SONY®

Home Theatre System

Operating Instructions

HT-M77/HT-M55/HT-M22

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.

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.

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

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.

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

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 customers in Australia and India

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

About This Manual

- The instructions in this manual are for models HT-M77, HT-M55 and HT-M22. In this manual, the HT-M77 is used for illustration purposes unless stated otherwise. Any differences in operation are marked in the manual as "HT-M77 only".
- The instructions in this manual describe the operation of the receiver with the supplied remote control. You can also use the buttons or knobs on the receiver if they have the same or similar names as those on the remote control.

On copyrights

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

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HT-M77 only

- Receiver (STR-KM77) (1)
- Speaker system
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  – Center speaker (1)
  – Surround speaker (2)
  – Surround back speaker (2)
  – Subwoofer (2)
- Speaker cords (6) (red (1), white (1), blue (1), gray (1), purple (2))

- Foot pads
  – (Big) (8)

  – (Small) (12)

HT-M55 only

- Receiver (STR-KM55) (1)
- Speaker system
  – Front speaker (2)
  – Center speaker (1)
  – Surround speaker (2)
  – Subwoofer (2)
- Speaker cords (4) (red (1), white (1), purple (2))

- Foot pads
  – (Big) (8)

  – (Small) (12)

HT-M22 only

- Receiver (STR-KM22) (1)
- Speaker system
  – Front speaker (2)
  – Center speaker (1)
  – Surround speaker (2)
  – Subwoofer (1)
- Speaker cords (purple) (1)

- Foot pads
  – (Big) (12)

  – (Small) (12)

Inserting batteries into the remote control

Insert two R6 (size-AA) batteries (supplied) in the remote control. Observe the correct polarity when installing batteries.
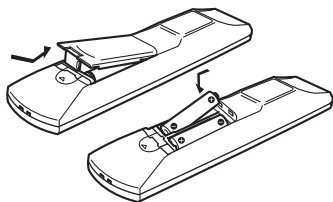
Notes

- 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 lighting apparatuses. 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 all the batteries with new ones.

Description and location of parts

Front panel
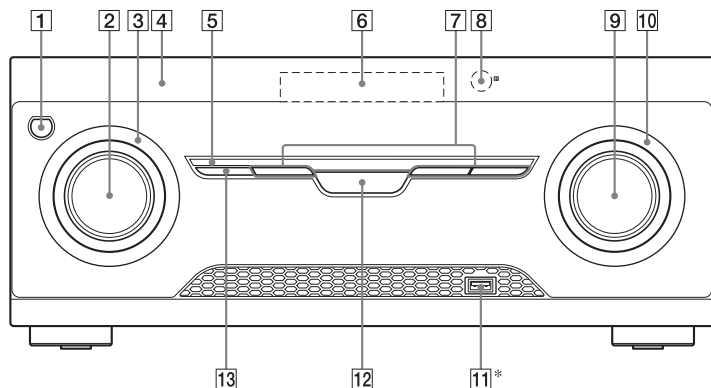
* Except for South Africa and Argentina models.

1 I/$\circlearrowleft$ (on/standby) (page 24, 34, 49)

2 INPUT SELECTOR (page 29, 31, 32, 35, 36, 53)

3 INPUT SELECTOR indicator
Flashes when you change the input source.

4 N (N-Mark) (page 37)

Position the NFC-compatible device near this indication to activate the NFC function.

5 M-TURBO indicator
Lights up when M-TURBO is activated.

6 Display panel (page 8)

7 MUSIC/MOVIE, GAME, FÚTBOL (Latin America and Argentina models only)/FOOTBALL (other models) (page 33)

8 Remote control sensor
Receives signals from remote control.

9 MASTER VOLUME (page 25, 26, 29, 52, 54)

10 MASTER VOLUME indicator
Flashes when you adjust the volume.

11 $\leftarrow$ (USB) port (page 23)

12 M-TURBO (page 11)

13 SPEAKER SETTINGS (page 12)

Indicators on the display panel
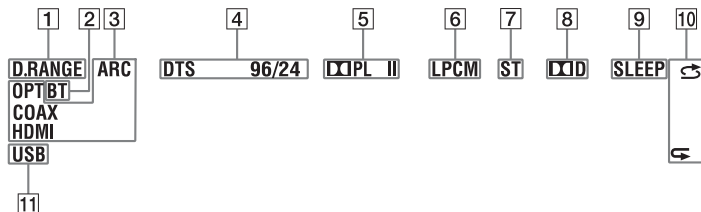
① **D.RANGE**

Lights up when Dynamic Range Compression is activated (page 45).

② **BT**

Lights up when *Bluetooth* device is connected (page 36).

③ **Input indicator**

Lights up to indicate the current input.

OPT

Lights up when "OPT 1" or "OPT 2" is selected.

COAX

Lights up when "COAX" is selected.

HDMI

The receiver recognizes the equipment connected via an HDMI IN jack.

ARC

TV input is selected and the Audio Return Channel (ARC) signals are detected.

④ **DTS indicator**

Lights up the respective indicator when the receiver is decoding the corresponding DTS format signals.

DTS DTS
DTS 96/24 DTS 96 kHz/24 bit

⑤ **Dolby Pro Logic indicator**

Lights up when the receiver performs Dolby Pro Logic processing. This matrix surround decoding technology can enhance input signals.

□□ PL II Dolby Pro Logic II

⑥ **LPCM**

Lights up when the receiver is decoding the Linear PCM signals.

⑦ **ST**

Lights up when the receiver tunes to a stereo broadcast.

⑧ **□□ D**

Lights up when the receiver is decoding Dolby Digital signals.

⑨ **SLEEP**

Lights up when the Sleep Timer is activated (page 11).

⑩ **Playback indicator**

Lights up the respective indicator when the playback option is activated.
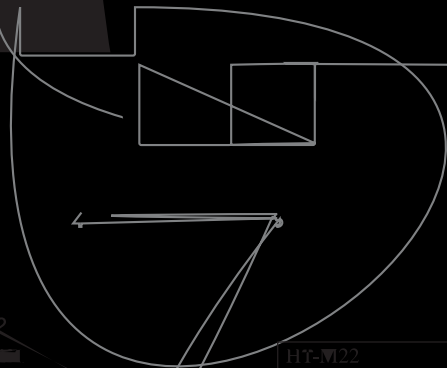
⇄ SHUFFLE

⇄ REPEAT

⑪ **USB**∗

Lights up when USB device is connected.

∗ Except for South Africa and Argentina models.
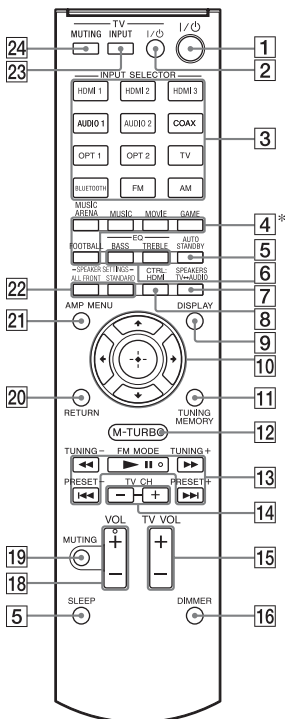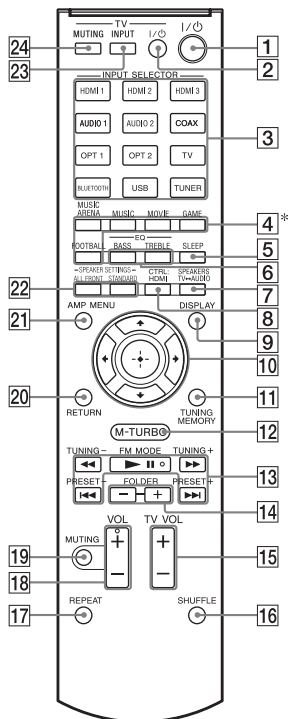
HT-M22

2

(...23)

Remote control

Use the supplied remote control to operate this receiver and Sony TV.

- **South Africa and Argentina models only**

- **Other models**

* FÚTBOL (Latin America and Argentina models only)/FOOTBALL (other models).

1 **I/(¹) (on/standby)**

Turns the receiver on or sets it to standby mode.

Saving the power in standby mode

When "CTRL: HDMI" is set to "CTRL OFF" (page 44).

2 **TV I/(¹) (on/standby)**

Turns the TV on or sets it to standby mode.

3 **INPUT SELECTOR**

Selects the equipment you want to use. When you press any of the INPUT SELECTOR buttons during standby mode, the receiver turns on.

4 **Sound field buttons (page 33)**

5 **AUTO STANDBY**

(South Africa and Argentina models only) (page 48)

SLEEP

Sets the receiver to turn off automatically at a specified time. Each time you press SLEEP, the display changes cyclically as follows:

0-30-00 → 1-00-00 → 1-30-00 → 2-00-00 → OFF

When Sleep Timer is being used, "SLEEP" indicator lights up on the display panel.

Tip

To check the remaining time before the receiver turns off, press SLEEP. The remaining time appears on the display panel. If you press SLEEP again, the Sleep Timer will be canceled.

6 **EQ BASS**

Adjusts the bass level (page 33).

EQ TREBLE

Adjusts the treble level (page 33).

7 **SPEAKERS TV ↔ AUDIO**

Selects whether TV sound is output from the system's speaker or the TV's speaker(s). This function works only when you set the control for HDMI function to on (page 44).

8 **CTRL: HDMI**

Turns the Control for HDMI function on or off (page 47).

9 **DISPLAY**

Views information on the display panel.

10 ⊕, ↑/↓/←/→

Press ↑/↓/←/→ to select the menu items then press ⊕ to enter/confirm the selection.

11 **TUNING MEMORY (page 31)**

12 **M-TURBO**

Turns the M-TURBO function on or off. M-TURBO function reinforces the bass and creates a more powerful sound.

13 **◄◄/►►, ►II, I◄◄/►►I**

Backward/forward, play/pause, skip operation.

TUNING +/–

Scans a station.

FM MODE

Selects the FM reception mode (monaural or stereo).

PRESET +/–

Selects preset stations or channels.

14 **TV CH +/–**

(South Africa and Argentina models only)

Scans for the preset TV channels.

FOLDER +/–

(Other models)

Selects a folder of the USB device.

15 **TV VOL +/–**

Adjusts the TV volume.

16 **DIMMER**

(South Africa and Argentina models only)

Adjusts the brightness of the display panel (page 48).

SHUFFLE

(Other models)

Plays track from USB in shuffle mode (page 29).

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[17] **REPEAT**

Plays a track or a folder repeatedly of the USB device (page 29).

[18] **VOL +/–**

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

[19] **MUTING**

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

[20] **RETURN**

Returns to the previous menu.

[21] **AMP MENU**

Displays the menu to operate the receiver.

[22] **SPEAKER SETTINGS ALL FRONT, SPEAKER SETTINGS STANDARD**

Selects speaker settings according to speaker layout (page 15, 16).

Tip

You can also use SPEAKER SETTINGS on the receiver.

[23] **TV INPUT**

Selects the input signal (TV input or video input).

[24] **TV MUTING**

Activates the TV's muting function.

Notes

- The ▶❚❚ and VOL + buttons have tactile dots. Use the tactile dots as references when operating the receiver.
- The above explanation is intended to serve as examples.
- Depending on the model of your connected equipment, some functions explained in this section may not work with the supplied remote control.

Getting started

You can enjoy your audio/video equipment connected to the receiver by following the simple steps below.
Before connecting cords, be sure to disconnect the AC power cord (mains lead).

Installing and connecting the speakers (page 15, 17)

Connecting the TV (page 18)

Connecting other equipment (page 19)

Preparing the receiver See "Setting the voltage selector" (page 24), "Connecting the AC power cord (mains lead)" (page 24) and "Turning on the receiver" (page 24).

Setting the speakers Select the speaker layout settings (page 12), then check the speaker connection using "TEST TONE" in LEVEL menu (page 25). If the sound is not output correctly, check the speaker connection.

Setting the audio output settings on the connected equipment To output multi channel digital audio, check the digital audio output setting on the connected equipment. For a Sony Blu-ray Disc player, check that "Audio (HDMI)", "Dolby Digital", and "DTS" are set to "Auto", "Dolby Digital" and "DTS" respectively (as of September 2011). For a PlayStation 3, check that "BD/DVD Audio Output Format (HDMI)" and "BD Audio Output Format (Optical Digital)" are set to "Bitstream" (with system software version 3.70). For details, refer to the operating instructions supplied with the connected equipment.

Digital audio formats supported by the receiver

Digital audio formats that this receiver can decode depend on digital audio output jacks of the equipment connected. This receiver supports the following audio formats.

Audio format [Display]	Maximum number of channels	Connection between the playback equipment and the receiver	
		COAXIAL/OPTICAL	HDMI
Dolby Digital [DOLBY D]	5.1	○	○
DTS [DTS]	5.1	○	○
DTS 96/24 [DTS 96/24]	5.1	○	○
Multi Channel Linear PCM* [PCM]	7.1	×	○
Linear PCM	2.0	○	○

* Audio signals are output in another format if the playback equipment does not correspond to the format. For details, refer to the operating instructions of the playback equipment.

Connections

1: Installing the speakers

HT-M77
This receiver allows you to use a 7 channel speaker with 2 subwoofer system.

HT-M55
This receiver allows you to use a 5 channel speaker with 2 subwoofer system.

HT-M22
This receiver allows you to use a 5 channel speaker with 1 subwoofer system.

Example of speaker system configuration

You can enjoy different sound effects from the system by placing the speakers as shown below.

A Front speaker (left)
B Front speaker (right)
C Center speaker
D Surround speaker (left)
E Surround speaker (right)
F Surround back speaker (left)
G Surround back speaker (right)
H Subwoofer

Installing all the speakers in front position (Speaker layout: All Front)

– HT-M77
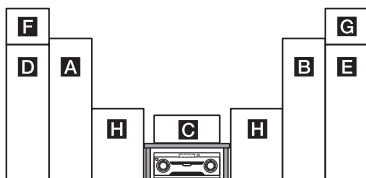
– HT-M55
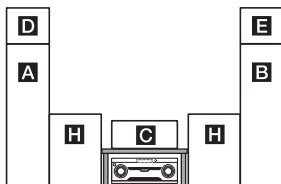
– HT-M22
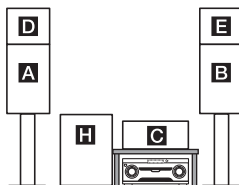
Installing the surround/surround back speakers in rear position (Speaker layout: Standard)
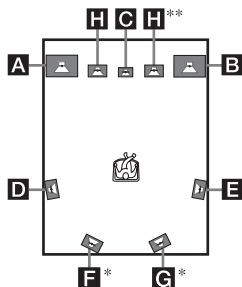
* HT-M77 only.
** HT-M77/HT-M55 only.

Notes

- Do not install the speakers on a wall.
- We recommend that you place the surround back speakers (HT-M77 only), surround speakers (HT-M55 and HT-M22 only), and front speakers (HT-M22 only) on a speaker stand (not supplied).
- Be sure to select the speaker layout setting (page 12) according to your speakers placement.
- Do not lean or hang on a speaker, as it may fall down.
- For details about installing the speakers, please refer to the supplied Quick Setup Guide.

Tips

- In order to output more effective sound when "All Front" setting is selected, we recommend you to install your front speakers and surround speakers closer to each other.
- All the angles **A** should be the same.
  – HT-M77 only
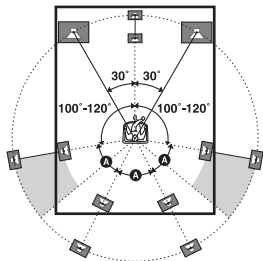
– HT-M55/HT-M22 only
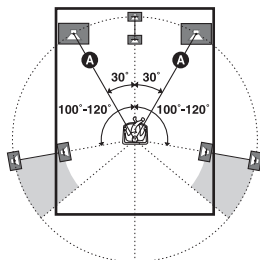
- Since the subwoofer does not emit highly directional signals, you can place it wherever you want.
- We recommend that you place the subwoofer on the floor for better bass performance.

Installing the speakers on a flat surface

Attach the supplied foot pads to the bottom of the speakers and subwoofers to prevent vibration or movement.
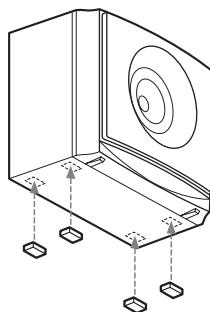
Speaker	Foot pads
Front (HT-M22 only)	Big
Center	Small
Surround (HT-M55 and HT-M22 only)	Small
Surround back (HT-M77 only)	Small
Subwoofer	Big

2: Connecting the speakers

Before connecting cords, be sure to disconnect the AC power cord (mains lead).
When connecting the speaker cords, match the color of the connector to the color label under the SPEAKERS jacks of the receiver. Be sure to insert the speaker connector until it clicks.
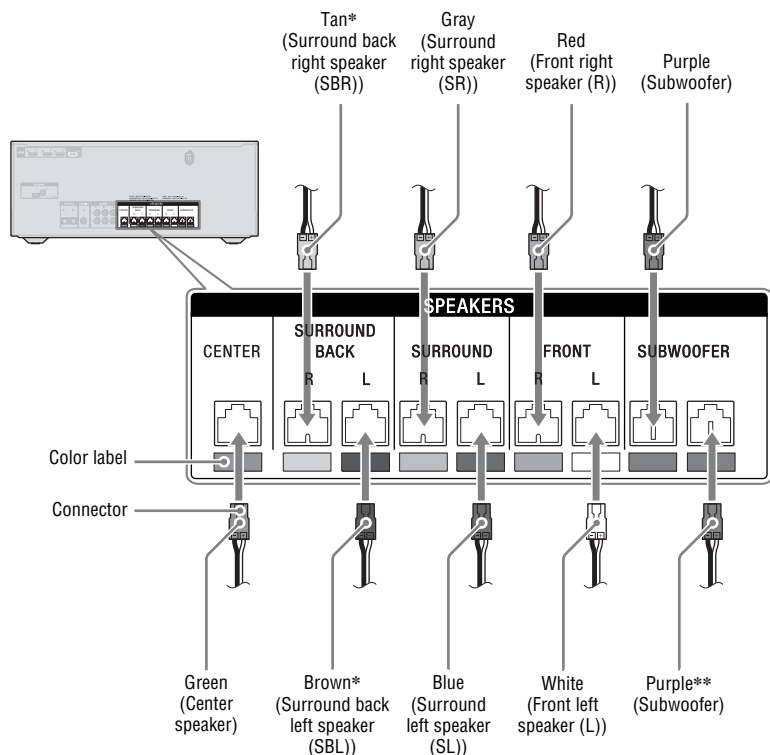
* HT-M77 only.
** HT-M77 and HT-M55 only.

Notes

- Check the speaker type by referring to the speaker label on the rear panel of the speakers.
- The center speaker and subwoofers do not have any character on the speaker label. For details on the speaker type, see page 62.

3: Connecting the TV

Before connecting cords, be sure to disconnect the AC power cord (mains lead).
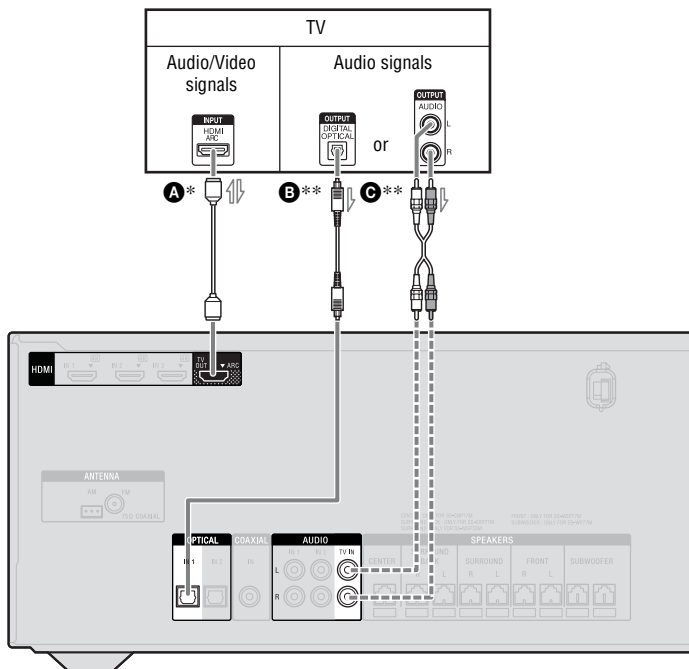
Ⓐ HDMI cable (not supplied)

Sony recommends that you use an HDMI-authorized cable or Sony High Speed HDMI cable with Cable Type Logo.

Ⓑ Optical digital cord (not supplied)

Ⓒ Audio cord (not supplied)

——— Recommended connection

----- Alternative connection

To enjoy the TV broadcast in multi channel surround sound from the receiver

* If your TV is compatible with the Audio Return Channel (ARC) function, connect **A**. Be sure to set the "CTRL HDMI" to "CTRL ON" in HDMI settings menu (page 47).

** If your TV is not compatible with the ARC function, connect **B** or **C**.

Be sure to turn off the TV's volume or activate the TV's muting function.

Notes

• Connect a TV monitor or a projector to the HDMI TV OUT jack on the receiver.
• 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 optical digital cords, insert the plugs straight until they click into place.
• Do not bend or tie optical digital cords.

Tips

• All the digital audio jacks are compatible with 32 kHz, 44.1 kHz, 48 kHz, and 96 kHz sampling frequencies.
• When you connect the audio output jack of the TV to the TV IN jacks of the receiver to output the TV sound from the speakers connected to the receiver, set the sound output jack of the TV to "Fixed" if it can be switched between either "Fixed" or "Variable".

To listen to the sound from the TV

If your TV does not support System Audio Control function, set the "AUDIO OUT" to "TV+AMP" in the HDMI settings menu (page 47).

4: Connecting other equipment

Using HDMI connection

High-Definition Multimedia Interface (HDMI) is an interface which transmits video and audio signals in digital format. By connecting Sony "BRAVIA" Sync-compatible equipment using HDMI cables, operations can be simplified. See ""BRAVIA" Sync Features" (page 39).

HDMI features

• A digital audio signals transmitted by HDMI can be output from the speakers connected to the receiver. This signal supports Dolby Digital, DTS, and Linear PCM. For details, see "Digital audio formats supported by the receiver" (page 14).
• The receiver can receive Multi Channel Linear PCM (up to 8 channels) with a sampling frequency of 192 kHz or less with an HDMI connection.
• This receiver supports Deep Color (Deep Colour), "x.v.Color (x.v.Colour)", and 4K or 3D transmission.
• To enjoy 3D images, connect 3D-compatible TV and video equipment (Blu-ray Disc player, Blu-ray Disc recorder, PlayStation 3, etc.) to the receiver using High Speed HDMI cables, put on 3D glasses, and then play back a 3D-compatible content.
• To enjoy 4K (HDMI IN 1, IN 2, and IN 3 input) images, connect 4K-compatible TV and video equipment (Blu-ray Disc player, Blu-ray Disc recorder, etc.) to the receiver using High Speed HDMI cables, and then play back a 4K-compatible content.

Notes on HDMI connections

- DSD signals of Super Audio CD are not input or output.
- Depending on the TV or the video equipment, 4K or 3D images may not be displayed.
- Refer to the operating instructions of each connected equipment for details.

When connecting cords

- Before connecting cords, be sure to disconnect the AC power cord (mains lead).
- It is not necessary to connect all the cords. Connect according to the availability of jacks on the connected equipment.
- Use a High Speed HDMI cable. If you use a Standard HDMI cable, 1080p, Deep Color (Deep Colour), 4K or 3D images may not be displayed properly.
- We do not recommend using an HDMI-DVI conversion cable. When you connect an HDMI-DVI conversion cable to a DVI-D equipment, the sound and/or the image may be lost.
- When connecting optical digital cords, insert the plugs straight until they click into place.
- Do not bend or tie optical digital cords.

Tip

All the digital audio jacks are compatible with 32 kHz, 44.1 kHz, 48 kHz, and 96 kHz sampling frequencies.

Connecting equipment with HDMI jacks

This HDMI connection is an example. You can connect each HDMI equipment to any HDMI inputs.
If your equipment does not have an HDMI jack, see page 22.
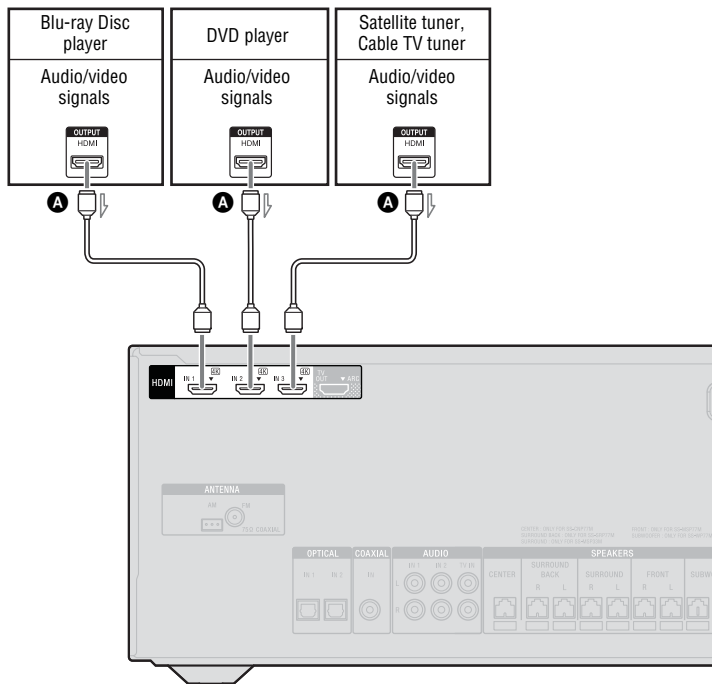
A HDMI cable (not supplied)

Sony recommends that you use an HDMI-authorized cable or Sony High Speed HDMI cable with Cable Type Logo.

21GB

Connecting equipment with jacks other than HDMI jacks

Below connection is an example. You can connect each audio/video equipment to any digital or analog input jacks.
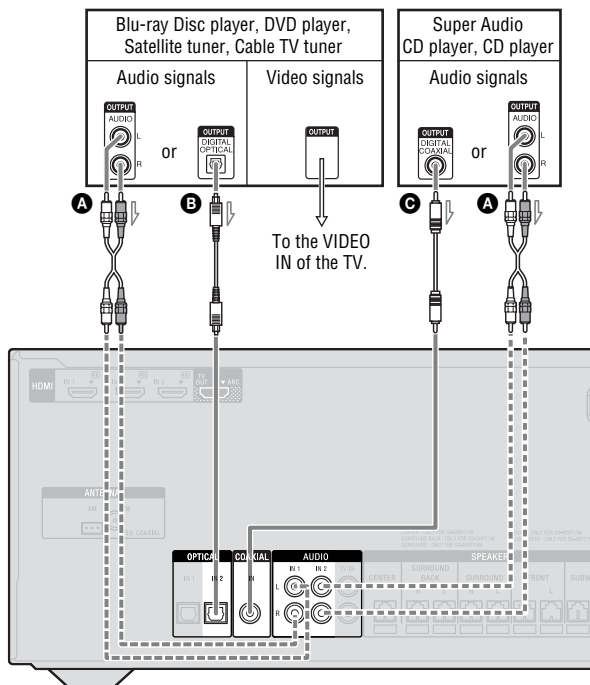
Ⓐ Audio cord (not supplied)
Ⓑ Optical digital cord (not supplied)
Ⓒ Coaxial digital cord (not supplied)

― Recommended connection
---- Alternative connection

Connecting a USB device

(Except for South Africa and Argentina models)
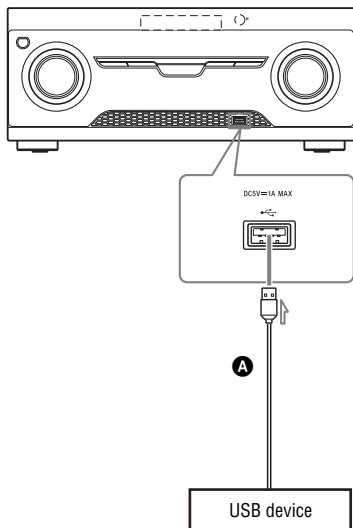
Ⓐ USB cable (not supplied)

Note

You can use your iPhone/iPod with this receiver via *Bluetooth* connection only.

5: Connecting the antennas (aerials)

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

AM loop antenna (aerial) (supplied)

FM wire antenna (aerial) (supplied)
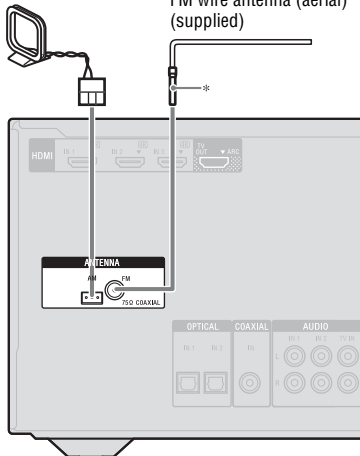
* The shape of the connector varies depending on the area of this receiver

Notes

• To prevent noise pickup, keep the AM loop antenna (aerial) away from the receiver and other equipment.
• Be sure to fully extend the FM wire antenna (aerial).
• After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

23GB

Setting the voltage selector

If your receiver has a voltage selector on the rear panel, check that the voltage selector is set to the local power supply voltage. If not, use a screwdriver to set the selector to the correct position before connecting the AC power cord to a wall outlet.
Depending on the area, the VOLTAGE SELECTOR may differ.

Connecting the AC power cord (mains lead)

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

AC power cord (mains lead)

To the wall outlet

Turning on the receiver

I/(¹)
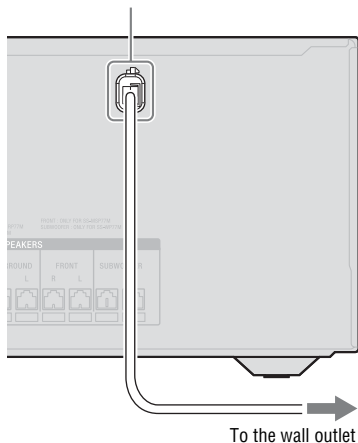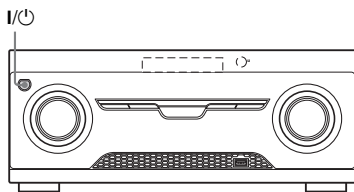
Press I/(¹) to turn on the receiver.
You can also turn on the receiver using I/(¹) on the remote control. When you turn off the receiver, press I/(¹) again.
"STANDBY" flashes on the display panel. Do not disconnect the AC power cord (mains lead) while "STANDBY" is flashing. This may cause a malfunction.

Adjusting the speaker levels and balance (TEST TONE)

You can adjust the speaker levels and balance while listening to the test tone from your seating position.

INPUT SELECTOR buttons

AMP MENU

$\oplus$, $\blacktriangle$/$\blacktriangledown$/$\blacktriangleleft$/$\blacktriangleright$

VOL +/–
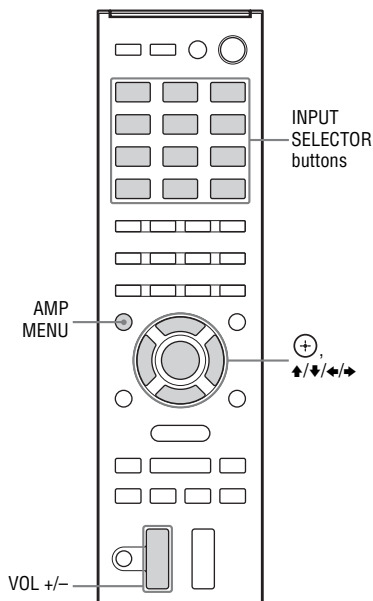
1 **Press AMP MENU.**

2 **Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select "LEVEL", then press $\oplus$ or $\blacktriangleright$.**

3 **Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select "TEST TONE", then press $\oplus$ or $\blacktriangleright$.**

4 **Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select "AUTO ■■■*".**

The test tone is output from each speaker in sequence.
* ■■■ represent a speaker channel.

5 **Adjust the speaker levels and balance.**

Use the LEVEL settings menu (page 45) to adjust the speakers to have the same sounding test tone level for each speaker.

Tips

• To adjust the level of all speakers at the same time, press VOL +/–. You can also use MASTER VOLUME on the receiver.
• The adjusted value are shown on the display panel during adjustment.

6 **Exit test tone.**

Press any INPUT SELECTOR buttons or select "OFF" in step 4.

Playing an input source equipment

INPUT
SELECTOR
buttons

Sound field
buttons

AMP
MENU

$\oplus$,
▲/▼/◄/►

MUTING

VOL +/–
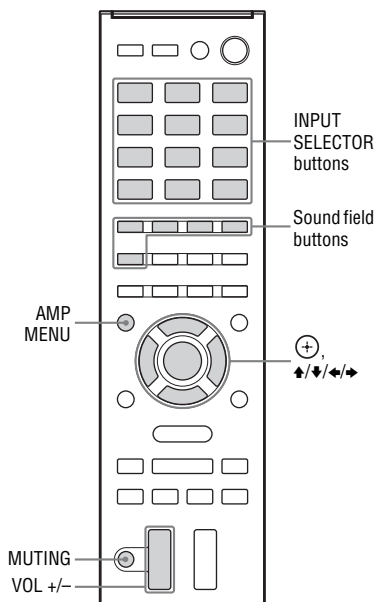
1 Press the INPUT SELECTOR buttons which corresponds to the equipment you want.

The selected input appears on the display panel.

2 Turn on the equipment and start playback.

3 Press VOL +/– to adjust the volume.

You can also use MASTER VOLUME on the receiver.

4 Press sound field buttons to enjoy the surround sound.

You can also use MUSIC/MOVIE, GAME or FÚTBOL (Latin America and Argentina models only)/ FOOTBALL (other models) on the receiver.
For details, see page 33.

Tips

- You can adjust the volume differently using the MASTER VOLUME knob on the receiver or the VOL +/– button on the remote control.
  To turn the volume up or down quickly
  – Turn the knob quickly.
  – Press and hold the button.
  To make fine adjustment
  – Turn the knob slowly.
  – Press the button and release it immediately.

To activate the muting function

Press MUTING.
The muting function will be canceled when you do the following.
- Press the button again.
- Increase the volume.
- Turn off the receiver.

To avoid damaging your speakers

Before you turn off the receiver, be sure to turn down the volume level.

Naming inputs

You can enter a name of up to 8 characters for inputs (except TUNER) to appear on the display panel.
It is more recognizable having the equipment named on the display than the jacks.

1 **Press the corresponding INPUT SELECTOR button which you want to create an index name.**

2 **Press AMP MENU.**

3 **Press ♦/♦ repeatedly to select "SYSTEM", then press ⊕ or ♦.**

4 **Press ♦/♦ repeatedly to select "NAME IN", then press ⊕ or ♦.**
The cursor flashes and you can enter a character.

5 **Press ♦/♦ to select a character, then press ♦/♦ to move the input position backward and forward.**

Tips

• You can select the character type as follows by pressing ♦/♦.
Alphabet (upper case) → Numbers → Symbols
• To enter a blank space, press ♦ without selecting a character.

If you made a mistake

Press ♦/♦ until the character you want to change flashes, then press ♦/♦ to select the correct character.

6 **Repeat step 5 to input a character one by one, then press ⊕.**
The name you entered is registered.

Playing a USB device (Except for South Africa and Argentina models)

You can enjoy music from the USB device by connecting it to the ⟵ (USB) port on the receiver.
For details on connecting a USB device, see "Connecting a USB device" (page 23).
The music file formats that can be played back by this receiver are as follows:

File format	Extensions
MP3 (MPEG-1 Audio Layer III)	".mp3"
AAC*	".m4a", ".3gp", ".mp4"
WMA9 Standard*	".wma"
WAV	".wav"

* The receiver does not play files encoded with DRM.

Compatible USB devices

You can use the following Sony USB devices on this receiver.

Verified Sony USB device

Product name	Model name
Walkman®	NW-A857 / A860
	NW-E053 / E060 / E083
	NW-F800
	NW-M505
	NW-S756 / S760 / S770 / S785
	NW-WH303
	NW-Z1000 / Z1070
	NWD-W260 / W273

Product name	Model name
	NWZ-A864
	NWZ-B162F / B173F
	NWZ-E053 / E363 / E373 / E385 / E463 / E575 / E585
	NWZ-F805 / F885
	NWZ-S755 / S764 / S774
	NWZ-W262 / W272
	NWZ-WH303 / WH505
	NWZ-Z1040 / Z1070 / Z1060
MICROVAULT	USM1GL / 4GL / 8GL / 32GL
	USM16GLX / 32GLX / 64GLX
	USM512J / 8GJ
	USM4GM
	USM4GN / 8GN / 16(32)GN
	USM64GP
	USM8GQ / 32GQ / 64GQ
	USM8GR / 16GR / 32GR
	USM4GS / 16GS
	USM8GT
	USM16GU
	USM4GV

Product name	Model name
Digital Voice Recorder	ICD-AX412
	ICD-FX8
	ICD-PX232 / PX312F / PX333
	ICD-SX813 / SX1000
	ICD-UX502 / UX513F / UX523F / UX532 / UX543
	ICD-TX50
	ICZ-R50 / R51
	PCM-D100

Notes

- Some USB devices may not work with this receiver.
- The receiver is unable to read data in NTFS format.
- The receiver is unable to read data other than that saved in the first partition of a hard disk drive.
- Operation of models not listed here is not guaranteed.
- Operation may not always be ensured even when using these USB devices.
- Some of these USB devices may not be available for purchase in certain areas.
- When formatting the above models, be sure to format using the model itself or the dedicated formatting software for that model.
- When connecting a Walkman® to the receiver, be sure to connect after the display "Creating Library" or "Creating Database" on the Walkman® has disappeared.

Operating the USB device

USB

Sound field buttons

►II

I◄◄/►►I

FOLDER +/–

◄◄/►►

VOL +/–

REPEAT
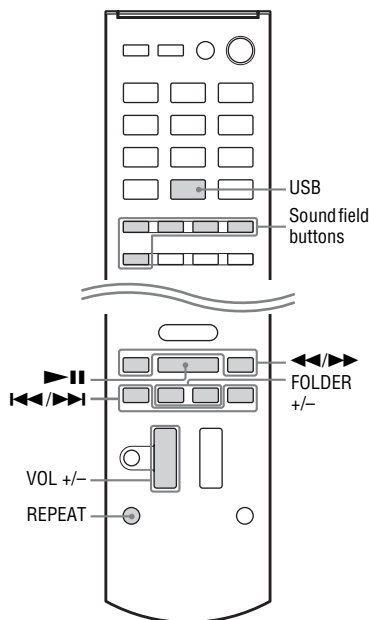
1 Press USB.

You can also use INPUT SELECTOR on the receiver.

2 Connect a USB device to the ⦂ (USB) port.

"USB" lights up on the display panel and the playback starts automatically.

3 Press VOL +/– to adjust the volume.

You can also use MASTER VOLUME on the receiver.

4 Press sound field buttons to enjoy the surround sound.

You can also use MUSIC/MOVIE, GAME or FÚTBOL (Latin America and Argentina models only)/ FOOTBALL (other models) on the receiver.
For details, see page 33.

Other operations

Press	Operation
►II	Starts/pauses play.
◄◄/►►	Fast reverses or forwards.
I◄◄/►►I	Goes to the previous/next file.
FOLDER +/–	Goes to the previous/next folder.
REPEAT	Enters repeat mode.
SHUFFLE	Enters shuffle mode.

Notes on the USB device

- Do not remove the USB device during operation. To avoid data corruption or damage to the USB device, turn the receiver off when connecting or removing the USB device.
- When USB cable connection is necessary, connect the USB cable supplied with the USB device to be connected. Refer to the operating instructions supplied with the USB device to be connected for details on the operation method.
- Do not connect the receiver and the USB device through a USB hub.
- It may take about 10 seconds before "READING" appears depending on the type of USB device connected.
- When the USB device is connected, the receiver reads all the files on the USB device. If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.
- The receiver can recognize up to
  – 256 folders (including "ROOT" folder).
  – 256 audio files for each folder.

Basic Operations

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– 16 folder levels (tree structure of files, including "ROOT" folder).
The maximum number of audio files and folders may vary depending on the file and folder structure.
Do not save other types of files or unnecessary folders on a USB device.
• Compatibility with all encoding/writing softwares, recording devices, and recording media cannot be guaranteed. Incompatible USB device may produce noise or interrupted audio or may not play at all.
• Some time may be needed to start playback when:
– the folder structure is complex.
– the memory capacity is excessive.
• This receiver does not necessarily support all the functions provided in a connected USB device.
• The playback order for the receiver may differ from the playback order of the connected USB device.
• Folders that have no audio files are skipped.
• When playing a very long track, some operations may cause playback delay.

USB message list

Message and explanation

READING
The receiver is recognizing and reading information of the USB device.

DEVICE ERROR
The memory of the USB device could not be recognized (page 27).

NO SUPPORT
An unsupported USB device is connected, an unknown device is connected, or the USB device is connected through a USB hub (page 27).

NO DEVICE
No USB device is connected or the connected USB device is not recognized.

NO TRACK
No track was found.

Tuner Operations

Listening to FM/AM radio

You can listen to FM and AM broadcasts through the built-in tuner. Before operation, be sure you have connected the FM and AM antennas (aerials) to the receiver (page 23).

Tip

The tuning scale is shown below.

Area	FM	AM
Latin America and Argentina	50 kHz	10 kHz*
Australia, South Africa, Middle East, India, Thailand, and Singapore	50 kHz	9 kHz

* The AM tuning scale can be changed (page 31).

FM[1])

AM[1])/
TUNER[2])

AMP
MENU

$\oplus$,
▲/▼/◀/▶

FM
MODE
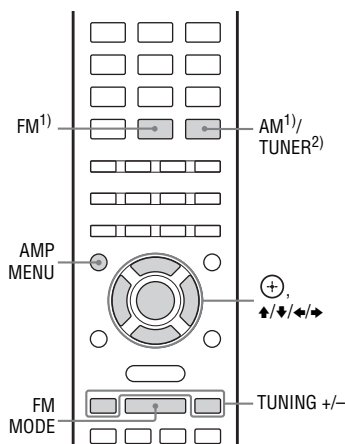
TUNING +/–

[1]) South Africa and Argentina models only.
[2]) Other models.

Tuning to a station automatically (Auto Tuning)

1 **Press TUNER repeatedly (or press FM or AM) to select the FM or AM band.**

You can also use INPUT SELECTOR on the receiver.

2 **Press TUNING + or TUNING –.**

TUNING + scans from lower to higher frequency stations and TUNING – scans from higher to lower stations. The receiver stops scanning whenever a station is received.

In case of poor FM stereo reception

If the FM stereo reception is poor and "ST" flashes on the display panel, select monaural audio to lessen the sound distortion.
Press FM MODE repeatedly to select "MONO".
To return to stereo mode, press FM MODE repeatedly to select "STEREO".

Changing the AM tuning scale

(Latin America and Argentina models only)

You can change the AM tuning scale to either 9 kHz or 10 kHz.

1 **Press TUNER repeatedly (or press AM) to select AM.**

You can also use INPUT SELECTOR on the receiver.

2 **Press AMP MENU.**

3 **Press ♦/♦ repeatedly to select "TUNER", then press ⊕ or ♦.**

4 **Press ♦/♦ repeatedly to select "AM STEP", then press ⊕ or ♦.**

5 **Press ♦/♦ repeatedly to select "9K STEP" or "10K STEP".**

Notes

- Depending on the settings, the receiver may take some time to change the AM tuning scale.
- All preset stations will be erased when you change the tuning scale.

Presetting FM/AM radio stations (Preset Memory)

You can store up to 30 FM and 30 AM stations as your favorite stations.
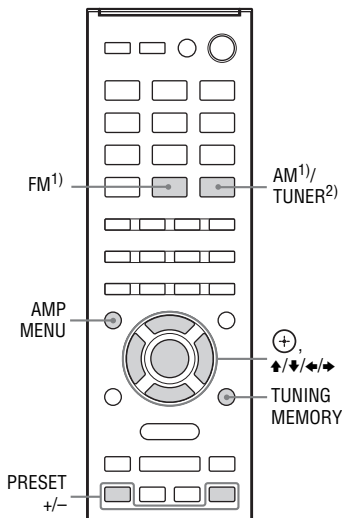
1) South Africa and Argentina models only.
2) Other models.

1 **Press TUNER repeatedly (or press FM or AM) to select the FM or AM band.**

You can also use INPUT SELECTOR on the receiver.

2 **Tune to the station that you want to preset (page 31).**

3 **Press TUNING MEMORY.**

4 **Press PRESET + or PRESET – to select a preset number.**

5 **Press ⊕.**
The station is stored as the selected preset number.

6 **Repeat steps 2 to 5 to store another station.**

Tuning to preset stations

1 **Press TUNER repeatedly (or press FM or AM) to select the FM or AM band.**
You can also use INPUT SELECTOR on the receiver.

2 **Press PRESET + or PRESET – repeatedly to select the station.**
Each time you press the button, you can select a preset station as follows:

→ 1 ↔ 2 ↔ 3 ↔ 4 ↔ 5 ↔...↔ 27↔
→ 30 ↔ 29 ↔ 28 ↔
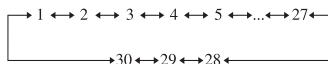
Naming preset stations

1 **Press TUNER repeatedly (or press FM or AM) to select the FM or AM band.**
You can also use INPUT SELECTOR on the receiver.

2 **Tune to the preset station which you want to create an index name (page 32).**

3 **Press AMP MENU.**

4 **Press ♦/♦ repeatedly to select "TUNER", then press ⊕ or ➡.**

5 **Press ♦/♦ repeatedly to select "NAME IN", then press ⊕ or ➡.**
The cursor flashes and you can enter a character.

6 **Press ♦/♦ to select a character, then press ♦/➡ to move the input position backward and forward.**
You can enter up to 8 characters to name the station.

Tips

• You can select the character type as follows by pressing ♦/♦.
Alphabet (upper case) → Numbers → Symbols
• To enter a blank space, press ➡ without selecting a character.

If you made a mistake
Press ♦/➡ until the character you want to change flashes, then press ♦/♦ to select the correct character.

7 **Repeat step 6 to input a character one by one, then press ⊕.**
The name you entered is registered.

Selecting the sound field

This receiver can create multi channel surround sound. You can select one of the optimized sound fields from the receiver's pre-programmed sound fields.

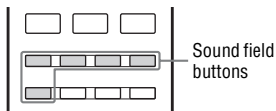Sound field buttons

Press any of the sound field buttons to select the sound field you want.

You can also use MUSIC/MOVIE, GAME or FÚTBOL (Latin America and Argentina models only)/FOOTBALL (other models) on the receiver.

Note

Before selecting the sound field, be sure to select the speaker layout settings according to your speaker placement (page 12).

■ MUSIC ARENA

You can enjoy Live Music Concert filled with great excitement created by Sony unique Audio DSP technology. (Digital Music Arena)

■ MUSIC

Reproduces music sound with multi channel output.

■ MOVIE

Optimizes sound output for movie playback.

■ GAME

Reproduces the sound processing of video games for better gaming experience.

■ FOOTBALL

Press FÚTBOL (Latin America and Argentina models only)/FOOTBALL (other models) repeatedly while watching a football match broadcast.

You can experience a feeling of presence in the stadium when watching the football match broadcast.

- **FOOTBALL:** You can enjoy an immersive feeling of being in a football stadium through enhanced stadium cheers.
- **NARRATE.OFF:** You can enjoy a more immersive feeling of being in a football stadium by minimizing the volume level of narration in addition to the enhancement of cheers.
- **OFF:** The football mode is turned off.

Notes on sound fields

- The effects provided by the Digital Music Arena, Game and Football sound field may cause increased noise in the playback signal.
- We recommend you to select the football mode when watching a football match broadcast.
- If you hear unnatural sound in the content when "NARRATE.OFF" is selected, "FOOTBALL" is recommended.
- The football and digital music arena modes are automatically set to "OFF" when you press any of the sound field buttons.
- Football mode does not support monaural sound.

Tip

You can identify the encoding format of DVD software, etc., by looking at the logo on the package.

To turn off the surround effect

Press MOVIE.
You can also use MUSIC/MOVIE on the receiver to select "MOVIE".

Adjusting the equalizer

You can use the following parameters to adjust the tonal quality (bass/treble level) of front speakers.

33GB

EQ BASS ———— EQ TREBLE

$\oplus$, ▲/▼
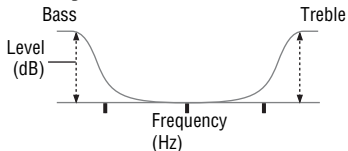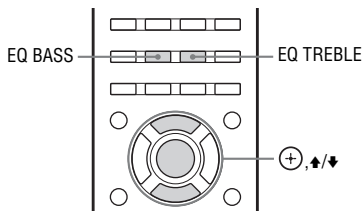
1 Press EQ BASS or EQ TREBLE.

2 Press ▲/▼ to adjust the gain, then press $\oplus$.

Resetting sound fields to the default settings

Be sure to use the buttons on the receiver to perform this operation.
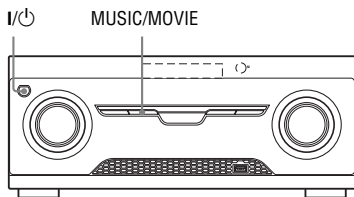
I/$\circlearrowleft$ MUSIC/MOVIE

1 Press I/$\circlearrowleft$ to turn off the receiver.

2 While holding down MUSIC/MOVIE, press I/$\circlearrowleft$.

"S.F. CLEAR" appears on the display panel and all sound fields are reset to their default setting.

About the *Bluetooth* wireless technology

Bluetooth wireless technology is a short-range wireless technology that enables wireless data communication between digital devices. *Bluetooth* wireless technology operates within a range of about 10 meters.
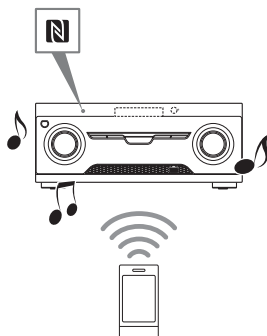
Supported *Bluetooth* version and profiles

Profile refers to a standard set of capabilities for various *Bluetooth* product capabilities. This receiver supports the following *Bluetooth* version and profiles.

Supported *Bluetooth* version:
Bluetooth Specification version 3.0
Supported *Bluetooth* profiles:
A2DP (Advanced Audio Distribution Profile): Receiving audio content of high-quality
AVRCP 1.3 (Audio Video Remote Control Profile): Controlling audio/video equipment; pausing, stopping, starting playback, volume control, etc.

- To use a *Bluetooth* device connected to this receiver, the *Bluetooth* device must support the same profile as this receiver. Even if the device supports the same profile, the functions may differ depending on the specifications of the *Bluetooth* device.
- The audio playback on this receiver may be delayed from that on the *Bluetooth* device because of the characteristics of the *Bluetooth* wireless technology.

Pairing the receiver with a *Bluetooth* device

Pairing is an operation where *Bluetooth* devices register with each other beforehand. Once a pairing operation is performed, it does not need to be performed again.

1 Place the *Bluetooth* device within 1 meter from this receiver.

2 Press BLUETOOTH.
You can also use INPUT SELECTOR on the receiver.
"PAIRING" appears and "BT" flashes quickly on the display panel.
Perform step 3 within 5 minutes, otherwise pairing will be canceled. In this case, repeat this step.

Note

Set the *Bluetooth* device in pairing mode. For details on setting the *Bluetooth* device in pairing mode, refer to the operating instructions supplied with the device.

3 Perform pairing on the *Bluetooth* device to detect this receiver.
For details, refer to the operating instructions of your *Bluetooth* device.

Note

When establishing a connection with this receiver, select the audio profile (A2DP, AVRCP) at the *Bluetooth* device. If the *Bluetooth* device does not support AVRCP profile, you cannot perform playback or other operations with this receiver (page 34).

4 Select your receiver's name (for example, "HT-M77") on the *Bluetooth* device display.
If the receiver's name is not displayed, repeat from step 1.

Note

If passkey is required on the display of the *Bluetooth* device, enter "0000".

5 Once pairing is completed, the device is automatically connected to the receiver.
Device name appears and "BT" lights up on the display panel.

6 Start playback on the *Bluetooth* device.

7 Adjust the volume.
Adjust the volume of the *Bluetooth* device first, if the volume level is still too low, adjust the volume level on the receiver.

Notes

- Passkey may be called "Passcode", "PIN code", "PIN number" or "Password".
- You can pair up to 9 *Bluetooth* devices. If 10th *Bluetooth* device is paired, the least recently connected device will be replaced by the new one.
- Pairing from another *Bluetooth* device is not possible when the receiver is connecting to a *Bluetooth* device.
- Depending on the type of *Bluetooth* device, you can adjust the volume using the controls of the *Bluetooth* device.

Using *Bluetooth* Features

Connecting a *Bluetooth* device

You can connect to a *Bluetooth* device from this receiver.
Check the following before playing music:
– The *Bluetooth* function of the *Bluetooth* device is turned on.
– The pairing has been completed (page 35).

1 **Place the *Bluetooth* device within 1 meter from this receiver.**

2 **Press BLUETOOTH**
You can also use INPUT SELECTOR on the receiver.

3 **Perform connecting on the *Bluetooth* device.**
For details, refer to the operating instructions of your *Bluetooth* device.

4 **Press ▶ to start playback.**

5 **Adjust the volume.**
Adjust the volume of the *Bluetooth* device first, if the volume level is still too low, adjust the volume level on the receiver.

To disconnect the *Bluetooth* device
Bluetooth connection can only be disconnected by the *Bluetooth* device or if there is a signal loss.

To delete a paired *Bluetooth* device from the device list
Initialize the receiver (page 49).

Notes

• Depending on the type of *Bluetooth* device, you can adjust the volume using the controls of the *Bluetooth* device.
• If you cannot connect with a paired *Bluetooth* device, perform the pairing operation between the receiver and the *Bluetooth* device again.
• If the input has been set to "BLUETOOTH" when you turn on the receiver, the receiver automatically connects to the last connected *Bluetooth* device.

To operate the *Bluetooth* device using the remote control
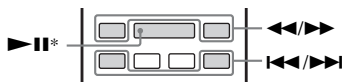
Once the receiver and the *Bluetooth* device are connected, you can control playback by pressing ▶II*, ◀◀/▶▶ and I◀◀/▶▶I.

* If no *Bluetooth* device is connected and you press ▶II, the receiver automatically connects to the last connected *Bluetooth* device and play back the music.

Note

These operations may not be available for certain *Bluetooth* devices. In addition, the actual operations may differ depending on the connected *Bluetooth* device.

Setting the *Bluetooth* Standby mode

You can set the *Bluetooth* Standby mode so that the receiver can be controlled by the *Bluetooth* device even when the receiver is in standby mode.

1 **Press BLUETOOTH.**
You can also use INPUT SELECTOR on the receiver.

2 **Press AMP MENU.**

3 **Press ▲/▼ repeatedly to select "BT", then press ⊕ or ➡.**

4 **Press ▲/▼ repeatedly to select "BT STANDBY", then press ⊕ or ➡.**

5 **Press ▲/▼ repeatedly to select "STBY ON", then press ⊕.**
The receiver turns on automatically when you establish the *Bluetooth* connection from the *Bluetooth* device.

To turn off this function

Select "STBY OFF" in step 5.

Note

You can only select this parameter when a *Bluetooth* device is paired.

Setting the *Bluetooth* audio codecs

You can enable and disable AAC (Advanced Audio Coding) audio.

1 Press BLUETOOTH.
You can also use INPUT SELECTOR on the receiver.

2 Press AMP MENU.

3 Press ↑/↓ repeatedly to select "BT", then press ⊕ or ➜.

4 Press ↑/↓ repeatedly to select "BT AAC", then press ⊕ or ➜.

5 Select "AAC ON" or "AAC OFF", then press ⊕.
- **AAC ON:** AAC audio is available.
- **AAC OFF:** AAC audio is not available.

Notes

- You can enjoy high quality sound if the AAC is enabled.
- When you change the setting, the *Bluetooth* device is disconnected from the receiver and reconnected automatically.

Checking the information of a connected *Bluetooth* device

You can check the *Bluetooth* device information by pressing DISPLAY repeatedly.
Each time you press DISPLAY, the display will change cyclically as follows:

Bluetooth device name → *Bluetooth* device address → Sound field currently applied → Volume level → Input you selected

Connecting a smartphone with One-touch (NFC)

What is "NFC"?

NFC (Near Field Communication) is a technology enabling short-range wireless communication between various devices, such as smartphones and IC tags. Thanks to the NFC function, data communication can be achieved easily just by holding the

device near the [N] (N-mark) on the

NFC-compatible devices.

By holding an NFC-compatible smartphone near to the N-Mark on the receiver, the receiver automatically:
– turns on in *Bluetooth* function.
– completes pairing.
– completes the *Bluetooth* connection.

1 Download and install the "NFC Easy Connect" app.

Download the free Android app from Google Play by searching for "NFC Easy Connect" or access it by using the two-dimensional code below. Data communication fees may be charged.

Two-dimensional code* for direct access

*Use a two-dimensional code reader app.

Notes

- The app may not be available in some countries/regions.
- Depending on your smartphone, you can use the NFC function without installing the app. In this case, the operations and specifications may differ. For details, refer to the operating instructions of your smartphone.

Compatible smartphones
Smartphones with a built-in NFC function

2 Start the "NFC Easy Connect" app on the smartphone.

Make sure that the app screen is displayed.

3 Hold the smartphone near to the N-Mark on the receiver until the smartphone vibrates.

Vibration cue is provided when the smartphone is recognized by the receiver.
After being recognized by the receiver, follow the on-screen instructions displayed on the smartphone, and complete the procedure for *Bluetooth* connection.

Notes

- The receiver only can recognizes and connects to one NFC-compatible device at a time.
- Depending on your smartphone, you may need to turn on the NFC function on your smartphone in advance. For details, refer to the operating instructions of the smartphone.

Tip

If pairing and the *Bluetooth* connection fail, do the following.

– Relaunch "NFC Easy Connect" and move the smartphone slowly over the [N] .

– Remove the case from the smartphone if using a commercially available smartphone case.

To listen to music

Start playback of an audio source on the smartphone. For details on playback operations, refer to the operating instructions of your smartphone.

Tip

If the volume level is low, adjust the volume of the smartphone first. If the volume level is still too low, adjust the volume level on the receiver.

To stop playback

The playback will be stopped when you perform any of the following items:

– Hold the smartphone near to the [N] on the receiver again.
– Stop the music player of the smartphone.
– Turn off the receiver or the smartphone.
– Change the function.
– Disable the *Bluetooth* function on the smartphone.

⊙ Using "SongPal" via *Bluetooth*

A dedicated app for this model is available on both Google Play and App Store. Search for "SongPal" and download the free App to find out more about the convenient features.

Easy Control app, "SongPal", supports wireless operation. It allows you to:

– choose music/audio contents from integrated functions of various device and smartphone.
– control various settings intuitively.
– enhance the music visually with your smartphone display.

Bluetooth technology works with iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPhone 3GS, iPod touch (5th generation), iPod touch (4th generation).

What is "BRAVIA" Sync?

The "BRAVIA" Sync function allows communication between Sony products such as TV, Blu-ray Disc player, DVD player, AV amplifier, etc. that supports the Control for HDMI function.

By connecting Sony equipment that is compatible with the "BRAVIA" Sync with an HDMI cable (not supplied), operation is simplified as follows:

- One-Touch Play (page 41)
- System Audio Control (page 41)
- System Power-Off (page 42)
- Scene Select (page 42)

Control for HDMI is a mutual control function standard used by HDMI CEC (Consumer Electronics Control) for HDMI (High-Definition Multimedia Interface).

We recommend that you connect the receiver to products featuring "BRAVIA" Sync.

Notes

- You may use "One Touch Play", "System Audio Control", and "System Power-Off" function with non-Sony equipment. However, compatibility with all non-Sony equipment is not guaranteed.
- "Scene Select"is Sony proprietary function. It cannot operate with non-Sony equipment.
- Equipment not compatible with "BRAVIA" Sync cannot activate these features.
- Depending on the connected equipment, the Control for HDMI function may not work. Refer to the operating instructions of the equipment.

"BRAVIA" Sync Features

Preparing for the "BRAVIA" Sync

The receiver is compatible with the "Control for HDMI-Easy Setting" function.
- If your TV is compatible with the "Control for HDMI-Easy Setting" function, you can set the Control for HDMI function of the receiver and playback equipment automatically by setting the Control for HDMI function on your TV (page 40).
- If your TV is not compatible with the "Control for HDMI-Easy Setting" function, set the Control for HDMI function of the receiver, playback equipment and TV individually (page 40).

If your TV is compatible with the "Control for HDMI-Easy Setting" function

1 Connect the receiver, TV and playback equipment via HDMI connection (page 18, 21).

(The respective equipment must be compatible with the Control for HDMI function.)

2 Turn on the receiver, TV and playback equipment.

3 Turn on the Control for HDMI function of the TV.

The Control for HDMI function of the receiver and all the connected equipment are turned on simultaneously. Wait until "COMPLETE" appears. The setup is complete.

For details on setup of the TV, refer to the operating instructions of your TV.

If your TV is not compatible with the "Control for HDMI-Easy Setting" function

AMP MENU

$\oplus$, ↑/↓/←/→
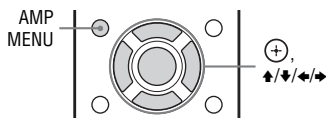
1 Press AMP MENU.

2 Press ↑/↓ repeatedly to select "HDMI", then press $\oplus$ or →.

3 Press ↑/↓ repeatedly to select "CTRL HDMI", then press $\oplus$ or →.

4 Press ↑/↓ repeatedly to select "CTRL ON", then press $\oplus$.

Control for HDMI function is turned on.

5 Set the Control for HDMI function of the connected equipment to on.

If the Control for HDMI function is already set to on, you do not need to change the setting.

For details on setting the TV and connected equipment, refer to the operating instructions of the respective equipment.

Notes

- When you unplug the HDMI cable or change the connection, perform the steps given in "If your TV is compatible with the "Control for HDMI-Easy Setting" function" (page 40) or "If your TV is not compatible with the "Control for HDMI-Easy Setting" function" (page 40).
- Before you perform the "Control for HDMI-Easy Setting" on your TV, be sure to turn on the TV and other connected equipment including the receiver first.
- If the playback equipment cannot function after you have made the settings for "Control for HDMI-Easy Setting", check the Control for HDMI setting of the playback equipment.
- If the connected equipment does not support the "Control for HDMI-Easy Setting", but still supports the Control for HDMI, then you need to set the Control for HDMI function of the connected equipment before you perform the "Control for HDMI-Easy Setting" from the TV.

One-Touch Play

When you start playback the equipment connected to the receiver via an HDMI connection, the receiver and TV operation are simplified as follows:

Receiver and TV

Turns on (if in standby mode)

↓

Switches to appropriate HDMI input
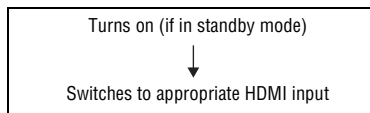
If you set "PASS THRU" to "ON" or "AUTO" (page 47), then set the receiver to standby mode, sound and image can be output only from the TV.

Notes
- Be sure that the System Audio Control function is set to on using TV menu.
- Depending on the TV, the start of the content may not appear.
- Depending on the settings, the receiver may not turns on when "PASS THRU" is set to "ON" or "AUTO".

Tip

You can also select a connected equipment, such as Blu-ray Disc player or DVD player from the TV menu. The receiver and TV will automatically switch to the appropriate HDMI input.

System Audio Control

You can enjoy the TV sound from the speakers connected to the receiver by a simple operation.
You can operate System Audio Control function using the TV menu. For details, refer to the operating instructions of the TV.

TV	**Receiver**
Switches the TV speaker setting to output sound from the receiver	• Turns on (if in standby mode) • Switches to appropriate HDMI input
Turns off the TV sound temporarily	Outputs TV sound
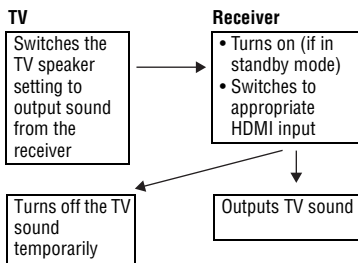
You can also use the System Audio Control function as follows.
- If you turn on the receiver while the TV is turned on, the System Audio Control function will automatically activate to output TV sound through the speakers connected to the receiver. However, if you turn off the receiver, the sound will output from the TV speakers.
- When sound from the TV or other equipment is output via the speakers connected to the receiver, you can switch the sound to output from the TV speakers by pressing SPEAKERS TV ↔ AUDIO.
- When you enjoy the TV sound from the speakers connected to the receiver, you can adjust the volume or turn off the sound temporarily by using the TV's remote control.

- If System Audio Control does not function according to your TV setting, refer to the operating instructions of the TV.
- When "CTRL HDMI" is set to "CTRL ON", the "AUDIO OUT" settings in the HDMI settings menu will set automatically based on the System Audio Control settings (page 47).
- Your TV must support the System Audio Control function.
- If the TV is turned on before turning on the receiver, the TV will momentarily loose the sound output.

System Power-Off

When you turn the TV off, using the power button on the TV's remote control, the receiver and the connected equipment turn off automatically.
You can also use the receiver's remote control to turn off the TV.
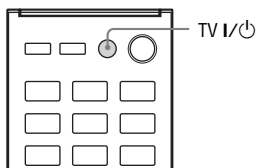
Press TV I/(¹).
The TV, receiver and the connected equipment are turned off.

- Set the TV power supply interlock function to on before using the System Power-Off function. For details, refer to the operating instructions of the TV.
- Depending on the condition of the connected equipment, it may not be turned off. For details, refer to the operating instructions of the connected equipment.

Scene Select

The optimum picture quality and sound field are selected automatically according to the scene selected on your TV.
For details on the operation, refer to the operating instructions of the TV.

The sound field may not switch depending on the TV.

Correspondence table

Scene setting on the TV	Sound field
Cinema	MOVIE
Sports	MOVIE
Music	MUSIC
Animation	MOVIE
Photo	MUSIC
Game	GAME
Graphics	MUSIC

Adjusting settings

Using the settings menu

You can customize the receiver by making various adjustments using the setting menu.

AMP
MENU

RETURN

$\oplus$,
$\blacktriangle$/$\blacktriangledown$/$\blacktriangleleft$/$\blacktriangleright$

1 Press AMP MENU.

2 Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select the menu item you want, then press $\oplus$ or $\blacktriangleright$.

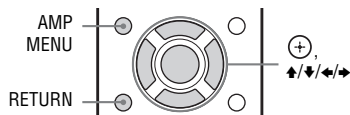**3** Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select the parameter you want to adjust, then press $\oplus$ or $\blacktriangleright$.

4 Press $\blacktriangle$/$\blacktriangledown$ repeatedly to select the setting you want, then press $\oplus$.

To return to the previous display

Press $\blacktriangleleft$ or RETURN.

To exit the menu

Press AMP MENU.

Note

Some parameters and settings may appear dimmed on the display panel. This means that they are either unavailable or fixed and unchangeable.

Overview of the menus

The following options are available in each menu. For details, see the referencing page in the parentheses.

Menu [Display]	Parameters [Display]	Settings
Level settings [LEVEL] (page 45)	Test tone [TEST TONE]	OFF, AUTO ■■■[a]
	Front speaker balance [FRT BAL]	BAL. L+1 to BAL. L+6, BALANCE, BAL. R+1 to BAL. R+6
	Center speaker level [CNT LEVEL]	CNT –6.0 dB to CNT +6.0 dB (0.5 dB interval)
	Surround left speaker level [SL LEVEL]	SL –6.0 dB to SL +6.0 dB (0.5 dB interval)
	Surround right speaker level [SR LEVEL]	SR –6.0 dB to SR +6.0 dB (0.5 dB interval)
	Surround back left speaker level[b] [SBL LEVEL]	SBL –6.0 dB to SBL +6.0 dB (0.5 dB interval)
	Surround back right speaker level[b] [SBR LEVEL]	SBR –6.0 dB to SBR +6.0 dB (0.5 dB interval)
	Subwoofer level [SW LEVEL]	SW –6.0 dB to SW +6.0 dB (0.5 dB interval)

Menu [Display]	Parameters [Display]	Settings
	Dynamic range compressor [D. RANGE]	COMP. MAX, COMP. STD, COMP. OFF
Speaker settings [SPEAKER] (page 46)	Front left speaker distance [FL DIST.]	
	Front right speaker distance [FR DIST.]	
	Center speaker distance [CNT DIST.]	
	Surround left speaker distance [SL DIST.]	
	Surround right speaker distance [SR DIST.]	1.00 M to 10.00 M (0.01 m interval)
	Surround back left speaker distance[b) [SBL DIST.]	
	Surround back right speaker distance[b) [SBR DIST.]	
	Subwoofer distance [SW DIST.]	
EQ settings [EQ] (page 46)	Front speakers bass level [BASS]	BASS –6 dB to BASS +6 dB (1 dB interval)
	Front speakers treble level [TREBLE]	TREBLE –6 dB to TREBLE +6 dB (1 dB interval)
Tuner settings [TUNER] (page 46)	FM station receiving mode [FM MODE]	STEREO, MONO
	Naming preset stations [NAME IN]	For details, see "Naming preset stations" (page 32).
	AM tuning scale selection[c) [AM STEP]	For details, see "Changing the AM tuning scale" (page 31).
Audio settings [AUDIO] (page 46)	Synchronizes audio with video output [A/V SYNC]	HDMI AUTO, 0 MS to 300 MS (10 ms interval)
	Digital broadcast language selection [DUAL MONO]	MAIN/SUB, MAIN, SUB
	Pro Logic II Decoding mode[d) [PLII DEC.]	AUTO, ON, OFF
HDMI settings [HDMI] (page 47)	Control for HDMI [CTRL HDMI]	CTRL ON, CTRL OFF
	HDMI Signal Pass Through [PASS THRU]	OFF, AUTO, ON
	Setting HDMI audio input [AUDIO OUT]	AMP, TV+AMP

Menu [Display]	Parameters [Display]	Settings
	Fast view [FAST VIEW]	AUTO, OFF
Bluetooth settings [BT] (page 48)	*Bluetooth* standby mode[e)] [BT STANDBY]	STBY ON, STBY OFF
	Bluetooth AAC [BT AAC]	AAC ON, AAC OFF
System settings [SYSTEM] (page 48)	Brightness of the display panel [DIMMER]	DIMMER OFF, DIMMER ON
	Main unit illumination [MAIN ILLUM.]	ON, OFF
	Auto standby mode [AUTO STBY]	STBY ON, STBY OFF
	Naming inputs [NAME IN]	For details, see "Naming inputs" (page 27).

[a)] ■■■ represent a speaker channel.
   – HT-M77 only: FL, FR, CNT, SL, SR, SBL, SBR, SW
   – HT-M22/HT-M55 only: FL, FR, CNT, SL, SR, SW
[b)] HT-M77 only.
[c)] Latin America and Argentina models only.
[d)] You can only select this parameter if the sound field is set to "MOVIE" and the speaker layout settings is set to "STANDARD".
[e)] You can only select this parameter when a *Bluetooth* device is paired.

LEVEL settings menu

You can adjust the level and balance of each speaker manually.

■ TEST TONE

Lets you adjust the speaker levels and balance while listening to the test tone from your seating position (page 25).

■ FRT BAL

Lets you adjust the balance between front left and right speakers.

■ CNT LEVEL, SL LEVEL, SR LEVEL, SBL LEVEL*, SBR LEVEL*, SW LEVEL

Lets you adjust each speaker's level (center, surround left/right, surround back left/right*, subwoofer).

* HT-M77 only.

■ D. RANGE (Dynamic range compressor)

Lets you compress the dynamic range of the soundtrack. This may be useful when you want to watch movies at low volumes late at night. Dynamic range compression is possible with Dolby Digital sources only.
• **COMP. MAX:** The dynamic range is compressed dramatically.
• **COMP. STD:** The dynamic range is compressed as intended by the recording engineer.

Adjusting settings

- **COMP. OFF:** The dynamic range is not compressed.

Tip

"COMP. STD" is the standard setting, and enacts light compression. Therefore, we recommend using the "COMP. MAX" setting. This greatly compresses the dynamic range and lets you view movies late at night at low volumes. Unlike analog limiters, the levels are predetermined and provide a very natural compression.

SPEAKER settings menu

You can adjust the position and distance of the speakers connected to this receiver.

■ FL DIST., FR DIST., CNT DIST., SL DIST., SR DIST., SBL DIST.*, SBR DIST.*, SW DIST.

Lets you adjust the distance from your seating position to each speaker (front left/right, center, surround left/right, surround back left/right*, subwoofer).
If both front speakers are not placed in equal distance from your seating position, set the distance to the closest speaker.

* HT-M77 only.

EQ settings menu

You can adjust the bass and treble level for front speakers. For details, see "Adjusting the equalizer" (page 33).

TUNER settings menu

You can set the FM station receiving mode and name the preset stations.

■ FM MODE
- **STEREO:** This receiver will decode the signal as stereo signal when the radio station is broadcast in stereo.
- **MONO:** This receiver will decode the signal as mono signal regardless of the broadcast signal.

■ NAME IN
Lets you set the name of preset stations. For details, see "Naming preset stations" (page 32).

■ AM STEP*
Lets you change the AM STEP to either 9 kHz or 10 kHz. For details, see "Changing the AM tuning scale" (page 31).

* Latin America and Argentina models only.

AUDIO settings menu

You can adjust settings for the audio to suit your preference.

■ A/V SYNC
- **HDMI AUTO:** The time gap between audio output and visual display for the monitor connected via an HDMI connection will be adjusted automatically based on the information for the TV. This feature is available only when the monitor supports the A/V Sync function.
- **0 MS - 300 MS:** You can adjust the delay from 0 ms to 300 ms in 10 ms intervals.

Notes
- This function is useful when you use a large LCD or plasma monitor or a projector.
- The delay time may vary depending on audio format, sound field and speaker distance settings.

■ DUAL MONO

Lets you select the language you want when you listen to the dual audio of a digital broadcast when available. This feature only functions for Dolby Digital sources.

- **MAIN/SUB:** Sound of the main language will be output through the front left speaker and sound of the sub language will be output through the front right speaker simultaneously.
- **MAIN:** Sound of the main language will be output.
- **SUB:** Sound of the sub language will be output.

■ PLII DEC.

Lets you turn the Pro Logic II decoding mode on or off.

- **AUTO:** Applies the Pro Logic II decoding mode automatically when receiving the Dolby Surround encoded signals.
- **ON:** Applies the Pro Logic II decoding mode when receiving 2 channels signals.
- **OFF:** Pro Logic II decoding mode is turned off.

Note

This function works only in the following cases.
– "MOVIE" is selected.
– Speaker layout settings is set to "STANDARD" (page 12).

HDMI settings menu

You can adjust the required settings for equipment connected to the HDMI jacks.

■ CTRL HDMI

Lets you turn the Control for HDMI function on or off. For details, see ""BRAVIA" Sync Features" (page 39).

■ PASS THRU

Lets you output the HDMI signals to the TV even when the receiver is in standby mode.

- **ON:** When the receiver is in the standby mode, the receiver continuously outputs HDMI signals from the receiver's HDMI TV OUT jack.
- **AUTO:** When the TV is turned on while the receiver is in the standby mode, the receiver outputs HDMI signals from the receiver's HDMI TV OUT jack. Sony recommends this setting if you use a "BRAVIA" Sync compatible Sony TV. This setting saves power in the standby mode when compared with the "ON" setting.
- **OFF:** The receiver does not output HDMI signals when in the standby mode. Turn on the receiver to enjoy the connected equipment's source on the TV. This setting saves power in the standby mode when compared with the "ON" setting.

Notes

- This parameter is not available when "CTRL HDMI" is set to "CTRL OFF".
- When "AUTO" is selected, it may take a little more time for the image and sound to be output to the TV than when "ON" is selected.
- When the receiver is in standby mode, "A.STANDBY" appears on the display if "PASS THRU" is set to "AUTO" or "ON". However, "A.STANDBY" will disappear when "PASS THRU" is set to "AUTO" and no signals are detected.

■ AUDIO OUT

Lets you set the HDMI audio output from the playback equipment connected to the receiver via an HDMI connection.

- **AMP:** The HDMI audio signals from the playback equipment are only output to the speakers connected to the receiver. Multi channel sound can be played back as it is.

Audio signals are not output from the TV's speaker when "AUDIO OUT" is set to "AMP".

- **TV+AMP:** The sound is output from TV's speaker and the speakers connected to the receiver.

- The sound quality of the playback equipment depends on the TV's sound quality, such as the number of channels, and the sampling frequency, etc. If the TV has stereo speakers, the sound output from the receiver is also in stereo as that of the TV, even if you play back multi channel source.
- When you connect the receiver to an image display equipment (projector, etc.), sound may not be output from the receiver. In this case, select "AMP".

■ Fast View

Lets you set the operation of Fast View.
- **AUTO:** You can select HDMI input faster than the normal selection.
- **OFF:** This function is not available.

BT settings menu

You can adjust the settings for *Bluetooth*.

■ BT STANDBY

Lets you set the *Bluetooth* standby mode. For details, see "Setting the *Bluetooth* Standby mode" (page 36).

■ BT AAC

Lets you set the *Bluetooth* audio codes. For details, see "Setting the *Bluetooth* audio codecs" (page 37).

SYSTEM settings menu

You can customize the settings of the receiver.

■ DIMMER

Lets you adjust the brightness of the display panel.
- **DIMMER ON:** The brightness of the display is reduced.
- **DIMMER OFF:** The brightness of the display remain unchanged.

■ MAIN ILLUM.

Lets you adjust the lighting status of the front panel LEDs.
- **ON:** The front panel LEDs lighting status turns on.
- **OFF:** The front panel LEDs lighting status turns off.

■ AUTO STBY

Lets you set the receiver switch to standby mode automatically when you do not operate the receiver or when there is no signals input to the receiver.
- **STBY ON:** Switches to standby mode after approximately 20 minutes.
- **STBY OFF:** Does not switch to standby mode.

- This function does not work when TUNER input is selected.
- If you use the Auto standby mode and the Sleep Timer at the same time, the Sleep Timer has priority.

■ NAME IN

- Lets you set the name of inputs. For details, see "Naming inputs" (page 27).

Viewing information on the display panel

The display panel provides various information of the receiver status such as sound field.

AMP MENU

DISPLAY

INPUT SELECTOR buttons
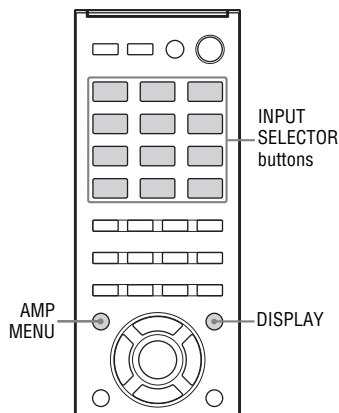
1 **Press the corresponding INPUT SELECTOR button which you want to check the information.**

2 **Press DISPLAY repeatedly.**
Each time you press the button, the display changes cyclically as follows:

Index name of the input* → Input you selected → Sound field currently applied → Volume level → Stream information**

When listening to FM and AM radio
Preset station name* → Frequency → Sound field currently applied → Volume level

* Index name appears only when you have assigned one to the input or preset station (page 27, 32). Index name does not appear when only blank spaces have been entered, or it is the same as the input name.
** Stream information may not be displayed.

Reverting back to the factory default settings

You can clear all memorized settings and revert the receiver back to the factory default settings by performing the following procedure. This procedure can also be used to initialize the receiver before you use it for the first time.
Be sure to use the button on the receiver to perform this operation.

I/(¹)
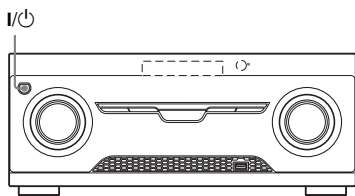
1 **Press I/(¹) to turn off the receiver.**

2 **Hold down I/(¹) for 5 seconds.**
The "CLEARING" appears on the display panel for a while, then changes to CLEARED *.
Changes or adjustments made to the settings are now reset to the defaults.

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

For the model supplied with the AC plug adaptor

If the AC plug of your receiver does not fit into the wall outlet, attach the supplied AC plug adaptor.
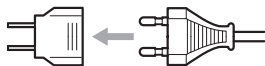
On heat buildup

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 equipment 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 equipment, noise may result, and picture quality may suffer. This is especially likely when using an indoor antenna (aerial). Therefore, we recommend using an outdoor antenna (aerial).)
• Use caution when placing the receiver or speakers 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 equipment, be sure to turn off and unplug the receiver.

If you encounter color irregularity on a nearby TV screen

The center speaker is magnetically shielded to allow it to be installed near a TV set. However, color irregularities may still be observed on certain types of TV sets. As the front speakers, surround/surround back speakers and the subwoofers are not magnetically shielded, we recommend that you place them slightly further away from a TV set (page 15).

If color irregularity is observed...

Turn off the TV set, then turn it on again after 15 to 30 minutes.

If color irregularity is observed again...

Place the speakers further away from the TV set.

On cleaning

Clean the cabinet, panel, speaker cone surfaces 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 benzine.

On *Bluetooth* communication

- *Bluetooth* devices should be used within approximately 10 meters (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 occur
- *Bluetooth* devices and wireless LAN (IEEE 802.11b/g) 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 away from the wireless LAN device.
  - Turn off the power to the wireless LAN equipment when using your *Bluetooth* device within 10 meters.
  - Install this receiver and *Bluetooth* device as closer to each other as possible.

- 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
- 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 cannot 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.

Troubleshooting

If you experience any of the following difficulties while using the receiver, use this troubleshooting guide to help you remedy the problem. Should any problem persists, consult your nearest Sony dealer. Note that if service personnel changes some parts during repair, these parts may be retained.

Power

The receiver is turned off automatically.

- "AUTO STBY" is set to "STBY ON" (page 48).
- The Sleep Timer function is working (page 11).
- "PROTECTOR" is working (page 58).

Image

No image appears on the TV.

- Select the appropriate input using the INPUT SELECTOR buttons.
- Set your TV to the appropriate input mode.
- Move your audio equipment away from the TV.
- Make sure that cables are correctly and securely connected to equipment.
- Depending on the playback equipment, you may need to set up the equipment. Refer to the operating instructions supplied with each equipment.
- Be sure to use a High Speed HDMI cable when you view images or listen to sound, especially for the 1080p, Deep Color (Deep Colour), 4K or 3D transmission.

No 3D image appears on the TV.

- Depending on the TV or the video equipment, 3D images may not be displayed. Check the HDMI video formats supported by the receiver (page 60).

No 4K image appears on the TV.

- Depending on the TV or video equipment, 4K images may not be displayed. Check the video capability and setting of your TV and video device. Also, make sure to connect the video equipment to 4K available HDMI IN jack of the receiver.

When the receiver is in standby mode, there is no image output from the TV.

- When the receiver enters into standby mode, image is from the last HDMI equipment selection before you turned off the receiver. If you are enjoying other equipment, play the equipment and perform the One-Touch Play operation, or turn on the receiver to select the HDMI equipment you want to enjoy.
- Make sure "PASS THRU" is set to "ON" in the HDMI settings menu if you connect equipment not compatible with the "BRAVIA" Sync to the receiver (page 47).

Sound

There is no sound, no matter which equipment is selected, or only a very low-level sound is heard.

- Check that all connecting cords are inserted to their input/output jacks for the respective jacks of the receiver, speakers and the equipment.
- Check that both the receiver and all equipment are turned on.
- Check that MASTER VOLUME control is not set to "VOL MIN".

- Press MUTING on the remote control to cancel the muting function.
- Try pressing the INPUT SELECTOR button on the remote control or turning the INPUT SELECTOR on the receiver to select the equipment of your choice (page 26).
- When you want to listen to the sound from the TV speaker, set the "AUDIO OUT" to "TV+AMP" in the HDMI settings menu (page 47). If you cannot play back multi channel audio source, set to "AMP". However, the sound will not output through the TV speaker. You can also press SPEAKERS TV ⟷ AUDIO repeatedly to select whether the sound is output via the TV speakers or the system's speakers.
- Sound may be interrupted when the sampling frequency, the number of channels or audio format of audio output signals from the playback equipment is switched.

There is severe hum or noise.

- Check that the speakers and equipment are connected securely.
- Check that the connecting cords are away from a transformer or motor, and at least 3 meters away from a TV set or fluorescent light.
- Move your audio equipment away from the TV.
- The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol.

There is no sound, or only a very low-level sound is heard from specific speakers.

- Check that all the cords are fully inserted into the jacks on both the receiver and the equipment.
- Make sure you have connected to both the L and R jacks of an analog equipment, analog equipment requires both L and R jack connections. Use an audio cord (not supplied).
- Adjust the speaker level (page 45).

- Check that the speaker cords (supplied) are connected correctly and securely (page 17).
- Check that the subwoofer is connected correctly and securely.

There is no sound from a specific equipment.

- Check that the equipment is connected correctly to the audio input jacks for that equipment.
- Check that the cord(s) used for the connection is (are) fully inserted into the jacks on both the receiver and the equipment.
- Check the setting of "AUDIO OUT" in the HDMI settings menu (page 47).
- You cannot listen to the Super Audio CD by connecting HDMI.
- Depending on the playback equipment, you may need to set up the HDMI setting of the equipment. Refer to the operating instructions supplied with each equipment.
- Be sure to use a High Speed HDMI cable when you view images or listen to sound, especially for the 1080p, Deep Color (Deep Colour), 4K or 3D transmission.
- Audio signals (format, sampling frequency, bit length, etc.) transmitted from an HDMI jack may be suppressed by the connected equipment. Check the setup of the connected equipment if the image is poor or the sound does not come out of the equipment connected via the HDMI cable.
- When the connected equipment is not compatible with copyright protection technology (HDCP), the image and/or the sound from the HDMI TV OUT jack may be distorted or may not be output. If this is the case, check the specification of the connected equipment.

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- The image resolution of the playback equipment may need to be at certain settings before you can enjoy Multi Channel Linear PCM. Refer to the operating instructions of the playback equipment.
- Make sure the TV is compatible with the System Audio Control function.
- If the TV does not have System Audio Control function, set the "AUDIO OUT" settings in the HDMI settings menu to
  – "TV+AMP" if you want to listen to the sound from the TV speaker and receiver.
  – "AMP" if you want to listen to the sound from the receiver.
- When you connect the receiver to a video equipment (projector, etc.), sound may not be output from the receiver. In this case, set the "AUDIO OUT" to "AMP" in the HDMI settings menu (page 47).
- You cannot listen to the sound of the equipment connected to the receiver while TV input is selected on the receiver
  – Be sure to change the input of the receiver to HDMI when you want to watch a program on the equipment connected via HDMI connection to the receiver.
  – Change the TV channel when you want to watch a TV broadcast.
  – Be sure to select the correct equipment or input you want when you watch a program from the equipment connected to the TV. Refer to the operating instructions of the TV on this operation.
- When using the Control for HDMI function, you cannot control the connected equipment using TV's remote control.

- – Depending on the connected equipment and TV, you may need to set up the equipment and TV. Refer to the operating instructions supplied with each equipment and TV.
  – Change the input of the receiver to the HDMI input connected to the equipment.

The left and right sounds are unbalanced or reversed.

- Check that the speakers and equipment are connected correctly and securely.
- Adjust the sound level parameters using the LEVEL settings menu (page 45).

Dolby Digital or DTS multi channel sound is not reproduced.

- Check that the DVD, etc. you are playing is recorded in Dolby Digital or DTS format.
- When connecting the DVD player, etc., to the digital input jacks of this receiver, make sure the digital audio output setting of the connected equipment is available.
- Set "AUDIO OUT" to "AMP" in the HDMI settings menu (page 47).
- You can enjoy Multi Channel Linear PCM only with an HDMI connection.

The surround effect cannot be obtained.

- Make sure you have selected the appropriate sound field (page 33).

A test tone is not output from the speakers.

- The speaker cords may not be connected securely. Check to see if they are connected securely and cannot be disconnected by pulling on them slightly.
- The speaker cords may have short-circuit problem.
- The MASTER VOLUME may has set to "VOL MIN".

When the receiver is in standby mode, there is no sound output from the TV.

- When the receiver enters into standby mode, sound is from the last HDMI equipment selection before you turned off the receiver. If you are enjoying other equipment, play the equipment and perform the One-Touch Play operation, or turn on the receiver to select the HDMI equipment you want to enjoy.
- Make sure "PASS THRU" is set to "ON" in the HDMI settings menu if you connect equipment not compatible with the "BRAVIA" Sync to the receiver (page 47).
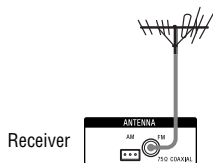
Tuner

The FM reception is poor.

- Use a 75-ohm coaxial cable (not supplied) to connect the receiver to an outdoor FM antennas (aerial) as shown below.

Outdoor FM antenna (aerial)

Receiver

Radio stations cannot be tuned in.

- Check that the antennas (aerials) are connected securely. Adjust the antennas (aerials) and connect an external antenna (aerial), if necessary.
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations is used). Preset the stations (page 31).

- Press DISPLAY repeatedly on the remote control so that the frequency appears on the display panel.

USB device

Are you using a supported USB device?

- If you connect an unsupported USB device, the following problems may occur. See "Compatible USB devices" (page 27) for the supported device types.
  - The USB device is not recognized.
  - File or folder names are not displayed on this receiver.
  - Playback is not possible.
  - The sound skips.
  - There is noise.
  - A distorted sound is output.

There is noise, skipping, or distorted sound.

- Turn off the receiver and reconnect the USB device, then turn on the receiver.
- The music data itself contains noise, or the sound is distorted.

The USB device is not recognized.

- Turn off the receiver, then disconnect the USB device. Turn on the receiver again and reconnect the USB device.
- Connect the supported USB device (page 27).
- The USB device does not work properly. Refer to the USB device operating instructions on how to deal with this problem.

Playback does not start.

- Turn off the receiver and reconnect the USB device, then turn on the receiver.
- Connect the supported USB device (page 27).
- Press ▶❚❚ to start playback.

The USB device cannot be connected into the ⟵ (USB) port.

- The USB device is being connected upside down. Connect the USB device in the correct orientation.

Erroneous display.

- The data stored in the USB device may have been corrupted.
- The character codes that can be displayed by this receiver are as follows:
  – Upper cases (A to Z)
  – Numbers (0 to 9)
  – Symbols (' = < > * + , – . / [\ ] _)
  Other characters may not be displayed correctly.

"READING" is displayed for an extended time, or it takes a long time before playback starts.

- The reading process can take a long time in the following cases.
  – There are many folders or files on the USB device.
  – The file structure is extremely complex.
  – The memory capacity is excessive.
  – The internal memory is fragmented.
  Thus, we recommend following these guidelines.
  – Total folders on USB device: 256 or less (including "ROOT" folder)
  – Total files per folder: 256 or less.

Audio file cannot be played back.

- MP3 files in MP3 PRO format cannot be played back.
- The audio file is a multiple track audio file.
- Some AAC files may not be played back correctly.
- WMA files in Windows Media Audio Lossless and Professional format cannot be played back.
- USB device formatted with file systems other than FAT16 or FAT32 are unsupported.*

- If you use partitioned USB device, only audio files on the first partition can be played back.
- Playback is possible up to 16 levels (including "ROOT" folder).
- The number of folders has exceeded 256 (including "ROOT" folder).
- The number of files in a folder has exceeded 256.
- Files that are encrypted or protected by passwords cannot be played back.

* This unit supports FAT16 and FAT32, but some USB device may not support all of these FAT.
  For details, refer to the operating instructions of each USB device or contact the manufacturer.

Bluetooth device

Pairing cannot be done.

- Move the *Bluetooth* device closer to the receiver.
- Pairing may not be possible if other *Bluetooth* devices are present around the receiver. In this case, turn off the other *Bluetooth* devices.
- Pairing from another *Bluetooth* device is not possible when the receiver is connecting to a *Bluetooth* device. Disconnect the *Bluetooth* device (page 36) and perform the pairing again (page 35).
- Make sure the correct passkey was entered at the *Bluetooth* device (page 35).

Connection is not possible.

- The *Bluetooth* device you attempted to connect does not support the A2DP profile, and cannot be connected with the receiver.
- Press BLUETOOTH to connect to the last connected *Bluetooth* device.
- Turn on the *Bluetooth* function of the *Bluetooth* device.
- Establish a connection from the *Bluetooth* device.

- The pairing registration information has been erased. Perform the pairing operation again (page 35).
- Erase the pairing registration information of a *Bluetooth* device (page 36) and perform the pairing operation again.

The sound skips or fluctuates, or the connection is lost.

- The receiver and the *Bluetooth* device are too far apart.
- If there are obstacles between the receiver and your *Bluetooth* device, remove or avoid the obstacles.
- If there is equipment that generates electromagnetic radiation, such as a wireless LAN, other *Bluetooth* device, or a microwave oven nearby, move them away.

The sound of your *Bluetooth* device cannot be heard on this receiver.

- Turn up the volume on your *Bluetooth* device first, and then adjust the volume using VOL + (or MASTER VOLUME on the receiver).

Severe hum or noise.

- If there are obstacles between the receiver and your *Bluetooth* device, remove or avoid the obstacles.
- If there is equipment that generates electromagnetic radiation, such as a wireless LAN, other *Bluetooth* device, or a microwave oven nearby, move them away.
- Turn down the volume of the connected *Bluetooth* device.

"SongPal" app is closed.

- Disconnect the *Bluetooth* connection on your smartphone, then reconnect it to the receiver again (page 36).

"BRAVIA" Sync (Control for HDMI)

The Control for HDMI function does not work.

- Check the HDMI connection (page 18, 21).
- Make sure "CTRL HDMI" is set to "CTRL ON" in HDMI settings menu (page 47).
- Make sure the connected equipment is compatible with the Control for HDMI function.
- Check the Control for HDMI settings on the connected equipment. Refer to the operating instructions of the connected equipment.
- If you unplug the HDMI cable or change the connection, repeat the procedures of "Preparing for the "BRAVIA" Sync" (page 40).
- When "CTRL HDMI" is set to "CTRL OFF", the "BRAVIA" Sync does not work properly, even if the equipment is connected to the HDMI IN jack.
- The types and the number of equipment which can be controlled by the "BRAVIA" Sync are restricted in the HDMI CEC standard as follows.
  – Recording equipment (Blu-ray Disc recorder, DVD recorder, etc.): up to 3 equipment
  – Playback equipment (Blu-ray Disc player, DVD player, etc.): up to 3 equipment
  – Tuner-related equipment: up to 4 equipment
  – AV receiver (audio system): up to 1 equipment

Additional Information

Remote control

The remote control does not function.

- Point the remote control at the remote control sensor on the receiver (page 7).
- Remove any obstacles in the path between the remote control and the receiver.
- Replace all the batteries in the remote control with new ones, if they are weak.
- Make sure you select the correct input on the remote control.

Error messages

If there is a malfunction, a message appears on the display panel. You can check the condition of the system by the message. If any problem persists, consult your nearest Sony dealer.
If an error message appears while you use a USB device, see "USB message list" (page 30).

PROTECTOR

Irregular current is output to the speakers, or the receiver is covered and ventilation holes are blocked. The receiver will automatically turn off after a few seconds. Remove the object covering the upper panel of the receiver, check the speaker connection and turn on the power again.

USB FAIL

An over current from the ⟜ (USB) port was detected. The receiver will automatically turn off after a few seconds. Check the USB device, then unplug it and turn on the power again.

Clearing the memory

Reference sections

To clear	See
All memorized settings	page 49
Customized sound fields	page 34

Specifications

Amplifier section

Power Output

• STR-KM77
Stereo mode output (rated)
(6 ohms, 1 kHz, THD 1%)
120 W + 120 W[1]

Surround mode output[2] (reference)
(6 ohms, 1 kHz, THD 30%)
RMS output
FRONT: 264 W per channel[1]
CENTER: 266 W[1]
SURROUND: 264 W per channel[1]
SURROUND BACK: 264 W per channel[1]

Surround mode output[2] (reference)
(4 ohms, 100 Hz, THD 30%)
SUBWOOFER: 300 W per channel[1]

• STR-KM55
Stereo mode output (rated)
(6 ohms, 1 kHz, THD 1%)
120 W + 120 W[1]

Surround mode output[3] (reference)
(6 ohms, 1 kHz, THD 30%)
RMS output
FRONT: 270 W per channel[1]
CENTER: 270 W[1]
SURROUND: 270 W per channel[1]

Surround mode output[3] (reference)
(4 ohms, 100 Hz, THD 30%)
SUBWOOFER: 300 W per channel[1]

• STR-KM22

Stereo mode output (rated)
(6 ohms, 1 kHz, THD 1%)
[1]
    100 W + 100 W[1]

Surround mode output[3] (reference)
(6 ohms, 1 kHz, THD 30%)
      RMS output
      FRONT: 252 W per channel[1]
      CENTER: 252 W[1]
      SURROUND: 252 W per channel[1]

Surround mode output[3] (reference)
(4 ohms, 100 Hz, THD 30%)
      SUBWOOFER: 290 W per channel[1]

[1] Measured under the following conditions:

Area	Power requirements
South Africa, Latin America, Singapore, India	240 V AC, 50 Hz
Middle East	127 V AC, 60 Hz
Australia, Argentina, Thailand	230 V AC, 50 Hz

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

[3] Reference power output for front, center, surround speakers and subwoofer(s). Depending on the sound field settings and the source, there may be no sound output.

Inputs
    Analog
      Sensitivity: 800 mV/50 kilohms
    Digital (Coaxial)
      Impedance: 75 ohms

Tone
    Gain levels
      ±6 dB, 1 dB step

Reproduction frequency range
    28 Hz – 20,000 Hz

FM tuner section

Tuning range
    87.5 MHz – 108.0 MHz

Antenna (aerial)
    FM wire antenna (aerial)

Antenna (aerial) terminals
    75 ohms, unbalanced

AM tuner section

Tuning range

Area	Tuning scale	
	10 kHz step	9 kHz step
Latin America, Argentina	530 kHz – 1,710 kHz	531 kHz – 1,710 kHz
Middle East, South Africa, Australia, Thailand, India, Singapore	–	531 kHz – 1,602 kHz

Antenna (aerial)
    Loop antenna (aerial)

HDMI Video

Input/Output (HDMI Repeater block)

Format	2D	3D		
		Frame packing	Side-by-Side (Half)	Over-Under (Top-and-Bottom)
4096 × 2160p @ 59.94/60 Hz	○[1]	–	–	–
4096 × 2160p @ 50 Hz	○[1]	–	–	–
3840 × 2160p @ 59.94/60 Hz	○[1]	–	–	–
3840 × 2160p @ 50 Hz	○[1]	–	–	–
4096 × 2160p @ 23.98/24 Hz	○[2]	–	–	–
3840 × 2160p @ 29.97/30 Hz	○[2]	–	–	–
3840 × 2160p @ 25 Hz	○[2]	–	–	–
3840 × 2160p @ 23.98/24 Hz	○[2]	–	–	–
1920 × 1080p @ 59.94/60 Hz	○	–	○	○
1920 × 1080p @ 50 Hz	○	–	○	○
1920 × 1080p @ 29.97/30 Hz	○	○	○	○
1920 × 1080p @ 25 Hz	○	○	○	○
1920 × 1080p @ 23.98/24 Hz	○	○	○	○
1920 × 1080i @ 59.94/60 Hz	○	○	○	○
1920 × 1080i @ 50 Hz	○	○	○	○
1280 × 720p @ 59.94/60 Hz	○	○	○	○
1280 × 720p @ 50 Hz	○	○	○	○
1280 × 720p @ 29.97/30 Hz	○	○	○	○
1280 × 720p @ 23.98/24 Hz	○	○	○	○
720 × 480p @ 59.94/60 Hz	○	–	–	–
720 × 576p @ 50 Hz	○	–	–	–
640 × 480p @ 59.94/60 Hz	○	–	–	–

[1] Supports YCbCr 4:2:0 / 8 bit format only.
[2] Supports 8 bit format only.

USB section

(Except for South Africa and Argentina models)

Supported format*
    MP3 (MPEG 1 Audio Layer-3):
        32 kbps – 320 kbps, VBR
    WMA:
        48 kbps – 192 kbps
    AAC:
        48 kbps – 320 kbps
    WAV:
        8 kHz – 48 kHz, 16 bit PCM

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

Transfer speed
    Full-speed

Supported USB device
    Mass Storage Class

Maximum current
    500 mA

Bluetooth section

Communication system
    Bluetooth Specification version 3.0

Output
    Bluetooth Specification Power Class 2

Maximum communication range
    Line of sight approx. 10 m[1]

Frequency band
    2.4 GHz band (2.4000 GHz – 2.4835 GHz)

Modulation method
    FHSS (Freq Hopping Spread Spectrum)

Compatible *Bluetooth* profiles[2]
    A2DP (Advanced Audio Distribution Profile)
    AVRCP 1.3 (Audio Video Remote Control Profile)

Supported Codecs[3]
    SBC[4], AAC

Transmission range (A2DP)
    20 Hz – 20,000 Hz (Sampling frequency 44.1 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
South Africa, Thailand, Singapore	230 V AC – 240 V AC, 50/60 Hz
Latin America	120/220/240 V AC, 50/60 Hz
Argentina	220 V AC – 230 V AC, 50/60 Hz
Middle East	120 V AC – 127/220/230 V AC – 240 V AC, 50/60 Hz
Australia	230 V AC, 50 Hz
India	220 V AC – 240 V AC, 50/60 Hz

Power consumption
    195 W (STR-KM77)
    185 W (STR-KM55)
    150 W (STR-KM22)

Power consumption (during standby mode)
    0.3 W (When "CTRL HDMI" is set to "CTRL OFF")

Dimensions (width/height/depth) (Approx.)
    430 mm × 178 mm × 336 mm
    including projecting parts and controls

Mass (Approx.)
    10.3 kg (STR-KM77/STR-KM55)
    8.5 kg (STR-KM22)

Speaker section

• Front speaker for HT-M77/HT-M55 (SS-MSP77M)

Speaker system
2-way, 3-driver, Bass reflex

Speaker unit
Woofer:
200 mm, cone type × 2
Tweeter:
25 mm, horn type

Rated Impedance
6 ohms

Dimensions (width/height/depth) (Approx.)
280 mm × 925 mm × 265 mm
(with foot)

Mass (Approx.)
15.0 kg

• Front speaker for HT-M22 (SS-MSP22M)

Speaker system
2-way, 2-driver, Bass reflex

Speaker unit
Woofer:
160 mm, cone type
Tweeter:
25 mm, horn type

Rated Impedance
6 ohms

Dimensions (width/height/depth) (Approx.)
280 mm × 485 mm × 290 mm
(with foot)

Mass (Approx.)
7.3 kg

• Center speaker for HT-M77/HT-M55/ HT-M22 (SS-CNP77M)

Speaker system
Full range, Bass reflex, Magnetically shielded

Speaker unit
Woofer: 100 mm, cone type

Rated Impedance
6 ohms

Dimensions (width/height/depth) (Approx.)
430 mm × 182 mm × 178 mm
(with foot)

Mass (Approx.)
3.3 kg

• Surround speaker for HT-M77 (SS-MSP33M)

Speaker system
2-way, 2-driver, Bass reflex

Speaker unit
Woofer:
160 mm, cone type
Tweeter:
25 mm, horn type

Rated Impedance
6 ohms

Dimensions (width/height/depth) (Approx.)
280 mm × 885 mm × 265 mm
(with foot)

Mass (Approx.)
13.0 kg

• Surround back speaker for HT-M77/ Surround speaker for HT-M55/HT-M22 (SS-SRP77M)

Speaker system
Full range, Closed box

Speaker unit
Woofer: 100 mm, cone type

Rated Impedance
6 ohms

Dimensions (width/height/depth) (Approx.)
280 mm × 235 mm × 162 mm
(with foot)

Mass (Approx.)
2.4 kg

• Subwoofer for HT-M77 (SS-WP77M)

Speaker system
    Bass reflex

Speaker unit
    300 mm, cone type

Rated Impedance
    4 ohms

Dimensions (width/height/depth) (Approx.)
    410 mm × 555 mm × 350 mm
    (with foot)

Mass (Approx.)
    14 kg

**• Subwoofer for HT-M55/HT-M22
  (SS-WP55M)**

Speaker system
    Bass reflex

Speaker unit
    250 mm, cone type

Rated Impedance
    4 ohms

Dimensions (width/height/depth) (Approx.)
    340 mm × 465 mm × 295 mm
    (with foot)

Mass (Approx.)
    8.5 kg

Design and specifications are subject to
change without notice.

Index

Additional Information

Made for
iPod iPhone

HDMI N **Bluetooth**®

http://www.sony.net/