



Multi Channel AV Receiver

Operating Instructions

For the customers in the USA

Owner's Record

The model and serial numbers are located on the rear of the receiver. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc. Do not expose the appliance to naked flame sources (for example, lighted candles).

To reduce the risk of fire or electric shock, do not expose this appliance to dripping or splashing, and do not place objects filled with liquids, such as vases, on the appliance.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or appliances with battery-installed to excessive heat, such as sunshine and fire.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.



This symbol is intended to alert the user to the presence of the Hot Surface that may be hot if it is touched during the normal operation.

FOR UNITED STATES CUSTOMERS. NOT APPLICABLE IN CANADA, INCLUDING IN THE PROVINCE OF QUEBEC.

POUR LES CONSOMMATEURS AUX ÉTATS-UNIS. NON APPLICABLE AU CANADA, Y COMPRIS LA PROVINCE DE QUÉBEC.

For the customers in the USA



This symbol 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Important Safety Instructions

- 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.

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.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Properly shielded and grounded cables and connectors must be used for connection to host computers and/or peripherals in order to meet FCC emission limits.

To reduce the risk of electric shock, the speaker cable should be connected to the apparatus and the speakers in accordance with the following instructions.

- 1) Disconnect the AC power cord from the MAINS.
- 2) Strip 10 to 15 mm of the wire insulation of the speaker cable.
- 3) Connect the speaker cable to the apparatus and the speakers carefully so as not to touch the core of speaker cable by hand. Also disconnect the AC power cord from the MAINS before disconnecting the speaker cable from the apparatus and the speakers.

This equipment must not be co-located or operated in conjunction with any other antenna or transmitter.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment has very low levels of RF energy that is deemed to comply without maximum permissive exposure evaluation (MPE).

For the customers in Canada

Properly shielded and grounded cables and connectors must be used for connection to host computers and/or peripherals.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that is deemed to comply without maximum permissive exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body.

For the customers in Australia and New Zealand

This equipment should be installed and operated with at least 20 cm and more between the radiator and person's body (excluding extremities: hands, wrists, feet and ankles).

For the customers in Australia



**Disposal of Old Electrical & Electronic Equipment
(Applicable in the European Union and other European countries with separate collection systems)**

For the customers in Europe



Disposal of waste batteries and electrical and electronic equipment (applicable in the European Union and other European countries with separate collection systems)

This symbol on the product, the battery or on the packaging indicates that the product and the battery shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these products and batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery and the electrical and electronic equipment will be treated properly, hand over these products at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product or battery.

Notice for customers: the following information is only applicable to equipment sold in countries applying EU directives

This product has been manufactured by or on behalf of Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. Inquiries related to product compliance based on European Union legislation shall be addressed to the authorized representative, Sony Belgium, bijkantoor van Sony Europe Limited, Da Vincilaan 7-D1, 1935 Zaventem, Belgium. For any service or guarantee matters, please refer to the addresses provided in the separate service or guarantee documents.

Hereby, Sony Corp., declares that this equipment is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For details, please access the following URL:
<http://www.compliance.sony.de/>



This Multi Channel AV Receiver is intended for sound and video playback from connected devices, music streaming from an NFC-compatible smartphone or a BLUETOOTH device, and FM tuner.

This equipment has been tested and found to comply with the limits set out in the EMC regulation using a connection cable shorter than 3 meters.

Excessive sound pressure from earphones and headphones can cause hearing loss.

Manuals provided for this product

The following manuals are provided for this product.
The information included in each manual is as shown below:



Startup
Guide



Operating
Instructions
(this booklet)



Help Guide
(online)

Preparation Installation Connections Initial Setup			
Basic operations Listening/Watching			
Advanced operations Listening/Watching			
Advanced operations BLUETOOTH function Other features Adjusting Settings			
Troubleshooting			
Precautions / Specifications			



To read the Help Guide, go to the following website:



For the customers in Europe
http://rd1.sony.net/help/ha/strdh77/h_eu/



For the customers in Taiwan
<http://rd1.sony.net/help/ha/strdh77/zh-tw/>



For the customers in other areas
http://rd1.sony.net/help/ha/strdh77/h_zz/



About These Operating Instructions

- The instructions in these Operating Instructions describe the controls on the remote control. You can also use the controls on the receiver if they have the same or similar names as those on the remote control.
- Some illustrations are presented as conceptual drawings, and may be different from the actual products.
- The items displayed on the TV screen may vary depending on the area.
- The text enclosed in bracket ([--]) appears on the TV screen, and the text enclosed in double quotation mark ("--") appears on the display panel.

On copyrights

This receiver incorporates Dolby* Digital and Pro Logic Surround and the DTS** Digital Surround System.

- * Manufactured under license from Dolby Laboratories. Dolby, Pro Logic, Surround EX, and the double-D symbol are trademarks of Dolby Laboratories.
- ** For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS Licensing Limited. DTS, DTS-HD, the Symbol, & DTS and the Symbol together are registered trademarks, and DTS-HD Master Audio is a trademark of DTS, Inc. © DTS, Inc. All Rights Reserved.

This receiver incorporates High-Definition Multimedia Interface (HDMI™) technology. The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Apple, the Apple logo, iPhone, iPod, iPod touch, and Retina are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.

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MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

"BRAVIA" is a trademark of Sony Corporation.

"PlayStation" is a registered trademark of Sony Computer Entertainment Inc.

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Google Play™ is a trademark of Google Inc.

All other trademarks and registered trademarks are of their respective holders. In this manual, ™ and ® marks are not specified.

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REAL END USER LICENSE AGREEMENT

(Taiwanese models only)

1. End users are prohibited from modifying, translating, reverse engineering, decompiling, disassembling or using other means to discover the software developed by Real or otherwise replicate the functionality of the software, except to the extent that this restriction is expressly prohibited by applicable law.
2. Real disclaims all warranties and conditions, express and implied, including implied warranties or conditions of merchantability and fitness for a particular purpose; and effectively exclude all liability for indirect, special, incidental and consequential damages, including but not limited to lost profits or replacement systems.

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Listening/Watching

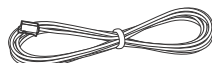
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Supplied Accessories

- Remote control (1)
- R03 (size AAA) batteries (2)
- FM wire antenna (aerial) (1)

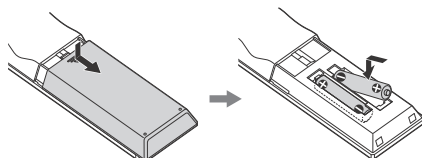


- Calibration microphone (1)



Inserting batteries into the remote control

Insert two R03 (size AAA) batteries (supplied) in the remote control. Make sure that the + and – ends are in the correct position when installing batteries.



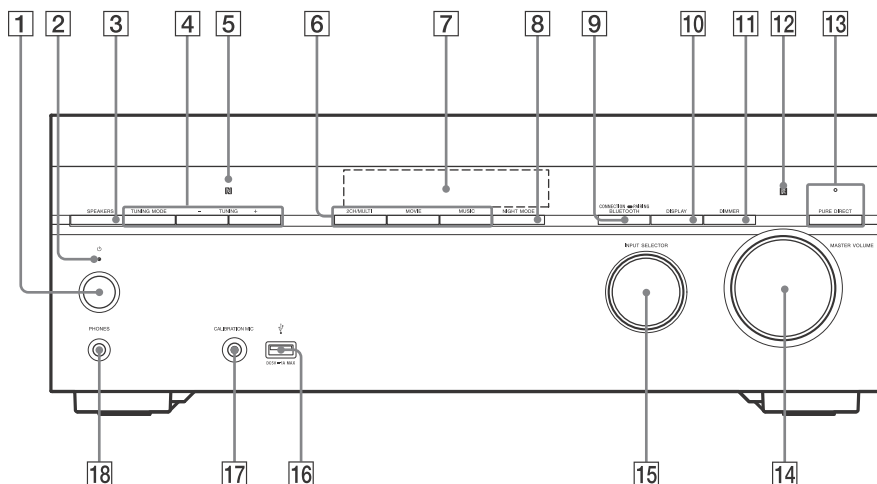
Note


- Do not leave the remote control in an extremely hot or humid place.
- Do not use a new battery with old ones.
- Do not mix manganese batteries and other kinds of batteries.
- Do not expose the remote control sensor to direct sunlight or lights. Doing so may cause a malfunction.
- If you do not intend to use the remote control for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.
- When the receiver no longer responds to the remote control, replace both of the batteries with new ones.

Parts and Controls

Receiver

Front panel



- 1 **⏻ (power) (page 27)**
- 2 **Power indicator**
- 3 **SPEAKERS (page 29)**
- 4 **TUNING MODE, TUNING +/-**
Operates a tuner function.
Press TUNING +/- to scan a station.
- 5 **NFC sensor**
- 6 **2CH/MULTI, MOVIE, MUSIC (page 32, 33)**
- 7 **Display panel (page 10)**
- 8 **NIGHT MODE**
- 9 **CONNECTION  PAIRING BLUETOOTH**
Operates the BLUETOOTH function.
- 10 **DISPLAY**
- 11 **DIMMER**
Adjusts the brightness of the display panel in 3 levels.
- 12 **Remote control sensor**
Receives signals from remote control.
- 13 **PURE DIRECT**
The indicator above the button lights up when the Pure Direct function is activated.
- 14 **MASTER VOLUME (page 31)**
- 15 **INPUT SELECTOR (page 32)**
- 16 **🔌 (USB) port**

- 17 **CALIBRATION MIC jack (page 30)**
- 18 **PHONES jack**
Connect headphones here.

Power indicator

- Green: The receiver is turned on.
- Amber: The receiver is in standby mode, and you have set one of the following:
 - “CTRL HDMI” is set to “CTRL ON”.
 - “BT STANDBY” is set to “STBY ON”*.
 - “STBY THRU” is set to “ON” or “AUTO”.

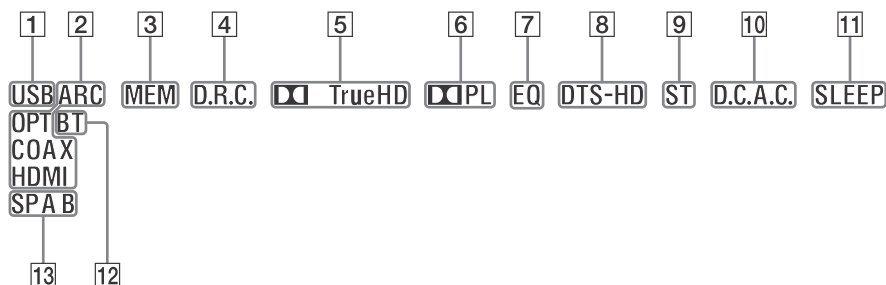
The indicator turns off when the receiver is in standby mode and:

- “CTRL HDMI” is set to “CTRL OFF”.
- “BT STANDBY” is set to “STBY OFF”.
- “STBY THRU” is set to “OFF”.

* The indicator lights up in amber only if a device has been paired with the receiver. If no devices are paired with the receiver, the indicator turns off.

Indicators on the display panel

The indicator lights up to indicate the current status.

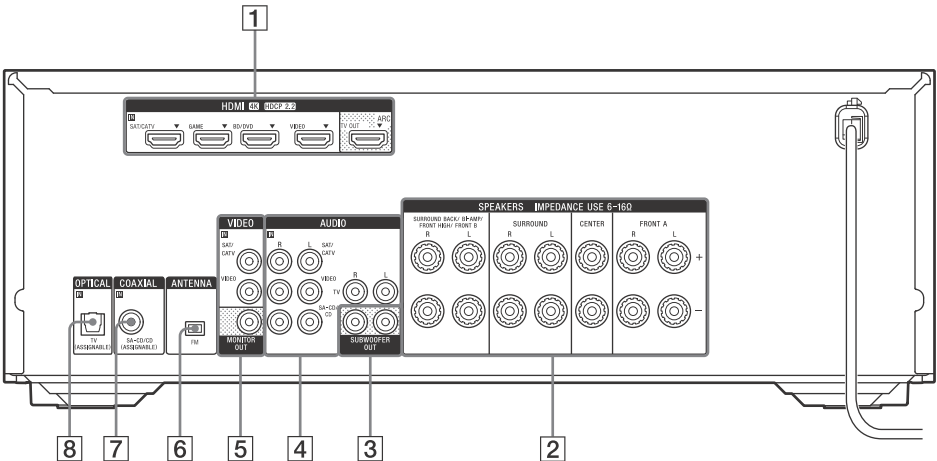


- 1 USB**
USB device is detected.
- 2 Input indicator**
Indicates the current input.
ARC
TV input is selected and Audio Return Channel (ARC) signals are detected.
OPT
Digital signals are input through the OPTICAL jack (page 22, 24).
COAX
Digital signals are input through the COAXIAL jack (page 26).
HDMI
Digital signals are input through the selected HDMI jack (page 22, 23, 25).
- 3 MEM**
Memory function such as Preset Memory, etc. is activated.
- 4 D.R.C.**
Dynamic range compression is activated.
- 5 Dolby Digital Surround indicator***
The receiver is decoding the corresponding Dolby Digital format signals.
TrueHD Dolby TrueHD
- 6 Dolby Pro Logic indicator**
The receiver is processing Dolby Pro Logic format signals. This matrix surround decoding technology can enhance input signals.
Note
The indicator may not light up depending on the speaker pattern setting.
- 7 EQ**
Equalizer is activated.
- 8 DTS(-HD) indicator***
The receiver is decoding the corresponding DTS format signals.
DTS-HD DTS-HD
- 9 ST**
The receiver tunes to a stereo broadcast.

- 10 D.C.A.C.**
The measurement results of the Auto Calibration function are applied.
- 11 SLEEP**
Sleep timer is activated.
- 12 BT**
Lights up when a BLUETOOTH device is connected. Flashes while pairing and connecting.
- 13 Speaker system indicator (page 29)**

* When playing a Dolby Digital or DTS format disc, make sure that you have completed the digital connections and "INPUT MODE" is not set to "ANALOG".

Rear panel



- 1 HDMI IN/OUT jacks* (page 22, 23, 25)
- 2 SPEAKERS terminals (page 16, 17, 18, 19, 20)
- 3 SUBWOOFER OUT jacks (page 16, 17, 18, 19, 20)
- 4 AUDIO IN jacks (page 22, 24, 26)
- 5 VIDEO IN/MONITOR OUT jacks (page 24, 26)
- 6 FM ANTENNA terminal (page 27)
- 7 COAXIAL IN jack (page 26)
- 8 OPTICAL IN jack (page 22, 24)

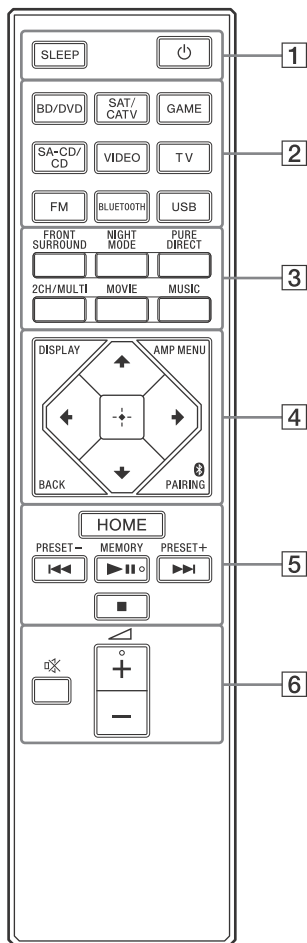
* HDCP 2.2 is newly enhanced copyright protection technology that is used to protect content such as 4K movies.

Connect a TV to the corresponding output jacks to watch video input from these jacks.

Input jacks	Output jack
HDMI IN	HDMI TV OUT
VIDEO IN	MONITOR OUT

For details, see “Connecting a TV” (page 21).

Remote control



1 (power)

Turns the receiver on or sets it to the standby mode.

Saving power in standby mode

Check that you have made the following settings:

- Set “CTRL HDMI” to “CTRL OFF” in the “<HDMI>” menu.
- Set “BT STANDBY” to “STBY OFF” in the “<BT>” menu.
- Set “STBY THRU” to “OFF” in the “<HDMI>” menu.

SLEEP

Sets the receiver to turn off automatically at a specified time.

2 Input buttons

Selects the input channel connected to the device you want to use. When you press any of the input buttons, the receiver turns on.

3 FRONT SURROUND, 2CH/MULTI, MOVIE, MUSIC

Selects a sound field.

NIGHT MODE

Activates the Night Mode function.

PURE DIRECT

Activates the Pure Direct function.

4 DISPLAY

Displays information on the display panel.

AMP MENU

Displays the menu on the display panel to operate the receiver.

BACK

Returns to the previous menu or exits a menu or on-screen guide that is displayed on the TV screen.

PAIRING

Sets the receiver to pairing mode.

(enter), / / /

Press , , , to select the menu items. Then, press to enter the selection.

5 HOME

Displays the home menu on the TV screen.

/ (previous/next),

(play/pause)*, (stop)

Skip, play, pause, stop operation.

PRESET +/-

Selects preset stations or channels.

MEMORY

Stores a station during tuner operation.

6 (volume) +*/-

Adjusts the volume level of all speakers at the same time.

(muting)

Turns off the sound temporarily. Press the button again to restore the sound.

* The /MEMORY and + buttons have tactile dots. Use the tactile dots as reference when operating the receiver.

Note

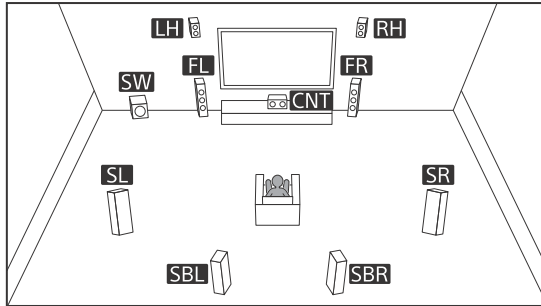
- The above explanation is intended to serve as examples.
- Depending on the model of your connected device, some functions explained in this section may not work with the supplied remote control.

Preparation

Installing Speakers

You can connect up to 7 speakers and 2 subwoofers to this AV receiver. Place the speakers and subwoofers according to the speaker system of your preference.

Location of each speaker



Note

- When you connect only one surround back speaker (SB), place the surround back speaker directly behind the listening position.
- As the subwoofer (SW) does not emit highly directional signals, you can place it wherever you want.

Names and functions of speakers

Abbreviations used in illustrations	Speaker name	Functions
FL	Front left speaker	Produces stereo sounds from front left/right channel.
FR	Front right speaker	
CNT	Center speaker	Produces vocal sounds from center channel.
SL	Surround left speaker	Produces sounds from surround left/right channel.
SR	Surround right speaker	
SBL	Surround back left speaker	Produces sounds from surround back left/right channel.
SBR	Surround back right speaker	
SB	Surround back speaker	Produces sounds from surround back channel.
SW	Subwoofer	Produces LFE (low frequency effect) channel sounds and reinforces bass parts of other channels.
LH	Left front high speaker	Produces vertical sound effects from front high left/right channel.
RH	Right front high speaker	

Speaker configuration and speaker pattern settings

Select the speaker pattern according to the speaker configuration which you are using.

Speaker configuration	"SB ASSIGN"*	Speaker pattern to be selected in "<SPEAKER>" menu	For connection, see page
5.1-channel	"OFF"	"3/2.1"	16
7.1-channel using surround back speakers	–	"3/4.1"	17
7.1-channel using front high speakers	–	"5/2.1"	18
5.1-channel with Bi-amplifier connection	"BI-AMP"	"3/2.1"	19
5.1-channel with Front B speakers	"SPK B"	"3/2.1"	20

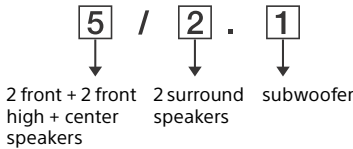
* You can only set "SB ASSIGN" if the speaker pattern is set to a setting that does not have surround back and front high speakers.

Selecting the speaker pattern

- 1 Press AMP MENU.
- 2 Press \uparrow/\downarrow to select "<SPEAKER>", then press $\boxed{+}$.
- 3 Press \uparrow/\downarrow to select "SP PATTERN", then press $\boxed{+}$.
- 4 Select the speaker pattern you want, then press $\boxed{+}$.

Speaker pattern settings

For example:



Speaker pattern	Front left/right speaker	Center speaker	Surround left/right speaker	Surround back left speaker	Surround back right speaker	Subwoofer	Left/right front high speaker
5/2.1	○	○	○	–	–	○	○
5/2	○	○	○	–	–	–	○
4/2.1	○	–	○	–	–	○	○
4/2	○	–	○	–	–	–	○
3/4.1	○	○	○	○	○	○	–
3/4	○	○	○	○	○	–	–
2/4.1	○	–	○	○	○	○	–
2/4	○	–	○	○	○	–	–
3/3.1	○	○	○	○	–	○	–
3/3	○	○	○	○	–	–	–
2/3.1	○	–	○	○	–	○	–

Speaker pattern	Front left/right speaker	Center speaker	Surround left/right speaker	Surround back left speaker	Surround back right speaker	Subwoofer	Left/right front high speaker
2/3	○	–	○	○	–	–	–
3/2.1	○	○	○	–	–	○	–
3/2	○	○	○	–	–	–	–
2/2.1	○	–	○	–	–	○	–
2/2	○	–	○	–	–	–	–
3/0.1	○	○	–	–	–	○	–
3/0	○	○	–	–	–	–	–
2/0.1	○	–	–	–	–	○	–
2/0	○	–	–	–	–	–	–

– : Not used.

○ : Used.

Connecting Speakers

This receiver allows you to connect up to 7.1-channel speaker system.

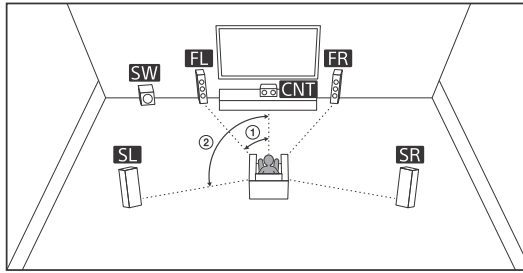
The speaker layout diagram is a guide for the ideal speaker placement. You do not need to adjust your speaker placement exactly the same as the diagram.

Note

- Before connecting cables, be sure to disconnect the AC power cord (mains lead).
- Before connecting the AC power cord (mains lead), make sure that metallic wires of the speaker cables are not touching each other between the SPEAKERS terminals.
- When you connect a subwoofer with an auto standby function, turn off the function when watching movies. If the auto standby function is set to on, it turns to standby mode automatically based on the level of the input signal to the subwoofer, and the sound may not be output.
- If you have two subwoofers, you can connect them to both SUBWOOFER OUT jacks.

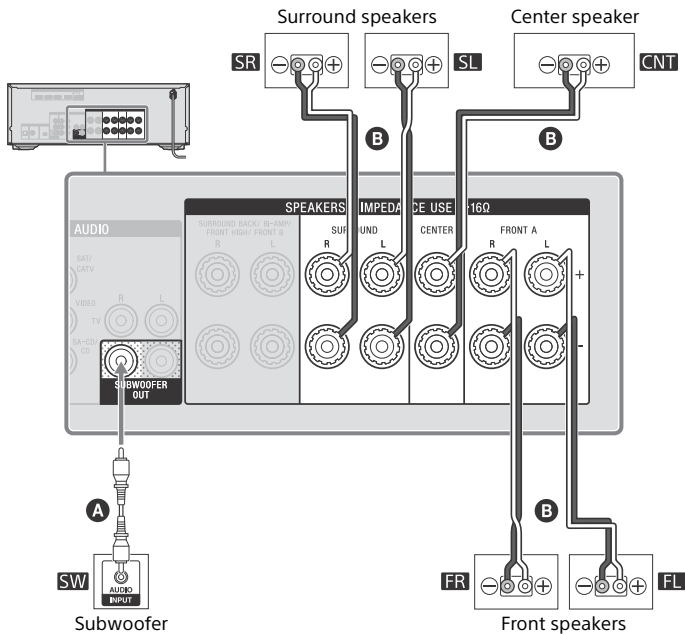
Examples of speaker connections

5.1-channel speaker system



① 30°

② 100° - 120°



A Monaural audio cable (not supplied)

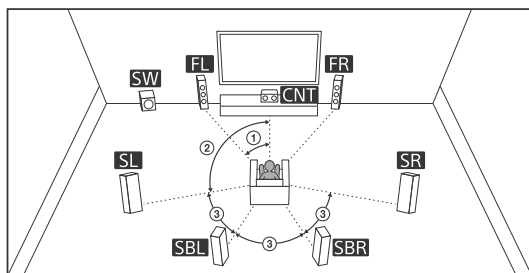
B Speaker cable (not supplied)

After you have made the connection, set [Surround Back Speakers Assign] in [Speaker Setting] to [None Speaker].

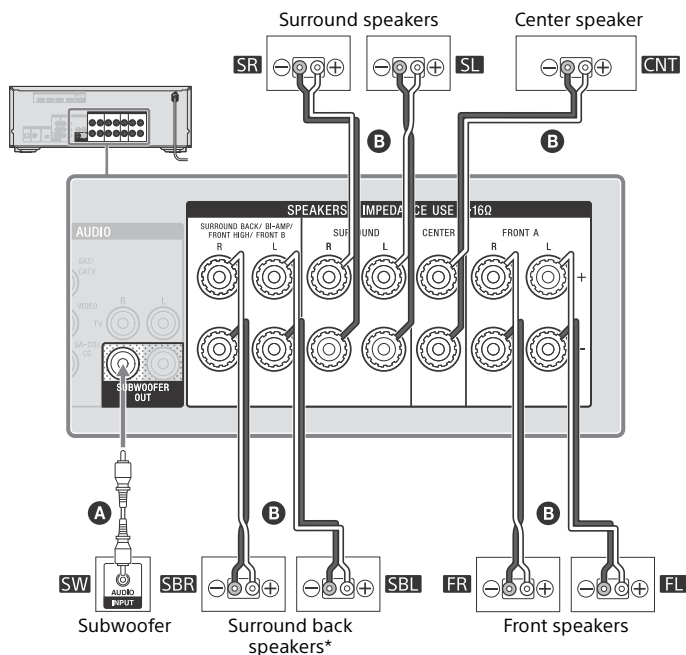
Tip

You can also set [SURROUND BACK SPEAKERS ASSIGN] in [Easy Setup] to [No speaker is connected].

7.1-channel speaker system using surround back speakers



- ① 30°
 ② 100° – 120°
 ③ Same angle.

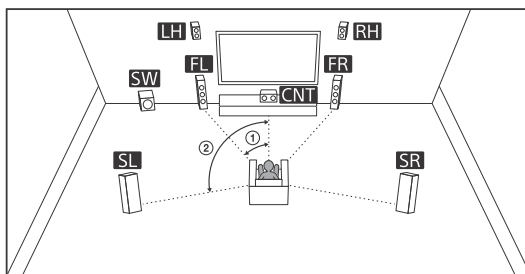


- A** Monaural audio cable (not supplied)
B Speaker cable (not supplied)

* If you connect only one surround back speaker, connect it to the L (+/-) terminals.

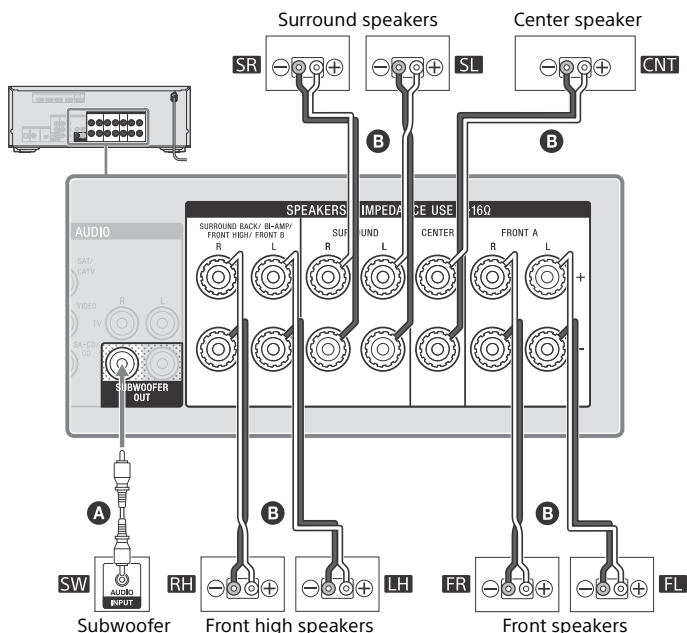
After you have made the connection, set [Surround Back Speakers Assign] in [Speaker Setting] to [Surround Back Speakers].

7.1-channel speaker system using front high speakers



① 30°

② 100° - 120°



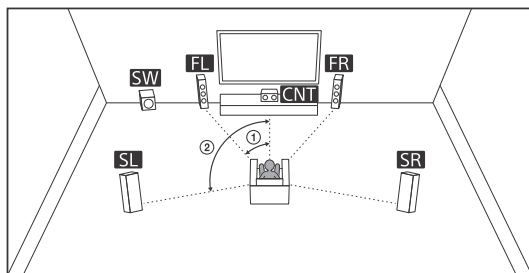
A Monaural audio cable (not supplied)

B Speaker cable (not supplied)

After you have made the connection, set
[Surround Back Speakers Assign] in [Speaker
Setting] to [Front High Speakers].

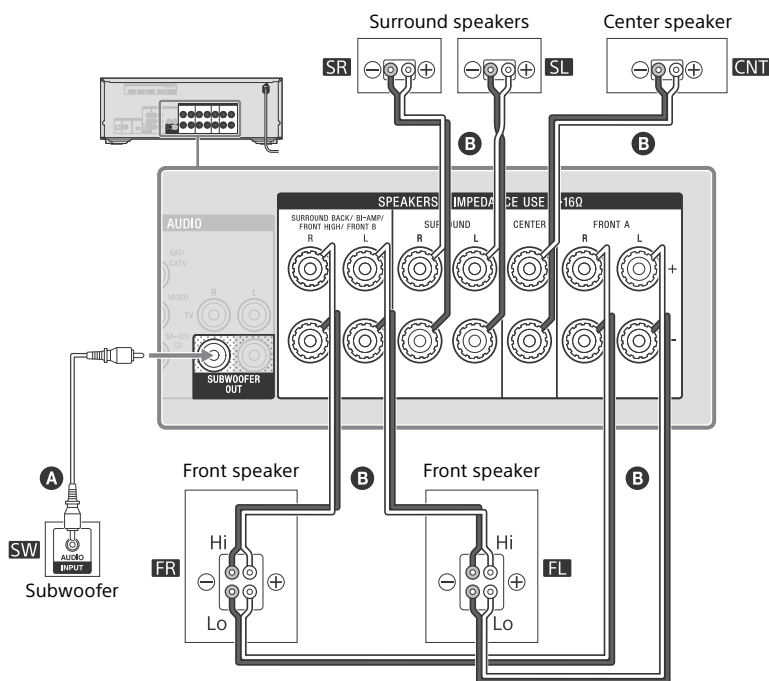
5.1-channel speaker system with Bi-amplifier connection

You can enhance the sound quality by connecting different amplifiers to both a tweeter and a woofer, using bi-amplifier connection.



① 30°

② 100° - 120°



A Monaural audio cable (not supplied)

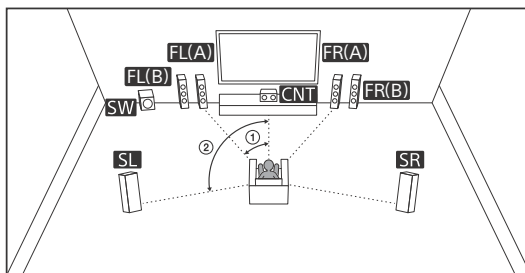
B Speaker cable (not supplied)

Make sure that metal fittings of Hi/Lo attached to the speakers have been removed from the speakers to avoid receiver malfunction.

After you have made the connection, set [Surround Back Speakers Assign] in [Speaker Setting] to [Bi-Amplifier Speakers].

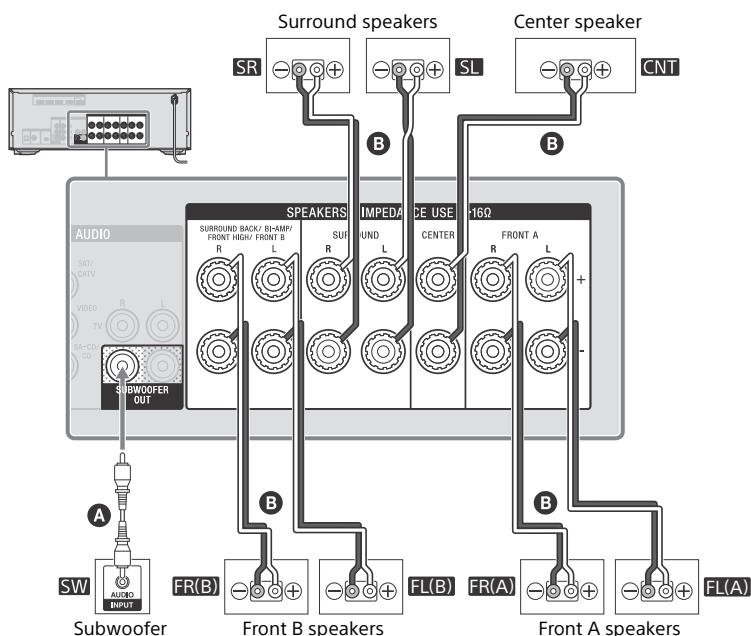
5.1-channel speaker system with Front B speakers

If you have an additional front speaker system, connect it to SPEAKERS SURROUND BACK/BI-AMP/FRONT HIGH/FRONT B terminals.



① 30°

② 100° – 120°



A Monaural audio cable (not supplied)

B Speaker cable (not supplied)

After you have made the connection, set [Surround Back Speakers Assign] in [Speaker Setting] to [Front B Speakers].

You can select the front speaker system you want by using the SPEAKERS button on the receiver (page 29).

Connecting a TV

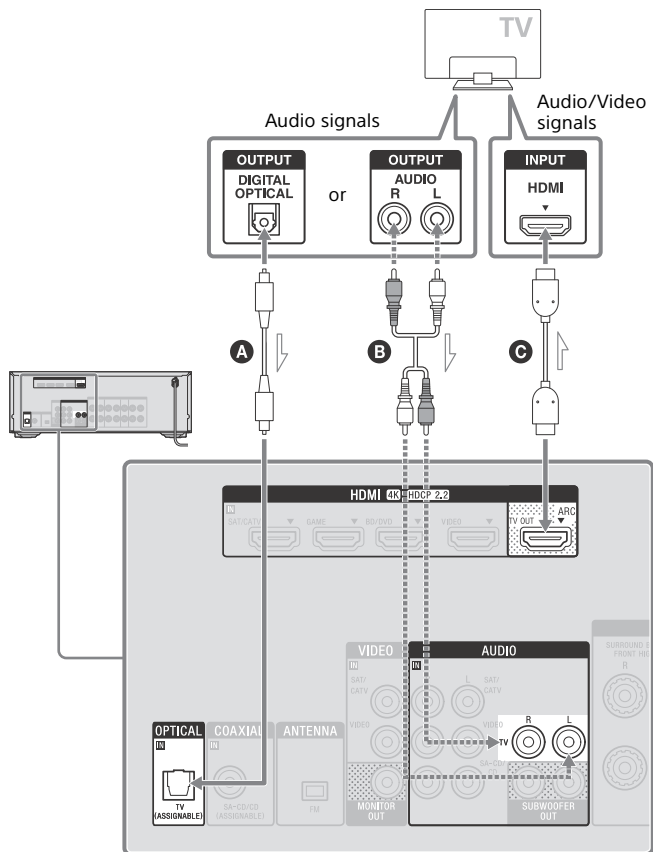
Connect a TV to the HDMI TV OUT or MONITOR OUT jack. You can operate this receiver using the menu on the TV screen when you connect the TV to the HDMI TV OUT jack.
For a 4K TV connection, visit the Help Guide.

Notes on connection

- Before connecting cables, be sure to disconnect the AC power cord (mains lead).
- Connect a TV monitor or a projector to the HDMI TV OUT or MONITOR OUT jack on the receiver.
- Sony recommends that you use an HDMI authorized cable or HDMI cable made by Sony.
Be sure to use a High Speed HDMI Cable with Ethernet. Premium High Speed HDMI Cable with Ethernet is required for 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit etc.
- We do not recommend using an HDMI-DVI conversion cable. If you connect an HDMI-DVI conversion cable to a DVI-D device, the sound and/or image may be lost. Connect separate audio cables or digital connecting cables, then reassign the input jacks if the sound is not output correctly.
- Depending on the status of the connection between the TV and the antenna (aerial), the image on the TV screen may be distorted. If this is the case, place the antenna (aerial) farther away from the receiver.
- When connecting an optical digital cable, insert the plugs straight until they click into place.
- Do not bend or tie optical digital cables.
- All of the digital audio jacks are compatible with 32 kHz, 44.1 kHz, 48 kHz, and 96 kHz sampling frequencies.
- When connecting a TV to the receiver via the TV IN jacks of the receiver, set the sound output jack of the TV to "Fixed" if it can be switched between "Fixed" or "Variable".
- When you use high bandwidth video formats such as 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit, be sure to set the HDMI signal format. For details, see "Setting HDMI signal format" (page 32).

Connecting a TV incompatible with the Audio Return Channel (ARC) function via an HDMI connection

It is not necessary to connect all the cables. HDMI connection for audio/video signals is required.

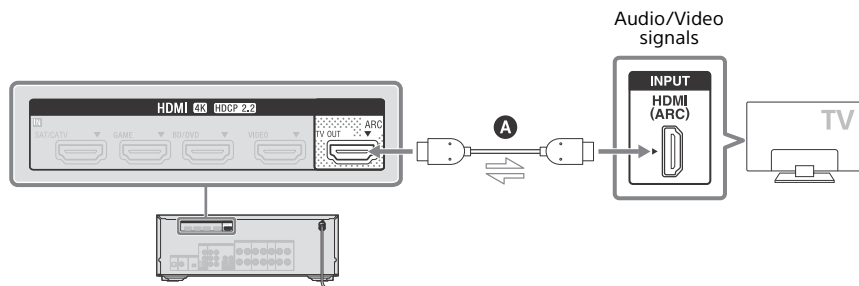


- A** Optical digital cable (not supplied)
- B** Audio cable (not supplied)
- C** HDMI cable (not supplied)

— Recommended connection
- - - Alternative connection

Connecting a TV compatible with the Audio Return Channel (ARC) function via an HDMI connection

With just one HDMI cable connection, you can listen to the TV audio from the speakers connected to the receiver while the receiver sends audio and video signals to the TV.



A HDMI cable (not supplied)

Note

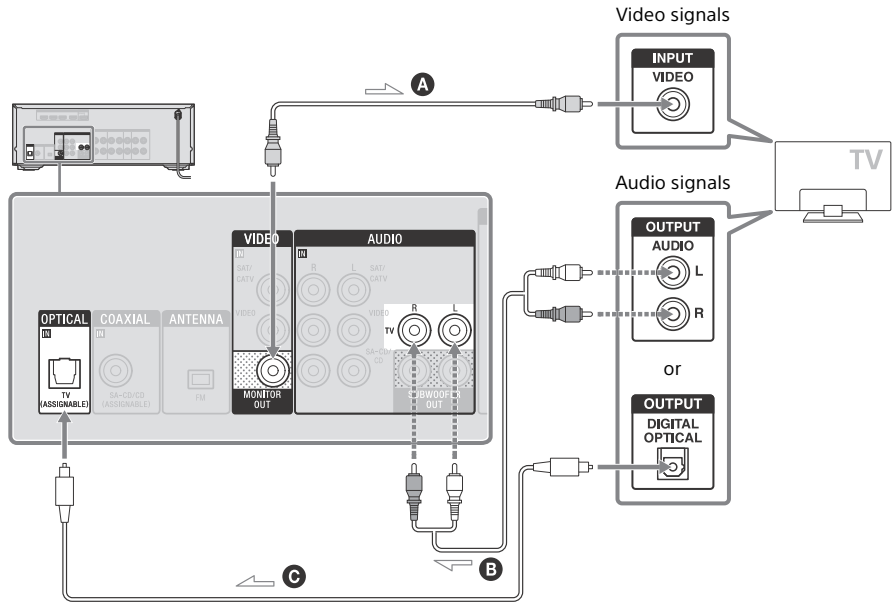
For this connection, you need to turn the Control for HDMI function on. Press AMP MENU, then select "<HDMI>" – "CTRL HDMI" – "CTRL ON".

Tip

If the HDMI jack of the TV (labeled "ARC") is already connected to another device, disconnect the device and connect the receiver.

Connecting a TV without HDMI jacks

It is not necessary to connect all the cables. Connections for video signals are required.



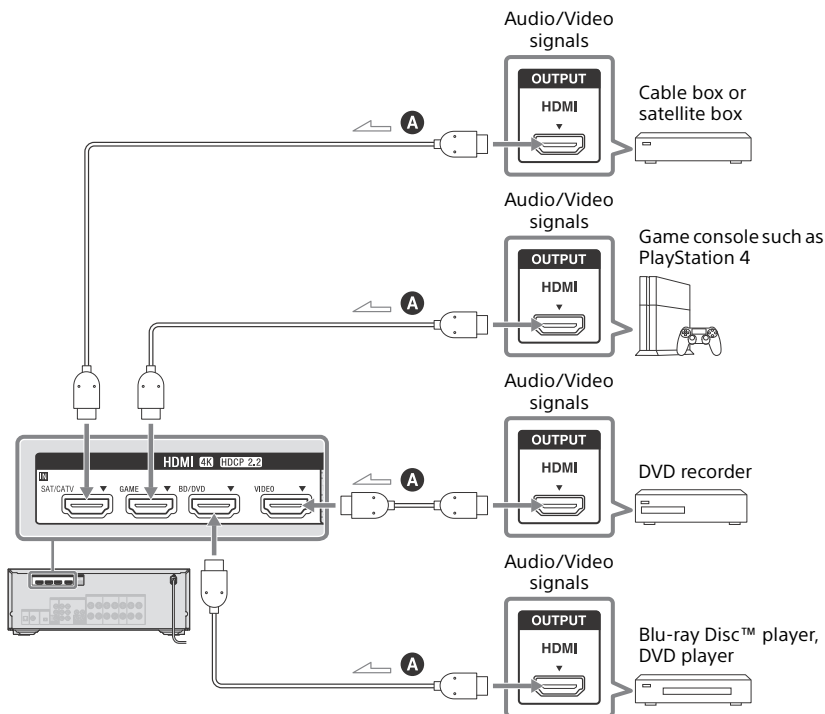
- A** Video cable (not supplied)
- B** Audio cable (not supplied)
- C** Optical digital cable (not supplied)

— Recommended connection
 ---- Alternative connection

Connecting Audio-Visual Devices

Connecting devices with HDMI jacks

Before connecting cables, be sure to disconnect the AC power cord (mains lead). The HDMI jacks are compatible with HDCP 2.2. To watch content protected by HDCP 2.2, such as 4K content, connect these HDMI jacks to HDCP 2.2-compatible HDMI jacks on the TV and player. Refer to the operating instructions of the connected device for details.



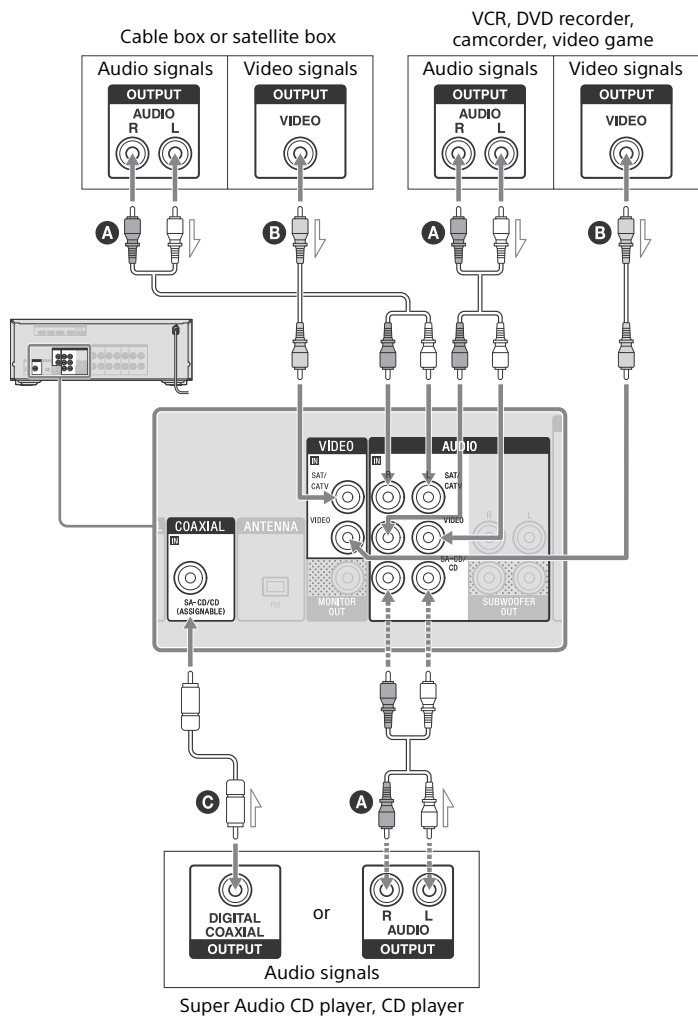
A HDMI cable (not supplied)

Tip

- This HDMI connection is an example. You can connect each HDMI device to any HDMI input.
- The image quality depends on the connecting jack. We recommend you to connect your devices via an HDMI connection if they have HDMI jacks.

Connecting devices with jacks other than HDMI jacks

Before connecting cables, be sure to disconnect the AC power cord (mains lead).



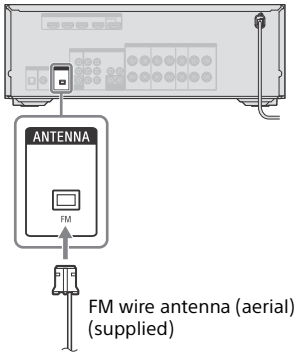
- A** Audio cable (not supplied)
- B** Video cable (not supplied)
- C** Coaxial digital cable (not supplied)

Tip

You can rename each input so that the name can be displayed on the display panel of the receiver. For details on the setting, refer to "Changing the name for each input (NAME IN)" in Help Guide.

Connecting the Antenna (aerial)

Before connecting the antenna (aerial), be sure to disconnect the AC power cord (mains lead).



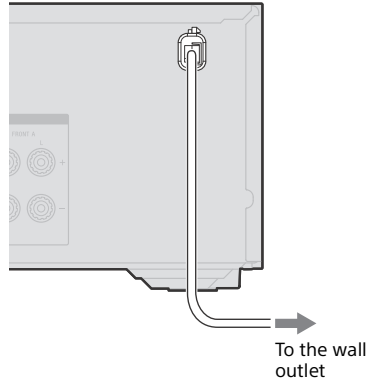
Note

- Be sure to fully extend the FM wire antenna (aerial).
- After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

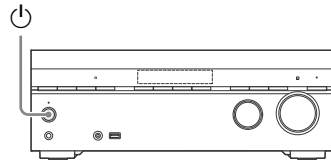
Connecting the AC Power Cord (mains lead)



Before connecting the AC power cord (mains lead), be sure to make connections for speakers and the other devices.

1 Connect the AC power cord (mains lead) to a wall outlet.



2 Press (power) to turn on the receiver.



You can also turn on the receiver using  (power) on the remote control. To turn off the receiver, press  (power) again.

Note

After you turn off the receiver, "STANDBY" flashes on the display panel. Do not disconnect the AC power cord (mains lead) while "STANDBY" is flashing. This may cause a malfunction.

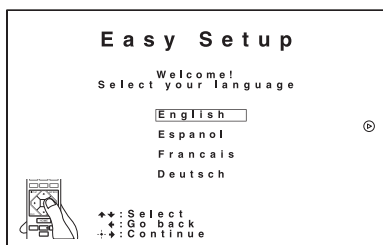
Setting up the Receiver using the Easy Setup

To perform initial setup of the receiver, make sure a TV is connected to the receiver (page 22, 23). Then, switch the input of the TV to the input to which the receiver is connected.

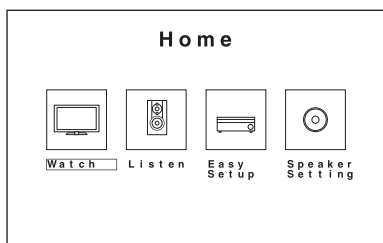
Note

It is not possible to perform the Easy Setup procedure using the indications on the display panel.

When you turn on the receiver for the first time or after the receiver is initialized, the Easy Setup screen appears on the TV screen.



If the Easy Setup screen does not appear or you want to display the Easy Setup screen manually, you can display it by pressing HOME, then select [Easy Setup].



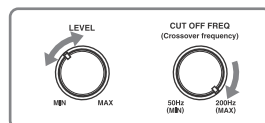
What you can do with Easy Setup

By performing Easy Setup, you can complete:

- 1: Selecting the language
- 2: Selecting the Surround Back Speakers Assign
Set the assignment for the SPEAKERS SURROUND BACK/BI-AMP/FRONT HIGH/FRONT B terminals.
- 3: Performing the Auto Calibration
Perform automatic calibration according to the configuration and arrangement of your speaker system.

Before you perform Auto Calibration

- Disconnect the headphones.
- Remove any obstacles between the calibration microphone and the speakers.
- For accurate measurement, make sure the environment is quiet and free from noise.
- Set the speaker output to a setting other than "SPK OFF". For details, see "Selecting the front speakers" (page 29).
- Confirm the active subwoofer setup
 - When a subwoofer is connected, turn on the subwoofer and turn up the volume prior to activating the subwoofer. Turn the LEVEL to just before the mid-point.
 - If you connect a subwoofer with a crossover frequency function, set the value to maximum.
 - If you connect a subwoofer with an auto standby function, set it to off (deactivated).

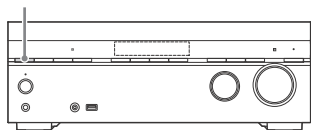


Note

Depending on the characteristics of the subwoofer you are using, the setup distance value may be different from the actual position.

Selecting the front speakers

SPEAKERS



Press **SPEAKERS** on the receiver repeatedly.

The indicators on the display panel shows which set of terminals is selected.

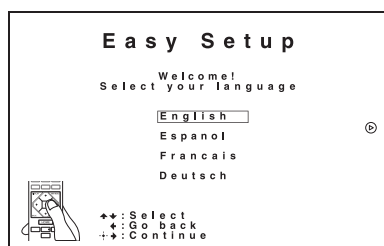
- **SP A**: Speakers connected to the SPEAKERS FRONT A terminals.
- **SP B***: Speakers connected to the SPEAKERS SURROUND BACK/BI-AMP/ FRONT HIGH/FRONT B terminals.
- **SP A B***: Speakers connected to both the SPEAKERS FRONT A and SPEAKERS SURROUND BACK/BI-AMP/FRONT HIGH/ FRONT B terminals (parallel connection).
- (None): "SPK OFF" appears on the display panel. No audio signals are output from any speaker terminals.

* To select "SP B" or "SP A B", set [Surround Back Speakers Assign] in [Speaker Setting] to [Front B Speakers].

Note

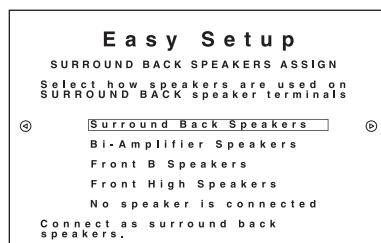
This setting is not available when headphones are connected.

1: Selecting the language



Press **↑/↓** to select the language, then press **+**.

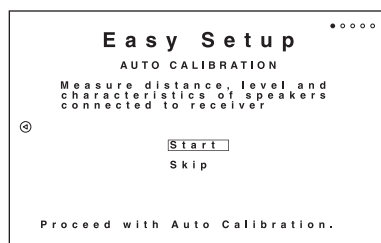
2: Selecting the Surround Back Speakers Assign



Press **↑/↓** to select the Surround Back Speakers Assign, then press **+**.

Select the Surround Back Speakers Assign according to the speaker configuration that you are using (page 16 – 20).

3: Performing the Auto Calibration

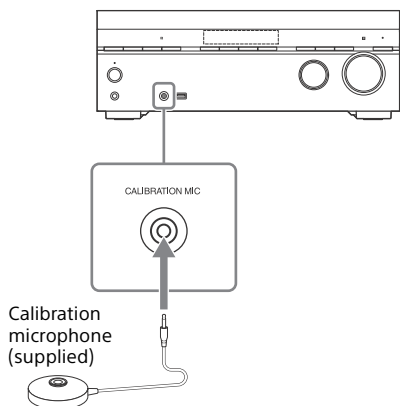


1 Press **↑/↓** to select [Start], then press **+**.

Tip

If you wish to perform Auto Calibration later, select [Skip].

2 Connect the supplied calibration microphone to CALIBRATION MIC jack. Set up the calibration microphone at your listening position.



Note

- The speakers emit very loud sound during the calibration and the volume cannot be adjusted. Be considerate of your neighbors and any children who are present.
- If the muting function has been activated before you perform Auto Calibration, the muting function will shut off automatically.
- It may not be possible to take the correct measurements or to perform Auto Calibration at all if special speakers such as dipole speakers are used.

3 Select [Proceed].



4 Select [Proceed] again.



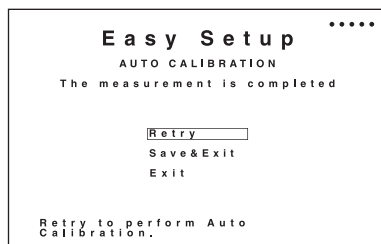
The measurement process will take approximately 30 seconds with a test tone.

When the measurement ends, a beep sounds and the screen switches.

Note

If the measurement fails, follow the message, then select [Retry]. For details on the error code and warning message, see "List of messages after Auto Calibration measurements" (page 37).

5 Confirm the measurement results.



- [Retry]: Performs the Auto Calibration again.
- [Save&Exit]: Save the measurement results and exits the setting process.
- [Exit]: Exits the setting process without saving the measurement results.

Tip

The measurement results may vary depending on the position of the subwoofer. However, continuing to use the receiver with that value does not cause problems.

6 Select [Save&Exit].



7 The Auto Calibration is completed. Disconnect the calibration microphone, then select [Exit].

To cancel Auto Calibration

The Auto Calibration function will be canceled when you perform the following during the measurement process:

- Press (power).
- Press the input buttons on the remote control or turn the INPUT SELECTOR on the receiver.
- Press .
- Press SPEAKERS on the receiver.
- Change the volume level.
- Connect the headphones.

Listening/Watching

Enjoying Sound and Video

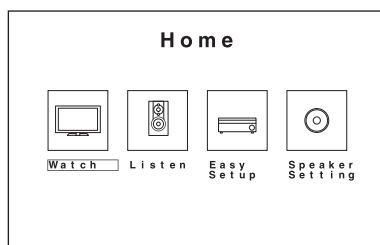
Playing AV devices

1 Turn the TV on, and then switch the input of the TV to the input to which the receiver is connected.

2 Press HOME.

The home menu is displayed on the TV screen.

Depending on the TV, the home menu may take some time to appear on the TV screen.



3 Press to select [Watch] or [Listen], then press .

The menu item list appears on the TV screen.

4 Select the device you want to play.

5 Turn on the device and start playback.

6 Press +/- to adjust the volume.

You can also use MASTER VOLUME on the receiver.


Note

Before you turn off the receiver, be sure to turn down the volume level to avoid damaging your speakers.

Tip

- You can turn INPUT SELECTOR on the receiver or press the input buttons on the remote control to select the device you want.
- You can adjust the volume differently using the MASTER VOLUME knob on the receiver or the \triangle +/- buttons on the remote control.
 - To turn the volume up or down quickly
 - Turn the knob quickly.
 - Press and hold one of the buttons.
 - To make fine adjustments
 - Turn the knob slowly.
 - Press one of the buttons and release it immediately.

Setting HDMI signal format

Press AMP MENU, then select "<HDMI>" – "SIGNAL FMT.". Select the input you want, then press .

- **STANDARD:** Selects this when you do not use high bandwidth video format.
- **ENHANCED:** Selects this when you use high bandwidth video formats such as 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit.

Note

- For details on the high bandwidth video format, visit the Help Guide.
- When "ENHANCED" is selected, we recommend you to use a Premium High Speed HDMI Cable with Ethernet, which can support bandwidth up to 18 Gbps.
- Some devices (cable box or satellite box, Blu-ray Disc player, and DVD player) does not work well with "ENHANCED" setting. In this case, select "STANDARD".
- If your TV have similar menu for high bandwidth video format, check the setting on the TV menu when you select "ENHANCED" on this receiver. For details on the TV menu setting, refer to the operating instructions of the TV.

Enjoying Sound Effects

Selecting a sound field

You can select from a variety of sound field modes according to speaker connections or input sources.

Press FRONT SURROUND, 2CH/MULTI, MOVIE, or MUSIC to select a sound field you want.

You can also use 2CH/MULTI, MOVIE, or MUSIC on the receiver.

For details on each sound field, visit the Help Guide.

Note

- When listening with headphones, only the sound field for headphones appear.
- The sound fields for movie and music may not work, depending on the input or the speaker pattern you select, or with audio formats.
- The receiver may play signals at a lower sampling frequency than the actual sampling frequency of the input signals, depending on the audio format.
- "PLIIX MV" or "PLIIX MS" may not appear, depending on the speaker pattern you select.
- Some speakers or the subwoofer may not output sound, depending on the sound field setting.
- If there is any noise present, the noise may be different, depending on the sound field you select.

Relations between sound fields and speaker outputs

The list below shows which speaker outputs sound when a certain sound field is selected.

2-channel contents

Sound field		Display panel	Front speakers	Center speaker	Surround speakers	Surround back speakers	Subwoofer	Front high speakers
2CH/ MULTI	2ch Stereo	2CH STEREO	⊙	—	—	—	—	—
	Multi Channel Stereo	MULTI ST.	⊙	○	○	○	○	○
	Direct (Analog input)	DIRECT	⊙	—	—	—	—	—
	Direct (Others)	DIRECT	⊙	—	—	—	○ ^{*1}	—
MOVIE	HD-Digital Cinema Sound (Dynamic/Theater/Studio)	HD-D.C.S.	⊙	○	○	○	○	○
	Pro Logic II Movie	PLII MV	⊙	○	○	—	○	—
	Pro Logic IIx Movie	PLIIX MV	⊙	○	○	○	○	—
	Neo:6 Cinema	NEO6.CINEMA	⊙	○	○	○	○ ^{*2}	—
	Front Surround	FRONT SUR.	⊙	—	—	—	○ ^{*2}	—
MUSIC	Audio Enhancer	A. ENHANCER	⊙	—	—	—	○	—
	Concert Hall	HALL	⊙	○	○	○	○ ^{*2}	○
	Jazz Club	JAZZ	⊙	○	○	○	○ ^{*2}	○
	Live Concert	CONCERT	⊙	○	○	○	○ ^{*2}	○
	Stadium	STADIUM	⊙	○	○	○	○ ^{*2}	○
	Sports	SPORTS	⊙	○	○	○	○ ^{*2}	○
	Pro Logic II Music	PLII MS	⊙	○	○	—	○	—
	Pro Logic IIx Music	PLIIX MS	⊙	○	○	○	○	—
	Neo:6 Music	NEO6.MUSIC	⊙	○	○	○	○ ^{*2}	—

— : No sound is output.

⊙ : Outputs sound.

○ : Outputs sound depending on the speaker pattern setting.

^{*1} USA and Canadian models: Outputs sound.

Other models: Outputs sound depending on the speaker pattern setting only when [Small] is selected for [Size] in [Speaker Setting].

^{*2} Outputs sound depending on the speaker pattern setting only when [Small] is selected for [Size] in [Speaker Setting].

Multi-channel contents

Sound field		Display panel	Front speakers	Center speaker	Surround speakers	Surround back speakers	Subwoofer	Front high speakers
2CH/ MULTI	2ch Stereo	2CH STEREO	⊙	—	—	—	—	—
	Multi Channel Stereo	MULTI ST.	⊙	○	○	○	○	○
	Direct	DIRECT	⊙	○	○	○	○	○
MOVIE	HD-Digital Cinema Sound (Dynamic/Theater/Studio)	HD-D.C.S.	⊙	○	○	○	○	○
	Pro Logic II Movie	PLII MV	⊙	○	○	○	○	○
	Pro Logic IIx Movie	PLIIX MV	⊙	○	○	○	○	—
	Neo:6 Cinema	NEO6.CINEMA	⊙	○	○	○	○	○
	Front Surround	FRONT SUR.	⊙	—	—	—	○	—
MUSIC	Audio Enhancer	A. ENHANCER	⊙	○	○	○	○	○
	Concert Hall	HALL	⊙	○	○	○	○	○
	Jazz Club	JAZZ	⊙	○	○	○	○	○
	Live Concert	CONCERT	⊙	○	○	○	○	○
	Stadium	STADIUM	⊙	○	○	○	○	○
	Sports	SPORTS	⊙	○	○	○	○	○
	Pro Logic II Music	PLII MS	⊙	○	○	○	○	○
	Pro Logic IIx Music	PLIIX MS	⊙	○	○	○	○	—
	Neo:6 Music	NEO6.MUSIC	⊙	○	○	○	○	○

— : No sound is output.

⊙ : Outputs sound.

○ : Outputs sound depending on the speaker pattern setting and the channels included in the input source.

Note

When no sound is heard, check that all the speakers are securely connected to the correct speaker terminals (page 15), and the correct speaker pattern (page 14) is selected.

Additional Information

Troubleshooting

If a problem occurs while operating the receiver, check the following to resolve the problem before consulting your nearest Sony dealer.

- Check to see if the problem is listed in this “Troubleshooting” section.
- Visit the Help Guide for detailed examples. You can search by a keyword using the online troubleshooting guide.

For the customers in Europe:

http://rd1.sony.net/help/ha/strdh77/h_eu/

For the customers in Taiwan:

<http://rd1.sony.net/help/ha/strdh77/zh-tw/>

For the customers in other areas:

http://rd1.sony.net/help/ha/strdh77/h_zz/

If the problem persists after doing all of the above, consult your nearest Sony dealer.

General

The receiver is turned off automatically.

- “AUTO STBY” is set to “STBY ON”.
- The sleep timer function was activated.
- “PROTECTOR” was activated (page 36).

The display panel is turned off.

- If the PURE DIRECT indicator on the front panel lights up, press PURE DIRECT to turn off this function.
- Press DIMMER on the receiver to adjust the brightness of the display panel.

Image

No image appears on the TV screen.

- Select the appropriate input using the input buttons.
- Set your TV to the appropriate input mode.
- Move your audio device away from the TV.
- Make sure that cables are correctly and securely connected to devices.

- Set “SIGNAL FMT.” of the selected input to “STANDARD” in the “<HDMI>” menu.
- Some playback devices need to be set up. Refer to the operating instructions supplied with each device.
- Be sure to use a High Speed HDMI Cable with Ethernet when you view images or listen to sound, especially for 1080p, Deep Color (Deep Colour), 4K or 3D transmission. Premium High Speed HDMI Cable with Ethernet is required for 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit etc.
- If you want to play HDCP 2.2 content, connect the receiver to an HDMI input jack of a TV that is compatible with HDCP 2.2.

No 3D content appears on the TV screen.

- Depending on the TV or the video device, 3D content may not be displayed. For details on the 3D HDMI video format supported by the receiver, visit the Help Guide.
- Be sure to use a High Speed HDMI Cable with Ethernet.

No 4K content appears on the TV screen.

- Depending on the TV or the video device, 4K content may not be displayed. Check the video capability and settings of your TV and video device.
- Be sure to use a High Speed HDMI Cable with Ethernet.
- When you use high bandwidth video formats such as 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit, we recommend you to use a Premium High Speed HDMI Cable with Ethernet.
- If your TV have similar menu for high bandwidth video format, check the setting on the TV menu when you select “ENHANCED” (page 32) on this receiver. For details on the TV menu setting, refer to the operating instructions of the TV.
- Be sure to connect the receiver to an HDMI input jack of a TV or video device that is supporting 4K. You have to connect an HDMI cable to an HDMI jack that supports HDCP 2.2 when you use a playback device for 4K resolution video content, etc.

The home menu does not appear on the TV screen.

- The home menu can only be used when you connect the TV to the HDMI TV OUT jack.
- Press HOME to display the home menu.
- Check that the TV is connected correctly.
- The home menu may take some time to appear on the TV screen depending on the TV.

Audio

No sound or only a very low level of sound is heard, no matter which device is selected.

- Check that all connecting cables are inserted to their input/output jacks on the receiver, speakers and the devices.
- Check that the receiver and all devices are turned on.
- Check that MASTER VOLUME on the receiver is not set to "VOL MIN".
- Check that SPEAKERS on the receiver is not set to "SPK OFF" (page 29).
- Check that headphones are not connected to the receiver.
- Press \times to cancel the muting function.
- Try pressing the input button on the remote control or turning INPUT SELECTOR on the receiver to select the device of your choice.
- If you want to listen to sound from the TV speaker, set "AUDIO OUT" to "TV + AMP" in the "<HDMI>" menu. If you cannot play multi-channel audio source, set to "AMP". However, the sound will not be output through the TV speaker.
- Sound may be interrupted when the sampling frequency, number of channels or audio format of audio output signals from the playback device is switched.

There is no sound from the TV via the HDMI TV OUT (ARC) jack when using the Audio Return Channel function.

- Set "CTRL HDMI" to "CTRL ON" in the "<HDMI>" menu.
- Make sure that your TV is compatible with the Audio Return Channel function.
- Make sure that the HDMI cable is connected to a jack on your TV that is compatible with the Audio Return Channel function.

The surround effect cannot be obtained.

- Make sure you have selected a sound field for "MOVIE" or "MUSIC" (page 32).
- "PLII MV", "PLII MS", "PLIIX MV", "PLIIX MS", "NEO6.CINEMA", and "NEO6.MUSIC" do not work when the speaker pattern is set to "2/0" or "2/0.1" (page 14).

Error messages

PROTECTOR

The receiver will automatically turn off after a few seconds. Check the followings:

- There may be an electrical surge or power failure. Unplug the AC power cord (mains lead) and then plug in the cord again after 30 minutes.
- The receiver is covered and the ventilation holes are blocked. Remove the object covering the ventilation holes of the receiver.
- The impedance of the connected speakers is below the rated impedance range indicated on the back panel of the receiver. Reduce the volume level.
- Unplug the AC power cord (mains lead) and let the receiver cool down for 30 minutes while performing the following troubleshooting:
 - Disconnect all of the speakers and subwoofer.
 - Check that the speaker wires are tightly twisted on both ends.
 - Connect the front speaker first, increase the volume level and operate the receiver for at least 30 minutes until it completely warms up. Then, connect each additional speaker one by one and test each additional speaker until you detect which speaker is causing the protection error.

After checking the above items and fixing any problems, plug in the AC power cord (mains lead) and turn on the receiver. If the problem persists, consult your nearest Sony dealer.

List of messages after Auto Calibration measurements

Error 30

- Headphones are connected to the PHONES jack on the receiver. Remove the headphones and perform the Auto Calibration again.

Error 31

- Front speakers are not selected properly. Select the front speakers using SPEAKERS on the receiver and perform the Auto Calibration again. For details on selecting the front speakers, see "Selecting the front speakers" (page 29).

Error 32, Error 33

- Speakers were not detected or not connected properly.
 - None of the front speakers are connected or only one front speaker is connected.
 - Either the surround left or surround right speaker is not connected.
 - Surround back speakers or front high speakers are connected even though surround speakers are not connected. Connect the surround speaker(s) to the SPEAKERS SURROUND terminals.
 - A surround back speaker is connected only to the SPEAKERS SURROUND BACK/BI-AMP/FRONT HIGH/FRONT B R terminal. If connecting only one surround back speaker, connect it to the SPEAKERS SURROUND BACK/BI-AMP/FRONT HIGH/FRONT B L terminal.
 - Either the front high left or front high right speaker is not connected.
- The calibration microphone is not connected. Make sure that the calibration microphone is connected properly and perform the Auto Calibration again. If the calibration microphone is connected properly but the error code still appears, the calibration microphone cable may be damaged.

Warning 40

- The measurement process has been completed and a high noise level has been detected. You may be able to achieve better results if you try the process again in a quiet environment.

Warning 41, Warning 42

- The input from the microphone is too large.
- The distance between the speaker and the microphone may be too short. Set them further apart and perform the measurement again.

Warning 43

- The distance and position of a subwoofer cannot be detected. This may be caused by noise. Try performing the measurement in a quiet environment.

Precautions

On safety

Should any solid object or liquid fall into the cabinet, unplug the receiver and have it checked by qualified personnel before operating it any further.

On power sources

- Before operating the receiver, check that the operating voltage is identical with your local power supply.
The operating voltage is indicated on the nameplate on the back of the receiver.
- If you are not going to use the receiver for a long time, be sure to disconnect the receiver from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.
- The AC power cord (mains lead) must be changed only at a qualified service shop.

On heat buildup

Although the receiver heats up during operation, this is not a malfunction. If you continuously use this receiver at a large volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.

On placement

- Place the receiver in a location with adequate ventilation to prevent heat buildup and prolong the life of the receiver.
- Do not place the receiver near heat sources, or in a place subject to direct sunlight, excessive dust, or mechanical shock.
- Do not place anything on top of the cabinet that might block the ventilation holes and cause malfunctions.
- Do not place the receiver near device such as a TV, VCR, or tape deck. (If the receiver is being used in combination with a TV, VCR, or tape deck, and is placed too close to that device, noise may result, and picture quality may suffer. This is especially likely when using an indoor antenna (aerial).)
- Use caution when placing the receiver on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On operation

Before connecting other device, be sure to turn off and unplug the receiver.

On cleaning

Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzene.

On BLUETOOTH communication

Supported BLUETOOTH version and profiles

Profile refers to a standard set of functions for various BLUETOOTH product features. See "BLUETOOTH section" in "Specifications" (page 40) for the BLUETOOTH version and profiles supported by this receiver.

Effective communication range

BLUETOOTH devices should be used within approximately 10 meters (33 feet) (unobstructed distance) of each other. The effective communication range may become shorter under the following conditions.

- When a person, metal object, wall or other obstruction is between the devices with a BLUETOOTH connection.
- Locations where a wireless LAN is installed.
- Around microwave ovens that are in use.
- Locations where other electromagnetic waves are generated.

Effects of other devices

BLUETOOTH devices and wireless LAN (IEEE 802.11b/g/n) device use the same frequency band (2.4 GHz). When using your BLUETOOTH device near a device with wireless LAN capability, electromagnetic interference may occur. This could result in lower data transfer rates, noise, or inability to connect. If this happens, try the following remedies:

- Use this receiver at least 10 meters (33 feet) away from the wireless LAN device.
- Turn off the power of the wireless LAN device when using your BLUETOOTH device within 10 meters (33 feet).
- Install this receiver and BLUETOOTH device as closer to each other as possible.

Effects on other devices

The radio waves broadcast by this receiver may interfere with the operation of some medical devices. Since this interference may result in malfunction, always turn off the power on this receiver and BLUETOOTH device in the following locations:

- In hospitals, on trains, in airplanes, at gas stations, and any place where flammable gasses may be present.
- Near automatic doors or fire alarms.

Note

- This receiver supports security functions that comply with the BLUETOOTH specification to ensure secure connection during communication using BLUETOOTH technology. However, this security may be insufficient depending on the setting contents and other factors, so always be careful when performing communication using BLUETOOTH technology.

- Sony shall not be held liable in any way for damages or other loss resulting from information leaks during communication using BLUETOOTH technology.
- BLUETOOTH communication is not necessarily guaranteed with all BLUETOOTH devices that have the same profile as this receiver.
- BLUETOOTH devices connected with this receiver must comply with the BLUETOOTH specification prescribed by the Bluetooth SIG, Inc., and must be certified to comply. However, even when a device complies with the BLUETOOTH specification, there may be cases where the characteristics or specifications of the BLUETOOTH device make it impossible to connect, or may result in different control methods, display or operation.
- Noise may occur or the audio may cut off depending on the BLUETOOTH device connected with this receiver, the communications environment, or surrounding conditions.

If you have any questions or problems concerning your receiver, please consult your nearest Sony dealer.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: (USA models only)

With 6 ohm loads, both channels driven, from 20 Hz – 20,000 Hz; rated 90 watts per channel minimum RMS power, with no more than 0.09% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section¹⁾

Minimum RMS Output Power
(6 ohms, 20 Hz – 20 kHz, THD 0.09%)
90 W + 90 W

Stereo Mode Output Power
(6 ohms, 1 kHz, THD 1%)
105 W + 105 W

Surround Mode Output Power²⁾
(6 ohms, 1 kHz, THD 0.9%)
145 W per channel

¹⁾ Measured under the following conditions:

Area	Power requirements
USA, Canada, Taiwan	120 V AC, 60 Hz
Oceania, Europe	230 V AC, 50 Hz

²⁾ Reference power output for front, center, surround, surround back and front high speakers. Depending on the sound field settings and the source, there may be no sound output.

Frequency response

Analog
10 Hz – 100 kHz, +0.5/–2 dB (with sound field and equalizer bypassed)

Input

Analog
Sensitivity: 500 mV/50 kilohms
S/N³⁾: 105 dB (A, 500 mV⁴⁾)
Digital (Coaxial)
Impedance: 75 ohms
S/N: 100 dB (A, 20 kHz LPF)
Digital (Optical)
S/N: 100 dB (A, 20 kHz LPF)

Output (Analog)

SUBWOOFER
Voltage: 2 V/1 kilohm

Equalizer

Gain levels
±10 dB, 1 dB step

³⁾ INPUT SHORT (with sound field and equalizer bypassed).

⁴⁾ Weighted network, input level.

FM tuner section

Tuning range

USA and Canadian models:
87.5 MHz – 108.0 MHz (100 kHz step)
Other models:
87.5 MHz – 108.0 MHz (50 kHz step)

Antenna (aerial)

FM wire antenna (aerial)

Antenna (aerial) terminals
75 ohms, unbalanced

Video section

Inputs/Outputs

Video:
1 Vp-p, 75 ohms

HDMI Video

Resolution

- 480p/60 Hz
- 576p/50 Hz
- 720p/60 Hz, 50 Hz, 24 Hz
- 1080i/60 Hz, 50 Hz
- 1080p/60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz
- 4K/60 Hz, 50 Hz, 30 Hz, 25 Hz, 24 Hz

Support

HDCP2.2, HDR, 3D, Deep Color (Deep Colour), ITU-R BT.2020, ARC.

iPhone/iPod section

BLUETOOTH technology works with iPhone 6s Plus, iPhone 6s, iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, and iPod touch (5th and 6th generation).

You can use “SongPal” app with this receiver via BLUETOOTH.

iPhone/iPod playback via ⚡ (USB) port is not possible.

USB section

Supported format*

MP3/WMA/AAC/WAV

* Compatibility with all encoding/writing software, recording devices and recording media cannot be guaranteed.

Supported USB device

Mass Storage Class

Maximum current

1 A

BLUETOOTH section

Communication system

BLUETOOTH Specification version 4.2

Output

BLUETOOTH Specification Power Class 1

Maximum communication range

Line of sight approx. 30 m (98.4 feet)¹⁾

Frequency band

2.4 GHz band (2.4000 GHz – 2.4835 GHz)

Modulation method

FHSS (Freq Hopping Spread Spectrum)

Compatible BLUETOOTH profiles²⁾

A2DP 1.3 (Advanced Audio Distribution Profile)

AVRCP 1.5 (Audio Video Remote Control Profile)

SPP 1.2 (Serial Port Profile)

DID (Device Identification Profile)

Supported Codecs³⁾

SBC⁴⁾, AAC

Transmission range (A2DP)

20 Hz – 20,000 Hz (Sampling frequency 32 kHz, 44.1 kHz, 48 kHz)

¹⁾ The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, cordless phone, reception sensitivity, antenna's performance, operating system, software application, etc.

²⁾ BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

³⁾ Codec: Audio signal compression and conversion format

⁴⁾ Subband Codec

General

Power requirements

Area	Power requirements
USA, Canada, Taiwan	120 V AC, 60 Hz
Oceania	230 V AC, 50 Hz
Europe	230 V AC, 50/60 Hz

Power consumption

240 W

Power consumption (during standby mode)

0.3 W or less (When “CTRL HDMI” is set to “CTRL OFF”, “STBY THRU” is set to “OFF”, and “BT STANDBY” is set to “STBY OFF”.)

0.5 W (When “CTRL HDMI” is set to “CTRL ON”, “BT STANDBY” is set to “STBY ON”, and “STBY THRU” is set to “OFF”.)

Dimensions (width/height/depth) (Approx.)

430 mm × 156 mm × 329.4 mm (17 in × 6 1/4 in × 13 in) including projecting parts and controls

Mass (Approx.)

7.8 kg (17 lb 4 oz)

Design and specifications are subject to change without notice.



HDMI

<http://www.sony.net/>





MULTI CHANNEL AV RECEIVER

Startup Guide
Guide de démarrage
Guía de inicio

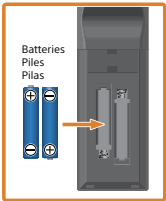
GB
FR
ES



STR-DH770

Supplied accessories:
Accessoires fournis :
Accesorios suministrados:

- Remote control (1)
Télécommande (1)
Mando a distancia (1)
- R03 (size AAA) batteries (2)
Piles R03 (taille AAA) (2)
Pilas R03 (tamaño AAA) (2)
- Calibration microphone (1)
Microphone de calibrage (1)
Micrófono de calibración (1)
- FM wire antenna (aerial) (1)
Antenne fil FM (1)
Antena FM de cable (1)



Insert two R03 (size AAA) batteries into the remote control.
Insérez deux piles R03 (taille AAA) dans la télécommande.
Inserte dos pilas R03 (tamaño AAA) en el mando a distancia.

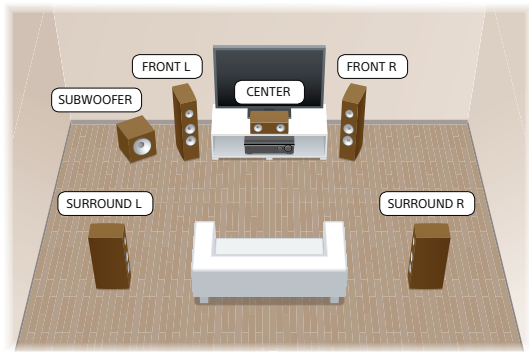
You will also need (not supplied):
Autres accessoires nécessaires (non fournis) :
También necesitará (no suministrado):

- Speaker cables
Câbles d'enceinte
Cables de altavoz
- Monaural audio cable
Câble audio mono
Cable de audio monofónico
- HDMI cables*¹
Câbles HDMI*¹
Cables HDMI*¹
- Optical digital cable*²
Câble optique numérique*²
Cable digital óptico*²

* We recommend using Premium High Speed HDMI Cables with Ethernet.
* Nous vous conseillons d'utiliser des câbles HDMI haute vitesse avec Ethernet.
* Recomendamos utilizar cables HDMI de alta velocidad de calidad superior con Ethernet.
*² This cable may not be needed depending on your connection.
*² Il est possible que ce câble ne soit pas nécessaire selon votre connexion.
*² Puede que este cable no sea necesario dependiendo del tipo de conexión.

1 Installing and connecting the speakers
Installation et raccordement des enceintes
Instalación y conexión de los altavoces

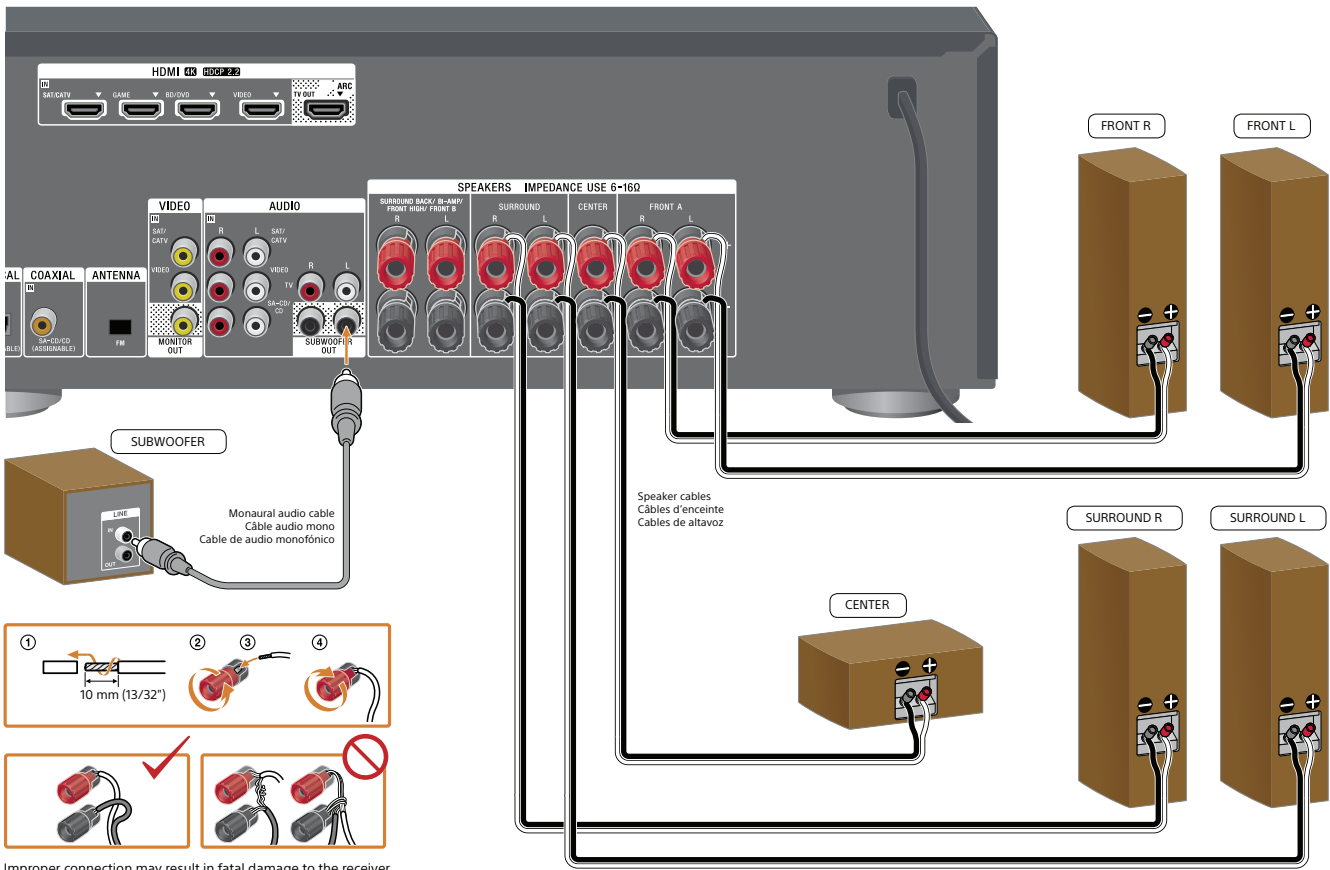
Example of a 5.1 channel speaker system configuration
Exemple d'une configuration de systèmes d'enceintes 5,1 canaux
Ejemplo de configuración de un sistema de altavoces de 5,1 canales



Read the Operating Instructions for information including more examples of speaker system configurations and connections.

Pour plus d'information, lisez le mode d'emploi, notamment pour consulter des exemples de configurations et de raccordements de systèmes d'enceintes.

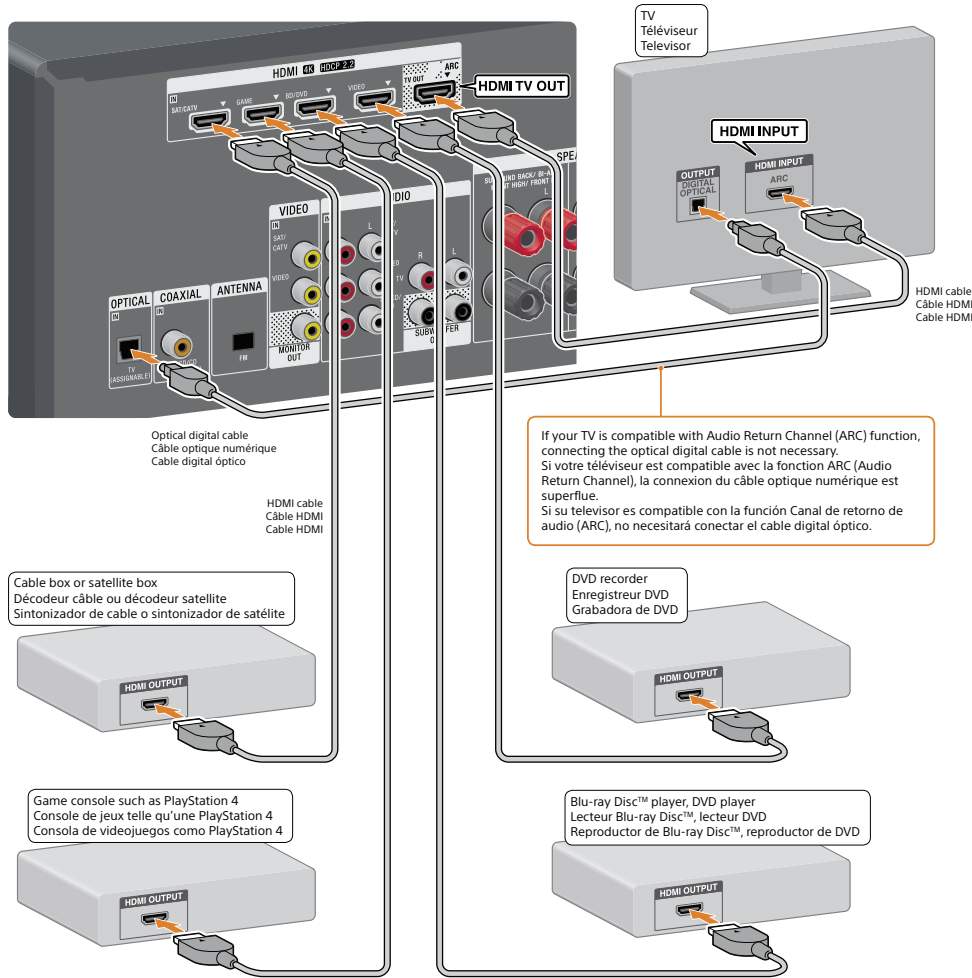
Lea el manual de instrucciones para ver información incluyendo más ejemplos de configuraciones y conexiones del sistema de altavoces.



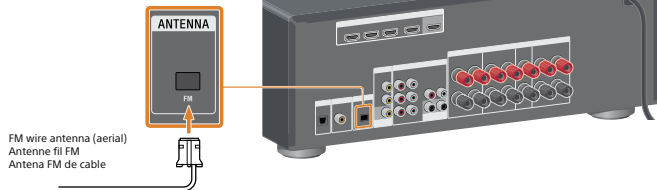
Improper connection may result in fatal damage to the receiver.
Un raccordement incorrect peut endommager l'ampli-tuner de façon irréversible.
Una conexión incorrecta puede causar daños irreparables al receptor.

Go to back page for steps 2 - 3.
Consultez le verso pour les étapes 2 - 3.
Vaya al dorso para consultar los pasos 2 - 3.

Connecting a TV and AV devices Raccordement d'un téléviseur et de périphériques AV Conexión de un televisor y dispositivos AV

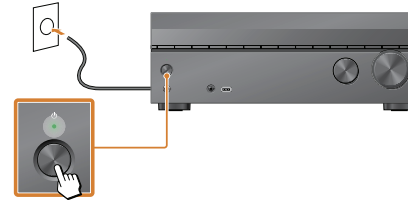


Connecting the FM wire antenna (aerial) Raccordement de l'antenne fil FM Conexión de la antena FM de cable

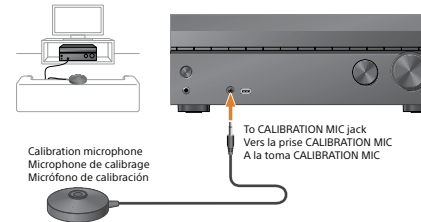


Performing the Easy Setup and starting playback Exécution d'Easy Setup et démarrage de la lecture Ejecución de Easy Setup e inicio de la reproducción

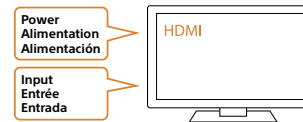
- 1 Connect the AC power cord (mains lead) to a wall outlet (mains), and then press (power) to turn the AV receiver on.
Branchez le cordon d'alimentation secteur à une prise murale, puis appuyez sur (alimentation) pour mettre l'ampli-tuner AV sous tension.
Conecte el cable de alimentación de CA a una toma de la pared y, a continuación, pulse (alimentación) para encender el receptor de AV.



- 2 Place the calibration microphone at your listening position and set it at the same height as your ears.
Placez le microphone de calibrage en position d'écoute et réglez-le à la hauteur de vos oreilles.
Coloque el micrófono de calibración en su posición de escucha y póngalo a la misma altura que sus oídos.



- 3 Turn on the TV and then switch the input of the TV to the input to which the receiver is connected.
Mettez le téléviseur sous tension, puis basculez la source d'entrée du téléviseur sur celle sur laquelle l'ampli-tuner est connecté.
Encienda el televisor y cambie la entrada del televisor a la entrada a la que el receptor se encuentra conectado.



The Easy Setup screen appears automatically.
L'écran Easy Setup s'affiche automatiquement.
La pantalla de Easy Setup aparece automáticamente.

Hint / Conseil / Observación

If the Easy Setup screen does not appear or you want to display the Easy Setup screen manually, press HOME on the remote control to display the home menu, then select [Easy Setup].

Si l'écran Easy Setup ne s'affiche pas ou que vous voulez afficher manuellement l'écran Easy Setup, appuyez sur HOME sur la télécommande pour afficher le menu d'accueil, puis sélectionnez [Easy Setup].

Si la pantalla de Easy Setup no aparece o si quiere mostrar la pantalla de Easy Setup manualmente, pulse HOME en el mando a distancia para mostrar el menú principal y, a continuación, seleccione [Easy Setup].

- 4 Follow the on-screen instructions to perform [Easy Setup].
Suivez les instructions à l'écran pour exécuter [Easy Setup].
Siga las instrucciones en pantalla para ejecutar [Easy Setup].



Once the setup is completed, press on the remote control to exit the setup.

Une fois la configuration terminée, appuyez sur sur la télécommande pour quitter la configuration.

Cuando la configuración haya finalizado, pulse en el mando a distancia para salir de la configuración.

Note / Remarque / Nota

The speakers emit very loud sound during the calibration and the volume cannot be adjusted. Be considerate of your neighbors and any children who are present.

Les enceintes émettent un son très puissant au cours du calibrage et il est impossible de régler le volume. Veuillez respecter vos voisins et les enfants présents.

Durante la calibración los altavoces emiten sonido muy alto y el volumen no se puede ajustar. Sea considerado con sus vecinos y los niños que estén presentes.

- 5 Press one of the buttons to select an input source which you want to listen or watch. Then, start playing the selected source.

Appuyez sur l'un des boutons pour sélectionner la source d'entrée que vous voulez écouter ou regarder. Ensuite, commencez à lire la source sélectionnée.

Pulse uno de los botones para seleccionar una fuente de entrada que quiera escuchar o ver. A continuación, inicie la reproducción de la fuente seleccionada.



Note / Remarque / Nota

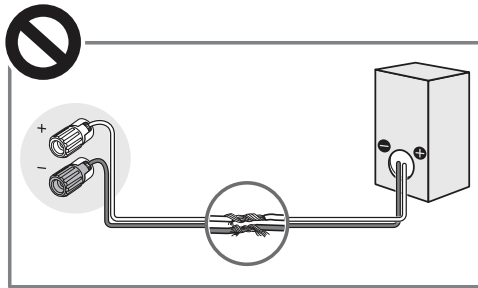
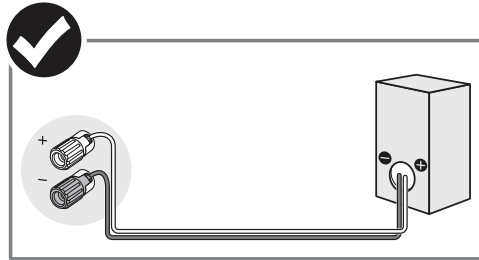
When viewing 4K/60p content, refer to "Setting HDMI signal format" in the supplied Operating Instructions.

Lorsque vous visualisez du contenu 4K/60p, reportez-vous à « Réglage du format de signal HDMI » dans le mode d'emploi fourni.

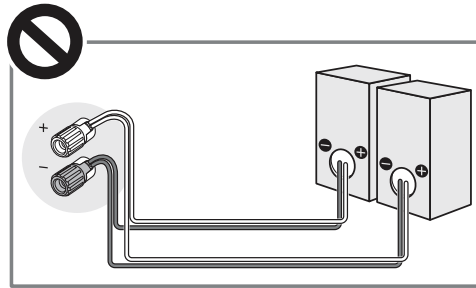
Cuando vea contenido 4K/60p, consulte "Ajuste del formato de la señal HDMI" en el manual de instrucciones suministrado.

Before connecting speakers/ Avant de raccorder des enceintes/ Antes de conectar los altavoces/ Vor dem Anschließen der Lautsprecher

- Check that the speaker impedance is within the rated impedance range indicated on the back panel of the receiver (or amplifier).
Vérifiez que l'impédance des enceintes est comprise dans la plage d'impédance nominale indiquée sur le panneau arrière de l'ampli-tuner (ou amplificateur).
Compruebe que la impedancia de los altavoces se encuentre dentro del rango de impedancia nominal indicado en el panel posterior del receptor (o amplificador).
Stellen Sie sicher, dass die Impedanz der Lautsprecher im Nennimpedanzbereich liegt, der auf der Rückseite des Receivers (oder Verstärkers) angegeben ist.
- Be sure to disconnect the AC power cord (mains lead) of the receiver (or amplifier).
Veillez à débrancher le cordon d'alimentation secteur de l'ampli-tuner (ou amplificateur).
Asegúrese de desconectar el cable de alimentación de ca del receptor (o amplificador).
Trennen Sie unbedingt das Netzkabel des Receivers (oder Verstärkers).



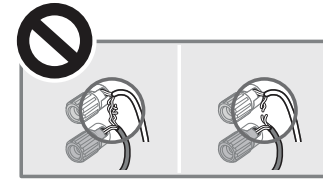
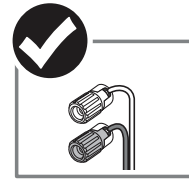
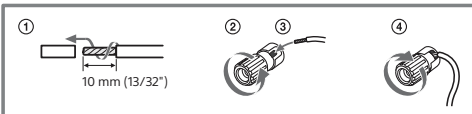
Do not connect two speaker cables to lengthen it.
Ne raccordez pas deux cordons d'enceinte pour les rallonger.
No conecte dos cables de altavoz para obtener uno más largo.
Schließen Sie nicht zwei Lautsprecherkabel aneinander, um sie zu verlängern.



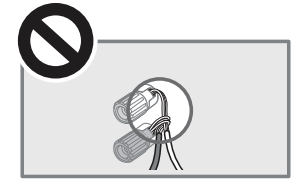
Do not connect multiple speakers to one speaker terminal.
Ne raccordez pas plusieurs enceintes à une borne d'enceinte.
No conecte varios altavoces a un terminal de altavoz.
Schließen Sie nicht mehrere Lautsprecher an einen Lautsprecheranschluss an.

Note on connecting speaker cables/ Remarque sur le raccordement des cordons d'enceinte/ Nota sobre la conexión de los cables de altavoz/ Hinweis zum Anschließen von Lautsprecherkabeln

Make sure that the speaker cables are properly connected to the speaker and receiver (or amplifier) terminals. Otherwise, the receiver (or amplifier) may be fatally damaged.
Vérifiez que les cordons d'enceinte sont correctement raccordés aux bornes des enceintes et de l'ampli-tuner (ou amplificateur). Sinon, l'ampli-tuner (ou amplificateur) peut être définitivement endommagé.
Asegúrese de que los cables de los altavoces estén correctamente conectados a los terminales del altavoz y receptor (o amplificador). De lo contrario, el receptor (o amplificador) puede resultar gravemente dañado.
Stellen Sie sicher, dass die Lautsprecherkabel ordnungsgemäß an die Anschlüsse von Lautsprecher und Receiver (oder Verstärker) angeschlossen sind. Andernfalls kann der Receiver (oder Verstärker) stark beschädigt werden.



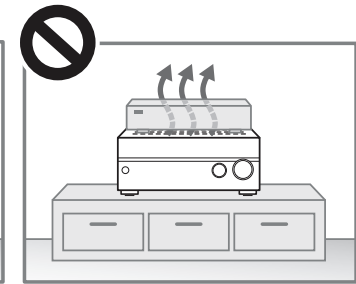
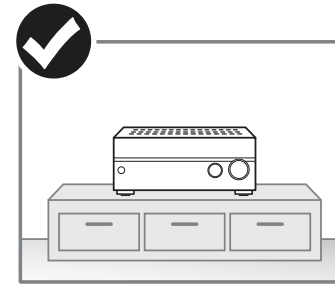
Speaker wires are not tightly twisted and fully inserted to the speaker terminals.
Les fils des enceintes ne sont pas étroitement torsadés et complètement insérés dans les bornes des enceintes.
Los hilos de los altavoces no están firmemente enroscados ni completamente insertados en los terminales de los altavoces.
Die Lautsprecherkabel wurden nicht fest verdreht und vollständig in die Lautsprecheranschlüsse eingeführt.



Speaker wires are in contact with each other due to excessive removal of insulation.
Les fils des enceintes sont en contact les uns avec les autres en raison d'une élimination excessive de l'isolation.
Los hilos de los altavoces están en contacto entre sí porque se ha quitado demasiado aislante.
Die Lautsprecherkabel berühren einander aufgrund einer zu sehr entfernten Isolierung.

Note on placing receiver (or amplifier)/ Remarque sur le positionnement de l'ampli-tuner (ou amplificateur)/ Nota sobre la colocación del receptor (o amplificador)/ Hinweis zum Aufstellen des Receivers (oder Verstärkers)

Do not place anything on top of the cabinet that might block the ventilation holes and caused malfunction.
Ne placez rien au-dessus du boîtier qui puisse obstruer les orifices d'aération et provoquer des anomalies.
No coloque encima de la carcasa ningún objeto que pueda bloquear los orificios de ventilación y provocar problemas de funcionamiento.
Stellen Sie keine Gegenstände auf das Gehäuse, welche die Lüftungsöffnungen blockieren und Funktionsstörungen verursachen könnten.



If "PROTECTOR" or "PROTECT" appears on the display panel/ Si « PROTECTOR » ou « PROTECT » apparaît sur le panneau de l'afficheur/ Si "PROTECTOR" o "PROTECT" aparece en el visor/ Wenn „PROTECTOR“ oder „PROTECT“ im Bedienfeld-Display eingeblendet wird

The protector function is activated. The receiver (or amplifier) will automatically turn off after a few seconds. For details on how to deal with this problem, refer to "Error messages" in "Troubleshooting" in the supplied operating instructions.

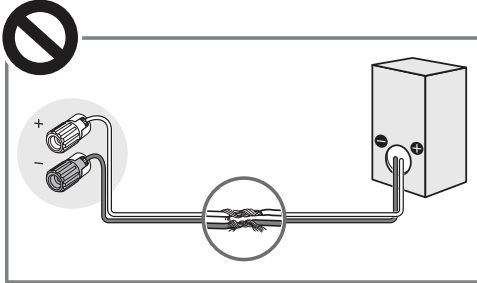
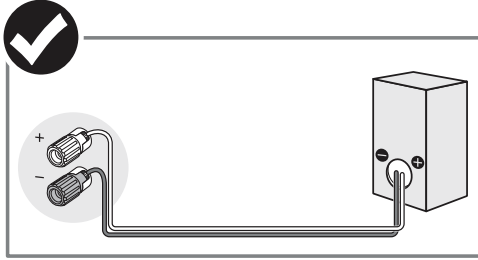
La fonction du protecteur est activée. L'ampli-tuner (ou amplificateur) s'éteindra automatiquement après quelques secondes. Pour plus informations sur la résolution de ce problème, reportez-vous aux « Messages d'erreur » dans la section « Dépannage » du mode d'emploi fourni.

La función del protector está activada. El receptor (o amplificador) se apagará automáticamente al cabo de unos segundos. Para obtener detalles sobre cómo solucionar este problema, consulte "Mensajes de error" en el apartado "Solución de problemas" del manual de instrucciones suministrado.

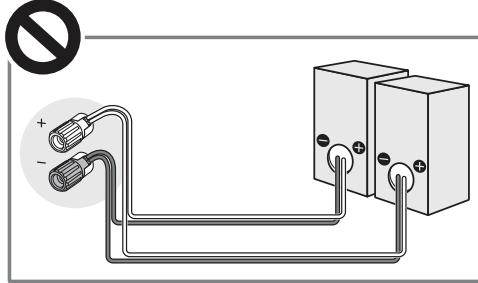
Die Schutzfunktion ist aktiviert. Der Receiver (oder Verstärker) schaltet sich nach wenigen Sekunden automatisch aus. Informationen zum Umgang mit diesem Problem finden Sie in der mitgelieferten Bedienungsanleitung im Kapitel „Störungsbehebung“ unter „Fehlermeldungen“.

Voordat u de luidsprekers aansluit/ Prima di collegare i diffusori/ Przed podłączeniem głośników/ 連接揚聲器之前

- Controleer dat de impedantie van de luidspreker binnen het nominale impedantiebereik ligt dat op de achterzijde van de receiver (of versterker) is aangegeven.
Controllare che l'impedenza dei diffusori collegati sia compresa entro l'intervallo di impedenza nominale indicato sul pannello posteriore del ricevitore (o amplificatore).
Sprawdź, czy impedancja głośnika mieści się w zakresie znamionowym oznaczonym z tyłu odbiornika (lub wzmacniacza).
檢查揚聲器的阻抗處於接收器（或放大器）後板上指示的額定阻抗範圍內。
- Zorg ervoor dat de stekker van het netsnoer van de receiver (of versterker) uit het stopcontact is gehaald.
Assicurarsi di scollegare il cavo di alimentazione CA del ricevitore (o amplificatore).
Upewnij się, że przewód sieciowy odbiornika (lub wzmacniacza) jest odłączony.
一定要斷開接收器（或放大器）的交流電源線。



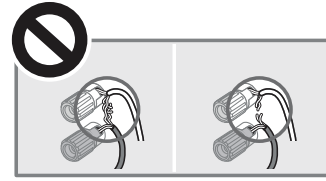
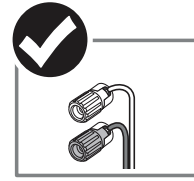
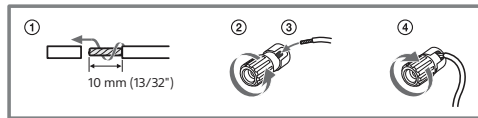
Verbind niet twee luidsprekercables om de kabel te verlengen.
Non collegare due cavi di diffusori per allungarlo.
Nie łącz ze sobą dwóch kabli głośnika, aby je wydłużyć.
請勿連接兩條揚聲器電線以增加長度。



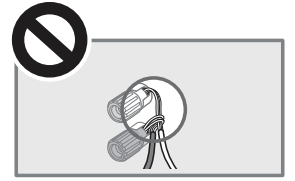
Sluit niet meerdere luidsprekers aan op één luidsprekeraansluiting.
Non collegare più diffusori ad un unico terminale di diffusore.
Nie podłączaj kilku głośników do jednego zacisku głośnika.
請勿連接多個揚聲器至一個揚聲器端子。

Opmerkingen over aansluiting luidsprekercables/ Nota sul collegamento dei cavi dei diffusori/ Uwaga dotycząca podłączania kabli głośnikowych/ 連接揚聲器電線的注意事項

Zorg ervoor dat de luidsprekercables stevig aan de aansluitingen van de luidspreker en receiver (of versterker) zijn bevestigd. Anders kan de receiver (of versterker) onherstelbare schade oplopen.
Assicurarsi che i cavi dei diffusori siano correttamente collegati ai terminali del diffusore e del ricevitore (o amplificatore). In caso contrario, il ricevitore (o amplificatore) può subire danni fatali.
Upewnij się, że kable głośnika są prawidłowo podłączone do zacisków głośnika i odbiornika (lub wzmacniacza). W przeciwnym razie odbiornik (lub wzmacniacz) mogą zostać nieodwracalnie uszkodzone.
確保揚聲器電線正確的連接至揚聲器和接收器（或放大器）端子。否則，接收器（或放大器）可能會嚴重損壞。



De luidsprekerdraden zijn niet stevig in elkaar gedraaid en volledig in de luidsprekeraansluitingen gestoken.
I fili dei diffusori non sono strettamente attorcigliati e inseriti a fondo nei terminali dei diffusori.
Przewody głośnika nie są ciasno skręcone i w pełni umieszczone w zaciskach.
揚聲器線沒有擰緊並完全插入揚聲器端子。

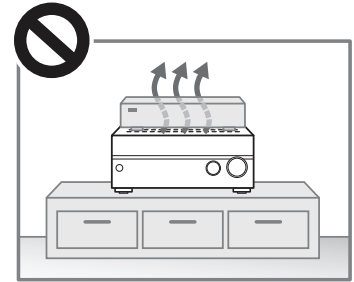
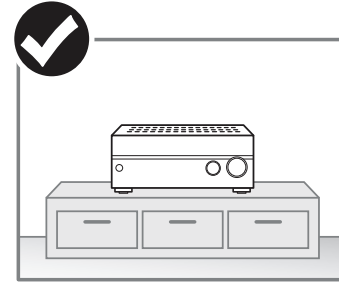


De luidsprekerdraden maken contact met elkaar door het te ver weghalen van de isolatiemantel.
I fili dei diffusori sono a contatto l'uno con l'altro a causa di una eccessiva rimozione dell'isolamento.
Przewody głośnika stykają się ze sobą w wyniku nadmiernego usunięcia materiału izolacyjnego.
揚聲器線因絕緣套過度脫除而彼此接觸。

Opmerkingen over de plaatsing van de receiver (of de versterker)/ Note sul posizionamento del ricevitore (o amplificatore)/ Uwaga dotycząca umieszczania odbiornika (lub wzmacniacza)/ 放置接收器（或放大器）的注意事項

Plaats geen voorwerpen boven op de behuizing waardoor de ventilatieopeningen worden afgesloten en storingen kunnen worden veroorzaakt.

Non appoggiare sull'apparecchio oggetti che potrebbero bloccare le prese di ventilazione, causando problemi di funzionamento.
Na obudowie nie należy umieszczać żadnych przedmiotów, które mogłyby zasłaniać otwory wentylacyjne i spowodować uszkodzenie urządzenia.
切勿將會阻擋通風口的物件放在本機機殼頂上以避免故障。



Als "PROTECTOR" of "PROTECT" op het displaypaneel wordt weergegeven/ Se "PROTECTOR" o "PROTECT" compaiono nel pannello display/ Na panelu wyświetlacza pojawia się komunikat „PROTECTOR” lub „PROTECT”/ 如果顯示面板上出現“PROTECTOR”或“PROTECT”

De Protector-functie is ingeschakeld. De receiver (of versterker) wordt na enkele seconden automatisch uitgeschakeld. Voor meer informatie over hoe u dit probleem kunt oplossen zie "Foutmeldingen" in "Problemen oplossen" in de bijgeleverde gebruiksaanwijzing.
La funzione di protezione è attivata. Il ricevitore (o amplificatore) verrà spento automaticamente dopo alcuni secondi. Per informazioni dettagliate su come risolvere il problema, consultare "Messaggi di errore" nella "Guida alla soluzione dei problemi" nelle istruzioni per l'uso in dotazione.

Protector funkcja zabezpieczająca jest włączona. Odbiornik (lub wzmacniacz) wyłączy się automatycznie po kilku sekundach. Informacje na temat rozwiązywania tego problemu można znaleźć w części „Komunikaty o błędach” w podrozdziale „Rozwiązywanie problemów” w dostarczonej instrukcji obsługi.

Protector 功能被啟動。接收器（或放大器）將在幾秒後自動關閉。有關如何解決問題的詳細資訊，請參閱所提供的使用說明書中“故障排除”的“錯誤信息”部分。



English

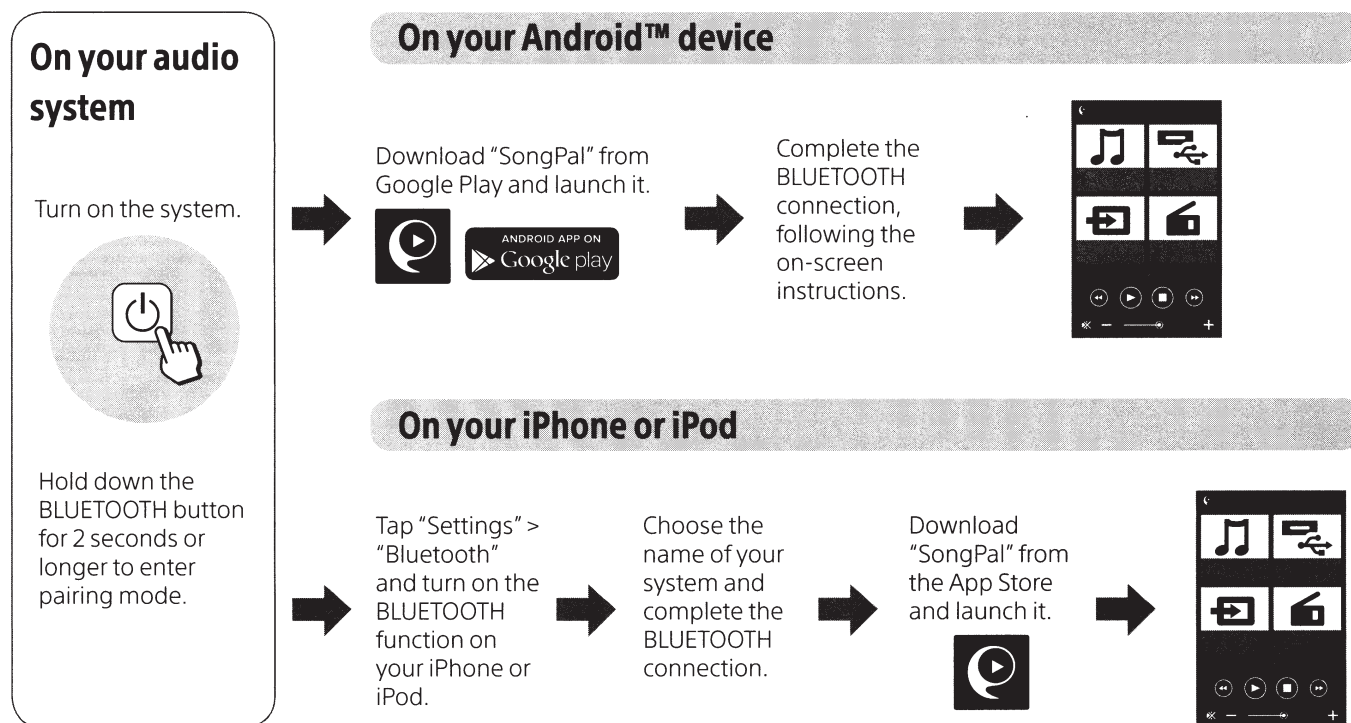


How to set up the "SongPal" app

"SongPal" is a free dedicated app for smartphones that allows you to enjoy the music content on your audio system or smartphone, by using a wireless BLUETOOTH® connection. Some features of the app are as follows.

- Choose music and control playback on the various music sources in combination with the functions of your audio system and a "SongPal"-ready smartphone.
- Operation of sound settings, power control and other features is easy and intuitive.
- Instantly recognizable content browsing and visually easy-to-use music play features make navigation easier and more enjoyable with your smartphone.

The app is available at both Google Play™ and App Store. Search for "SongPal" and download it to find out about more convenient features.



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All other trademarks are trademarks of their respective owners.

Product Registration

SONY

Thank you for purchasing this Sony product. Proper registration will enable us to send you periodic mailings about new products and other important announcements. Registering your product will also allow us to contact you in the unlikely event that it will need adjustment or modification. Please take the time to register your new product at our website:

<http://www.sony.com/productregistration>

You will find the product serial number on the main unit and the carton box.

If you have any operational questions regarding your new purchase, please contact your retailer. For the location of a Sony dealer in your area, or for any other questions, please call 1-800-222-SONY(7669).

Thank you.

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3-089-014-02



Garantie protégeant les consommateurs

Sony du Canada Ltée (ci-après désignée Sony), sous réserve des modalités et conditions indiquées aux présentes, garantit le présent produit contre tout défaut de fabrication ou de matériaux pour la période de garantie spécifiée. Si un défaut de fabrication ou de matériaux survient pendant la période de garantie spécifiée, Sony veillera à réparer le produit en y effectuant tous les remplacements de pièces nécessaires par des pièces neuves ou remises à neuf et ce, sans frais de pièces ou de main-d'œuvre. À sa seule discrétion, Sony peut aussi choisir de remplacer le produit par un produit réusiné de qualité égale ou supérieure. **La présente garantie n'est valide qu'au Canada.**

La période de garantie :

1. Main-d'œuvre : DEUX ANS à compter de la date d'achat originelle au détail.
2. Pièces : DEUX ANS (90 jours pour têtes thermiques et lampes de projecteur) à compter de la date d'achat originelle au détail.
3. Usage commercial ou locatif : QUATRE-VINGT-DIX jours sur pièces et main-d'œuvre à compter de la date d'achat originelle.

Garantie nulle ou limitée :

La présente garantie limitée est nulle si le produit a été antérieurement transformé, modifié, réparé ou entretenu par quiconque autre que les installations de service autorisées par Sony, si le numéro de série du produit a été modifié ou enlevé, ou si le produit a fait l'objet d'un accident, d'un mauvais usage, d'un abus, d'une calamité naturelle, ou s'il a été utilisé contrairement aux instructions du manuel du propriétaire. Le présent produit n'est pas destiné à l'usage commercial ou locatif. Advenant que le produit soit utilisé à des fins commerciales ou locatives, la garantie commerciale de quatre-vingt-dix de Sony s'appliquera. L'opinion de Sony à cet effet est définitive.

Livraison appropriée pour entretien :

Le produit doit être expédié, port prépayé, ou livré à l'une des installations de service Sony les plus rapprochées au Canada, soit dans son emballage d'origine, soit dans un emballage similaire offrant un degré de protection comparable, et accompagné d'instructions indiquant l'endroit au Canada où le produit doit être retourné. Le produit réparé sera retourné au client port payé. Avant d'expédier ou de livrer le produit pour réparation, tous les accessoires, supports et autres périphériques doivent être retirés du produit, et le consommateur doit effectuer une copie de sécurité de toutes les données et de tous les logiciels. Il est plus que probable que les données et logiciels seront perdus, corrompus ou reformatés lors de l'entretien, et Sony n'est pas responsable des données ou logiciels perdus, corrompus ou reformatés. Si plus d'un produit est envoyé pour réparation, tous les articles doivent être énumérés individuellement sur le bordereau d'expédition pour la documentation d'expédition. Sony n'est nullement responsable de la perte ou des dommages aux articles qui ne figurent pas sur la documentation d'expédition. Les accessoires défectueux doivent être retournés à Sony comme articles à réparer distincts.

Le service à domicile pour les téléviseurs de certaines dimensions peut être disponible à tout client qui habite dans un rayon de 50 km d'une installation de service autorisée Sony, et dont la résidence est accessible à un véhicule de service routier. Rendez-vous à www.fastracservic.ca ou composez le 1-877-899-7669 afin de déterminer si le service à domicile s'applique à votre téléviseur et à l'emplacement de votre résidence.

Preuve de date d'achat :

La présente garantie limitée s'applique au produit à compter de la date d'achat originelle au détail. Par conséquent, le propriétaire doit présenter une preuve de date d'achat originelle au détail pour se prévaloir de la présente garantie. Pour la garantie commerciale, le propriétaire doit présenter une preuve de date d'achat originelle au détail ou d'un distributeur. En ce qui a trait aux La présente garantie limitée ne couvre pas les dommages cosmétiques, les boîtiers brisés ou endommagés, les accessoires, les antennes et stylets exposés, les articles consommables (comme

les piles) fournis avec le produit, la défaillance de pièces découlant de leur usure normale, les dommages causés par l'opération du produit avec de l'équipement ou des accessoires non compatibles, les problèmes de logiciels (consultez l'entente de licence d'utilisateur pour connaître les modalités afférentes aux logiciels; sinon, les logiciels sont fournis « TELS QUELS »), ou les produits vendus « TELS QUELS ». La présente garantie limitée ne couvre pas l'entretien régulier du produit comme le nettoyage, la lubrification ou les vérifications.

Aucune autre garantie; limite et exclusion de responsabilité :

SAUF DANS LA MESURE OÙ LA LOI APPLICABLE L'INTERDIT, TOUTES LES AUTRES GARANTIES ET CONDITIONS, EXPRESSES OU IMPLICITES, RELEVANT OU NON D'UNE LOI, D'UN ACTE LÉGISLATIF, D'HABITUDES COMMERCIALES ÉTABLIES OU D'USAGES DU COMMERCE, Y COMPRIS, SANS S'Y LIMITER, TOUTE GARANTIE IMPLICITE DE QUALITÉ MARCHANDE OU DE L'ADAPTABILITÉ À UNE FIN PARTICULIÈRE, SONT DÉSAVOUÉES. SONY NE SAURAIT EN AUCUN CAS ÊTRE RESPONSABLE D'UN MONTANT SUPÉRIEUR AU PRIX RÉEL D'ACHAT DU PRODUIT; ET SONY NE SAURAIT EN AUCUN CAS ÊTRE RESPONSABLE DE PERTES, DOMMAGES OU CORRUPTION DE DONNÉES, NI DE DOMMAGES SPÉCIAUX, ACCESSOIRES OU CONSÉCUTIFS SUBIS RELATIVEMENT AU PRODUIT. SONY N'ASSUME NI N'AUTORISE AUCUN REPRÉSENTANT OU QUICONQUE À ASSUMER EN SON NOM UNE OBLIGATION OU RESPONSABILITÉ AUTRE QUE CELLES QUI SONT EXPRESSÉMENT DÉCRITES AUX PRÉSENTES.

Enregistrement du produit et soutien de la clientèle :

Nous vous remercions d'avoir choisi un produit Sony. À Sony, nous nous efforçons de créer des produits de la plus haute qualité afin de renforcer votre expérience et votre satisfaction. Afin d'assurer le meilleur soutien qui soit pour votre produit, nous vous demandons de remplir un formulaire d'enregistrement à www.Sony.ca/enregistrement et ce, dans les quatre-vingt-dix (90) jours suivant la date d'achat.

Pour obtenir de l'aide concernant le service, des renseignements sur le produit, l'enregistrement du produit, ou pour localiser une installation de service autorisée, visitez www.fastracservic.ca ou composez le 1-877-899-7669.

Pour obtenir des renseignements concernant la garantie prolongée Sony Care, composez 1-800-773-9667.

Pour obtenir un soutien de produit en ligne et des mises

à jour en tout temps, visitez www.sony.ca/fr/support, ou appelez le Centre d'information de la clientèle de Sony au 1-877-899-7669.

SONY®

Consumer Warranty

Sony of Canada Ltd. (hereinafter referred to as "Sony") hereby warrants, subject to the terms and conditions herein set forth, this product against defects in material and workmanship during the specified warranty period. In the event of a defect of material or workmanship during the specified warranty period, Sony will, without charge for parts or labour, either repair the product, effecting all necessary parts replacements with either new or refurbished parts, or at Sony's sole discretion, replace the product with a refurbished product of equal or better quality. **This limited warranty is valid only in Canada.**

The Warranty Period:

1. Labour: TWO YEARS from the date of original purchase at retail.
2. Parts: TWO YEARS (thermal head and projector lamp: 90 days) from the date of original purchase at retail.
3. Commercial or Rental Use: NINETY DAYS parts and labour from the date of original purchase.

Void or limited warranty:

This limited warranty is void if the product has been previously altered, modified, repaired or serviced by anyone other than the service facilities authorized by Sony, if the serial number on the product has been altered or removed, or if the product has been subject to accident, misuse, abuse, acts of God or operated contrary to the instructions contained in the Owner's Manual. This product is not intended for commercial or rental use. Should this product be used for commercial or rental use, Sony's standard ninety day commercial warranty will apply. The opinion of Sony with respect to these matters shall be final.

Proper Delivery for Service:

The product must be shipped, freight prepaid, or delivered to one of the nearest Sony service facilities in Canada in either its original package or similar package affording an equal degree of protection, and with instructions indicating a location within Canada to which the product should be returned. The repaired product will be returned to customer freight prepaid. Prior to shipping or delivering the product for repair, all accessories, media and other attachments should be removed from the product and all data and software must be backed up. It is likely that stored data and software will be lost, corrupted or reformatted in the course of service and Sony will not be liable for lost, corrupted or reformatted data or software. If more than the product is sent for repair, all items must be listed individually on the packing slip for the shipping documentation. Sony shall have no liability whatsoever for loss or damage to items that are not listed on the shipping documentation. Defective accessories should be returned to Sony as a separate repair item.

On-site service for televisions of certain dimensions may be available to a customer living within a 50km radius of an authorized Sony service facility, provided the residence can be accessed by an on-road service vehicle. Please go to www.fastracservice.ca or call 1-877-899-7669 to determine if on-site service applies to your television and residential location.



4-460-229-51

Proof of Original Purchase:

This limited warranty applies to the product from the date of original purchase. Therefore, the owner must furnish proof of original purchase at retail for the consumer warranty. For the commercial warranty, the owner must furnish proof of original purchase at retail or from a distributor. For subsequent purchasers, the date the first user acquired the product will apply as the original purchase.

This limited warranty does not extend to cosmetic damage, broken or damaged casing, accessories, exposed antennas and styluses, consumable items (such as batteries) provided with the product, parts wearing out due to normal wear and tear, damage caused by operation of the product with incompatible equipment or attachments, software issues (consult the End-User License Agreement for software terms and conditions, otherwise software is provided "AS IS") or to products sold "AS IS". This limited warranty does not cover regular product maintenance such as cleaning, lubrication or evaluation.

No Other Warranties; Limitation and Exclusion of Liability:

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ALL OTHER WARRANTIES AND CONDITIONS, EXPRESS OR IMPLIED, AND WHETHER ARISING BY LAW, BY STATUTE, BY COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, MERCHANTABLE QUALITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. UNDER NO CIRCUMSTANCES SHALL SONY BE LIABLE FOR AN AMOUNT GREATER THAN THE ACTUAL PURCHASE PRICE OF THE UNIT, FOR ANY LOSS, DAMAGE OR CORRUPTION OF DATA, OR FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES SUSTAINED IN CONNECTION WITH SAID UNIT AND SONY NEITHER ASSUMES NOR AUTHORIZES ANY REPRESENTATIVE OR OTHER PERSON TO ASSUME FOR IT ANY OBLIGATION OR LIABILITY OTHER THAN SUCH AS IS EXPRESSLY SET FORTH HEREIN.

Product Registration and Customer Support:

Thank you for choosing a Sony product. At Sony, we strive to create products of the highest quality to enhance your experience and enjoyment. To provide the best support for your product, we request that you complete a product registration form at www.Sony.ca/registration within ninety (90) days of purchase.

For service assistance, product information, product registration or to locate an authorized service facility please go to www.fastracservice.ca, or call: 1-877-899-7669.

For information about a Sony Care Extended Warranty, please call 1-800-773-9667.

For online product support and updates at any time, please visit: www.sony.ca/support, or call the Sony Customer Information Centre at 1-877-899-7669.

SONY®General Stereo/Hifi Components/Tape Decks
CD Players/Mini Disc Players/Audio Systems

Hifi Audio

LIMITED WARRANTY (U.S. Only)

Sony Electronics Inc. ("Sony") warrants this product against defects in material or workmanship for the time periods and as set forth below when purchased directly from Sony or a Sony Retailer. Pursuant to this Limited Warranty, Sony will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. **In the event of a defect, these are your exclusive remedies.**

Labor: For a period of two (2) years from the original date of purchase of the product ("Labor Warranty"), Sony will, at its option, repair or replace with new or refurbished product, product determined to be defective. If Sony elects to replace the product after this Labor Warranty has expired but while the Parts Warranty below is still in effect, it will do so for the applicable labor charge.

Parts: For a period of two (2) years from the original date of purchase of product ("Parts Warranty"), Sony will supply new or refurbished replacement parts in exchange for parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the Sony authorized service facility specified. **It is your responsibility to backup any data, software or other materials you may have stored or preserved on your unit. It is likely that such data, software, or other materials will be lost or reformatted during service and Sony will not be responsible for any such damage or loss.** A dated purchase receipt from Sony or a Sony Retailer is required. For specific instructions on how to obtain warranty service for your product,

Visit Sony's Web Site:
www.sony.com/service

Or call the **Sony Customer Information Service Center**
1-800-222-SONY (7669)

For an accessory or part not available from your authorized dealer, call:

1-800-488-SONY (7669)

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