marantz®

AV Surround Receiver

SR7008

You can print more than one page of a PDF onto a single sheet of paper.

Owner's Manual

Contents

Settings

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Thank you for purchasing this Marantz product. To ensure proper operation, please read this owner's manual carefully before using the product. After reading this manual, be sure to keep it for future reference.

Accessories

Check that the following parts are supplied with the product.
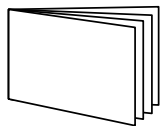
(1) Getting Started	(2) CD-ROM (Owner's Manual)	(3) Safety Instructions	(4) Warranty (for USA) (for CANADA)
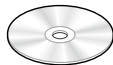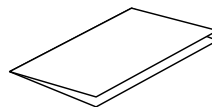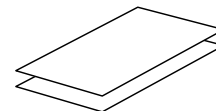
(5) Power cord	(6) Remote control unit (RC023SR)	(7) R03/AAA batteries	(8) AM loop antenna
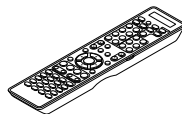
(9) FM indoor antenna	(10) Setup and measurement microphone (ACM1HB)	(11) Cable label
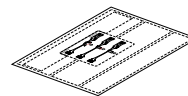
Inserting the batteries

① Slide the rear cover off the remote control unit in the arrow direction.
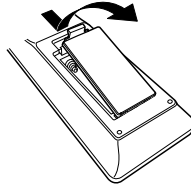
② Load the two batteries properly as indicated by the ⊕ and ⊖ marks in the battery compartment.

R03/AAA
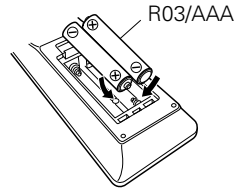
③ Put the rear cover back on.

NOTE

- When inserting the batteries, be sure to do so in the proper direction, following the ⊕ and ⊖ marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
  - Do not use a new battery together with an old one.
  - Do not use two different types of batteries.
- Remove the batteries from the remote control unit if it will not be in use for long periods.
- If the battery fluid should leak, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.

Operating range of the remote control unit

Point the remote control unit at the remote sensor when operating it.

Approx. 23 ft/7 m 30° 30°
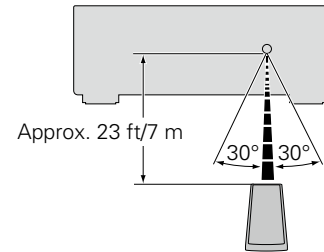
Features

High quality sound

• **With discrete circuit technology, the power amplifier provides identical quality for all 9-channels (165 Watts x 9-channels)**
For optimum realism and stunning dynamic range, the power amplifier section features discrete power devices (not integrated circuitry).
By using high current, high power discrete power devices, the amplifier is able to easily drive high quality speakers.

• **Current feedback amplifier**
This unit uses a high-speed current feedback amplifier circuit for its preamplifier so that signals from a Blu-ray Disc player and other equipment that support high-definition audio formats can be amplified with high fidelity. The high-speed current feedback amplifier also reproduces a natural sound space.

• **Audyssey DSX® (**☞**<u>page 170</u>)**
This unit is equipped with Audyssey DSX® processor. By connecting front height speakers to this unit and playing back with Audyssey DSX® processing you can experience a more vertically expansive front soundstage. By connecting two front wide speakers, you can experience a wider and more expanded front soundstage.

• **Audyssey LFC™ (Low Frequency Containment) (**☞**<u>page 169</u>)**
Audyssey LFC™ solves the problem of low frequency sounds disturbing people in neighboring rooms or apartments. Audyssey LFC™ dynamically monitors the audio content and removes the low frequencies that pass through walls, floors and ceilings. It then applies psychoacoustic processing to restore the perception of low bass for listeners in the room. The result is great sound that no longer disturbs the neighbors.

• **Discrete subwoofers and Audyssey Sub EQ HT™ (**☞**<u>page 184</u>)**
The unit has two subwoofer output capability and can adjust the level and delay for each subwoofer individually.
Audyssey Sub EQ HT™ makes the integration seamless by first compensating for any level and delay differences between the two subwoofers and then applying Audyssey MultEQ® XT32 to both subwoofers together for improved deep bass response and detail.

• **DTS Neo:X (**☞**<u>page 118</u>)**
This technology enables the playback of 2-channel source audio or 7.1/5.1 multi-channel source audio through a maximum 9.1-channel speakers, achieving an even broader soundstage.

• **Equipped with Hybrid PLL Jitter Reducer capable of reducing jitter and phase noise that negatively affects sound quality**

Marantz's Hybrid Phase Lock Loop Jitter Reducer improves sound localization, reproducing a broad and natural soundstage.

High performance

• **Digital video processor upscales analog video signals (SD resolution) to HD (720p/1080p) and 4K (☞page 242)**

This unit features a sophisticated video processor that can upscale standard definition (SD) analog video content from legacy sources such as a VCR to HD and is able to output at 4K Ultra HD resolution (3840 x 2160 pixels) for compatibility with newly available high resolution 4K TVs.

• **Equipped with HDMI ZONE2 output (☞page 145)**

The ZONE2 multi-room output includes an HDMI output that lets you enjoy a different A/V source in that room, with another program playing in the main room.

• **Simultaneous playback via two HDMI outputs (for MAIN ZONE) (☞page 145)**

This unit is equipped with two HDMI MONITOR outputs. You can connect one output to a projector and the other output to a TV for simultaneous signal outputs.

• **Supports Internet Radio, music, and photograph streaming Supports AirPlay® (☞page 107)**

You can enjoy a wide variety of content, including listening to Internet Radio, playing audio files stored on your PC, and displaying photographs stored on your PC on our television.

This unit also supports Apple AirPlay which lets you stream your music library from an iPhone®, iPad®, iPod touch® or iTunes®.

• **Compatible with "Marantz Remote App" for performing basic operations of the unit with an iPad, iPhone or Android∗ smartphone**

"Marantz Remote App" is application software that allows you to perform basic operations with an iPad, iPhone, Android smartphone or Android tablet such as turning the unit ON/OFF, controlling the volume, and switching the source.

∗ Download the appropriate "Marantz Remote App" for iOS and Android devices. This unit needs to be connected to your LAN and the iPhone/iPod touch or other device needs to be connected to the same network by Wi-Fi (wireless LAN).

• **HDMI connections enable quick connection to various digital AV devices (7 inputs, 3 outputs)**

This unit is equipped with 7 HDMI inputs and 3 HDMI outputs enabling connection to various HDMI compatible devices such as Blu-ray Disc players, game consoles, HD video camcorders and HD TVs.

• **Supports HDMI (3D, ARC, Deep Color, "x.v.Color", Auto Lip Sync, 4K) and HDMI control function (**☞**page 242)**
Advanced HDMI features are supported, including 3D passthrough, Audio Return Channel, Auto Lip Sync, Deep Color and "x.v.Color", and HDMI CEC control functions. If a 4K digital video signal is input, it is passed through the unit unchanged, and the GUI overlay will adjust the resolution accordingly.

• **Direct play for iPod and iPhone via USB (**☞**page 49)**
Music data from an iPod or iPhone can be played back if you connect the USB cable supplied with the iPod via the USB port of this unit, and also an iPod and iPhone can be controlled with the remote control that comes with this unit.

• **Equipped with 3 source 3 zone Multi-Zone Function**
Lets you enjoy audio and video in the main room, and have up to 1 other zones with different audio content delivered to each room (☞page 145).

• **Multi-Room audio**
Enjoy the same music in your home theater and another room at the same time (☞page 117).

• **InstaPrevue Technology (**☞**page 133)**
Live picture-in-picture preview of HDMI sources that are connected to the unit.

• **M-XPort (Marantz-eXtension Port) (**☞**page 55)**
This unit is equipped with the M-XPort, a Marantz original innovation that provides outstanding expandability. You can connect the Wireless Receiver RX101 (sold separately) to this port.

Easy operation

• **"Setup Assistant" provides easy-to-follow setup instructions**
First select the language when prompted. Then simply follow the instructions displayed on the TV screen to set up the speakers, network, etc.

• **Easy to use Graphical User Interface**
This unit is equipped with an easy to see Graphical User Interface that uses menu displays and features colorful icons and easy to understand controls for maximum ease of use.

Part names and functions

Front panel
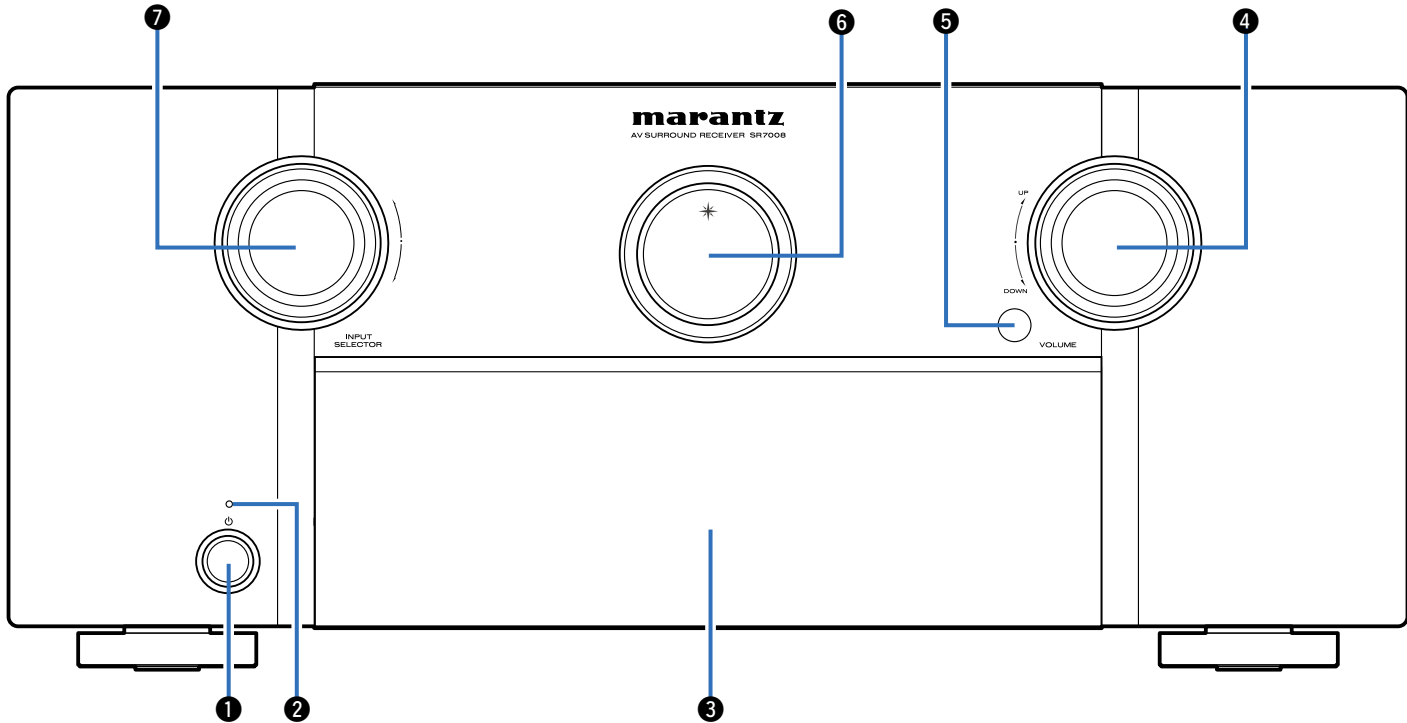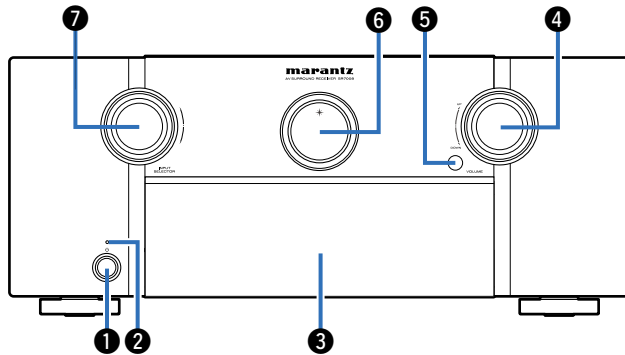
q Power operation button (⏻)

This turns the power of MAIN ZONE on/off (standby) (vpage 60).

w Power indicator

This is lit as follows according to the power status:
- Power on : Off
- Normal standby : Red
- When "HDMI Pass Through" (vpage 174) or "HDMI Control" (vpage 174) is set to "On" : Orange
- When "IP Control" (vpage 199) is set to "Always On" : Orange

e Door

When you are using buttons and/or connectors behind the door, press the bottom of the door to open it. Be careful not to catch your fingers when closing the door.
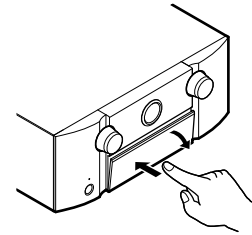
r VOLUME knob

This adjusts the volume level (vpage 61).

t Remote control sensor

This receives signals from the remote control unit (vpage 8).

y Main Display

This displays various pieces of information (vpage 17).

u INPUT SELECTOR knob

This selects the input source (vpage 60).

With the door open
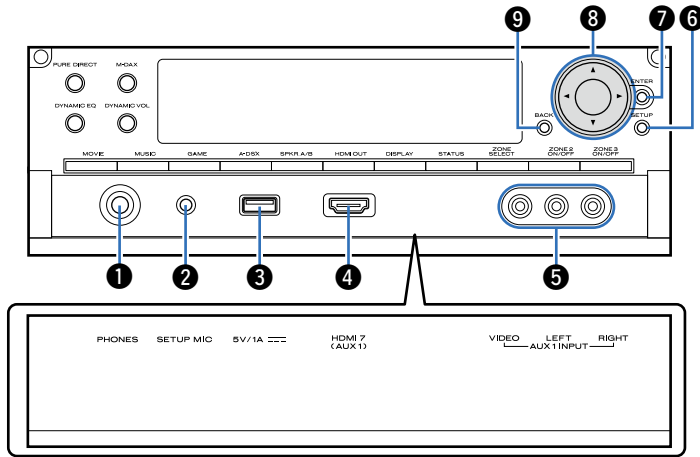
A Headphones jack (PHONES)

Used to connect headphones.

When the headphones are plugged into this jack, audio will no longer be output from the connected speakers or from the PRE OUT connectors.

NOTE

• To prevent hearing loss, do not raise the volume level excessively when using headphones.

B SETUP MIC jack

Used to connect the supplied Setup and measurement microphone (vpage 186).

C USB port

Used to connect USB storages (such as USB memory devices) and the USB cable supplied with iPod (vpage 49).

D HDMI 7 (AUX 1) connector

Used to connect HDMI output compatible devices such as video camcorders and game consoles (vpage 46).

E AUX 1 INPUT connectors

Used to connect analog output compatible devices such as video camcorders and game consoles (vpage 46).

F SETUP button

This displays the menu on the TV screen (vpage 158).

G ENTER button

This determines the selection (vpage 158).

H Cursor buttons (△▽◁ ▷)

These select items (vpage 158).

I BACK button

This returns to the previous screen (vpage 158).

PHONES   SETUP MIC   5V/1A ===   HDMI 7 (AUX 1)   VIDEO — LEFT — RIGHT AUX 1 INPUT
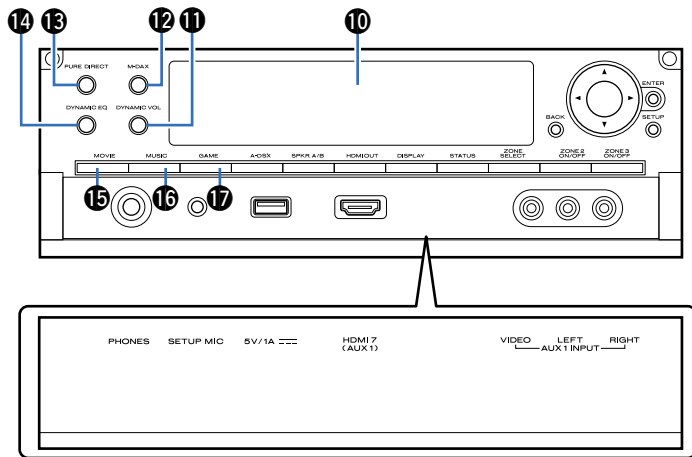
⏲ Sub display

This displays various pieces of information (⟲page 19).

⑪ Dynamic Volume button (DYNAMIC VOL)

This switches the Dynamic Volume settings (⟲page 169).

⑫ M-DAX button/indicator

This enables the M-DAX mode (⟲page 165).
This lights when the M-DAX mode is selected.

⑬ PURE DIRECT button/indicator

This switches the sound mode between DIRECT, PURE DIRECT and AUTO (⟲page 120, 121).
This lights when the PURE DIRECT mode is selected as the sound mode.

⑭ DYNAMIC EQ button

This switches the Dynamic EQ settings (⟲page 168).

⑮ MOVIE button

This switches the sound mode to "MOVIE" (⟲page 119).

⑯ MUSIC button

This switches the sound mode to "MUSIC" (⟲page 119).

⑰ GAME button

This switches the sound mode to "GAME" (⟲page 119).

HDMI OUT button

This sets the HDMI monitor output (☞page 174).

DISPLAY button

This switches the display mode of the display (☞page 144, 206).

STATUS button

Each press of this switches the status information that is shown on the display (☞page 64).

ZONE SELECT button

These switch the zone (MAIN ZONE, ZONE2, ZONE3) that is operated through the remote control unit (☞page 149, 158).

ZONE2 ON/OFF button

This turns the power of ZONE2 on/off (☞page 149).

ZONE3 ON/OFF button

This turns the power of ZONE3 on/off (☞page 149).

Audyssey DSX® button (A-DSX)

This switches the Audyssey DSX® settings (☞page 170).

Speaker A/B switching button (SPKR A/B)

This sets the front speakers to use (☞page 198).

Main Display

The input source name, sound mode, setting values and other information are displayed here.

■ Standard display
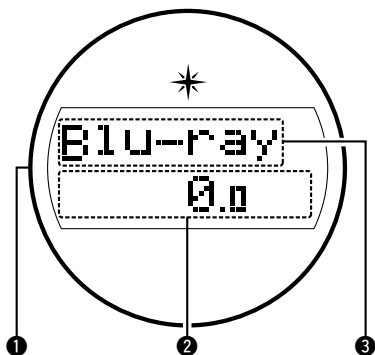
❶ Light illumination

When the power to this device is switched on, the surrounding area is lit blue. The settings can be changed so the light does not switch on (☞page 144 "Switches light illumination on/off").

❷ Master volume indicator

❸ Input source indicator

The currently selected input source name is displayed.

If the input source name has been changed using "Source Rename" (☞page 181) in the menu, the input source name after the change is displayed.

■ Tuner display

These light according to the reception conditions when the input source is set to "HD Radio".
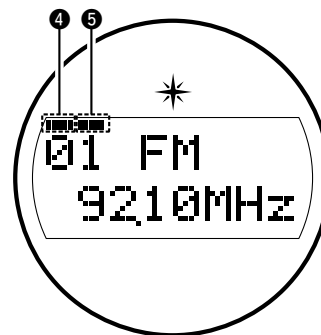
❹ Lights up when the broadcast is properly turned in.

❺ In the FM mode, this lights up when receiving stereo broadcasts.

■ Sleep timer display
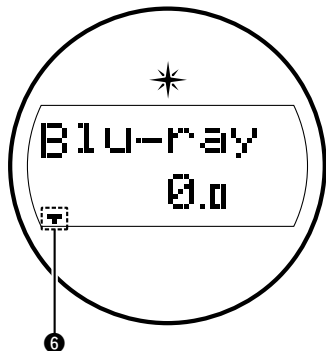
❻ This lights when the sleep mode is selected (☞page 135).

■ ZONE2/ZONE3 power on display
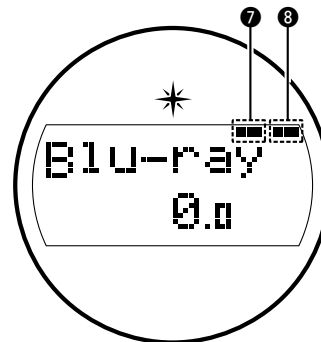
❼ This lights up when ZONE2 (separate room) power is turned on (☞page 149).

❽ This lights up when ZONE3 (separate room) power is turned on (☞page 149).

Sub Display
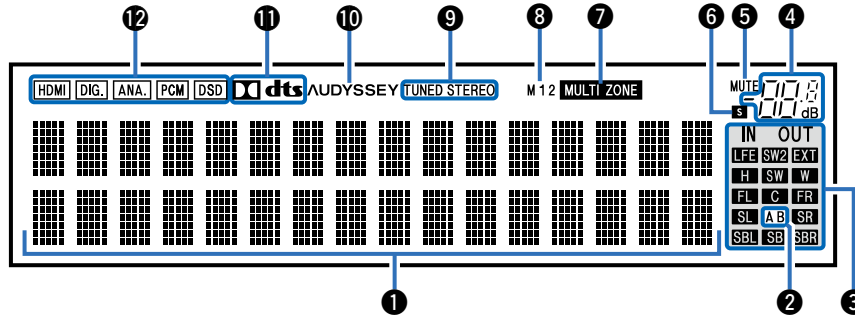
❶ **Information display**

The input source name, sound mode, setting values and other information are displayed here.

❷ **Front speaker indicator**

This lights according to the setting of the front A and B speakers.

❸ **Input/output signal channel indicators**

The channel for input/output signals is displayed according to the setting configured for "Channel Indicators" (☞page 206).

- When "Channel Indicators" is set to "Output" (Default)
  These light when audio signals are being output from the speakers.
- When "Channel Indicators" is set to "Input"
  These light corresponding to the channels that include the input signals.
  When playing HD Audio sources, the **EXT** indicator lights when a signal from an extension channel (a channel other than the front, center, surround, surround back, front height, front wide or LFE channel) is input.

HDMI DIG. ANA. PCM DSD dts AUDYSSEY TUNED STEREO M 12 MULTI ZONE

MUTE
S dB
IN OUT
LFE SW2 EXT
H SW W
FL C FR
SL AB SR
SBL SB SBR
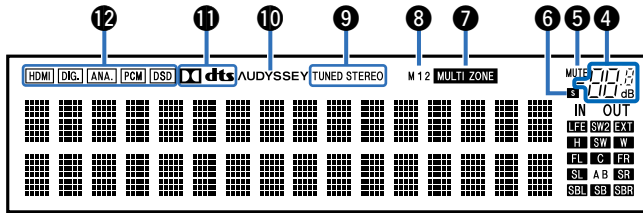
r Master volume indicator

t MUTE indicator

This blinks while the sound is muted (vpage 61, 150).

y Sleep timer indicator

This lights when the sleep mode is selected (vpage 135).

u MULTI ZONE indicator

This lights up when ZONE2 or ZONE3 (separate room) power is turned on (vpage 149).

i Monitor output indicator

These light according to the HDMI monitor output setting.

When set to "Auto(Dual)", the indicators light according to connection status (vpage 174).

o Tuner reception mode indicators

These light according to the reception conditions when the input source is set to "HD Radio".

STEREO : In FM mode, this lights up when receiving stereo broadcasts.

TUNED : Lights up when the broadcast is properly tuned in.

Q0 Audyssey® indicator

This indicator lights when the "MultEQ® XT32" (vpage 167), "Dynamic EQ" (vpage 168) or "Dynamic Volume" (vpage 169) setting is set to other than "Off" and "Audyssey LFC™" (vpage 169) setting or "Audyssey DSX®" (vpage 170) is set to other than "Off".

Q1 Decoder indicator

These light when Dolby or DTS signals are input or when the Dolby or DTS decoder is running.

Q2 Input signal indicators

The respective indicator will light corresponding to the input signal (vpage 182).

Rear panel
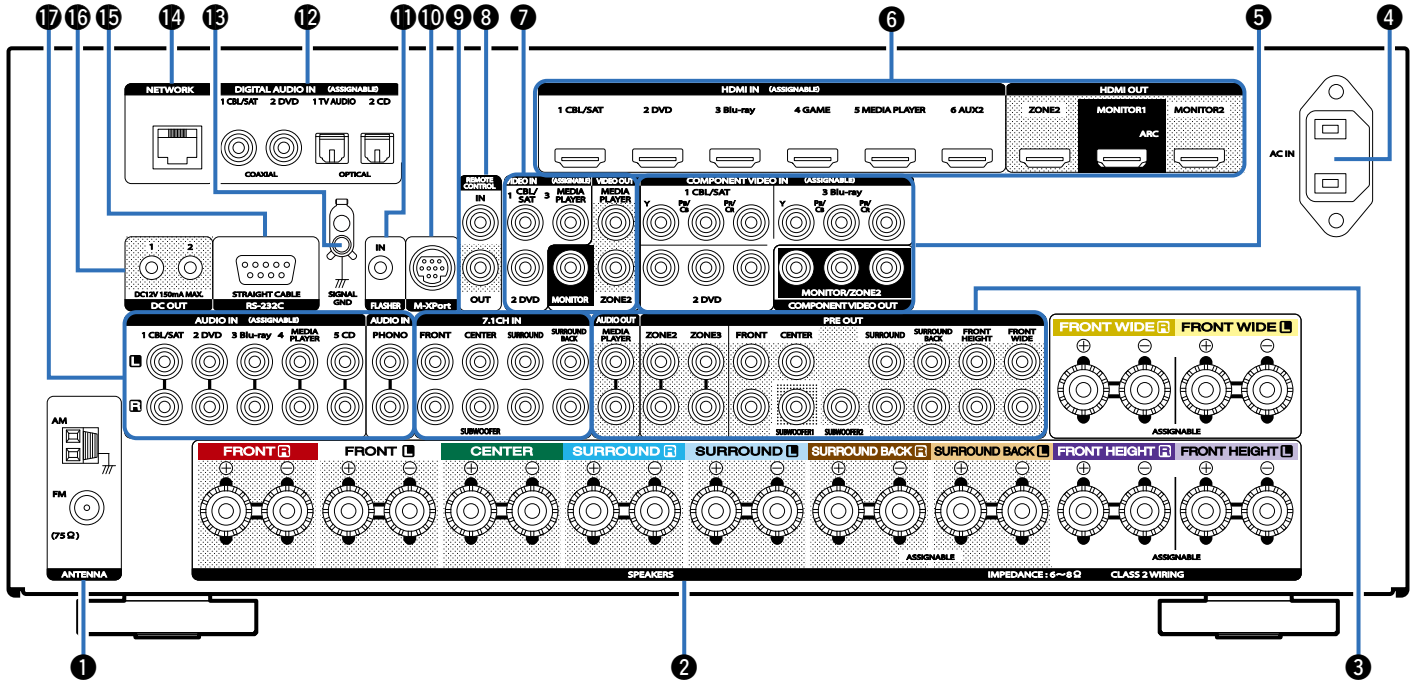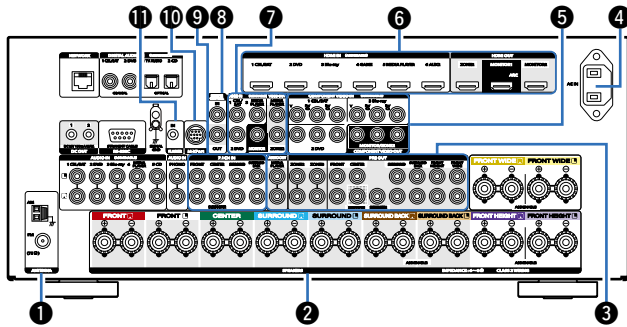
q FM/AM antenna terminals (ANTENNA)

Used to connect FM and AM antennas (vpage 51).

w Speaker terminals (SPEAKERS)

Used to connect speakers (vpage 32).

e PRE OUT connectors

Used to connect a subwoofer with a built-in amplifier or an external power amplifier (vpage 33, 38, 148).

r AC inlet (AC IN)

Used to connect the power cord (vpage 58).

t Component video connectors (COMPONENT VIDEO)

Used to connect devices equipped with component video connectors (vpage 42, 44, 45).

y HDMI connectors

Used to connect devices equipped with HDMI connectors (vpage 40, 41, 44, 45).

u Video connectors (VIDEO)

Used to connect devices equipped with video connectors (vpage 42, 44, 45).

i REMOTE CONTROL connectors

Used to connect infrared receivers/transmitters in order to operate this unit and external devices from a different room (vpage 56).

o 7.1ch input connectors (7.1CH IN)

Used to connect to a device that has multi-channel audio output connectors (vpage 48).

Q0 M-XPort connector

Used to connect to a wireless receiver (RX101, sold separately) (vpage 55).

Q1 FLASHER IN jack

Used when using a control BOX or other such control devices to control this unit.
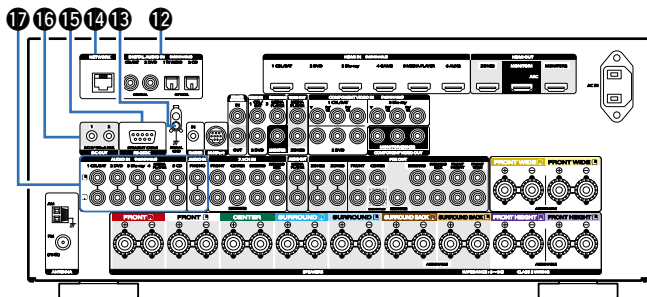
⑫ **Digital audio connectors (DIGITAL AUDIO)**

Used to connect devices equipped with digital audio connectors (⯈page 41, 42, 44, 45).

⑬ **SIGNAL GND jacks**

Used to connect a turntable (⯈page 47).

⑭ **Network connector (NETWORK)**

Used to connect this unit to the network (⯈page 53).

⑮ **RS-232C connector**

The RS-232C serial port is provided to allow compatibility with an external home automation controller. Consult the owner's manual of the home automation controller for more information about serial control of this unit. The serial port allows two-way control and status via an external home automation controller.

⑯ **DC OUT jacks**

Used to connect devices equipped with the trigger function (⯈page 57).

⑰ **Analog audio connectors (AUDIO)**

Used to connect devices equipped with analog audio connectors (⯈page 44, 45, 47).

NOTE

• Do not touch the inner pins of the connectors on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Remote control unit
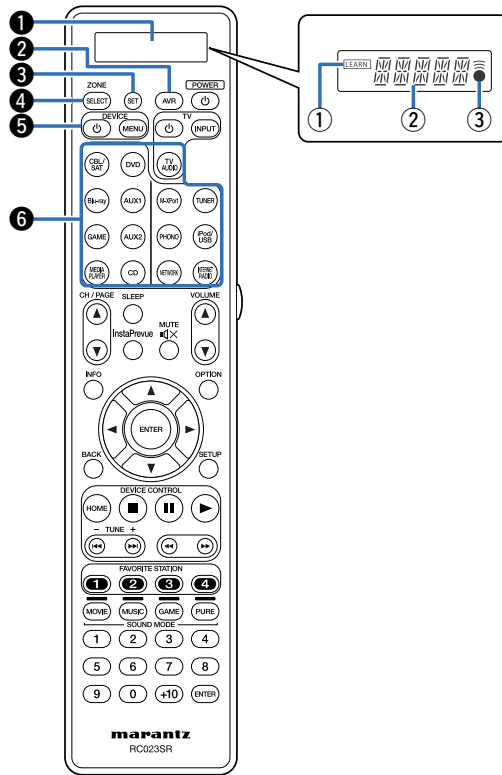
q Display

① LEARN indicator

This is lit when setting the learning function for the remote control unit (vpage 220).

② Information display

- This displays "AVR" when operating this unit.
- This displays the input source name when operating an external device.
- This displays "TV" when operating TV.

③ 📶 indicator

This is lit when signals are sent from the remote control unit.

w AVR-operation mode button

When preset codes are registered to the remote control unit, press this button and then operate the menu on the unit.

e SET button

This is used for various settings on the remote control unit (vpage 212, 220, 223, 224).

r ZONE SELECT button

These switch the zone (MAIN ZONE, ZONE2, ZONE3) that is operated through the remote control unit (vpage 149, 158).

t Device operation buttons (DEVICE ⏻ / DEVICE MENU)

These turn the power of external devices on/off and call up menus. Preset codes need to be registered in order to use these buttons (vpage 216).

y Input source select buttons

These select the input source (vpage 60, 149).
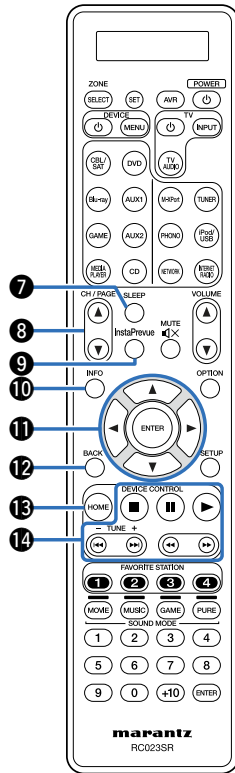
G **SLEEP button**
This sets the sleep timer (vpage 135).

H **Channel/page search buttons (CH/PAGE ▲▼)**
These select preset radio stations or switch pages (vpage 74).

I **InstaPrevue button**
This displays the InstaPrevue screen (vpage 133).

J **Information button (INFO)**
This displays the status information on the TV screen (vpage 208).

K **Cursor buttons (△▽◁ ▷)**
These select items (vpage 158).

L **BACK button**
This returns to the previous screen (vpage 158).

M **HOME button**
This takes you to the Home screen (Top screen) when the input source is NETWORK or iPod/USB (vpage 64).

N **System buttons**
These perform playback related operations (vpage 62).
• Stop button (■)
• Pause button (❚❚)
• Play button (▶)
• Skip buttons (◀◀, ▶▶)
• Search buttons (◀◀, ▶▶)

Tuning up / Tuning down buttons (TUNE +, –)
These operate the tuner (vpage 71).
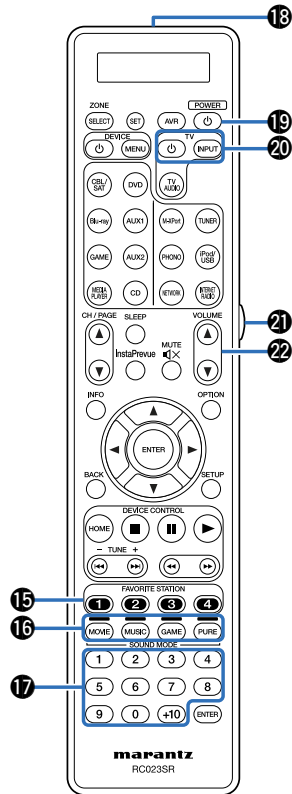
O **FAVORITE STATION buttons (1 – 4)**

With a single press of these, you can call up registered radio stations and contents (page 105).

O **SOUND MODE buttons**

These select the sound mode (page 119).
• MOVIE button
• MUSIC button
• GAME button
• PURE button

O **Number buttons**

These enter numbers into the unit (page 72, 160).

O **Remote control signal transmitter**

This transmits signals from the remote control unit (page 8).

O **POWER button (⏻)**

This turns the power on/off (page 60, 149).

O **TV operation buttons (TV ⏻ / TV INPUT)**

These turn the TV power on/off, switch the TV input and call up menus. Preset codes need to be registered in order to use these buttons (page 216).

O **Light button**

This turns on the backlight for approx. 2 seconds (page 223).

O **VOLUME buttons (▲▼)**

These adjust the volume level (page 61, 150).
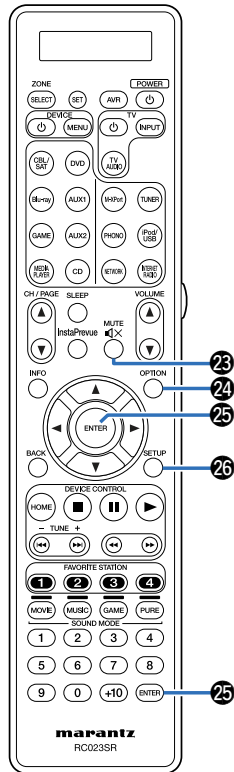
㉓ **MUTE button (◁×)**

This mutes the output audio (☞page 61, 150).

㉔ **OPTION button**

This displays the option menu on the TV screen (☞page 110).

㉕ **ENTER button**

This determines the selection (☞page 158).

㉖ **SETUP button**

This displays the menu on the TV screen (☞page 158).

Connections

NOTE

- Do not plug in the power cord until all connections have been completed. However, when the "Setup Assistant" is running, follow the instructions in the "Setup Assistant" (☐ page 7) screen for making connections. (During "Setup Assistant" operation, the input/output connectors do not conduct current.)
- Do not bundle power cords together with connection cables. Doing so can result in noise.

■ Cables used for connections

Provide necessary cables according to the devices you want to connect.

Speaker cable	
Subwoofer cable	
HDMI cable	
Component video cable	
Video cable	
Coaxial digital cable	
Optical cable	
Audio cable	
LAN cable	
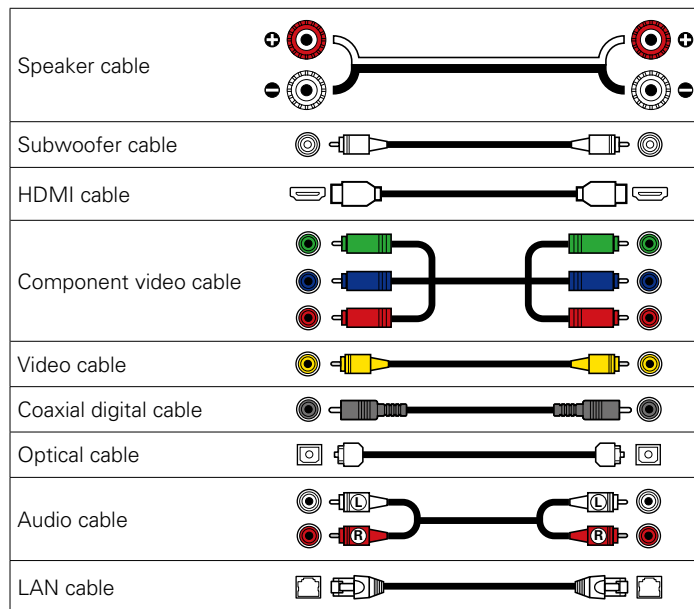
Speaker connection

Install speakers and connect them to this unit (page 29, 32).

Speaker installation

Determine the speaker system depending on the number of speakers you are using and install each speaker and subwoofer in the room. Here, we explain how to install the speakers using a typical example.
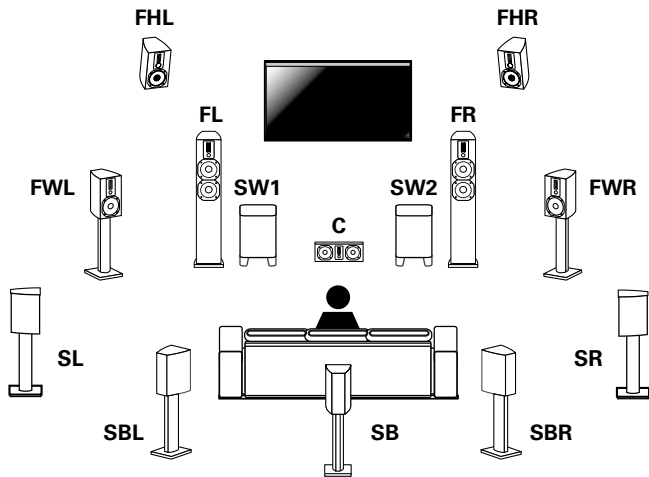
FL/FR : Place the FRONT left and right speakers an equal distance from the main listening position. The distance between each speaker and your TV should also be the same.

C : Place the CENTER speaker in between the front speakers and above or below your TV.

SL/SR : Place the SURROUND left and right speakers an equal distance to the left and right sides of the main listening position. If you don't have Surround Back speakers, move the surround speakers slightly behind your listening position.

SBL/SBR (SB) : Place the SURROUND BACK left and right speakers an equal distance from the main listening position and directly behind the main listening position. If you only have one Surround Back speaker, center it.

FHL/FHR : Place the FRONT HEIGHT left and right speakers just outside of the front left and right speakers. Mount them as close to the ceiling as possible and aim them towards the main listening position.

FWL/FWR : Place the FRONT WIDE left and right speakers outside of the front left and right speakers so that there is an equal distance between all front speakers.

SW 1/2 : Place the SUBWOOFER at a convenient location near the front speakers. If you have two subwoofers, place them symmetrically across the front of your room. If you have 2 subwoofers, place them symmetrically across the front of your room.

🖊

- This unit is compatible with Audyssey DSX® (v☞page 257), Dolby Pro Logic IIz (v☞page 259) and DTS Neo:X (v☞page 260) which offers an even wider and deeper surround sensation.
  When using Audyssey DSX®, install front wide speakers or front height speakers.
  When using Dolby Pro Logic IIz, install front height speakers.
- Use the illustration below as a guide for how high each speaker should be installed. The height does not need to be exactly the same.
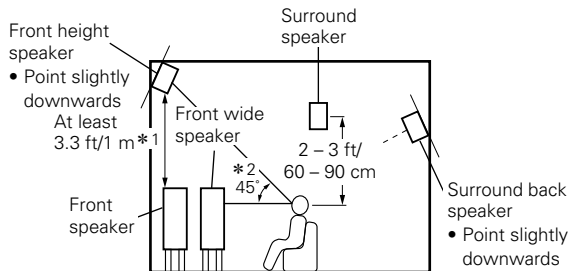
【Viewed from the side】

∗1　Recommended for Dolby Pro Logic IIz
∗2　Recommended for Audyssey DSX®

NOTE

- Sound cannot be played simultaneously from all of the surround back, front height and front wide speakers.

■ Typical speaker layout
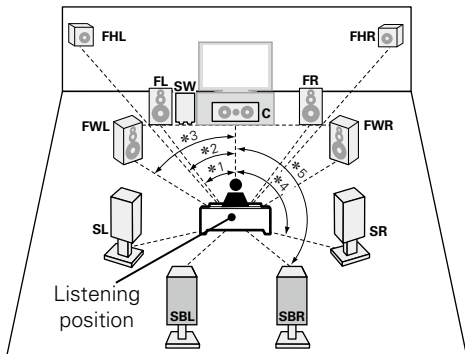
∗1 22˚ – 30˚
∗2 22˚ – 45˚
∗3 55˚ – 60˚
∗4 90˚ – 110˚
∗5 135˚ – 150˚

Listening position

• When using a single surround back speaker, place it directly behind the listening position.

【Speaker abbreviations】

FL	Front speaker (L)	**SBL**	Surround back speaker (L)
FR	Front speaker (R)	**SBR**	Surround back speaker (R)
C	Center speaker	**FHL**	Front height speaker (L)
SW	Subwoofer	**FHR**	Front height speaker (R)
SL	Surround speaker (L)	**FWL**	Front wide speaker (L)
SR	Surround speaker (R)	**FWR**	Front wide speaker (R)

■ When 5.1-channel speakers are installed

∗1 22˚ – 30˚
∗2 120˚

Speaker connection

Here we connect the speakers in the room to this unit.
This section explains how to connect them using typical examples.

NOTE

- Disconnect this unit's power plug from the power outlet before connecting the speakers. Also, turn off the subwoofer.
- Connect so that the speaker cable core wires do not protrude from the speaker terminal. The protection circuit may be activated if the core wires touch the rear panel or if the + and – sides touch each other (☞page 262 "Protection circuit").
- Never touch the speaker terminals while the power cord is connected. Doing so could result in electric shock. When the "Setup Assistant" is running, follow the instructions in the "Setup Assistant" (☞ page 7) screen for making connections. (Power is not supplied to the speaker terminals while the "Setup Assistant" is running.)
- Use speakers with an impedance of 6 – 8 Ω/ohms.

■ Connecting the speaker cables

Carefully check the left (L) and right (R) channels and + (red) and – (black) polarities on the speakers being connected to this unit, and be sure to connect the channels and polarities correctly.

1 Peel off about 3/8 inch (10 mm) of sheathing from the tip of the speaker cable, then either twist the core wire tightly or terminate it.

2 Turn the speaker terminal counterclockwise to loosen it.
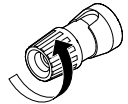
3 Insert the speaker cable's core wire to the hilt into the speaker terminal.
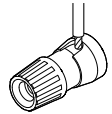
4 Turn the speaker terminal clockwise to tighten it.
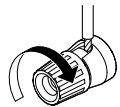
■ Connecting the subwoofer

Use a subwoofer cable to connect the subwoofer.

Two subwoofers can be connected to this unit.

To use two subwoofers, set "Subwoofer" to "2 spkrs" using the "Speaker Config." (vpage 194) setting.

The level and distance can be set separately for Subwoofer 1 and Subwoofer 2.
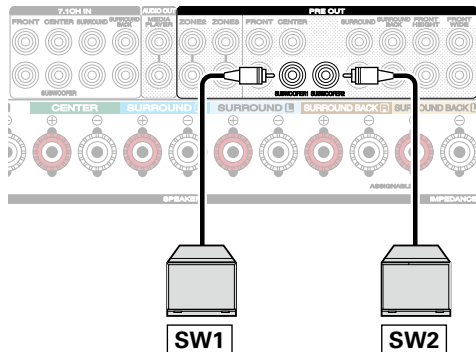
■ About the speaker cable label (supplied) for channel identification

The channel display section for speaker terminals on the rear panel is color-coded for each channel to be identifiable.

Speaker terminals	Color
FRONT L	White
FRONT R	Red
CENTER	Green
SURROUND L	Light blue
SURROUND R	Blue
SURROUND BACK L	Beige
SURROUND BACK R	Brown
FRONT HEIGHT L	Light purple
FRONT HEIGHT R	Purple
FRONT WIDE L	Light yellow
FRONT WIDE R	Yellow

Attach the speaker cable label for each channel to its speaker cable as shown in the diagram.

Then, make connection so that the color of the speaker terminal matches that of the speaker cable label.

【How to attach the speaker cable label】

Speaker   This unit

❶

❷

❸
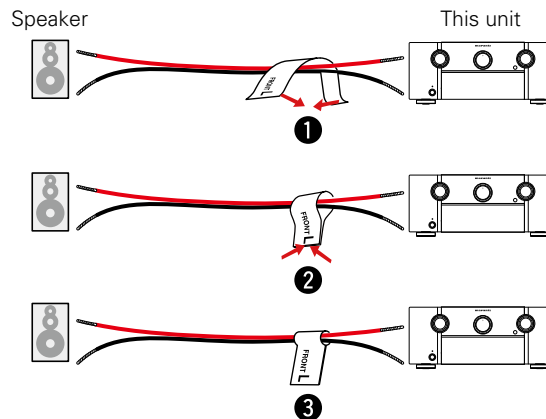
■ Standard Speaker Connection

The figure below shows an example of standard speaker connection.
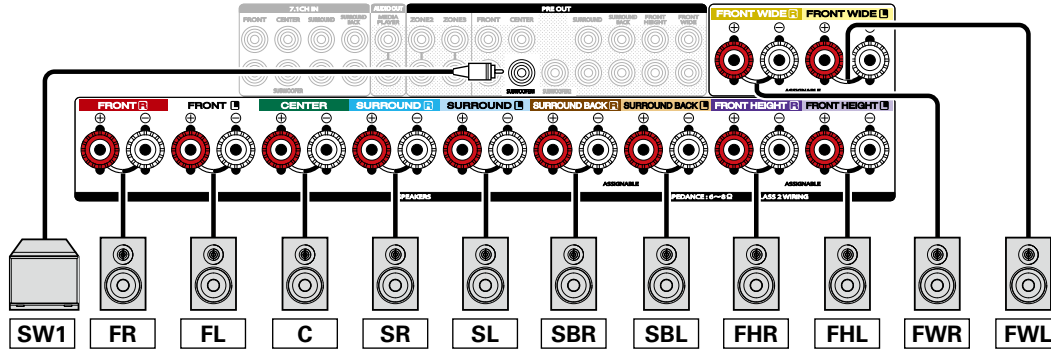
- By connecting all speakers in advance, audio playback can be automatically switched between the surround back, front height and front wide speakers corresponding to the sound mode and input signals.
- When using this connection, also set "Assign Mode" in the menu to "9.1ch(SB/FH/FW)" ().
- When using a signal surround back speaker, connect it to the SURROUND BACK L terminal.

■ About the front B speaker connections

• For how to connect the front, center, and surround speaker and the subwoofer to this unit, see "Standard Speaker Connection" (☞page 35).

FRONT WIDE R   FRONT WIDE L

ASSIGNABLE

FR (B)   FL (B)

🖉
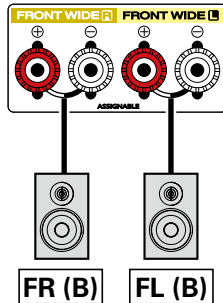
• When using this connection, also set "Assign Mode" in the menu to "7.1ch + Front B" (☞page 192).

■ About the Bi-amp connection

Some audiophile loudspeakers can be connected to an amplifier with two separate amp-to-speaker connections per each speaker. One amplifier channel's output is hooked up to the speaker's bass driver (woofer), while the other amplifier drives the upper range transducers (tweeter, or in some cases midrange and tweeter). This connection method has one amplifier channel driving one half of the bi-amp speaker, and avoids electrical interference between the speaker's bass and treble drivers and the driving amplifier channels. You can assign 4 amp channels to connect to one pair of bi-amp capable speakers. Bi-amp capable speakers always have two sets of speaker input connector pairs, one for the bass range and one for the treble range. If you're unsure about whether or not your speakers are bi-amp capable, consult the owner's manual that came with the speakers.

• For how to connect the center, surround speaker and the subwoofer to this unit, see "Standard Speaker Connection" (℗page 35).

🖉
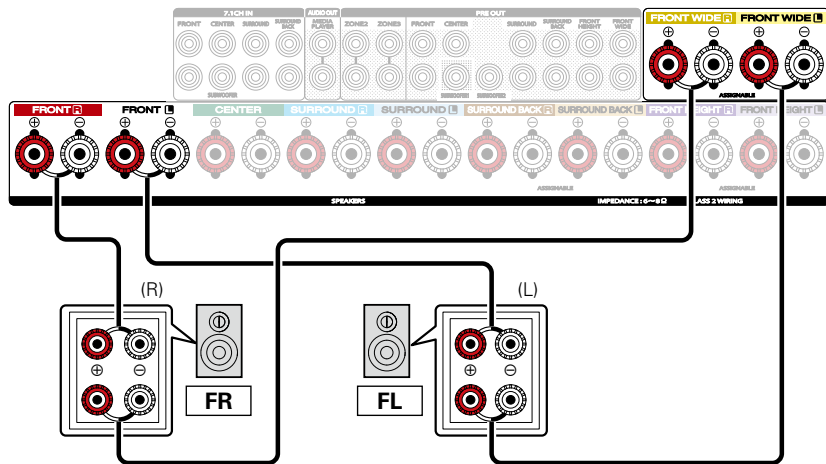
• When using this connection, also set "Assign Mode" in the menu to "7.1ch(Bi-Amp)" (℗page 192).

NOTE

• When making bi-amp connections, be sure to remove the short-circuiting plate or wire between the speaker's woofer and tweeter terminals.

■ Connecting an external power amplifier

• You can use this unit as a pre-amp by connecting an external power amplifier to the PRE OUT connectors. Adding an external power amplifier with a higher power output rating than this unit may be beneficial with loudspeakers that have lower efficiency and/or lower impedances, or to reach higher volume levels.

• Select the terminal to use and connect the device.
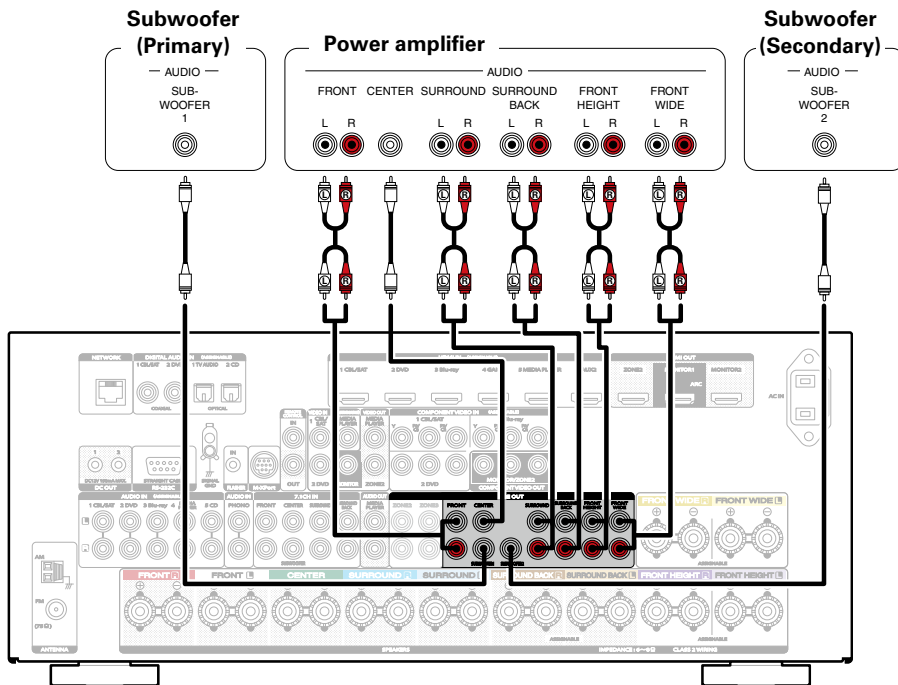
• When using just one surround back speaker, connect it to the left channel (L) terminal.

Connecting a TV

Connect a TV to this unit so that the input video is output to the TV. You can also enjoy audio from the TV on this unit.

How to connect a TV depends on the connectors and functions equipped on the TV.

ARC function plays TV audio on this unit by sending the TV audio signal to this unit via HDMI cable.

Is the TV equipped with an HDMI connector?

Yes

No

Is the TV compatible with the ARC (Audio Return Channel) ?

Yes

No

Connection 1
(☞page 40)

Connection 2
(☞page 41)

Connection 3
(☞page 42)

Connection 1 : TV equipped with an HDMI connector and compatible with the ARC (Audio Return Channel)

Use an HDMI cable to connect a TV that is compatible with the ARC function to this unit.
Set "HDMI Control" () to "On" when using a TV that supports the ARC function.

TV

HDMI
IN
(ARC)

Connection 2 : TV equipped with an HDMI connector

Use an HDMI cable to connect the TV to this unit.
To listen to audio from TV on this unit, use an optical cable to connect the TV to this unit.

🖊
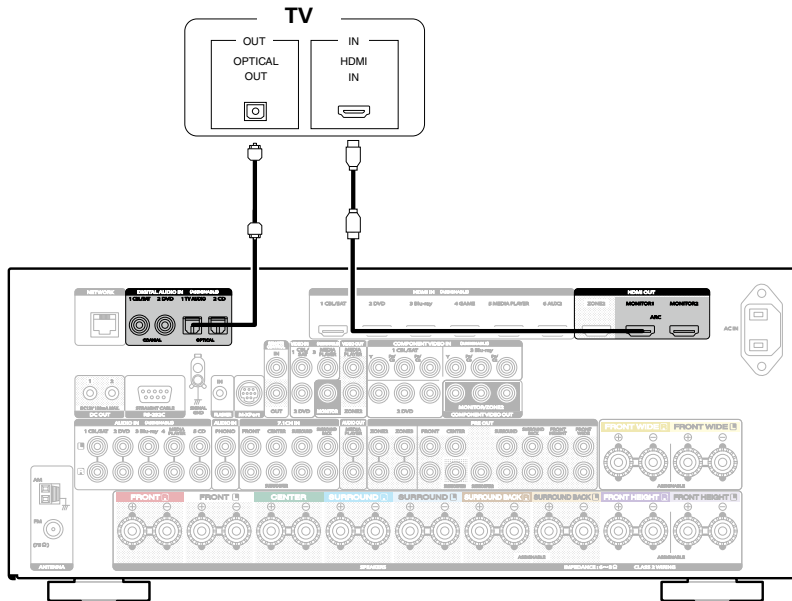
• To output audio signals that are input from the HDMI input connector to a TV connected via HDMI, set "HDMI Audio Out" (☞page 173) to "TV".

Connection 3 : TV equipped without an HDMI connector

Use a video or a component cable to connect the TV to this unit.
To listen to audio from TV on this unit, use an optical cable to connect the TV to this unit.
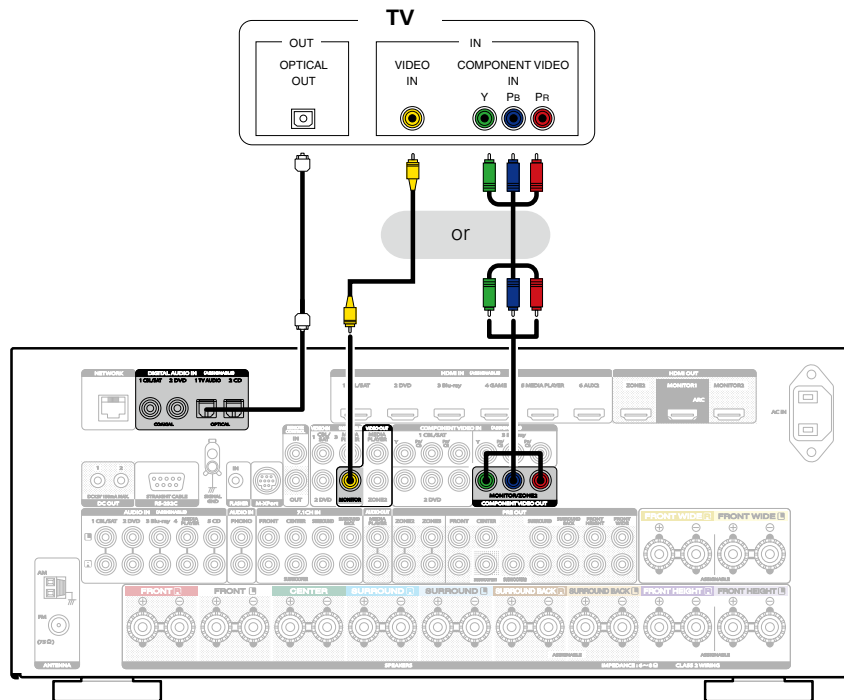
Connecting a playback device

This unit is equipped with three types of video input connectors (HDMI, component video and composite video) and three types of video output connectors (HDMI, component video and composite video).

Select input connectors on this unit according to the connectors equipped on the device you want to connect.

If the device connected to this unit is equipped with an HDMI connector, it is recommended to use HDMI connections.

In the HDMI connection, audio and video signals can be transmitted through a single HDMI cable.

- Connect devices to this unit as indicated by the input sources printed on the audio/video input connectors of this unit.
- This unit can change the source that is assigned to the HDMI IN, DIGITAL AUDIO IN, COMPONENT VIDEO IN, VIDEO IN and AUDIO IN connectors.
  How to change the source assigned to connectors ("Input Assign").

Connecting a set-top box (Satellite tuner/cable TV)

This explanation uses the connection with a satellite tuner/cable TV STB as an example.
Select input connectors on this unit according to the connectors equipped on the device you want to connect.

Connecting a DVD player

This explanation uses the connection with a DVD players as an example.
Select input connectors on this unit according to the connectors equipped on the device you want to connect.
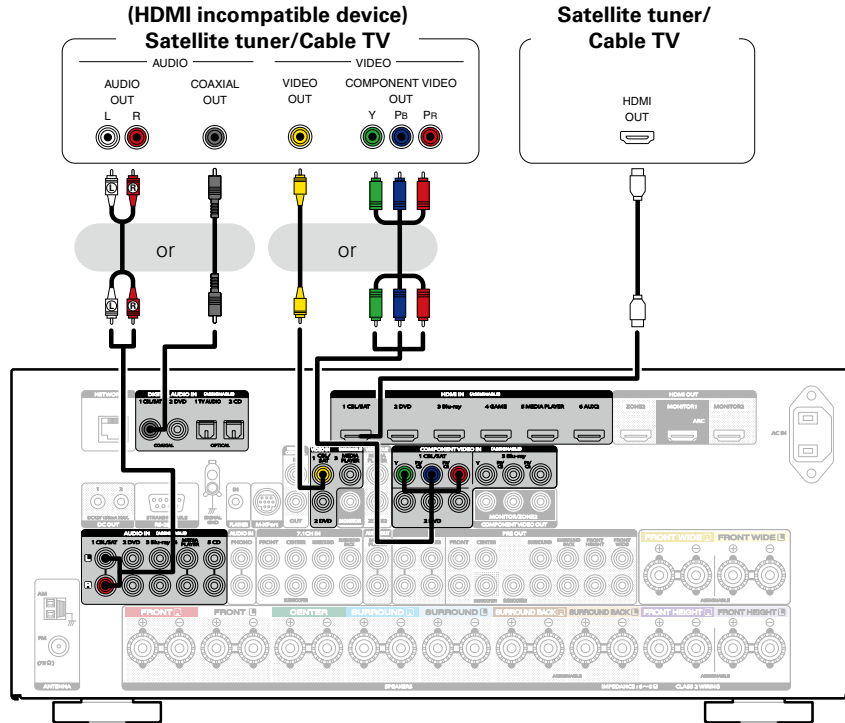
Connecting a video camcorder or other device

This explanation uses the connection with a video camcorders as an example.
Connect a playback device to this unit, such as a video camcorder or game console.

(HDMI incompatible device) Video camcorder

Video camcorder
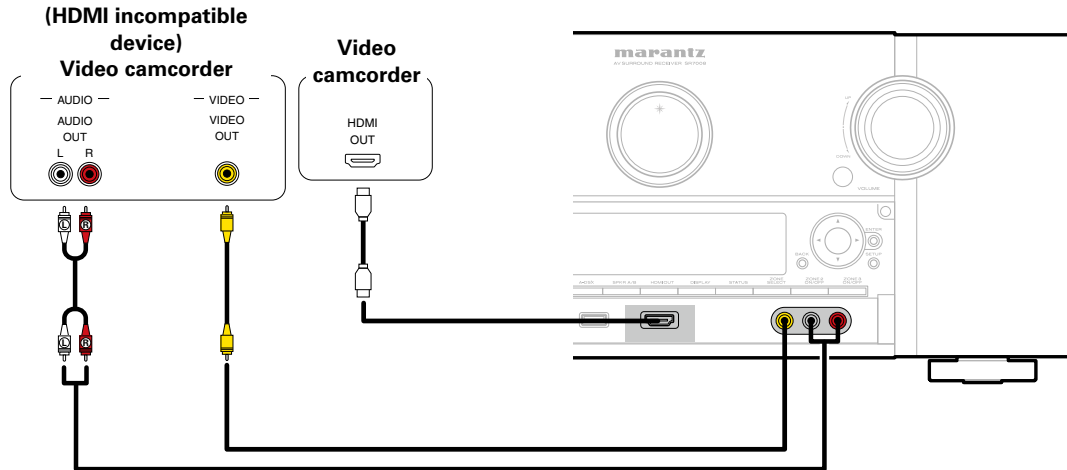
Connecting a turntable

This unit is compatible with turntables equipped with a moving magnet (MM) phono cartridge. When you connect to a turntable with a low output moving coil (MC) cartridge, use a commercially available MC head amp or a step-up transformer.
If you set this unit's input source to "PHONO" and you accidentally increase the volume without having a turntable connected, you may hear a hum noise from the speakers.

**Turntable
(MM cartridge)**

AUDIO
OUT   GND
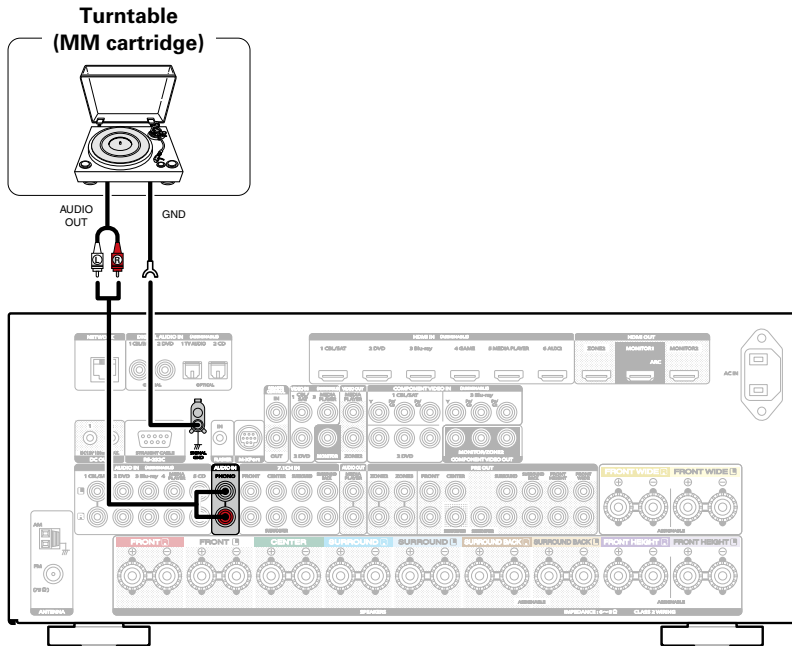
NOTE

- The ground line (SIGNAL GND) on this unit is not a safety ground. Note that depending on the turntable, connecting the ground line may have the reverse effect of increasing noise. In this case, it is not necessary to connect the ground line.

Connecting a device with a multi-channel output connector

You can connect this unit to an external device fitted with multi-channel sound audio output connectors to enjoy music and video.
To play analog signals input from 7.1CH IN connectors, set "Input Mode" (vpage 182) to "7.1CH IN".

**Devices with a multi-channel output connector
(Blu-ray Disc player, DVD player,
External decoder etc.)**
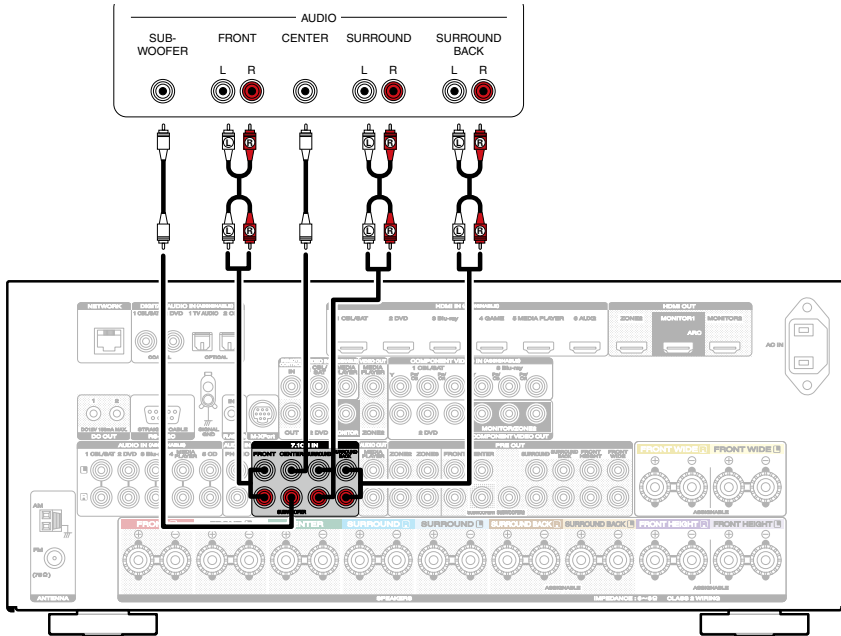
• The video signal can be connected in the same way as a DVD player (vpage 45 "Connecting a DVD player").
• When a device is connected to the SBL/SBR terminal of 7.1CH IN connectors, set "Assign Mode" (vpage 192) to "9.1ch(SB/FH/FW)".

Connecting an iPod or USB memory device to the USB port

To connect an iPod to this unit, use the USB adapter cable that was supplied with the iPod.
For operating instructions see "Playing an iPod" () or "Playing a USB memory device" ().

USB memory device

or

iPod

marantz
AV SURROUND RECEIVER SR7008

✎
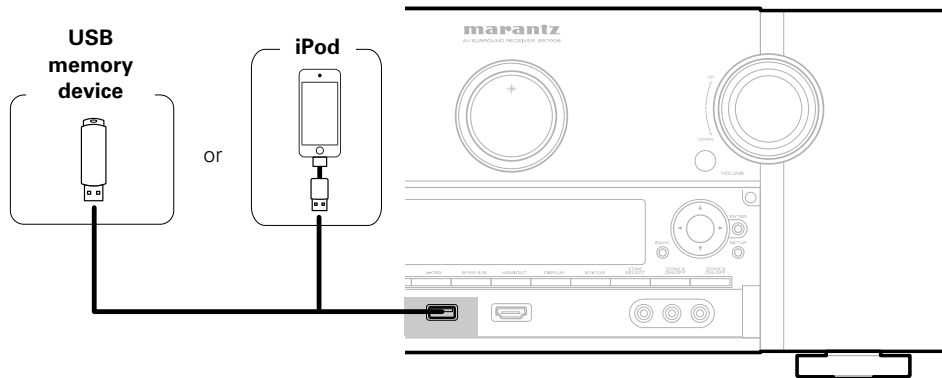
• Marantz does not guarantee that all USB memory devices will operate or receive power. When using a portable USB hard disk drive (HDD) which came with an AC adapter, use that device's supplied AC adapter.

NOTE

• USB memory devices will not work via a USB hub.
• It is not possible to use this unit by connecting the unit's USB port to a PC via a USB cable.
• Do not use an extension cable when connecting a USB memory device. This may cause radio interference with other devices.

■ Supported iPod/iPhone models

• iPod classic

iPod classic
80GB

iPod classic
160GB (2007)

iPod classic
160GB (2009)

• iPod nano

iPod nano
3rd generation
(video)
4GB 8GB

iPod nano
4th generation (video)
8GB 16GB

iPod nano
5th generation (video camera)
8GB 16GB

iPod nano
6th generation
8GB 16GB

iPod nano
7th generation
16GB

• iPod touch

iPod touch
1st generation
8GB 16GB 32GB

iPod touch
2nd generation
8GB 16GB 32GB

iPod touch
3rd generation
32GB 64GB

iPod touch
4th generation
8GB 32GB 64GB

iPod touch
5th generation
32GB 64GB

• iPhone

iPhone
4GB 8GB 16GB

iPhone 3G
8GB 16GB

iPhone 3GS
8GB 16GB 32GB

iPhone 4
8GB 16GB 32GB

iPhone 4S
16GB 32GB 64GB

iPhone 5
16GB 32GB 64GB

Connecting an HD Radio receiver

HD Radio broadcasting currently is available in the United States and select other countries.
After connecting the antenna and receiving a broadcast signal ("Listening to HD Radio broadcasts"), fix the antenna with tape in a position where the noise level becomes minimal.

Direction of broadcasting station

FM outdoor antenna

AM loop antenna
(for HD Radio broadcasting, supplied)

75 Ω/ohms coaxial cable

① ② ③

White

Black

FM indoor antenna
(for HD Radio broadcasting, supplied)

Ground

AM outdoor antenna
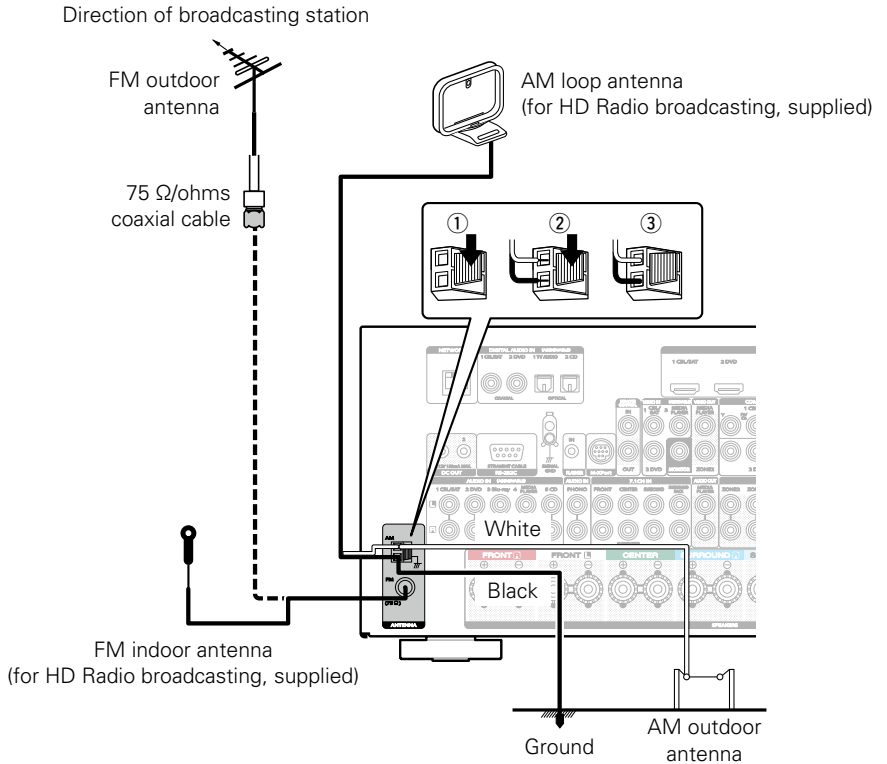
■ AM loop antenna assembly

1 Put the stand section through the bottom of the loop antenna from the rear and bend it forward.

2 Insert the projecting part into the square hole in the stand.

Loop antenna
Stand
Square hole
Projecting part
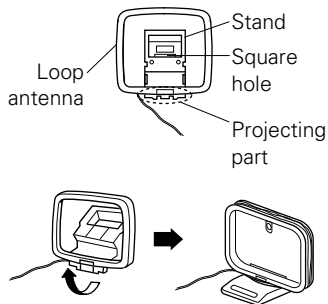
■ Using the AM loop antenna

Suspending on a wall
Suspend directly on a wall without assembling.

Nail, tack, etc.
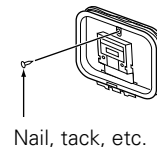
Standing alone
Use the procedure shown above to assemble.
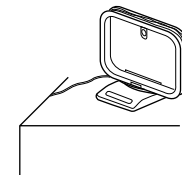
NOTE

- Do not connect two FM antennas simultaneously.
- Even if an external AM antenna is used, do not disconnect the AM loop antenna.
- Make sure the AM loop antenna lead terminals do not touch metal parts of the panel.
- If the signal has noise interference, connect the ground terminal (GND) to reduce noise.
- If you are unable to receive a good broadcast signal, we recommend installing an outdoor antenna. For details, inquire at the retail store where you purchased the unit.

Connecting to a home network (LAN)

You can connect this unit to your home network (LAN) to perform various types of playbacks and operations as follows.

- Playback of network audio such as Internet Radio and from your media server(s)
- Playback of music content from online streaming services
- Using the Apple AirPlay function
- Operation on this unit via the network
- Firmware Update

✎

- With this unit, it is possible to use the DHCP and Auto IP functions to make the network settings automatically.
- When using this unit connected to a network with no DHCP function, make the settings for the IP address, etc., at "Network" ().

NAS
(Network Attached Storage)

PC

Modem

Internet

To WAN side

To LAN port

To LAN port

LAN port/
Ethernet
connector

LAN port/
Ethernet
connector
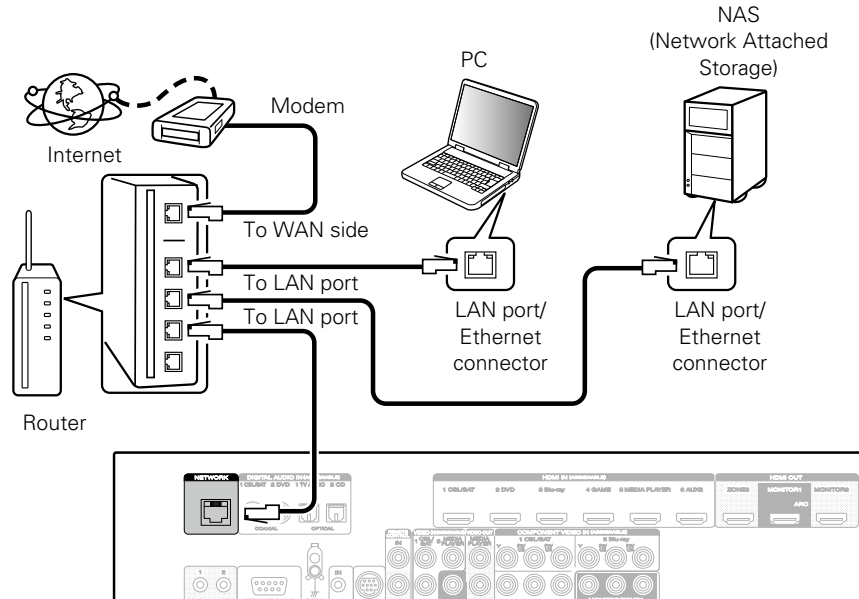
Router

For connections to the Internet, contact an ISP (Internet Service Provider) or a computer shop.

🖉

- When using this unit, we recommend you use a router equipped with the following functions:
  - Built-in DHCP server
    This function automatically assigns IP addresses on the LAN.
  - Built-in 100BASE-TX switch
    When connecting multiple devices, we recommend a switching hub with a speed of 100 Mbps or greater.
- Use only a shielded STP or ScTP LAN cable which is easily available at electronics stores (CAT-5 or greater recommended).
- The normal shielded-type LAN cable is recommended. If a flat-type cable or unshielded-type cable is used, other devices could be affected by noise.

NOTE

- The types of routers that can be used depend on the ISP. Contact your ISP or a computer shop for details.
- This unit is not compatible with PPPoE. A PPPoE-compatible router is required if you have a contract for a type of line set by PPPoE.
- Do not connect an NETWORK connector directly to the LAN port/ Ethernet connector on your computer.

Connecting a wireless receiver (RX101)

You can connect a wireless receiver (RX101, sold separately) to play back music on your Bluetooth device with this unit.
To do this, switch the input source to "M-XPort" (☞page 60 "Selecting the input source").

✎

• When connecting your Bluetooth device to the wireless receiver for the first time, paring is necessary. Once paring is completed, the communication between your Bluetooth device and the wireless receiver can be established just by connecting them. Paring is necessary for each Bluetooth device.
• You can also use the wireless receiver as an IR receiver. In this case, disable the remote control signal receiving function (☞page 143 "Remote lock function").
• This unit supports the A2DP standard of the Bluetooth profile.

Wireless receiver (RX101)

Bluetooth device
(A2DP Compatibility)

Remote control unit
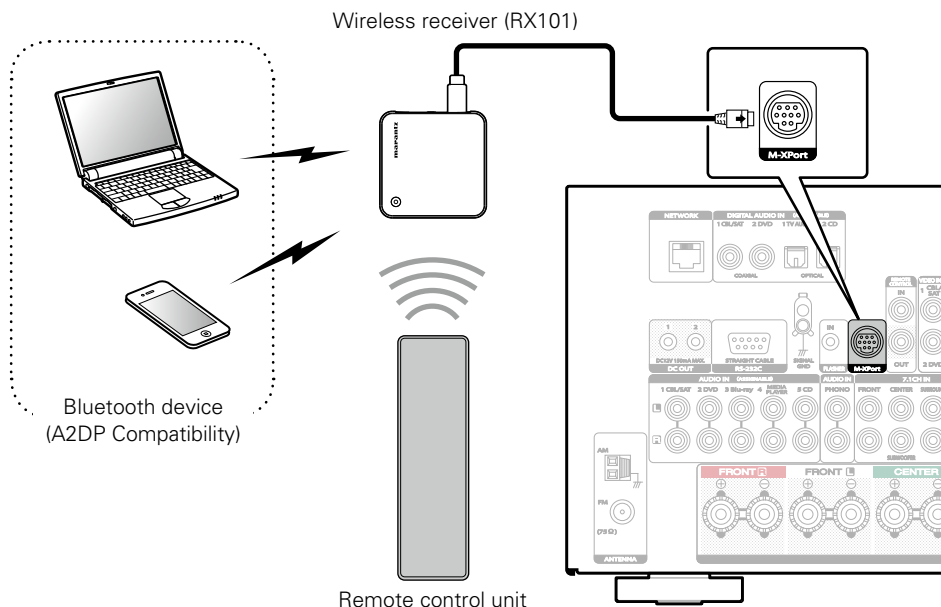
Connecting an external control device

Remotely connecting Marantz devices

■ Performing operations by RC on this unit without visual contact

You can connect an external IR receiver to the REMOTE CONTROL connectors to perform operations on this unit with the supplied remote control unit without visual contact. This might be necessary if the unit is hidden in a cupboard or corner, so you can't directly point with the remote control unit to the device.

To do this, disable the remote control signal receiving function (vpage 143 "Remote lock function").

IR receiver

RC OUT
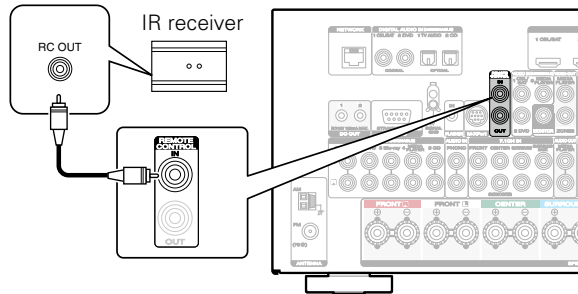
NOTE

• When the remote control signal receiving function is disabled, you can not perform operations with the remote control unit.

■ Remotely connecting Marantz devices

When you are using a Marantz device other than this unit that supports remote connection, you can transmit remote control signals just by connecting the device to the REMOTE CONTROL IN/ OUT connector with a monaural cable.

Set the remote control switch located on the rear panel of the connected audio component to "EXTERNAL" or "EXT." to use this feature.

Remotely control a Marantz Blu-ray Disc player by the Marantz Remote App

Marantz Blu-ray Disc player of newer generation also can be controlled via a network receiver unit using the Marantz Remote App. Please ensure REMOTE CONTROL system of the receiver unit and the Blu-ray Disc player is set up as shown in the previous section.

DC OUT jack

When a device with DC IN jack is connected, the connected device's power on/standby can be controlled through linked operation to this unit. The DC OUT jack outputs a maximum 12 V/150 mA electrical signal.

12 V/150 mA trigger-compatible device

NOTE

- Use the monaural mini-plug cable for connecting DC OUT jacks. Do not use the stereo mini-plug cable.
- If the permissible trigger input level for the connected device is larger than 12 V/150 mA, or has shorted, the DC OUT jack cannot be used. In this case, turn off the power to the unit, and disconnect it.

Connecting the power cord

After completing all the connections, insert the power plug into the power outlet.

To household power outlet
(AC 120 V, 60 Hz)

Power cord (supplied)
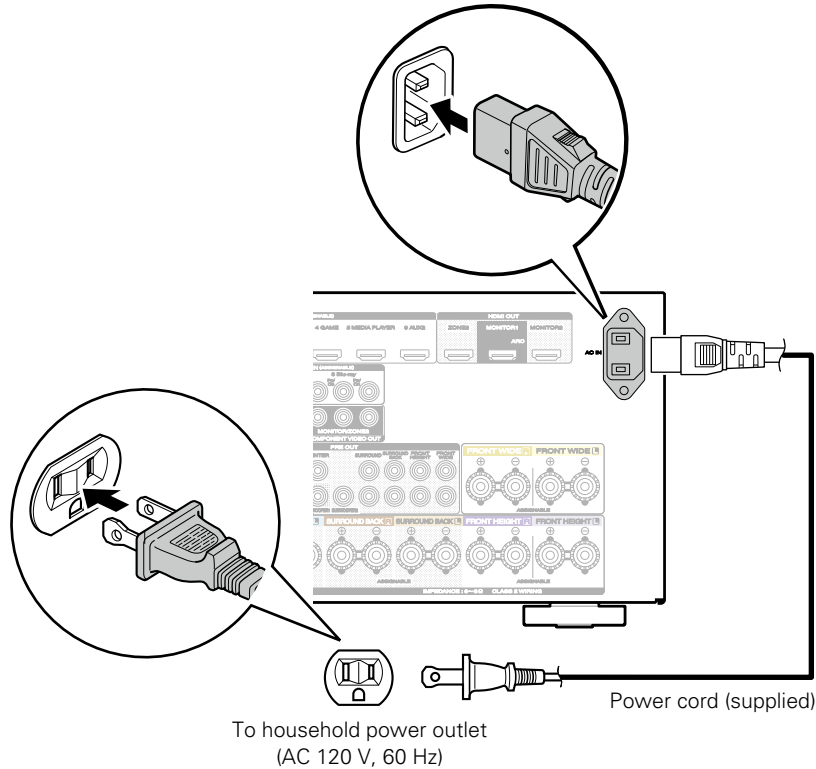
Playback

Turning the power on (☞page 60)

Selecting the input source (☞page 60)

Adjusting the master volume (☞page 61)

Turning off the sound temporarily (☞page 61)

Playing a DVD player/Blu-ray Disc player (☞page 61)

Playing an iPod (☞page 62)

Playing a USB memory device (☞page 67)

Listening to HD Radio™ stations (☞page 70)

Listening to Internet Radio (☞page 79)

Playing back files stored on a PC and NAS (☞page 83)

Viewing photographs on the Flickr site (☞page 87)

Listening to Pandora® (☞page 91)

Listening to SiriusXM Internet Radio (☞page 98)

Listening to Spotify (☞page 101)

Adding to the FAVORITE STATION button (☞page 105)

AirPlay function (☞page 107)

Convenience functions (☞page 110)

Selecting a sound mode (☞page 118)

HDMI control function (☞page 132)

InstaPrevue function (☞page 133)

Sleep timer function (☞page 135)

Rec out function (☞page 136)

Web control function (☞page 138)

Dual backup memory function (☞page 140)

Panel lock function (☞page 141)

Remote lock function (☞page 143)

Switches light illumination on/off (☞page 144)

Playback in ZONE2/ZONE3 (Separate room) (☞page 145)

Front panel **Display** **Rear panel** 59 **Remote** **Index**

Basic operation

POWER ⏻

Input source select buttons

MUTE ◁✕

VOLUME ▲▼
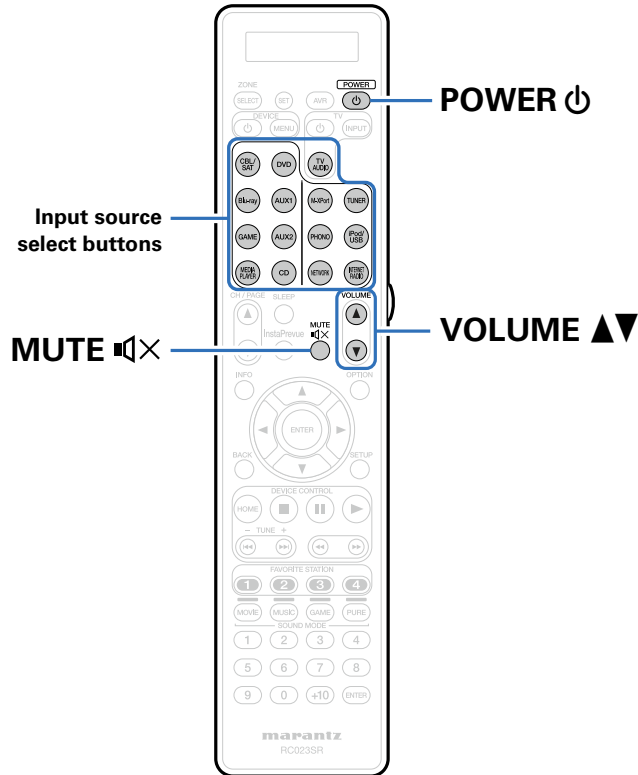
Turning the power on

1 Press POWER ⏻ to turn on power to the unit.

🖉

• You can also switch the power to standby by pressing ⏻ on the main unit.

Selecting the input source

1 Press the input source select button to be played back.
The desired input source can be selected directly.

🖉

• You can also select the input source by turning INPUT SELECTOR knob on the main unit.

Adjusting the master volume

1 Use VOLUME ▲▼ to adjust the volume.
• The variable range differs according to the input signal and channel level setting.

✎
• You can also adjust the master volume by turning VOLUME on the main unit.

Turning off the sound temporarily

1 Press MUTE ◁×.
• "MUTE" appears on the display.
• ◁× appears on the TV screen.

✎
• The sound is reduced to the level set at "Mute Level" ().
• To cancel, press MUTE ◁× again. Muting can also be cancelled by adjusting the master volume.

Playing a DVD player/Blu-ray Disc player

The following describes the procedure for playing DVD player/Blu-ray Disc player.

1 Prepare for playback.
① Turn on the power of the TV, subwoofer and player.
② Change the TV input to the input of this unit.

2 Press POWER ⏻ to turn on power to the unit.

3 Press DVD or Blu-ray to switch an input source for a player used for playback.

4 Play the DVD player or Blu-ray Disc player.

Playing an iPod

iPod/USB

CH/PAGE △▽

△▽◁▷
ENTER

BACK

HOME

OPTION

■

❚❚

▶

◀◀ ▶▶❘

◀◀ ▶▶
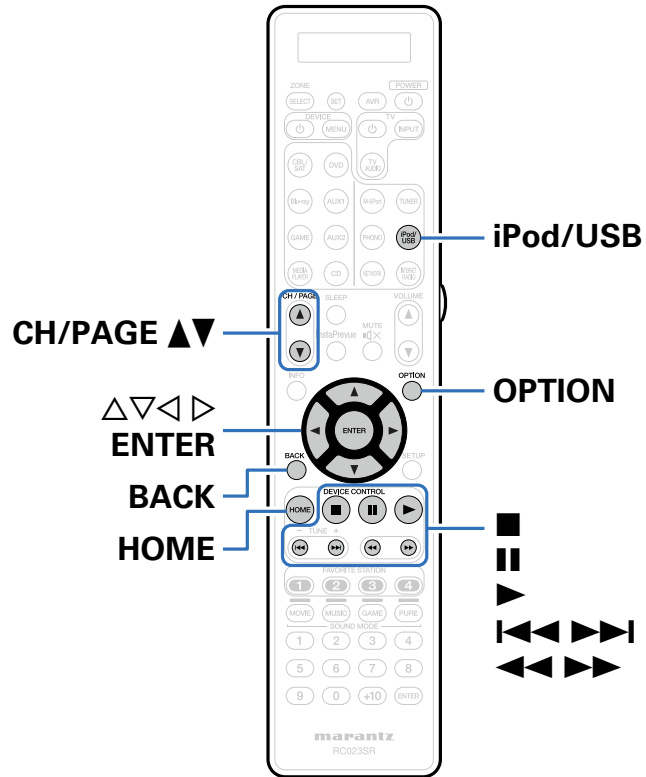
- You can use the USB cable provided with the iPod to connect the iPod with the unit's USB port and enjoy music stored on the iPod.
- For information on the iPod models that can be played back with this unit, see "Supported iPod/iPhone models" (vpage 50).

Listening to music on an iPod

1 Connect the iPod to the USB port (☞page 49).

2 Press iPod/USB to switch the input source to "iPod/USB".

"Browse From iPod" is displayed on the display of this unit.
• Nothing is displayed on the TV screen.

3 Operate iPod itself directly while seeing the iPod screen to play back music.

✐
• "iPod Browse Mode" has two modes, "From iPod" and "On-Screen".
By default, "From iPod", where you directly operate the iPod itself while looking at the iPod screen, is set.
• To change to "On-Screen", where you perform operations while having the iPod information displayed on the TV screen, see "iPod Browse Mode Settings" (☞page 64).

NOTE
• Depending on the type of iPod and the software version, some functions may not operate.
• Note that Marantz will accept no responsibility whatsoever for any problems arising with the data on an iPod when using this unit in conjunction with the iPod.

■ Playing the AirPlay (☞page 107)

■ Operations available through the OPTION button
• iPod Browse Mode Settings (☞page 64)
• Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

iPod Browse Mode Settings

In this mode, various lists and screens during playback on the iPod are displayed on the TV screen.
This section describes the steps up to playing back tracks on the iPod in "On-Screen".

1 **Press OPTION when the input source is "iPod/USB".**
The option menu screen is displayed.

2 **Select "iPod Browse Mode", then press ENTER.**
The "iPod Browse Mode" screen is displayed.

3 **Use ◁ ▷ to select "On-Screen", then press ENTER.**
• Operations available for "On-Screen" and "From iPod" are listed below.

iPod Browse Mode		From iPod	On-Screen
Playable files	**Music file**	✓	✓
	Video file	＊	
Active buttons	**Remote control unit (This unit)**	✓	✓
	iPod	✓	

＊ Only the sound is played.

4 **Use △▽ ▷ to select the file to be played, then press ENTER.**
Playback starts.

Operation buttons	Function
▶	Playback
�III	Pause
■	Stop
I◀◀ ▶▶I	Skip to previous track/Skip to next track
◀◀ ▶▶	(Press and hold) Fast-reverse / Fast-forward
ENTER	Playback / Pause
	(Press and hold) Stop
△▽	Skip to previous track/Skip to next track
	(Press and hold) Fast-reverse / Fast-forward
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

✏

• The display switches between track title, artist name, and album title etc. each time the main unit's STATUS is pressed during playback with "iPod Browse Mode" set to "On-Screen".

• English letters, numbers and certain symbols are displayed. Incompatible characters are displayed as "." (period).

■ Operations available through the OPTION button

• Performing repeat playback (℘page 66)
• Performing random playback (℘page 66)
• Playing the Same Music in All Zones (All Zone Stereo) (℘page 117)

Performing repeat playback

1 **Press OPTION with "iPod Browse Mode" set to "On-Screen".**
The option menu screen is displayed.

2 **Use △▽ to select "Repeat", then press ENTER.**

3 **Use ◁ ▷ to select repeat playback mode.**

Off (Default) : Repeat playback mode is canceled.

One : A file being played is played repeatedly.

All : All files in the folder currently being played are played repeatedly.

4 **Press ENTER.**
The display returns to the playback screen.

Performing random playback

1 **Press OPTION with "iPod Browse Mode" set to "On-Screen".**
The option menu screen is displayed.

2 **Use △▽ to select "Random", then press ENTER.**

3 **Use ◁ ▷ to select random playback mode.**

Off (Default) : Disable random playback.

On : Randomly play back all tracks in the current playback folder.

4 **Press ENTER.**
The display returns to the playback screen.

✎

• During random playback, each time playback of a track is completed, another track is randomly selected for playback from tracks in the folder. Therefore, it's possible that you may hear a track played back more than once during random playback.

Playing a USB memory device

iPod/USB

CH/PAGE ▲▼

△▽◁▷
ENTER

BACK

HOME

OPTION

■
II
▶
I◀◀ ▶▶I
◀◀ ▶▶
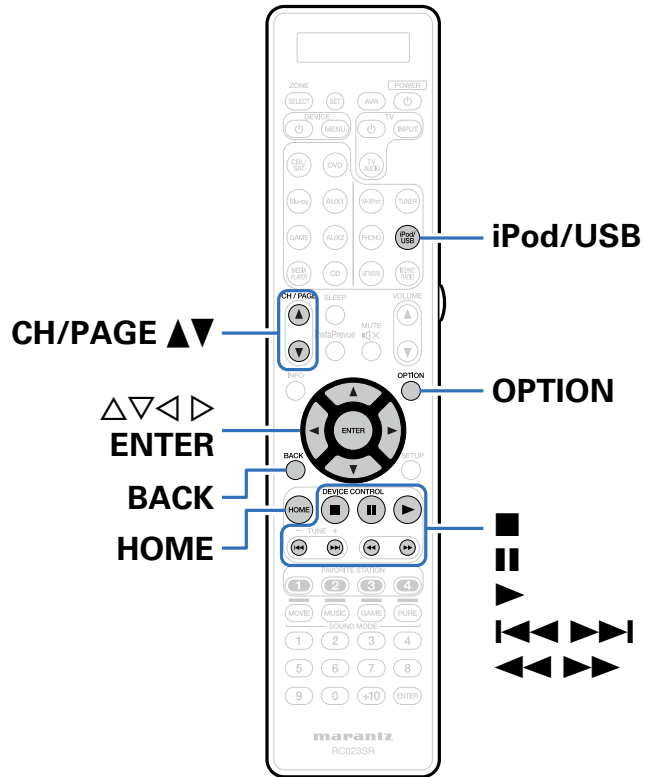
- Playing back music or viewing still picture (JPEG) files stored on a USB memory device.
- Only USB memory devices conforming to mass storage class and MTP (Media Transfer Protocol) standards can be played on this unit.
- This unit is compatible with USB memory devices in "FAT16" or "FAT32" format.
- This unit can play back the following files.
  - **WMA** (Windows Media Audio)
  - **MP3** (MPEG-1 Audio Layer-3)
  - **WAV**
  - **MPEG-4 AAC**
  - **FLAC** (Free Lossless Audio Codec)
  - **JPEG**
  - **ALAC** (Apple Lossless Audio Codec)

Playing files stored on USB memory devices

1 **Connect the USB memory device to the USB port (☞page 49).**

2 **Press iPod/USB to switch the input source to "iPod/USB".**

USB   [1 /9]

□ Folder1
□ Folder2
□ Folder3
♫ Music1
♫ Music2
♫ Music3
♫ Music4

OPTION Option

3 **Use △▽ ▷ to select the file to be played, then press ENTER.**
Playback starts.

Operation buttons	Function
▶	Playback
❙❙	Pause
■	Stop
❙◀◀ ▶▶❙	Skip to previous track/Skip to next track
◀◀ ▶▶	(Press and hold) Fast-reverse / Fast-forward*
ENTER	Playback / Pause
	(Press and hold) Stop
△▽	Skip to previous track/Skip to next track
	(Press and hold) Fast-reverse / Fast-forward*
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

* This function is available while an MP3 / WAV / AAC / FLAC file is being played back.

📝

• When an MP3 music file includes album art data, the album art can be displayed while playing the file.
• This unit plays back picture (JPEG) files in the order in which they are stored in the folder.

NOTE

• Note that Marantz will accept no responsibility whatsoever for any problems arising with the data on a USB memory device when using this unit in conjunction with the USB memory device.

■ Operations available through the OPTION button

- Performing repeat playback (☞page 111)
- Performing random playback (☞page 111)
- Searching content with keywords (Text Search) (☞page 113)
- Playing back music and a favorite picture at the same time (Slideshow) (☞page 114)
- Setting the Slideshow Interval (☞page 115)
- Adjusting the picture quality for your viewing environment (Picture Mode) (☞page 116)
- Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Listening to HD Radio™ stations
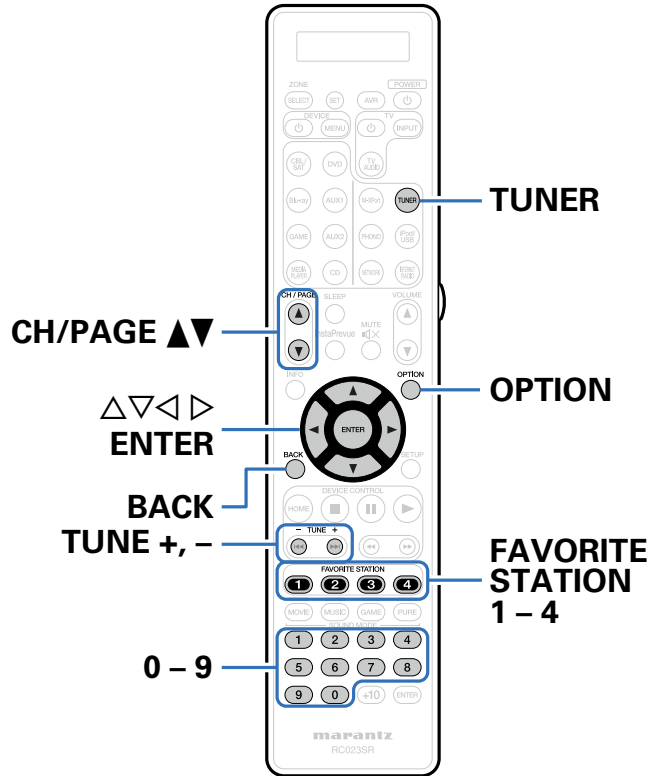
- HD Radio stations offer higher sound quality than conventional FM/AM broadcasts. It is also possible to receive data services and select broadcasts from among up to eight multicast programs.
- HD Radio Technology provides higher quality sound than conventional broadcasts and allows reception of data services.

Digital Sound)

- Digital, CD-quality sound. HD Radio Technology enables local radio stations to broadcast a clean digital signal. AM sounds like today's FM and FM sounds like a CD.

PSD)

- Program Service Data: Contributes to the superior user experience of HD Radio Technology. Presents song name, artist, station IDs, and other relevant data streams.

TUNER

CH/PAGE ▲▼

△▽◁▷
ENTER

OPTION

BACK
TUNE +, −

FAVORITE
STATION
1 – 4

0 – 9

HD2/HD3

• Adjacent to traditional main stations are extra local FM channels. These HD2/HD3 Channels provide new, original music as well as deep cuts into traditional genre.

HD) Radio®

This HD Radio receiver enables:

PSD

HD2/HD3

Digital Sound

• HD Radio Technology manufactured under license from iBiquity Digital Corporation. U.S. and Foreign Patents. HD Radio™ and the HD, HD Radio, and "Arc" logos are proprietary trademarks of iBiquity Digital Corp.
For detailed information on HD Radio Technology, please go to "www.hdradio.com/".

• For antenna connections, see "Connecting an HD Radio receiver" (vpage 51).

Listening to HD Radio broadcasts

1 Press TUNER to switch the input source to "HD Radio".

【TV Screen】

HD Radio

STEREO HD-AUTO

Now Playing

CH 1

FM 92.10MHz

TUNE+/– Tune   CH▲/▼ Preset   OPTION Option

【Display of this unit】

```
01 FM  92.10MHz "
```

2 Press OPTION.
The option menu screen is displayed.

3 Use △▽ to select "FM/AM", then press ENTER.
The Band screen is displayed.

4 **Use ◁ ▷ to select "FM" or "AM", then press ENTER.**

FM : When listening to an FM broadcast.

AM : When listening to an AM broadcast.

5 **Press TUNE + or TUNE – to select the station you want to hear.**

Scanning is performed until it finds an available radio station. When it finds a radio station, it stops the scan automatically and tunes in.

✎

- The modes for receiving FM broadcasts consists of "Auto" mode that automatically searches available broadcast stations and "Manual" mode that lets you tune in using buttons to change the frequency. The default setting is "Auto". You can also use "Direct Tune" to tune in by entering the frequency directly.

In "Auto" mode, you cannot tune in to radio stations if the reception is not good. If this is the case, then use the "Manual" mode or "Direct Tune" to tune in.

Operation buttons	Function
TUNE +, –	Tuning (up/down) / Multicast switching
CH/PAGE ▲▼	Preset channel selection
0 – 9	Preset channel selection / Direct frequency tuning
FAVORITE STATION 1 – 4	Call up FAVORITE STATION
	(Press and hold) Registering to FAVORITE STATION

■ **Adding to the FAVORITE STATION button (**☞**page 105)**

■ **Operations available through the OPTION button**

- Tuning in by entering the frequency (Direct Tune) (☞page 73)
- Changing the tuning mode (Tune Mode) (☞page 73)
- Presetting the current broadcast station (Preset Memory) (☞page 75)
- Tuning in to stations and presetting them automatically (Auto Preset Memory) (☞page 76)
- Specify a name for the preset broadcast station (Preset Name) (☞page 76)
- Skipping preset broadcast stations (Preset Skip) (☞page 77)
- Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Tuning in by entering the frequency (Direct Tune)

You can enter the receiving frequency directly to tune in.

1 **Press OPTION when the input source is "HD Radio".**
The option menu screen is displayed.

2 **Use △▽ to select "Direct Tune", then press ENTER.**
The screen that lets you enter the frequency is displayed.

3 **Use △▽ or 0 – 9 to select a number and press ▷.**
• If ◁ is pressed, the immediately preceding input is cancelled.

4 **Repeat step 3 and enter the frequency of the radio station you want to hear.**

5 **When setting is completed, press ENTER.**
The preset frequency is tuned in.

Changing the tuning mode (Tune Mode)

You can change the mode for tuning into FM broadcasts.

1 **Press OPTION when the input source is "HD Radio".**
The option menu screen is displayed.

2 **Use △▽ to select "Tune Mode", then press ENTER.**

3 **Use ◁ ▷ to select tuning mode, then press ENTER.**

Auto : Automatically search for and tune to a receivable radio station.

HD-Auto : Automatically tune to the HD Radio station.

Analog-Auto : Automatically tune to an analog station and analog HD Radio station.

Manual : Manually change the frequency one step at a time each time the button is pressed.

Analog-Manual : Manually tune to an analog station and analog HD Radio station.

Selecting audio programs

HD Radio Technology enables stations to broadcast multiple Audio Program and data services on HD2 / HD3 / HD4 channels.

1 Select the tuning mode ("HD-Auto", "Auto" or "Manual").

2 Press TUNE + or TUNE – to tune in the desired Multicast channel.

• If the station you are tuning in has multiple audio programs, "HD1" is indicated on the display.
If it only has one audio program, "HD" is indicated.

• When the unit receives multicast channels, the multicast program number (HD2) is displayed to the right of the station name.

NOTE

• This function is not available for AM HD Radio stations because they cannot broadcast multicast channels.
• If digital audio data cannot be received after the station is selected, or if the station signal is weak, the unit may not be able to receive the multicast channels.
• If the station signal is weak, the digital audio of the multicast channel may cut out.

Listening to preset stations

1 Use CH/PAGE ▲▼ or 0 – 9 to select the desired preset channel.

Presetting the current broadcast station (Preset Memory)

Your favorite broadcast stations can be preset so that you can tune them in easily. Up to 56 stations can be preset.

1 Tune in the broadcast station you want to preset (☞page 71 "Listening to HD Radio broadcasts").

2 Press OPTION.
The option menu screen is displayed.

3 Use $\triangle\triangledown$ to select "Preset Memory", then press ENTER.
The list of already preset channels is displayed.

4 Use $\triangle\triangledown$ or 0 – 9 to select the channel you want to preset, then press ENTER.
The current broadcast station that is preset.
• To preset other stations, repeat steps 1 to 4.

Channel	Default settings
1 – 8	92.10 / 92.30 / 92.50 / 92.70 / 93.10 / 93.50 / 93.70 / 94.10 MHz
9 – 16	94.30 / 94.50 / 94.70 / 94.90 / 95.10 / 95.30 / 95.50 / 95.70 MHz
17 – 24	98.10 / 98.30 / 98.50 / 98.70 / 98.90 / 99.10 / 100.10 / 100.30 MHz
25 – 32	100.50 / 100.70 / 100.90 / 101.10 / 101.30 / 101.50 / 101.70 / 101.90 MHz
33 – 40	103.10 / 103.30 / 103.50 / 103.70 / 103.90 / 104.10 / 104.30 / 104.50 MHz
41 – 48	104.70 / 104.90 / 105.10 / 105.30 / 105.50 / 105.70 / 105.90 / 106.10 MHz
49 – 56	106.30 / 106.50 / 106.70 / 106.90 / 107.10 / 107.30 / 107.50 / 107.90 MHz

Tuning in to stations and presetting them automatically (Auto Preset Memory)

A maximum of 56 radio stations can be automatically preset.

1 **Press OPTION when the input source is "HD Radio".**
The option menu screen is displayed.

2 **Use △▽ to select "Auto Preset Memory", then press ENTER.**

3 **Press ENTER.**
The unit starts to tune in to radio stations automatically and preset them.
• When presetting is completed, "Completed" is displayed for about 5 seconds and the option menu screen turns off.

🖊

• The preset memory is overwritten.

Specify a name for the preset broadcast station (Preset Name)

You can set the name to the preset broadcast station or change it.
Up to eight characters can be input.

1 **Press OPTION when the input source is "HD Radio".**
The option menu screen is displayed.

2 **Use △▽ to select "Preset Name", then press ENTER.**
The Preset Name screen is displayed.

3 **Use ◁ ▷ to select the group of the broadcast station you want to name.**

4 **Use △▽ to select the broadcast station you want to name, then press ENTER.**

5 **Use △▽ to select a name label, then press ENTER.**
The screen that lets you edit the preset name is displayed.
• If you select "Set Defaults", then the unit returns to displaying the frequency.

6 **Enter the characters, then press "OK".**
• For character input, see page 159.

Skipping preset broadcast stations (Preset Skip)

When tuning preset broadcast stations, you can set groups or individual broadcast stations that you don't want to display in advance.
The preset skip setting is useful when tuning in, because only your favorite stations are displayed.

1 **Press OPTION when the input source is "HD Radio".**
The option menu screen is displayed.

2 **Use △▽ to select "Preset Skip", then press ENTER.**
The Preset Skip screen is displayed.

3 ❏ **To set the stations you want to skip by groups**
① **Use ◁ ▷ to select the group of broadcast stations you want to skip.**
② **Press △ to select "Set No. ✳ – ✳ to Skip", then press ENTER.**
All broadcast stations in the group "✳ – ✳" you selected are not displayed.
(✳ are the selected group numbers)

❏ **To set the stations you want to skip by stations**
① **Use ◁ ▷ to select the group of broadcast stations you want to skip.**
② **Use △▽ to select the broadcast station you want to skip.**
③ **Use ◁ ▷ to select "Skip".**
The station you selected is not displayed.

Cancelling preset skip

1 **While the Preset Skip screen is displayed, use ◁ ▷ to select a group containing a broadcast station to cancel the skip for.**

2 **Use △▽ to select a broadcast station to cancel the skip for.**

3 **Use ◁ ▷ to select "On".**
The skip is cancelled.

NOTE

• Preset skip cannot be cancelled for groups.

Check the HD Radio reception information

1 **Press STATUS on the main unit while an HD Radio broadcast is being received.**

The current reception information is shown on the display.
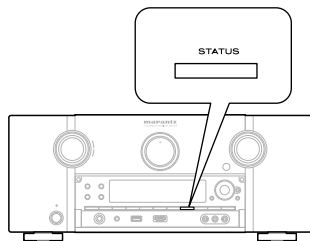
① Normal
↓
② Frequency / Signal strength
↓
③ Long station name / Program and Program type
↓
④ Title name / Artist name
↓
⑤ Album name / Genre name

🖉

• If the station signal weakens while receiving a digital broadcast (while "HD" and text is displayed), the mode automatically switches to the analog reception mode (the reception frequency is displayed).

Because of this, the "HD" and text may flicker if the station signal level is weak and unstable.

Listening to Internet Radio

NETWORK

CH/PAGE ▲▼

△▽◁▷
ENTER

BACK

HOME

INTERNET
RADIO

OPTION

FAVORITE
STATION
1 – 4
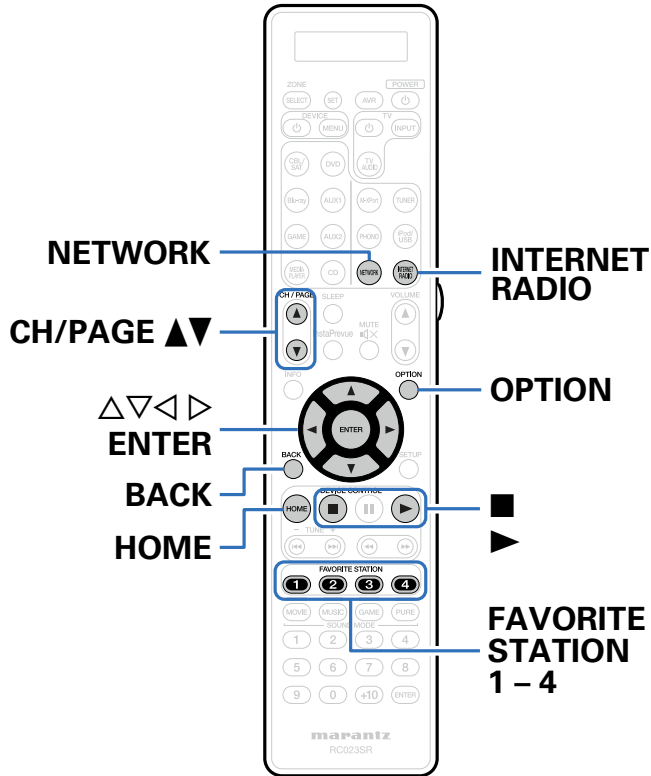
- Internet Radio refers to radio broadcasts distributed over the Internet. Internet Radio stations from around the world can be received.
- The broad cast station types and specifications supported by this unit for playback are as follows.
  - **WMA** (Windows Media Audio)
  - **MP3** (MPEG-1 Audio Layer-3)
  - **MPEG-4 AAC**

Listening to Internet Radio

1 Prepare for playback.
• Check the network environment, then turn on this unit's power (☞ page 53 "Connecting to a home network (LAN)").

2 Press NETWORK.
• You can also press INTERNET RADIO to select the input source "Internet Radio" directly.

3 Use △▽◁ ▷ to select "Internet Radio", then press ENTER.

4 Use △▽ to select the item you want to play, then press ENTER.

✱✱✱✱✱ (Country name) :
• Displays typical Internet Radio stations your country.

Search Stations :
• Displays all Internet Radio stations that this unit can tune in to.

Search Podcasts :
• Displays Internet Radio stations in the podcasts that this unit can tune in to.

Recommended Stations :
• Displays recommended Internet Radio stations.

radiomarantz.com :

• Displays Internet Radio stations added to favorites in vTuner. For instructions on how to add to favorites in vTuner, see "Using vTuner to add Internet Radio stations to favorites" (v page 82).

Recently Played :

• Displays recently played Internet Radio stations. Up to 20 stations can be stored in "Recently Played".

Search by Keyword :

• Displays Internet Radio stations searched by keyword. For character input, see page 160.

5 Use △▽ ▷ to select the station, then press ENTER.

Playback starts once buffering reaches "100%".

Operation buttons	Function
▶	Playback
■	Stop
ENTER	(Press and hold) Stop
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
FAVORITE STATION 1 – 4	Call up FAVORITE STATION
	(Press and hold) Registering to FAVORITE STATION
INTERNET RADIO	Last played Internet Radio station
HOME	Go to Home screen

✎

• The display switches between track title and radio station name etc. each time the main unit's STATUS is pressed.

• Any characters that cannot be displayed are replaced with "." (period).

NOTE

• The radio station database service may be suspended or be otherwise unavailable without notice.

Playing the last played Internet Radio station

1 Press INTERNET RADIO.

The source switches to "Internet Radio" and the last played radio station plays.

Using vTuner to add Internet Radio stations to favorites

There are many Internet Radio stations in the world, and this unit can tune into these stations. But finding the radio station you want to hear may be difficult, because there are too many stations. If this is the case, then please use vTuner, an Internet Radio station search website specifically designed for this unit. You can use your PC to search Internet Radio stations and add them as your favorites. This unit can play radio stations added to vTuner.

1 **Check the MAC address of this unit (☞page 199 "Information").**
   • The MAC address is necessary when you create an account for vTuner.

2 **Use your PC to access the vTuner website (http://www. radiomarantz.com).**

3 **Enter the MAC address of this unit, then click "Go".**

4 **Enter your E-mail address and a password of your choice.**

5 **Select the search criteria (genre, region, language, etc.) of your choice.**
   • You can also enter a keyword to search for a station you want to hear.

6 **Select the radio station of your choice from the list, and then click the Add to Favorites icon.**

7 **Enter the name of the favorite group, then click "Go".**
   A new favorite group that includes the selected radio station is created.
   • Internet Radio stations added to favorites in vTuner can be played from "radiomarantz.com" (☞page 81) with this unit.

■ Operations available through the OPTION button
   • Registering to Favorites (☞page 112)
   • Searching content with keywords (Text Search) (☞page 113)
   • Playing back music and a favorite picture at the same time (Slideshow) (☞page 114)
   • Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Playing back files stored on a PC and NAS

NETWORK

CH/PAGE △▽

△▽◁▷

ENTER

BACK

HOME

OPTION

■

❚❚

▶

I◀◀ ▶▶I

◀◀ ▶▶

FAVORITE STATION 1 – 4
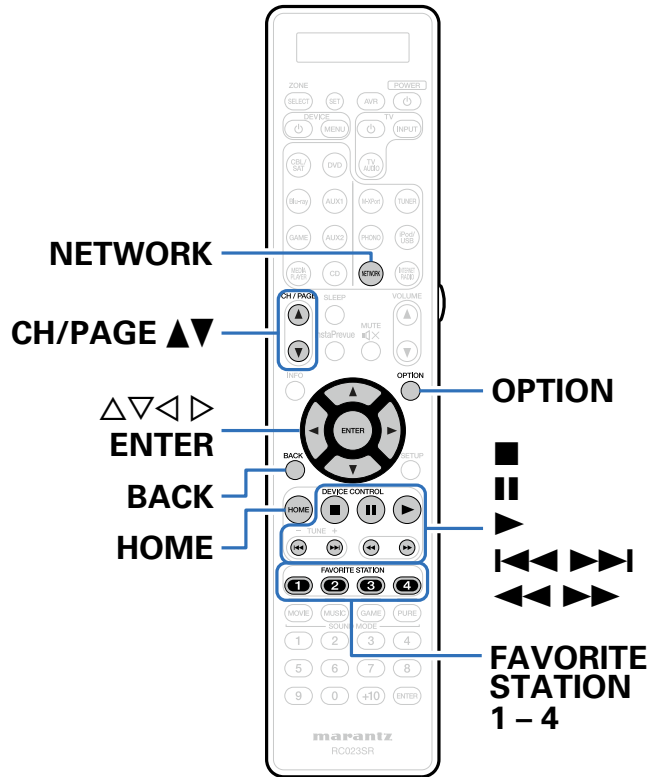
- This unit can play back music files and playlists (m3u, wpl) stored on a PC and on Network Attached Storage (NAS) that supports DLNA.
- The network audio playback function of this unit connects to the server using technologies shown below.
  - Windows Media Player Network Sharing Service
  - Windows Media DRM10
- This unit can play back the following files.
  - **WMA** (Windows Media Audio)
  - **MP3** (MPEG-1 Audio Layer-3)
  - **WAV**
  - **MPEG-4 AAC**
  - **FLAC** (Free Lossless Audio Codec)
  - **JPEG**
  - **ALAC** (Apple Lossless Audio Codec)

Applying media sharing settings

Here, we apply the settings to share music files stored on a PC and NAS on the network.
If you are using a Media Server, be sure to apply this setting first.

■ When using Windows Media Player 12 (Windows 7 / Windows 8)

1 Start up Windows Media Player 12 on the PC.

2 Select "More streaming options..." in the "Stream".

3 Select "Allowed" in the drop-down list for "SR7008".

4 Select "Allowed" in the drop-down list for "Media programs on this PC and remote connections...".

5 Click "OK" to finish.

■ When using Windows Media Player 11

1 Start up Windows Media Player 11 on the PC.

2 Select "Media Sharing" in the "Library".

3 Click the "Share my media" check box, select "SR7008", and then click "Allow".

4 As you did in step 3, select the icon of the device (other PCs and mobile devices) you want to use as a media controller, and then click "Allow".

5 Click "OK" to finish.

■ Sharing media stored in NAS

Change settings on the NAS to allow this unit and other devices (PCs and mobile devices) used as media controllers to access the NAS. For details, see the owner's manual that came with the NAS.

Playing back files stored on a PC and NAS

Use this procedure to play music files, image files or playlists.

1 Prepare for playback.
① Check the network environment, then turn on this unit's power (☞page 53 "Connecting to a home network (LAN)").
② Prepare the computer (☞Computer's operating instructions).

2 Press NETWORK.

3 Use △▽◁ ▷ to select "Media Server", then press ENTER.

🌐 Network

❤ Favorites   📻 Internet Radio   ((SiriusXM))

PANDORA   📡 Media Server   flickr

🟢 Spotify
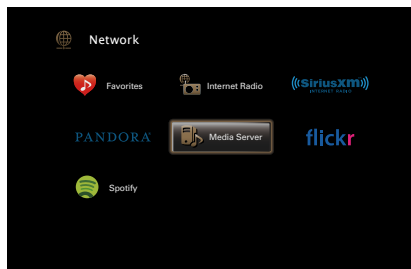
4 Use △▽ to select the server including the file to be played, then press ENTER.

5 Use △▽ ▷ to select the file, then press ENTER.
Playback starts once buffering reaches "100％".

Operation buttons	Function
▶	Playback
❚❚	Pause
■	Stop
◀◀ ▶▶❙	Skip to previous track/Skip to next track
◀◀ ▶▶	(Press and hold) Fast-reverse / Fast-forward✻
ENTER	Playback / Pause
	(Press and hold) Stop
△▽	Skip to previous track/Skip to next track
	(Press and hold) Fast-reverse / Fast-forward✻
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
FAVORITE STATION 1 – 4	Call up FAVORITE STATION
	(Press and hold) Registering to FAVORITE STATION
HOME	Go to Home screen

✻ This function is available while an MP3 / WAV / AAC / FLAC file is being played back.

✎

- The display switches between track title, artist name, and album title each time the main unit's STATUS is pressed.
- When a WMA (Windows Media Audio), MP3 or MPEG-4 AAC file includes album art data, the album art can be displayed while the music files are playing.
- If you use Ver.11 or later of Windows Media Player, the album art for WMA files can be displayed.
- WMA Lossless files can be played when using a server supporting transcoding, such as Windows Media Player Ver. 11 or later.
- This unit plays back picture (JPEG) files in the order in which they are stored in the folder.

NOTE

- When playing back music files with your PC or NAS connected through wireless LAN, audio may be interrupted depending on your wireless LAN environment. In this case, play back music files with your PC or NAS connected through wired LAN.
- Depending on the size of the still picture (JPEG) file, some time may be required for the file to be displayed.
- The order in which the tracks/files are displayed depends on the server specifications. If the tracks/files are not displayed in alphabetical order due to the server specifications, searching by the first letter may not work properly.

■ **Operations available through the OPTION button**

- Performing repeat playback (☞page 111)
- Performing random playback (☞page 111)
- Registering to Favorites (☞page 112)
- Searching content with keywords (Text Search) (☞page 113)
- Playing back music and a favorite picture at the same time (Slideshow) (☞page 114)
- Setting the Slideshow Interval (☞page 115)
- Displaying your desired video during audio playback (Video Select) (☞page 115)
- Adjusting the picture quality for your viewing environment (Picture Mode) (☞page 116)
- Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Viewing photographs on the Flickr site

NETWORK

CH/PAGE △▽

△▽◁ ▷
ENTER

OPTION

BACK

HOME ■
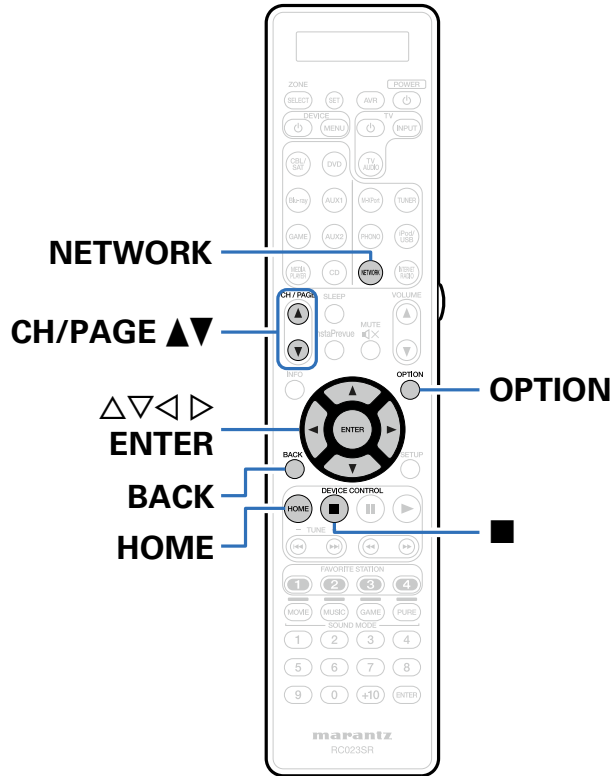
- Flickr is an online photograph sharing service that started in 2004. You can use the this unit to view photographs that have been made public by Flickr users. You do not need an account to use Flickr. To view photographs that you recorded yourself, you need an account in order to upload these photographs to the Flickr server. For details, see the Flickr homepage.
  http://www.flickr.com/
- You can view photographs shared by particular users, or all of the photographs shared on Flickr.

Viewing photographs shared by particular users

1 **Prepare for playback.**
• Check the network environment, then turn on this unit's power (☞<u>page 53</u> "Connecting to a home network (LAN)").

2 **Press NETWORK.**

3 **Use △▽◁ ▷ to select "Flickr", then press ENTER.**

Network

Favorites   Internet Radio   (((SiriusXM)))

PANDORA   Media Server   flickr

Spotify

4 **Use △▽ to select "Add Flickr Contact", then press ENTER.**

flickr Flickr   [1/2]

◁ 🗀 Add Flickr Contact ▷
🗀 All Content

OPTION Option
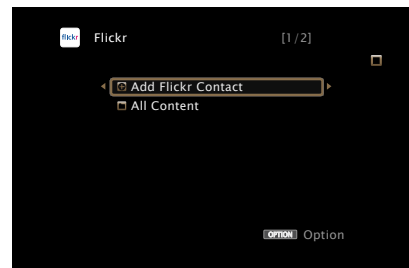
5 **In "Contact", add the screen name (user name you want to view) you want to add.**
• For character input, see <u>page 159</u>.

6 **After inputting the "Contact", press "OK".**
The screen name is added to "Contact", and the screen name you entered in Step 5 is displayed on the top screen of Flickr.
• If you enter a screen name that does not exist, "The Flickr Contact you entered could not be found" is displayed. Check and enter the correct screen name.

7 **Use △▽ to select the screen name (user name you want to view) added to "Contact", then press ENTER.**

8 Use △▽ to select the folder, and then press ENTER.

Favorites :
• Displays the favorite photographs of the specified user.

Photostream :
• Displays a list of shared photographs.

PhotoSets :
• Displays the folder (photograph album) list.

Contacts :
• Displays the screen name used by the specified user in Contacts.

Remove this Contact :
• Deletes a user from Flickr Contact.

Add this Contact :
• Adds a user from Flickr Contact.

9 Use △▽ ▷ to select the photograph, and then press ENTER.

The selected photograph is displayed.

Operation buttons	Function
ENTER	Playback
	(Press and hold)
	Stop
■	Stop
△▽	Display previous photograph/display next photograph
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

Viewing all photographs on Flickr

1 Use △▽ to select "All Content", then press ENTER.

```
flickr  Flickr                    [1/2]
                                      ▢
         ▢ Add Flickr Contact
       ◄ ▢ All Content                ►


                        OPTION  Option
```
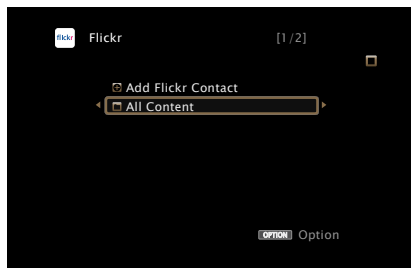
2 Use △▽ to select the folder, and then press ENTER.

Interestingness :
• Displays photographs that are popular from the number of user comments or number of times they are added as favorites.

Recent :
• Displays the most recently added photographs.

Search by text :
• Search for photographs by keyword.

3 Use △▽ ▷ to select the photograph, and then press ENTER.
The selected photograph is displayed.

NOTE

• Depending on the file format, some photographs may not be viewable.

■ Operations available through the OPTION button

• Setting the Slideshow Interval (☞page 115)
• Displaying your desired video during audio playback (Video Select) (☞page 115)
• Adjusting the picture quality for your viewing environment (Picture Mode) (☞page 116)
• Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Listening to Pandora®
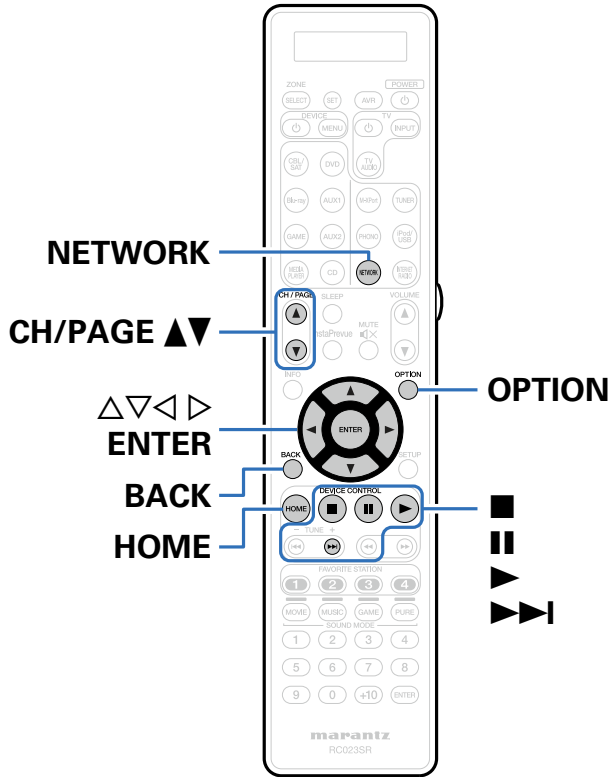
Pandora is an automated music recommendation and Internet Radio service created by the Music Genome Project.

To listen to Pandora you will need a free Pandora account. If you do not have a Pandora account, you can create one at www.pandora.com or from the Pandora smartphone application.

It is necessary to associate this machine with a Pandora account by visiting http://www.pandora.com/marantz from your PC.

NETWORK

CH/PAGE ▲▼

△▽◁ ▷

ENTER

BACK

HOME

OPTION

■

❚❚

▶

▶▶❙

Listening to Pandora®

1 **Prepare for playback.**
 ① Check the network environment, then turn on this unit's power
   (☞page 53 "Connecting to a home network (LAN)").
 ② Complete step 4 and obtain a Pandora account.
  • If you already have a Pandora account, you do not need to
    obtain a new account. Use your existing Pandora account.

2 **Press NETWORK.**

3 **Use △▽◁ ▷ to select "Pandora", then press ENTER.**

4 **If you have a Pandora account, use △▽ to select "I have
 a Pandora account", then press ENTER.**
 • If you do not have a Pandora account, press ▽ to select "I am
   new to Pandora". The URL of Pandora and activation code are
   displayed. Access the Pandora web page from your PC and
   register the displayed activation code and account information.
   Then press ENTER.
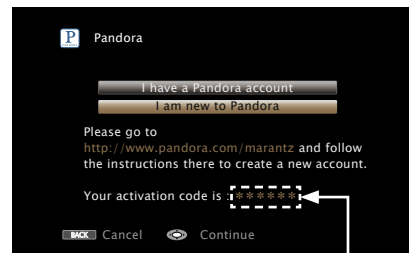
This is an identification code required to register your
purchased product to the Pandora service.
This code is used to obtain your account.

5 Input "Email address" and "Password".

```
P   Pandora Account

Email address    ▸ ▭▭▭▭▭▭▭▭▭
Password           ▭▭▭▭▭▭▭▭▭


        OK

BACK  Exit
Enter Email address
```
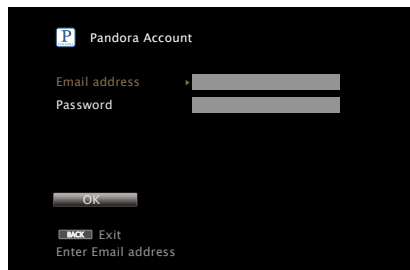
- For character input, see page 159.
- Press BACK to cancel the input. When "Cancel Input?" is displayed, select "Yes", then press ENTER.

6 After inputting the "Email address" and "Password", select "OK", then press ENTER.

If the "Email address" and "Password" match, the top menu for Pandora is displayed.

Creating a new station

You can create up to 100 radio stations.

1 Use △▽ to select "New Station", then press ENTER.

```
P   My Station                    [1/4]


 ◂ □ New Station                     ▸
    ♪ Quick Mix
    ♪ Music1 Radio
    ⚙ Sign Out



                       OPTION  Option
```

2 Input a track or artist name, then press "OK".

```
P   New Station

Track or Artist   Music2_
  Clear    Insert    Delete    ←    →
A  B  C  D  E  F  G  H  I  J  K  L  M
N  O  P  Q  R  S  T  U  V  W  X  Y  Z
0  1  2  3  4  5  6  7  8  9  !  "  #
$  %  &  '  (  )  *  +  ,  ;  <  =  >
   a/A       Space       Cancel     O K

⊙  Select      ⊙  Input
BACK  Cancel
```

- For character input, see page 159.

3 **Use △▽ to select "Search by Artist" or "Search by Track", then press ENTER.**

You can search and display a list by track or artist.
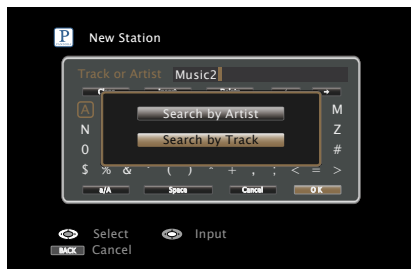
4 **Press △▽, select a file (e.g. Music2 Radio) from the list, and press ENTER.**

"Radio" is added to the end of a filename, and your new station is created (e.g. Music2 Radio).

Operation buttons	Function
▶	Playback
❚❚	Pause
■	Stop
▶▶❙	Skip to next track
ENTER	Playback / Pause
	(Press and hold)
	Stop
▽	Skip to next track
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

📝

• You can create up to 100 Stations (radio stations).
• Your new station will play music with similar qualities to the artist or track you entered.

Listening to an existing station

1 **Use △▽ and select the radio station ("Music2 Radio") that you want to listen to, and press ENTER.**

```
P  Music2 Radio

                    Now Playing
                    ♪ Title
                    👤 Artist
                    💿 Album

   00:06      100%


      Pause              OPTION  Option
      Back        Next           Menu
```

🖊
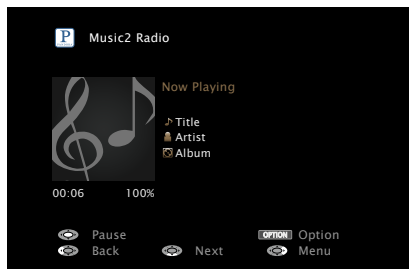
• You can Skip up to 6 Tracks that are being played back within 1 hour.

Listening to created radio stations at random

1 **Use △▽ to select "Quick Mix", then press ENTER.**
Created radio stations are selected at random, and tracks are streamed.

Giving Feedback and Managing Stations

You can personalize your stations by providing feedback.

1 **Press ▷ while a track is playing.**
The Pandora menu screen is displayed.

P Menu   [1 /8]

◄ ● I like this track ►
● I don't like this track
☞ Why is this track playing?
☞ Create station
☞ Bookmark this artist
☞ Bookmark this track
☞ I'm tired of this track
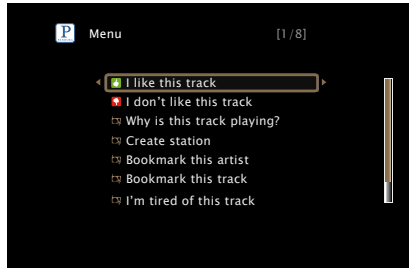
I like this track :
• Press when you like the track that is being played.
• It will return to the Play Screen. And 👍 (Thumbs up) icon is displayed. (The icon is not displayed on the next track.)

I don't like this track :
• Press when you don't like the track that is being played.
• It will return to the Play Screen. And 👎 (Thumbs down) icon is displayed. (The icon is not displayed on the next track.)

Why is this track playing? :
• Displays the reason why Pandora selected this track.

Create station :
• Creates a Station for the Track or Artist being played.

Bookmark this artist :
• Bookmarks the artist currently being played.
• You can check on a computer or iPhone etc.
• For details, see the Pandora web page.

Bookmark this track :
• Bookmarks the track currently being played.
• You can check on a computer or iPhone etc.
• For details, see the Pandora web page.

I'm tired of this track :
• Press when you don't like the track that is being played.
• The track will not be played for 1 month.

Delete this station :
• Press when you want to delete the station that is being played.

🖉

• You can create up to 100 Stations (radio stations).

Sign Out

Disassociate this unit from your Pandora account.

1 Use △▽ to select "Sign Out", then press ENTER.
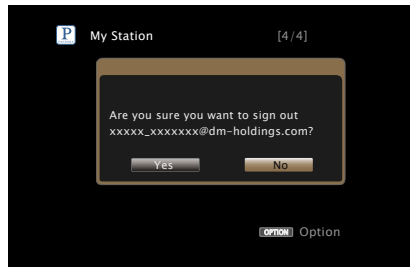
```
P  My Station                    [4/4]


     Are you sure you want to sign out
     xxxxx_xxxxxxx@dm-holdings.com?

        Yes              No



                  OPTION  Option
```

2 When the popup menu appears, use ◁ ▷ to select "Yes", then press ENTER.

■ Operations available through the OPTION button

- Displaying your desired video during audio playback (Video Select) (page 115)
- Adjusting the picture quality for your viewing environment (Picture Mode) (page 116)
- Playing the Same Music in All Zones (All Zone Stereo) (page 117)

Listening to SiriusXM Internet Radio

NETWORK

CH/PAGE ▲▼

△▽◁ ▷

ENTER

BACK

HOME

OPTION

■

▶

Enjoy anywhere access to the unparalleled content of SiriusXM.
Whether on your computer, smartphone, tablet, Lynx Portable Enjoy anywhere access to the unparalleled content of SiriusXM.
Whether on your computer, smartphone, tablet, Lynx Portable Radio, or compatible Internet-connected device, you don't need to be in your vehicle to enjoy SiriusXM.
For details, see the SiriusXM homepage.
http://www.siriusxm.com

Listening to SiriusXM Internet Radio

Over 120-channels of the SiriusXM programming you love, including commercial-free music plus sports, talk, news and entertainment.
Listen anywhere on your computer or smartphone.

1 Prepare for playback.
① Check the network environment, then turn on this unit's power (☞page 53 "Connecting to a home network (LAN)").
② Access the following website from your PC and obtain a SiriusXM account.
http://www.siriusxm.com
  • If you already have a SiriusXM account, you do not need to obtain a new account. Select "Sign in" in step 4, and enter your existing SiriusXM account.

2 Press NETWORK.

3 Use △▽◁ ▷ to select "SiriusXM", then press ENTER.

⊕ Network

❤ Favorites   🔊 Internet Radio   ((Siriusxm))

PANDORA   📇 Media Server   flickr

🟢 Spotify

4 Select "Sign in", then press ENTER.

📶 SiriusXM Sign in

Please set your SiriusXM username and password.
You can go to www.siriusxm.com to sign up
for an account. Or,select "Start Trial" below
to start the one-time free trial.

Sign in
Start Trial

BACK Cancel   ◉ Enter
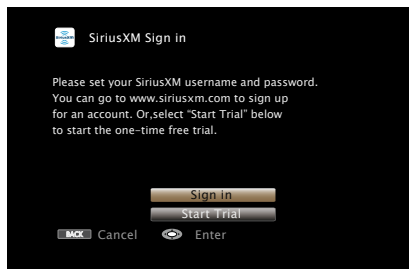
5 Input the "Username" and "Password".

📶 SiriusXM Sign in

Username   *****
Password   *****

Sign in

BACK Exit   ◉ Enter
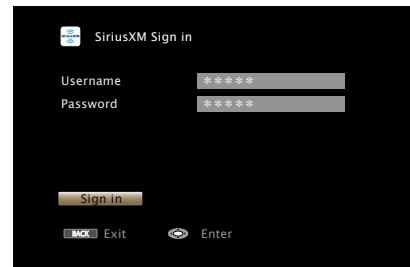
• For character input, see page 159.

6 Select the "Sign in", and then press ENTER.
The top menu of SiriusXM is displayed.

7 Use △▽ to select the genre, then press ENTER.

8 Use △▽ to select the file, and then press ENTER.
The selected file is displayed.

Operation buttons	Function
▶	Playback
■	Stop
ENTER	Playback
	(Press and hold)
	Stop
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

Sign Out

Disassociate this unit from your SiriusXM account.

1 Use △▽ to select "Sign Out", then press ENTER.

2 When the popup menu appears, use ◁ ▷ to select "Yes", then press ENTER.
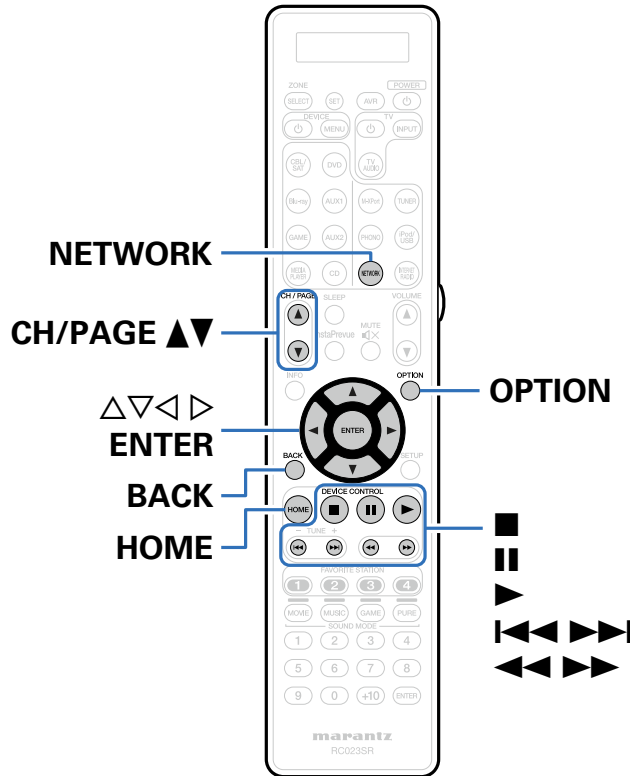
∎ Operations available through the OPTION button

- Displaying your desired video during audio playback (Video Select) (☞page 115)
- Adjusting the picture quality for your viewing environment (Picture Mode) (☞page 116)
- Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Listening to Spotify

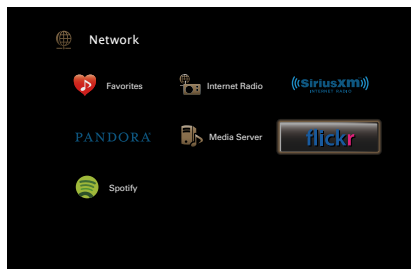Introduce your Marantz to a whole new world of music. With Spotify, you can enjoy instant access to millions of songs.

A Spotify Premium subscription is required.

For details, see the Spotify homepage.

http://www.spotify.com

Listening to Spotify

NETWORK

CH/PAGE ▲▼

$\triangle\nabla\triangleleft\triangleright$
ENTER

BACK

HOME

OPTION

■

II

▶

|◀◀ ▶▶|

◀◀ ▶▶

1 **Prepare for playback.**
   ⓐ Check the network environment, then turn on this unit's power (vpage 53 "Connecting to a home network (LAN)").
   ⓑ Complete step 5 and obtain a Spotify account.
      • If you already have a Spotify account, you do not need to obtain a new account. Use your existing Spotify account.

2 **Press NETWORK.**

3 **Use $\triangle\nabla\triangleleft\triangleright$ to select "Spotify", then press ENTER.**

4 **If you have a Spotify account, then press ENTER.**

Spotify

Introduce your Marantz to a whole new world
of music. With Spotify, you can enjoy instant
access to millions of songs.
A Spotify Premium subscription is required.
Just subscribe at spotify.com

Get Started

BACK Exit
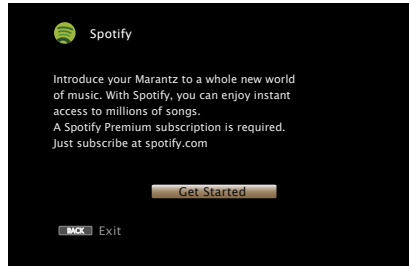
5 **Use △▽ ▷ to enter your username and password.**

Spotify Log In

Username *****
Password *****

Log In

BACK Exit   Enter
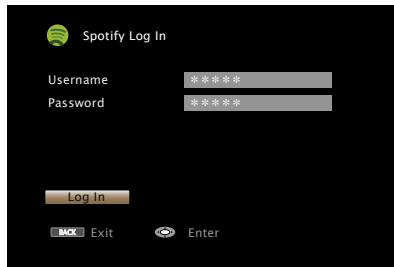
• For character input, see page 159.
The types of characters that can be input are as shown below.

〖Upper case characters/Numbers/Symbols〗
ABCDEFGHIJKLMNOPQRSTUVWXYZ
ÄÀÁÂÃÅÆÇÐÈÉÊËÌÍÎÏÑÖÒÓÔÕØÜÙÚÛÝÞ
0123456789
! " # $ % & ' ( ) * + , ; < = >
〖Lower case characters/Numbers/Symbols〗
abcdefghijklmnopqrstuvwxyz
äàáâãåæçðèéêëìíîïñöòóôõøüùúûýþÿß
0123456789
. @ - _ / : ˜ ? [\ ] ^ ' { | }

• The password should be no longer than 99 characters.
• Press BACK to cancel the input. When "Cancel Input?" is
displayed, select "Yes", then press ENTER.

6 After inputting the username and password, select "Log In", then press ENTER.

If the username and password match, the top menu for Spotify is displayed.

7 Use △▽ to select menu and then press ENTER.

Spotify   [1 / 5]

◄ 🔍 Search   ►
   📻 What's New
   ★ Starred
   🗂 Playlists
   ⚙ Accounts

OPTION Option
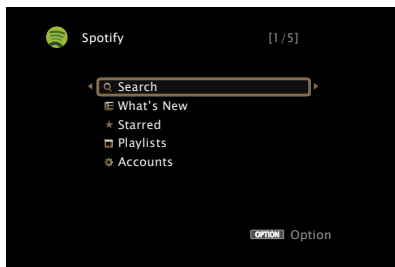
Search :
• Searches for tracks, artists and albums by entering keywords.

What's New :
• Displays the list of the latest albums.

Starred :
• Displays the list of the starred tracks.

Playlists :
• Displays the playlists for Spotify.

Accounts :
• Manages accounts (Log out, Add new user, Switch to user).

8 Use △▽ to select a station, and press ENTER to start playback.

Playback starts and the following screen appears.

Spotify

Now Playing

♪ Title
👤 Artist
💿 Album

00:06

👁 Pause   📀 Previous   OPTION Option
👁 Back   📀 Next   📀 Menu

Operation buttons	Function
►	Playback
❚❚	Pause
■	Stop
⏮ ⏭	Skip to previous track/Skip to next track
◄◄ ►►	(Press and hold) Fast-reverse / Fast-forward
ENTER	Playback / Pause (Press and hold) Stop
△▽	Skip to previous track/Skip to next track (Press and hold) Fast-reverse / Fast-forward
CH/PAGE ▲▼	Switch to previous page/switch to next page in the list display
HOME	Go to Home screen

9 Press ▷ while a track is playing.

The Spotify menu screen is displayed.

```
🟢 Track-Artist              [1/3]

    ◀ ☆ Star this track            ▶
      👤 Browse "Artist name"
      💿 Browse "Album name"




    ⬔ Back
```
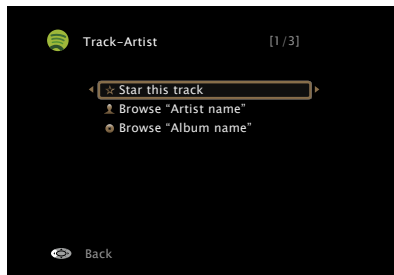
Star this track :

• Adds a star to the selected track.

Browse "Artist name" :

• Displays the list of albums by the artist of the track that is being played back.

Browse "Album name" :

• Displays the list of tracks on the album that is being played back.

🖉

• The display switches between track title, artist name, and album title each time the main unit's STATUS is pressed.

■ Operations available through the OPTION button

• Performing repeat playback (☞page 111)
• Performing random playback (☞page 111)
• Displaying your desired video during audio playback (Video Select) (☞page 115)
• Adjusting the picture quality for your viewing environment (Picture Mode) (☞page 116)
• Playing the Same Music in All Zones (All Zone Stereo) (☞page 117)

Adding to the FAVORITE STATION button
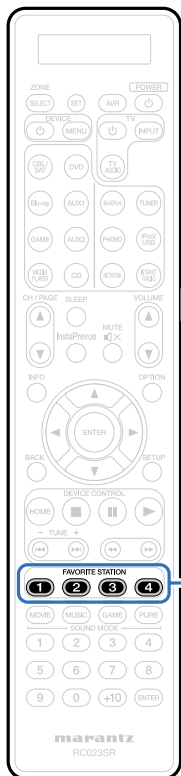
With a single press of these, you can call up registered radio stations and contents.
You can add up to four types of content.

1 **Press and hold one of the FAVORITE STATION 1 – 4 buttons for 3 seconds or longer while playing back a content or listening to a radio station.**

The content you are playing back or the radio station you are listening to is registered to the pressed button.

• Contents that can be added to the FAVORITE STATION button differ depending on the input source.

Input source	Contents that can be added
HD Radio	Radio station
Internet Radio	Top list of content / Internet Radio station
Media Server	Top list of content / Track of Media Server
Flickr	Top list of content
Pandora	Top list of content
SiriusXM	Top list of content
Spotify	Top list of content
Favorites	Top list of content / Internet Radio station / Track of Media Server

FAVORITE STATION 1 – 4

Playing back content added to the FAVORITE STATION button

You can easily call up content by pressing the FAVORITE STATION button.

1 **Press one of the FAVORITE STATION 1 – 4 buttons that you added content to.**
Playback starts.

✎

• Internet Radio stations are already registered to the FAVORITE STATION 1 – 4 buttons. However, you may not be able to play the stations due to restrictions imposed by the radio stations.

NOTE

• The following operations update the database on the Media Server, which may make the added music files unplayable.
  • When you quit the Media Server and then restart it.
  • When music files are deleted or added on the Media Server.

AirPlay function

Music files stored on your iPhone, iPod touch, iPad or iTunes can be played on this unit via the network.

PC

This unit

Router
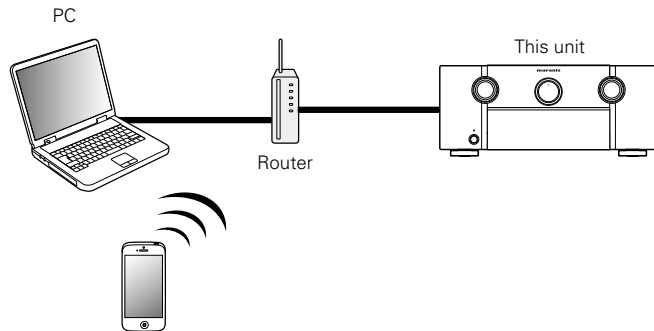
Playing songs from your iPhone, iPod touch or iPad

If you update your "iPhone/iPod touch/iPad" to iOS 4.2.1 or later, you can stream music stored in your "iPhone/iPod touch/iPad" directly to this unit.

1 **Connect your iPhone, iPod touch or iPad Wi-Fi to the same network as this unit.**

• For details, see your device's manual.

2 **Play the song on your iPhone, iPod touch or iPad.**

◻ is displayed on the iPhone, iPod touch or iPad screen.

3 **Tap the AirPlay icon ◻.**

4 **Select the speaker you want to use.**
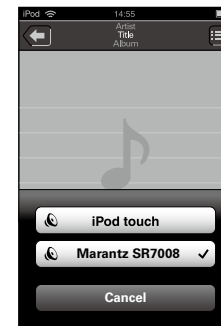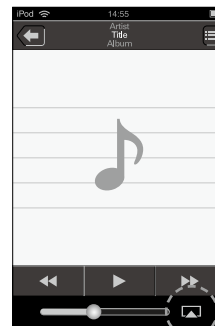
Playing iTunes music with this unit

1 **Install iTunes 10, or later, on a Mac or Windows PC that is connected to the same network as this unit.**

2 **Turn this unit ON.**
Set "IP Control" (☞page 199) to "Always On" for this unit.

NOTE

• When "IP Control" is set to "Always On", the unit consumes more standby power.

3 **Launch iTunes and click the AirPlay icon ⊡ displayed the window and select this unit from the list.**

4 **Choose a song and click play in iTunes.**
The music will stream to this unit.

Selecting multiple speakers (devices)

It is possible to play iTunes songs on your home's AirPlay compatible speakers (devices) other than those of this unit.

1 **Click the AirPlay icon ⊡ and select "Multiple".**

2 **Check the speakers you want to use.**

AirPlay	Single	Multiple
🔊 **Master Volume**	━━━━●━━	
🖥 My Computer	━●	○
🔊 Marantz SR7008	━━━━●━	✓
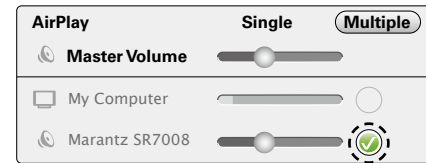
NOTE

• In playback using the AirPlay function, the sound is output at the iPhone, iPod touch, iPad or iTunes volume setting level.
You should turn down the iPhone, iPod touch, iPad or iTunes volume prior to playback and then adjust it to a suitable level.

Perform iTunes playback operations with the remote control unit of this unit

With this unit's remote control unit, you can perform iTunes song play, pause, and auto search (cue) operations.

1 **Select "Edit" – "Preferences..." on the menu.**

2 **Select "Devices" in the iTunes setting window.**

3 **Check "Allow iTunes audio control from remote speakers", and then click "OK".**

• 🎛 is displayed on the menu screen while AirPlay is being operated.
• Source input will be switched to "NETWORK" when AirPlay playback is started.
• You can stop AirPlay playback by pressing the ◁ or choosing other input source.
• To see song and artist names together, press STATUS on the main unit.
• For information about how to use iTunes, also see the Help for iTunes.
• The screen may differ depending on the OS and software versions.

Convenience functions

This section explains how to use convenient functions that can be used for each input source.
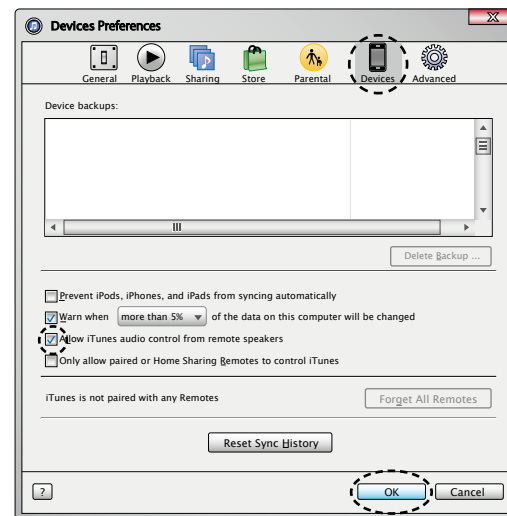
ZONE SELECT

NETWORK

△▽◁ ▷
ENTER

OPTION

marantz
RC023SR

Performing repeat playback

❏ **Supported input sources : USB / Media Server / Spotify**

1 **While content is playing, press OPTION.**
The option menu screen is displayed.

2 **Use △▽ to select "Repeat", then press ENTER.**

3 **Use ◁ ▷ to select repeat playback mode.**

Off (Default) : Repeat playback mode is canceled.

One : A file being played is played repeatedly.

All : All files in the folder currently being played are played repeatedly.

4 **Press ENTER.**
The display returns to the playback screen.

Performing random playback

❏ **Supported input sources : USB / Media Server / Spotify**

1 **While content is playing, press OPTION.**
The option menu screen is displayed.

2 **Use △▽ to select "Random", then press ENTER.**

3 **Use ◁ ▷ to select random playback mode.**

Off (Default) : Disable random playback.

On : Randomly play back all tracks in the current playback folder.

4 **Press ENTER.**
The display returns to the playback screen.

✎

• During random playback, each time playback of a track is completed, another track is randomly selected for playback from tracks in the folder. Therefore, it's possible that you may hear a track played back more than once during random playback.

Registering to Favorites

You can add up to 100 items as favorites for Internet Radio and Media Server.

❏ **Supported input sources : Internet Radio / Media Server**

1 While content is playing, press OPTION.
The option menu screen is displayed.

2 Use △▽ to select "Save to Favorites", then press ENTER.
"Favorite added" is displayed, and the current content is added to favorites.
• The display returns to the playback screen when the procedure is completed.

Playing back content added in "Save to Favorites"

1 Press NETWORK.

2 Use △▽◁ ▷ to select "Favorites", then press ENTER.
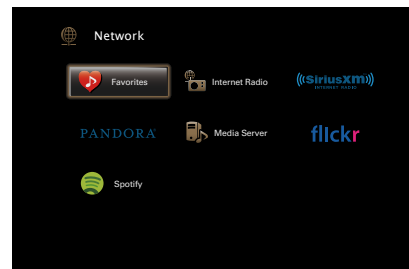
3 Use △▽ to select the content you want to play, and then press ENTER.
Playback starts.

Deleting content added to favorites

1 Press NETWORK.

2 Use $\triangle\triangledown\triangleleft\triangleright$ to select "Favorites", then press ENTER.

3 Use $\triangle\triangledown$ to select the content you want to delete from favorites, then press OPTION.
The option menu screen is displayed.

4 Use $\triangle\triangledown$ to select "Remove from Favorites", then press ENTER.
"Favorite removed" is displayed, and the selected content is deleted from favorites.
• The display returns to the original screen when the procedure is completed.

Searching content with keywords (Text Search)

❏ **Supported input sources : USB / Internet Radio / Media Server**

1 While the list is displayed, press OPTION.
The option menu screen is displayed.

2 Use $\triangle\triangledown$ to select "Text Search", then press ENTER.
The keyboard input screen is displayed.

3 Enter the first character of the Internet Radio station or file you want to search for, and then press "OK".
• For character input, see page 159.

4 Use $\triangle\triangledown$ to select the content you want to play, and then press ENTER.
Playback starts.

🖉
• "Text Search" searches for Internet Radio stations or files that start with the entered first character from the displayed list.

NOTE
• "Text Search" may not work for some lists.

Playing back music and a favorite picture at the same time (Slideshow)

❏ **Supported input sources : USB**

1 Play back a still picture.
• Playing back still pictures stored on USB memory devices (v page 68).

2 Play back a music file (v page 68).

3 Press OPTION.
The option menu screen is displayed.

4 Use △▽ to select "Slideshow", then press ENTER.
The option menu disappears, and the picture you were viewing is shown on the screen.

❏ **Supported input sources : Internet Radio / Media Server**

1 Play back a still picture.
• Playing back still pictures stored on Media Server (v page 83).
• Playing back still pictures stored on Flickr (v page 87).

2 Play back a music file of Media Server or Internet Radio station (v page 80, 85).

3 Press OPTION.
The option menu screen is displayed.

4 Use △▽ to select "Slideshow", then press ENTER.
The option menu disappears, and the picture you were viewing is shown on the screen.

Setting the Slideshow Interval

Set the playback interval when playing back a slideshow of still image (JPEG) files stored on a USB memory stick or media server, or on the Flickr website.

❏ **Supported input sources : USB / Media Server / Flickr**

1 **While the list is displayed, press OPTION.**
The option menu screen is displayed.

2 **Use △▽ to select "Slideshow Interval", then press ENTER.**

3 **Use ◁ ▷ to set the display time.**

Off : The slide show is not played back.

5s (Default) **– 60s** : Set the time for displaying a single picture when playing back images in the slide show.

4 **Press ENTER.**

Displaying your desired video during audio playback (Video Select)

This unit can display video from a different source on TV during audio playback.
You can set this for each input source.

❏ **Supported input sources : iPod/USB / CD＊ / HD Radio / NETWORK / PHONO / M-XPort**
＊ Available when none of HDMI, component video or video connector is assigned.

1 **Press OPTION during audio playback.**
The option menu screen is displayed.

2 **Use △▽ to select "Video Select", then press ENTER.**

3 **Use ◁ ▷ to select the Video Select mode.**

Off (Default) : Disable Video Select mode.

On : Enable Video Select mode.

4 **If you selected "On" in step 3, press ▽ and select "Source".**

5 **Press ◁ ▷ to select the input source for video you want to play back, and press ENTER.**

Adjusting the picture quality for your viewing environment (Picture Mode)

❏ **Supported input sources : CBL/SAT / DVD / Blu-ray / GAME/ AUX1 / AUX2 / MEDIA PLAYER / iPod/USB / NETWORK / CD**∗ **/ TV AUDIO**∗

∗ You can set the picture mode when an HDMI, component video or video connector is assigned.

1 Press OPTION during video playback.
The option menu screen is displayed.

2 Use △▽ to select "Picture Mode", then press ENTER.

3 Use ◁ ▷ to select picture mode.

Off : No picture quality adjustment is done with this unit.

Standard : The standard mode suited for most living room viewing environments.

Movie : A mode suited for watching movies in a dark room such as a theater room.

Vivid : A mode that makes graphic images for games, etc. brighter and more vivid.

Streaming : A mode suited for low bit rate video sources.

Custom : Adjusts the picture quality manually.

4 Press ENTER.

Playing the Same Music in All Zones (All Zone Stereo)

You can play back music in another room (ZONE2/ZONE3) simultaneously that is played back in MAIN ZONE.

It is useful when you want to enjoy the same music at the same time in multiple rooms during home party or when you want to play back the same BGM in the entire house.

1 **Turn on the power for the multi-zones (ZONE2/ZONE3) that you want to playback using All Zone Stereo mode in advance.**

2 **Press ZONE SELECT to switch "MAIN".**

3 **Press OPTION.**
The option menu screen is displayed.

4 **Use △▽ to select "All Zone Stereo", then press ENTER.**

5 **Use ◁ ▷ to select "On", then press ENTER.**
The input source for the multi-zones (ZONE2/ZONE3) is switched to the same as the one for MAIN ZONE, and playback in the All Zone Stereo mode starts.

■ Stopping the All Zone Stereo mode

1 **During playback in All Zone Stereo mode, press OPTION.**
The option menu screen is displayed.

2 **Use △▽ to select "All Zone Stereo", then press ENTER.**

3 **Use ◁ ▷ to select "Off", then press ENTER.**

✎

• The All Zone Stereo mode is also stopped when you:
  • Turn MAIN ZONE off.
  • Change the input source for MAIN ZONE.
  • Change the sound mode.
• When "HDMI Audio Out" (☞page 173) is set to "TV", the All Zone Stereo mode is not available.
• When "Input Mode" (☞page 182) is set to other than "7.1CH IN", the All Zone Stereo mode is available.

Selecting a sound mode
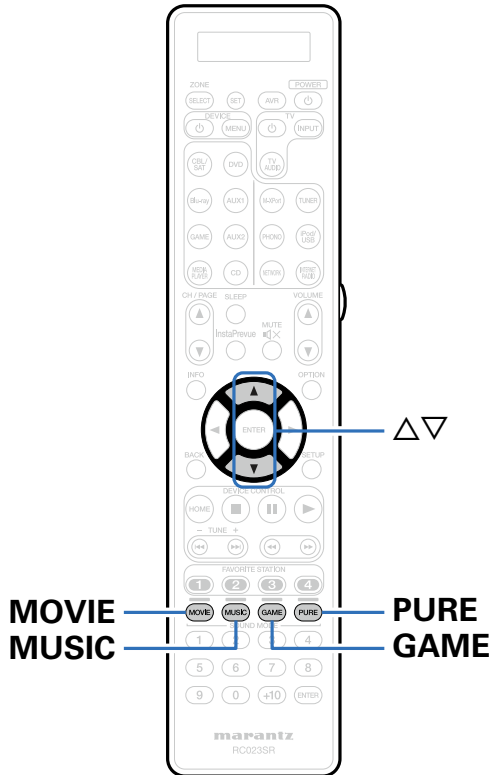
This unit allows you to enjoy various kinds of surround and stereo playback modes.

Multi-channel audio formats are provided on popular movie and music disc formats such as Blu-ray and DVD, as well as being supported by digital broadcasting, and even by streaming movies and music from internet-based subscription services.

This unit supports playback of almost all of these multi-channel audio formats. It also supports surround playback of audio formats other than multi-channel audio such as 2-channel stereo audio.

✎

• For audio formats recorded on a disc, see the disc jacket or label.

△▽

MOVIE   PURE
MUSIC   GAME

Selecting a sound mode

1 Press MOVIE, MUSIC or GAME to select a sound mode.

MOVIE	: Switches to the sound mode suitable for enjoying movies and TV programs.
MUSIC	: Switches to the sound mode suitable for enjoying music.
GAME	: Switches to the sound mode suitable for enjoying games.

- The MOVIE, MUSIC, or GAME button memorizes the last sound mode selected for its button. Pressing MOVIE, MUSIC, or GAME recalls the same sound mode as the one selected at the previous playback.
- If the content played back does not support the previously selected sound mode, the most appropriate sound mode for the content is automatically selected.
- This can be set by pressing MOVIE, MUSIC or GAME on the main unit.

■ Switching the sound mode

- Press and hold MOVIE, MUSIC or GAME displays a list of the sound modes that can be selected. Each time you press MOVIE, MUSIC or GAME, the sound mode changes.
- While the list is displayed, you can also use $\triangle\nabla$ to select a sound mode.
- Try out various sound modes and enjoy sound mode in your favorite mode.

【Example】 When MOVIE is pressed and held

MOVIE SOUND

STEREO
DOLBY PLIIx MOVIE
DTS NEO:X CINEMA
MULTI CH STEREO
VIRTUAL
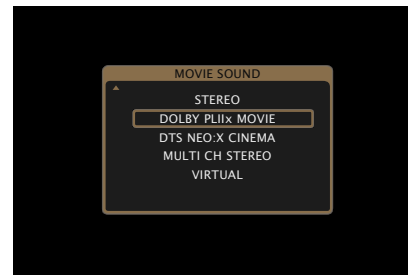
- You can also press SOUND MODE on the unit to switch the sound mode.

Direct playback

Sound recorded in source is played as is.

1 Press PURE to select "DIRECT".
Direct playback begins.

🖉

• While DSD signals are played back, "DSD DIRECT" is displayed.

• This can be set by pressing PURE DIRECT on the main unit.

Pure Direct playback

This mode is for playback with higher sound quality than in "DIRECT" mode, by turning off the front panel display panel, which can eliminate faint low level noise from creeping into sensitive analog circuitry.

1 Press PURE to select "PURE DIRECT".
The display goes dark, and Pure Direct playback begins.
The PURE DIRECT indicator lights.

🖉

• In DIRECT and PURE DIRECT sound modes, the following items cannot be adjusted.
   • Tone (☞page 165)
   • M-DAX (☞page 165)
   • MultEQ® XT32 (☞page 167)
   • Dynamic EQ (☞page 168)
   • Dynamic Volume (☞page 169)
   • Audyssey LFC™ (☞page 169)
• This can be set by pressing PURE DIRECT on the main unit.

NOTE

• Video signals are only output when HDMI signals are played in the PURE DIRECT mode.
• When the PURE DIRECT mode has been selected, the display turns off after about 5 seconds.

Auto surround playback

This mode detects the type of input digital signal, and automatically selects the corresponding mode for playback.

1 Press PURE to select "AUTO".
Auto surround playback begins.

🖉

• This can be set by pressing PURE DIRECT on the main unit.

■ Description of sound mode types

Dolby sound mode

Sound mode type	Description
DOLBY PLIIx*1	This mode can be selected when the Dolby Pro Logic IIx decoder is used to play back 2-channel sources in 6.1/7.1-channel surround sound including the surround back channel(s). By adding the surround back channel(s), a more enveloping surround environment is produced, compared to Dolby Pro Logic II. There are three playback modes: "Movie" mode that is optimized for movie playback, "Music" mode that is optimized for music playback, and "Game" mode that is optimized for game play.
DOLBY PLII	This mode can be selected when the Dolby Pro Logic II decoder is used to play back 2-channel sources in 5.1-channel surround sound with an enveloping surround sound experience.
DOLBY PLIIz*2	This mode can be selected when the Dolby Pro Logic IIz decoder is used to play back 2-channel sources in 7.1-channel surround sound with added front height channels. By adding front height channels, the front soundstage becomes dramatically taller, simulating the effect of listening in a large movie theater or concert hall.
DOLBY DIGITAL	This mode can be selected when playing sources recorded with Dolby Digital.
DOLBY DIGITAL EX*1	Using the Dolby Digital EX decoder, this mode plays Dolby Digital sources in 6.1/7.1-channel surround sound with added surround back channel(s). By adding surround back speaker(s), sounds can be heard coming at you from behind and not just from the sides.
DOLBY TrueHD	This mode can be selected when playing sources recorded in Dolby TrueHD.
DOLBY DIGITAL Plus	This mode can be selected when playing sources recorded with Dolby Digital Plus.

*1   This can be selected when "Speaker Config." – "Surr. Back" (℃page 194) is not set to "None".
*2   This can be selected when "Speaker Config." – "Front Height" (℃page 195) is not set to "None".

DTS sound mode

Sound mode type	Description
DTS NEO:X*1	This matrix decoding technology uses the DTS NEO:X decoder to playback 2-channel source or 5.1/6.1/7.1-channel surround sound including the surround back channel. There are 3 modes: "Music" suited for playing music, "Cinema" suited for playing movies, and "Game" which is optimized for playing games.
DTS SURROUND	This mode can be selected when playing sources recorded in DTS.
DTS ES DSCRT6.1*2	This mode is suitable for playing discs recorded in DTS-ES. The surround back channel added using the discrete method is played as an independent channel. Since all channels are independent, the 360-degree spacial expressiveness and sound localization are enhanced.
DTS ES MTRX6.1*3	This mode is suitable for playing discs recorded in DTS-ES. The surround back channel added to the surround-left and surround-right channels by a matrix encoder at software recording time is decoded by this unit's matrix decoder and played from each channel (surround left, surround right, surround back).
DTS 96/24	This mode can be selected when playing sources recorded in DTS 96/24.
DTS-HD	This mode can be selected when playing sources recorded in DTS-HD.
DTS Express	This mode can be selected when playing sources recorded in DTS Express.

*1 This mode cannot be selected when DSD signals from Super Audio CD are input.
*2 This mode can be selected when only one surround back speaker is used and no front height speaker is used.
*3 This can be selected when "Speaker Config." – "Surr. Back" (page 194) is set other than to "1 spkr".

PCM multi-channel sound mode

Sound mode type	Description
MULTI CH IN	This mode can be selected when playing multi-channel PCM/DSD sources.

Audyssey DSX® sound mode

Sound mode type	Description
Audyssey DSX® (A-DSX)✽	This mode creates playback for the new channels (front wide or front height) in 5.1-channel systems. By adding front wide or front height channels, the surround sound effects sound become more three dimensional and realistic.

✽ This can be selected when a setting other than "None" is selected for "Front Height" or "Front Wide", and a setting other than "None" is selected for "Center" in "Speaker Config." (☞<u>page 193</u>).

Original sound mode

Sound mode type	Description
MULTI CH STEREO	This mode is for enjoying stereo sound from all speakers. Stereo audio (2-channel) sources are played back via the front (L/R) speakers, the surround speakers and if connected the surround back speakers.
VIRTUAL	This mode lets you experience an expansive surround sound effect when playing back through just the front (L/R) speakers only, and when listening with stereo headphones.

AUTO sound mode

Sound mode type	Description
AUTO	In this mode, the type of digital signal input, such as Dolby Digital, Dolby TrueHD, Dolby Digital Plus, DTS, DTS-HD, PCM (multi-channel) is detected, and the playback mode switches automatically to the corresponding mode. If the input signal is analog or PCM (2-channel), stereo playback is used.

Stereo sound mode

Sound mode type	Description
STEREO	This mode plays 2-channel stereo audio with no additional surround sound processing. • Sound is output from the front left and right speakers, and subwoofer if connected. • When multi-channel signals are inputted, they are mixed down to 2-channel audio and are played back with no additional surround sound processing.

Direct sound mode

Sound mode type	Description
DIRECT	This mode provides a direct input-to-output path with minimal audio processing, bypassing any unnecessary stages for purest sound.
PURE DIRECT	This mode provides the direct audio signal path benefit of the Direct mode along with disabling additional stages that might possibly have an affect on sound quality. In Pure Direct mode, the following elements are turned off: • The front panel display and its driver circuitry are shut down. The display will temporarily come on when adjusting the volume, etc., but will turn off again once the adjustment has been made. • The analog video input/output switcher and processor is disabled.

■ Sound mode

• The following sound modes can be selected using the MOVIE, MUSIC, GAME, and PURE buttons.
• Adjust the sound field effect with the menu "Surround Parameter" (☞page 162) to enjoy surround sound the way you like it.

Input signal	Sound mode	Note	Sound mode		
			MOVIE	**MUSIC**	**GAME**
2-channel *1	STEREO		○	○	○
	DOLBY PLII/IIx Movie	*2	○		
	DOLBY PLII/IIx Music	*2		○	
	DOLBY PLII/IIx Game	*2			○
	DOLBY PLII/IIx Movie A-DSX	*2	○		
	DOLBY PLII/IIx Music A-DSX	*2		○	
	DOLBY PLII/IIx Game A-DSX	*2			○
	DOLBY PLIIz	*2	○	○	○
	DTS NEO:X Cinema	*2 *3	○		
	DTS NEO:X Music	*2 *3		○	
	DTS NEO:X Game	*2 *3			○
	MULTI CH STEREO		○	○	○
	VIRTUAL		○	○	○

*1   2-channel also includes analog input.
*2   This mode plays back 2-channel sources in 5.1 or 7.1-channel playback. It cannot be selected when headphones are used, or when only front speakers are used.
*3   This mode cannot be selected when DSD signals from Super Audio CD are input.

Input signal	Sound mode	Note	Sound mode		
			MOVIE	MUSIC	GAME
Multi-channel ✻4	STEREO		○	○	○
Dolby Digital	DOLBY DIGITAL		○	○	○
	DOLBY DIGITAL EX		○	○	○
	DOLBY DIGITAL + PLⅡx Movie		○		
	DOLBY DIGITAL + PLⅡx Music			○	
	DOLBY DIGITAL + PLⅡz		○	○	○
	DOLBY DIGITAL A-DSX	✻5	○	○	○
	DOLBY DIGITAL + PLⅡx Movie A-DSX	✻5	○		
	DOLBY DIGITAL + PLⅡx Music A-DSX	✻5		○	
	DOLBY DIGITAL + NEO:X Cinema		○		
	DOLBY DIGITAL + NEO:X Music			○	
	DOLBY DIGITAL + NEO:X Game				○
Dolby TrueHD	DOLBY TrueHD		○	○	○
	DOLBY TrueHD + EX		○	○	○
	DOLBY TrueHD + PLⅡx Movie		○		
	DOLBY TrueHD + PLⅡx Music			○	
	DOLBY TrueHD + PLⅡz		○	○	○
	DOLBY TrueHD A-DSX	✻5	○	○	○
	DOLBY TrueHD + PLⅡx Movie A-DSX	✻5	○		
	DOLBY TrueHD + PLⅡx Music A-DSX	✻5		○	
	DOLBY TrueHD + NEO:X Cinema		○		
	DOLBY TrueHD + NEO:X Music			○	
	DOLBY TrueHD + NEO:X Game				○

✻4 Some sound modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding sound modes" (page 254).

✻5 These modes add new channels to 5.1-channel surround using Audyssey DSX® processing (page 170 "Audyssey DSX®").

Input signal		Sound mode	Note	Sound mode		
				MOVIE	MUSIC	GAME
Multi-channel *4	Dolby Digital Plus	DOLBY DIGITAL Plus		○	○	○
		DOLBY DIGITAL Plus + EX		○	○	○
		DOLBY DIGITAL Plus + PLIIx Movie		○		
		DOLBY DIGITAL Plus + PLIIx Music			○	
		DOLBY DIGITAL Plus + PLIIz		○	○	○
		DOLBY DIGITAL Plus A-DSX	*5	○	○	○
		DOLBY DIGITAL Plus + PLIIx Movie A-DSX	*5	○		
		DOLBY DIGITAL Plus + PLIIx Music A-DSX	*5		○	
		DOLBY DIGITAL Plus + NEO:X Cinema		○		
		DOLBY DIGITAL Plus + NEO:X Music			○	
		DOLBY DIGITAL Plus + NEO:X Game				○
	DTS	DTS SURROUND		○	○	○
		DTS ES DSCRT 6.1		○	○	○
		DTS ES MTRX 6.1		○	○	○
		DTS 96/24		○	○	○
		DTS + PLIIx Movie		○		
		DTS + PLIIx Music			○	
		DTS + PLIIz		○	○	○
		DTS SURROUND A-DSX	*5	○	○	○
		DTS + NEO:X Cinema		○		
		DTS + NEO:X Music			○	
		DTS + NEO:X Game				○

*4 Some sound modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding sound modes" (☞page 254).

*5 These modes add new channels to 5.1-channel surround using Audyssey DSX® processing (☞page 170 "Audyssey DSX®").

Input signal		Sound mode	Note	Sound mode		
				MOVIE	MUSIC	GAME
Multi-channel *4	DTS-HD / DTS Express	DTS-HD HI RES		○	○	○
		DTS-HD MSTR		○	○	○
		DTS-HD MSTR A-DSX	*5	○	○	○
		DTS Express		○	○	○
		DTS Express A-DSX	*5	○	○	○
		DTS-HD + PLIIx Movie		○		
		DTS-HD + PLIIx Music			○	
		DTS-HD + PLIIz		○	○	○
		DTS-HD HI RES A-DSX	*5	○	○	○
		DTS-HD + NEO:X Cinema		○		
		DTS-HD + NEO:X Music			○	
		DTS-HD + NEO:X Game				○
	PCM multi-channel	MULTI CH IN		○	○	○
		MULTI CH IN 7.1		○	○	○
		MULTI IN + PLIIx Movie		○		
		MULTI IN + PLIIx Music			○	
		MULTI IN + PLIIz		○	○	○
		MULTI CH IN A-DSX	*5	○	○	○
		MULTI CH IN + PLIIx Movie A-DSX	*5	○		
		MULTI CH IN + PLIIx Music A-DSX	*5		○	
		MULTI IN + DOLBY EX	*3	○	○	○
		MULTI IN + NEO:X Cinema	*3	○		
		MULTI IN + NEO:X Music	*3		○	
		MULTI IN + NEO:X Game	*3			○

*3 This mode cannot be selected when DSD signals from Super Audio CD are input.
*4 Some sound modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding sound modes" (☞page 254).
*5 These modes add new channels to 5.1-channel surround using Audyssey DSX® processing (☞page 170 "Audyssey DSX®").

Input signal	Sound mode	Note	Sound mode		
			MOVIE	MUSIC	GAME
Multi-channel *4	MULTI CH STEREO		○	○	○
	VIRTUAL		○	○	○

*4 Some sound modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see "Types of input signals, and corresponding sound modes" ().

■ Views on the display

```
            Blu-ray
    DOLBY D + ↓PLⅡz
```
❶   ❷
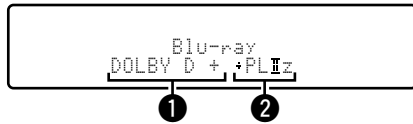
❶ Shows a decoder to be used.
• A DOLBY DIGITAL Plus decoder is displayed as "DOLBY D+".

❷ Shows a decoder that creates sound output.
• "+ PLⅡz" indicates that the PLⅡz decoder is being used, and that front height channel sound is being created.

HDMI control function

A recent addition to the HDMI standard is CEC (Consumer Electronics Control), which allows control signals from one device to communicate with another device via the HDMI cable connection. Not all HDMI-equipped devices have this capability.

Setting procedure

1 **Set the HDMI output connector corresponding with the HDMI control function.**
Set "HDMI Control" (☞page 174) to "On".

2 **Turn the power on for all the devices connected by HDMI cable.**

3 **Set the HDMI control function for all devices connected by HDMI cable.**
• Please consult the operating instructions for the connected devices to check the settings.
• Carry out steps 2 and 3 should any of the devices be unplugged.

4 **Switch the television input to the HDMI input connected to this unit.**

5 **Switch the input source of this unit to check that video from the player connected by HDMI is played back correctly.**

6 **When you turn the TV's power to standby, check that the power of this unit also goes to standby.**

| NOTE |

• Some functions may not operate depending on the connected TV or player. Check the owner's manual of each device for details beforehand.
• The HDMI ZONE2 function is not compatible with the HDMI control function.
• When the HDMI ZONE2 function is used with "HDMI Control" in the menu set to "On", the HDMI ZONE2 function may not fully work.

InstaPrevue function

ZONE SELECT

InstaPrevue

OPTION

△▽◁ ▷
ENTER
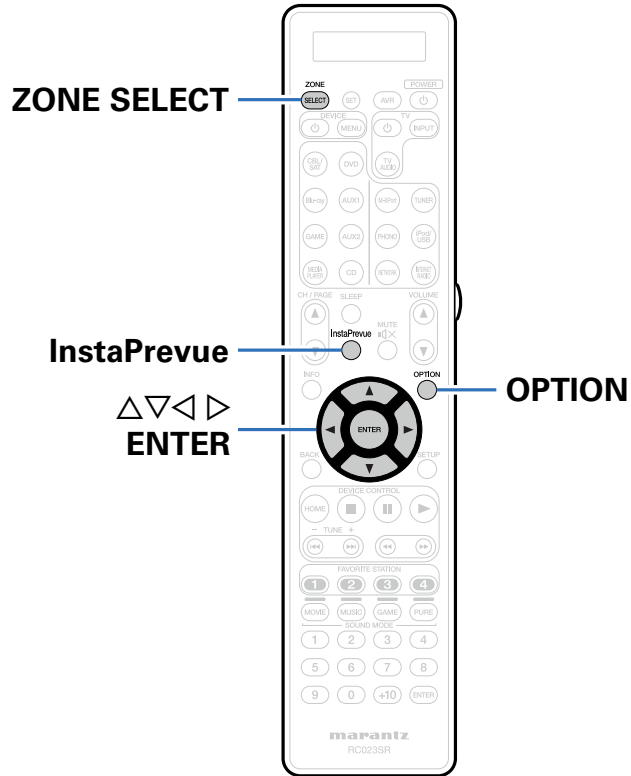
You can display sub screens on the main screen to preview playback video of the HDMI input connected to this unit. You can also display various video inputs in a single screen to switch input sources such as Blu-ray, DVD, and GAME while viewing them on sub screens.

InstaPrevue

✎

• The InstaPrevue function is compatible with the HDMI 1 – 6 connectors. It is not supported for the HDMI 7 (AUX 1) connector on the front panel.

Switching input sources

Switch to the desired input source while watching the sub screen.

1 **Press ZONE SELECT to switch "MAIN".**

2 **Press InstaPrevue.**
The main screen (current input video) and sub screens (other input video) are displayed.

3 **Use △▽◁ ▷ to select the desired input source from the sub screen, and press ENTER.**

Setting how to display sub screens

You can select to display five sub screens or only one sub screen.

1 **While sub screens are displayed, press OPTION.**
The InstaPrevue setting screen is displayed.

2 **Press ◁ ▷ in "HDMI Input" to select how to display sub screens.**

All (Default) : Displays five sub screens.

One at time : Displays only one sub screen.

3 **Press OPTION to enter the setting.**

Changing the display location of sub screens

You can change the display location of sub screens to a desired location.

1 **While sub screens are displayed, press OPTION.**
The InstaPrevue setting screen is displayed.

2 **Press ▽ to select "Location" and use ◁ ▷ to select the location where you want to display sub screens.**

3 **Press OPTION to enter the setting.**

🖉

• The InstaPrevue function is available when HDMI signals are input to the main screen. However, it is not available while computer's resolution (e.g. VGA), 3D or 4K video content is being played back.
• The InstaPrevue function is not available when the power of ZONE2 is on.

Sleep timer function

ZONE SELECT

SLEEP
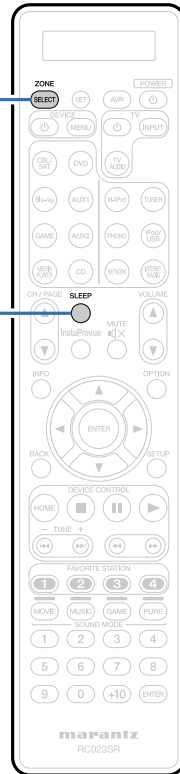
You can have the power automatically switched to standby once a set time has elapsed. This is convenient for viewing and listening while going to sleep.

The sleep timer function can be set for each zone.

Using the sleep timer

1 **Press ZONE SELECT to switch "MAIN", "ZONE2" or "ZONE3".**

2 **Press SLEEP and display the time you want to set.**
- The 🆂 indicator on the display lights.
- You can set the sleep timer in the range from 10 to 120 minutes in steps of 10 minutes.

∎ To cancel the sleep timer

Press SLEEP to set "Off".
The 🆂 indicator on the display turns off.

✐

- The sleep timer is also cancelled when this unit is set to the standby mode or the MAIN ZONE, ZONE2 or ZONE3 power is turned off.

NOTE

- The sleep timer function cannot turn off the power of devices connected to this unit. To turn off the power of those connected devices, set up sleep timers on the connected devices themselves.

Rec out function

Input source select
buttons
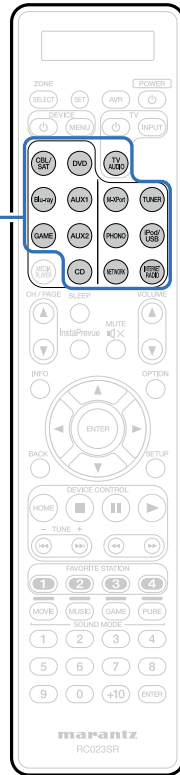
When using the audio/video recording connectors (MEDIA PLAYER outputs), you can record the audio or video.

This unit
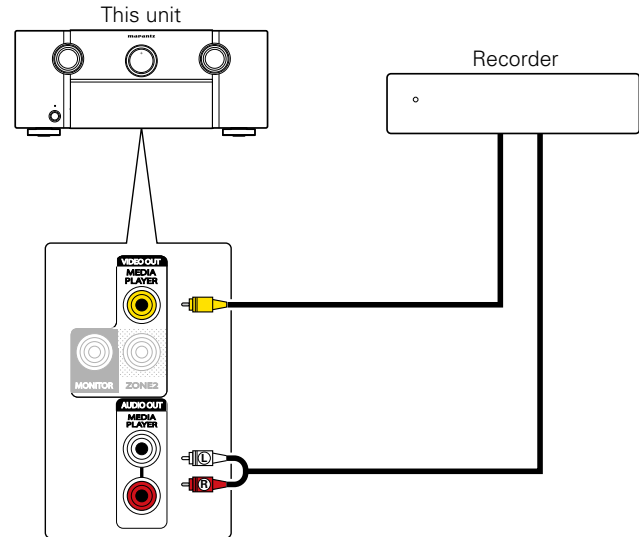
Recorder

Recording on an External Device

1 **Press the input source select button to choose the input source to be recorded.**

2 **Start recording.**
- For operating instructions, refer to the respective device's operating instructions.

- Recordings you make are for your personal enjoyment and should not be used for other purposes without permission of the copyright holder.
- To record video signals through this unit, use the video cable for connection between this unit and the player.
- Make an analog connection for audio signals.

Web control function

You can control this unit from a web control screen on a web browser.

PC

Router   This unit
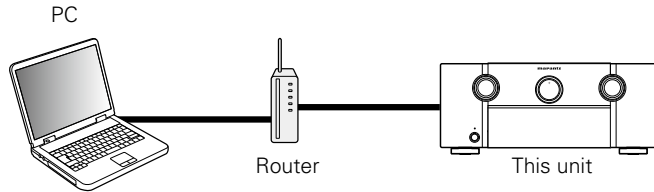
- This unit and the PC need to be connected to the network properly (☞page 53 "Connecting to a home network (LAN)") in order to use the web control function.
- Depending on the settings of your security-related software, you may not be able to access this unit from your PC. If this is the case, then change the settings of the security-related software.

Controlling the unit from a web control

1 Switch the "IP Control" (☞page 199) setting to "Always On".

2 Check the IP address of this unit with "Information" (☞page 199).

Network/Information
Friendly name   Marantz SR7008
DHCP   On
IP Address   192.168.0.2
MAC Address   000678-000000

Checking the IP address.

Displays the current network settings of the AVR
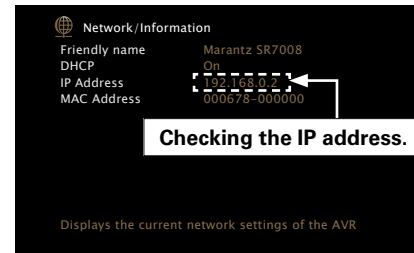
3 Start up the web browser.

4 **Enter the IP address of this unit in browser's address box.**

For example, if the IP address of this unit is "192.168.0.2", enter "http://192.168.0.2".

```
[icons] ▾ http://192.168.0.2
File  Edit  View  Favorites  Tools  Help
```

5 **When the top menu is displayed, click on the menu item you want to operate.**

Web Controller

Marantz SR7008

⏻ MAIN ZONE
CBL/SAT   0.0

⏻ ZONE2
NETWORK   20

⏻ ZONE3
CBL/SAT

Setup Menu

🖊

• You can use the Web control function with Internet Explorer 8 or later to memorize and call up various settings on this unit.
To memorize settings, click "SAVE" on the Setup Menu screen.
To call up settings, click "LOAD" on the Setup Menu screen.

Dual backup memory function

The unit stores settings information in nonvolatile memory even when the main power supply is turned off. Using the Dual Backup Memory function, you can write settings information to another memory area to back up saved settings for recovery anytime as needed. Remembering set details (Backup).

ZONE SELECT   BACK

marantz
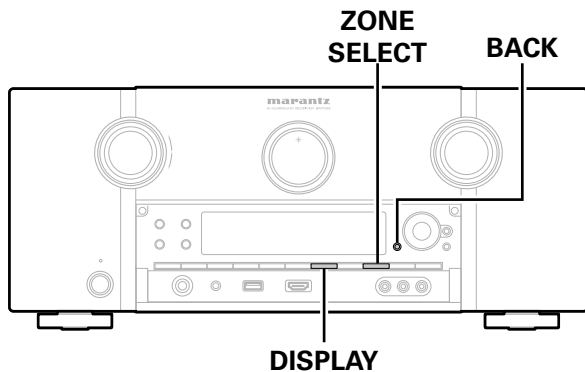
DISPLAY

Remembering set details (Backup)

1 **Set the unit in the state you want remembering, and press and hold DISPLAY and ZONE SELECT for at least 3 seconds.**

"MEMORY SAVING" is shown in the display, and the setting details are remembered.

✏️

• The volume is not remembered.
• If remembered details are overwritten, the previously remembered contents are deleted.

Recalling remembered details (Recovery)

1 **Press and hold BACK and ZONE SELECT together for at least 3 seconds.**

"MEMORY LOAD" is shown in the display, and the remembered details are recalled.

✏️

• If there is no remembered data, "NO BACKUP" is shown in the display, and no remembered details are recalled.
• As the volume cannot be recalled, it returns to the factory setting volume.

Panel lock function

To prevent accidental operation of this unit, you can disable operation of the buttons on the front panel.
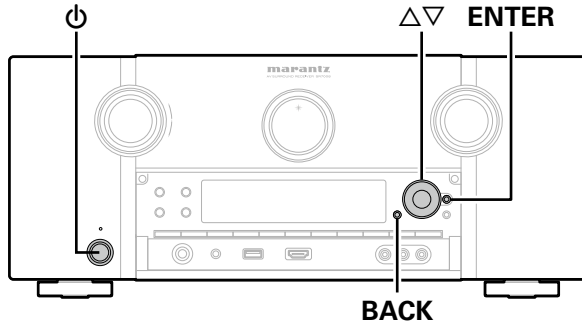
Disabling all key button operations

1 Press Φ while you press and hold BACK and ENTER with the unit in standby mode.

2 Press △▽ to select "FP/VOL LOCK On".

3 Press ENTER to enter the setting.
All button operations except Φ are disabled.

Disabling all button operations except VOLUME

1 Press Φ while you press and hold BACK and ENTER with the unit in standby mode.

2 Press △▽ to select "FP LOCK On".

3 Press ENTER to enter the setting.
All button operations except Φ and VOLUME are disabled.

Canceling the Panel lock function

1 **Press ⏻ while you press and hold BACK and ENTER with the unit in standby mode.**

2 **Press △▽ to select "FP LOCK ∗Off".**
(∗ The currently set mode.)

3 **Press ENTER to enter the setting.**
The Panel lock function is canceled.

🖋

• Even when the Panel lock function is set, you can operate the unit using the remote control unit.

Remote lock function

When connecting an IR receiver, enable the Remote lock function. When the function is enabled, you can not perform operations with the remote control unit.

By default, this function is disabled.
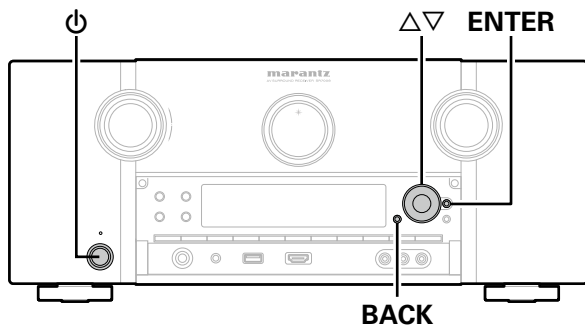
Disabling the sensor function of the remote control unit

1 When the main unit is in standby mode, press Φ while holding down BACK and ENTER on the main unit.

2 Press △▽ to select "RC LOCK On".

3 Press ENTER to enter the setting.
The infrared light receiving function is disabled.

Enabling the remote sensor function

1 When the main unit is in standby mode, press Φ while holding down BACK and ENTER on the main unit.

2 Press △▽ to select "RC LOCK ∗Off".
(∗ The currently set mode.)

3 Press ENTER to enter the setting.
The infrared light receiving function on the main unit is enabled.

Switches light illumination on/off

Light illumination
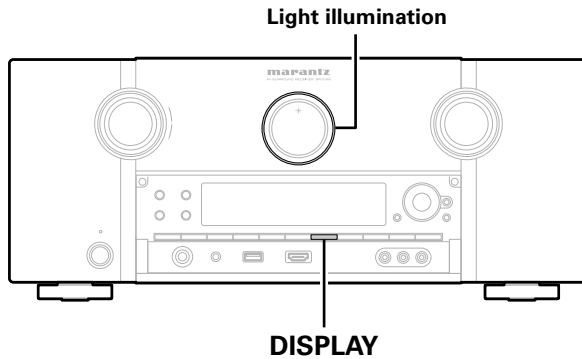
DISPLAY

You can switch the light illumination around the main display on or off. The factory setting is "On".

1 **Press and hold DISPLAY on the main unit for 3 seconds.**
• Carry out the same procedure if you want to change the settings again.

Playback in ZONE2/ZONE3 (Separate room)

You can operate this unit to enjoy video and audio in a room (ZONE2 and ZONE3) that is different from the room where this unit is placed (MAIN ZONE). You can simultaneously play back the same source in both the MAIN ZONE, ZONE2 and ZONE3. You can also play back separate sources in the MAIN ZONE, ZONE2 and ZONE3.

Connecting ZONE

You can use the following three methods to play back video and audio in ZONE2 and ZONE3.
- Connection through the HDMI ZONE2 connector (☞page 145)
- Connection through the video output connector and speaker output connector (☞page 146)
- Connection through the video output connector and external power amplifiers (☞page 148)

■ Connection 1 : Connection through the HDMI ZONE2 connector

When a TV is connected to the HDMI ZONE2 OUT connector, you can play back a video or audio from the device connected to the HDMI 1 – 6 IN connector in ZONE2 (HDMI ZONE2 function).
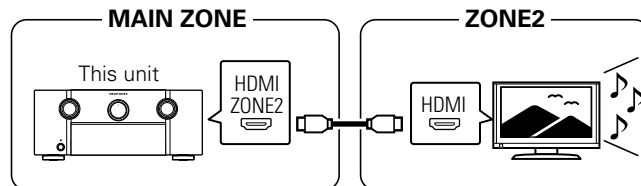
■ Connection 2 : Connection through the video output connector and speaker output connector

• When "Assign Mode" (☞page 192) in the menu is set to any of the following audio is output from speakers in ZONE2 or ZONE3.

❏ Assign Mode : 7.1ch + ZONE2 or 5.1ch(Bi-Amp) + ZONE2
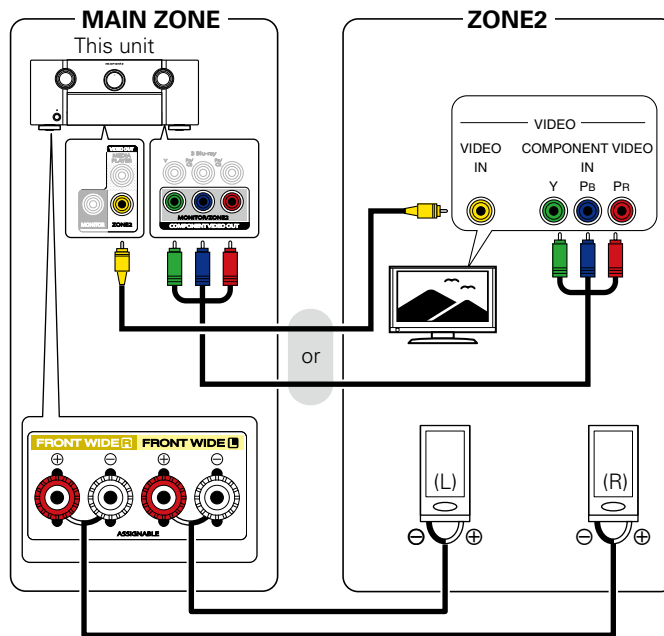
❏ Assign Mode : 5.1ch + ZONE2/3
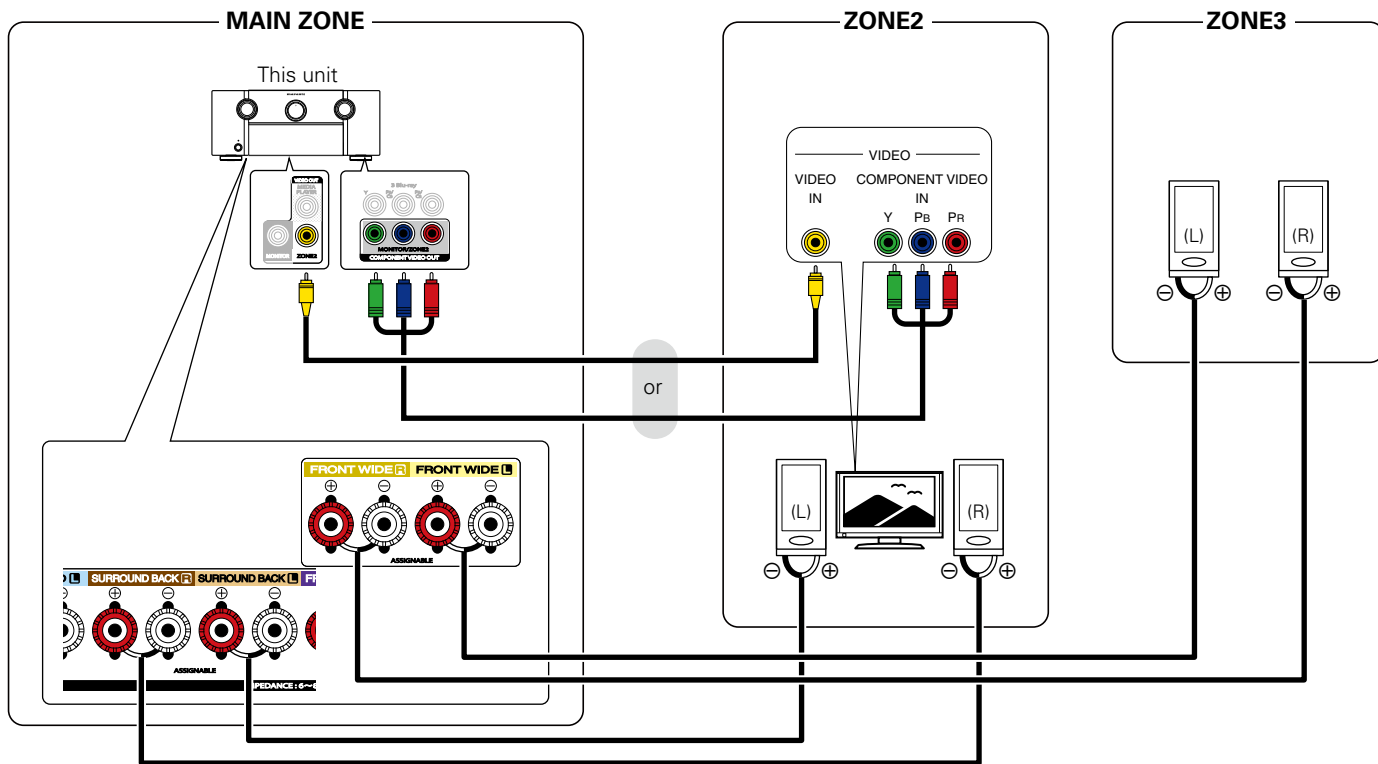
■ Connection 3 : Connection through the video output connector and external power amplifiers

The audio signals of this unit's ZONE2 and ZONE3 audio output connectors are played on the ZONE2 and ZONE3 power amplifiers.

📝
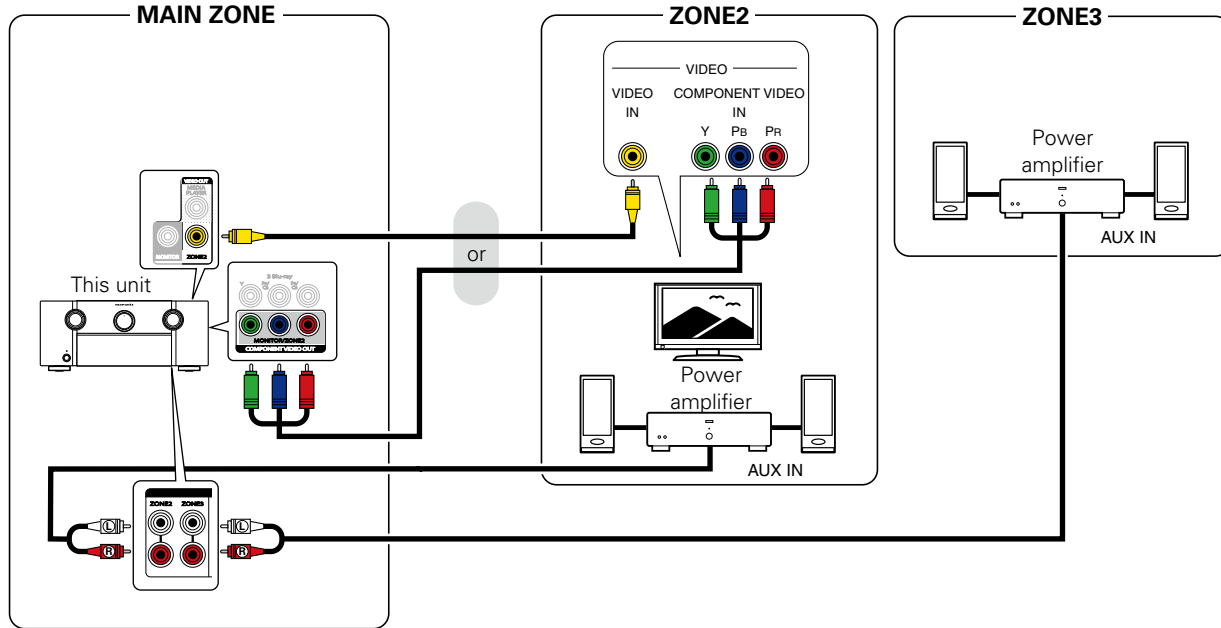
- We recommend using high quality pin-plug (RCA type) cables for audio connections in order to prevent noise.
- If you select a same input source for MAIN ZONE and ZONE2, audio playback may be restricted.
- When "Component Video Out" (☞ page 177) in the menu is set to "ZONE2", the component video output connector outputs the ZONE2 video.
- The menu screen is not output in ZONE2.

Playback in ZONE

ZONE SELECT

Input source select buttons

MUTE ◁✕

POWER ⏻

VOLUME ▲▼

marantz
RC023SR
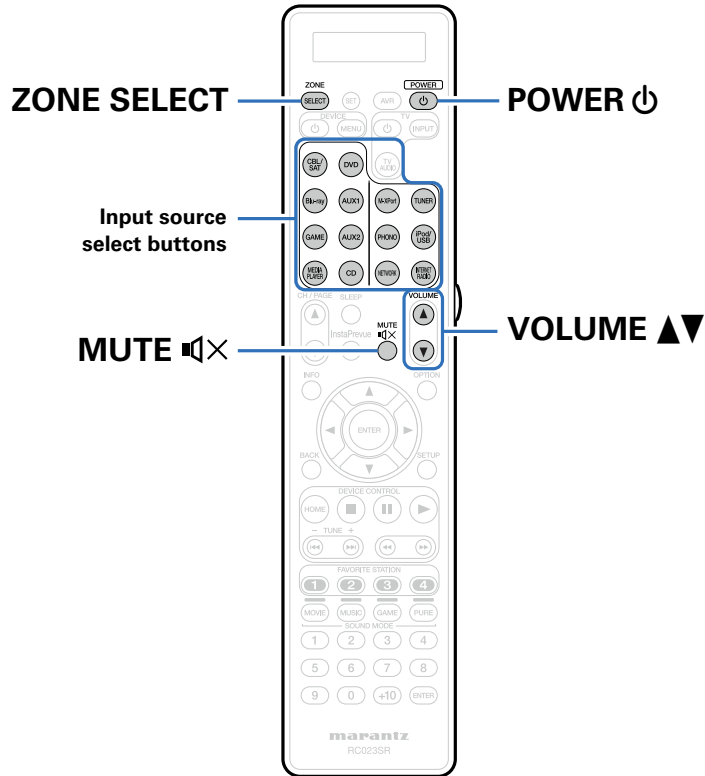
1 **Press ZONE SELECT to switch "ZONE2" or "ZONE3".**

2 **Press POWER ⏻ to turn on the ZONE2 or ZONE3 power.**
- Also press input source select button when in standby mode, the power turns on.
- When POWER ⏻ is pressed, ZONE2 or ZONE3 turns off.
- Power in ZONE2 or ZONE3 can be turned on or off by pressing ZONE2 ON/OFF or ZONE3 ON/OFF on the main unit.

3 **Press the input source select button to select the input source to be played.**
The audio signal of the selected source is output to ZONE2 or ZONE3.
- To perform an operation with the main unit.
Press ZONE SELECT to select the zone to operate and then turn INPUT SELECTOR to select an input source.

■ Adjusting the volume

Use VOLUME ▲▼ to adjust the volume.

• At time of purchase, "Volume Limit" (☞page 204) is set to "70 (–10dB)".

🖉

• To perform an operation with the main unit, press ZONE SELECT to select the zone to operate and then turn VOLUME to adjust the volume.

■ Turning off the sound temporarily

Press MUTE ◁×.

The sound is reduced to the level set at "Mute Level" (☞page 205) in the menu.

• To cancel, either adjust the volume or press MUTE ◁× again.

• You can also adjust the volume level to cancel the muting.

Settings

Menu map

For menu operation, connect a TV to this unit and display the menu on the TV screen. For menu operations, see the following page.
By default, this unit has recommended settings defined. You can customize this unit based on your existing system and your preferences.

■ Audio

Setting items		Description	Page
Dialog Level		This setting adjusts the output level to clarify the dialogue output from the center channel.	161
Subwoofer Level		This setting adjusts the volume level for the subwoofer.	161
	Subwoofer	Turn subwoofer output on and off.	161
	Subwoofer 1 Level	This setting adjusts the volume level for the subwoofer 1.	161
	Subwoofer 2 Level	This setting adjusts the volume level for the subwoofer 2.	161
Surround Parameter		Adjusts surround sound parameters.	162
	Home Theater EQ	Gently softens the upper treble range of movie soundtracks to reduce possible harshness and improve clarity.	162
	Loudness Management	This sets whether to output as specified in "Dynamic Compression" or output directly without compressing the dynamic range of audio recorded in the disc.	162
	Dynamic Compression	Compress dynamic range (difference between loud and soft sounds).	162
	Low Frequency Effects	Adjust the low frequency effects level (LFE).	163
	Center Gain	Distributes the dialogue output from the center channel to the front left and right channels and widens the sound image in the front.	163
	Panorama	Assign front L/R signals to also go to the surround channels for wider sound.	163
	Dimension	Shift sound image center to front or rear to adjust playback balance.	163
	Center Width	Distributes the dialogue output from the center channel to left and right channels and widens the sound image in the front.	164
	Height Gain	Control the front height channel volume.	164
	Speaker Select	Makes setting for the speakers outputting sound.	164

Setting items	Description	Page
Tone	Adjusts the tonal quality of the sound.	165
Tone Control	Set the tone control function to on/off.	165
Bass	Adjust bass.	165
Treble	Adjust treble.	165
M-DAX	Expands the low and high frequency components of compressed audio content such as MP3 files to enable richer audio playback.	165
Audio Delay	Compensates for incorrect timing between video and audio.	166
Volume	Set the MAIN ZONE (room where the unit is located) volume setting.	166
Scale	Set how volume is displayed.	166
Limit	Make a setting for maximum volume.	167
Power On Level	Define the volume setting that is active when the power is turned on.	167
Mute Level	Set the amount of attenuation when muting is on.	167
Audyssey	Makes Audyssey MultEQ® XT32, Audyssey Dynamic EQ®, Audyssey Dynamic Volume®, Audyssey LFC™ and Audyssey DSX® settings.	167
MultEQ® XT32	MultEQ® XT32 compensates for both time and frequency characteristics of the listening area based on Audyssey® Setup measurement results.	167
Dynamic EQ	Solves the problem of deteriorating sound quality as volume is decreased by taking into account human perception and room acoustics. Works with MultEQ® XT32.	168
Reference Level Offset	Audyssey Dynamic EQ® is referenced to the standard film mix level.	168
Dynamic Volume	Solves the problem of large variations in volume level between TV, movies and other content (between quiet passages and loud passages, etc.) by automatically adjusting to the user's preferred volume setting.	169
Audyssey LFC™	Adjusts the low frequency band to prevent bass and vibration from being conveyed to neighboring rooms.	169
Containment Amount	Adjusts the amount of low frequency containment. Use higher settings if you have close neighbors.	169
Audyssey DSX®	Provides more immersive surround sound by adding the new channels.	170
Stage Width	Adjust sound stage width when using front wide speakers.	170
Stage Height	Adjust sound stage height when using front height speakers.	170

Setting items	Description	Page
Graphic EQ	Uses the graphic equalizer to adjust the tone of each speaker.	171
Speaker Selection	Select whether to adjust tones for individual speakers or for all speakers.	171
Adjust EQ	Adjust tonal balance for each frequency band. Adjust the speaker selected in "Speaker Selection".	171
Curve Copy	Copy "Audyssey Flat"curve from MultEQ® XT32.	171

■ Video

Setting items	Description	Page
Picture Adjust	Adjusts the video quality.	172
Picture Mode	Select the desired picture mode according to the video content and your viewing environment.	172
Contrast	Adjust picture contrast.	172
Brightness	Adjust picture brightness.	172
Saturation	Adjust picture chroma level (color saturation).	172
Hue	Adjust green and red balance. Also called Tint.	172
Noise Reduction	Reduce overall video noise.	173
Enhancer	Emphasize picture sharpness.	173
HDMI Setup	Makes settings for HDMI video/audio output.	173
Auto Lip Sync	Make automatic compensation for timing shift in audio and video output.	173
HDMI Audio Out	Select HDMI audio output device.	174
Video Output	Selects which HDMI outputs to use.	174
HDMI Pass Through	Selects how the AV receiver will pass HDMI signals to the HDMI output in standby power mode.	174
HDMI Control	You can link operations with devices connected to HDMI and compatible with HDMI Control.	174
Pass Through Source	The AV receiver will "pass through" the sources HDMI signal when in standby.	175
Power Off Control	Links the power standby of this unit to external devices.	175

Setting items	Description	Page
Output Settings	Makes settings for video output.	175
Video Mode	Make settings for video processing.	175
Video Conversion	The input video signal is converted automatically in conjunction with the connected TV.	175
i/p Scaler	Sets the video input signal for which i/p Scaler processing is performed.	176
Resolution	Set the output resolution.	176
Progressive Mode	Set an appropriate progressive conversion mode for the source video signal.	177
Aspect Ratio	Set the aspect ratio for the video signals output to the HDMI.	177
Component Video Out	Sets whether to use the component video output connector for MAIN ZONE or ZONE2.	177
On Screen Display	Select the on-screen display user interface preferences.	178
Volume	Sets where to display the master volume level.	178
Info	Displays status of operation temporarily when the sound mode is changed, or input source is switched.	178
Now Playing	Sets how long each menu is displayed when the input source is "NETWORK", "iPod/USB", or "HD Radio".	178
TV Format	Set the video output signal format for the TV you are using.	178

■ Inputs

Setting items	Description	Page
Input Assign	Changes input connector assignment.	179
Source Rename	Changes the display name for input source.	181
Hide Sources	Remove from the display input sources that are not used.	181
Source Level	Adjusts the playback level of the audio input.	181
Input Select	Sets the audio input mode and decode mode.	182
Input Mode	Set the audio input modes for input sources.	182
Decode Mode	Set the audio decode mode for input source.	182

■ Speakers

Setting items	Description	Page
Audyssey® Setup	The acoustic characteristics of the connected speakers and listening room are measured and the optimum settings are made automatically.	183
Manual Setup	Perform when setting the speakers manually or when changing settings made in Audyssey® Setup.	192
Amp Assign	Select power amplifier usage method.	192
Speaker Config.	Indicate speaker presence and select speaker size categories based on bass reproduction capability.	193
Distances	Set distance from listening position to speakers.	195
Levels	Set the volume of the test tone to be the same when it is output from each speaker.	196
Crossovers	Set the maximum frequency of the bass signal output from each channel to the subwoofer.	197
Bass	Set subwoofer and LFE signal range playback.	198
Impedance	Set the impedance of connected speakers.	198
Front Speaker	Set the front speaker A/B to use for every sound mode.	198

■ Network

Setting items	Description	Page
Information	Display network information.	199
IP Control	Enables network communication in standby power mode.	199
Friendly Name	The Friendly Name is the name of this unit displayed on the network. You can change the Friendly Name according to your preferences.	199
Settings	Make settings for wired LAN.	200
Diagnostics	Used to check the network connection.	201
Maintenance Mode	Use when receiving maintenance from a Marantz service engineer or custom installer.	202

■ General

Setting items	Description	Page
Language	Sets the language for display the menu on the TV screen.	203
ZONE2 Setup / ZONE3 Setup	Makes settings for audio playback with multi-zone (ZONE2, ZONE3).	203
Bass	Adjust bass.	203
Treble	Adjust treble.	203
High Pass Filter	Make settings for cutting the low range to reduce distortion in the bass.	203
Lch Level	Adjust the left channel output level.	204
Rch Level	Adjust the right channel output level.	204
Channel	Sets stereo/monaural.	204
HDMI Audio (ZONE2 only)	Selects the audio signal format for playing an HDMI source in ZONE2.	204
Volume Level	Set the volume output level.	204
Volume Limit	Make a setting for maximum volume.	204
Power On Volume	Define the volume setting that is active when the power is turned on.	204
Mute Level	Set the amount of attenuation when muting is on.	205
Zone Rename	Change the display title of each zone to one you prefer.	205
Trigger Out 1 / Trigger Out 2	Selects when to activate trigger out.	205
Auto Standby	Sets the time for switching to auto standby when there are no audio or video signals input into this unit.	206
Front Display	Makes settings related to the display on this unit.	206

Setting items	Description	Page
Information	Show information about receiver settings, input signals, etc.	207
Audio	Shows information about audio input signals.	207
Video	Shows information about video input signal and HDMI Monitor.	207
ZONE	Shows information about each zone.	207
Firmware	Displays system information.	207
Notifications	Displays and sets notifications from Marantz.	208
Usage Data	Selects whether or not to send anonymous usage data to Marantz.	208
Firmware	Checks for the latest firmware information about updates and upgrades, updates the firmware, and sets up the notification message display.	209
Update	Update the firmware of the receiver.	209
Notifications	Sets whether or not to display a notification message when new firmware is released.	209
Add New Feature	Display new features that can be downloaded to this unit and perform an upgrade.	210
Setup Lock	Protect settings from inadvertent changes.	211

■ Setup Assistant

Setting items	Description	Page
Begin Setup	Perform basic installation/connections/settings from the beginning according to the guidance indicated on the TV screen.	📖 7
Language Select	Perform settings item by item according to the guidance indicated on the TV screen.	
Speaker Setup		
Speaker Calibration		
Network Setup		
Input Setup		

ZONE SELECT

$\triangle \nabla \triangleleft \triangleright$
ENTER
BACK

SETUP

0 – 9

Menu operation
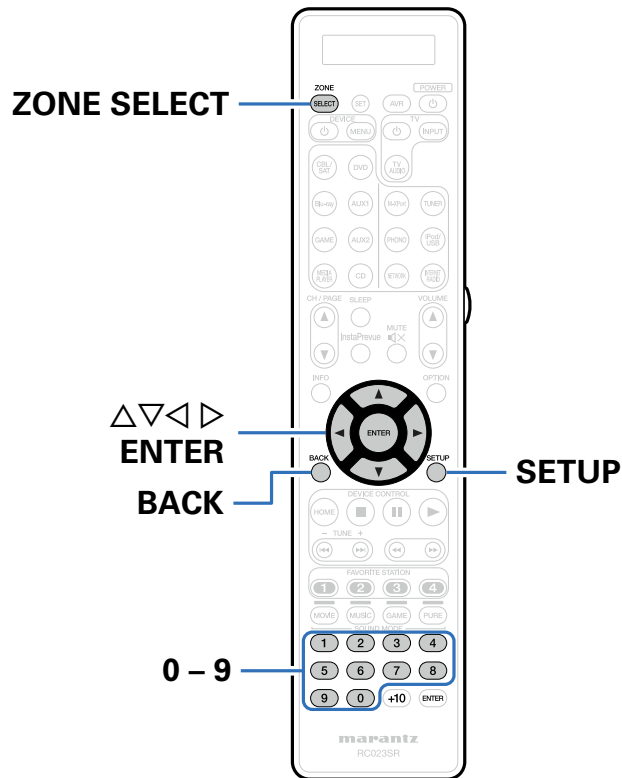
1 Press ZONE SELECT to switch "MAIN".

2 Press SETUP.
The menu is displayed on the TV screen.

3 Use $\triangle \nabla \triangleright$ to select the menu to be set or operated, then press ENTER.

4 Use $\triangleleft \triangleright$ to change to desired setting.

5 Press ENTER to enter the setting.
• To return to the previous item, press BACK.
• Exiting the Menu, press SETUP while the menu is displayed. The menu display disappears.

Inputting characters

- On this unit, you can change the name displayed on the following screens to the names that you prefer.
  - Preset Name (☞page 76)
  - Text Search (☞page 113)
  - Source Rename (☞page 181)
  - Friendly Name (☞page 199)
  - Zone Rename (☞page 205)
  - Character input for the network functions (☞page 80, 87, 91, 98, 101, 200)
- The following two methods can be used for inputting characters.
  - Using the keyboard screen (☞page 160)
  - Using the number buttons (☞page 160)

Using the keyboard screen

1 Display the screen for inputting characters.

【Example】 Source Rename screen

Change the display name for this source

2 Select a character to be changed.
① Use △▽◁ ▷ to select "←" or "→".
② Press ENTER to place the cursor at the character to be changed.
Each time ENTER is pressed, the cursor moves by one character.

3 Select a character to be input with △▽◁ ▷ then press ENTER.

4 Repeat steps 2 and 3 to change the name.

5 Use △▽◁ ▷ to select "OK", then press ENTER.

Using the number buttons

1 When the keyboard screen is displayed, press 0 – 9.
The 10 key input screen is displayed.

2 Place the cursor at the character to be changed with ◁ ▷ and press the number button (0 – 9) until the desired character is displayed.
• The types of characters that can be input are as shown below.

1 . /	**1 . @ - _ / : ˜**	**6** MNO	**M N O m n o 6**
2 ABC	**A B C a b c 2**	**7** PQRS	**P Q R S p q r s 7**
3 DEF	**D E F d e f 3**	**8** TUV	**T U V t u v 8**
4 GHI	**G H I g h i 4**	**9** WXYZ	**W X Y Z w x y z 9**
5 JKL	**J K L j k l 5**	**0** ␣ *	**0** (Space) **! " # $ % & ' ( ) ＊ + , ; < = > ? [\ ] ^ ` {	}**

3 Repeat step 2 to change the name then press ENTER to register it.

Audio

Make audio-related settings.

Dialog Level

This setting adjusts the output level to clarify the dialogue output from the center channel.

■ Level

–12.0dB – +12.0dB (Default : 0.0dB)

Subwoofer Level

This setting adjusts the volume level for the subwoofer.

■ Subwoofer

Turn subwoofer output on and off.

On (Default) : The subwoofer is used.

Off : The subwoofer is not used.

✎

• This can be set when the sound mode is "DIRECT" and the "Subwoofer Mode" (vpage 198) is "LFE+Main".

■ Subwoofer 1 Level

This setting adjusts the volume level for the subwoofer 1.

–12.0dB – +12.0dB (Default : 0.0dB)

■ Subwoofer 2 Level

This setting adjusts the volume level for the subwoofer 2.

–12.0dB – +12.0dB (Default : 0.0dB)

Surround Parameter

You can adjust the surround audio sound field effects to match your preferences.

The items (parameters) that can be adjusted depend on the signal being input and the currently set sound mode. For details on the adjustable parameters, see "Sound modes and surround parameters" ().

- Some setting items cannot be set while playback is stopped. Make the settings during playback.

■ Home Theater EQ

Gently softens the upper treble range of movie soundtracks to reduce possible harshness and improve clarity.

On : "Home Theater EQ" is used.

Off (Default) : "Home Theater EQ" is not used.

■ Loudness Management

This sets whether to output as specified in "Dynamic Compression" or output directly without compressing the dynamic range of audio recorded in the disc.

On (Default) : Outputs using the settings made in "Dynamic Compression" and "Dialogue normalization function" () are enabled.

Off : "Dynamic Compression" settings and "Dialogue Normalization" are disabled, and the signals on the disc are output as is.

- This can be set in the Dolby TrueHD mode.

■ Dynamic Compression

Compress dynamic range (difference between loud and soft sounds).

Auto : Automatic dynamic range compression on/off control according to source.

Low / **Medium** / **High** : These set the compression level.

Off : Dynamic range compression is always off.

- You can set "Auto" only for the Dolby TrueHD source.
- The default setting is "Off". When the input signal is Dolby TrueHD source, the default setting is "Auto".

■ Low Frequency Effects

Adjust the low-frequency effects level (LFE).

❏ **When "Input Mode" is set other than to "7.1CH IN"**

–10dB – 0dB (Default)

❏ **When "Input Mode" is set to "7.1CH IN"**

0dB / +5dB / +10dB (Default) **/ +15dB**

- For proper playback of the different sources, we recommend setting to the values below.
  - Dolby Digital sources : 0dB
  - DTS movie sources : 0dB
  - DTS music sources : –10dB

■ Center Gain

Distributes the dialogue output from the center channel to the front left and right channels and widens the sound image in the front.

0.0 – 1.0

- You can set this when the sound mode is set to DTS NEO:X.
- The smaller the value, the more dialogue is concentrated on the center channel. The larger the value, the more dialogue is distributed to front left and right channels, and the more the sound image widens in the front.

■ Panorama

Assign front L/R signals to also go to the surround channels for wider sound.

On : Set.

Off (Default) : Do not set.

- You can set this when the sound mode is Dolby PLⅡ/Ⅱx in the "Music" mode.

■ Dimension

Shift sound image center to front or rear to adjust playback balance.

0 – 6 (Default : 3)

- You can set this when the sound mode is Dolby PLⅡ/Ⅱx in the "Music" mode.
- As you set a smaller number, the surround sound field shifts backward; as you set a larger number, the surround sound field shifts forward.

■ Center Width

Distributes the dialogue output from the center channel to left and right channels and widens the sound image in the front.

0 – 7 (Default : 3)

✎
- You can set this when the sound mode is Dolby PLⅡ/Ⅱx in the "Music" mode.
- The smaller the value, the more dialogue is concentrated on the center channel. The larger the value, the more dialogue is distributed to front left and right channels, and the more the sound image widens in the front.

■ Height Gain

Control the front height channel volume.

Low : Reduce the front height channel volume.

Normal (Default) : Front height channel sound is output with standard sound volume.

High : Increase the front height channel volume.

✎
- You can set this in the "PLⅡz" sound mode or when using the PLⅡz decoder.

■ Speaker Select

Makes settings for the speakers outputting sound.

Surround Back : Sound is output from the surround back speakers.

Height : Sound is output from the front height speakers.

Wide : Sound is output from the front wide speakers.

Back/Height : Sound is output from the surround back and front height speakers.

Back/Wide : Sound is output from the surround back and front wide speakers.

Height/Wide : Sound is output from the front height and front wide speakers.

✎
- This can be set when "Assign Mode" (☞page 192) is set to "9.1ch(SB/FH/FW)", "7.1ch + ZONE2", "7.1ch(Bi-Amp)" or "7.1ch + Front B".
- The speakers that can be selected by the "Main Speakers" (☞page 193) setting are changed.
- You can set this when the sound mode is "MULTI CH STEREO" or "NEO:X".

■ Set Defaults

The "Surround Parameter" settings are returned to the default settings.

Tone

Adjust the tonal quality of the sound.

■ Tone Control

Set the tone control function to on/off.

On : Allow tone adjustment (bass, treble).

Off (Default) : Playback without tone adjustment.

■ Bass

Adjust bass.

–6dB – +6dB (Default : 0dB)

■ Treble

Adjust treble.

–6dB – +6dB (Default : 0dB)

🖉

• This cannot be set when the sound mode is set to "DIRECT" or "PURE DIRECT".

M-DAX

Compressed audio formats such as MP3, WMA (Windows Media Audio) and MPEG-4 AAC reduce the amount of data by eliminating signal components that are hard for the human ear to hear. The "M-DAX" function generates the signals eliminated upon compression, restoring the sound to conditions near those of the original sound before compression. It also restores the original bass characteristics for a rich and expanded tonal range.

■ Mode

High : Optimized mode for compressed sources with very weak highs (64 kbps and under).

Medium : Apply suitable bass and treble boost for all compressed sources (96 kbps and under).

Low : Optimized mode for compressed sources with normal highs (96 kbps and over).

Off (Default) : Do not use "M-DAX".

🖉

• This item can be set with analog signals or PCM signal (Sample Rate = 44.1/48 kHz) is input.
• "M-DAX" settings are stored for each input source.
• This cannot be set when the sound mode is set to "DIRECT" or "PURE DIRECT".
• This can be set by pressing M-DAX on the main unit.
• The M-DAX indicator lights.

Audio Delay

While viewing video, manually adjust the time to delay audio output so that the video and audio are synchronized.

0ms (Default) **– 200ms**

✎

- This item can be set within the range of 0 to 100 ms when "Auto Lip Sync" (☞page 173) is set to "On" and when a TV compatible with Auto Lip Sync is connected.
- Store "Audio Delay" for each input source.
- Audio Delay for game mode can be set when "Video Mode" (☞page 175) is set to "Auto" or "Game".

Volume

Set the MAIN ZONE (room where the unit is located) volume setting.

■ Scale

Set how volume is displayed.

0 – 98 (Default) : Display in the range 0 (Min) to 98.

–79.5dB – 18.0dB : Display ―dB (Min), in the range –79.5 dB to 18.0 dB.

✎

- The "Scale" setting applies to all zones.

■ Limit

Make a setting for maximum volume.

60 (–20dB) / 70 (–10dB) / 80 (0dB)

Off (Default)

■ Power On Level

Define the volume setting that is active when the power is turned on.

Last (Default) : Use the memorized setting from the last session.

Mute : Always use the muting on condition when power is turned on.

1 – 98 (–79dB – 18dB) : The volume is adjusted to the set level.

■ Mute Level

Set the amount of attenuation when muting is on.

Full (Default) : The sound is muted entirely.

–40dB : The sound is attenuated by 40 dB down.

–20dB : The sound is attenuated by 20 dB down.

Audyssey

Set Audyssey MultEQ® XT32, Audyssey Dynamic EQ®, Audyssey Dynamic Volume®, Audyssey LFC™ and Audyssey DSX®. These can be selected after Audyssey® Setup has been performed. For additional information on Audyssey technology, please see page 257.

✐

• "MultEQ® XT32", "Dynamic EQ", "Dynamic Volume" and "Audyssey LFC™" settings are stored for each input source.
• "MultEQ® XT32", "Dynamic EQ", "Dynamic Volume" and "Audyssey LFC™" cannot be set when the sound mode is set to "DIRECT" or "PURE DIRECT".

■ MultEQ® XT32

MultEQ® XT32 compensates for both time and frequency characteristics of the listening area based on Audyssey® Setup measurement results. Selection is done from three types of compensation curves. We recommend the "Audyssey" setting.

Audyssey (Default) : Optimize the frequency response of all speakers.

Audyssey Byp. L/R : Optimize frequency response of speakers except front L and R speakers.

Audyssey Flat : Optimize frequency response of all speakers to flat response.

Graphic EQ : Apply frequency response set with "Graphic EQ" (☞page 171).

Off : Turn "MultEQ® XT32" equalizer off.

✐

• When using headphones, "MultEQ® XT32" is automatically set to "Off".

■ Dynamic EQ

Solves the problem of deteriorating sound quality as volume is decreased by taking into account human perception and room acoustics. Works with MultEQ® XT32.

On (Default) : Use Dynamic EQ.

Off : Do not use Dynamic EQ.

🖋

• When the menu "Dynamic EQ" setting is "On", it is not possible to do "Tone Control" (vpage 165) adjustment.
• This can be set by pressing DYNAMIC EQ on the main unit.

■ Reference Level Offset

Audyssey Dynamic EQ® is referenced to the standard film mix level. It makes adjustments to maintain the reference response and surround envelopment when the volume is turned down from 0 dB. However, film reference level is not always used in music or other non-film content. Dynamic EQ Reference Level Offset provides three offsets from the film level reference (5 dB, 10 dB, and 15 dB) that can be selected when the mix level of the content is not within the standard. Recommended setting levels for content are shown below.

0dB (Film Ref) (Default) : Optimized for content such as movies.

5dB : Select this setting for content that has a very wide dynamic range, such as classical music.

10dB : Select this setting for jazz or other music that has a wider dynamic range. This setting should also be selected for TV content as that is usually mixed at 10 dB below film reference.

15dB : Select this setting for pop/rock music or other program material that is mixed at very high listening levels and has a compressed dynamic range.

🖋

• Setting is enabled when "Dynamic EQ" (vpage 168) is "On".

■ Dynamic Volume

Solves the problem of large variations in volume level between TV, movies and other content (between quiet passages and loud passages, etc.) by automatically adjusting to the user's preferred volume setting.

Heavy : Most adjustment to softest and loudest sounds.

Medium : Medium adjustment to loudest and softest sound.

Light : Least adjustment to loudest and softest sounds.

Off (Default) : Do not use "Dynamic Volume".

✎

• If "Dynamic Volume" is set to "Yes" in "Audyssey® Setup" (%page 183), the setting is automatically changed to "Medium".
• This can be set by pressing DYNAMIC VOLUME on the main unit.

■ Audyssey LFC™

Adjusts the low frequency band to prevent bass and vibration from being conveyed to neighboring rooms.

On : Use "Audyssey LFC™".

Off (Default) : Do not use "Audyssey LFC™".

✎

• "Audyssey LFC™" cannot be set up if "Audyssey® Setup" is not completed.

About Audyssey LFC™ (Low Frequency Containment)
Audyssey LFC™ solves the problem of low frequency sounds disturbing people in neighboring rooms or apartments. Audyssey LFC™ dynamically monitors the audio content and removes the low frequencies that pass through walls, floors and ceilings. It then applies psychoacoustic processing to restore the perception of low bass for listeners in the room. The result is great sound that no longer disturbs the neighbors.

■ Containment Amount

Adjusts the amount of low frequency containment. Use higher settings if you have close neighbors.

1 – 7 (Default : 4)

✎

• Setting is enabled when "Audyssey LFC™" is "On".

■ Audyssey DSX®

Provides more immersive surround sound by adding the new channels.

Wides : Turn on Audyssey DSX® processing for wide expansion.

Heights : Turn on Audyssey DSX® processing for height expansion.

Wides/Heights : Turns on Audyssey DSX® processing for wide and height expansion.

Off (Default) : Do not set Audyssey DSX®.

✎

• "Audyssey DSX®" can be set when you are using front height speakers or front wide speakers.
• "Wides/Heights" can only be set when the "Assign Mode" (☞page 192) setting is other than "9.1ch(SB/FH/FW)".
• "Audyssey DSX®" is only valid when using a center speaker.
• "Audyssey DSX®" is valid when sound mode is DOLBY sound mode or DTS sound mode other than PLⅡz and DTS NEO:X.
• "Audyssey DSX®" cannot be configured if the HD Audio source being played includes Front height and Front wide channels. In this case, the respective channels are played back using the input signals.
• This can be set by pressing A-DSX on the main unit.

About Audyssey Dynamic Surround Expansion (A-DSX)

Audyssey DSX® is a scalable system that adds new speakers to improve surround impression. Starting with a 5.1 system Audyssey DSX® first adds Wide channels for the biggest impact on envelopment. Research in human hearing has proven that information from the Wide channels is much more critical in the presentation of a realistic soundstage than the Back Surround channels found in traditional 7.1 systems. Audyssey DSX® then creates a pair of Height channels to reproduce the next most important acoustical and perceptual cues. In addition to these new Wide and Height channels, Audyssey DSX® applies Surround Envelopment Processing to enhance the blend between the front and surround channels.

■ Stage Width

Adjust sound stage width when using front wide speakers.

–10 – +10 (Default : 0)

■ Stage Height

Adjust sound stage height when using front height speakers.

–10 – +10 (Default : 0)

Graphic EQ

Use the 9 band graphic equalizer to adjust the tone of each speaker.

✎

• "Graphic EQ" can be set when "MultEQ® XT32" (☞page 167) setting is "Graphic EQ".
• Speakers for which "Graphic EQ" can be set differ according to the sound mode.

■ Speaker Selection

Select whether to adjust tones for individual speakers or for all speakers.

All

Left/Right (Default)

Each

■ Adjust EQ

Adjust tonal balance for each frequency band. Adjust the speaker selected in "Speaker Selection".

① Select the speaker.
② Select the adjustment frequency band.
   63Hz / **125Hz** / **250Hz** / **500Hz** / **1kHz** / **2kHz** / **4kHz** / **8kHz** / **16kHz**
③ Adjust the level.
   –20.0dB – +6.0dB (Default : 0.0dB)

■ Curve Copy

Copy "Audyssey Flat" curve from "MultEQ® XT32" (☞page 167).

✎

• "Curve Copy" is displayed after Audyssey® Setup has been performed.

■ Set Defaults

The "Graphic EQ" settings are returned to the default settings.

Video

Make video-related settings.

Picture Adjust

Picture quality can be adjusted.

✎

• Can be set when the "Video Conversion" (☞page 175) setting is "On".
• Can be set when "HDMI", "COMP" or "VIDEO" (☞page 180) is assigned for each input source.

■ Picture Mode

Select the desired picture mode according to the video content and your viewing environment.

Standard : The standard mode suited for most living room viewing environments.

Movie : A mode suited for watching movies in a dark room such as a theater room.

Vivid : A mode that makes graphic images for games, etc. brighter and more vivid.

Streaming : A mode suited for low bit rate video sources.

Custom : Adjusts the picture quality manually.

Off : No picture quality adjustment is done with this unit.

✎

• You can also press OPTION to make these settings from "Picture Mode" (☞page 116) in the option menu.
• The default settings are as follows.
  • For "NETWORK" and "iPod/USB" input sources : Streaming
  • For input sources other than "NETWORK" and "iPod/USB" : Off

■ Contrast

Adjust picture contrast.

–6 – +6 (Default : 0)

■ Brightness

Adjust picture brightness.

0 (Default) **– +12**

■ Saturation

Adjust picture chroma level (color saturation).

–6 – +6 (Default : 0)

■ Hue

Adjust green and red balance. Also called Tint.

–6 – +6 (Default : 0)

■ Noise Reduction

Reduce overall video noise.

Low / **Medium** / **High** / **Off** (Default)

■ Enhancer

Emphasize picture sharpness.

0 (Default) **– +12**

✐

- "Contrast", "Brightness", "Saturation", "Hue", "Noise Reduction" and "Enhancer" can be set when "Picture Mode" is set to "Custom".
- "Picture Adjust" cannot be set when 4K signals are input.

HDMI Setup

Make settings for HDMI video/audio output.

NOTE

- When "HDMI Pass Through" and "HDMI Control" is set to "On", it consumes more standby power. If you are not using this unit for an extended period, it is recommended that you unplug the power cord from the power outlet.

■ Auto Lip Sync

Make automatic compensation for timing shift in audio and video output.

On (Default) : Compensated.

Off : Not compensated.

■ HDMI Audio Out

Select HDMI audio output device.

AVR (Default) : Play back through speakers connected to the unit.

TV : Play back through TV connected to the unit.

✐

- When the HDMI control function is activated, priority is given to the TV audio setting (vpage 132 "HDMI control function").
- When the power of this unit is on and "HDMI Audio Out" is set to "TV", audio is output as 2-channel from the HDMI OUT connector.

■ Video Output

Selects which HDMI outputs to use.

Auto(Dual) (Default) : The presence of a TV connected to the HDMI MONITOR 1 or HDMI MONITOR 2 connector is detected automatically, and that TV connection is used.

Monitor 1 : A TV connected to the HDMI MONITOR 1 connector is always used.

Monitor 2 : A TV connected to the HDMI MONITOR 2 connector is always used.

✎

• If both the HDMI MONITOR 1 and HDMI MONITOR 2 connectors are connected and "Resolution" (☞page 176) is set to "Auto", the signals are output with a resolution compatible with both TV.
• With "Resolution" (☞page 176) not set to "Auto", check whether the TV you are using is compatible with the resolution under "Video" – "HDMI Monitor 1" or "HDMI Monitor 2" (☞page 207).
• This can be set by pressing HDMI OUT on the main unit.

■ HDMI Pass Through

Selects how the AV receiver will pass HDMI signals to the HDMI output in standby power mode.

On (Default) : Passes the selected HDMI input through the AV receiver's HDMI output when the AV receiver is in standby power mode.

Off : No HDMI signals are passed through the AV receiver's HDMI output in standby power mode.

■ HDMI Control

You can link operations with devices connected to HDMI and compatible with HDMI Control.

On : Use HDMI control function.

Off (Default) : Do not use HDMI control function.

✎

• Please consult the operating instructions for each connected device to check the settings.
• Refer to "HDMI control function" (☞page 132) for more information about the HDMI control function.

NOTE

• If the "HDMI Control" settings have been changed, always reset the power to connected devices after the change.

■ Pass Through Source

The AV receiver will "pass through" the sources HDMI signal when in standby.

Last : Choose this option to "pass through" the last used HDMI input video source.

CBL/SAT (Default) / **DVD** / **Blu-ray** / **GAME** / **AUX1** / **AUX2** / **MEDIA PLAYER** / **CD**∗ : Choose this option to "pass through" the selected input source when in standby.

∗ "Pass Through Source" can be set when any of the HDMI connectors is assigned to "CD" for the input source in the "Input Assign" (⟨☞page 179) setting.

*   • "Pass Through Source" can be set when "HDMI Control" is set to "On" or "HDMI Pass Through" is set to "On".

■ Power Off Control

Links the power standby of this unit to external devices.

All (Default) : If power to a connected TV is turned off independently of the input source, power to this unit is automatically set to standby.

Video : With an input source being selected that is assigned either "HDMI", "COMP" or "VIDEO" (⟨☞page 180), when you turn the power of the TV off, power to this unit is automatically set to standby.

Off : This unit does not link with power to a TV.

Output Settings

Makes settings for video output.

*   • Can be set when each input source is assigned "HDMI", "COMP" or "VIDEO" (⟨☞page 180).
   • "Resolution", "Progressive Mode" and "Aspect Ratio" can be set when "i/p Scaler" is set to anything other than "Off".
   • "Output Settings" can not be set when 4K signals are input.

■ Video Mode

Make settings for video processing.

Auto (Default) : Process video automatically based on the HDMI content information.

Game : Always process video for game content.

Movie : Always process video for movie content.

*   • If "Video Mode" is set to "Auto", the mode is switched according to the input contents.

■ Video Conversion

The input video signal is converted automatically in conjunction with the connected TV (⟨☞page 245 "Video conversion function").

On (Default) : The input video signal is converted.

Off : The input video signal is not converted.

■ i/p Scaler

Sets the video input signal for which i/p Scaler processing is performed.

❏ **When the input source is set other than to "iPod/USB" and "NETWORK"**

Analog (Default) : Use i/p (interlace-to-progressive) scaler function for analog video signals.

Analog & HDMI : Use i/p scaler function for analog and HDMI video signal.

HDMI : Use i/p scaler function for HDMI video signals.

Off : Do not use i/p scaler function.

❏ **When the input source is set to "iPod/USB" and "NETWORK"**

On (Default) : Use i/p scaler function.

Off : Do not use i/p scaler function.

✎
- "Analog & HDMI" can be set for input sources for which an HDMI input connector is assigned.
- Which items can be set depend on the input source assigned to each input connector.
- This function is not effective when the input signal is "x.v.Color", 3D, sYCC 601 color, Adobe RGB color, Adobe YCC 601 color or computer resolutions.

■ Resolution

Set the output resolution.

You can set "Resolution" separately for HDMI output of the analog video input and HDMI input.

Auto (Default) : The number of pixels the TV connected to the HDMI MONITOR OUT connector supports is detected automatically and the appropriate output resolution is set.

480p/576p / **1080i** / **720p** / **1080p** / **1080p:24Hz** / **4K** :
Set the output resolution.

✎
- When "i/p Scaler" is set to "Analog & HDMI", the resolution of both the analog video input signal and HDMI input signal can be set.
- When set to "1080p:24Hz", you can enjoy film-like pictures for film sources (in 24 Hz). For video sources and mixed sources, we recommend setting the resolution to "1080p".
- It is not possible to convert a 50 Hz signal into 1080p/24Hz. It is output at a resolution of 1080p/50Hz.

■ Progressive Mode

Set an appropriate progressive conversion mode for the source video signal.

Auto (Default) : The video signal is automatically detected and the appropriate mode is set.

Video : Select mode suitable for video playback.

Video and Film : Select mode suitable for video and 30-frame film material playback.

✎

• This item can be set when "i/p Scaler" is set to anything other than "Off".

■ Aspect Ratio

Set the aspect ratio for the video signals output to the HDMI.

16:9 (Default) : Output at 16:9 aspect ratio.

4:3 : Output at 4:3 aspect ratio with black bars on the sides of a 16:9 TV screen (except for 480p/576p output).

✎

• "Aspect Ratio" can be set when "i/p Scaler" is set to anything other than "Off".

Component Video Out

Set the zone to which the component video output connector is assigned.

MAIN ZONE (Default) : Assigns the component video output connector to MAIN ZONE.

ZONE2 : Assigns the component video output connector to ZONE2.

On Screen Display

Select the on-screen display user interface preferences.

■ Volume

Sets where to display the master volume level.

Bottom (Default) : Display at the bottom.

Top : Display at the top.

Off : Turn display off.

✏️
- When the master volume display is hard to see when superimposed text (closed captioning) or movie subtitles are present, set to "Top".

■ Info

Displays status of operation temporarily when the sound mode is changed, or input source is switched.

On (Default) : Turn display on.

Off : Turn display off.

■ Now Playing

Sets the display time for the playback display when the input source is "NETWORK", "iPod/USB" or "HD Radio".

Always On (Default) : Show display continuously.

Auto Off : Show display for 30 seconds after operation.

TV Format

Set the video signal format to be output for the TV you are using.

■ Format

NTSC (Default) : Select NTSC output.

PAL : Select PAL output.

✏️
- "Format" can also be set by the following procedure. However, the menu screen is not displayed.
  1. Press and hold the main unit's STATUS and ZONE SELECT for at least 3 seconds.
     "＊Video Format <NTSC>" appears on the display.
  2. Use the main unit's ◁ ▷ and set the video signal format.
  3. Press the main unit's ENTER to complete the setting.

NOTE
- When a format other than the video format of the connected TV is set, the picture will not be displayed properly.

Inputs

Perform settings related to input source playback.
You do not have to change the settings to use the unit. Make settings when needed.

Input Assign

By making connections as indicated by the input sources printed on the audio/video input connectors of this unit, you can just press one of the input source select buttons to easily play back audio or video from a connected device.

If you have made connections that are different to the default settings, the HDMI input connectors, digital audio input connectors, analog audio input connectors, component video input connectors and video input connectors assigned to each input source can be changed using these items.

🖉
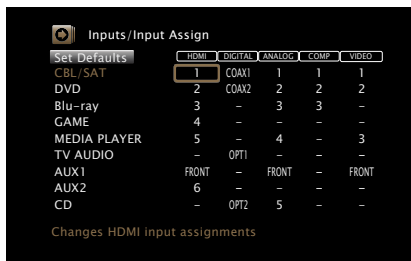
- By default, each item is set as follows.

Input source	HDMI	DIGITAL	ANALOG	COMP	VIDEO
CBL/SAT	1	COAX1	1	1	1
DVD	2	COAX2	2	2	2
Blu-ray	3	–	3	3	–
GAME	4	–	–	–	–
MEDIA PLAYER	5	–	4	–	3
TV AUDIO	–	OPT1	–	–	–
AUX1	FRONT	–	FRONT	–	FRONT
AUX2	6	–	–	–	–
CD	–	OPT2	5	–	–

❏ TV set top box/satellite users please note

When using the optical or coaxial digital audio output on a TV/satellite box :

To play the video signal assigned to "HDMI" combined with the audio signal assigned at "Input Assign" – "DIGITAL", you will also need to select "Digital" in the "Input Mode" (vpage 182).

■ HDMI

Set this to change the HDMI input connectors assigned to the input sources.

1 / **2** / **3** / **4** / **5** / **6** / **FRONT** :
Assign an HDMI input connector to the selected input source.

– : Do not assign an HDMI input connector to the selected input source.

✎
• When "HDMI Control" (℺ page 174) is set to "On", HDMI input connector cannot be assigned to "TV AUDIO".

■ DIGITAL

Set this to change the digital audio input connectors assigned to the input sources.

COAX1 (Coaxial) / **COAX2** / **OPT1** (Optical) / **OPT2** :
Assign a digital audio input connector to the selected input source.

– : Do not assign a digital audio input connector to the selected input source.

■ ANALOG

Set this to change the analog audio input connectors assigned to the input sources.

1 / **2** / **3** / **4** / **5** / **FRONT** : Assign a analog audio input connector to the selected input source.

– : Do not assign a analog audio input connector to the selected input source.

■ COMP (Component video)

Set this to change the component video input connectors assigned to the input sources.

1 / **2** / **3** : Assign the component video input connector to the selected input source.

– : Do not assign a component video input connector to the selected input source.

■ VIDEO

Set this to change the composite video input connectors assigned to the input sources.

1 / **2** / **3** / **FRONT** : Assign the video input connector to the selected input source.

– : Do not assign a video input connector to the selected input source.

■ Set Defaults

The "Input Assign" settings are returned to the default settings.

Source Rename

Change the display name for input source.
This is convenient when the name of your device and the input source name of this unit are different. You can change the name to suit your needs. When the renaming is completed, the name is displayed on this unit's display and on the menu screen.

CBL/SAT / **DVD** / **Blu-ray** / **GAME** / **AUX1** / **AUX2** / **MEDIA PLAYER** / **CD** / **TV AUDIO** / **PHONO** / **M-XPort** : Change the display name of the selected input source.

Set Defaults : The "Source Rename" settings are returned to the default settings.

✎

• Up to 12 characters can be input. For character input, see <u>page 159</u>.

Hide Sources

Remove from the display input sources that are not used.

Show (Default) : Use this source.

Hide : Do not use this source.

Source Level

• This function corrects the playback level of the selected input source's audio input.
• Make this setting if there are differences in the input volume levels between the different sources.

■ Source Level

❏ **When the input source is set to "iPod/USB", "NETWORK" and "HD Radio"**

–12dB – +12dB (Default : 0dB)

■ Analog Inputs / Digital Inputs

❏ **When the input source is set other than to "iPod/USB", "NETWORK" and "HD Radio"**

–12dB – +12dB (Default : 0dB)

✎

• The analog input level can be adjusted independently for input sources for which "ANALOG" is assigned at "Input Assign" (☞page 179).
• The digital input level can be adjusted independently for input sources for which "DIGITAL" is assigned at "Input Assign" (☞page 179).

Input Select

Set the audio input mode and decode mode of each input source.
The input modes available for selection may vary depending on the input source.

■ Input Mode

Set the audio input modes for input sources.
It is normally recommended to set the audio input mode to "Auto".

Auto (Default) : Automatically detect input signal and perform playback.

HDMI : Play only signals from HDMI input.

Digital : Play only signals from digital input.

Analog : Play only signals from analog input.

7.1CH IN : Only signals input from the 7.1CH IN connector will be played back.

🖉

• When digital signals are properly input, the **DIG.** indicator lights on the display. If the **DIG.** indicator does not light, check "Input Assign" () and the connections.
• If "HDMI Control" is set to "On" and a TV compatible with the ARC is connected via the HDMI MONITOR connectors, the input mode whose input source is "TV AUDIO" is fixed to ARC.
• The sound mode cannot be set if the input mode is set to "7.1CH IN".

■ Decode Mode

Set the audio decode mode for input source.

Auto (Default) : Detect type of digital input signal and decode and play automatically.

PCM : Decode and play only PCM input signals.

DTS : Decode and play only DTS input signals.

🖉

• This item can be set for input sources for which "HDMI" or "DIGITAL" is assigned at "Input Assign" ().
• Normally set this mode to "Auto". It is recommended to set "PCM" or "DTS" when audio is missing at the beginning or a noise occurs.

Speakers

The acoustic characteristics of the connected speakers and listening room are measured and the optimum settings are made automatically. This is called "Audyssey® Setup".
You do not have to perform Audyssey® Setup when you have already performed Speaker Calibration in Setup Assistant.
To set up the speakers manually, use "Manual Setup" (☞page 192) on the menu.

Audyssey® Setup

To perform measurement, place the Setup and measurement microphone in multiple locations all around the listening area. For best results, we recommend you measure in six or more positions, as shown in the illustration (up to eight positions).

✎

- When performing Audyssey® Setup, Audyssey MultEQ® XT32/Audyssey Dynamic EQ®/Audyssey Dynamic Volume®/Audyssey LFC™ functions become active (☞page 167, 168, 169).

NOTE

- Make the room as quiet as possible. Background noise can disrupt the room measurements. Close windows and turn off the power on electronic devices (TVs, radios, air conditioners, fluorescent lights, etc.). The measurements could be affected by the sounds emitted by such devices.
- During the measurement process, place cell phones outside the listening room. Cell phone signals could disrupt the measurements.
- Do not stand between the speakers and Setup and measurement microphone or allow obstacles in the path while the measurements are being made. Do not hold the Setup and measurement microphone in your hand during measurements. This will cause inaccurate readings.
- During the measurement process, audible test tones will come from the speakers and subwoofer(s), but this is part of normal operation. If there is background noise in the room, these test signals will increase in volume.
- Operating VOLUME ▲▼ on the remote control unit or VOLUME on the main unit during the measurements will cancel the measurements.
- Measurement cannot be performed when headphones are connected. Unplug the headphones before performing Audyssey® Setup.

■ About Setup and measurement microphone placement

- Measurements are performed by placing the Setup and measurement microphone successively at multiple positions throughout the entire listening area, as shown in 【Example ①】.
- Even if the listening environment is small as shown in 【Example ②】, measuring at multiple points throughout the listening environment results in more effective correction.

【Example ①】

【Example ②】

(■ : Measuring positions)

(■ : Measuring positions)
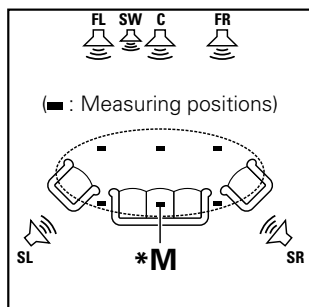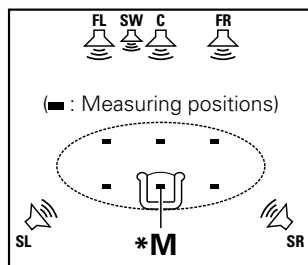
FL Front speaker (L)
FR Front speaker (R)
C Center speaker

SW Subwoofer
SL Surround speaker (L)
SR Surround speaker (R)

■ About the main listening position (*M)

The main listening position is the position where listeners would normally sit or where one would normally sit alone within the listening environment. Before starting Audyssey® Setup, place the Setup and measurement microphone in the main listening position. Audyssey MultEQ® XT32 uses the measurements from this position to calculate speaker distance, level, polarity, and the optimum crossover value for the subwoofer.

■ About Audyssey Sub EQ HT™

Audyssey Sub EQ HT™ makes the integration of dual subwoofers seamless by first compensating for any level and delay differences between the two subwoofers and then applying Audyssey MultEQ® XT32 to both subwoofers together.

To run Audyssey Sub EQ HT™ you must select "Measure (2 spkrs)" in "Channel Select" (vpage 186).

Procedure for speaker settings (Audyssey® Setup)

```
┌─────────────────────────────────┐
│         Preparation              │
└─────────────────────────────────┘
              ↓
┌─────────────────────────────────┐
│        Measurement               │
└─────────────────────────────────┘
              ↓
┌─────────────────────────────────┐
│        Calculation               │
└─────────────────────────────────┘
              ↓
┌─────────────────────────────────┐
│           Check                  │
└─────────────────────────────────┘
              ↓
┌─────────────────────────────────┐
│           Store                  │
└─────────────────────────────────┘
              ↓
┌─────────────────────────────────┐
│           Finish                 │
└─────────────────────────────────┘
```

1 **Mount the Setup and measurement microphone on a tripod or stand and place it in the main listening position.**
When you set the setup microphone, point the tip of it toward the ceiling, at the height of your ears in your listening position.

2 **If using a subwoofer capable of the following adjustments, set up the subwoofer as shown below.**

❑ When using a subwoofer with a direct mode
Set the direct mode to "On" and disable the volume adjustment and crossover frequency setting.

❑ When using a subwoofer without a direct mode
Make the following settings:
• Volume : "12 o'clock position"
• Crossover frequency : "Maximum/Highest Frequency"
• Low pass filter : "Off"
• Standby mode : "Off"

3 **Connect the Setup and measurement microphone to the SETUP MIC jack of this unit.**
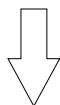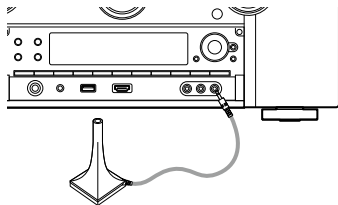
When the Setup and measurement microphone is connected, the following screen is displayed.
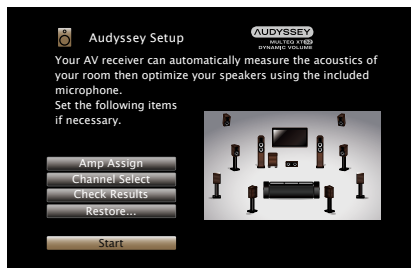
4 **Select "Start" and then press ENTER.**

Audyssey® Setup can also make the following settings.

• **Amp Assign**

The signals output from the SURROUND BACK, FRONT HEIGHT and FRONT WIDE speaker terminals can be switched in accordance with your speaker environment. Refer to "Amp Assign" (v page 192).

• **Channel Select**

If channels that are not to be used are set in advance, measurement for the set channels is skipped, and measuring time can be reduced. You can also change the number of surround back speakers and subwoofer.

5 **Select "Next" and then press ENTER.**

6 Select "Begin Test" and then press ENTER.

• Measurement requires several minutes.

NOTE

• **If "Caution!" is displayed on TV screen:**

Go to "Error messages" (☞page 190). Check any related items, and perform the necessary procedures.

• If the volume level for the subwoofer is not appropriate, an error message is displayed. See "Subwoofer level error message and how to adjust" (☞page 191).

❏ **When measuring has stopped**

① Press BACK to display the popup screen.

② Press ◁ to select "Yes", and then press ENTER.

7 The detected speakers are displayed.

8 Select "Next" and then press ENTER.

9 Move the Setup and measurement microphone to position 2, select "Continue", and then press ENTER.

The measurement of the second position starts. Measurements can be made in up to eight positions.

• To skip measuring the second and subsequent listening position, use ▽ to select "Calculation" and press ENTER to proceed to step 12.

10 **Repeat step 9, measuring positions 3 to 8.**

11 **Select "Calculation" and then press ENTER.**
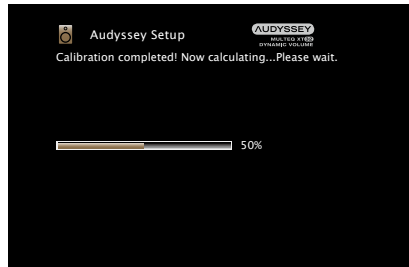
- Analysis takes several minutes to complete. The more speakers and measurement positions that there are, the more time it takes to perform the analysis.

12 **Use △▽ to select the item you want to check, and then press ENTER.**
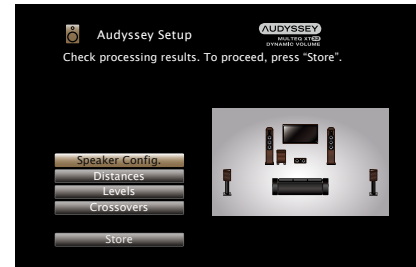
- Subwoofers may measure a greater reported distance than the actual distance due to added electrical delay common in subwoofers.

13 Select "Store" and then press ENTER.
Save the measurement results.
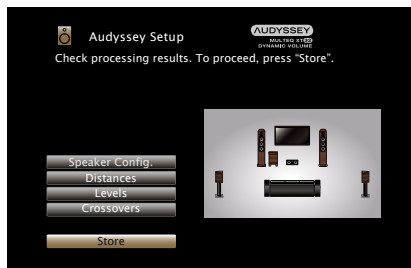
- Saving the results requires about 30 seconds.

NOTE

- During saving of measurement results, be sure not to turn off the power.

14 Unplug the Setup and measurement microphone from the unit's SETUP MIC jack.

15 Set Audyssey Dynamic Volume®.

- This feature adjusts the output volume to the optimal level while constantly monitoring the level of the audio input to the unit. Optimal volume control is performed automatically without any loss in the dynamism and clarity of the sound when, for example, the volume suddenly increases for commercials shown during television programs.

NOTE

- After performing Audyssey® Setup, do not change the speaker connections or subwoofer volume. In event of a change, perform Audyssey® Setup again.

Error messages

An error message is displayed if Audyssey® Setup could not be completed due to speaker placement, the measurement environment, etc. If an error message is displayed, check the relevant items and perform the necessary measures. Be sure to turn off the power before checking speaker connections.

Examples	Error details	Measures
Microphone or Speaker is None	• Setup and measurement microphone is not detected. • Not all speakers could be detected.	• Connect the included Setup and measurement microphone to the SETUP MIC jack of this unit. • Check the speaker connections.
Ambient noise is too high or level is too low	• There is too much noise in the room. • Speaker or subwoofer sound is too low.	• Either turn off any device generating noise or move it away. • Perform again when the surroundings are quieter. • Check the speaker installation and the direction in which the speakers are facing. • Adjust the subwoofer's volume.
Front R : None	• The displayed speaker could not be detected.	• Check the connections of the displayed speaker.
Front R : Phase	• The displayed speaker is connected with the polarity reversed.	• Check the polarity of the displayed speaker. • For some speakers, this error message may be displayed even if the speaker is properly connected. If you are sure the connection is correct, use ▷ to select "Skip Error", then press ENTER.

■ Subwoofer level error message and how to adjust

The optimal level of each subwoofer channel for Audyssey Setup measurement is 75 dB.

During subwoofer level measurement (☞page 183 "Audyssey® Setup"), an error message is displayed when one level of subwoofers is outside the 72 – 78 dB range.

When using a subwoofer with built-in amplifier (active type), adjust the subwoofer volume so that the subwoofer level is within the 72 to 78 dB range.

【Error message】
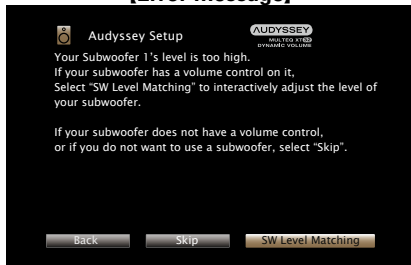
1 Select "SW Level Matching" and then press ENTER.

2 Adjust the volume control on your subwoofer so that the measured level is within the 72 to 78 dB range.

3 When the measured level is within the 72 to 78 dB range, select "Next" and then press ENTER.
- If you use two subwoofers, the second subwoofer's adjustment will be started.
  Repeat the operation from step 2, 3.

Retrieving Audyssey® Setup settings

If you set "Restore..." to "Restore", you can return to Audyssey® Setup measurement result (value calculated at the start by MultEQ® XT32) even when you have changed each setting manually.

Manual Setup

Perform when setting the speakers manually or when changing settings made in Audyssey® Setup.

• If you change the speaker settings after performing Audyssey® Setup, it will not be possible to select Audyssey MultEQ® XT32, Audyssey Dynamic EQ® and Audyssey Dynamic Volume® (v<u>page 167</u>, <u>168</u>, <u>169</u>).

• "Manual Setup" can be used without changing the settings. Please set if necessary.

Amp Assign

Select power amplifier usage method.

■ Assign Mode

Set the assignment mode.

9.1ch(SB/FH/FW) (Default) : Assigns all power amplifiers within this unit for MAIN ZONE.

7.1ch + ZONE2 : Setting to assign the unit's built-in power amplifier for ZONE2 and output the audio in stereo.

5.1ch + ZONE2/3 : Setting to assign the unit's built-in power amplifier for ZONE2 and ZONE3 and output the audio in stereo.

7.1ch(Bi-Amp) : Setting to assign the unit's built-in power amplifier for front speaker bi-amp connections and output the audio in stereo.

5.1ch(Bi-Amp) + ZONE2 : Settings to use the front speakers via the bi-amp connection and assign the internal power amp for ZONE2 to output stereo audio.

7.1ch + Front B : Setting to use the second set of front speakers for playback. You can switch the speaker to be used as the "Front Speaker" (v<u>page 198</u>) between Front speaker A and B.

■ Main Speakers

Selects speakers used in MAIN ZONE when "Assign Mode" (☞page 192) is set to "7.1ch + ZONE2", "7.1ch(Bi-Amp)" or "7.1ch + Front B".

S.Back/F.Height (Default) : Uses surround back and front height speakers.

S.Back/F.Wide : Uses surround back and front wide speakers.

F.Height/F.Wide : Uses front height and front wide speakers.

Speaker Config.

Indicate speaker presence and select speaker size categories based on bass reproduction capability.

■ Front

Set the front speaker size.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

🖉

• When "Subwoofer" is set to "None", "Front" is automatically set to "Large".
• When "Front" is set to "Small", "Center", "Surround", "Surr. Back", "Front Height" and "Front Wide" can not be set to "Large".

■ Center

Set the presence and size of the center speaker.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

None : Select when a center speaker is not connected.

■ Subwoofer

Set the presence of a subwoofer.

2 spkrs : Use two subwoofers.

1 spkr (Default) : Use only one subwoofer.

None : Select when a subwoofer is not connected.

• When "Front" is set to "Small", "Subwoofer" is automatically set to "1 spkr".

■ Surround

Set the presence and size of the surround speakers.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

None : Select when the surround speakers are not connected.

• When "Surround" is set to "None", "Surr. Back", "Front Height" and "Front Wide" are automatically set to "None".

■ Surr. Back

Set the presence, size and number of surround back speakers.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

None : Select when the surround back speakers are not connected.

2 spkrs (Default) : Use two surround back speakers.

1 spkr : Use only one surround back speaker. When you select this setting, connect the surround back speaker to the left (L) channel.

• When "Assign Mode" () setting is "9.1ch(SB/FH/FW)", "7.1ch + ZONE2", "7.1ch(Bi-Amp)" or "7.1ch + Front B", you can make the "Surr. Back" setting.

■ Front Height

Set the presence and size of the front height speakers.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

None : Select when the front height speakers are not connected.

✎
• When "Assign Mode" (☞page 192) setting is "9.1ch(SB/FH/FW)", "7.1ch + ZONE2", "7.1ch(Bi-Amp)" or "7.1ch + Front B", you can make the "Surr. Back" setting.

■ Front Wide

Set the presence and size of the front wide speakers.

Large : Use a large speaker that can adequately play back very low bass frequencies.

Small (Default) : Use a small speaker that has inadequate playback capacity for very low bass frequencies.

None : Select when the front wide speakers are not connected.

✎
• When "Assign Mode" (☞page 192) setting is "9.1ch(SB/FH/FW)", "7.1ch + ZONE2", "7.1ch(Bi-Amp)" or "7.1ch + Front B", you can make the "Surr. Back" setting.

Distances

Set distance from listening position to speakers.
Measure beforehand the distance from the listening position to each speaker.

■ Unit

Set the unit of distance.

Feet (Default)

Meters

■ Step

Set the minimum variable width of the distance.

1ft (Default) / **0.1ft**

0.1m / **0.01m**

■ Set Defaults

The "Distances" settings are returned to the default settings.

■ Set the distance

0.0ft – 60.0ft / 0.00m – 18.00m

✎

• The speakers that can be selected differ depending on the "Amp Assign"
(☞page 192) and "Speaker Config." (☞page 193) settings.
• Default settings :
Front L / Front R / F. Height L / F. Height R / F. Wide L / F. Wide R / Center /
Subwoofer : 12.0 ft (3.60 m)
Surround L / Surround R / Surr. Back L / Surr. Back R : 10.0 ft (3.00 m)
• Set the difference in the distance between the speakers to less than 20.0 ft
(6.00 m).

Levels

Set the volume of the test tone to be the same when it is output from
each speaker.

■ Test Tone Start

Output test tone. A test tone is output from the selected speaker.
While listening to the test tone, adjust the volume output from the
selected speaker.

–12.0dB – +12.0dB (Default : 0.0dB)

✎

• When "Levels" is adjusted, the adjusted values are set for all the sound
modes.
• When headphones are connected to the PHONES connector on this unit, you
cannot set "Levels".

■ Set Defaults

The "Levels" settings are returned to the default settings.

Crossovers

Set in accordance with the lower limit frequency of the base frequencies that can be played back through each speaker.

■ Speaker Selection

Selects how to set the crossover frequency. See the speaker manual for information concerning speaker crossover frequency.

All (Default) : Sets the same crossover frequency for all speakers.

Individual : Selects the crossover points for each speaker individually.

■ Set the crossover frequency

40Hz / **60Hz** / **80Hz** (Default) / **90Hz** / **100Hz** / **110Hz** / **120Hz** / **150Hz** / **200Hz** / **250Hz**

- "Crossovers" can be set when the "Subwoofer Mode" (☞page 198) setting is "LFE+Main", or when you have a speaker that is set to "Small".
- The default crossover frequency is "80Hz", which will work best with the widest variety of speakers. However, we recommend setting to a higher frequency that the crossover frequency when small speakers are used. For example, set to "250Hz" when the frequency range of the speakers is 250 Hz – 20 kHz.
- For speakers set to "Small", low frequency content below the crossover frequency is attenuated to the speakers and the low bass content is then re-delivered to the subwoofer, or the front (L/R) speakers if they have been set to Large.
- The speakers that can be set when "Individual" is selected differ depending on to the "Subwoofer Mode" (☞page 198) setting.
  - When "LFE" is selected, speakers set to "Small" at "Speaker Config." (☞page 193) can be set. If the speakers are set to "Large", "Full Band" is displayed and the setting cannot be made.
  - When "LFE+Main" is selected, speakers can be set regardless of the "Speaker Config." (☞page 193) setting.

Bass

Set subwoofer and LFE signal range playback.

■ Subwoofer Mode

Select low range signals to be reproduced by subwoofer.

LFE (Default) : The low range signal of the channel set to "Small" speaker size is added to the LFE signal output from the subwoofer.

LFE+Main : The low range signal of all channels is added to the LFE signal output from the subwoofer. This is usually the best setting for most systems.

✎

• "Subwoofer Mode" can be set when "Speaker Config." – "Subwoofer" (☞page 194) is set to other than "None".
• Play music or a movie source and select the mode offering the strongest bass.
• If "Front" and "Center" for "Speaker Config." (☞page 193) are set to "Large", and "Subwoofer Mode" is set to "LFE", no sound may be output from the subwoofers, depending on the input signal or selected sound mode. Select "LFE+Main" if you want the bass signals to always be produced from the subwoofer.

■ LPF for LFE

Set LFE signal playback range. Set this when you want to change the playback frequency (low pass filter point) of the subwoofer.

80Hz / **90Hz** / **100Hz** / **110Hz** / **120Hz** (Default) / **150Hz** / **200Hz** / **250Hz**

Impedance

Set the impedance of connected speakers.

8Ω/ohms (Default) : Select when the impedance per speaker for all the connected speakers is 8 Ω/ohms or larger.

6Ω/ohms : Select when the impedance for any of the connected speakers is between 6 Ω/ohms and 8 Ω/ohms.

✎

• Check the speaker impedance (Ω/ohms) shown on the back of your speakers or in the instruction manual beforehand.

Front Speaker

Set the front speaker A/B to use for every sound mode.

✎

• This can be set when "Assign Mode" (☞page 192) is set to "7.1ch + Front B".

A (Default) : Front speaker A is used.

B : Front speaker B is used.

A+B : Both front speakers A and B are used.

✎

• This can be set by pressing SPKR A/B on the main unit.

Network

To use this unit by connecting it to a home network (LAN), you must configure network settings.
If you set up your home network (LAN) via DHCP, set "DHCP" to "On" (use the default setting). This allows this unit to use your home network (LAN).
When assigning an IP address to each device manually, you need to assign an IP address to this unit using the "IP Address" settings, and enter information about your home network (LAN) such as the gateway address and subnet mask, etc.

Information

Display network information.

Friendly Name / **DHCP On** or **Off** / **IP Address** / **MAC Address**

✎
• MAC Address is required to make a vTuner account.

IP Control

Enables network communication in standby power mode.

Off In Standby : Suspend network function during standby.

Always On (Default) : Network is on during standby. Main unit operable with a network compatible controller.

✎
• When using the web control function or Marantz Remote App, use with the "IP Control" setting set to "Always On".

NOTE
• When "IP Control" is set to "Always On", it consumes more standby power.

Friendly Name

The Friendly Name is the name of this unit displayed on the network. You can change the Friendly Name according to your preferences.

■ Edit Name
Edits Friendly Name.

✎
• The default Friendly Name on first use is "Marantz SR7008".
• Up to 63 characters can be input.
• For character input, see page 159.

■ Set Defaults
Restores Friendly Name, which you had changed, to the default setting.

Settings

Make settings for wired LAN.
• If you are using a broadband router (DHCP function), there is no need to make the settings at "IP Address" and "Proxy", since the DHCP function is set to "On" in this unit's default settings.
• Only set "Settings" when connecting to a network without a DHCP function.
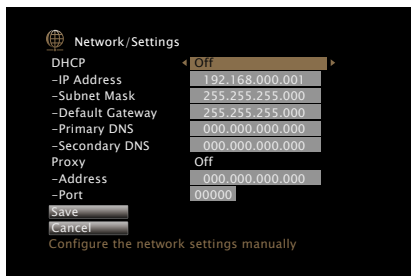
■ DHCP

Selects how to connect to the network.

On (Default) : Configure the network settings automatically from your router.

Off : Configure the network settings manually.

■ IP Address

Set the IP address within the ranges shown below.
• The Network Audio function cannot be used if other IP addresses are set.
CLASS A: 10.0.0.1 – 10.255.255.254
CLASS B: 172.16.0.1 – 172.31.255.254
CLASS C: 192.168.0.1 – 192.168.255.254

■ Subnet Mask

When connecting an xDSL modem or connector adapter directly to this unit, input the subnet mask indicated in the documentation supplied by your provider. Normally input 255.255.255.0.

■ Default Gateway

When connected to a gateway (router), input its IP address.

■ Primary DNS, Secondary DNS

If there is only one DNS address indicated in the documentation supplied by your provider, input it at "Primary DNS". If two or more DNS are provided by your provider, enter both "Primary DNS" and "Secondary DNS".

■ Proxy

Make this setting when connecting to the Internet via a proxy server. Make the proxy settings only when you connect to the Internet via a proxy server that is on your internal network or provided by your provider, etc.

On(Address) : Select when inputting by address.

On(Name) : Select when inputting by domain name. Up to 38 characters can be input.

Off (Default) : Disables the proxy server.

■ Port

Enter port number.

🖉

• If you cannot connect to the Internet, recheck the connections and settings (☞page 53).
• If you do not understand about Internet connection, contact your ISP (Internet Service Provider) or the store from which you purchased your computer.

Diagnostics

Used to check the network connection.

■ Physical Connection

Checks the physical LAN port connection.

OK

Error : The LAN cable is not connected. Check the connection.

■ Router Access

Checks the connection from this unit to the router.

OK

Error : Failed to communicate with the router. Check the router settings.

■ Internet Access

Checks whether this unit has access to the Internet (WAN).

OK

Error : Failed to connect to the Internet. Check the Internet connection environment or router settings.

Maintenance Mode

Use when receiving maintenance from a Marantz service engineer or custom installer. Ordinarily, this mode isn't suitable for use by the end user, only by a trained service technician or custom installation professional.

NOTE

• Only use this function if so instructed by a Marantz serviceperson or installer.

General

Make various other settings.

Language

Set the language for display the menu on the TV screen.

English (Default) / **Français** / **Español**

✎

• "Language" can also be set by the following procedure. However, the menu screen is not displayed.
Following the display content to make the setting.

1. Press and hold the main unit's STATUS and ZONE SELECT for at least 3 seconds.
"✳Video Format <NTSC>" appears on the display.

2. Press the main unit's ▽.
"✳GUI Language <ENGLISH>" appears on the display.

3. Use the main unit's ◁ ▷ and set the language.

4. Press the main unit's ENTER to complete the setting.

ZONE2 Setup / ZONE3 Setup

Set the audio to play back with multi-zone (ZONE2, ZONE3).

✎

• Values set for "Volume Limit" and "Power On Volume" are displayed according to the setting specified for the volume "Scale" (☞page 166).

∎ Bass

Adjust bass.

–14dB – +14dB (Default : 0dB)

∎ Treble

Adjust treble.

–14dB – +14dB (Default : 0dB)

∎ High Pass Filter

Make settings for cutting the low range to reduce distortion in the bass.

On : The low range is attenuated.

Off (Default) : The low range is not attenuated.

■ Lch Level

Adjust the left channel output level.

–12dB – +12dB (Default : 0dB)

■ Rch Level

Adjust the right channel output level.

–12dB – +12dB (Default : 0dB)

■ Channel

Set whether to playback in stereo or monaural.

Stereo (Default) : Stereo playback.

Mono : Monaural playback.

✎

• When "Assign Mode" (vpage 192) is set to "5.1ch + ZONE2/3", the "Channel" setting is automatically set to "Mono".

■ HDMI Audio (ZONE2 only)

Selects the audio signal format for playing an HDMI source in ZONE2.

Through (Default) : The HDMI audio signal is passed through the AV receiver to the device in ZONE2.

PCM : The HDMI audio signal input into this unit is converted to a PCM signal that can be output from the ZONE2 PRE OUT terminals or speaker terminals.

■ Volume Level

Set the volume output level.

Variable (Default) : Volume can be adjusted.

1 – 98 (–79dB – 18dB) : Volume is fixed at the desired level. The volume cannot be adjusting using the remote control unit.

■ Volume Limit

Make a setting for maximum volume.

60 (–20dB) / 70 (–10dB) / 80 (0dB) (Default : 70 (–10dB))

Off : Do not set a maximum volume.

✎

• This can be set when "Volume Level" is set to "Variable".

■ Power On Volume

Define the volume setting that is active when the power is turned on.

Last (Default) : Use the memorized setting from the last session.

Mute : Always mute when power is turned on.

1 – 98 (–79dB – 18dB) : The volume is adjusted to the set level.

✎

• This can be set when "Volume Level" is set to "Variable".

∎ Mute Level

Set the amount of attenuation when muting is on.

Full (Default) : The sound is muted entirely.

–40dB : The sound is attenuated by 40 dB down.

–20dB : The sound is attenuated by 20 dB down.

🖉

• This can be set when "Volume Level" is set to "Variable".

Zone Rename

Change the display title of each zone to one you prefer.

MAIN ZONE / ZONE2 / ZONE3

Set Defaults : The input source name is returned to the default setting.

🖉

• Up to 10 characters can be input.
• For character input, see .

Trigger Out 1 / Trigger Out 2

Selects when to activate trigger out.
For details about how to connect the DC OUT jacks, see "DC OUT jack" ().

❑ When setting for zone (MAIN ZONE / ZONE2 / ZONE3)
Trigger out is activated through linkage to the power of the zone set to "On".

❑ When setting for input source
Activate trigger out when the input source set to "On" is selected.

❑ When setting for HDMI monitor
Activate trigger out when the HDMI monitor set to "On" is selected.

On : Activate trigger on this mode.

– – – : Do not activate trigger on this mode.

Auto Standby

Sets the time after which the unit automatically enters standby mode when there are no audio or video signals input, and the unit is not operated. Before it enters the standby mode, "Auto Standby" is displayed on the display of this unit and the menu screen.

60 min : The unit goes into standby after 60 minutes.

30 min : The unit goes into standby after 30 minutes.

Off (Default) : The unit does not go into standby automatically.

Front Display

Makes settings related to the display on this unit.

■ Display

Select the front display mode.

On (Default) : Display is always on.

Auto Off : Display is off except when showing the status display.

Off : Display is always off.

🖉

• This can be set by pressing DISPLAY on the main unit.

■ Channel Indicators

Sets whether to use the input signal display or output signal display for the channel indication on the display.

Input : Uses the input signal display for the channel indication on the display.

Output (Default) : Uses the output signal display for the channel indication on the display.

Information

Show information about receiver settings, input signals, etc.

■ Audio

Show the audio information for MAIN ZONE.

Sound Mode : The currently set sound mode.

Input Signal : The input signal type.

Format : The number of input signal channels (presence of front, surround, LFE).

Sample Rate : The input signal's sampling frequency.

Offset : The dialogue normalization correction value.

Flag : This is displayed when inputting signals including a surround back channel. "MATRIX" is displayed with Dolby Digital EX and DTS-ES Matrix signals, "DISCRETE" with DTS-ES Discrete signals.

Dialogue normalization function

This function is automatically activated when playing Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS and DTS-HD sources.
It automatically corrects the standard signal level for individual program sources.
The correction value can be checked using the main unit's STATUS.

```
            Dial.Norm
            Offset  - 4dB
```

The figure is the corrected value. This cannot be changed.

■ Video

Show the HDMI input/output signals and HDMI monitor information for MAIN ZONE.

HDMI Signal Info.

Resolution / **Color Space** / **Pixel Depth**

HDMI Monitor 1 / HDMI Monitor 2

Interface / **Resolutions**

■ ZONE

Show information about current settings.

MAIN ZONE : This item shows information about settings for MAIN ZONE. The information displayed differs according to the input source.

ZONE2 : This item shows information about settings for ZONE2.

ZONE3 : This item shows information about settings for ZONE3.

■ Firmware

Version : Displays information for the current firmware.

■ Notifications

Displays and sets notifications from Marantz.

Also, sets whether or not to display the notification when the power is turned on.

Notification Alerts

On (Default) : Displays notification messages from Marantz.

Off : Does not display notification messages from Marantz.

✎

• Press INFO on the remote control unit to display current source name, volume, sound mode name, and other information at the bottom of the screen.

SOURCE Blu-ray
SOUND DOLBY TrueHD
SIGNAL Dolby TrueHD
INPUT SIGNAL
ACTIVE SPEAKERS
40.0
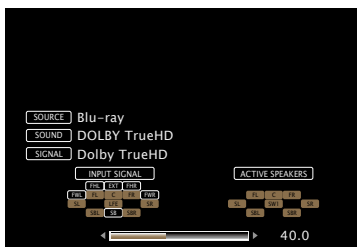
NOTE

• The status display screen cannot be displayed at a computer's resolution (e.g. VGA) is being played.

Usage Data

To help us improve our products and customer service, Marantz collects anonymous information about how you use your AV receiver (such as frequently used input sources and sound modes and speaker settings). Marantz will never provide any information we collect to third parties.

Yes : Provide Marantz with information about how you use this unit via the network.

No : Do not provide Marantz with information about how you use this unit via the network.

Firmware

Checks for the latest firmware information about updates and upgrades, updates the firmware, and sets up the notification message display for updates and upgrades.

■ Update

Update the firmware of the receiver.

Check for Update : Check for firmware updates. You can also check approximately how long it will take to complete an update.

Update Start : Execute the update process. When the update starts, the menu screen is shut down. During the update, the progress is shown on the display.

🖉

• If updating fails, the set automatically retries, but if updating is still not possible, one of the messages shown below is displayed. If the display reads as shown below, check the settings and network environment, then update again.

Display	Description
Updating fail	Updating failed.
Login failed	Failure to log into server.
Server is busy	Server is busy. Wait a while then try again.
Connection fail	Failure in connecting to server.
Download fail	Downloading of the firmware has failed.

■ Notifications

When the latest firmware is available, a notification message is displayed on the TV screen at power on.

The notification message is displayed for about 20 seconds when the power is turned on. Connect to broadband Internet (☞page 53) when using this function.

Update

On (Default) : Display update message.

Off : Do not display update message.

Upgrade

On (Default) : Display upgrade message.

Off : Do not display upgrade message.

■ Add New Feature

Display new features that can be downloaded to this unit and perform an upgrade.

Upgrade Package : Display the items to be upgraded.

Upgrade Status : Display a list of the additional functions provided by the upgrade.

Upgrade Start : Execute the upgrade process. When the upgrade starts, the menu screen is shut down. During the upgrade, the amount of upgrade time which has elapsed is displayed.

✎

• See the Marantz website for details about upgrades.

• When the procedure is complete, "Registered" is displayed in this menu and upgrades can be carried out. If the procedure has not been carried out, "Not Registered" is displayed.

The ID number shown on this screen is needed when carrying out the procedure.

The ID number can also be displayed by pressing and holding the main unit's ◁ and SETUP for at least 3 seconds.

• If the upgrade is not successful, an error message identical to those in "Update" will appear on the display. Check the settings and network environment and then perform the upgrade again.

Notes concerning use of "Update" and "Add New Feature"

• In order to use these functions, you must have the correct system requirements and settings for a broadband Internet connection (℅page 53).

• Do not turn off the power until updating or upgrading is completed.

• Even with a broadband connection to the Internet, approximately 1 hour is required for the updating/upgrading procedure to be completed.

• Once updating/upgrade starts, normal operations on this unit cannot be performed until updating/upgrading is completed. Furthermore, there may be cases where backup data is reset for the parameters, etc., set on this unit.

• If the update or upgrade fails, press and hold the ⏻ on the main unit for more than 5 seconds, or remove and re-insert the power cord. "Update retry" appears on the display and update restarts from the point at which update failed. If the error continues despite this, check the network environment.

✎

• Information regarding the "Update" function and "Add New Feature" will be announced on the Marantz web site each time related plans are defined.

Setup Lock

Protect settings from inadvertent changes.

■ Lock

On : Turn protection on.

Off (Default) : Turn protection off.

🖉

• When cancelling the setting, set "Lock" to "Off".

NOTE

• When "Lock" is set to "On", no setting items are displayed except for "Setup Lock".

Operating external devices with the remote control unit

SET — AVR

Input source
select buttons

CH/PAGE ▲

INFO — OPTION
ENTER

FAVORITE
STATION
1 – 4

0 – 9

marantz
RC023SR
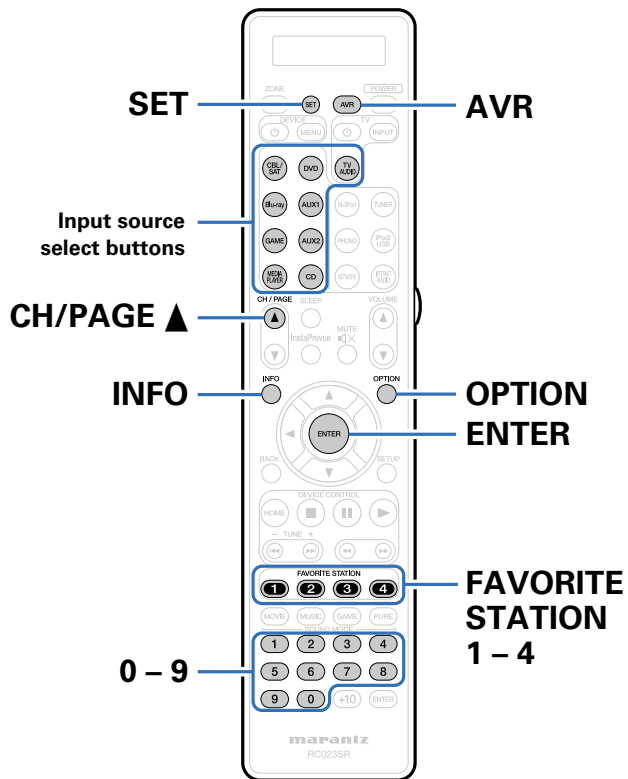
When preset codes are registered in the included remote control unit, it can then be used to operate any devices you have, such as DVD players or TVs made by different manufacturers.

Registering preset codes

There are three methods for registering preset codes; the simple method for registering preset codes of Marantz players, the method for registering the preset numbers of other manufacturers' devices, and the method for experimenting with preset codes one by one for registration.

■ Registering Marantz players

Use the following simple method to register the preset codes of Marantz Blu-ray Disc players, DVD players and CD players.

❏ Registering Blu-ray Disc players

1 **Press and hold down Blu-ray and OPTION until "OK" indicator on the remote control display is flashing, then release.**

❏ Registering DVD players

1 **Press and hold down DVD and OPTION until "OK" indicator on the remote control display is flashing, then release.**

❏ Registering CD players

1 **Press and hold down CD and OPTION until "OK" indicator on the remote control display is flashing, then release.**

❏ **Registering multiple players at the same time**

1 **Press and hold down the FAVORITE STATION 1 – 4 and OPTION until "OK" indicator on the remote control display is flashing, then release.**

Devices to be registered at the same time			Press and hold down the buttons
Bru-ray Disc player	**DVD player**	**CD player**	
✓	✓		FAVORITE STATION 1 and OPTION
✓		✓	FAVORITE STATION 2 and OPTION
	✓	✓	FAVORITE STATION 3 and OPTION
✓	✓	✓	FAVORITE STATION 4 and OPTION

NOTE

• Depending on the model and year of manufacture of your device, some buttons may not operate. In this case, try "Registering by entering preset numbers" (☞page 214).

■ **Registering by entering preset numbers**
Before starting, confirm the preset number of the device that you want to register and the buttons that can be registered in the Preset Code Table (☞page 279) in the Appendix.

1 **Press and hold down the input source select button that you want to register the preset code to and SET until "PRSET" indicator on the remote control display is flashing, then release.**

2 **Enter the preset number (4 digits) listed for the device in the Preset Code Table using the number buttons (0 – 9) on the remote control.**

✎

• Some manufacturers use more than one type of remote control code. Preset codes to change the number and verify correct operation.

NOTE

• Depending on the model and year of manufacture of your device, some buttons may not operate.

■ Experimenting with preset codes one by one for registration

1 Switch the power on of the device for which you want to set the preset code.

2 Press and hold down the input source select button that you want to register the preset code to and SET until "PRSET" indicator on the remote control display is flashing, then release.

3 Aim the remote control at the appliance and slowly alternate between pressing CH/PAGE ▲ and DEVICE ⏻ for the appliance.

The preset code is shown in the remote control display.

4 Stop when the appliance turns off.

5 Press ENTER once to lock in the code.

🖋

- Some manufacturers use more than one type of remote control code. Preset codes to change the number and verify correct operation.
- If the AV device is not a Marantz device, or if the device does not operate even when the preset code is registered, use the learning function. Remote codes for different devices can be remembered for use by the Marantz remote control included with this device.

NOTE

- Depending on the model and year of manufacture of your device, some buttons may not operate.

Operating devices

To operate an external device, press the input source button registered with the preset code, followed by one of the buttons in the following tables.

✎
- When operating an external device, the display on the remote control unit shows the input source name.
- When operating TV, the display on the remote control unit shows "TV".
- The "TV" indicator lights when the TV is being operated.
- To operate the menu of this unit, press AVR before operating the unit. The "AVR" operation mode indicator lights when this unit is being operated.

❏ TV group (TV) operation
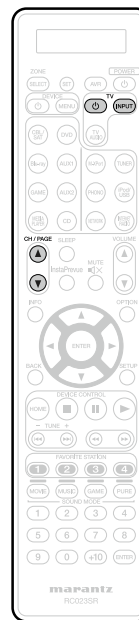
Operation buttons	Function
TV ⏻	TV power on/off
TV INPUT	Switch TV input
CH/PAGE ▲▼	Switch channels (up/down)

✎
- TV ⏻ and TV INPUT buttons can be operated at any time without pressing the TV button.

❏ **DVD group**
(DVD player / DVD recorder) operation

Operation buttons	Function
DEVICE ⏻	Power on/off
DEVICE MENU	Menu
INFO	Information
OPTION	Top menu
△▽◁▷	Cursor operation
ENTER	Enter
BACK	Return
SETUP	Setup
■	Stop
❚❚	Pause
▶	Playback
◀◀ ▶▶	Skip chapter
◀◀ ▶▶	Fast-reverse / Fast-forward
0 – 9, +10	Select title, chapter or channel selection

❏ **CD group**
(CD player / CD recorder) operation
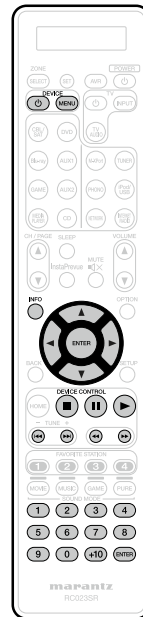
Operation buttons	Function
DEVICE ⏻	Power on/off
DEVICE MENU	Menu
INFO	Information
△▽◁▷	Cursor operation
ENTER	Enter
■	Stop
❚❚	Pause
▶	Playback
◀◀ ▶▶	Skip track
◀◀ ▶▶	Fast-reverse / Fast-forward
0 – 9, +10	Track selection

❏ **CBL/SAT group**
(Set top box for satellite (SAT) / cable (CBL) / Media player) operation

Operation buttons	Function
DEVICE ⏻	Power on/off
DEVICE MENU	Menu
CH/PAGE ▲▼	Switch channels (up/down)
INFO	Information
△▽◁ ▷	Cursor operation
ENTER	Enter
BACK	Return
SETUP	Setup
❚❚	Pause
▶	Playback
◀◀ ▶▶❙	Skip chapter
◀◀ ▶▶	Fast-reverse / Fast-forward
0 – 9, +10	Channel selection

❏ **BD group**
(Blu-ray Disc player) operation
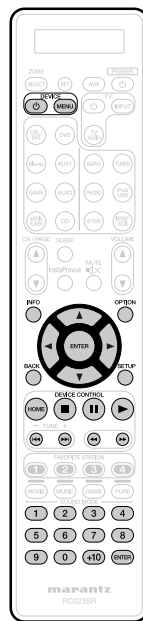
Operation buttons	Function
DEVICE ⏻	Power on/off
DEVICE MENU	(Popup) Menu
INFO	Information
OPTION	Top menu
△▽◁ ▷	Cursor operation
ENTER	Enter
BACK	Return
SETUP	Setup
HOME	Go to Home screen
■	Stop
❚❚	Pause
▶	Playback
◀◀ ▶▶❙	Skip chapter
◀◀ ▶▶	Fast-reverse / Fast-forward
0 – 9, +10	Select title, chapter or channel selection

Check the registered preset code

1 Press and hold an input source select button for which you want to check the preset code and the SET button until the display on the remote control unit shows "PRSET".

2 Press INFO.
The set code is shown for 3 seconds in the remote control display.

Initializing registered preset codes

1 Press and hold down AVR and OPTION until "OK" indicator on the remote control display is flashing, then release.

Operating learn function
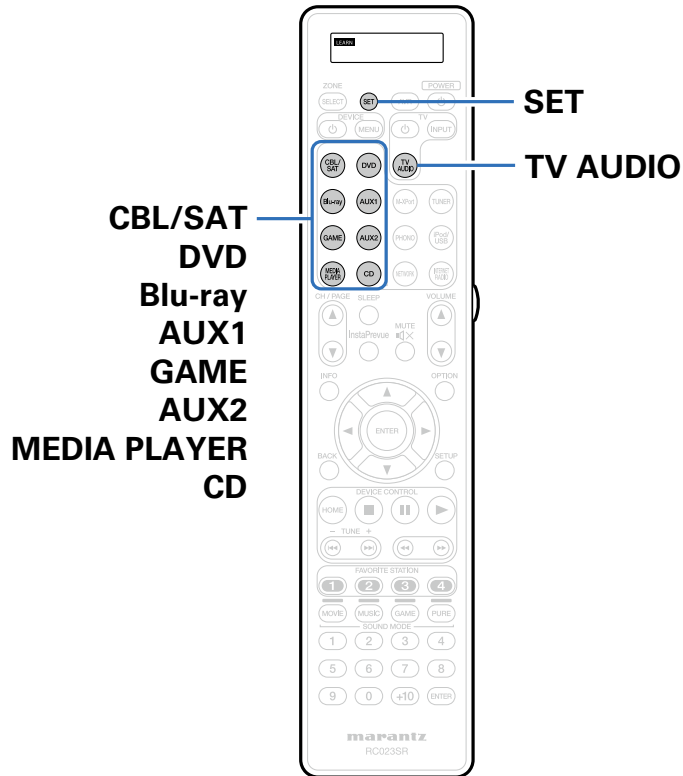
CBL/SAT
DVD
Blu-ray
AUX1
GAME
AUX2
MEDIA PLAYER
CD

SET

TV AUDIO

If the device does not operate even when the preset code is registered, use the learning function. Remote codes for different devices can be remembered for use by the Marantz remote control included with this device.

Remembering remote control codes from other devices

1 **Place the Marantz remote control and remote control from the other device approximately 5 cm apart, with the remote control signal transmission sections facing each other.**

2 **Press and hold SET until the LEARN indicator blinks.**

3 **Press input source select buttons to select the input source.**
The input source is shown in the remote control display.

4 **Select the button to be learned.**
LEARN indicator lights up.

5 **Press and hold the button that you want to register on the other remote control until "OK" is displayed on the Marantz remote control display.**
• If "NG" is shown on the remote control display, perform step 4 again.

6 **Repeat steps 4 and 5 to learn other buttons for the same input source.**

7 **When programming of the remote control unit is completed, press SET.**
The LEARN indicator turns off, and the remote control unit exits learn mode.

✎

• There are some remote control units that cannot be programmed, or even if they can be programmed, they may not operate correctly. If this happens, use the remote control unit supplied with the AV equipment to operate it.
• If the remote control memory becomes full, "FULL" is shown on the remote control display. If you want to learn the code, you should erase other learned button.

NOTE

• The learning function is unavailable for all ZONE SELECT, SET, AVR, POWER ⏻, VOLUME ▲▼, FAVORITE STATION, SOUND MODE and input source select buttons in any mode.
• If no buttons are pressed for approximately 1 minutes while in the LEARN mode, the remote control unit automatically exits from the LEARN mode.

Delete saved remote control codes

Codes can be erased in three ways: by buttons, sources, and by all memory contents.

■ Delete remote control codes for each button

1 **Press and hold SET until the LEARN indicator blinks.**

2 **Press input source select buttons to select the input source you want to delete.**
The input source is shown in the remote control display.

3 **Press and hold POWER ⏻ and press the learned button to be erased twice.**
"ERASE" is shown in the remote control display.

4 **Press SET.**
• The LEARN indicator turn off.

■ Delete remote control codes for each input source

1 Press and hold SET until the LEARN indicator blinks.

2 Press and hold POWER Φ and press the learned input source select buttons to be erased twice.
"ERASE" is shown in the remote control display.

3 Press SET.
• The LEARN indicator turn off.

■ Delete remote control codes for all input sources

1 Press and hold SET until the LEARN indicator blinks.

2 Press and hold POWER Φ and press AVR twice.
"ERASE" is shown in the remote control display.

3 Press SET.
• The LEARN indicator turn off.

Setting the back light

SET
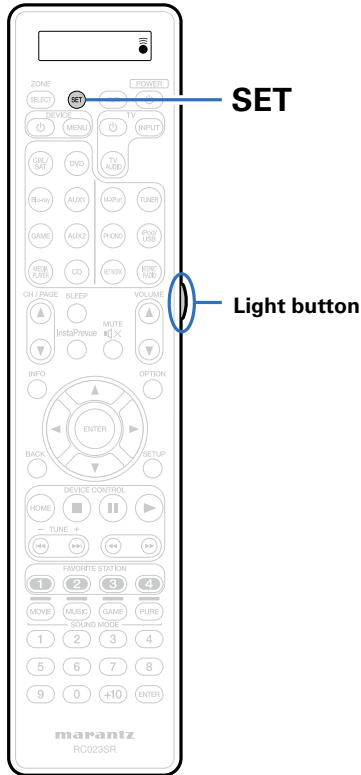
Light button

You can turn off the backlight of the remote control unit.

• Backlight is set on in the factory settings.

Disabling the backlight

1 **Press and hold both SET and Light button until "OFF" indicator flashes twice.**

Turning the backlight on

1 **Press and hold both SET and Light button until "ON" indicator flashes twice.**

Specifying the zone used with the remote control unit
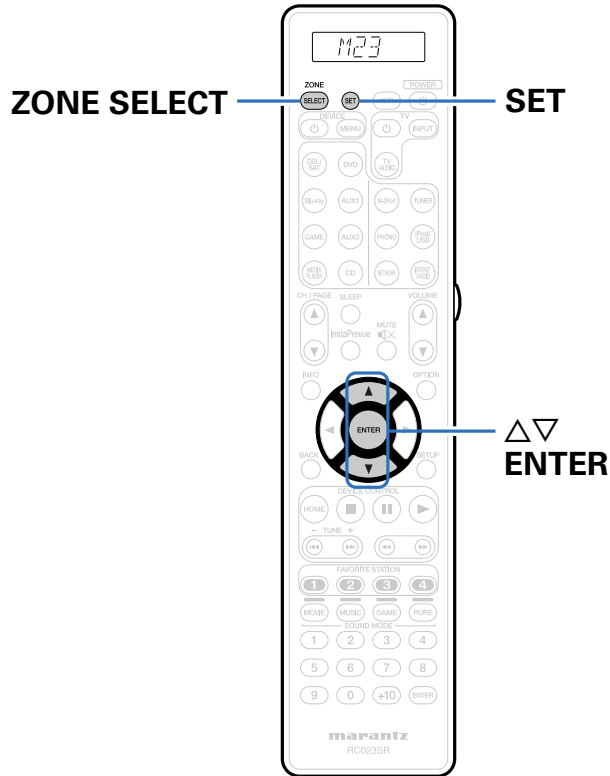
When the ZONE SELECT is pressed, only the set zone can be operated with the remote control unit.

This is useful for preventing mistaken operation.

• The factory setting is "M23".

1 **Press and hold ZONE SELECT and SET for at least 3 seconds.**

2 **Use △▽ to set the zone to be used and press ENTER.**

"SET" flashes four times on the remote control unit and the normal operation mode is restored.

Remote control unit display	Zone to be used
M	MAIN ZONE only
M2	MAIN ZONE / ZONE2
M23	MAIN ZONE / ZONE2 / ZONE3

ZONE SELECT — **SET**

△▽
ENTER

Tips

Contents

Tips

I want the volume not to become too loud by mistake.

• Set the volume upper limit for "Volume Limit" in the menu beforehand. This prevents children or others from increasing the volume too much by mistake. You can set this for each zone (vpage 167, 204).

I want to keep the volume at the same level when I turn the power on.

• By default, the volume setting when power was previously set to standby is applied at next power on. To use a fixed volume level, set the volume level at power on for "Volume Limit" in the menu. You can set this for each zone (vpage 167, 204).

I want to have the subwoofer always output audio.

• Depending on the input signals and sound mode, the subwoofer may not output audio.
When "Subwoofer Mode" in the menu is set to "LFE+Main", you can have the subwoofer always output audio (vpage 198).

I want to make human voices in the movies clearer.

• Use "Dialog Level" in the menu to adjust the level (vpage 161).

I want to keep bass and clarity during playback at a lower volume level.

• Set "Dynamic EQ" in the menu to "On". This setting corrects the frequency characteristics to allow you to enjoy clear sound without the bass being lost even during playback at a lower volume level (vpage 168).

I want to automatically adjust the volume level difference in content such as TV and movies.

• Set "Dynamic Volume" in the menu. Volume level changes (between quiet scenes and loud scenes) in TV shows or movies are automatically adjusted to your desired level (vpage 169).

I want to set the optimized listening environment after changing the configuration/position of the speakers or changing a speaker to a new one.

• Perform Audyssey® Setup. This automatically makes the optimized speaker settings for the new listening environment (vpage 183).

I want to combine a desired video with the current music.

• Set "Video Select" in the option menu to "On". You can combine the current music with your desired video source from Set-top Box or DVD, etc. while listening to music from Tuner, CD, PHONO, M-XPort or the Internet radio (☞page 115).

I want to play back photos from Flickr at the same time while listening to the Internet radio.

• After playing back photos from Flickr, start the slide show on the Internet radio playback screen (☞page 114).

I want to delete unused input sources.

• Set unused input sources for "Hide Sources" in the menu. This allows you to skip unused input sources when rotating the INPUT SELECTOR knob on this unit (☞page 181).

I want to enjoy the same music in all zones at the home party, etc.

• Set "All Zone Stereo" in the option menu to "On". This allows you to simultaneously play back in ZONE2/ZONE3 the music that is played back in MAIN ZONE (☞page 117).

I want to minimize the delay in video signals when I'm playing a game on my game console.

• When the video is delayed against button operations with the controller on the game console, set "Video Mode" in the menu to "Game" (☞page 175).

How to add Wi-Fi to the AV receiver?

• Connect a wireless LAN converter (sold separately) to the NETWORK connector on this unit.

Troubleshooting

If a problem should arise, first check the following:

1. Are the connections correct?

2. Is the set being operated as described in the owner's manual?

3. Are the other devices operating properly?

If this unit does not operate properly, check the items listed in the table below. Should the problem persist, there may be a malfunction.

In this case, disconnect the power immediately and contact your store of purchase.

■ Power does not turn on / Power is turned off

Symptom	Cause / Solution	Page
Power does not turn on.	• Check whether the power plug is correctly inserted into the power outlet.	58
Power automatically turns off.	• The sleep timer is set. Turn on the power again. • "Auto Standby" is set. "Auto Standby" is triggered when there is no operation for a set amount of time. To disable "Auto Standby", set "Auto Standby" on the menu to "Off".	135 206
Power turns off and the power indicator flashes in red approx. every 2 seconds.	• The protection circuit has been activated due to a rise in temperature within this unit. Turn the power off, wait about an hour until this unit cools down sufficiently, and then turn the power on again. • Please re-install this unit in a place having good ventilation.	262 –
Power turns off and the power indicator flashes in red approx. every 0.5 seconds.	• Check the speaker connection. The protection circuit may have been activated because speaker cable core wires came in contact with each other or a core wire was disconnected from the connector and came in contact with the rear panel of this unit. After unplugging the power cord, take corrective action such as firmly re-twisting the core wire or taking care of the connector, and then reconnect the wire. • Turn down the volume and turn on the power again. • This unit's amplifier circuit has failed. Unplug the power cord and contact our customer service center.	32 60, 61 –

■ Operations cannot be performed through the remote control unit

Symptom	Cause/Solution	Page
Operations cannot be performed through the remote control unit.	• Batteries are worn out. Replace with new batteries.	8
	• Operate the remote control unit within a distance of about 23 ft/7 m from this unit and at an angle of within 30°.	8
	• Remove any obstacle between this unit and the remote control unit.	–
	• Insert the batteries in the proper direction, checking the ⊕ and ⊖ marks.	8
	• The set's remote control sensor is exposed to strong light (direct sunlight, inverter type fluorescent bulb light, etc.). Move the set to a place in which the remote control sensor will not be exposed to strong light.	–
	• The operation target zone does not correspond to the zone setting specified on the remote control unit. Press ZONE SELECT to select the zone to operate.	149, 158
	• The remote control unit operating mode is used to operate other devices. Press the AVR button to set the operating mode to AVR.	216
	• When using a 3D video device, the remote control unit of this unit may not function due to effects of infrared communications between units (such as TV and glasses for 3D viewing). In this case, adjust the direction of units with the 3D communications function and their distance to ensure they do not affect operations from the remote control unit of this unit.	–

■ Display on this unit shows nothing

Symptom	Cause/Solution	Page
Display is off.	• Set "Display" on the menu to something other than "Off".	206
	• When the sound mode is set to PURE DIRECT, the display is off.	120

■ No sound comes out

Symptom	Cause/Solution	Page
No sound comes out of speakers.	• Check the connections for all devices.	32, 40, 41, 42, 44, 45, 46, 47, 48, 49, 51, 53, 55, 56, 57
	• Insert connection cables all the way in.	–
	• Check that input connectors and output connectors are not reversely connected.	–
	• Check cables for damage.	–
	• Check that speaker cables are properly connected. Check that cable core wires come in contact with the metal part on speaker terminals. Also, securely tighten speaker terminals. Check speaker terminals for looseness.	32
	• Check that a proper input source is selected.	60, 149
	• Adjust the master volume.	61, 149
	• Cancel the mute mode.	61, 150
	• Check the digital input connector setting.	41, 42, 44, 45
	• Check the digital audio output setting on the connected device. On some devices, the digital audio output is set to off by default.	–
	• No sound is output from the speakers when headphones are connected.	14
No sound comes out when using the DVI-D connection.	• When this unit is connected to a device equipped with a DVI-D connector, no sound is output. Make a separate audio connection.	–
No sound comes out of a TV that is connected via HDMI.	• Audio signals input to 7.1CH IN connectors on this unit cannot be output to the TV.	–

∎ Desired sound does not come out

Symptom	Cause/Solution	Page
The volume does not increase.	• The maximum volume is set too low. Set the maximum volume using "Limit" on the menu. • Appropriate volume correction processing is performed according to the input audio format and settings, so the volume may not reach the upper limit.	167, 204 –
No sound comes out with the HDMI connection.	• Check the connection of the HDMI connectors. • When outputting HDMI audio from the speakers, set "HDMI Audio Out" on the menu to "AVR". To output from the TV, set "TV". • When using the HDMI control function, check that the audio output is set to the AV amplifier on the TV.	40, 41, 44, 45, 46 173 132
No sound comes out of a specific speaker.	• Check that the speaker cable is properly connected. • Check that a selection other than "None" is set for the "Speaker Config." setting in menu. • Check the "Assign Mode" setting in the menu. • When the sound mode is "STEREO" and "VIRTUAL", audio is only output from the front speakers and subwoofer.	32 193, 194 192 –
No sound is produced from subwoofer.	• Check the subwoofer connections. • Turn on the subwoofer's power. • Set "Speaker Config." – "Subwoofer" on the menu to "2 spkrs" or "1 spkr". • When "Speaker Config." – "Front" in the menu is set to "Large", depending on the input signal and the sound mode, no sound may be output from the subwoofer. • When no subwoofer audio signal (LFE) is included in the input signals, no sound may be output from the subwoofer. • You can make the subwoofer always output sound by setting the subwoofer mode to "LFE+Main".	33 – 194 193 198 198

Symptom	Cause/Solution	Page
DTS sound is not output.	• Check that the digital audio output setting on the connected device is set to "DTS". • Set "Decode Mode" on the menu to "Auto" or "DTS".	– 182
Dolby TrueHD, DTS-HD, Dolby Digital Plus audio is not output.	• Make HDMI connections. • Check the digital audio output setting on the connected device. On some devices, "PCM" is set by default.	44, 45, 46 –
Dolby PLⅡ mode or DTS NEO:X mode cannot be selected.	• It cannot be selected when "None" is set for "Speaker Config." – "Center" and "Surround". • These cannot be selected when using the headphones.	193 –
Audyssey MultEQ® XT32, Audyssey Dynamic EQ®, Audyssey Dynamic Volume® and Audyssey LFC™ cannot be selected.	• These cannot be selected when you have not performed Audyssey® Setup. • Switch the sound mode to other than "DIRECT" or "PURE DIRECT". • These cannot be selected when using the headphones.	183 120 –
Audyssey DSX® cannot be selected.	• It can be selected when using the front height or front wide speakers. • It can be selected when using the center speaker. • Switch the sound mode to DOLBY sound mode or DTS sound mode. • This cannot be selected when using the headphones.	195 193 119 –
"M-DAX" cannot be selected.	• Check that an analog signal or PCM signal (Sample Rate=44.1/48 kHz) is input. For playback of multichannel signals such as Dolby Digital or DTS surround, "M-DAX" cannot be used. • Switch the sound mode to other than "DIRECT" or "PURE DIRECT".	165 120
No audio is output from PRE OUT or speakers for ZONE2/ZONE3.	• In ZONE2/ZONE3, the audio can be played back when signals input from digital connectors (OPTICAL/COAXIAL) are in 2ch PCM format. • In ZONE2, the audio can be played back when signals input from the HDMI connector are in 2ch PCM format. To play back the audio in ZONE2 irrespective of the input signal format, set the "HDMI Audio" setting in the menu to "PCM". Depending on the played back device, the audio may not be played back even with this setting. In that case, set the audio format to "PCM (2ch)" on the played back device.	– 204

■ Sound is interrupted or noise occurs

Symptom	Cause/Solution	Page
During playback from the Internet radio or USB memory device, sound is occasionally interrupted.	• When the transfer speed of the USB memory device is slow, sound may occasionally be interrupted. • The network communication speed is slow or the radio station is busy.	– –
When making a call on iPhone, noise occurs in audio output on this unit.	• When making a call, keep a distance of 20 cm or longer between iPhone and this unit.	–
Noise often occurs in FM/AM broadcasting.	• Change the antenna orientation or position. • Separate the AM loop antenna from the unit. • Use an FM outdoor antenna. • Separate the antenna from other connection cables.	51 51 51 51

■ No video is shown on the TV

Symptom	Cause/Solution	Page
No picture appears.	• Check the connections for all devices.	40, 41, 42, 44, 45, 46, 47, 48, 49, 51, 53, 55, 56, 57
	• Insert connection cables all the way in.	–
	• Check that input connectors and output connectors are not reversely connected.	–
	• Check cables for damage.	–
	• Match the input settings to the input connector of the TV connected to this unit.	179
	• Check that the proper input source is selected.	60, 149
	• Check the video input connector setting.	179
	• Check that the resolution of the player corresponds to that of the TV.	207
	• Check whether the TV is compatible with copyright protection (HDCP). If connected to a device not compatible with HDCP, video will not be output correctly.	244
	• The HDMI signal cannot be converted to an analog signal. Use analog connections.	245
No video is shown on the TV with the DVI-D connection.	• With the DVI-D connection, on some device combinations, devices may not function properly due to the copy guard copyright protection (HDCP).	244
No video from an input source such as a game console is shown on the TV.	• When special video signals are input from a game console, etc., the video conversion function may not function. Connect the input connector to the monitor output connector of the same type.	–
While the menu is being displayed, no video is shown on the TV.	• When the menu is operated during playback of some 3D video contents or of video at some computer resolutions (such as VGA), no playback video is shown in the background of the menu.	–

■ The menu screen is not displayed on the TV

Symptom	Cause/Solution	Page
The menu screen or status information screen is not displayed on the TV.	• The menu screen is only displayed on this unit and a TV connected by HDMI cable. If this unit is connected to a TV using a different video output connector, operate while watching the display on this unit.	–
	• No status information is displayed for some 3D videos or videos with a computer resolution such as VGA.	208
	• When a 2D video is converted to a 3D video on the TV, the menu screen or status information screen is not properly displayed.	–
	• In the pure direct playback mode, the menu screen or status information is not displayed. Switch to a sound mode other than the pure direct mode.	119, 120
	• Set the "TV Format" setting in the menu to a selection that is appropriate for the TV.	178

■ iPod cannot be played back

Symptom	Cause/Solution	Page
iPod cannot be connected.	• When using iPod by connecting it to the USB port, some iPod variations are not supported. • When iPod is connected by using a USB cable other than the genuine cable, iPod may not be recognized. Use a genuine USB cable.	50 –
The AirPlay icon ⬛ is not displayed on iTunes / iPhone / iPod touch / iPad.	• This unit and PC / iPhone / iPod touch / iPad are not connected to the same network (LAN). Connect it to the same LAN as this unit. • The firmware on iTunes / iPhone / iPod touch / iPad is not compatible with AirPlay. Update the firmware to the latest version.	53 –
Audio is not output.	• The volume on iTunes / iPhone / iPod touch / iPad is set to the minimum level. The volume on iTunes / iPhone / iPod touch / iPad is linked with the volume on this unit. Set a proper volume level. • The AirPlay playback is not performed, or this unit is not selected. Click the AirPlay icon ⬛ on the iTunes / iPhone / iPod touch / iPad screen and select this unit.	– 107
Audio is interrupted during the AirPlay playback on iPhone / iPod touch / iPad.	• Quit the application running in the background of the iPhone/iPod touch/iPad, and then play using AirPlay. • Some external factors may be affecting the wireless connection. Modify the network environment by taking measures such as shortening the distance from the wireless LAN access point.	– –
iTunes cannot be played back through the remote control unit.	• Enable the "Allow iTunes audio control from remote speakers" setting on iTunes. Then, you can perform playback, pause, and skip operations through the remote control unit.	–

■ USB memory devices cannot be played back

Symptom	Cause/Solution	Page
"No Connection" is displayed.	• This unit may not recognize the USB memory device due to poor connection, etc. Make sure that the connection is made properly by taking actions such as disconnecting and reconnecting the USB memory device.	49
	• USB memory devices of a mass storage class or those compatible with MTP are supported.	–
	• This unit does not support a connection through a USB hub. Connect the USB memory device directly to the USB port.	–
	• The USB memory device must be formatted to FAT16 or FAT32.	–
	• Not all USB memory devices are guaranteed to work. Some USB memory devices are not recognized. When using a type of portable hard disc drive compatible with the USB connection that requires power from an AC adapter, use the AC adapter that came with the drive.	–
Files on the USB memory device are not displayed.	• Files of a type not supported by this unit are not displayed.	67
	• This unit can display a file structure with up to 8 levels and up to 5000 subfolders and files in total. Modify the folder structure of the USB memory device.	–
	• When multiple partitions exist on the USB memory device, only files on the first partition are displayed.	–
Files on a USB memory device cannot be played.	• Files are created in a format that is not supported by this unit. Check the formats supported by this unit.	247
	• You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit.	–

■ File names on the iPod/USB memory device are not displayed properly

Symptom	Cause/Solution	Page
The file names are not displayed properly ("...", etc.).	• Characters that cannot be displayed are used. This is not a malfunction. On this unit, characters that cannot be displayed are replaced with a "." (period).	–

■ The Internet radio cannot be played back

Symptom	Cause/Solution	Page
A list of broadcasting radio stations is not displayed.	• The LAN cable is not properly connected, or the network is disconnected. Check the connection status. • Perform the network diagnostic mode.	53 –
Internet Radio cannot be played.	• The selected radio station is broadcasting in a format that is not supported by this unit. Formats that can be played back in this unit are MP3, WMA and AAC. • The firewall function is enabled on the router. Check the firewall setting. • The IP address is not properly set. • Check the power of the router is on. • To obtain the IP address automatically, enable the DHCP server function on the router. Also, set the DHCP setting to "On" on this unit. • To obtain the IP address manually, set the IP address and proxy on this unit. • Some radio stations broadcast silently during some time period. In this case, no audio is output. Wait for a while and select the same radio station, or select another radio station.	249 – 200 – 200 200, 201 80
Cannot connect to favorite radio stations.	• Radio station is not currently in service. Register radio stations in service.	–
For some radio stations, "Connection down" is displayed and station cannot be connected to.	• The selected radio station is not in service. Select a radio station in service.	–

■ Music files on PC or NAS cannot be played back

Symptom	Cause/Solution	Page
Files stored on a computer cannot be played.	• Files are stored in a non-compatible format. Record in a compatible format.	248
	• You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit.	–
	• Set and computer are connected by USB cable. The set's USB port cannot be used for connection to a computer.	–
	• Media sharing settings are not correct. Change media sharing settings so that the unit can access the folders on your computer.	84
Server is not found, or it is not possible to connect to the server.	• The computer's or router's firewall is activated. Check the computer's or router's firewall settings.	–
	• Computer's power is not turned on. Turn on the power.	–
	• Server is not running. Launch the server.	–
	• Set's IP address is wrong. Check the set's IP address.	199
Music files on PC cannot be played back.	• Even if PC is connected to the USB connector on this unit, music files on it cannot be played back. Connect PC or NAS to this unit through the network.	53
Files on PC or NAS are not displayed.	• Files of a type not supported by this unit are not displayed.	248
Music stored on a NAS cannot be played.	• If you use a NAS in conformity with the DLNA standard, enable the DLNA server function in the NAS setting.	–
	• If you use a NAS that does not conform with the DLNA standard, play the music via a PC. Set Windows Media Player's media sharing function and add NAS to the selected play folder.	84
	• If connection is restricted, set audio equipment as the connection target.	–

■ The HDMI control function does not work

Symptom	Cause/Solution	Page
The HDMI control function does not work.	• Check that "HDMI Control" in the menu is set to "On".	174
	• You cannot operate devices that are not compatible with the HDMI control function. In addition, depending on the connected device or the settings, the HDMI control function may not work. In this case, operate the external device directly.	132
	• Check that the HDMI control function setting is enabled on all devices connected to this unit.	132
	• When you make connection related changes such as connecting an additional HDMI device, the link operation settings may be initialized. Turn off this unit and devices connected via HDMI, and turn them on again.	132
	• The HDMI MONITOR 2 connector is not compatible with the HDMI control function. Use the HDMI MONITOR 1 connector to connect to the TV.	40

■ When using HDMI ZONE2, the devices does not function properly

Symptom	Cause/Solution	Page
When using MAIN ZONE, video output is interrupted in HDMI ZONE2.	• With the same input source selected for MAIN ZONE and ZONE2, when you operate MAIN ZONE, video may be interrupted in HDMI ZONE2.	–
When using HDMI ZONE2, no video or audio is output from the TV in ZONE2.	• Check that the power is on for ZONE2.	149
	• Check the input source for ZONE2.	149
	• The HDMI 7 (AUX 1) connector on the front panel does not support the HDMI ZONE2 function.	–
	• In ZONE2, playback is only possible when the input signals are HDMI signals.	–
	• When the TV does not support the input audio format, audio is not output. Set the audio format to "PCM" on the playback device. Alternatively, set "ZONE2 Setup" – "HDMI Audio" in the menu to "PCM".	204
	• When the TV is not compatible with the resolution of the input video, no video is output. Set the output resolution on the playback device to a resolution that is compatible with the TV.	–
When using HDMI ZONE2, MAIN ZONE audio is played back as PCM.	• When the same input source is selected for MAIN ZONE and ZONE2, the audio format is limited according to the specifications of the TV in ZONE2.	–

Resetting factory settings

Perform this procedure if the display is abnormal or if operations cannot be performed.
Various settings are reset to the factory default values. Make settings again.
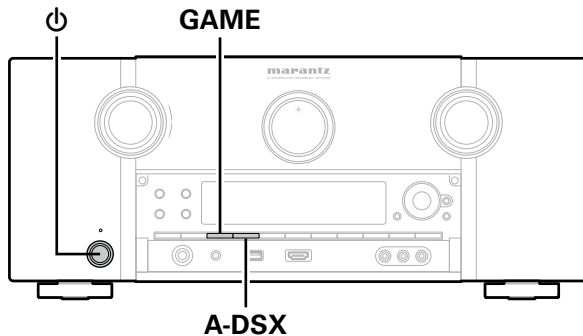
1 Turn off the power using Φ.

2 Press Φ while simultaneously pressing GAME and A-DSX.

3 Once the display starts flashing at intervals of about 1 second, release the two buttons.

✎

• If in step 3 the display does not flash at intervals of about 1 second, start over from step 1.

Appendix

About HDMI

HDMI is an abbreviation of High-Definition Multimedia Interface, which is an AV digital interface that can be connected to a TV or amplifier.

With the HDMI connection, high definition video and high quality audio formats adopted by Blu-ray disc players (Dolby Digital Plus, Dolby TrueHD, DTS-HD, DTS-HD Master Audio) can be transmitted, which is not possible with the analog video transmission.

Furthermore, in the HDMI connection, audio and video signals can be transmitted through a single HDMI cable, while in conventional connections it is necessary to provide audio and video cables separately for connection between devices.

This allows you to simplify the wiring configuration that tends to be quite complex in a home theater system.

This unit supports the following HDMI functions.

- **Deep Color**

  An imaging technology supported by HDMI. Unlike RGB or YCbCr, which uses 8 bits (256 shades) per color, it can use 10 bits (1024 shades), 12 bits (4096 shades), or 16 bits (65536 shades) to produce colors in higher definition. Both devices linked via HDMI must support Deep Color.

- **"x.v.Color"**

  This function lets HDTVs display colors more accurately. It enables display with natural, vivid colors.

  "x.v.Color" is trademark of Sony Corporation.

- **3D**

  This unit supports input and output of 3D (3 dimensional) video signals of HDMI.

  To play back 3D video, you need a TV and player that provide support for the HDMI 3D function and a pair of 3D glasses.

- **4K**

  This unit supports input and output of 4K Ultra HD (3840 x 2160 pixels) video signals of HDMI.

- **Content Type**

  It automatically makes settings suitable for the video output type (content information).

- **Adobe RGB color, Adobe YCC601 color**

  The color space defined by Adobe Systems Inc. Because it is a wider color space than RGB, it can produce more vivid and natural images.

- **sYCC601 color**

  Each of these color spaces defines a palette of available colors that is larger than the traditional RGB color model.

- **Auto Lip Sync**

  This function can automatically correct delay between the audio and video.

  Use a TV that is compatible with the Auto Lip Sync function.

- **HDMI pass through**

  Even when the power to this unit is set to standby, signals input from the HDMI input connector are output to a TV or other device that is connected to the HDMI output connector.

• HDMI control

If you connect the unit and an HDMI control function compatible TV or player with an HDMI cable and then enable the HDMI control function setting on each device, the devices will be able to control each other.

• Power off link

This unit power off can be linked to the TV power off step.

• Audio output destination switching

From the TV, you can switch whether to output audio from the TV or the AV amplifier.

• Volume adjustment

You can adjust this unit's volume in the TV volume adjustment operation.

• Input source switching

You can switch this unit input sources through linkage to TV input switching.

When playing the player, this unit input source switches to the source for that player.

• ARC (Audio Return Channel)

This function transmits audio signals from the TV to this unit through the HDMI cable and plays back the audio from the TV on this unit based on the HDMI control function.

If a TV without the ARC function is connected via HDMI connections, video signals of the playback device connected to this unit are transmitted to the TV, but this unit can not play back the audio from the TV. If you want to enjoy surround audio for TV program, a separate audio cable connection is required. In contrast, if a TV with the ARC function is connected via HDMI connections, no audio cable connection is required. Audio signals from the TV can be input to this unit through the HDMI cable between this unit and the TV. This function allows you to enjoy surround playback on this unit for the TV.

■ Supported audio formats

2-channel Linear PCM	2-channel, 32 kHz – 192 kHz, 16/20/24 bit
Multi-channel Linear PCM	7.1-channel, 32 kHz – 192 kHz, 16/20/24 bit
Bitstream	Dolby Digital / DTS / Dolby TrueHD / Dolby Digital Plus / DTS-HD Master Audio / DTS-HD High Resolution Audio / DTS Express
DSD	2-channel – 5.1-channel, 2.8224 MHz

■ Supported video signals

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

Copyright protection system
In order to play back digital video and audio such as BD-Video (Blu-ray Disc) or DVD-Video via HDMI connection, both this unit and TV and the player need to support the copyright protection system known as HDCP (High-bandwidth Digital Content Protection System). HDCP is copyright protection technology comprised of data encryption and authentication of the connected AV devices. This unit supports HDCP. • If a device that does not support HDCP is connected, video and audio are not output correctly. Read the owner's manual of your television or player for more information.

🖉

• When connecting this unit to a device that is compatible with the Deep Color, 4K, ARC function, use a "High Speed HDMI cable with Ethernet".

Video conversion function

This unit automatically converts the input video signals as shown in the diagram below before outputting them to the TV.
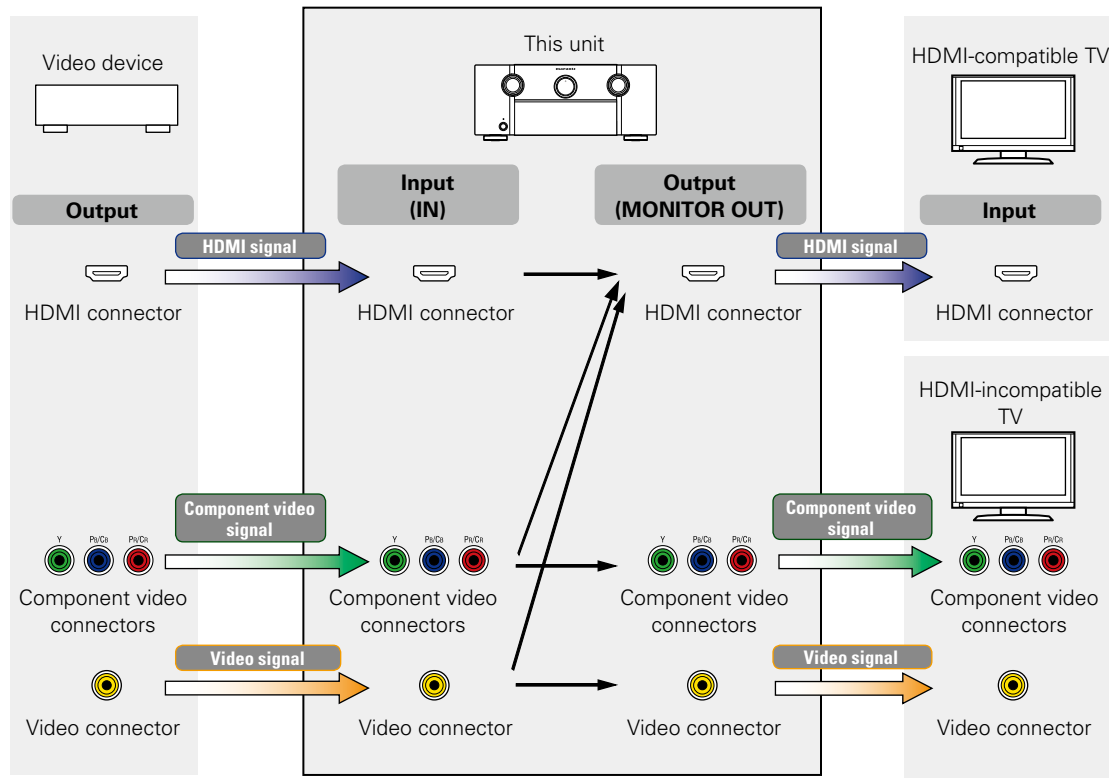
✏
- The main zone video conversion function is compatible with the following formats: NTSC, PAL, SECAM, NTSC4.43, PAL-N, PAL-M and PAL-60.

This unit can convert the input video signals to the resolution that is set for "Resolution" (☞page 176) in the menu before outputting them to the TV.

Input signal	Output signal	HDMI						
		480i/576i	480p/576p	720p	1080i	1080p	1080p 24Hz	4K 30/25/24Hz
HDMI	480i/576i	✓	✓	✓	✓	✓	✓	✓
	480p/576p		✓	✓	✓	✓	✓	✓
	720p			✓	✓	✓	✓	✓
	1080i			✓	✓	✓	✓	✓
	1080p 24Hz					✓	✓	✓
	1080p					✓	✓	✓
	4K 30/25/24Hz							✓
Component Video	480i/576i	✓	✓	✓	✓	✓	✓	✓
	480p/576p		✓	✓	✓	✓	✓	✓
	720p			✓	✓	✓	✓	✓
	1080i			✓	✓	✓	✓	✓
	1080p					✓	✓	✓
Video	480i/576i	✓	✓	✓	✓	✓	✓	✓

Playing back USB memory devices

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit can show the artwork that was embedded by using MP3 ID3-Tag Ver. 2.3 or 2.4.
- This unit is compatible with WMA META tags.
- If the image size (pixels) of an album artwork exceeds 500 × 500 (WMA/MP3/WAV/FLAC) or 349 × 349 (MPEG-4 AAC), then music may not be played back properly.

■ Compatible formats

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)*1	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
WAV	32/44.1/48/88.2/96/176.4/192 kHz	–	.wav
MPEG-4 AAC*2	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4
FLAC (Free Lossless Audio Codec)	32/44.1/48/88.2/96/176.4/192 kHz	–	.flac
ALAC (Apple Lossless Audio Codec)*3	32/44.1/48/88.2/96 kHz	–	.m4a

*1 Copyright-protected files can be played on certain portable players compatible with MTP.

*2 Only files that are not protected by copyright can be played on this unit.
Content downloaded from pay sites on the Internet are copyright protected.
Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.

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■ Maximum Number of Playable Files and Folder

The limits on the number of folders and files that can be displayed by this unit are as follows.

Item \ Media	USB memory devices
Memory capacity	FAT16 : 2 GB, FAT32 : 2 TB
Number of folder directory levels *1	8 levels
Number of folders	500
Number of files*2	5000

*1 The limited number includes the root folder.

*2 The allowable number of files may differ according to the USB memory device capacity and the file size.

Playing back files stored on PC or NAS

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit can show the artwork that was embedded by using MP3 ID3-Tag Ver. 2.3 or 2.4.
- This unit is compatible with WMA META tags.
- If the image size (pixels) of an album artwork exceeds 500 × 500 (WMA/MP3/WAV/FLAC) or 349 × 349 (MPEG-4 AAC), then music may not be played back properly.
- A server or server software compatible with distribution in the corresponding formats is required to play music files via a network.

■ Specifications of supported files

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
WAV	32/44.1/48/88.2/96/176.4/192 kHz	–	.wav
MPEG-4 AAC∗1	32/44.1/48 kHz	16 – 320 kbps	.aac/.m4a/.mp4
FLAC (Free Lossless Audio Codec)	32/44.1/48/88.2/96/176.4/192 kHz	–	.flac
ALAC (Apple Lossless Audio Codec)∗2	32/44.1/48/88.2/96 kHz	–	.m4a

∗1 Only files that are not protected by copyright can be played on this unit.
Content downloaded from pay sites on the Internet are copyright protected. Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.

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Playing back Internet Radio

■ Playable broadcast station specifications

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
MPEG-4 AAC	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4

Personal memory plus function

This function sets the settings (input mode, sound mode, HDMI output mode, MultEQ® XT32, Dynamic EQ, audio delay etc.) last selected for the individual input sources.

✎

• The surround parameters, tone control settings are stored for the individual sound modes.

Last function memory

This function stores the settings which were made before going into the standby mode.

Sound modes and channel output

○ This indicates the audio output channels or surround parameters that can be set.
◎ This indicates the audio output channels. The output channels depend on the settings of "Speaker Config." (page 193).

Sound mode (page 118)	Channel output						
	Front L/R	Center	Surround L/R	Surround back L/R	Front height L/R	Front wide L/R	Subwoofer
DIRECT/PURE DIRECT (2-channel)	○						◎*4
DIRECT/PURE DIRECT (Multi-channel)	○	◎	◎	◎*1	◎*1	◎*1	◎
DSD DIRECT (2-channel)	○						◎*4
DSD DIRECT (Multi-channel)	○	◎	◎				◎
STEREO	○						◎
MULTI CH IN	○	◎	◎	◎*1	◎*2		◎
DOLBY PRO LOGIC IIz	○	◎	◎	◎	◎		◎
DOLBY PRO LOGIC IIx	○	◎	◎	◎			◎
DOLBY PRO LOGIC II	○	◎	◎				◎
DOLBY PRO LOGIC II A-DSX	○	◎	◎		◎*3	◎*3	◎
DOLBY PRO LOGIC IIx A-DSX	○	◎	◎	◎	◎*3	◎*3	◎
DTS NEO:X	○	◎	◎	◎	◎	◎	◎
Audyssey DSX®	○	◎	◎	◎	◎*3	◎*3	◎
DOLBY DIGITAL	○	◎	◎	◎	◎*2		◎
DOLBY DIGITAL Plus	○	◎	◎	◎*1	◎*1	◎*1	◎
DOLBY TrueHD	○	◎	◎	◎*1	◎*1	◎*1	◎
DTS SURROUND	○	◎	◎	◎	◎*2		◎
DTS 96/24	○	◎	◎	◎	◎*2		◎
DTS-HD	○	◎	◎	◎*1	◎*1	◎*1	◎
DTS Express	○	◎	◎	◎	◎*2		◎
MULTI CH STEREO	○	◎	◎	◎	◎	◎	◎
VIRTUAL	○						◎

*1 A signal for each channel contained in an input signal is output as audio.
*2 Audio is output when the set sound mode name contains "+PLIIz".
*3 Audio is output from the speakers specified in the "Audyssey DSX®" (page 170) settings.
*4 Audio is output when "Subwoofer Mode" (page 198) in the menu is set to "LFE+Main".

Sound modes and surround parameters

Sound mode (☞page 118)	Surround Parameter (☞page 162)							
	Dialog Level (☞page 161)	Subwoofer Level (☞page 161)	Home Theater EQ (☞page 162)	Loudness Management *1 (☞page 162)	Dynamic Compression *2 (☞page 162)	Low Frequency Effects *3 (☞page 163)	Height Gain *4 (☞page 164)	Speaker Select (☞page 164)
DIRECT/PURE DIRECT (2-channel)*5		○*6		○	○			
DIRECT/PURE DIRECT (Multi-channel)*5	○	○		○	○	○		
DSD DIRECT (2-channel)*5		○*6						
DSD DIRECT (Multi-channel)*5	○	○				○		
STEREO		○		○	○	○		
MULTI CH IN	○	○	○			○	○	
DOLBY PRO LOGIC IIz	○	○	○	○	○		○	
DOLBY PRO LOGIC IIx	○	○	○	○	○			
DOLBY PRO LOGIC II	○	○	○	○	○			
DOLBY PRO LOGIC II A-DSX	○	○	○	○	○			
DOLBY PRO LOGIC IIx A-DSX	○	○	○	○	○			
DTS NEO:X	○	○	○	○	○			○
Audyssey DSX®	○	○	○	○	○	○		
DOLBY DIGITAL	○	○	○		○	○	○	○*7
DOLBY DIGITAL Plus	○	○	○		○	○	○	○*7
DOLBY TrueHD	○	○	○	○	○	○	○	○*7
DTS SURROUND	○	○	○		○	○	○	○*7
DTS 96/24	○	○	○			○	○	○*7
DTS-HD	○	○	○			○	○	○*7
DTS Express	○	○	○			○	○	○*7
MULTI CH STEREO	○	○	○	○	○	○		○
VIRTUAL	○	○		○	○	○		

*1 – *7 : ☞page 253

Sound mode (☞page 118)	Surround Parameter (☞page 162)				Tone *8 (☞page165)	Audyssey (☞page 167)					M-DAX *11 (☞page165)
	PRO LOGIC II/IIx Music mode only			NEO:X mode only							
	Panorama (☞page163)	Dimension (☞page163)	Center Width (☞page164)	Center Gain (☞page163)		MultEQ® XT32 *9 (☞page167)	Dynamic EQ *10 (☞page168)	Dynamic Volume *10 (☞page169)	Audyssey LFC™ (☞page169)	Audyssey DSX® (☞page170)	
DIRECT/PURE DIRECT (2-channel)*5											
DIRECT/PURE DIRECT (Multi-channel)*5											
DSD DIRECT (2-channel)*5											
DSD DIRECT (Multi-channel)*5											
STEREO					○	○	○	○	○		○
MULTI CH IN					○	○	○	○	○	○	
DOLBY PRO LOGIC IIz					○	○	○	○	○		○
DOLBY PRO LOGIC IIx	○	○	○		○	○	○	○	○		○
DOLBY PRO LOGIC II	○	○	○		○	○	○	○	○	○	○
DOLBY PRO LOGIC II A-DSX	○	○	○		○	○	○	○	○	○	○
DOLBY PRO LOGIC IIx A-DSX	○	○	○		○	○	○	○	○	○	○
DTS NEO:X				○	○	○	○	○	○		○
Audyssey DSX®					○	○	○	○	○	○	○
DOLBY DIGITAL					○	○	○	○	○	○	
DOLBY DIGITAL Plus					○	○	○	○	○	○	
DOLBY TrueHD					○	○	○	○	○	○	
DTS SURROUND					○	○	○	○	○	○	
DTS 96/24					○	○	○	○	○	○	
DTS-HD					○	○	○	○	○	○	
DTS Express					○	○	○	○	○	○	
MULTI CH STEREO					○	○	○	○	○		○
VIRTUAL					○	○	○	○	○		○

*5, *8 – *11 : ☞page 253

✻1 This item can be selected when a Dolby TrueHD signal is played.
✻2 This item can be selected when a Dolby Digital or DTS signal is played.
✻3 This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.
✻4 This setting is available when the set sound mode name contains "+PLIIz".
✻5 During playback in PURE DIRECT mode, the surround parameters are the same as in DIRECT mode.
✻6 This setting is available when "Subwoofer Mode" (☞page 198) in the menu is set to "LFE+Main".
✻7 This setting is available when the set sound mode name contains "+Neo:X".
✻8 This item cannot be set when "Dynamic EQ" (☞page 168) is set to "On".
✻9 This item cannot be set when Audyssey® Setup (Speaker Calibration) has not been performed.
✻10 This item cannot be set when "MultEQ® XT32" (☞page 167) is set to "Off" or "Graphic EQ".
✻11 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.

Types of input signals, and corresponding sound modes

● This indicates the default sound mode.
○ This indicates the selectable sound mode.

Sound mode (☞page 118)	NOTE	2-channel signal			Multi-channel signal										
		Analog / PCM	Dolby Digital (+/HD) / DTS (-HD)	DSD (Super Audio CD)	PCM Multi	DTS-HD	DTS Express	DTS ES DSCRT 6.1	DTS ES MTRIX 6.1	DTS	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX	DOLBY DIGITAL	DSD (Super Audio CD)
DTS SURROUND															
DTS-HD MSTR						●*7									
DTS-HD HI RES						●*8									
DTS ES DSCRT6.1	*1							●							
DTS ES MTRX6.1	*1								●						
DTS SURROUND								○	○	●					
DTS 96/24										●*9					
DTS (–HD) + PLIIx	*1*2					○	○			○					
DTS (–HD) + PLIIz	*3					○	○	○	○	○					
DTS Express							●								
DTS (–HD) + NEO:X	*4					○	○	○	○	○					
DTS NEO:X	*5	○	○												
DOLBY SURROUND															
DOLBY TrueHD											●				
DOLBY DIGITAL+												●			
DOLBY DIGITAL EX	*1												○	○	
DOLBY (D+) (HD) +EX	*1										○	○			
DOLBY DIGITAL													●	●	
DOLBY (D) (D+) (HD) + PLIIx	*1*2										○	○	○	○	
DOLBY (D) (D+) (HD) + PLIIz	*3										○	○	○	○	
DOLBY (D) (D+) (HD) + NEO:X	*4										○	○	○	○	
DOLBY PRO LOGIC II/IIx	*6	○	○	○											
DOLBY PRO LOGIC IIz	*3	○	○	○											

*1 – *9 :

Sound mode (☞page 118)	NOTE	2-channel signal			Multi-channel signal										
		Analog / PCM	Dolby Digital (+/HD) / DTS (-HD)	DSD (Super Audio CD)	PCM Multi	DTS-HD	DTS Express	DTS ES DSCRT 6.1	DTS ES MTRIX 6.1	DTS	DOLBY TrueHD	DOLBY DIGITAL Plus	DOLBY DIGITAL EX	DOLBY DIGITAL	DSD (Super Audio CD)
MULTI CH IN															
MULTI CH IN					●										●
MULTI CH IN + DOLBY EX	∗1				○										○
MULTI CH IN + PLⅡx	∗1∗2				○										○
MULTI CH IN + PLⅡz	∗3				○										○
MULTI CH IN + NEO:X	∗4				○										
MULTI CH IN 7.1	∗1				●∗10										
Audyssey															
Audyssey DSX®					○	○	○	○	○	○	○	○	○	○	○
DOLBY PLⅡ/Ⅱx A-DSX	∗6	○	○	○											
DIRECT															
DIRECT		○∗11	○	○	○	○	○	○	○	○	○	○	○	○	○
PURE DIRECT															
PURE DIRECT		○	○	○	○	○	○	○	○	○	○	○	○	○	○
DSP SIMULATION															
MULTI CH STEREO		○	○	○	○	○	○	○	○	○	○	○	○	○	○
VIRTUAL		○	○	○	○	○	○	○	○	○	○	○	○	○	○
STEREO															
STEREO		●	○	○	○	○	○	○	○	○	○	○	○	○	○

∗1 – ∗4, ∗6, ∗10, ∗11 :

*1 This item can be selected when surround back speakers are used.
*2 The Cinema mode or Music mode can be selected. When using a single surround back speaker, the Music mode is used.
*3 This item can be selected when front height speakers are used.
*4 The Cinema mode, Music mode or Game mode can be selected. This item can be selected when using any of the Surround back, Front height or Front wide speaker.
*5 The Cinema mode, Music mode or Game mode can be selected.
*6 The Movie mode, Music mode or Game mode can be selected.
*7 This item can be selected when the input signal is DTS-HD MASTER AUDIO.
*8 This item can be selected when the input signal is DTS-HD HI RESOLUTION.
*9 This item can be selected when the input signal is DTS 96/24.
*10 The default sound mode for the AirPlay playback is DIRECT.
*11 This item can be selected when the input signals contain surround back signals.

Explanation of terms

A

A2DP

A2DP is one profile of Bluetooth defined for in-car devices or AV devices that use wireless communication instead of a cable.

AirPlay

AirPlay sends (plays) contents recorded in iTunes or on an iPhone/iPod touch/iPad to a compatible device via the network.

ALAC (Apple Lossless Audio Codec)

This is a codec for lossless audio compression method developed by Apple Inc. This codec can be played back on iTunes, iPod or iPhone. Data compressed to approximately 60 – 70 % can be decompressed to exactly the same original data.

App Store

App Store is a site that sells application software for such devices as the iPhone or iPod Touch, and is operated by Apple Inc.

Audyssey Dynamic EQ®

Dynamic EQ solves the problem of deteriorating sound quality as volume is decreased by taking into account human perception and room acoustics. Audyssey Dynamic EQ® works in tandem with Audyssey MultEQ® XT32 to provide well-balanced sound for every listener at any volume level.

Audyssey Dynamic Surround Expansion (A-DSX)

Audyssey DSX® is a scalable system that adds new speakers to improve surround sound vividness.

Starting with a 5.1 system Audyssey DSX® first adds Wide channels for the biggest impact on envelopment. Research in human hearing has proven that information from the Wide channels is much more critical in the presentation of a realistic soundstage than the Back Surround channels found in traditional 7.1 systems. Audyssey DSX® then creates a pair of Height channels to reproduce the next most important acoustical and perceptual cues. In addition to these new Wide and Height channels, Audyssey DSX® applies Surround Envelopment Processing to enhance the blend between the front and surround channels.

Audyssey Dynamic Volume®

Dynamic Volume solves the problem of large variations in volume level between television programs, commercials, and between the soft and loud passages of movies. Audyssey Dynamic EQ® is integrated into Dynamic Volume so that as the playback volume is adjusted automatically, the perceived bass response, tonal balance, surround impression, and dialog clarity remain the same.

Audyssey MultEQ® XT32

MultEQ® XT32 is a room equalization solution that calibrates any audio system so that it can achieve optimum performance for every listener in a large listening area. Based on several room measurements, MultEQ® XT32 calculates an equalization solution that corrects for both time and frequency response problems in the listening area and also performs a fully automated surround system setup.

B

Bluetooth

Bluetooth is a short-distance wireless communication technology used for connecting handheld devices several meters apart. This enables notebook computers, PDA s, mobile phones, etc. to connect without a cable for transmitting audio and data.

D

DLNA

DLNA and DLNA CERTIFIED are trademarks and/or service marks of Digital Living Network Alliance.

Some contents may not be compatible with other DLNA CERTIFIED® products.

Dolby Digital

Dolby Digital is a multi-channel digital signal format developed by Dolby Laboratories.

A total of 5.1-channels are played: 3 front channels ("FL", "FR" and "C"), 2 surround channels ("SL" and "SR") and the "LFE" channel for low frequency effects.

Because of this, there is no crosstalk between channels and a realistic sound field with a "three-dimensional" feeling (sense of distance, movement and positioning) is achieved. This delivers a thrilling surround sound experience in the home.

Dolby Digital EX

Dolby Digital EX is a 6.1-channel surround format from Dolby Laboratories that allows users to enjoy in their homes the "DOLBY DIGITAL SURROUND EX" audio format jointly developed by Dolby Laboratories and Lucasfilm. The 6.1-channels of sound, including surround back channel, provide improved sound positioning and expansion of the surround sound field.

Dolby Digital Plus

Dolby Digital Plus is an improved Dolby Digital signal format that is compatible with up to 7.1-channels of discrete digital sound and also improves sound quality thanks to extra data bit rate performance. It is upwardly compatible with conventional Dolby Digital, so it offers greater flexibility in response to the source signal and the conditions of the playback device.

Dolby Pro Logic II

Dolby Pro Logic II is a matrix decoding technology developed by Dolby Laboratories.

Regular music such as that on CDs is encoded into 5-channels to achieve an excellent surround effect.

The surround channel signals are converted into stereo and full band signals (with a frequency response of 20 Hz to 20 kHz or greater) to create a "three-dimensional" sound image offering a rich sense of presence for all stereo sources.

Dolby Pro Logic IIx

Dolby Pro Logic IIx is a further improved version of the Dolby Pro Logic II matrix decoding technology.

Audio signals recorded in 2-channels are decoded to achieve a natural sound with up to 7.1-channels.

There are three modes: "Music" suited for playing music, "Movie" suited for playing movies, and "Game" which is optimized for playing games.

Dolby Pro Logic Ⅱz

Dolby Pro Logic Ⅱz introduces a new dimension to Home Entertainment through the addition of a pair of front height channels. Compatible with stereo, 5.1-channel and 7.1-channel content, Dolby Pro Logic Ⅱz provides enhanced spaciousness, depth and dimension to movies, concert video and video game playback while maintaining the full integrity of the source mix.

Dolby Pro Logic Ⅱz identifies and decodes spatial cues that occur naturally in all content, directing this information to the front height channels, complementing the performance of left and right surround sound speakers. Content that is encoded with Dolby Pro Logic Ⅱz height channel information can be even more revealing, with perceptually discrete height channel information bringing an exciting new dimension to home entertainment.

Dolby Pro Logic Ⅱz, with front height channels is also an ideal alternative for households that cannot support the placement of back surround speakers of a typical 7.1-channel system but may have bookshelf space available to support the addition of height speakers.

Dolby TrueHD

Dolby TrueHD is a high definition audio technology developed by Dolby Laboratories, using lossless coding technology to faithfully reproduce the sound of the studio master.

This format provides the facility to support up to 8 audio channels with a sampling frequency of 96 kHz/24 bit resolution and up to 6 audio channels with a sampling frequency of 192 kHz/24 bit resolution. Dolby TrueHD is adopted for applications that put very high importance on sound quality.

Downmix

This function converts the number of channels of surround audio to a lower number of channels and plays back according to the system's configuration.

DTS

This is an abbreviation of Digital Theater System, which is a digital audio system developed by DTS.

DTS delivers a powerful and dynamic surround sound experience, and is found in the world's finest movie theaters and screening rooms.

DTS 96/24

DTS 96/24 is a digital audio format enabling high sound quality playback in 5.1-channels with a sampling frequency of 96 kHz and 24 bit quantization on DVD-Video.

DTS Digital Surround

DTS Digital Surround is the standard digital surround format of DTS, Inc., compatible with a sampling frequency of 44.1 or 48 kHz and up to 5.1-channels of digital discrete surround sound.

DTS-ES™ Discrete 6.1

DTS-ES™ Discrete 6.1 is a 6.1-channel discrete digital audio format adding a surround back (SB) channel to the DTS digital surround sound.

Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

DTS-ES™ Matrix 6.1

DTS-ES™ Matrix 6.1 is a 6.1-channel audio format that inserts a surround back (SB) channel to the DTS digital surround sound through matrix encoding. Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

DTS Express

DTS Express is an audio format supporting low bit rates (max. 5.1-channels, 24 to 256 kbps).

DTS-HD

This audio technology provides higher sound quality and enhanced functionality than the conventional DTS and is adopted as an optional audio for Blu-ray Disc. This technology supports multi-channel, high data transfer speed, high sampling frequency, and lossless audio playback. Maximum 7.1-channels are supported in Blu-ray Disc.

DTS-HD High Resolution Audio

DTS-HD High Resolution Audio is an improved version of the conventional DTS, DTS-ES and DTS 96/24 signals formats, compatible with sampling frequencies of 96 or 48 kHz and up to 7.1-channels of discrete digital sound. High data bit rate performance provides high quality sound. This format is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

DTS-HD Master Audio

DTS-HD Master Audio is a lossless audio format created by Digital Theater System (DTS). This format provides the facility to support up to 8 audio channels with a sampling frequency of 96 kHz/24 bit resolution and up to 6 audio channels with a sampling frequency of 192 kHz/24 bit resolution. It is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

DTS Neo:X

This matrix decoding technology uses the DTS NEO:X decoder to playback 2-channel source or 5.1/6.1/7.1-channel surround sources as a maximum of 9.1-channel surround sound. There are 3 modes: "Music" suited for playing music, "Cinema" suited for playing movies, and "Game" which is optimized for playing games.

Dynamic range

The difference between the maximum undistorted sound level and the minimum discernible level above the noise emitted by the device.

FLAC

FLAC stands for Free lossless Audio Codec, and is a lossless free audio file format. Lossless means that the audio is compressed without any loss in quality.

The FLAC license is as shown below.

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HDCP

When transmitting digital signals between devices, this copyright protection technology encrypts the signals to prevent content from being copied without authorization.

iTunes

iTunes is the name of the multimedia player provided by Apple Inc. It enables management and playback of multimedia contents including music and movies. iTunes supports many main file formats including AAC, WAV, and MP3.

L

LFE

This is an abbreviation of Low Frequency Effect, which is an output channel that emphasizes low frequency effect sound. Surround audio is intensified by outputting 20 Hz to 120 Hz deep bass to the system subwoofer(s).

M

MAIN ZONE

The room where this unit is placed is called the MAIN ZONE.

Modem

Device that connects to your broadband internet provider, and is very often supplied with the service.

A type that is integrated with a router is also often available.

MP3 (MPEG Audio Layer-3)

This is an internationally standardized audio data compression scheme, using the "MPEG-1" video compression standard. It compresses the data volume to about one eleventh its original size while maintaining sound quality equivalent to a music CD.

**MPEG (Moving Picture Experts Group),
MPEG-2, MPEG-4**

These are the names for digital compression format standards used for the encoding of video and audio. Video standards include "MPEG-1 Video", "MPEG-2 Video", "MPEG-4 Visual", "MPEG-4 AVC". Audio standards include "MPEG-1 Audio", "MPEG-2 Audio", "MPEG-4 AAC".

P

Pairing

Pairing is an operation required for settings to connect two Bluetooth devices. Pairing enables Bluetooth devices to access each other.

Progressive (sequential scanning)

This is a scanning system of the video signal that displays 1 frame of video as one image. Compared to the interlace system, this system provides images with less flickering and jagged edges.

Protection circuit

This is a function to prevent damage to devices within the power supply when an abnormality such as an overload, excess voltage occurs or over temperature for any reason.

If a malfunction occurs in this unit, the power indicator blinks red and the unit switches to standby mode.

S

Sampling frequency

Sampling involves taking a reading of a sound wave (analog signal) at regular intervals and expressing the height of the wave at each reading in digitized format (producing a digital signal).

The number of readings taken in one second is called the "sampling frequency". The larger the value, the closer the reproduced sound is to the original.

Speaker impedance

This is an AC resistance value, indicated in Ω (Ohms). Greater power can be obtained when this value is smaller.

V

vTuner

This is a free online content server for Internet Radio. Note that usage fees are included in upgrade costs.

For inquiries about this service, visit the vTuner site below.

vTuner website: http://www.radiomarantz.com

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W

Windows Media DRM

This is a copyright protection technology developed by Microsoft.

Content providers are using the digital rights management technology for Windows Media contained in this device (WM-DRM) to protect the integrity of their content (Secure Content) so that their intellectual property, including copyright, in such content is not misappropriated. This device uses WM-DRM software to play Secure Content (WM-DRM Software). If the security of the WM-DRM Software in this device has been compromised, owners of Secure Content (Secure Content Owners) may request that Microsoft revoke the WM-DRM Software's right to acquire new licenses to copy, display and/or play Secure Content. Revocation does not alter the WM-DRM Software's ability to play unprotected content. A list of revoked WM-DRM Software is sent to your device whenever you download a license for Secure Content from the Internet or from a PC. Microsoft may, in conjunction with such license, also download revocation list onto your device on behalf of Secure Content Owners.

Windows Media Player Ver.11 or later

This is a media player distributed free of charge by Microsoft Corporation. It can play playlists created with Ver.11 or later of Windows Media Player, as well as WMA, DRM WMA, WAV, and other files.

WMA (Windows Media Audio)

This is audio compression technology developed by Microsoft Corporation. WMA data can be encoded using Windows Media® Player.

To encode WMA files, only use applications authorized by Microsoft Corporation. If you use an unauthorized application, the file may not work properly.

Z

ZONE2

This unit can operate in a room other than the room where this unit is placed (MAIN ZONE) (ZONE2 playback). The room for ZONE2 playback is called ZONE2.

ZONE3

This unit can operate in a room other than the room where this unit is placed (MAIN ZONE) (ZONE3 playback). The room for ZONE3 playback is called ZONE3.

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Specifications

■ Audio section

• Power amplifier

Rated output:

Front:

125 W + 125 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
165 W + 165 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Center:

125 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
165 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Surround:

125 W + 125 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
165 W + 165 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Surround back / Front height / Front wide:

125 W + 125 W (8 Ω/ohms, 20 Hz – 20 kHz with 0.08 % T.H.D.)
165 W + 165 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.)

Output connectors: 6 – 8 Ω/ohms

• Analog

Input sensitivity/Input impedance:	200 mV/47 kΩ/kohms
Frequency response:	10 Hz – 100 kHz — +1, –3 dB (DIRECT mode)
S/N:	100 dB (IHF–A weighted, DIRECT mode)
Distortion:	0.005 % (20 Hz – 20 kHz) (DIRECT mode)
Rated output:	1.2 V

• **Digital**

D/A output:	Rated output — 2 V (at 0 dB playback)
	Total harmonic distortion — 0.008 % (1 kHz, at 0 dB)
	S/N ratio — 102 dB
	Dynamic range — 100 dB
Digital input:	Format — Digital audio interface

• **Phono equalizer (PHONO input — MEDIA PLAYER OUT)**

Input sensitivity:	2.5 mV
RIAA deviation:	±1 dB (20 Hz to 20 kHz)
S/N:	74 dB (A weighting, with 5 mV input)
Rated output:	150 mV
Distortion factor:	0.03 % (1 kHz, 3 V)

■ Video section

• **Standard video connectors**

Input/output level and impedance:	1 Vp-p, 75 Ω/ohms
Frequency response:	5 Hz – 10 MHz — 0, –3 dB

• **Color component video connector**

Input/output level and impedance:	Y signal — 1 Vp-p, 75 Ω/ohms
	P_B / C_B signal — 0.7 Vp-p, 75 Ω/ohms
	P_R / C_R signal — 0.7 Vp-p, 75 Ω/ohms
Frequency response:	5 Hz – 60 MHz — 0, –3 dB

■ Tuner section

(ANTENNA input – MEDIA PLAYER OUT)	[FM]	[AM]
	(Note: μV at 75 Ω/ohms, 0 dBf = 1 x 10^{-15} W)	
Receiving Range:	87.5 MHz – 107.9 MHz	530 kHz – 1710 kHz
Usable Sensitivity:	1.5 μV (14.8 dBf)	20 μV
S/N (IHF–A weighted):	MONO 78 dB STEREO 68 dB HD 85 dB	85 dB
Distortion (1 kHz):	MONO 0.1 % STEREO 0.2 % HD 0.02 %	0.02 %

■ General

Power supply:	AC 120 V, 60 Hz
Power consumption:	710 W
Power consumption in standby mode:	0.2 W
Power consumption in CEC standby mode:	0.5 W
Power consumption in network standby mode:	2.7 W

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❏ Boost

http://www.boost.org/

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❏ FastDelegate

http://www.codeproject.com/KB/cpp/FastDelegate.aspx

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❏ Tremolo

http://wss.co.uk/pinknoise/tremolo

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❏ Mersenne Twister
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❏ zlib

http://www.zlib.net/

zlib.h – interface of the 'zlib' general purpose compression library version 1.2.3, July 18th, 2005

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http://curl.haxx.se

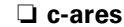COPYRIGHT AND PERMISSION NOTICE

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List of preset codes

To return a preset code to the default settings, register the AVR code "0000" to the button whose preset code you want to cancel.

AVR

| **M** | Marantz | 0000 |

TV group

Registrable input source button : (TV AUDIO)

A	Acer	1141
	Admiral	1009, 1089, 1002
	Aiko	1059
	Aiwa	1117, 1118
	Akai	1001
	Amtron	1023
	Anam	1113
	Anam National	1023, 1069, 1092
	AOC	1003, 1049, 1024, 1127
	Audiovox	1023
B	Bell & Howell	1009, 1025
	Benq	1104, 1142
	Broksonic	1097, 1098, 1113, 1003
C	Celebrity	1001
	Citizen	1003, 1023, 1059, 1063, 1026, 1013
	Colortyme	1003, 1043
	Contec/Cony	1045, 1047, 1023, 1113
	Craig	1023, 1113, 1020, 1022
	Crown	1023, 1067
	Curtis Mathes	1003, 1110, 1025, 1062, 1026, 1103, 1013

D	Daewoo	1003, 1059, 1024, 1084, 1101, 1013, 1035, 1036
	Daytron	1003, 1013, 1016
	Dimensia	1110, 1103
	Dumont	1010, 1003, 1153
E	Electroband	1001
	Electrohome	1003, 1133, 1001, 1069
	Emerson	1003, 1020, 1044, 1038, 1045, 1048, 1055, 1023, 1025, 1061, 1022, 1094, 1096, 1099, 1013, 1113, 1101, 1015, 1021
	Envision	1003
F	Fisher	1051, 1025, 1091, 1160
	Fujitsu	1038, 1124, 1125, 1155
	Funai	1038, 1023, 1113
G	Gateway	1150
	GE	1110, 1003, 1085, 1046, 1054, 1133, 1018, 1069, 1022, 1103, 1113, 1136, 1153
	Goldstar	1045, 1024, 1112, 1080, 1100, 1013, 1003, 1030, 1154
H	Hallmark	1003
	Hisense	1116

	Hitachi	1003, 1012, 1031, 1032, 1037, 1041, 1045, 1047, 1065, 1068, 1082, 1088, 1094, 1139, 1140, 1145, 1159
I	Infinity	1067
J	Janeil	1134
	JBL	1067
	JC Penney	1003, 1046, 1047, 1054, 1133, 1110, 1019, 1112, 1024, 1063, 1018, 1026, 1083, 1085, 1100, 1103, 1013, 1154
	Jensen	1003
	JVC	1045, 1047, 1050, 1060, 1065, 1028, 1029
K	Kawasho	1003, 1001
	Kenwood	1003
	Kloss Novabeam	1056, 1023, 1057, 1134
	KTV	1023, 1073, 1099, 1013, 1113, 1033, 1034
L	LG	1024, 1030
M	M.Wards	1002, 1009, 1038
	Magnavox	1003, 1052, 1053, 1056, 1057, 1063, 1081, 1067, 1106
	Marantz	1000, 1003, 1122, 1067, 1031
	Mitsubishi	1003, 1051, 1133, 1122, 1024, 1115
	Motorola	1069, 1014

TV group

Registrable input source button : (TV AUDIO)

N	NEC	1003, 1043, 1024, 1069, 1012
	NET-TV	1137, 1150
O	Orion	1020, 1096
P	Panasonic	1017, 1067, 1069, 1111, 1095
	Philips	1003, 1045, 1052, 1054, 1056, 1057, 1058, 1063, 1069, 1067, 1011
	Philips Magnavox	1106, 1067
	Pioneer	1003, 1018, 1070, 1071, 1037, 1094, 1145, 1147, 1149
	Plasmsync	1135
	Portland	1003, 1059, 1024, 1013
	Price Club	1026
	Prism	1018
	Proscan	1110, 1085, 1103, 1004, 1005, 1006, 1007, 1008
	Proton	1003, 1045
Q	Quasar	1069, 1073, 1111, 1010, 1153
R	Radio Shack	1025, 1103, 1113, 1024
	Radio Shack/ Realistic	1003, 1045, 1023, 1110, 1025, 1015, 1100, 1013
	RCA	1110, 1003, 1049, 1024, 1069, 1075, 1079, 1085, 1087, 1088, 1093, 1094, 1101, 1103, 1085, 1113, 1004, 1005, 1006, 1007, 1008, 1153, 1014
	Realistic	1025, 1103
	Runco	1010, 1153
S	Sampo	1150
	Sampo	1150
	Samsung	1003, 1045, 1024, 1062, 1026, 1078, 1083, 1090, 1100, 1013, 1105, 1040, 1114, 1157, 1120, 1121, 1148, 1146
	Sansui	1119

	Sanyo	1003, 1051, 1025, 1072, 1077, 1091, 1156, 1157, 1158
	Sharp	1003, 1045, 1055, 1015, 1064, 1066, 1076, 1089, 1013, 1014, 1123
	Signature	1009
	Sony	1001, 1102, 1108
	Soundesign	1003, 1038, 1023, 1063, 1113
	Starlite	1023
	Supre-Macy	1134
	Sylvania	1003, 1042, 1052, 1053, 1063, 1056, 1057, 1067, 1089, 1151, 1039
	Symphonic	1044, 1023, 1039
T	Tandy	1014
	Tatung	1069
	Technics	1018
	Techwood	1003, 1018
	Teknika	1003, 1009, 1038, 1045, 1047, 1063, 1023, 1059, 1024, 1063, 1026, 1111, 1013, 1113
	Telecaption	1074
	Toshiba	1042, 1025, 1074, 1026, 1098, 1003, 1107, 1019, 1136, 1111, 1135
	Totevision	1013
U	Universal	1046, 1054
V	Video Concepts	1113
	Viewsonic	1130, 1128, 1006, 1131, 1129, 1109, 1143, 1150, 1022, 1145, 1138
W	Wards	1003, 1009, 1044, 1038, 1046, 1052, 1054, 1056, 1110, 1057, 1024, 1015, 1067, 1086, 1103
	White Westinghouse	1101, 1001

Y	Yamaha	1003, 1024
Z	Zenith	1132, 1010, 1003, 1009, 1144, 1153

DVD group

Registrable input source button : (DVD) (Blu-ray) (GAME) (AUX1) (AUX2)

A	Aiwa	2036, 2037
	Apex	2017, 2034, 2018, 2019, 2021, 2012
B	Bluray	2064
	BOSE	2038, 2039, 2063
D	Denon	2047, 2048
F	Funai	2049
G	GE	2020, 2029, 2033, 2009
H	Harman Kardon	2061
	Hitachi	2031, 2012, 2008
J	JVC	2006, 2010, 2040, 2041, 2042, 2043
K	Kenwood	2054, 2053
	Koss	2058
M	Magnavox	2023, 2025, 2011, 2007
	Marantz	2000, 2025, 2065
	Mitsubishi	2011, 2015
O	Onkyo	2062
	Oritron	2030, 2009
P	Panasonic	2003, 2015, 2016, 2055
	Philips	2007, 2011, 2058
	Pioneer	2002, 2014, 2056
	Proscan	2020, 2032, 2009
R	RCA	2020, 2005, 2009, 2035, 2057
S	Sampo	2041
	Samsung	2008, 2022, 2024, 2027, 2012
	Sanyo	2050, 2052
	Sharp	2044, 2045
	Sherwood	2051
	Sony	2001, 2013, 2059

T	Toshiba	2004, 2026, 2028, 2008
Y	Yamaha	2046, 2060
Z	Zenith	2010

CD group

Registrable input source button : (CD) (GAME) (AUX1) (AUX2)

A	AIWA	3001, 3002, 3003
	AKAI	3004, 3005, 3006
	AUDIO	3007
	AUDIO LABS	3008
C	CALIFORNIA	3008
	CARVER	3010, 3011, 3009
	CASIO	3012, 3020
	CURTIS	3020, 3012
D	Denon	3013
E	EMERSON	3014
F	FISHER	3011, 3015, 3016, 3017, 3018
G	GE	3019
	GENEXXA	3014, 3021, 3020
H	HARMON	3022, 3023, 3051
	HITACHI	3020
I	INKEL	3024
J	JC PENNEY	3012, 3020, 3025
	JVC	3026, 3027
K	KARDON	3022, 3051, 3023
	KENWOOD	3028, 3029, 3030, 3031, 3032, 3033
	KRELL	3010
L	LUXMAN	3035, 3036, 3037, 3038
	LX I	3012, 3020, 3014
M	MAGNAVOX	3010, 3039, 3040
	Marantz	3000, 3010, 3041, 3042, 3043
	MATHES	3012, 3020
	MCS	3012, 3020
	MGA	3023

	MISSION	3010
	MITSUBISHI	3023, 3044
N	NAD	3034, 3045
	NAKAMICHI	3046, 3047, 3048
	NEC MCS	3025
	NIKKO	3007, 3016
O	ONKYO	3049, 3050, 3051, 3052, 3055, 3102, 3103
	OPTIMUS	3011, 3014, 3020, 3028, 3053, 3054, 3056, 3057, 3058, 3059
P	PANASONIC	3008, 3060, 3061
	PHILIPS	3009, 3010, 3010, 3040
	PIONEER	3020, 3021, 3062, 3063, 3064
Q	QUASAR	3008
R	RCA	3011, 3014, 3065, 3066, 3067, 3068, 3069
	REALISTIC	3011, 3014, 3020, 3042, 3054, 3057
	ROTEL	3010
	RS ORIGINAL	3070
S	SAE	3010, 3083
	SAMSUNG	3071
	SANSUI	3014, 3068, 3072, 3073
	SANYO	3011, 3018, 3074, 3075, 3076
	SCOTT	3014
	SEARS	3012, 3014, 3020, 3028, 3042
	SHARP	3028, 3042, 3077
	SHERWOOD	3042, 3056, 3070, 3078, 3024
	SHURE	3025
	SONY	3039, 3079, 3080, 3081, 3082, 3097, 3098, 3099, 3100, 3101

	SYLVANIA	3010
	SYMPHONIC	3083
T	TEAC	3016, 3042, 3057, 3083, 3084, 3085, 3086
	TECHNICA	3007, 3008, 3061, 3087, 3088
	THETA DIGITAL	3040
	TOSHIBA	3045
V	VICTOR	3026
Y	YAMAHA	3007, 3089, 3090, 3091, 3092
Z	ZENITH	3016, 3093, 3094, 3095, 3096

CBL/SAT group

Registrable input source button : (CBL/SAT) (GAME) (MEDIA PLAYER) (AUX1) (AUX2)

A	Alphastar	4027
	Amstrad	4046, 4047, 4050
	Apple TV	4068
	Atsky	4048
B	BSkyB	4021, 4045, 4046
C	Chaparral	4039
D	Direct Tv	4001, 4016, 4044
	DISH Network	4030
	Drake	4026
E	Echostar	4007, 4017, 4018, 4019, 4020, 4062, 4063, 4064
	Eurosky	4056, 4047
	Express Vu	4017
F	Foxtel	4051
	Freesat	4056
	Fujitsu	4025
G	GE	4002, 4008, 4009
	General Instruments	4036, 4037
	Gradiente	4044, 4057
H	Hitachi	4001, 4015
	Hughes Network	4001, 4016
	Humax	4049, 4050, 4051, 4052, 4053
J	Janeil	4025
	JVC	4017
L	LG Smart TV	4069
M	Marantz	4000
	Mitsubishi	4001
N	NETGEAR Neo TV	4072

	Nokia	4058, 4059, 4060, 4061
O	Optima	4048
P	Panasonic	4004, 4010
	Philips	4031, 4044, 4057, 4035
	Proscan	4002, 4008, 4009, 4011
R	Radio Shack	4036, 4037
	RCA	4002, 4008, 4009, 4029
	Realistic	4040
	Roku XDS	4073
	Rural Cable	4036
S	Samsung	4022, 4027, 4042, 4043, 4054, 4055, 4050
	Schneider	4041, 4043
	SKY	4044, 4045, 4057
	Skyplus	4048
	Skysat	4041, 4047, 4056
	Sony	4003, 4012, 4014, 4065, 4066, 4067, 4070
	Star Choice	4032
	Star Trak	4024
	STS	4038
	SuperDish	4028
T	Teac	4049
	Thomson	4046, 4056
	Toshiba	4001, 4034
U	Universum	4056
	Uniden	4005, 4006, 4013
V	Video Pall	4025

W	Western Digital WD TV	4071
Z	Zenith	4033, 4025, 4023

Blu-ray group

Registrable input source button : Blu-ray CD GAME AUX1 AUX2

D	Denon	5034, 5035, 5036
H	Hitachi	5031, 5032, 5033
I	Integra	5013
J	JVC	5014, 5015, 5017, 5018, 5019, 5020
L	LG	5010, 5011
M	Marantz	5000, 5026, 5027
	Mitsubishi	5024, 5025
O	Onkyo	5013
P	Panasonic	5001, 5002, 5003
	Philips	5004
	Pioneer	5005
R	RCA	5012
S	Samsung	5005
	Sharp	5028, 5029, 5030
	Sony	5007, 5008, 5009, 5016
T	Toshiba	5012
Y	Yamaha	5021, 5022, 5023

■ Dimensions

Unit : in. (mm)

55/64 (22)

14 7/32 (361)

15 25/32 (401)

45/64 (18)

1 17/32 (39)

10 33/64 (267)

2 11/64 (55)

17 21/64 (440)

6 11/16 (170)

7 9/32 (185)

2 13/64 (56)

19/32 (15)

1 31/32 (50)

13 25/64 (340)

1 31/32 (50)

■ Weight : 29 lbs 16 oz (13.6 kg)