Preparation

- Turn on the TV.



1 Press [⏻] to turn on the system.

2 Select the source. (⇒ 6)

Press	To select
[TV]	“TV”
[BD/DVD]	“BD/DVD”
[AUX]	“AUX”

- This remote control cannot be used to control the operations of the connected devices.

■ When “BD/DVD” or “AUX” is selected as the source

On the connected device:

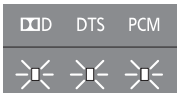
Select the TV’s input for this unit and start the playback on the connected device.



If the system does not operate as expected, such as sound defects, return the settings to the factory preset and operate the system again. (⇒ 26)

■ To mute the sound Press [MUTE].

The audio format indicators blink simultaneously while muting.



- To cancel, press the button again or adjust the volume.
- Muting is canceled if this system is turned off.

3 Press [+ VOL –] to adjust the volume of the speakers.

- Volume range: 1 to 100*

4 Press [+ SUBWOOFER –] to adjust the subwoofer level (bass sound).

- Subwoofer levels: 1 to 4* (Factory preset: 3)

- 1 Press [+ SUBWOOFER –] to display the current level.
- 2 While the level is displayed:
Press [+ SUBWOOFER –] to adjust the level.

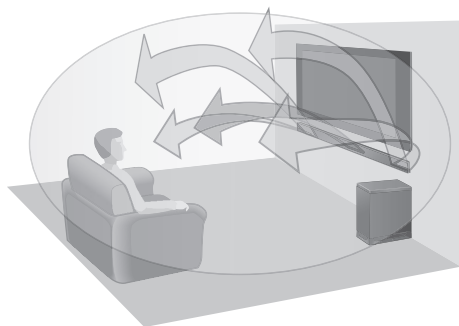
Indication	Effect level	
DDD DTS PCM □ □ 🔊	4	Highest
DDD DTS PCM □ 🔊 🔊	3	
DDD DTS PCM 🔊 🔊 □	2	
DDD DTS PCM 🔊 □ □	1	Lowest

- ※ The audio format indicators blink from left to right (+) or from right to left (–) while adjusting the speaker volume or the subwoofer level. The indicators will not blink when it has reached the maximum or minimum.

3D sound

This system provides a feeling that the sound and the image are as one. The 3D sound effect will be applied to Multi-channel audio sources as a factory preset.

e.g., Image of 3D sound field



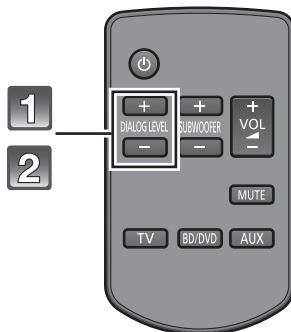
3D sound	
Dolby Virtual Speaker	With this effect you can enjoy a surround sound effect similar to 5.1ch.
3D surround effect	Adding to the Dolby Virtual Speaker effect, Panasonic has applied its own sound field controlling technology to expand the sound field forwards, backwards, upwards and downwards providing a sound with depth and force that better matches 3D images.
Clear-mode dialog	Sports commentary and dialogs from TV dramas are heard as if the sound is coming from the TV, giving the feeling that the sound and the image is as one. Also, the dialog will stand out from the other sounds during normal volume playback and when the volume is lowered for night time viewing.



Dolby Virtual Speaker and the 3D surround effects can be turned off and on by changing the audio output mode settings.

To adjust the dialog effect level

This setting will change the level of the Clear-mode dialog effect. (⇒ left)



1 Press [**+** **DIALOG LEVEL** **-**] to display the current level.

2 While the level is displayed: Press [**+** **DIALOG LEVEL** **-**] to adjust the level.

- The level indication pattern is the same as subwoofer level.※
- Dialog effect levels: 1 to 4 (Factory preset: 2)
- The dialog effect level can be also adjusted by pressing both [**-** **VOL**] and [**VOL** **+**] on the active subwoofer for more than 2 seconds. After the current setting is displayed, press [**-** **VOL**] or [**VOL** **+**] again to adjust the level.



- Depending on audio signals, sound other than dialog is emphasized.

※ The audio format indicators blink from left to right (+) or from right to left (-) while adjusting the dialog effect level. The indicators will not blink when it has reached the maximum or minimum.

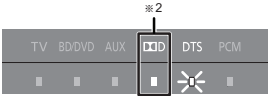
Audio output modes

As a factory preset, Dolby Virtual Speaker and the 3D surround effects will be applied to Multi-channel audio sources, such as those from a Blu-ray Disc player or DVD player, etc.

By changing the audio output setting, it is possible to apply the Dolby Virtual Speaker and 3D surround effects to 2ch audio sources, such as the audio from the TV.

To change the audio output mode

- 1 Press and hold [MUTE] for more than 2 sec.
- The indicator for the current setting blinks for 10 sec.
- 2 While the indicator is blinking, press [MUTE] again to change the setting.
- The setting changes each time [MUTE] is pressed.

Audio output mode	Dolby Virtual Speaker and 3D surround effect
Multi-channel mode 	The effects are applied to all audio sources.
Auto mode (Direct mode)*1 (Factory preset) 	The effects are applied to Multi-channel audio sources. The effects are not applied to 2 channel audio sources.
2ch mode 	The effects are not applied to any audio source.

※1 Depending on the audio source, Dolby Virtual Speaker and 3D surround effect settings are automatically adjusted.

※2 This indicator will also light when the audio source is Multi-channel audio.

 When using the optical digital audio cable, Dolby Virtual Speaker and the 3D surround effect will be automatically canceled if the audio signal's sampling frequency is greater than 48 kHz.

Linked operations with the TV (VIERA Link™ “HDAVI Control™”)

What is VIERA Link “HDAVI Control”?

VIERA Link™ is a new name for EZ Sync™. VIERA Link “HDAVI Control” is a convenient function that offers linked operations of this system, and a Panasonic TV (VIERA) under “HDAVI Control”.

You can use this function by connecting the equipment with an HDMI cable. See the operating instructions for connected equipment for operational details.

Preparation

- ① Confirm that the HDMI connection has been made. (⇒ 18, 19)
- ② Set the “HDAVI Control” operations on the connected equipment (e.g., TV).
- ③ For optimal “HDAVI Control” operations, change the following settings on the connected TV*1.
 - Set the default speaker settings to this system.*2
 - Set the speaker selection settings to this system.
- ④ Turn on all “HDAVI Control” compatible equipment and select the TV’s input for this system so that the “HDAVI Control” function works properly.
- ⑤ If a device is connected to the HDMI IN terminal, start play to check that the picture is displayed on the TV correctly.

When the connection or settings are changed, repeat this procedure.

- *1 The availability and function of the settings may vary depending on the TV. Refer to the operating instructions for the TV for details.
- *2 If the TV has a default speaker setting within the VIERA Link setting items, choosing this system as the default speaker will automatically change the speaker selection to this system.



- 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 unit supports “HDAVI Control 5” function. “HDAVI Control 5” is the newest standard (current as of November, 2011) 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”

To make sure that the audio is output from this system, select home theater speaker from the speaker menu of VIERA Link menu using the TV’s remote control to turn this system on. The availability and function of the settings may vary depending on the TV. Refer to the operating instructions for the TV for details.

■ Speaker control

You can select whether audio output is from this system or the TV speakers by using the TV menu settings.

Home theater

This system is active.

- When this system is in standby mode, changing the TV speakers to this system in the VIERA Link menu will automatically turn this system on and select TV as the source.
- You can control the volume setting of this system using the volume or mute button on the TV remote control.
- If you turn off this system, TV speakers will be automatically activated.
- Audio will automatically be output from this system if the TV is compatible to VIERA Link “HDAVI Control 4” or later.

TV

TV speakers are active.

- The volume of this system is set to its minimum.

■ Automatic input switching

When the following operations are performed, this system will automatically change the input to the corresponding source.

- When play starts on an HDMI connected device.*3
 - When the TV input or the TV channel is changed.
- *3 If the speaker output setting on the TV is set to this system, the TV and this system turn on automatically (Power on link).

■ Power off link

When the TV is turned off, this system also turns off automatically.

■ Automatic lip-sync function

(for HDAVI Control 3 or later)

Delay between audio and video is automatically adjusted by adding time lag to the audio output, enabling you to enjoy smooth audio for the picture.



The delay information is automatically set if the TV is compatible to VIERA Link “HDAVI Control 3” or later and the VIERA Link is set to on.

Advanced operations

Changing the dual audio

Change the dual audio from main to secondary.

- ① Confirm the digital audio output setting on the connected TV or player, etc. is set to "Bitstream".
- ② Press and hold [TV] for more than 2 sec.
- ③ While the indicator of the current setting is blinking, press [TV] to change the setting.



A : Main



B : Secondary (SAP: Secondary Audio Program)

A, B : Main and secondary

- The setting works only when the dual audio is available in the audio source.
- The setting is maintained until it is changed again.
- The same setting is used for [TV] and [BD/DVD] audio sources.

Auto gain control

This function adjusts the volume automatically when the volume exceeds a certain level. With this function, you can prevent sudden loud sounds.

- ① Press and hold [AUX] on remote control for more than 2 sec.
- The indicator for the current setting blinks for 10 sec.



Dolby Digital indicator blinks:
Auto gain control is on.



PCM indicator blinks:
Auto gain control is off.

- ② While the indicator is blinking, press [AUX] to change the setting.
- The setting changes each time [AUX] is pressed.
- The setting is maintained until it is changed again.
- Default setting of this function is OFF.

To turn off the 3D surround effect and clear-mode dialog effect

Depending on your preference, it is possible to use only the Dolby Virtual Speaker effect by turning off the 3D surround effect and the clear-mode dialog effect.

- ① Press and hold [BD/DVD] on remote controller for more than 2 sec.
- The indicator for the current setting blinks for 10 sec.

Dolby Digital indicator blinks:
3D surround effect and clear-mode dialog effect are on.



PCM indicator blinks:
3D surround effect and clear-mode dialog effect are off.



- ② While the indicator is blinking, press [BD/DVD] to change the setting.
- The setting changes each time [BD/DVD] is pressed.
- The setting will be reset to on when this system is turned off.
- When off is selected, the dialog effect level cannot be adjusted.

Others

The following settings are unnecessary under general usage conditions of the system.

Remote control code

When other Panasonic devices respond to this system's remote control, change the remote control code on the active subwoofer and the remote control.

Preparation

- Turn off all other Panasonic products.
- Turn on this system.

Change the remote control code to code 2:

- ① Aim the remote control at this system's remote control sensor.
- ② Press and hold [MUTE] and [BD/DVD] on the remote control for more than 4 sec.
- All the indicators will blink for 10 sec when the code of this system is changed.



- The setting is maintained until it is changed again.



- If this system does not operate after changing the code, repeat steps ① and ②.
- To change the remote control code to code 1, repeat the steps above, but replace [BD/DVD] with [TV].

(Continued on the next page)

■ To reduce the clear-mode dialog effect

When the dialog does not sound natural while the volume is set low, for example, it is possible to reduce the dialog enhancing effect as follows:

Press and hold [TV] on the remote control and [– VOL] on the active subwoofer for more than 2 sec.

■ To turn off VIERA Link “HDAVI Control”

When “HDAVI Control” compatible equipment does not work well with this system, for example, it is possible to turn off this function as follows:

- When VIERA Link is turned off the ARC function is not available. Be sure to connect the optical digital audio cable. (⇒ 19)
- ① Press and hold [MUTE] on the remote control and [– VOL] on the active subwoofer for more than 2 sec.
- ② After the setting has changed, turn off all the connected devices and then turn them on again.

■ To turn off the volume limitation

If a state of the lowered volume disturbs you every time this system turns on, for example, it is possible to turn off this function as follows:

Press and hold [MUTE] on the remote control and [VOL +] on the active subwoofer for more than 2 sec.



The settings of the clear-mode dialog effect, VIERA Link “HDAVI Control” and the volume limitation remain intact even if you switch this system to standby mode. To turn these 3 functions back on, this system must be set back to the factory preset. (⇒ right)

- All the indicators will blink once when the setting is changed.



Troubleshooting

Before requesting for service, make the following checks. If you are in doubt about some of the check points, or if the solutions indicated in the following guide do not solve the problem, refer to “Customer Services Directory (United States and Puerto Rico)” on page 30 if you reside in the U.S.A. or Puerto Rico, or refer to “WARRANTY SERVICE” on page 31 if you reside in Canada.

To return to the factory preset.

While this system is on, press [⏻/I] on the active subwoofer for more than 4 sec.

(All the indicators will blink twice when the active subwoofer is reset.)

If the system does not operate as expected, returning the settings to the factory preset may solve the problem.

- The remote control code will return to “1” when this system is returned to the factory preset. To change the remote control code, refer to page 25.

General operation

No power.

- Insert the AC power supply cord securely. (⇒ 20)
- After turning this system on, if the indicators blink and this system immediately turns off, unplug the AC power supply cord and consult your dealer.

The remote control does not work properly.

- The battery is depleted. Replace it with a new one. (⇒ 7)
- It is possible that the insulation sheet has not been removed. Remove the insulation sheet. (⇒ 7)
- It may be necessary to set the code of the remote control again after changing the battery in the remote control. (⇒ 25)
- Use the remote control within the correct operation range. (⇒ 9)

The “TV” indicator blinks, but there is no sound.

Remove the AC power supply cord and consult your dealer. If there are any other indicators blinking, be sure to inform the blinking indicators to your dealer.

This system is automatically switched to standby mode.

This system will automatically switch to standby mode when no signal is input and no operation is performed for approx. 30 minutes. (⇒ 20)

The power on this system is turned off when the TV's speakers are selected in the speaker control.

This is a normal feature when using VIERA Link (HDAVI Control 4 or later). For details please read the operating instructions for the TV on its power save feature. (⇒ 24)

HDMI

This system does not operate correctly.

If the HDMI cable is connected to the wrong terminal (HDMI IN or HDMI OUT), this system will not operate correctly. Turn this system off, disconnect the AC power supply cord and reconnect the HDMI cable(s). (⇒ 18, 19)

VIERA Link related operations no longer function properly.

- Check the VIERA Link setting on the connected devices.
- Have you turned the VIERA Link settings off? (⇒ 26)
- When the HDMI connections are changed, after a power failure or after the AC power supply cord has been removed, VIERA Link operations may not function properly.
 - Turn on all the devices that are connected to the TV with an HDMI cable and then turn the TV on.
 - Turn off the VIERA Link settings of the TV and turn it on again. For details refer to the operating instructions for the TV.
 - While this system and the TV are connected with the HDMI cable, turn on the TV and then remove the system's AC power supply cord and reconnect it again.

The first few seconds of audio cannot be heard when using the HDMI connection.

This may occur during DVD-Video chapter playback. Change the digital audio output setting on the connected device from "Bitstream" to "PCM".

When operating an HDMI compatible device of a different brand, this system reacts in an unwanted manner.

HDAVI Control commands may use a different signal depending on the brand of the device. In this case, turn VIERA Link off (⇒ 26).

Sound

No sound (or image).

- Turn muting off. (⇒ 21)
- Check the connections to the other devices. (⇒ 18, 19)
- Make sure that the received audio signal is compatible with this system. (⇒ 6)
- Turn this system off and then on again.
- If this system is connected to the TV with only an HDMI cable, make sure that the TV's HDMI terminal is labeled "HDMI (ARC)". If not, connect using the optical digital audio cable. (⇒ 18, 19)
- If this system is connected to a Panasonic TV and turned on using the button on the active subwoofer or the remote control, sound might not be output from this system. In this case, turn this system on using the TV's remote control. (⇒ 24)

- If the connections are correct, there might be a problem with the cables. Redo the connections with different cables.
- Check the audio output settings on the connected device.
- If the BD/DVD indicator flashes and there is no audio output, try the following.
 - ① Turn the connected device off and then on.
 - ② Turn off this system, remove the HDMI cable, then reconnect the HDMI cable and turn this system back on.

The dual audio cannot be changed from main to secondary.

If the audio received from the connected device is not "Dolby Dual Mono" or the output setting is not "Bitstream", the setting cannot be changed from this system. Change the setting on the connected device.

The volume is lowered when this system is turned on.

If this system is turned off with the volume setting in the greater half (above 50), this system will automatically lower the volume to the middle (50) when this system is turned on. (⇒ 26)

The dialog is too persistent or the dialog does not sound natural.

This system has a function to make the dialog stand out when the volume is low. (⇒ 26)

There is no audio.

The power of this system turns off automatically.

(When this system detects a problem, a safety measure is activated and this system automatically switches to standby mode.)

- There is a problem with the amplifier.
- Is the volume extremely high?
 - If so, lower the volume.
- Is this system placed in an extremely hot place?
 - If so, move this system to a cooler place and wait a few moments and then try to turn it on again.

If the problem persists, confirm the TV indicator and AUX indicator blink, turn the system off, remove the AC power supply cord and consult your dealer. Please be sure to remember the indicators that were blinking and inform the dealer.

Indicator illumination

The indicators display the condition of this system by flashing. The indicator patterns illustrated below are displayed during normal operational conditions. They do not refer to the indications of a problem. Refer to “Troubleshooting” (⇒ 26) if the indicators do not light as illustrated below.

Indicator	Description
	The indicators blink from left to right (+) or from right to left (–). When the speaker volume, the subwoofer level, or dialog effect level is adjusted (⇒ 21, 22)
	The indicators blink simultaneously. When “MUTE” is on (⇒ 21)
	The indicator blinks for 10 sec. - When the audio output mode is Multi-channel mode (⇒ 23) - When 3D surround effect and clear-mode dialog effect are on (⇒ 25) - When the dual audio setting is Main (⇒ 25) - When the auto gain control is on (⇒ 25) - When the subwoofer level or the dialog effect level is 1 (⇒ 21, 22)
	The indicator blinks for 10 sec. - When the audio output mode is Auto mode (⇒ 23) - When the subwoofer level or the dialog effect level is 2 (⇒ 21, 22)
	The indicator blinks for 10 sec. When the audio output mode is Auto mode (⇒ 23)
	The indicator blinks for 10 sec. When the subwoofer level or the dialog effect level is 3 (⇒ 21, 22)
	The indicator blinks for 10 sec. - When the audio output mode is 2ch mode (⇒ 23) - When 3D surround effect and clear-mode dialog effect are off (⇒ 25) - When the dual audio setting is Secondary (SAP: Secondary Audio Program) (⇒ 25) - When the auto gain control is off (⇒ 25) - When the subwoofer level or the dialog effect level is 4 (⇒ 21, 22)
	The indicators blink for 10 sec. When the dual audio setting is Main and Secondary (⇒ 25)
	The indicators blink for 10 sec. - When the remote control code is changed (⇒ 25) The indicators blink once. - When changing the setting (“To reduce the clear-mode dialog effect”, “To turn off VIERA Link “HDAVI Control”” and “To turn off the volume limitation”) (⇒ 26)

※The selected source indicator will also light.

Specifications

AMPLIFIER SECTION

RMS output power	
10 % total harmonic distortion	
Subwoofer ch	110 W per channel (100 Hz, 3 Ω)
Front ch (L, R ch)	65 W per channel (1 kHz, 6 Ω)
Total RMS Dolby Digital mode power	240 W
FTC output power	
1.0 % total harmonic distortion	
Subwoofer ch	50 Hz to 110 Hz 40 W (3 Ω)
Front ch (L, R ch)	110 Hz to 20 kHz 25 W (6 Ω)
Total FTC Dolby Digital mode power	90 W

TERMINAL SECTION

HDMI	
This unit supports "HDAVI Control 5" function.	
HDMI AV input (BD/DVD)	1
Input connector	Type A (19 pin)
HDMI AV output (To TV (ARC))	1
Output connector	Type A (19 pin)
Digital audio input	
Optical (TV, AUX)	2
Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
Audio format	
LPCM, Dolby Digital, DTS Digital Surround	
Speaker output	
(Front L, R)	2

SUBWOOFER SECTION

1 way, 1 speaker system (Bass reflex type)	
Woofer	16 cm (6-1/2") cone type×1

MAIN UNIT GENERAL

Power consumption	40 W
In standby condition	Approx. 0.07 W
(When the other connected devices are turned off)	

Power supply	AC 120 V, 60 Hz
Dimensions (W×H×D)	180 mm×408 mm×305 mm (7-3/32"×16-1/16"×12-1/64")

Mass (Weight)	5.5 kg (12.2 lbs)
Operating temperature range	0 °C to 40 °C (32 °F to 104 °F)
Operating humidity range	20 % to 80 % RH (no condensation)

FRONT SPEAKER SECTION

1 way, 1 speaker system (Bass reflex type)	
Full range	3.5 cm (1-3/8")×10 cm (4") cone type×1

SPEAKER GENERAL

Horizontal Placement using the Stands	
Dimensions (W×H×D)	755 mm×91 mm×75 mm (29-47/64"×3-19/32"×2-61/64")
Mass (Weight)	1.3 kg (2.9 lbs)
Horizontal Placement using the Speaker Feet	
Dimensions (W×H×D)	755 mm×52 mm×58.5 mm (29-47/64"×2-3/64"×2-5/16")
Mass (Weight)	1.3 kg (2.9 lbs)
Horizontal Placement (for wall mount)	
Dimensions (W×H×D)	755 mm×Approx. 49 mm×58.5 mm (29-47/64"×1-59/64"×2-5/16")
Mass (Weight)	1.3 kg (2.9 lbs)
Vertical Placement using the Speaker bases	
Dimensions (W×H×D)	126 mm×430 mm×130 mm (4-31/32"×16-15/16"×5-1/8")
Mass (Weight)	0.7 kg (1.6 lbs)
Vertical Placement (for wall mount)	
Dimensions (W×H×D)	Approx. 49 mm×377.5 mm×58.5 mm (1-59/64"×14-55/64"×2-5/16")
Mass (Weight)	0.6 kg (1.4 lbs)



- 1 Specifications are subject to change without notice.
- 2 Weight and dimensions are approximate.
- 3 Total harmonic distortion is measured by a digital spectrum analyzer.
- 4 Total harmonic distortion is measured by using AES17 filter.

Limited Warranty (ONLY FOR U.S.A. AND PUERTO RICO)

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

Panasonic Home Audio Products Limited Warranty

Limited Warranty Coverage (For USA and Puerto Rico Only)

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

Product or Part Name	Parts	Labor
Audio Products (except items below)	1 year	1 year
DVD Home Theater System	1 year	1 year
Home Theater Audio System	1 year	1 year
SD Memory Cards, Rechargeable Battery Packs (defective exchange)	90 days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. This Limited Warranty excludes both parts and labor for non-rechargeable batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is".

Carry-In or Mail-In Service

To find a service center please visit <http://www.panasonic.com/help> or call 1-800-211-PANA (7262).

When shipping the unit, carefully pack, include all supplied accessories listed in the Owner's Manual, and send it prepaid, adequately insured and packed well in a carton box. When shipping Lithium Ion batteries please visit our Web Site at www.panasonic.com/BatteryHandling as Panasonic is committed to providing the most up to date information. Include a letter detailing the complaint, a return address and provide a daytime phone number where you can be reached. A valid registered receipt is required under the Limited Warranty.

IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD, THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/ PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

Limited Warranty Limits And Exclusions

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

a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

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

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY.

(As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but for illustration only.)
ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.

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

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

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

Customer Services Directory (United States and Puerto Rico)

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Service Center; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:

**<http://www.panasonic.com/help>
or, contact us via the web at:
<http://www.panasonic.com/contactinfo>**

You may also contact us directly at:
1-800-211-PANA (7262)
Monday-Friday 9am-9pm,
Saturday-Sunday 10am-7pm EST

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

Accessory Purchases (United States and Puerto Rico)

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at:
<http://www.pstc.panasonic.com>
Or, send your request by E-mail to:
npcparts@us.panasonic.com
You may also contact us directly at:
1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only)
(Monday-Friday 9am-9pm EST)
Panasonic National Parts Center
20421 84th Ave. S., Kent, WA 98032
(We accept Visa, MasterCard, Discover Card, American Express)

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

As of January 2012

User memo:

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

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

MODEL NUMBER SC-HTB20
SERIAL NUMBER _____

Limited Warranty (ONLY FOR CANADA)

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3

PANASONIC PRODUCT - LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship under normal use and for a period as stated below from the date of original purchase agrees to, at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by Panasonic Canada Inc.

Technics Audio Product - One (1) year, parts and labour
Panasonic BD/DVD Product - One (1) year, parts and labour
Panasonic Audio Receivers - One (1) year, parts and labour
Home Theater Systems Product - One (1) year, parts and labour

This warranty is given only to the original purchaser, or the person for whom it was purchased as a gift, of a Panasonic brand product mentioned above sold by an authorized Panasonic dealer in Canada and purchased and used in Canada, which product was not sold "as is", and which product was delivered to you in new condition in the original packaging.

IN ORDER TO BE ELIGIBLE TO RECEIVE WARRANTY SERVICE HEREUNDER, A PURCHASE RECEIPT OR OTHER PROOF OF DATE OF ORIGINAL PURCHASE, SHOWING AMOUNT PAID AND PLACE OF PURCHASE IS REQUIRED

LIMITATIONS AND EXCLUSIONS

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

Dry cell batteries are also excluded from coverage under this warranty.

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In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable. This warranty gives you specific legal rights and you may have other rights which vary depending on your province or territory.

WARRANTY SERVICE

For product operation and information assistance, please contact:

PRODUCT OPERATION ASSISTANCE

Customer Care Centre: Telephone #: 1-800-561-5505
Fax #: (905) 238-2360
Email link: "Support → contact us → email" on www.panasonic.ca

PRODUCT REPAIRS

Please locate your nearest Authorized Servicentre.

Link: "Support → Panasonic Servicentre® locator" on www.panasonic.ca

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton.
Include details of the defect claimed, and proof of date of original purchase.

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VIERA Link™ is a trademark of Panasonic Corporation.

EZ Sync™ is a trademark of Panasonic Corporation.

-If you see this symbol-

Information on Disposal in other Countries outside the European Union



This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



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

* For Canada only: The word "Participant" is
used in place of the word "Partner".

Panasonic Consumer Marketing
Company of North America,
Division of Panasonic Corporation of
North America

One Panasonic Way, Secaucus,
New Jersey 07094
<http://www.panasonic.com>

Panasonic Canada Inc.

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

