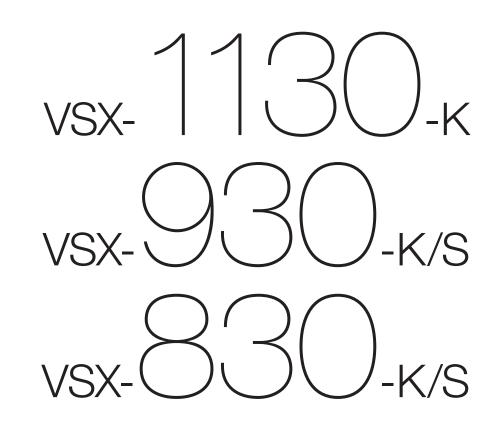


Operating Instructions



AV Receiver

CAUTION

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. D3-4-2-1-1 B1 En

WARNING

This equipment is not waterproof. To prevent a fire or shock hazard, do not place any container filled with liquid near this equipment (such as a vase or flower pot) or expose it to dripping, splashing, rain or moisture.

D3-4-2-1-3 A1 En

WARNING

To prevent a fire hazard, do not place any naked flame sources (such as a lighted candle) on the equipment. D3-4-2-1-7a A1 En

VENTILATION CAUTION

In case of VSX-1130/VSX-930

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 40 cm at top, 10 cm at rear, and 20 cm at each side).

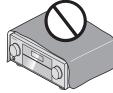
In case of VSX-830

When installing this unit, make sure to leave space around the unit for ventilation to improve heat radiation (at least 40 cm at top, 20 cm at rear, and 20 cm at each side).

WARNING

Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product, and to protect it from overheating. To prevent fire hazard, the openings should never be blocked or covered with items (such as newspapers, table-cloths, curtains) or by operating the equipment on thick carpet or a bed.

D3-4-2-1-7b* A1 En



Operating Environment

Operating environment temperature and humidity: +5 °C to +35 °C (+41 °F to +95 °F); less than 85 %RH (cooling vents not blocked)

Do not install this unit in a poorly ventilated area, or in locations exposed to high humidity or direct sunlight (or strong artificial light).

D3-4-2-1-7c* A2 En

CAUTION

The **O STANDBY/ON** switch on this unit will not completely shut off all power from the AC outlet. Since the power cord serves as the main disconnect device for the unit, you will need to unplug it from the AC outlet to shut down all power. Therefore, make sure the unit has been installed so that the power cord can be easily unplugged from the AC outlet in case of an accident. To avoid fire hazard, the power cord should also be unplugged from the AC outlet when left unused for a long period of time (for example, when on vacation).

D3-4-2-2-2a*_A1_En

This product is for general household purposes. Any failure due to use for other than household purposes (such as long-term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.

K041_A1_En

WARNING

Store small parts out of the reach of children and infants. If accidentally swallowed, contact a doctor immediately.

D41-6-4 A1 En

Information for users on collection and disposal of old equipment and used batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points in accordance with your national legislation.

By disposing of these products and batteries correctly, you will help to save valuable

Symbol examples \ for batteries





resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products and batteries,

please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

These symbols are only valid in the European Union.

For countries outside the European Union:

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

K058a A1 En

Radio wave caution

This unit uses a 2.4 GHz radio wave frequency, which is a band used by other wireless systems (Microwave ovens and Cordless phones, etc.). In this event noise appears in your television image, there is the possibility this unit (including products supported by this unit) is causing signal interference with the antenna input connector of your television, video, satellite tuner, etc. In this event, increase the distance between the antenna input connector and this unit (including products supported by this unit).

- Pioneer is not responsible for any malfunction of the compatible Pioneer product due to communication error/malfunctions associated with your network connection and/or your connected equipment. Please contact your Internet service provider or network device manufacturer.
- A separate contract with/payment to an Internet service provider is required to use the Internet.

Thank you for buying this Pioneer product. Please read through these operating instructions so you will know how to operate your model properly.

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Flow of settings on the receiver

Flow for connecting and setting the receiver

The unit is a full-fledged AV receiver equipped with an abundance of functions and terminals. It can be used easily after following the procedure below to make the connections and settings.

Required setting item: 1, 2, 3, 4, 5, 8, 10

Setting to be made as necessary: 6, 7, 9, 11, 12, 13, 14

() Important

Using **Wiring Navi** on AVNavigator of this receiver, you can make the initial settings of the receiver on your computer or mobile device. In that case, you can use **Wiring Navi** to make the same connections or settings that are performed in Steps **2**, **3**, **4**, **5**, **6**, **8**, and **9**. For details of how to use AVNavigator, refer to <u>How to use the built-in</u> <u>AVNavigator</u> on page 49.

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- Checking what's in the box on page 9
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2 Determining the speakers' application (<u>page 20</u> (VSX-1130/VSX-930), <u>page 37</u> (VSX-830))

In case of VSX-1130/VSX-930

- [A] 7.2 channel surround system (Surround back/Top middle) connection
- [B] Dolby Enabled Speaker system connection
- [C] 7.2 channel surround system (Surround back/Front wide) connection
- [D] 7.2 channel surround system & Speaker B connection
- [E] 5.2 channel surround system & Front Bi-amping connection (High quality surround)
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- Connecting AM/FM antennas (page 31 (VSX-1130/VSX-930), page 45 (VSX-830))
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Features

Audio

Dolby Atmos

Excluding VSX-830

This AV receiver supports the latest Dolby Atmos surround sound system. Dolby Atmos is a new technology in which, through real time calculation of audio data and meta data (position and time information) included in the audio signal, a surround sound space is achieved irrespective of the speaker layout and number of speakers. Dolby Atmos contents are required to enjoy Dolby Atmos. For Blu-ray discs with Dolby Atmos, Dolby Atmos can be played by connecting most conventional Blu-ray discs with this receiver using HDMI.

ESS-24bit-DAC-equipped

Excluding VSX-830

All channels are equipped with ESS SABRE Premier Audio DACs. The Jitter Eliminators achieve clearer sound.

Hi-bit 24 Audio Processing

Excluding VSX-830

Creates a wider dynamic range with digital sources like CDs or DVDs. 16- and 20-bit PCM as well as compressed audio is requantized to 24 bits, and the high frequency component is interpolated upon data processing to enable smoother, more subtle musical expression.

• Easy setup using MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830)

The Auto MCACC Setup provides a quick but accurate surround sound setup, which includes the advanced features of Professional Acoustic Calibration EQ.

Auto Phase Control Plus

For discs created with standards other than Phase Control, the LFE channel is delayed upon recording in the first place. This function automatically corrects phase shifting on such discs and broadcasts. This function is particularly effective when playing multi-channel music containing low frequency effects (LFE).

• Full Band Phase Control

Excluding VSX-830

The further advanced Full Band Phase Control technology focuses on the group delay in the speaker network filter, and compensates with special digital signal processing (DSP), to adjust the phase of each unit as well as the group delay for each speaker. Full Band Phase Control gives multi-range speakers the sound coherence of full-range speakers, while retaining the wide frequency range advantage.

• Subwoofer EQ

The EQ for subwoofer output can be corrected. In addition to the results of MCACC automatic adjustment, the subwoofer output can be adjusted to match the viewing environment or your taste by manual correction.

• Virtual Speakers

By turning on the 'Virtual Surround Back', 'Virtual Height', and 'Virtual Wide' modes, it is possible to realize a maximum of 11.1 channels combining the speakers that are actually installed and the virtual speakers. This makes for a smoother connection between the sounds and an improved 3D feel.

Video

• Ultra HD (with 4K/60p video support) - Pass-through and upscaling -

Up to 4K/60p resolution images can be passed through and displayed as such, and the HD (High Definition) or Full HD images of DVDs, Blu-ray discs and HD broadcasts can be upscaled to a resolution of up to 4K/60p and displayed. A separate monitor supporting Ultra HD (4K video) is required.

HDMI (4K60p, 3D, Audio Return Channel)

A compatible component is required to use the above function.

• HDCP 2.2

This receiver is compatible with the HDCP 2.2 standard, which has stringent copyright protection technology.





Network

Built-in Wi-Fi

This receiver is compatible with Wi-Fi standards, and supports the 2.4 GHz and 5 GHz dual bands.

Wireless Direct

With this receiver, you can enjoy music playback without a router by direct wireless connection using an iPhone or other Wi-Fi mobile device.

• Spotify Connect

Spotify is a digital music-streaming service that gives you access to millions of songs instantly. This receiver is ready for Spotify Connect, which lets you play music on your audio system, using the Spotify app as a remote. For service availability in your country check www.spotify.com.

• Compatible with Windows 8.1

This receiver is compatible with Windows 8.1, letting you easily stream music from compatible PCs on your home network.

• Apple AirPlay

With AirPlay you can stream music from iTunes to this receiver and play it through your home theater system. You can even use the receiver to view metadata including song titles, artist's names as well as the album art on a connected display. You can easily enjoy your iTunes music in any room in the house.

• DLNA Certified (1.5)

This receiver is a DLNA certified (1.5) device, enabled to work not only as a DMP (Digital Media Player) for playing DMS (Digital Media Server) audio files, but also as a DMR (Digital Media Renderer) to be controlled remotely by a device such as a smartphone or PC.

Internet Radio

When you connect this receiver to the network, you can listen to internet radio from around the world. You can register your favorite broadcasting stations in this receiver.

Multi-channel Music File playback

This receiver enables multi-channel music file playback with a resolution of up to 96 kHz/24 bit. Playback of WAV and FLAC files via the front USB port and network is supported.

• DSD File Music playback (via Network, Front USB and HDMI)

Playback of high sound quality DSD music (DSD files and DSD discs (SACDs)) is supported.

• High Resolution Music Playback

High resolution music files with resolutions of 96 kHz/24 bit to 192 kHz/24 bit can be played. Playback of AIFF, Apple Lossless, WAV and FLAC files via the front USB port and network is supported.

Gapless Playback

The silent section between tracks is skipped when playing music files, eliminating the interruptions that usually occur when playing live or concert contents.

This receiver plays back AAC or MP3 format files with a minimum gap even though it is fundamentally impossible to play back without a gap.

Connectivity

Built-in Bluetooth Wireless Technology

This receiver, equipped with *Bluetooth* wireless technology, lets you enjoy music files on an iPhone or other *Bluetooth* wireless technology enabled device wirelessly.

● MHLTM (Mobile High-definition Link)-compatible device playback

An incorporates MHL 2 mobile device can be connected to enjoy 3D videos, full-HD videos, high quality multichannel audio, and photos etc., with charge the battery on the receiver.

HTC Connect

HTC Connect makes it easy to wirelessly stream your favorite music straight from your HTC phone. There's no need for a separate app; HTC Connect is built right in your phone's music player.

• iPod Playback

Your iPod and iPhone can be connected to the receiver's USB terminal to play the music files on the iPod or iPhone. Also, the iPod or iPhone is charged when it is connected to the receiver.





Installation

• Built-in AVNavigator

With the built-in AVNavigator that included in this receiver, **Wiring Navi** can be used to interactively connect and set initial settings of this receiver with a smart phone, tablet, PC or Mac through a home network. In addition, with VSX-1130 and VSX-930, the **Interactive Operation Guide** can also be used, which visually explains functions and operations by actually experiencing operations with content linked with the main receiver.

• iControlAV5 Remote Application

This is an application that allows intuitive operation of many of the receiver's functions. This application is available on the App Store for iPhone, iPod touch and iPad. You can also get it on Google Play for Android smartphones. The application can be downloaded free of charge.

HDZONE output

Excluding VSX-830

This receiver supports output of the HDMI output to a subzone room. Powerful images can be enjoyed simply by connecting this receiver to a TV supporting 4K/Full-HD/3D. In addition, a multi-channel environment can be created by connecting this receiver to another AV receiver in the subzone room.

ZONE Ready

Excluding VSX-830

This receiver is equipped with HDZONE. HDZONE supports HD audio/video streaming to a separate room via HDMI. Multi-Zone enables music and movie playback from different sources in three zones at the same time.

• Energy Saving Design

This AV receiver has an ecological design. In addition to even lower power consumption in standby, the receiver is equipped with an 'eco mode' for low power consumption when playing contents as well. Furthermore, the eco mode can easily be set with a dedicated button on the remote control of using iControlAV5.

Checking what's in the box

Please check that you've received the following supplied accessories:

- Setup microphone (cable: 5 m)
- Remote control unit
- AAA size IEC R03 dry cell batteries (to confirm system operation) x2
- AM loop antenna
- FM wire antenna
- Power cord
- CD-ROM
- Quick start guide
- Safety Brochure
- Warranty sheet

Note

The operating instructions explains the operation using mainly illustrations of VSX-1130. In addition, the illustrations are modified and simplified for explanation purposes and may be different from the actual product.

Handling the CD-ROM

Precautions For Use

 This CD-ROM is for use with a personal computer. It cannot be used with a DVD player or music CD player. Attempting to play this CD-ROM with a DVD player or music CD player can damage speakers or cause impaired hearing due to the large volume.

License

• Please agree to the "Terms of Use" indicated below before using this CD-ROM. Do not use if you are unwilling to consent to the terms of its use.

Terms of Use

 Copyright to data provided on this CD-ROM belongs to PIONEER HOME ELECTRONICS CORPORATION. Unauthorized transfer, duplication, broadcast, public transmission, translation, sales, lending or other such matters that go beyond the scope of "personal use" or "citation" as defined by Copyright Law may be subject to punitive actions. Permission to use this CD-ROM is granted under license by PIONEER HOME ELECTRONICS CORPORATION.

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for any compensation. The names of private corporations, products and other entities described herein are the
registered trademarks or trademarks of their respective firms.







Installing the receiver

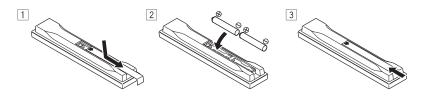
- When installing this unit, make sure to put it on a level and stable surface.
- Don't install it on the following places:
- —on a color TV (the screen may distort)
- -near a cassette deck (or close to a device that gives off a magnetic field). This may interfere with the sound.
- —in direct sunlight
- —in damp or wet areas
- —in extremely hot or cold areas
- -in places where there is vibration or other movement
- in places that are very dusty
- in places that have hot fumes or oils (such as a kitchen)
- Do not touch this receiver's bottom panel while the power is on or just after it is turned off. The bottom panel becomes hot when the power is on (or right after it is turned off) and could cause burns.

Loading the batteries

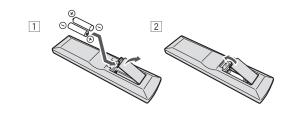
The batteries included with the unit are to check initial operations; they may not last over a long period. We recommend using alkaline batteries that have a longer life.

• The remote control setting may be restored to the default after the batteries are replaced. If this happens, reset it (page 92 (VSX-1130/VSX-930), page 13 (VSX-830)).

VSX-1130/VSX-930



VSX-830



• Do not use or store batteries in direct sunlight or other excessively hot place, such as inside a car or near a heater. This can cause batteries to leak, overheat, explode or catch fire. It can also reduce the life or performance of batteries.

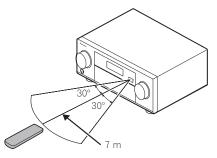
Incorrect use of batteries may result in such hazards as leakage and bursting. Observe the following precautions:

- Never use new and old batteries together.
- Insert the plus and minus sides of the batteries properly according to the marks in the battery case.
- When inserting the batteries, make sure not to damage the springs on the battery's (--) terminals. This can cause batteries to leak or overheat.
- Batteries with the same shape may have different voltages. Do not use different batteries together.
- When disposing of used batteries, please comply with governmental regulations or environmental public institution's rules that apply in your country/area.

Operating range of remote control unit

The remote control may not work properly if:

- There are obstacles between the remote control and the receiver's remote sensor.
- Direct sunlight or fluorescent light is shining onto the remote sensor.
- The receiver is located near a device that is emitting infrared rays.
- The receiver is operated simultaneously with another infrared remote control unit.









Controls and displays

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Remote control (In case of VSX-830)	13
Display	15
Front panel	16

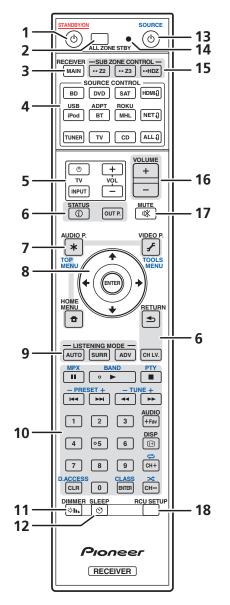


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Remote control (In case of VSX-1130/VSX-930)

This section explains how to operate the remote control for the receiver.



- The remote has been conveniently color-coded according to component control using the following system:
- White Receiver control, TV control
- Blue Operation of other devices and each input (TUNER, etc.) (See pages <u>63</u>, <u>64</u>, <u>66</u>, <u>67</u> and <u>96</u>.)

1 U STANDBY/ON

This switches between standby and on for this receiver.

2 ALL ZONE STBY

Use this button to perform unique operations (page 95).

3 MAIN RECEIVER

Switches the remote to control the receiver (used to select the white commands). Switch to perform operations in the main zone.

4 SOURCE CONTROL buttons

Switches the input. Also, switches remote control operation mode for operating other devices or each input (**TUNER**, etc.) (page 93).

The input for HDMI 9, NET 9 and ALL 9 switches each time these buttons are pressed.

5 TV control buttons

These buttons can be used to perform operations on the TV to which the **TV INPUT** button is assigned. The TV can be operated with these buttons regardless of the input set for the remote control's operation mode (page 93).

6 Receiver Control buttons

- STATUS Displays the IP address and information such as selected/set functions and input signals on the display (page 90).
- OUT P. (OUTPUT PARAMETER) Switches the output terminal of the HDMI signal or speaker terminal to be played (page 88).
- **RETURN** Press to confirm and exit the current menu screen.
- **CH LV.** (CHANNEL LEVEL) Press repeatedly to select a channel, then use \leftarrow/\Rightarrow to adjust the level (pages <u>89</u> and <u>108</u>).

7 Receiver setting buttons

Press MAIN RECEIVER first to access:

- AUDIO P. (AUDIO PARAMETER) Use to access the Audio options (page 85).
- VIDEO P. (VIDEO PARAMETER) Use to access the Video options (page 87).
- HOME MENU Use to access the Home Menu (pages 59, 60, 82, 99 and 106).

8 **1**/↓/←/→/ENTER

Use the arrow buttons when setting up your surround sound system (see <u>page 99</u>) and the Audio or Video options (<u>page 85</u> or <u>87</u>).

9 LISTENING MODE buttons

- AUTO (AUTO SURROUND/ALC/STREAM DIRECT) Switches between Auto Surround (page 71), Auto Level Control mode and Stream Direct mode (page 72).
- SURR (STANDARD SURROUND) Press for Standard decoding and to switch various modes (Dolby, DTS, etc.) (page 71).
- ADV (ADVANCED SURROUND) Use to switch between the various surround modes (page 72).

10 Source device operation button

Operates other devices or each input (TUNER, etc.).

11 DIMMER

Dims or brightens the display (page 90).

12 SLEEP

12

Use to put the receiver in sleep mode and select the amount of time before sleep (page 90).



ABC

13 () SOURCE

Press to turn on/off the power to the Pioneer device connected to the receiver.

14 Remote control LED

Lights when a command is sent from the remote control.

15 SUB ZONE CONTROL buttons

- Z2 (ZONE 2) It is not used with this receiver.
- Z3 (ZONE 3) It is not used with this receiver.
- HDZ (HDZONE) Holding down this button (for 1.5 seconds) until the remote control LED flashes one time, the mode changes to HDZONE operation.

16 VOLUME +/-

Use to set the listening volume.

To adjust the main zone sound volume, press **MAIN RECEIVER** first and then press this button. When in the sub zone, press the **SUB ZONE CONTROL** button first and then press this button.

17 MUTE

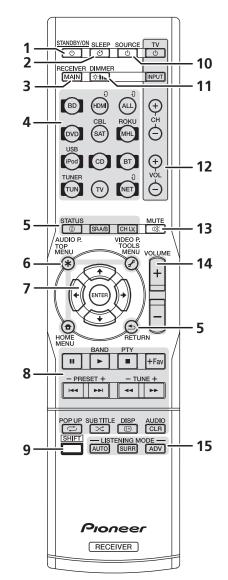
Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound). To mute the main zone sound volume, press **MAIN RECEIVER** first and then press this button. When in the sub zone, press the **SUB ZONE CONTROL** button first and then press this button.

18 RCU SETUP

Used to set the remote control (page 93).



This section explains how to operate the remote control for the receiver.











- White Receiver control, TV control
- Blue Operation of other devices and each input (TUNER, etc.) (See pages <u>63</u>, <u>64</u>, <u>66</u>, <u>67</u> and <u>96</u>.)

1 O STANDBY/ON

This switches between standby and on for this receiver.

2 SLEEP

Use to put the receiver in sleep mode and select the amount of time before sleep (page 90).

3 MAIN RECEIVER

Switches the remote to control the receiver (used to select the white commands).

4 Input function buttons

Switches the input. Also, switches remote control operation mode for operating other devices or each input (**TUNER**, etc.) (page 93).

The input for HDMI 0, NET 0 and ALL 0 switches each time these buttons are pressed.

5 Receiver Control buttons

- STATUS Displays the IP address and information such as selected/set functions and input signals on the display (page 90).
- SP-A/B Switches the speaker output on/off. No sounds will be made from the speaker when SP OFF is selected.
- CH LV. (CHANNEL LEVEL) Press repeatedly to select a channel, then use ←/→ to adjust the level (pages 89 and 108).
- **RETURN** Press to confirm and exit the current menu screen.

6 Receiver setting buttons

Press MAIN RECEIVER first to access:

- AUDIO P. (AUDIO PARAMETER) Use to access the Audio options (page 85).
- VIDEO P. (VIDEO PARAMETER) Use to access the Video options (page 87).
- HOME MENU Use to access the Home Menu (pages 59, 60, 82, 99 and 106).

7 **↑**/↓/←/→/ENTER

Use the arrow buttons when setting up your surround sound system (see <u>page 99</u>) and the Audio or Video options (<u>page 85</u> or <u>87</u>).

8 Component control buttons

The main buttons (►, ■, etc.) are used to control a component after you have selected it using the input function buttons.

The **BD**, **DVD**, and **CD** operation using the component control buttons are limited only to Pioneer components. The controls above these buttons can be accessed after you have selected the corresponding input function button (**BD**, **DVD** and **CD**). These buttons also function as described below.

Press TUNER first to access:

Use **TUNE +/-** can be used to find radio frequencies and **PRESET +/-** can be used to select preset radio stations (page 66).

9 SHIFT

It is not used with this receiver.

Press to turn on/off the power to the Pioneer device connected to the receiver.

11 DIMMER

Dims or brightens the display (page 90).

12 TV control buttons

Operates a TV. When operating other manufacturer's TV, setup as follows.

- \bullet Use to turn on/off the power of the TV.
- INPUT Use to select the TV input signal.
- CH +/- Use to select channels.
- VOL +/- Use to adjust the volume on your TV.

While holding down TV \circ button, press the input function buttons (listed in the table below) for component you want to control for about five seconds.

This may not operate depending on the TV. Default setting: Pioneer

TV preset

i v preset	
Input function button	TV Brand
MAIN RECEIVER	Pioneer
BD	Panasonic
НДМІ	Sharp
ALL	Sony
DVD	Toshiba
SAT	Mitsubishi
MHL	Philips/AOC/TPV
iPod	Vizio
CD	Samsung
ВТ	LG Electric
TUNER	Skyworth
TV	Hisense
NET	TCL

13 MUTE

Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound). To mute the sound volume, press **MAIN RECEIVER** first and then press this button.

14 VOLUME +/-

Use to set the listening volume.

15 LISTENING MODE buttons

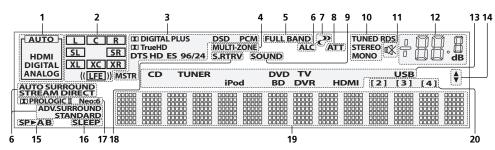
- AUTO (AUTO SURROUND/ALC/STREAM DIRECT) Switches between Auto Surround (page 71), Auto Level Control mode and Stream Direct mode (page 72).
- **SURR** (STANDARD SURROUND) Press for Standard decoding and to switch various modes (Dolby, DTS, etc.) (page 71).
- ADV (ADVANCED SURROUND) Use to switch between the various surround modes (page 72).







Display



1 Signal indicators

Light to indicate the currently selected input signal. **AUTO** lights when the receiver is set to select the input signal automatically (page 73).

2 Program format indicators

Light to indicate the channels to which digital signals are being input.

Excluding VSX-830: With Dolby Atmos content, the light will not be on when the object base signal is being decoded.

- L/R Left front/Right front channel
- **C** Center channel
- SL/SR Left surround/Right surround channel
- LFE Low frequency effects channel (the (()) indicators light when an LFE signal is being input)
- XL/XR Two channels other than the ones above
- XC Either one channel other than the ones above, the mono surround channel or matrix encode flag

3 Digital format indicators

Light when a signal encoded in the corresponding format is detected.

- DIGITAL Lights with Dolby Digital decoding.
- DIGITAL PLUS Lights with Dolby Digital Plus decoding.
- **TrueHD** Lights with Dolby TrueHD decoding.
- **DTS** Lights with DTS decoding.
- **DTS HD** Lights with DTS-HD decoding.
- 96/24 Lights with DTS 96/24 decoding.
- **DSD** Lights during playback of DSD (Direct Stream Digital) signals.
- **DSD PCM** Light during DSD (Direct Stream Digital) to PCM conversion.
- **PCM** Lights during playback of PCM signals.
- MSTR Lights during playback of DTS-HD Master Audio signals.

4 MULTI-ZONE

Lights when the MULTI-ZONE feature is active (page 89).

5 FULL BAND

Excluding VSX-830: Lights when the Full Band Phase Control is switched on (page 74).

6 Listening mode indicators

- ALC Lights when the ALC (Auto level control) mode is selected (page 71).
- AUTO SURROUND Lights when the Auto Surround feature is switched on (page 71).
- STREAM DIRECT Lights when Direct/Pure Direct is selected (page 72).
- ADV.SURROUND Lights when one of the Advanced Surround modes has been selected (page 72).
- STANDARD Lights when one of the Standard Surround modes is switched on (page 71).

7 🥐 (PHASE CONTROL)

Lights when the Phase Control is switched on (page 73).

8 ATT

Lights when the input signal level is lowered to reduce distortion (page 85).

9 SOUND

Lights when the **DIALOG E** (Dialog Enhancement) or **TONE** (tone controls) features is selected (page 85).

10 Tuner indicators

- TUNED Lights when a broadcast is being received.
- STEREO Lights when a stereo FM broadcast is being received in auto stereo mode.
- MONO Lights when the mono mode is set using MPX.
- **RDS** Lights when an RDS broadcast is received.

11 🕸

Lights when the sound is muted.

12 Master volume level

Shows the overall volume level.

"---" indicates the minimum level, and "+12dB" indicates the maximum level.

13 Input function indicators

Light to indicate the input function you have selected.

14 Scroll indicators

Light when there are more selectable items when making the various settings.

15 Speaker indicators

In case of VSX-1130/VSX-930: Lights to indicate the current speaker system using **OUT P.** (page 88). *In case of VSX-830:* When the front panel's **SPEAKERS** or remote control's **SP-A/B** are pressed, the currently selected speaker terminal indicator lights.

16 SLEEP

Lights when the receiver is in sleep mode (page 90).

17 Matrix decoding format indicators

- D PRO LOGIC II (VSX-830 only) This lights to indicate D Pro Logic II decoding (page 71).
- Neo:6 When one of the Neo:6 modes of the receiver is on, this lights to indicate Neo:6 processing (page 71).

18 S.RTRV

Lights when the Auto Sound Retriever function is active (page 85).

19 Character display

Displays various system information.

20 Remote control mode indicator

Excluding VSX-830: Lights to indicate the receiver's remote control mode setting. (Not displayed when set to **1**.) (page 110)





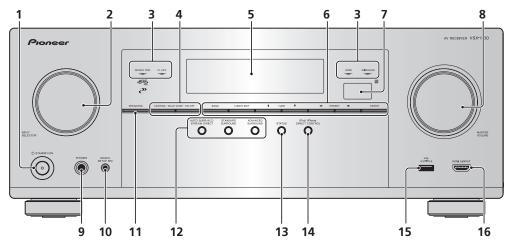




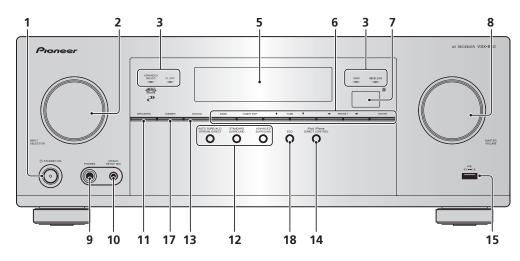


Front panel

VSX-1130/VSX-930







1 O STANDBY/ON

This switches between standby and on for this receiver.

2 INPUT SELECTOR dial

Use to select an input function.

3 Indicators

- MCACC PRO (VSX-1130/VSX-930)/ADVANCED MCACC (VSX-830) Lights when EQ is set to ON in the AUDIO PARAMETER menu (page 85).
- FL OFF Lights when "off" (nothing displayed) is selected with the display's dimmer adjustment (page 90).
- HDMI Blinks when connecting an HDMI-equipped component; lights when the component is connected (page 27).
- WIRELESS Lights when connected to the network with wireless. The light slowly blinks during WAC (Wireless Accessary Configuration) mode (page 53).

4 MULTI-ZONE controls

Excluding VSX-830

If you've made MULTI-ZONE connections (page 32) use these controls to control the sub zone from the main zone (page 89).

5 Character display

See Display on page 15.

6 TUNER controls

- BAND Switches between AM and FM radio bands (page 66).
- TUNER EDIT Use with TUNE ↑/↓, PRESET ←/→ and ENTER to memorize and name stations for recall (page 66)
- TUNE ↑/↓ Find radio frequencies (page 66).
- PRESET ←/→ Find preset stations (page 66).

7 Remote sensor

Receives the signals from the remote control (page 10).

8 MASTER VOLUME dial

9 PHONES jack

Use to connect headphones. When the headphones are connected, there is no sound output from the speakers.

10 MCACC SETUP MIC iack

Use to connect the supplied microphone (page 57).

11 SPEAKERS

Use to change the speaker terminal (page 88).

12 Listening mode buttons

- AUTO SURR/ALC/STREAM DIRECT Switches between Auto Surround (page 71), Auto Level Control and Stream Direct mode (page 72).
- STANDARD SURROUND Press for Standard decoding and to switch various modes (D Pro Logic, Neo:6, Stereo, etc.) (page 71).
- ADVANCED SURROUND Use to switch between the various surround modes (page 72).

13 STATUS

Displays the IP address and information such as selected/set functions and the input signal on the display (page <u>90</u>).

14 iPod iPhone DIRECT CONTROL

Change the receiver's input to the iPod and enable iPod operations on the iPod (page 63).









15 iPod/iPhone terminals

Use to connect your Apple iPod/iPhone as an audio source (<u>page 34</u>), or connect a USB device for audio and photo playback (<u>page 34</u>).

16 HDMI 5 INPUT terminal

Excluding VSX-830 Use for connection to a compatible HDMI device (Video camera, etc.) (page 34).

17 DIMMER

VSX-830 only. Dims or brightens the display (<u>page 90</u>).

18 ECO

VSX-830 only. Use to switch the eco mode type (page 72).









Connecting your equipment (In case of VSX-1130/VSX-930)

Connecting your equipment	10
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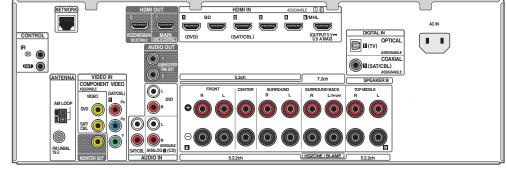
Connecting your equipment

This receiver provides you with many connection possibilities, but it doesn't have to be difficult. This chapter explains the kinds of components you can connect to make up your home theater system.

CAUTION

- · Before making or changing the connections, switch off the power and disconnect the power cord from the power outlet. Plugging in should be the final step.
- When making connections, also keep the power cords of the devices being connected unplugged from the power outlets.
- Depending on the device being connected (CD, DVD or BD player, etc.), the methods of connection and terminal names may differ from the explanations in this manual. Also refer to the operating instructions of the respective devices.

Rear panel



e

The input functions below are assigned by default to the receiver's different input terminals. Refer to The Input Setup menu on page 59 to change the assignments if other connections are used.

Les (Conflict		Input Terminals		
Input function	HDMI	Audio	Component	
BD	(BD)			H
DVD	IN 1			-
SAT/CBL	IN 2	COAXIAL	IN	1
HDMI 3	IN 3			<
HDMI 4	IN 4			-
HDMI 5 (front panel)	IN 5			
HDMI 6/MHL	IN 6			
TV		OPTICAL		-
CD		ANALOG-1		-
				-



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Determining the speakers' application

This unit permits you to build various surround systems, in accordance with the number of speakers you have.

- Be sure to connect speakers to the front left and right channels (L and R).
- It is also possible to only connect one of the surround back speakers $({\bf SB})$ or neither.
- If you have two subwoofers, the second subwoofer can be connected to the **SUBWOOFER 2** terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.
- When neither the top middle, surround back, or front wide speaker is connected, Dolby Atmos does not play. Choose one from Plans [A] to [F] below.

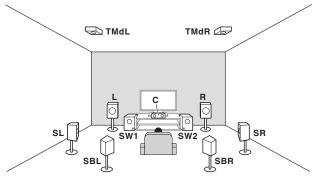
Important

- The **Speaker System** setting must be made if you use any of the connections shown below other than [A] (see <u>Speaker system setting</u> on <u>page 106</u>).
- The speakers from which sound is output can be switched according to the speaker layout/usage pattern (sound is not necessarily output from all connected speakers). Use the **OUT P.** button to switch the speakers from which sound is output. For details, see <u>Switching the speaker terminals</u> on <u>page 88</u>.

[A] 7.2 channel surround system (Surround back/Top middle) connection

*Default setting

• Speaker System setting: 7.2ch/5.2.2ch



A 7.2 ch surround system connects the left and right front speakers (L/R), the center speaker (C), the left and right top middle speakers (TMdL/TMdR), the left and right surround speakers (SL/SR), the left and right surround back speakers (SBL/SBR), and the subwoofers (SW 1/SW 2).

It is not possible to produce sound simultaneously from the surround back speakers and the top middle speakers. This surround system produces a more true-to-life sound from above.

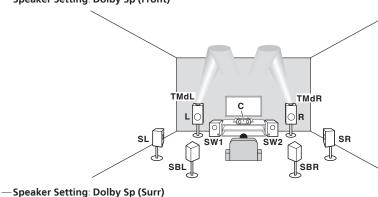
The speakers from which sound is output can be switched using the **OUT P.** button. For details, see <u>Switching</u> the speaker terminals on page 88.

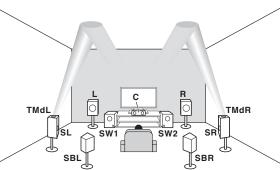
Playback of Dolby Atmos requires a connection with surround back speakers or top middle speakers.

[B] Dolby Enabled Speaker system connection

*Default setting

Speaker System setting: 7.2ch/5.2.2ch
 — Speaker Setting: Dolby Sp (Front)





7.2 ch surround system that consists of connected front left/right speakers (L/R), center speaker (C), left/right surround speakers (SL/SR), left/right surround back speakers (SBL/SBR), subwoofer (SW 1/SW 2), Dolby Enabled Speaker (TMdL/TMdR). For information on Dolby Enabled Speaker, refer to page 24.

Audio will not be output at the same time from the surround back speaker and a Dolby Enabled Speaker. This surround system produces a more true-to-life sound from above.

The speakers from which sound is output can be switched using the **OUT P**. button. For details, see <u>Switching</u> the speaker terminals on page 88.

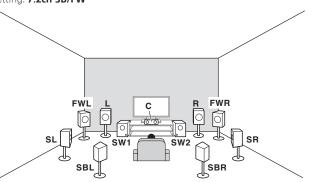
Playback of Dolby Atmos requires a connection with surround back speakers or top middle speakers that use Dolby Enabled Speakers.





[C] 7.2 channel surround system (Surround back/Front wide) connection

• Speaker System setting: 7.2ch SB/FW



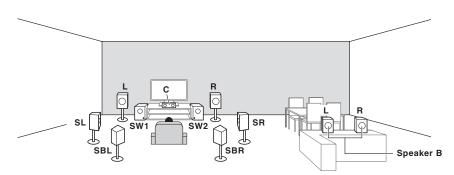
A 7.2 ch surround system connects the left and right front speakers (L/R), the center speaker (C), the left and right front wide speakers (FWL/FWR), the left and right surround speakers (SL/SR), the left and right surround back speakers (SBL/SBR), and the subwoofers (SW 1/SW 2).

It is not possible to produce sound simultaneously from the surround back speakers and the front wide speakers. The speakers from which sound is output can be switched using the **OUT P**. button. For details, see <u>Switching</u> the speaker terminals on page 88.

Playback of Dolby Atmos requires a connection with a surround back speaker or front wide speaker.

[D] 7.2 channel surround system & Speaker B connection

• Speaker System setting: Speaker B



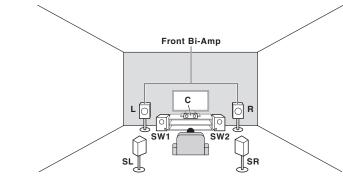
With these connections you can simultaneously enjoy 5.2-channel surround sound in the main zone with stereo playback of the same sound on the B speakers. The same connections also allow for 7.2-channel surround sound in the main zone when not using the B speakers.

The speakers from which sound is output can be switched using the **OUT P.** button. For details, see <u>Switching</u> the speaker terminals on page 88.

Playback of Dolby Atmos requires a connection with surround back speakers. However, when SP: ► A+B ON or Speaker B is selected, Dolby Atmos playback is not possible.



• Speaker System setting: Front Bi-Amp

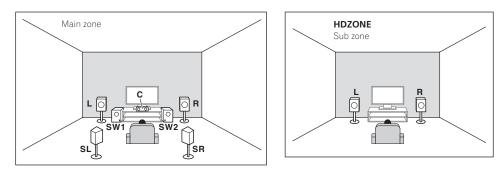




Bi-amping connection of the front speakers for high sound quality with 5.2-channel surround sound. You cannot playback Dolby Atmos with this system.

[F] 5.2 channel surround system & HDZONE connection (Multi Zone)

• Speaker System setting: HDZONE



With these connections you can simultaneously enjoy 5.2-channel surround sound in the main zone with stereo playback on another component in HDZONE. (The selection of input devices is limited.) You cannot playback Dolby Atmos with this system.

Other speaker connections

- Your favorite speaker connections can be selected even if you have fewer than 5.2 speakers (except front left/ right speakers).
- When not connecting a subwoofer, connect speakers with low frequency reproduction capabilities to the front channel. (The subwoofer's low frequency component is played from the front speakers, so the speakers could be damaged.)
- After connecting, be sure to conduct the Full Auto MCACC (speaker environment setting) procedure. See Automatically conducting optimum sound tuning (Full Auto MCACC) on page 57.

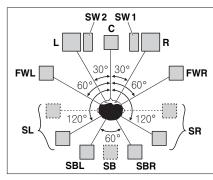
Layout as seen from the side

Placing the speakers

Refer to the chart below for placement of the speakers you intend to connect.

Listener speaker placement guidelines

Listener speakers, such as Left, Right, Center, Left Surround, and Right Surround, are placed at ear level relative to the listener position.

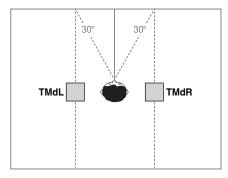


- Place the surround speakers at 120° from the center. If you, (1) use the surround back speaker, and, (2) don't use the front wide speakers, we recommend placing the surround speaker right beside you.
- If you intend to connect only one surround back speaker, place it directly behind you.

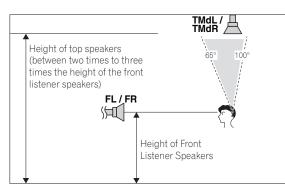
Top speaker placement guidelines

Top middle speakers (TMdL, TMdR) are placed above the listener position on the ceiling.

Layout as seen from above



- All top speaker pairs should preferably be mounted along a vertical line that is a ±30° horizontal from the center-front reference. However, these speakers may be placed as far as the side walls and anywhere between the side walls and the middle of the room, if needed.
- We also recommend that the top forward speakers and top backward speakers be installed at a symmetrical distance from the front and rear of right above, respectively.



- (A) BC
- The height of the Top Middle speakers mounted on the ceiling should preferably be no more than three times the height and no less than two times the height of the front speakers at listener height.
- The Top Middle speakers should be directed straight down, rather than directed at a central listener position.
- We recommend that the top middle speakers be installed slightly forward from right above.

Some tips for improving sound quality

Where you put your speakers in the room has a big effect on the quality of the sound. The following guidelines should help you to get the best sound from your system.

- The subwoofer can be placed on the floor. Ideally, the other speakers should be at about ear-level when you're listening to them. Putting the speakers on the floor (except the subwoofer), or mounting them very high on a wall is not recommended.
- For the best stereo effect, place the front speakers 2 m to 3 m apart, at equal distance from the TV.
- If you're going to place speakers around your CRT TV, use shielded speakers or place the speakers at a sufficient distance from your CRT TV.
- If you're using a center speaker, place the front speakers at a wider angle. If not, place them at a narrower angle.
- Place the center speaker above or below the TV so that the sound of the center channel is localized at the TV screen. Also, make sure the center speaker does not cross the line formed by the leading edge of the front left and right speakers.
- It is best to angle the speakers towards the listening position. The angle depends on the size of the room. Use less of an angle for bigger rooms.
- Surround and surround back speakers should be positioned 60 cm to 90 cm higher than your ears and tilted slightly downward. Make sure the speakers don't face each other. For DVD-Audio, the speakers should be more directly behind the listener than for home theater playback.
- Try not to place the surround speakers farther away from the listening position than the front and center speakers. Doing so can weaken the surround sound effect.

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Connecting the speakers

Each speaker connection on the receiver comprises a positive (+) and negative (-) terminal. Make sure to match these up with the terminals on the speakers themselves.

This unit supports speakers with a nominal impedance of 6 Ω to 16 Ω .

<u>/!</u>\ CAUTION

- These speaker terminals carry HAZARDOUS LIVE voltage. To prevent the risk of electric shock when connecting or disconnecting the speaker cables, disconnect the power cord before touching any uninsulated parts.
- Make sure that all the bare speaker wire is twisted together and inserted fully into the speaker terminal. If any of the bare speaker wire touches the back panel it may cause the power to cut off as a safety measure.

Bare wire connections

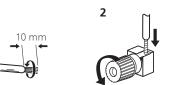
CAUTION

Make sure that all speakers are securely installed. This not only improves sound quality, but also reduces the risk of damage or injury resulting from speakers being knocked over or falling in the event of external shocks such as earthquakes.

Twist exposed wire strands together. 1

1

- 2 Loosen terminal and insert exposed wire.
- 3 Tighten terminal.





3

Notes

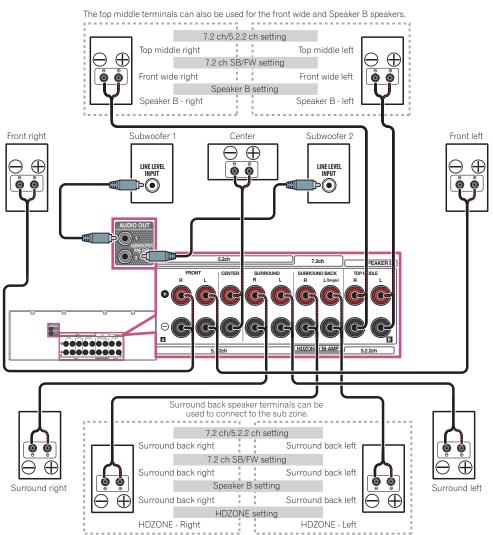
- · Please refer to the manual that came with your speakers for details on how to connect the other end of the speaker cables to your speakers.
- Use an RCA cable to connect the subwoofer. It is not possible to connect using speaker cables.
- If you have two subwoofers, the second subwoofer can be connected to the SUBWOOFER 2 terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.

Installing your speaker system

At the very least, front left and right speakers only are necessary. Note that your main surround speakers should always be connected as a pair, but you can connect just one surround back speaker if you like (it must be connected to the left surround back terminal).

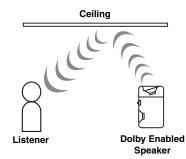
Standard surround connection

When only connecting one surround back speaker, connect it to the SURROUND BACK L (Single) terminals.



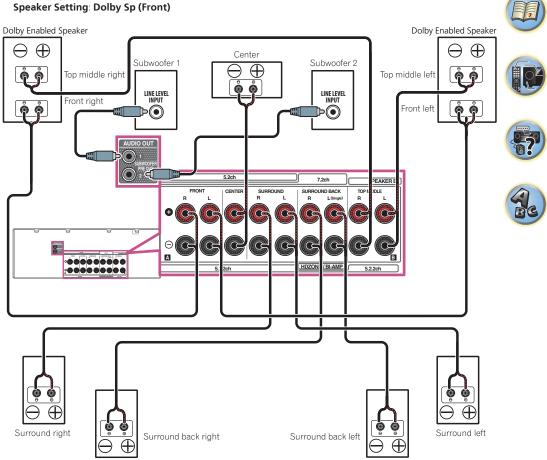
Dolby Enabled Speaker

Dolby enabled speakers bring a new sense of height and immersion to the listening experience without installation of overhead speakers.



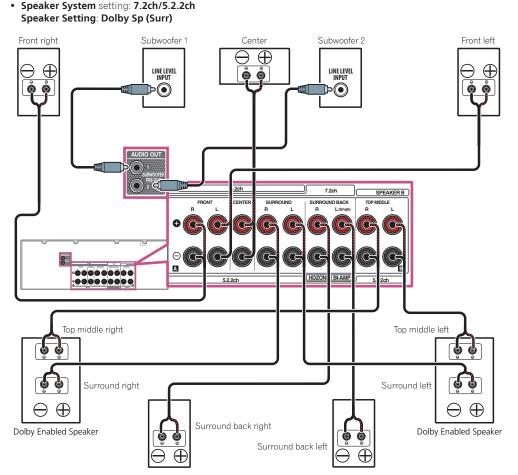
The front or surround speaker and Dolby Enabled Speaker are explained as one product group for the following connections. Connect the Standard surround connection on page 23 of the TOP MIDDLE terminal when using a Dolby Enabled Speaker as an independent product.

• Speaker System setting: 7.2ch/5.2.2ch Speaker Setting: Dolby Sp (Front)



When only connecting one surround back speaker, connect it to the SURROUND BACK L (Single) terminals.

03

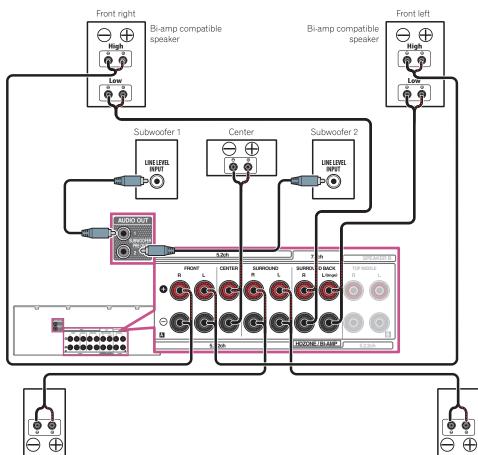


When only connecting one surround back speaker, connect it to the SURROUND BACK L (Single) terminals.

Bi-amping your speakers

Speaker System setting: Front Bi-Amp

Bi-amping is when you connect the high frequency driver and low frequency driver of your speakers to different amplifiers for better crossover performance. Your speakers must be bi-ampable to do this (having separate terminals for high and low) and the sound improvement will depend on the kind of speakers you're using.



Surround right

Surround left

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- Most speakers with both High and Low terminals have two metal plates that connect the High to the Low terminals. These must be removed when you are bi-amping the speakers or you could severely damage the amplifier. See your speaker manual for more information.
- If your speakers have a removable crossover network, make sure you do not remove it for bi-amping. Doing so
 may damage your speakers.
- When neither the top middle, surround back, or front wide speaker is connected, Dolby Atmos does not play.

Bi-wiring your speakers

Your speakers can also be bi-wired if they support bi-amping.

• With these connections, the Speaker System setting makes no difference.

CAUTION

- Don't connect different speakers from the same terminal in this way.
- When bi-wiring as well, heed the cautions for bi-amping shown above.
- To bi-wire a speaker, connect two speaker cords to the speaker terminal on the receiver.

About the audio connection

	Types of cables and terminals	Transferable audio signals
	HDMI	HD audio
Sound signal priority		
al pr	Digital (Coaxial)	Conventional digital audio
sign		
pund	Digital (Optical)	
Š		
	RCA (Analog) (White/Red)	Conventional analog audio

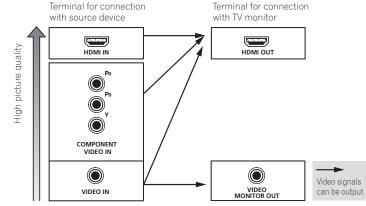
- With an HDMI cable, video and audio signals can be transferred in high quality over a single cable.
- For HD audio, see About HDMI on page 27.

About the video converter

The video converter ensures that all video sources are output through the HDMI OUT 1 and HDMI OUT 2 terminals.

If the TV is only connected to the receiver's composite VIDEO MONITOR OUT jacks, all the other video devices must be connected through composite connections.

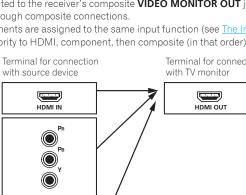
If several video components are assigned to the same input function (see The Input Setup menu on page 59), the converter gives priority to HDMI, component, then composite (in that order).



Notes

- Among the HDMI input signals for this receiver, 1080p can be up-converted to 4K. However, this is limited to when connected with 4K compatible televisions. Please set SCAL settings to AUTO (page 87).
- The video converter may not operate and the video may not be output depending on the input signal. In such case, put the SCAL settings to PURE and connect both the input equipment and the TV with the same type of cable (page 87).
- In principle, input signals from **COMPONENT VIDEO IN** and **VIDEO IN** are output from the HDMI terminal without resolution conversion. Depending on the resolution of the connected television, there maybe cases where video does not output to the screen.

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About HDMI

The HDMI connection transfers uncompressed digital video, as well as almost every kind of digital audio. This receiver incorporates High-Definition Multimedia Interface (HDMI[®]/TM) technology. This receiver supports the functions described below through HDMI connections.

- Digital transfer of uncompressed video (contents protected by HDCP (1080p/24, 1080p/60, etc.))
- HDCP 2.2 compatible terminal: BD, DVD (HDMI IN 1), SAT/CBL (HDMI IN 2), HDMI OUT 1, HDMI OUT 2
- 3D signal transfer
- Deep Color signal transfer
- x.v.Color signal transfer
- ARC (Audio Return Channel)
- 4K signal transfer
- -This may not operate properly, depending on the connected equipment.
- -4K 24p, 4K 25p, 4K 30p, 4K 50p and 4K 60p signals are supported.
- Input of multi-channel linear PCM digital audio signals (192 kHz or less) for up to 8 channels
- Input of the following digital audio formats:
- Dolby Digital, Dolby Digital Plus, DTS, High bitrate audio (Dolby TrueHD, DTS-HD Master Audio, DTS-HD High Resolution Audio), CD, SACD (DSD signal), OBJECT based audio (Atmos)
- Synchronized operation with components using the Control with HDMI function (see Control with HDMI function on page 81)

💋 _{Notes}

- An HDMI connection can only be made with DVI-equipped components compatible with both DVI and High Bandwidth Digital Content Protection (HDCP). If you choose to connect to a DVI connector, you will need a separate adaptor (DVI→HDMI) to do so. A DVI connection, however, does not support audio signals. Consult your local audio dealer for more information.
- If you connect a component that is not compatible with HDCP, an **HDCP ERROR** message is displayed on the front panel display. Some components that are compatible with HDCP still cause this message to be displayed, but so long as there is no problem with displaying video this is not a malfunction.
- Depending on the component you have connected, using a DVI connection may result in unreliable signal transfers.
- This receiver supports SACD, Dolby Digital Plus, Dolby TrueHD and DTS-HD Master Audio. To take advantage of these formats, however, make sure that the component connected to this receiver also supports the corresponding format.
- Use a High Speed HDMI^{®/TM} Cable. If an HDMI cable other than a High Speed HDMI^{®/TM} Cable is used, it may not work properly.
- When an HDMI cable with a built-in equalizer is connected, it may not operate properly.
- Signal transfer is only possible when connected to a compatible component.
- HDMI format digital audio transmissions require a longer time to be recognized. Due to this, interruption in the audio may occur when switching between audio formats or beginning playback.
- Turning on/off the device connected to this unit's **HDMI OUT** terminal during playback, or disconnecting/connecting the HDMI cable during playback, may cause noise or interrupted audio.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries.

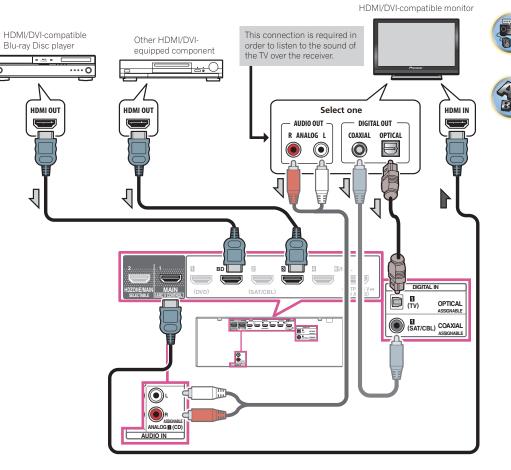
"x.v.Color" and **X.v.Color** are trademarks of Sony Corporation.

Connecting your TV and playback components

Connecting using HDMI

If you have an HDMI or DVI (with HDCP) equipped component (Blu-ray Disc player (BD), etc.), you can connect it to this receiver using a commercially available HDMI cable.

If the TV and playback components support the **Control** with HDMI feature, the convenient **Control** with HDMI functions can be used (see <u>Control with HDMI function</u> on <u>page 81</u>).





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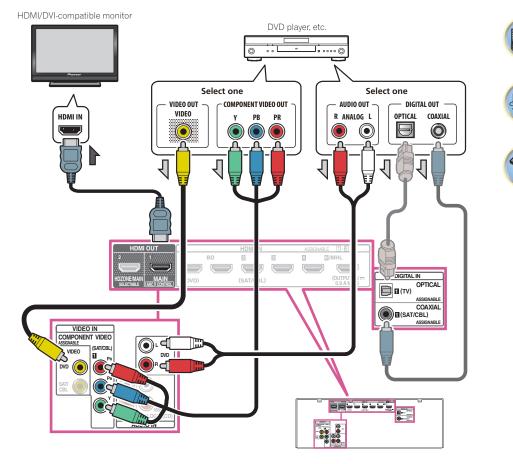
- When connecting to an HDMI/DVI-compatible monitor using the HDMI OUT 2 terminal, switch the HDMI output setting to OUT 2 or OUT 1+2. See <u>Switching the HDMI output</u> on page 88.
 Also, MAIN/HDZONE must be set to MAIN beforehand (page 111).
- For input components, connections other than HDMI connections are also possible (see <u>Connecting your DVD</u> player with no HDMI output on page 28).
- If you want to listen to the sound of the TV over the receiver, connect the receiver and TV with audio cables.
- When the TV and receiver are connected by HDMI connections, if the TV supports the HDMI ARC (Audio Return Channel) function, the sound of the TV can be input to the receiver via the **HDMI OUT** terminal, so there is no need to connect an audio cable. In this case, set **ARC** at **HDMI Setup** to **ON** (see <u>HDMI Setup</u> on page 82).

After setting the **ARC**, some time may be required for the connected device to be recognized and the sound to be produced.

- If you use a coaxial digital audio cable or RCA (analog) audio cable, you'll need to tell the receiver which digital or analog audio input you connected the TV to (see <u>The Input Setup menu</u> on <u>page 59</u>).
- Please refer to the TV's operation manual for directions on connections and setup for the TV.
- If the TV to be connected using HDMI supports 4K/60p, you can switch the 4K/60p signal output setting in accordance with TV performance. When the **4K/60p** setting is changed to **4:4:4**, the video image may not be output normally unless the HDMI cable supports 4K/60p 4:4:4 24 bit (18 Gbps transmission). In such a case, select **4:2:0** (page 88).
- You cannot input 4K/60p 4:4:4 24 bit video from HDMI IN 3 to the IN 6 terminal. Use the BD IN, HDMI IN 1 or HDMI IN 2 terminal.
- The HDMI OUT 2 terminal outputs 4K/60p 4:4:4 24 bit video when MAIN/HDZONE is set to MAIN. When it is set to HDZONE, the 4K/60p 4:4:4 24 bit video is not output.

Connecting your DVD player with no HDMI output

This diagram shows connections of a TV (with HDMI input) and DVD player (or other playback component with no HDMI output) to the receiver.



- If you want to listen to the sound of the TV over the receiver, connect the receiver and TV with audio cables (page 27).
- When the TV and receiver are connected by HDMI connections, if the TV supports the HDMI ARC (Audio Return Channel) function, the sound of the TV can be input to the receiver via the HDMI OUT 1 terminal, so there is no need to connect an audio cable. In this case, set ARC at HDMI Setup to ON (see HDMI Setup on page 82).
- When connecting to a DVD player with an optical digital audio cable or a coaxial digital audio cable, performing input terminal settings are necessary (page 59).
- If HDZONE is set to on, video images connected using a video cable or component cable are not output from the HDMI terminal. To output video images, turn HDZONE off (page 89).

Connecting your TV with no HDMI input

This diagram shows connections of a TV (with no HDMI input) and DVD player (or other playback component) to the receiver.

E Important

- With these connections, the picture is not output to the TV even if the DVD player is connected with an HDMI cable. Connect the receiver and TV using the same type of video cable as used to connect the receiver and player.
- Also, when the receiver and TV are connected by anything other than an HDMI cable, the OSD function allowing display of the receiver's settings, operations, etc., on the TV's screen cannot be used. In this case, watch the receiver's front panel display while performing the various operations and making settings.

• In order to listening to HD audio with this receiver, connect an HDMI cable, and use analog video cable for video signal input.

Depending on the player, it may not be possible to output video signals to both HDMI and other video output (composite, etc.) simultaneously, and it may be necessary to make video output settings. Please refer to the operating instructions supplied with your player for more information.

- If you want to listen to the sound of the TV over the receiver, connect the receiver and TV with audio cables (page 27).
- When connecting to a DVD player with an optical digital audio cable or a coaxial digital audio cable, performing input terminal settings are necessary (page 59).

Connecting a satellite/cable receiver or other set-top box

Satellite and cable receivers, and terrestrial digital TV tuners are all examples of so-called 'set-top boxes'. When you set up the receiver you'll need to tell the receiver which input you connected the set-top box to (see The Input Setup menu on page 59).

AUDIO OUT

R ANALOG L

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Select one

2

DIGITAL OUT

DIGITAL IN

(SAT/CBL)

🔲 🖬 (тv)

OPTICAL

COAXIAL

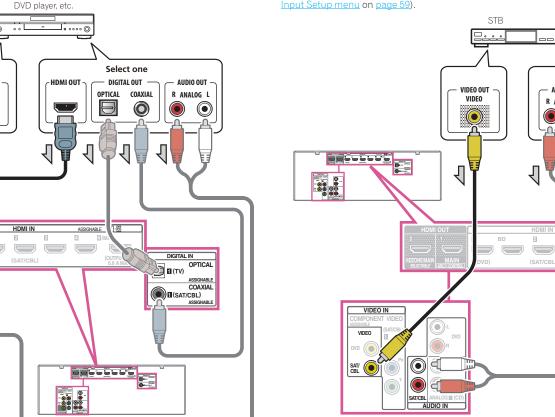
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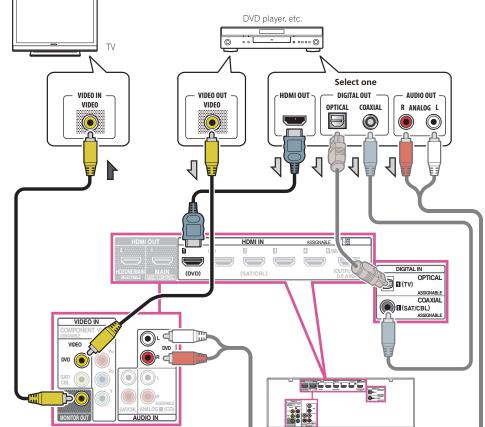
OPTICAL

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29

- If HDZONE is set to on, video images connected using a video cable or component cable are not output from the HDMI terminal. To output video images, turn HDZONE off (page 89).
- If you use an optical digital audio cable or RCA (analog) audio cable, you'll need to tell the receiver which digital input you connected the set-top box to (see The Input Setup menu on page 59).



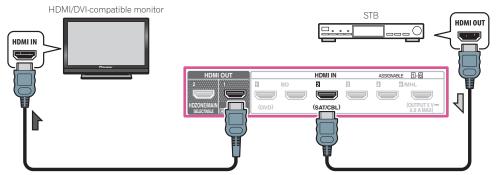




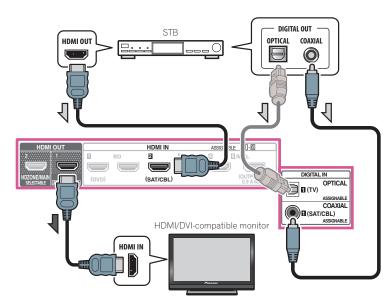
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If your set-top box is equipped with an HDMI output terminal, we recommend connecting it to the receiver's HDMI SAT/CBL IN terminal. When doing so, also connect the receiver and TV by HDMI (see <u>Connecting using HDMI</u> on page 27).



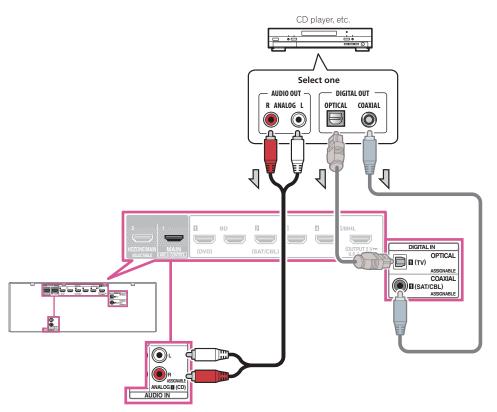
• Even if your set-top box is equipped with an HDMI output terminal, in some cases the sound is output from the digital audio output (optical or coaxial) and only the video is output from the HDMI output terminal. In this case, make the HDMI and digital audio connections as shown below.



— If you use an optical digital audio cable or RCA (analog) audio cable, you'll need to tell the receiver which digital input you connected the set-top box to (see <u>The Input Setup menu</u> on <u>page 59</u>).

Connecting other audio components

This receiver has both digital and analog inputs, allowing you to connect audio components for playback. When you set up the receiver you'll need to tell the receiver which input you connected the component to (see also <u>The Input Setup menu</u> on page 59).

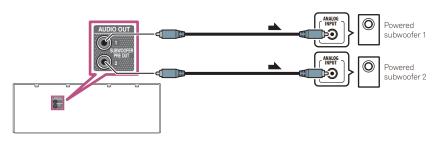


If your turntable has line-level outputs (i.e., it has a built-in phono pre-amp), connect it to the ANALOG IN 1 (CD) inputs instead.





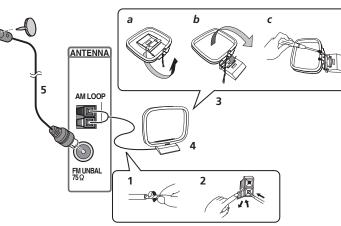
Connecting the subwoofer



- If you're not using a subwoofer, change the front speaker setting (see <u>Speaker Setting</u> on <u>page 103</u>) to LARGE.
- If you have two subwoofers, the second subwoofer can be connected to the **SUBWOOFER 2** terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.

Connecting AM/FM antennas

Connect the AM loop antenna and the FM wire antenna as shown below. To improve reception and sound quality, connect external antennas (see <u>Connecting external antennas</u> on <u>page 31</u>).



1 Pull off the protective shields of both AM antenna wires.

2 Push open the tabs, then insert one wire fully into each terminal, then release the tabs to secure the AM antenna wires.

3 Fix the AM loop antenna to the attached stand.

To fix the stand to the antenna, bend in the direction indicated by the arrow (*fig. a*) then clip the loop onto the stand (*fig. b*).

• If you plan to mount the AM antenna to a wall or other surface, secure the stand with screws (*fig. c*) before clipping the loop to the stand. Make sure the reception is clear.

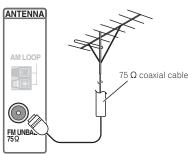
4 Place the AM antenna on a flat surface and in a direction giving the best reception.

5 Connect the FM wire antenna into the FM antenna socket.

For best results, extend the FM antenna fully and fix to a wall or door frame. Don't drape loosely or leave coiled up.

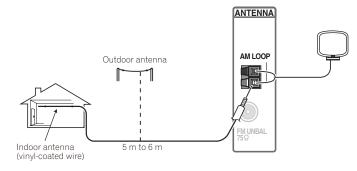
Connecting external antennas

To improve FM reception, connect an external FM antenna to FM UNBAL 75 $\,\Omega$.



To improve AM reception, connect a 5 m to 6 m length of vinyl-coated wire to the **AM LOOP** terminals without disconnecting the supplied AM loop antenna.

For the best possible reception, suspend horizontally outdoors.











Making MULTI-ZONE connections

Equipment connected to this receiver in a different room (sub zone) from a room with this receiver (main zone) can be played by operating this receiver (multi-zone function). This receiver can configure a HDZONE system apart from the main zone. Not only can the same source be played simultaneously in the main and sub zones, different sources can also be played.

By preparing a different amplifier with a HDMI input terminal in the sub zone, the other amplifier and TV monitor can be connected to this receiver. When there is no other amplifier, the speaker terminal of this receiver can be used. High resolution via HDMI can be enjoyed in the sub zone (HDZONE function).

E Important

- The settings must be changed at **ZONE Setup** in order to use the multi-zone function (page 111).
- MAIN/HDZONE at ZONE Setup must be set to HDZONE in order to use the HDZONE function (page 111).

MULTI-ZONE listening options

The following table shows the signals that can be output to HDZONE:

Sub Zone	Input functions available
HDZONE (HDMI)	BD, DVD, SAT/CBL, INTERNET RADIO, PANDORA, Spotify, MEDIA SERVER, FAVOR- ITES, iPod/USB, HDMI 1, HDMI 2, HDMI 3, HDMI 4, HDMI 5, HDMI 6/MHL, BT AUDIO (Outputs HDMI audio and video signals)

/4 Notes

- The inputs that can be switched differ according to how terminals HDMI IN 1 to IN 6 are assigned. Upon shipment from the factory, the input terminals are assigned to DVD, SAT/CBL, HDMI 3, HDMI 4, HDMI 5 and HDMI 6, in order starting from terminal HDMI IN 1.
- The video/audio signals of the RCA analog input terminals, the digital input terminals (OPTICAL and **COAXIAL**) and the **COMPONENT VIDEO** input terminals cannot be up-converted and output to the **HDZONE**.
- When any of the HDMI 3 to HDMI 6/MHL inputs is selected in the main zone, it is only possible to select the same input as in the main zone for the HDZONE. (Inputs other than the ones listed here can be selected.) The same limitations apply when one of the above inputs is selected for the HDZONE.
- When any of the INTERNET RADIO, PANDORA, Spotify, MEDIA SERVER, FAVORITES, iPod/USB or BT AUDIO inputs is selected in the main zone, it is only possible to select the same input as in the main zone for the **HDZONE**. (Inputs other than the ones listed here can be selected.)

The same limitations apply when one of the above inputs is selected for the HDZONE.

MULTI-ZONE setup using HDMI terminal (HDZONE)



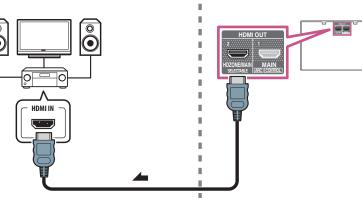
- MAIN/HDZONE at ZONE Setup must be set to HDZONE in order to use the HDZONE function (page 111).
- To use the HDZONE functions, set Control or Control Mode in HDMI Setup to OFF. For details, see HDMI Setup on page 82.
- Connect a separate receiver to the HDMI OUT 2 (HDZONE) terminal on this receiver.

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Main zone

Connect speakers and a TV to the HDZONE receiver as shown on the illustration below.

Sub zone (HDZONE)











Multi-zone connection using the HDMI terminal and speaker terminals (HDZONE)

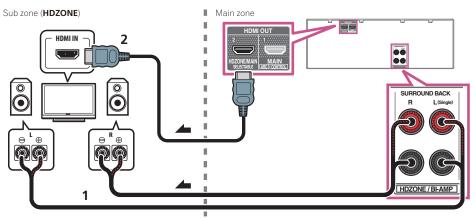
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- The settings must be changed at **ZONE Setup** in order to use the **HDZONE** function (page 111).
- To use the HDZONE functions, set Control or Control Mode in HDMI Setup to OFF. For details, see <u>HDMI</u> Setup on page 82.
- You must select HDZONE in Speaker system setting (page 106) to use this setup.
- 1 Connect the speaker to the surround back speaker terminal.

Which speaker terminal is connected defers depending on the **Speaker System** (page 106) setting. For details, see <u>Installing your speaker system</u> on page 23.

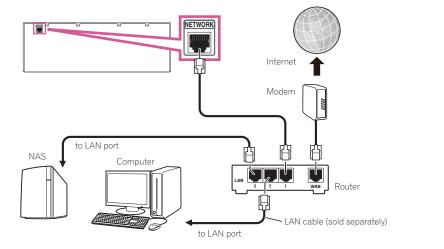
The following figure shows the connection of the surround back speaker terminal.

2 Connect a TV monitor to the HDMI OUT 2 (HDZONE) terminal on this receiver.



Connecting to the network through LAN interface

By connecting this receiver to the network via the LAN terminal, you can listen to Internet radio stations. To listen to Internet radio stations, you must sign a contract with an ISP (Internet Service Provider) beforehand. When connected in this way, you can play audio files stored on the components on the local network, including your computer.



Connect the LAN terminal on this receiver to the LAN terminal on your router (with or without the built-in DHCP server function) with a straight LAN cable (CAT 5 or higher).

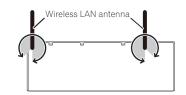
Turn on the DHCP server function of your router. In case your router does not have the built-in DHCP server function, it is necessary to set up the network manually. For details, see <u>Setting network connection</u> on page 51.

LAN terminal specifications

• LAN terminal : Ethernet jack (10BASE-T/100BASE-TX)



- When connecting the wireless LAN, please use with the wireless LAN antenna upright.
- The range of movement of the wireless LAN antenna is as indicated in the diagram below. There is danger that you may break it if unnecessary force is applied.

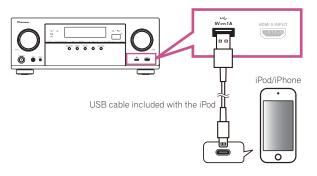


- Refer to the operation manual of the equipment you have as the connected equipment and connection method
 may differ depending on your Internet environment.
- When using a broadband Internet connection, a contract with an Internet service provider is required. For more details, contact your nearest Internet service provider.

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Connecting an iPod

This receiver has a dedicated iPod terminal that will allow you to control playback of audio content from your iPod using the controls of this receiver.

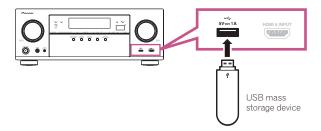


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- An iPod/iPhone can be connected to the receiver. For details on supported models and versions of the respective products, see <u>Playing an iPod</u> on page 63.
- Switch the receiver into standby, and then use the iPod cable to connect your iPod to the iPod/iPhone terminal on the front panel of this receiver.
- For the cable connection, also refer to the operating instructions for your iPod.
- When connecting an iPhone to this unit, keep the iPhone at least 20 cm away from this unit. If the iPhone is kept closer to this unit and a telephone call is received by the iPhone, noise may be output from this device.
- iPod recharging occurs whenever an iPod is connected to this unit. (Recharging is enabled only when the unit's power is turned on.)
- For instructions on playing the iPod, see <u>Playing an iPod</u> on page 63.

Connecting a USB device

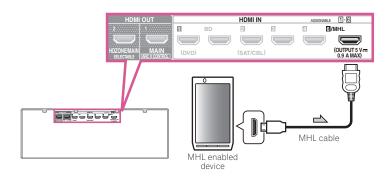
It is possible to play audio and photo files by connecting USB devices to this receiver.



- Switch the receiver into standby then connect your USB device to the USB terminal on the front panel of this receiver.
- This receiver does not support a USB hub.
- For instructions on playing the USB device, see Playing a USB device on page 64.

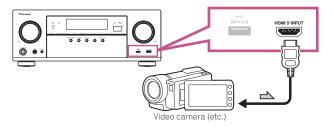
Connecting an MHL-compatible device

An MHL-compatible mobile device can be connected to enjoy 3D/Full-HD videos, high quality multi-channel audio, and photos etc., with charge the battery on the receiver. Use the MHL cable to connect the device.



- Switch the receiver into standby then use the MHL cable to connect your MHL enabled device to the MHL terminal on the rear panel of this receiver.
- To automatically switch to the MHL input when an MHL-compatible device is connected, see <u>MHL Setup</u> on page 109.
- The MHL-compatible device is recharged whenever it is connected to this unit. (Recharging is enabled only when the unit's power is turned on.)
- For instructions on playing the MHL-compatible device, see Playing an MHL-compatible device on page 65.
- Do not place the MHL device on this unit which has the power turned on.

Connecting an HDMI-equipped component to the front panel input





Connecting an IR receiver

If you keep your stereo components in a closed cabinet or shelving unit, or you wish to use the sub zone remote control in another zone, you can use an optional IR receiver (such as a Niles or Xantech unit) to control your system instead of the remote sensor on the front panel of this receiver.

- Remote operation may not be possible if direct light from a strong fluorescent lamp is shining on the IR receiver remote sensor window.
- Note that other manufacturers may not use the IR terminology. Refer to the manual that came with your component to check for IR compatibility.
- If using two remote controls (at the same time), the IR receiver's remote sensor takes priority over the remote sensor on the front panel.

1 Connect the IR receiver sensor to the IR IN jack on the rear of this receiver.

Closet or shelving unit

IR receiver

2 Connect the IR IN jack of another component to the IR OUT jack on the rear of this receiver to link it to the IR receiver.

Please see the manual supplied with your IR receiver for the type of cable necessary for the connection.

Plugging in the receiver

Only plug in after you have connected all your components to this receiver, including the speakers.

- Handle the power cord by the plug part. Do not pull out the plug by tugging the cord, and never touch the power cord when your hands are wet, as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, or other object on the power cord or pinch the cord in any other way. Never make a knot in the cord or tie it with other cables. The power cords should be routed so that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electric shock. Check the power cord once in a while. If you find it damaged, ask your nearest Pioneer authorized independent service company for a replacement.
- Do not use any power cord other than the one supplied with this unit.
- Do not use the supplied power cord for any purpose other than that described below.
- The receiver should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g., when on vacation.
- 1 Plug the supplied power cord into the AC IN socket on the back of the receiver.
- 2 Plug the other end into a power outlet.



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Connecting your equipment (In case of VSX-830)

Connecting your equipment	
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Plugging in the receiver	47



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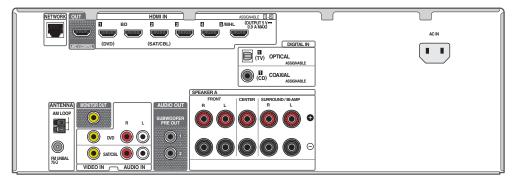
Connecting your equipment

This receiver provides you with many connection possibilities, but it doesn't have to be difficult. This chapter explains the kinds of components you can connect to make up your home theater system.

CAUTION

- · Before making or changing the connections, switch off the power and disconnect the power cord from the power outlet. Plugging in should be the final step.
- When making connections, also keep the power cords of the devices being connected unplugged from the power outlets.
- Depending on the device being connected (CD, DVD or BD player, etc.), the methods of connection and terminal names may differ from the explanations in this manual. Also refer to the operating instructions of the respective devices.

Rear panel



Ø Note The input functions below are assigned by default to the receiver's different input terminals. Refer to The Input

Setup menu on page 59 to change the assignments if other connections are used. Input Terminals Input function HDMI Audio BD (**BD**) DVD IN 1 SAT/CBL IN 2 HDMI 3 IN 3 HDMI 4 IN 4 HDMI 5/MHL IN 5 τν OPTICAL CD COAXIAL

Determining the speakers' application

This unit permits you to build various surround systems, in accordance with the number of speakers you have.

- Be sure to connect speakers to the front left and right channels (L and R).
- If you have two subwoofers, the second subwoofer can be connected to the SUBWOOFER 2 terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.

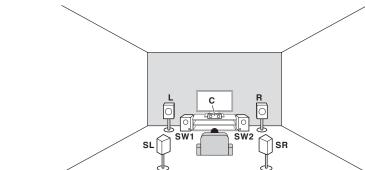
Important

- The Speaker System setting must be made if you use any of the connections shown below other than [A] (see Speaker system setting on page 106)
- Speaker play can be switched on or off by pressing the SP-A/B button (audio may not be output from all connected speakers).

[A] 5.2 channel surround system connection

*Default setting

• Speaker System setting: 5.2ch



The 5.2 channel surround system is the most commonly-used in home theaters.



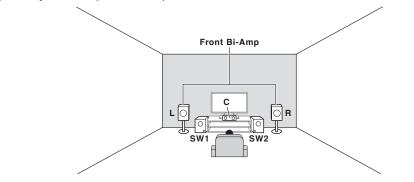






[B] Front Bi-amping connection (High quality surround)

• Speaker System setting: Front Bi-Amp



Play the front speaker in high sound quality (bi-amp).

Other speaker connections

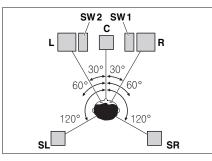
- Your favorite speaker connections can be selected even if you have fewer than 5.2 speakers (except front left/ right speakers).
- When not connecting a subwoofer, connect speakers with low frequency reproduction capabilities to the front channel. (The subwoofer's low frequency component is played from the front speakers, so the speakers could be damaged.)
- After connecting, be sure to conduct the Full Auto MCACC (speaker environment setting) procedure. See Automatically conducting optimum sound tuning (Full Auto MCACC) on page 57.

Placing the speakers

Refer to the chart below for placement of the speakers you intend to connect.

Listener speaker placement guidelines

Listener speakers, such as Left, Right, Center, Left Surround, and Right Surround, are placed at ear level relative to the listener position.



Some tips for improving sound quality

Where you put your speakers in the room has a big effect on the quality of the sound. The following guidelines should help you to get the best sound from your system.

- The subwoofer can be placed on the floor. Ideally, the other speakers should be at about ear-level when you're listening to them. Putting the speakers on the floor (except the subwoofer), or mounting them very high on a wall is not recommended.
- For the best stereo effect, place the front speakers 2 m to 3 m apart, at equal distance from the TV.
- If you're going to place speakers around your CRT TV, use shielded speakers or place the speakers at a sufficient distance from your CRT TV.
- If you're using a center speaker, place the front speakers at a wider angle. If not, place them at a narrower angle.
- Place the center speaker above or below the TV so that the sound of the center channel is localized at the TV screen. Also, make sure the center speaker does not cross the line formed by the leading edge of the front left and right speakers.
- It is best to angle the speakers towards the listening position. The angle depends on the size of the room. Use less of an angle for bigger rooms.
- Surround speakers should be positioned 60 cm to 90 cm higher than your ears and tilted slightly downward. Make sure the speakers don't face each other. For DVD-Audio, the speakers should be more directly behind the listener than for home theater playback.
- Try not to place the surround speakers farther away from the listening position than the front and center speakers. Doing so can weaken the surround sound effect.









39

Connecting the speakers

Each speaker connection on the receiver comprises a positive (+) and negative (-) terminal. Make sure to match these up with the terminals on the speakers themselves.

This unit supports speakers with a nominal impedance of 6 Ω to 16 $\Omega.$

- These speaker terminals carry HAZARDOUS LIVE voltage. To prevent the risk of electric shock when connecting or disconnecting the speaker cables, disconnect the power cord before touching any uninsulated parts.
- Make sure that all the bare speaker wire is twisted together and inserted fully into the speaker terminal. If any of the bare speaker wire touches the back panel it may cause the power to cut off as a safety measure.

Bare wire connections

Make sure that all speakers are securely installed. This not only improves sound quality, but also reduces the risk of damage or injury resulting from speakers being knocked over or falling in the event of external shocks such as earthquakes.

1 Twist exposed wire strands together.

1

2 Loosen terminal and insert exposed wire.

10 mm

3 Tighten terminal.



3

🖉 Notes

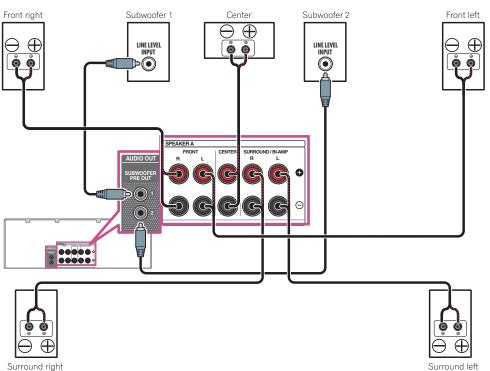
- Please refer to the manual that came with your speakers for details on how to connect the other end of the speaker cables to your speakers.
- Use an RCA cable to connect the subwoofer. It is not possible to connect using speaker cables.
- If you have two subwoofers, the second subwoofer can be connected to the SUBWOOFER 2 terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.



At the very least, front left and right speakers only are necessary. Note that your main surround speakers should always be connected as a pair.

Standard surround connection

Speaker System setting: 5.2ch





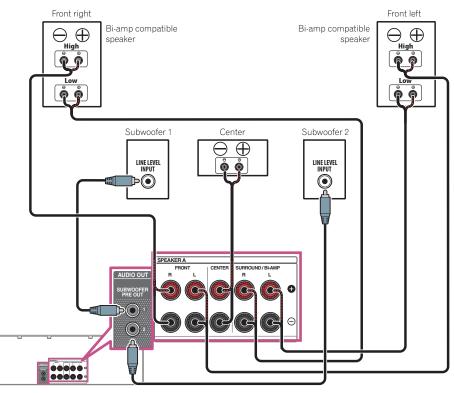
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Bi-amping your speakers

Speaker System setting: Front Bi-Amp

Bi-amping is when you connect the high frequency driver and low frequency driver of your speakers to different amplifiers for better crossover performance. Your speakers must be bi-ampable to do this (having separate terminals for high and low) and the sound improvement will depend on the kind of speakers you're using.



- Most speakers with both **High** and **Low** terminals have two metal plates that connect the **High** to the **Low** terminals. These must be removed when you are bi-amping the speakers or you could severely damage the amplifier. See your speaker manual for more information.
- If your speakers have a removable crossover network, make sure you do not remove it for bi-amping. Doing so may damage your speakers.

Bi-wiring your speakers

Your speakers can also be bi-wired if they support bi-amping.

• With these connections, the Speaker System setting makes no difference.

- Don't connect different speakers from the same terminal in this way.
- When bi-wiring as well, heed the cautions for bi-amping shown above.
- To bi-wire a speaker, connect two speaker cords to the speaker terminal on the receiver.



About the audio connection

	Types of cables and terminals	Transferable audio signals
	HDMI	HD audio
Sound signal priority		
al pı	Digital (Coaxial)	Conventional digital audio
lsign		
pund	Digital (Optical)	
Sc		
	RCA (Analog) (White/Red)	Conventional analog audio

- With an HDMI cable, video and audio signals can be transferred in high quality over a single cable.
- For HD audio, see <u>About HDMI</u> on <u>page 41</u>.







About HDMI

The HDMI connection transfers uncompressed digital video, as well as almost every kind of digital audio. This receiver incorporates High-Definition Multimedia Interface (HDMI^{®/TM}) technology. This receiver supports the functions described below through HDMI connections.

- Digital transfer of uncompressed video (contents protected by HDCP (1080p/24, 1080p/60, etc.))
- HDCP 2.2 compatible terminal: BD, DVD (HDMI IN 1), SAT/CBL (HDMI IN 2), HDMI OUT
- 3D signal transfer
- Deep Color signal transfer
- x.v.Color signal transfer
- ARC (Audio Return Channel)
- 4K signal transfer
- -This may not operate properly, depending on the connected equipment.
- -4K 24p, 4K 25p, 4K 30p, 4K 50p and 4K 60p signals are supported.
- Input of multi-channel linear PCM digital audio signals (192 kHz or less) for up to 8 channels
- Input of the following digital audio formats:
- Dolby Digital, Dolby Digital Plus, DTS, High bitrate audio (Dolby TrueHD, DTS-HD Master Audio, DTS-HD High Resolution Audio), CD, SACD (DSD signal)
- Synchronized operation with components using the Control with HDMI function (see Control with HDMI function on page 81)

🖉 Notes

- An HDMI connection can only be made with DVI-equipped components compatible with both DVI and High Bandwidth Digital Content Protection (HDCP). If you choose to connect to a DVI connector, you will need a separate adaptor (DVI→HDMI) to do so. A DVI connection, however, does not support audio signals. Consult your local audio dealer for more information.
- If you connect a component that is not compatible with HDCP, an **HDCP ERROR** message is displayed on the front panel display. Some components that are compatible with HDCP still cause this message to be displayed, but so long as there is no problem with displaying video this is not a malfunction.
- Depending on the component you have connected, using a DVI connection may result in unreliable signal transfers.
- This receiver supports SACD, Dolby Digital Plus, Dolby TrueHD and DTS-HD Master Audio. To take advantage of these formats, however, make sure that the component connected to this receiver also supports the corresponding format.
- Use a High Speed HDMI^{®/TM} Cable. If an HDMI cable other than a High Speed HDMI^{®/TM} Cable is used, it may not work properly.
- When an HDMI cable with a built-in equalizer is connected, it may not operate properly.
- Signal transfer is only possible when connected to a compatible component.
- HDMI format digital audio transmissions require a longer time to be recognized. Due to this, interruption in the audio may occur when switching between audio formats or beginning playback.
- Turning on/off the device connected to this unit's **HDMI OUT** terminal during playback, or disconnecting/connecting the HDMI cable during playback, may cause noise or interrupted audio.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries.

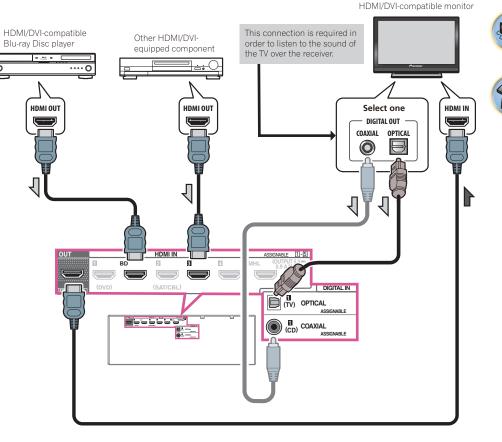
"x.v.Color" and **X.v.Color** are trademarks of Sony Corporation.

Connecting your TV and playback components

Connecting using HDMI

If you have an HDMI or DVI (with HDCP) equipped component (Blu-ray Disc player (BD), etc.), you can connect it to this receiver using a commercially available HDMI cable.

If the TV and playback components support the **Control** with HDMI feature, the convenient **Control** with HDMI functions can be used (see <u>Control with HDMI function</u> on <u>page 81</u>).



• If you want to listen to the sound of the TV over the receiver, connect the receiver and TV with audio cables.

— When the TV and receiver are connected by HDMI connections, if the TV supports the HDMI ARC (Audio Return Channel) function, the sound of the TV can be input to the receiver via the **HDMI OUT** terminal, so there is no need to connect an audio cable. In this case, set **ARC** at **HDMI Setup** to **ON** (see <u>HDMI Setup</u> on page 82).

After setting the **ARC**, some time may be required for the connected device to be recognized and the sound to be produced.

- If you use a coaxial digital audio cable, you'll need to tell the receiver which digital or analog audio input you connected the TV to (see <u>The Input Setup menu</u> on <u>page 59</u>).

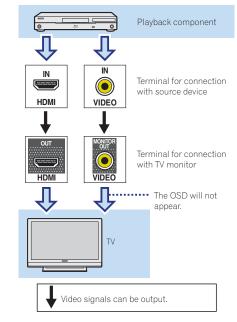
-Please refer to the TV's operation manual for directions on connections and setup for the TV.

- If the TV to be connected using HDMI supports 4K/60p, you can switch the 4K/60p signal output setting in accordance with TV performance. When the **4K/60p** setting is changed to **4:4:4**, the video image may not be output normally unless the HDMI cable supports 4K/60p 4:4:4 24 bit (18 Gbps transmission). In such a case, select **4:2:0** (page 88).
- You cannot input 4K/60p 4:4:4 24 bit video from HDMI IN 3 to the IN 5 terminal. Use the BD IN, HDMI IN 1 or HDMI IN 2 terminal.

About video outputs connection

This receiver is not loaded with a video converter. When you use HDMI cables for connecting to the input device, the same cables should be used for connecting to the TV.

The signals input from the analog (composite) video inputs of this unit will not be output from the **HDMI OUT** terminal.









Connecting your TV with no HDMI input

This diagram shows connections of a TV (with no HDMI input) and DVD player (or other playback component) to the receiver.

Important

- With these connections, the picture is not output to the TV even if the DVD player is connected with an HDMI cable. Connect the receiver and TV using the same type of video cable as used to connect the receiver and player.
- Also, when the receiver and TV are connected by anything other than an HDMI cable, the OSD function allowing display of the receiver's settings, operations, etc., on the TV's screen cannot be used. In this case, watch the receiver's front panel display while performing the various operations and making settings.

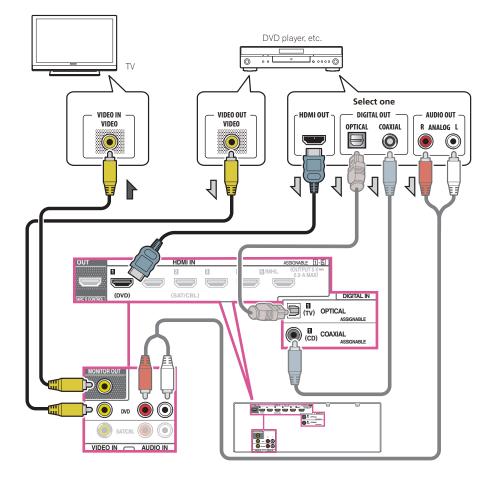
• In order to listening to HD audio with this receiver, connect an HDMI cable, and use analog video cable for video signal input.

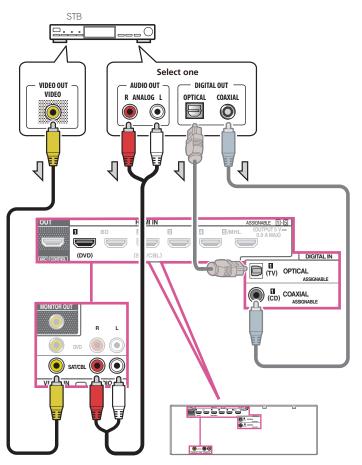
Depending on the player, it may not be possible to output video signals to both HDMI and other video output (composite, etc.) simultaneously, and it may be necessary to make video output settings. Please refer to the operating instructions supplied with your player for more information.

- If you want to listen to the sound of the TV over the receiver, connect the receiver and TV with audio cables (page 41).
- When connecting to a DVD player with an optical digital audio cable or a coaxial digital audio cable, performing input terminal settings are necessary (page 59).

Connecting a satellite/cable receiver or other set-top box

Satellite and cable receivers, and terrestrial digital TV tuners are all examples of so-called 'set-top boxes'. When you set up the receiver you'll need to tell the receiver which input you connected the set-top box to (see <u>The</u> <u>Input Setup menu</u> on <u>page 59</u>).

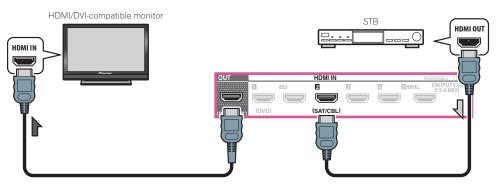




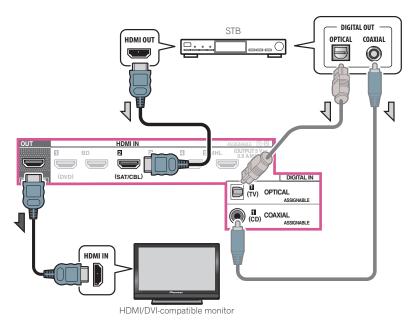




- When connecting to a satellite/cable TV tuner with an optical digital audio cable or a coaxial digital audio cable, performing input terminal settings are are necessary (page 59).
- If your set-top box is equipped with an HDMI output terminal, we recommend connecting it to the receiver's
 HDMI SAT/CBL IN terminal. When doing so, also connect the receiver and TV by HDMI (see <u>Connecting using HDMI</u> on page 41).



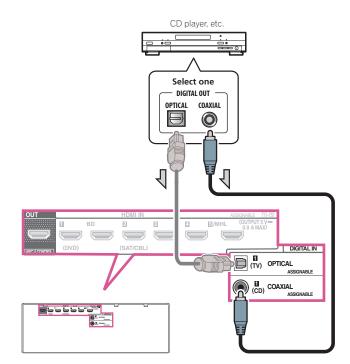
• Even if your set-top box is equipped with an HDMI output terminal, in some cases the sound is output from the digital audio output (optical or coaxial) and only the video is output from the HDMI output terminal. In this case, make the HDMI and digital audio connections as shown below.



— When connecting to a satellite/cable TV tuner with an optical digital audio cable or a coaxial digital audio cable, performing input terminal settings are are necessary (page 59).

Connecting other audio components

This receiver has both digital and analog inputs, allowing you to connect audio components for playback. When you set up the receiver you'll need to tell the receiver which input you connected the component to (see also <u>The Input Setup menu</u> on <u>page 59</u>).



• If you use an optical digital audio cable, you'll need to tell the receiver which digital input you connected the player to (see <u>The Input Setup menu</u> on page 59).

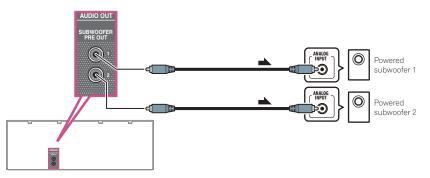








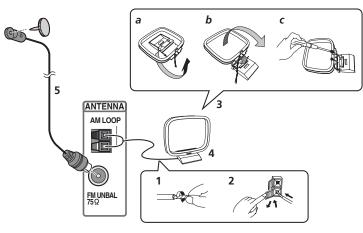
Connecting the subwoofer



- If you're not using a subwoofer, change the front speaker setting (see <u>Speaker Setting</u> on <u>page 103</u>) to LARGE.
- If you have two subwoofers, the second subwoofer can be connected to the **SUBWOOFER 2** terminal. Connecting two subwoofers increases the bass sound to achieve more powerful sound reproduction. In this case, the same sound is output from the two subwoofers.

Connecting AM/FM antennas

Connect the AM loop antenna and the FM wire antenna as shown below. To improve reception and sound quality, connect external antennas (see <u>Connecting external antennas</u> on <u>page 45</u>).



1 Pull off the protective shields of both AM antenna wires.

2 Push open the tabs, then insert one wire fully into each terminal, then release the tabs to secure the AM antenna wires.

3 Fix the AM loop antenna to the attached stand.

To fix the stand to the antenna, bend in the direction indicated by the arrow (*fig. a*) then clip the loop onto the stand (*fig. b*).

• If you plan to mount the AM antenna to a wall or other surface, secure the stand with screws (*fig. c*) before clipping the loop to the stand. Make sure the reception is clear.

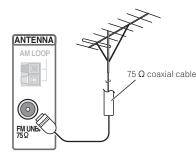
4 Place the AM antenna on a flat surface and in a direction giving the best reception.

5 Connect the FM wire antenna into the FM antenna socket.

For best results, extend the FM antenna fully and fix to a wall or door frame. Don't drape loosely or leave coiled up.

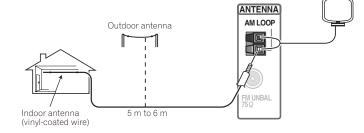
Connecting external antennas

To improve FM reception, connect an external FM antenna to FM UNBAL 75 $\,\Omega$.



To improve AM reception, connect a 5 m to 6 m length of vinyl-coated wire to the **AM LOOP** terminals without disconnecting the supplied AM loop antenna.

For the best possible reception, suspend horizontally outdoors.



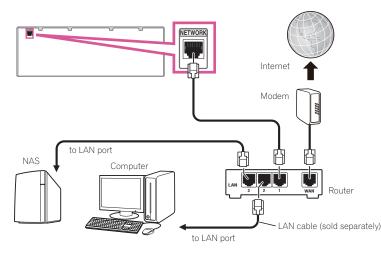






Connecting to the network through LAN interface

By connecting this receiver to the network via the LAN terminal, you can listen to Internet radio stations. To listen to Internet radio stations, you must sign a contract with an ISP (Internet Service Provider) beforehand. When connected in this way, you can play audio files stored on the components on the local network, including your computer.



Connect the LAN terminal on this receiver to the LAN terminal on your router (with or without the built-in DHCP server function) with a straight LAN cable (CAT 5 or higher).

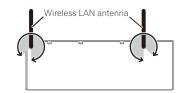
Turn on the DHCP server function of your router. In case your router does not have the built-in DHCP server function, it is necessary to set up the network manually. For details, see <u>Setting network connection</u> on page 51.

LAN terminal specifications

• LAN terminal : Ethernet jack (10BASE-T/100BASE-TX)

💋 Notes

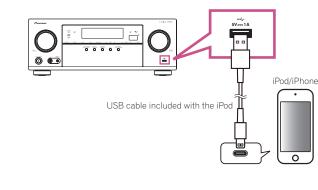
- When connecting the wireless LAN, please use with the wireless LAN antenna upright.
- The range of movement of the wireless LAN antenna is as indicated in the diagram below. There is danger that you may break it if unnecessary force is applied.



- Refer to the operation manual of the equipment you have as the connected equipment and connection method may differ depending on your Internet environment.
- When using a broadband Internet connection, a contract with an Internet service provider is required. For more details, contact your nearest Internet service provider.

Connecting an iPod

This receiver has a dedicated iPod terminal that will allow you to control playback of audio content from your iPod using the controls of this receiver.



w³ Tip

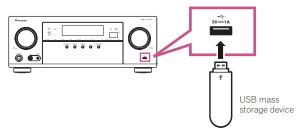
• An iPod/iPhone can be connected to the receiver. For details on supported models and versions of the respective products, see <u>Playing an iPod</u> on page 63.

• Switch the receiver into standby, and then use the iPod cable to connect your iPod to the iPod/iPhone terminal on the front panel of this receiver.

- For the cable connection, also refer to the operating instructions for your iPod.
- When connecting an iPhone to this unit, keep the iPhone at least 20 cm away from this unit. If the iPhone is kept closer to this unit and a telephone call is received by the iPhone, noise may be output from this device.
- iPod recharging occurs whenever an iPod is connected to this unit. (Recharging is enabled only when the unit's power is turned on.)
- For instructions on playing the iPod, see <u>Playing an iPod</u> on page 63.

Connecting a USB device

It is possible to play audio and photo files by connecting USB devices to this receiver.



- Switch the receiver into standby then connect your USB device to the USB terminal on the front panel of this receiver.
- This receiver does not support a USB hub.
- For instructions on playing the USB device, see Playing a USB device on page 64.



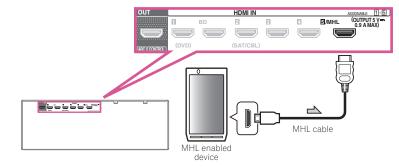
Plugging in the receiver

Only plug in after you have connected all your components to this receiver, including the speakers.

- Handle the power cord by the plug part. Do not pull out the plug by tugging the cord, and never touch the power cord when your hands are wet, as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, or other object on the power cord or pinch the cord in any other way. Never make a knot in the cord or tie it with other cables. The power cords should be routed so that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electric shock. Check the power cord once in a while. If you find it damaged, ask your nearest Pioneer authorized independent service company for a replacement.
- Do not use any power cord other than the one supplied with this unit.
- Do not use the supplied power cord for any purpose other than that described below.
- The receiver should be disconnected by removing the mains plug from the wall socket when not in regular use, e.g., when on vacation.
- 1 Plug the supplied power cord into the AC IN socket on the back of the receiver.
- 2 Plug the other end into a power outlet.

Connecting an MHL-compatible device

An MHL-compatible mobile device can be connected to enjoy 3D/Full-HD videos, high quality multi-channel audio, and photos etc., with charge the battery on the receiver. Use the MHL cable to connect the device.



- Switch the receiver into standby then use the MHL cable to connect your MHL enabled device to the MHL terminal on the rear panel of this receiver.
- To automatically switch to the MHL input when an MHL-compatible device is connected, see <u>MHL Setup</u> on page 109.
- The MHL-compatible device is recharged whenever it is connected to this unit. (Recharging is enabled only when the unit's power is turned on.)
- For instructions on playing the MHL-compatible device, see <u>Playing an MHL-compatible device</u> on page 65.
- Do not place the MHL device on this unit which has the power turned on.







Basic Setup

Initial settings of this receiver	49
Setting with a special application (Start-up Navi)	
Perform settings using the AVNavigator built into this receiver	49
Setting by referring to the operating instructions	51



P



Initial settings of this receiver

There are three ways to initialize this receiver.

- Setting with a special application (Start-up Navi) on page 49
- Perform settings using the AVNavigator built into this receiver on page 49
- <u>Setting by referring to the operating instructions on page 51</u>

Important

- After unpacking, turning on the power, and returning to initial factory settings (page 91), the **WIRELESS** indicator slowly flashes. This is not a malfunction.
- This receiver is designed to automatically enter WAC mode when turning on the power of this receiver in the initial factory settings state. For details about WAC mode, please refer to page 53. After the network settings (page 51) have been completed, the WIRELESS indicator flashing disappears.
- When the network is not connected, even though the **WIRELESS** indicator is blinking, there is no problem using it in this state.

Setting with a special application (Start-up Navi)

If you have a smart phone or tablet, once you download and start the special application, the settings can be done according to the instructions by the application.

• If you have an iPhone or iPod touch



• If you have an Android device



Perform settings using the AVNavigator built into this receiver

If you have a Windows PC or Mac, the settings can be performed using the AVNavigator built into this receiver.

How to use the built-in AVNavigator

The built-in AVNavigator is equipped with **Wiring Navi**, which allows you to perform connection of this receiver and initial settings in interactive mode. By simply following the screen prompts to connect and set the unit, highly accurate initial settings can be performed easily.

Additionally, in order to use various functions easily, contents linked to the receiver can be used.

Operating Environment

- AVNavigator can be used in the following environments.
- Windows PC: Microsoft[®] Windows Vista[®]/Windows[®] 7/Windows[®] 8/Windows[®] 8.1
- —iPad/iPhone/iPod touch: iOS 6.1 or later
- -Android operation confirmation device:
- SONY XPERIA Z1 (OS 4.2.2) SAMSUNG GALAXY S5 (OS 4.4.2) HTC One S (OS 4.1.1) Google Nexus 5 (OS 4.4.4)
- AVNavigator uses an Internet browser. The following browsers are supported:
- -Mac/iPad/iPhone/iPod touch: Safari 6.0, 7.0
- —Android device: Android browser
- Depending on the computer network setting or security setting, AVNavigator may not operate.

Using AVNavigator

Important

- Connect the LAN terminal to the network (pages <u>33, 46</u>).
- 1 Press () STANDBY/ON to switch on the receiver and your computer.

2 Launch AVNavigator.

Operate AVNavigator by following the screen prompts of your computer, etc.

- If using a Windows PC, complete the below steps to start up.
 - ① Start up Internet Explorer on your PC (open any random Internet page).
 - ② Press STATUS on the remote control and check the front panel display on the receiver (the IP address of the receiver will appear).



If 0.0.0.0 or 169.254.112.202 appears in the address, it indicates that the receiver is not connected to the network. Check to make sure that the receiver and router are properly connected.

③ Enter number in ② above in the field in Internet Explorer shown below and then press the ENTER key.











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• With a Windows PC, you can use the following method to launch AVNavigator. Launch Explorer and right-click <VSX-1130>, <VSX-930> or <VSX-830> displayed in the 'Network' folder, then click 'View device webpage'.

🕒 💿 = 💁 + Network	,		Search Network	- 1
Organize * Install	Network and Sharing Center Ad	d a printer 🛛 🛪	8 • 🗇	. 6
🚖 Favorites	Computer (1)			
🔚 Libraries	 Media Devices (1) 			
🝓 Homegroup	(Model No.)			
🛤 Computer				
🙀 Network				
a) (Model No.)	Categories: Media Devices			

• On a Mac, launch Safari and click <VSX-1130>, <VSX-930> or <VSX-830> displayed in 'Bonjour' on the Bookmarks bar.



- If 'Bonjour' is not displayed, tick the 'Include Bonjour in the Favorites bar' check box on the 'Advanced' tab in the Safari 'Preferences...' menu.



 When using an iPad/iPhone/iPod touch, from the App Store, download iControlAV5, which is a free application. After launching iControlAV5, follow the instructions on the screen. After that, on the Home screen, tap 'AVNavigator' or the icon.





• When using an Android device, from Google Play Store, download iControlAV5, which is a free application. After launching iControlAV5, follow the instructions on the screen. After that, on the Home screen, tap the icon.



3 Select and use the desired function.

AVNavigator includes the following functions:

- Wiring Navi Guides you through connections and initial settings in dialog fashion. High precision initial settings can be made easily.
- Interactive Operation Guide (excluding VSX-830): A one-stop guide for learning functions by actually experiencing the operation. This receiver will be operated using the remote control on the screen and you can view function explanations or videos. Explanations of the functions that are operated using the remote control are also automatically displayed.
- Network Setup Used to make network-related settings.

Setting by referring to the operating instructions

Use HOME MENU when referring to the operating instructions for various settings.

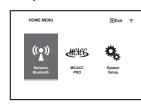
About the Home Menu

This receiver's Home Menu (**HOME MENU**) can be used to make various settings and to check and adjust items that have been set.

 With factory default settings, the Home Menu screen will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.

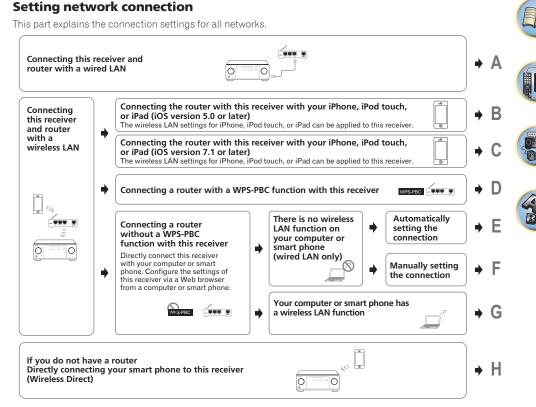
- HOME MENU may not start immediately after turning the main power of this receiver on or when settings have been changed. In such case, operate after a while.
- 1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode.
- 2 To display the Home Menu screen, press HOME MENU on the remote control.



A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/\leftarrow/\rightarrow$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

The top level in the Home Menu is as shown below. Refer to the respective explanations to set, check and adjust as necessary.

- Network, Bluetooth Conducts the setup necessary to connect this unit to the network (see <u>Setting network connection</u> on page 51).
- MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) Use this to make automatic settings and detailed manual settings for the surround sound. For details, see <u>Making receiver settings from the MCACC</u> <u>PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu on page 99</u>.
- System Setup Use this to make various settings related to this system. For details, see <u>Making receiver settings from the System Setup menu</u> on page 106.



- When connection method B, C, D, E, F, or G is selected, check that the LAN cable is not connected to this receiver.
- · Warning when connecting a wireless LAN router with this receiver
- SSID is compatible only with single-byte alphanumerical characters and some symbols such as the underbar. If characters other than these are used, change the SSID before executing network settings. Refer to the user's manual for your router for information on SSID.

• Some network functions may not be used with Wireless Direct. iControl AV5, AirPlay, and HTC connect can be used. When setting this receiver by A–H, first show the settings screen using the following procedures.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/ \leftarrow / \rightarrow$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

2 Select 'Network, Bluetooth' from the HOME MENU.

3 Select the setting you want to adjust.

If you are doing this for the first time, you may want to adjust these settings in order:

- Network Information The setting status of the following network-related items can be checked (page 56).
- **Network Type** Select the network connection method.
- Network Connection Connect to the network.
- Network Option Set the network other than for connection (page 56).
- Bluetooth Setup Set Bluetooth (page 56).

A: Connecting with a LAN cable (wired LAN)

Simply connect the LAN cable. Network settings are unnecessary.

- When wireless LAN is set once, the following procedures 1 through 3 must be executed.
- Only when connected to a network without a DHCP server function, the following network settings are necessary. Check the setting value with the provider or network administrator in advance when executing the settings. Also refer to the user's manual for network equipment.
- IP Address

The IP address to be entered must be defined within the following ranges. If the IP address defined is beyond the following ranges, you cannot play back audio files stored on components on the network or listen to Internet radio stations.

Class A: 10.0.0.1 to 10.255.255.254 Class B: 172.16.0.1 to 172.31.255.254 Class C: 192.168.0.1 to 192.168.255.254

Subnet Mask

In case an xDSL modem or a terminal adapter is directly connected to this receiver, enter the subnet mask provided by your ISP on paper. In most cases, enter 255.255.255.0.

• Default Gateway

In case a gateway (router) is connected to this receiver, enter the corresponding IP address.

• Primary DNS Server/Secondary DNS Server

In case there is only one DNS server address provided by your ISP on paper, enter it in the '**Primary DNS Server**' field. In case there are more than two DNS server addresses, enter '**Secondary DNS Server**' in the other DNS server address field.

• Proxy Hostname/Proxy Port

This setting is required when you connect this receiver to the Internet via a proxy server. Enter the IP address of your proxy server in the '**Proxy Hostname**' field. Also, enter the port number of your proxy server in the '**Proxy Port**' field.

- 1 Select 'Network Type' from the Network, Bluetooth menu.
- 2 Use ←/⇒ to select 'Wired'.

3 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

- 4 Press HOME MENU.
- 5 Select 'Network, Bluetooth' from the HOME MENU.
- 6 Select 'Network Connection' from the Network, Bluetooth menu.
- 7 Select 'Wired' from the Network Connection menu.

8 Select the DHCP setting you want.

When you select **ON**, the network is automatically set up, and you do not need to follow Steps 9. Proceed with Step 10.

If there is no DHCP server on the network and you select **ON**, this receiver will use its own Auto IP function to determine the IP address.

 The IP address determined by the Auto IP function is 169.254.X.X. You cannot listen to an Internet radio station if the IP address is set for the Auto IP function.

9 Enter the IP Address, Subnet Mask, Default Gateway, Primary DNS Server and Secondary DNS Server.

Press \uparrow/\downarrow to select a number and \leftarrow/\Rightarrow to move the cursor.

10 Select 'OFF' or 'ON' for the Enable Proxy Server setting to deactivate or activate the proxy server.

In case you select 'OFF', proceed with Step 13. In case you select 'ON', on the other hand, proceed with Step 11.

- 11 Enter the address of your proxy server or the domain name.
- Use \uparrow/\downarrow to select a character, \leftarrow/\Rightarrow to set the position, and **ENTER** to confirm your selection.
- 12 Enter the port number of your proxy server.
- Use \uparrow/\downarrow to select a character, \leftarrow/\Rightarrow to set the position, and **ENTER** to confirm your selection.
- 13 Select 'OK' to confirm the IP Address/Proxy setup.

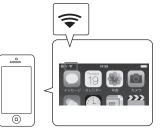
B: Setting this receiver with iOS equipment (iOS version 5.0 or later)

The Wi-Fi settings of your iPod/iPhone/iPad (equipment with iOS version 5.0 or later) can be applied to this receiver.

- The iOS equipment and router must be connected through Wi-Fi.
- Check that the LAN cable is not connected to this receiver.

1 Unlock the iPod/iPhone/iPad.

Check that the Wi-Fi operation mark is shown on the screen of the iOS equipment.



- 2 Select 'Network Type' from the Network, Bluetooth menu.
- 3 Use \Leftarrow/\Rightarrow to select 'Wireless'.

4 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

- 5 Press HOME MENU.
- 6 Select 'Network, Bluetooth' from the HOME MENU.
- 7 Select 'Network Connection' from the Network, Bluetooth menu.
- 8 Select 'Wireless' from the Network Connection menu.
- 9 Select 'Wi-Fi Sharing'
- 10 Connect the iOS equipment to the iPod/iPhone terminal on the front panel.
- 11 Select 'START', then press ENTER.
- 12 Tap [Allow] on iPod/iPhone/iPad.
- The Wi-Fi settings of your iPod/iPhone/iPad is applied to this receiver.







C: Perform this receiver's settings using the iOS equipment (iOS version 7.1 or later)

The Wi-Fi settings of your iPod/iPhone/iPad (equipment with iOS version 7.1 or later) can be applied to this receiver.

- The iOS equipment and router must be connected through Wi-Fi.
- Check that the LAN cable is not connected to this receiver.

1 Unlock the iPod/iPhone/iPad.

Check that the Wi-Fi operation mark is shown on the screen of the iOS equipment.

- 2 Select 'Network Type' from the Network, Bluetooth menu.
- 3 Use \Leftarrow/\Rightarrow to select 'Wireless'.

Select 'OK', then press ENTER. 4

The confirmation screen will be displayed. Select 'YES' and press ENTER. The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.





A = 1

A = (1)

In [Set new AIRPLAY speaker], select Friendly Name (iOS 7) or SSID (iOS 6 or older).

Settings Wi-Fi

Wi-Fi

Other..

CHOOSE A NETWORK 000A79E7302D na

Ask to Join Networks

lancel AirPlay Setup

J

This AirPlay speaker will be set up to join

5 Press HOME MENU.

- 6 Select 'Network, Bluetooth' from the HOME MENU.
- 7 Select 'Network Connection' from the Network, Bluetooth menu.
- Select 'Wireless' from the Network Connection menu. 8

9 Select 'Wireless Accessory Config.'.

WAC (Wireless Accessory Configuration) mode is a mode that allows you to set the network settings by operating this receiver as a Wi-Fi access point.

10 Select 'START', then press ENTER.

The SSID and IP address will be displayed when WAC is active.

11 Select 'OK', then press ENTER.

12 Operate the screen of the iPhone, iPod touch, or iPad.

- Check that the Wi-Fi mark is displayed on the screen of the iPhone, iPod touch, or iPad. If the mark is not displayed, activate Wi-Fi, and connect the iPhone, iPod touch, or iPad to a wireless LAN router.
- · Select the settings.



Select [Next]





AirPlay Setup ting up this AirPlay sp "XXXXXXX" Naiting for VSX.1130 ***

· Wait until the processing is complete.







• Select [Complete].





This screen is iOS 7.1. When software other than iOS 7.1 is installed on an iPhone, iPod touch, or iPad, the operation for the iPhone, iPod touch, or iPad may change.

D: WPS connection settings

WPS is an abbreviation for "Wi-Fi Protected Setup". This is a standard stipulated by the Wi-Fi Alliance, and connection to WPS compatible equipment and security settings can be performed using simple operations. This receiver is compatible with PBC (push button) method and PIN method.

- Check that your router is compatible with PBC. If the router is not PBC-compatible, connect using the PIN method.
- Check that the LAN cable is not connected to this receiver.
- 1 Select 'Network Type' from the Network, Bluetooth menu.
- 2 Use ←/⇒ to select 'Wireless'.

3 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

- 4 Press HOME MENU.
- 5 Select 'Network, Bluetooth' from the HOME MENU.
- 6 Select 'Network Connection' from the Network, Bluetooth menu.
- 7 Select 'Wireless' from the Network Connection menu.
- 8 Select 'WPS'.

9 At 1/4, select 'PBC' or 'PIN Input' and press ENTER.

When the router is compatible with the PBC function, select 'PBC'.

- PBC (Push-button method) Connection settings are automatically done by simply pressing the WPS button on wireless LAN equipment that is WPS-compatible. Follow the instructions shown on the screen of this receiver. This setting method is available when there is a WPS button on the wireless LAN equipment which is WPS-compatible, and is the easiest method for connection settings.
- **PIN Input** Indicate the SSID list of connectable access points, and select the desired access point for connection. Connection settings are performed by entering the access point to which the 8-digit PIN code shown on the screen of this receiver is to be connected.
- 1 Select the connection point to which the wireless LAN is to be connected with ↑/↓, and press **ENTER**. The PIN code will be shown.
- 2 Check the PIN code of this receiver.

3 Enter the PIN code in the access point.

Enter in the access point whose indicated PIN code is shown within two minutes after closing the PIN code confirmation screen. Success or failure of connection will be indicated on the screen. The PIN code input method varies depending on wireless LAN equipment. For details, refer to the user's manual of the wireless LAN equipment.

E: Automatically setting wireless LAN connection

- 1 Select 'Network Type' from the Network, Bluetooth menu.
- 2 Use \Leftarrow/\Rightarrow to select 'Wireless'.

3 Select 'OK', then press ENTER.

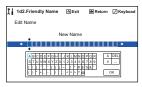
The confirmation screen will be displayed. Select '**YES**' and press **ENTER**. The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

- 4 Press HOME MENU.
- 5 Select 'Network, Bluetooth' from the HOME MENU.
- 6 Select 'Network Connection' from the Network, Bluetooth menu.
- 7 Select 'Wireless' from the Network Connection menu.
- 8 At 1/\$, select 'Auto' and press ENTER.

9 Select the connection point to which the wireless LAN is to be connected with \uparrow/\downarrow , and press ENTER.

10 Enter the password or WEP KEY at ↑/↓/←/→, and press ENTER.

- ←/→ Moves the cursor.
- ↑/↓ Selects the character to be entered.
- VIDEO P. The cursor switches the input character part and software keyboard part every time the button is pressed. A character is deleted by pressing the **DEL** on the software keyboard.



11 Select the DHCP setting you want.

Set the IP address of this receiver and the proxy. For details, see <u>A: Connecting with a LAN cable (wired LAN)</u> on page 52.

F: Manually setting wireless LAN connection

- 1 Select 'Network Type' from the Network, Bluetooth menu.
- 2 Use ←/→ to select 'Wireless'.

3 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

4 Press HOME MENU.





- 5 Select 'Network, Bluetooth' from the HOME MENU.
- 6 Select 'Network Connection' from the Network, Bluetooth menu.
- 7 Select 'Wireless' from the Network Connection menu.
- 8 Select [Manual] with the 1/4 button, and press the ENTER button.
- 9 Enter the SSID with the $\uparrow/\downarrow/\leftarrow/\Rightarrow$ button, and press the ENTER button.
- ←/→ Moves the cursor.
- ↑/↓ Selects the character to be entered.
- VIDEO P. The cursor switches the input character part and software keyboard part every time the button is pressed. A character is deleted by pressing the **DEL** on the software keyboard.

10 Select the encryption method with \leftarrow / \rightarrow .

- **None** Does not set the encryption method.
- WEP Set to the WEP method.
- WPA2/WPA, AES+TKIP Set to the WPA-AES, WPA-TKIP, WPA2-AES, and WPA2-TKIP method.

11 Select 'OK', then press ENTER.

When **WEP** or **WPA2/WPA, AES+TKIP** is selected, the password entry screen is displayed. Enter the password, select **OK**, and press **ENTER**.

12 Select the DHCP setting you want.

Set the IP address of this receiver and the proxy. For details, see <u>A: Connecting with a LAN cable (wired LAN)</u> on page 52.

G: Setting with Web Control

To set with this method, your computer must be compatible with wireless LAN functions.

- Network settings are performed on the browser on your computer. • Check that the LAN cable is not connected to this receiver.
- 1 Select 'Network Type' from the Network, Bluetooth menu.
- 2 Use \Leftarrow/\Rightarrow to select 'Wireless'.

3 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

- 4 Press HOME MENU.
- 5 Select 'Network, Bluetooth' from the HOME MENU.
- 6 Select 'Network Connection' from the Network, Bluetooth menu.
- 7 Select 'Wireless' from the Network Connection menu.
- 8 Select 'Wireless Accessory Config.'.
- 9 Select 'START', then press ENTER.

The SSID and IP address will be displayed when WAC is active.

10 Select 'OK', then press ENTER.

11 Select [Pioneer Setup] (this receiver) from the list of wireless LAN connections on your computer.

[Pioneer Setup:xxxxxxx] will be shown in the SSID field. "xxxxxxx" represents a number unique to each product.



- For your computer, iPhone, tablet computer, or wireless equipment, refer to the respective user's manual.
- Because this connection is not encrypted, there is a slight security risk.
- Operation verification has been done for this setting with OS X v 10.7, Safari 5.1.

12 Start the Web browser.

Access the following URL, and start setting this receiver. The Web Control menu will be shown.



- If you are using Safari, see Making network settings using Safari on page 111.
- 13 Click IP, Proxy Setting.

14 Setup the network settings manually and then press Apply.

SSID items are generally shown automatically, but if they are not shown follow the procedures again and redo the settings. This receiver will restart and the settings will be applied to this receiver.

🖉 Notes

- In case Web Control is not used, the screen above can be shown by entering the IP address of this receiver to the address field on the Web browser.
- The IP address of this receiver can be checked by pressing the **STATUS** button on the remote controller (page <u>90</u>) or **Network Information** (page <u>56</u>).

H: Directly connecting this receiver with a smart phone by wireless (Wireless Direct)

- 1 Select 'Network Connection' from the Network, Bluetooth menu.
- 2 Select 'Wireless Direct' from the Network Connection menu.
- 3 Select 'Security Protocol' at **↑**/↓.

4 Select the encryption method with \leftarrow / \Rightarrow .

- None Does not set the encryption method.
- Because this connection is not encrypted, there is a slight security risk.
- When the main power of this receiver is turned off, Wireless Direct is not started when it is turned on next time, and will operate with the network settings before Wireless Direct is started.
- WEP Set to the WEP method.
- Even when the main power of this receiver is turned off, Wireless Direct will continuously operate the next time it is turned on.
- 5 Select 'Frequency Band' at **↑**/↓.









6 Select the frequency with \leftarrow / \rightarrow .

Select the frequency band of Wireless Direct connection. If you do not know the frequency band of your equipment, select 2.4GHz.

- 2.4GHz Uses the band of 2.4 GHz.
- 5GHz Uses the band of 5 GHz.

7 Select 'OK', then press ENTER.

When WEP is selected, the WEP KEY input screen is displayed. Enter the WEP KEY in 5 or 13 characters, select OK, and press ENTER.

8 Select 'YES' and press ENTER.

9 Select the SSID shown on the screen of this receiver from the list of wireless connection LAN's corresponding to the equipment that you have.

• If the password is requested, enter the WEP KEY in procedure 7.

Checking the Network Information

The setting status of the following network-related items can be checked.

- IP Address (IPv4) Check the IP address of this receiver.
- IP Address (IPv6) Check the IP address of this receiver.
- MAC Address Check the MAC address of this receiver.
- Friendly Name Friendly Name on page 56.
- SSID Check the SSID during wireless connection.
- Network Connection Check the network connection status (Wired/Wireless/Wireless Direct).

Select 'Network Information' from the Network, Bluetooth menu.

Display the setting status of the network-related items.

Performing Bluetooth settings

Switches the Bluetooth function on/off.

1 Select 'Bluetooth Setup' from the Network, Bluetooth menu.

2 Use ←/→ to select the setting.

- **ON** Selected when using the *Bluetooth* function.
- **OFF** Selected when the *Bluetooth* function is not used.

3 Select 'OK', then press ENTER.

The confirmation screen will be displayed. Select 'YES' and press ENTER.

The on-screen display will close, and the home menu will be disabled for about 60 seconds. After 60 seconds, execute the following operation.

Other network settings

Set the network other than for connection.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/\leftarrow/\rightarrow$ and ENTER to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

- 2 Select 'Network, Bluetooth' from the HOME MENU.
- 3 Select 'Network Option' from the Network, Bluetooth menu.

4 Select the setting you want to adjust.

If you are doing this for the first time, you may want to adjust these settings in order:

- Network Standby Even when the unit is in standby mode, it is possible to turn on the power of the unit from iControlAV5 (page 56).
- Friendly Name The name of the receiver displayed on a computer or other device connected to the network can be changed (page 56)
- AirPlay Password Set the password to be entered when playing AirPlay with this receiver (page 56).
- Parental Lock Restricts usage of network functions (page 57).
- Play ZONE Setup (excluding VSX-830) Setting of what zone to play the audio content from a device on the home network (page 57).

Network Standby

Set so that the iControlAV5 function connected to the same LAN with the receiver can be used even while the unit is in standby status.

1 Select 'Network Standby' from the Network Option menu.

2 Specify whether the Network Standby is ON or OFF.

- ON Even when the unit is in standby mode, it is possible to turn on the power of the unit from the device iControlAV5 that is connected to the network.
- OFF The iControlAV5 function is not available while the receiver is in standby mode (power consumption during standby can be suppressed).

Friendly Name

- 1 Select 'Friendly Name' from the Network Option menu.
- 2 Select 'Edit Name' then select 'Rename'.

If after changing the name you want to restore the name to the default, select Default.

- 3 Input the name you want.
- Use \uparrow/\downarrow to select a character, \leftarrow/\rightarrow to set the position, and **ENTER** to confirm your selection.

AirPlay password

- 1 Select 'AirPlay Password' from the Network Option menu.
- 2 Enter the password up to 32 characters, select 'OK', and press ENTER.
- 3 Select 'YES' and press ENTER.







Parental Lock

Set restrictions for using Internet services. Also set the password accompanying the usage restrictions.

• Upon shipment from the factory, the password is set to "0000".

Important

When the **INTERNET RADIO**, **PANDORA**, **Spotify** or **FAVORITES** input is selected, the setting made here cannot be reflected.

1 Select 'Parental Lock' from the Network Option menu.

2 Input the password.

- Use \uparrow/\downarrow to select a character, \leftarrow/\Rightarrow to set the position, and **ENTER** to confirm your selection.
- 3 Specify whether to turn Parental Lock on or off.
- **OFF** Internet services are not restricted.
- **ON** Internet services are restricted.
- 4 If you want to change the password, select Change Password.

In this case, the procedure returns to step 2.

Play ZONE Setup

Excluding VSX-830

You can select what zone to play when playing via AirPlay and *Bluetooth* equipped devices as well as when playing audio content on equipment in the home network in DMR mode.

- For playable DLNA-compatible network devices, see page 76.
- 1 Select 'Play ZONE Setup' from the Network Option menu.
- 2 Select the zone in which you want to play the audio contents.
- 3 When you're finished, press RETURN.

You will return to the Network Option menu.

🖉 Notes

- If another zone is on, it may not be possible to play the audio contents. In this case, turn the other zone off, then play the audio contents.
- MAIN/HDZONE at ZONE Setup must be set to HDZONE in order to use the HDZONE function (page 111).

Automatically conducting optimum sound tuning (Full Auto MCACC)

The Full Auto MCACC Setup measures the acoustic characteristics of your listening area, taking into account ambient noise, speaker connection and speaker size, and tests for both channel delay and channel level. When **Measurement Type** is **Expert**, in addition to this, Standing Wave, Reverb characteristics, Full Band Phase Control (excluding VSX-830) and EQ are measured. After you have set up the microphone provided with your system, the receiver uses the information from a series of test tones to optimize the speaker settings and equalization for your particular room.



- Make sure the microphone and speakers are not moved during the Full Auto MCACC Setup.
- Using the Full Auto MCACC Setup will overwrite any existing settings for the MCACC preset you select.
- Before using the Full Auto MCACC Setup, the headphones should be disconnected.
- With factory default settings, the on-screen display will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

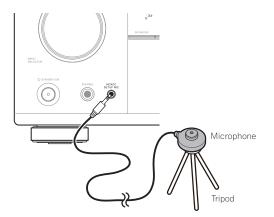
Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.



- The test tones used in the Full Auto MCACC Setup are output at high volume.
- 1 Press \odot STANDBY/ON to switch on the receiver and your TV.

Make sure that the TV's video input is set to this receiver.

2 Connect the microphone to the MCACC SETUP MIC jack on the front panel.



Make sure there are no obstacles between the speakers and the microphone.

If you have a tripod, use it to place the microphone so that it's about ear level at your normal listening position. If you do not have a tripod, use some other object to install the microphone.

Install the microphone on a stable floor. Placing the microphone on any of the following surfaces may make accurate measurement impossible:

- Sofas or other soft surfaces.
- High places such as tabletops and sofa tops.
- The Full Auto MCACC display appears once the microphone is connected



- If you leave the GUI screen for over five minutes, the screen saver will appear.
- 3 Press MAIN RECEIVER to switch the remote control to the receiver operation mode.

4 Select the parameters you want to set.

When the speaker system is not **7.2ch/5.2.2ch** (VSX-1130/VSX-930)/**5.2ch** (VSX-830), set **Speaker System** before measuring full auto MCACC. For details, see <u>Speaker system setting</u> on <u>page 106</u>.

Speaker System – Shows the current settings. When this is selected and ENTER is pressed, the speaker system selection screen appears. Select the proper speaker system, then press RETURN to return. If you are planning on bi-amping your front speakers, or setting up a separate speaker system in another room, read through Speaker system setting on page 106 and make sure to connect your speakers as necessary before continuing to step 4.

- EQ Type When you select Expert for Measurement Type, set the correction method of the frequency characteristics of the viewing environment. Usually, set SYMMETRY. For details, see <u>Automatic MCACC (Expert)</u> on page 99.
- MCACC The six MCACC presets are used for storing surround sound settings for different listening positions. Simply choose an unused preset for now (you can rename it later in <u>Data Management</u> on <u>page 104</u>).
- **Dolby Enabled Speaker** (excluding VSX-830): Select a speaker that uses (**TMd**). When a Dolby Enabled Speaker is not used, select **NO** (page 24).
- **SP to ceiling** (excluding VSX-830) When using the Dolby Enabled Speaker, you can input the vertical distance from the speaker to the ceiling (page 24).
- Measurement Type When Basic is set, the minimum required measurement is performed in a short period of time. When Expert is set, accurate and precise measurement is performed so it will take some time.
- 5 Select 'START', then press ENTER.

6 Follow the instructions on-screen.

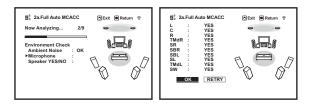
Make sure the microphone is connected, and if you're using a subwoofer, make sure it is switched on and set to a comfortable volume level.

7 Wait for the test tones to finish, then confirm the speaker configuration in the GUI screen.

A progress report is displayed on-screen while the receiver outputs test tones to determine the speakers present in your setup. Try to be as quiet as possible while it's doing this.

If no operations are performed for 10 seconds while the speaker configuration check screen is being displayed, the Full Auto MCACC Setup will resume automatically. In this case, you don't need to select '**OK**' and press **ENTER** in step 7.

 With error messages (such as **Too much ambient noise!** or **Check microphone**.), select **RETRY** after checking for ambient noise (see <u>Problems when using the Auto MCACC Setup</u> on page 58) and verifying the mic connection. If there doesn't seem to be a problem, you can simply select **GO NEXT** and continue.



The configuration shown on-screen should reflect the actual speakers you have.

- If you see an ERR message (or the speaker configuration displayed isn't correct), there may be a problem with the speaker connection. If selecting RETRY doesn't work, turn off the power and check the speaker connections. If there doesn't seem to be a problem, you can simply use ↑/↓ to select the speaker and ←/→ to change the setting and continue.
- If the speaker is not pointed to the microphone (listening position) or when using speakers that affect the
 phase (dipole speakers, reflective speakers, etc.), Reverse Phase may be displayed even if the speakers are
 properly connected.

If ${\it Reverse \ Phase}$ is displayed, the speaker's wiring (+ and –) may be inverted. Check the speaker connections.

- If the connections were wrong, turn off the power, disconnect the power cord, then reconnect properly. After this, perform the Full Auto MCACC procedure again.
- If the connections were right, select GO NEXT and continue.

8 Make sure 'OK' is selected, then press ENTER.

A progress report is displayed on-screen while the receiver outputs more test tones to determine the optimum receiver settings.

Again, try to be as quiet as possible while this is happening. It may take 3 to 10 minutes.

9 The Full Auto MCACC Setup procedure is completed and the Home Menu menu reappears automatically.

Be sure to disconnect the microphone from this receiver upon completion of the Full Auto MCACC Setup. The settings made in the Full Auto MCACC Setup should give you excellent surround sound from your system, but it is also possible to adjust these settings manually using <u>The MCACC PRO (VSX-1130/VSX-930)/Advanced</u> <u>MCACC (VSX-830) menu on page 98 or The System Setup and Other Setup menus on page 105</u>.

- Depending on the characteristics of your room, sometimes identical speakers with cone sizes of around 12 cm (5 inches) will end up with different size settings. You can correct the setting manually using the <u>Manual speaker setup</u> on <u>page 106</u>.
- The subwoofer distance setting may be farther than the actual distance from the listening position. This setting should be accurate (taking delay and room characteristics into account) and generally does not need to be changed.
- If Full Auto MCACC Setup measurement results are incorrect due to the interaction of the speakers and viewing environment, we recommend adjusting the settings manually.
- *Excluding VSX-830:* The Dolby Enabled Speaker distance indicates the distance of the ceiling reflection. Therefore, it is longer than the direct distance but you do not need to change this (page 24).
- *Excluding VSX-830:* When Full Auto MCACC or Auto MCACC is selected, all of the EQ adjustment values for Dolby Enabled Speaker are set to 0 dB. You can adjust the settings manually.

Problems when using the Auto MCACC Setup

If the room environment is not optimal for the Auto MCACC Setup (too much background noise, echo off the walls, obstacles blocking the speakers from the microphone) the final settings may be incorrect. Check for household appliances (air conditioner, fridge, fan, etc.), that may be affecting the environment and switch them off if necessary. If there are any instructions showing in the front panel display, please follow them.

• Some older TVs may interfere with the operation of the microphone. If this seems to be happening, switch off the TV when doing the Auto MCACC Setup.



The Input Setup menu

You only need to make settings in the **Input Setup** menu if you didn't hook up your digital equipment according to the default settings (see <u>Input function default and possible settings</u> on page 59). In this case, you need to tell the receiver what equipment is hooked up to which terminal so the buttons on the remote control correspond to the components you've connected.

• With factory default settings, the on-screen display will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/ \leftarrow / \rightarrow$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

2 Select 'System Setup' from the HOME MENU.

3 Select 'Input Setup' from the System Setup menu.

🗞 3.System Setup	texit miReturn S	? 🕂 3a.Input Se	tup	€Exit	Return 🤗
a.Input Setup	d.MHL Setup	Input Input Name Input Skip	: +	BD → Rename OFF	
b.HDMI Setup	ABC e.OSD Language	Audio In HDMI Input			
c.Manual SP Setup	f.Other Setup		-		

4 Select the input function that you want to set up.

The default names correspond with the names next to the terminals on the rear panel (such as **DVD** or **SAT/CBL** which, in turn, correspond with the names on the remote control.

5 Select the input(s) to which you've connected your component.

For example, if your DVD player only has an optical output, you will need to change the **DVD** input function's **Audio In** setting from **COAXIAL** (default) to the optical input you've connected it to.

6 When you're finished, proceed to the settings for other inputs.

There are optional settings in addition to the assignment of the input jacks:

- Input Name You can choose to rename the input function for easier identification. Select **Rename** to do so, or **Default** to return to the system default.
- Input Skip When set to ON, that input is skipped when selecting the input using ALL. (DVD and other inputs can be still be selected directly with the input function buttons.)

7 When you're finished, press RETURN.

You will return to the System Setup menu.

Input function default and possible settings

The terminals on the receiver generally correspond to the name of one of the input functions. If you have connected components to this receiver differently from (or in addition to) the defaults below, see <u>The Input Setup</u> menu on page 59 to tell the receiver how you've connected up. The dots (•) indicate possible assignments.

In case of VSX-1130/VSX-930

	Input Terminals		
Input function	HDMI	Audio	Component
BD	(BD)		
DVD	IN 1	•	•
SAT/CBL	IN 2	COAXIAL	IN
HDMI 1	٠		
HDMI 2	•		
HDMI 3	IN 3		
HDMI 4	IN 4		
HDMI 5 (front panel)	IN 5		
HDMI 6/MHL	IN 6		
INTERNET RADIO			
PANDORA			
Spotify			
MEDIA SERVER			
FAVORITES			
iPod/USB			
TV		OPTICAL	
		<a>	
CD		ANALOG-1 	
TUNER			
BT AUDIO			

a When ARC at HDMI Setup is set to ON, it is not possible to make assignments to the TV input's Audio In terminals.
 b Only the TV and CD inputs can be assigned to ANALOG-1.



• In case of VSX-830

Input Terminals			
L			
L			

a When ARC at HDMI Setup is set to ON, it is not possible to make assignments to the TV input's Audio In terminals.

Changing the OSD display language (OSD Language)

The language used on the Graphical User Interface screen can be changed.

- The explanations in these operating instructions are for when English is selected for the GUI screen.
- With factory default settings, the on-screen display will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.

1 Press () STANDBY/ON to switch on the receiver and your TV.

Make sure that the TV's video input is set to this receiver (for example, if you connected this receiver to the **VIDEO** jacks on your TV, make sure that the **VIDEO** input is now selected).

2 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/ \leftarrow/ \rightarrow$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

- 3 Select 'System Setup' from the Home Menu.
- 4 Select 'OSD Language' from the System Setup menu.
- 5 Select the desired language.
- 6 Select 'OK' to change the language.

The setting is completed and the System Setup menu reappears automatically.



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Basic playback

Playing a source	62
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displayed. If the display does not correspond to the input signal and listening mode, check the connections and settings.

Press AUTO (AUTO SURR/ALC/STREAM DIRECT) to select 'AUTO SURROUND' and start

For such sound sources as Dolby TrueHD and DTS-HD, the surround sound is played. With stereo sound, the

You may need to check the digital audio output settings on your DVD player or digital satellite receiver. It

• See also Listening to your system on page 70 for information on different ways of listening to sources.

erly. For details, see Auto Surround, ALC and Stream Direct with different input signal formats on page 127.

should be set to output Dolby Digital, DTS and 88.2 kHz / 96 kHz PCM (2 channel) audio, and if there is an

It is possible to check on the front panel display whether or not multi-channel playback is being performed prop-

When multi-channel speakers (more than the two front left and right channels) are connected, straight decoding

is performed, so the input signal's format name (for example, D TrueHD, DTS-HD MSTR or DTS-HD HI RES) is

To play a stereo sound source in multichannel, press **SURR** or **ADV** to select your favorite listening mode.

sound is played from the left and right front speakers with the default listening mode.

4 Use the VOLUME +/- to adjust the volume level.

(Example: Press SURR several times to select EXT.STEREO.)

MPEG audio option, set this to convert the MPEG audio to PCM.

Turn down the volume of your TV so that all sound is coming from the speakers connected to this receiver.



3

playback of the source.

Depending on the input to be played, the playback operation can in some cases be performed using the onscreen display.

With factory default settings, the on-screen display will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.

Turning off the sound

Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound).

• Press MUTE.

Playing a source with HDMI connection

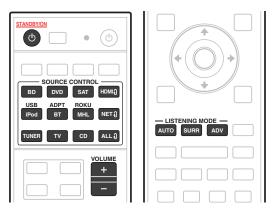
• Use ALL¹ to select the input function connected to the receiver's HDMI input terminals.

You can also perform the same operation by using the **INPUT SELECTOR** dial on the front panel or by pressing **HDMI** on the remote control repeatedly.

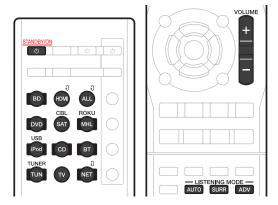
- Set the HDMI parameter in <u>Setting the Audio options</u> on page 85 to THROUGH if you want to hear HDMI audio output from your TV (no sound will be heard from this receiver).
- If the video signal does not appear on your TV, try adjusting the resolution settings on your component or display. Note that some components (such as video game units) have resolutions that may not be converted. In this case, use an analog video connection.

Playing a source

Here are the basic instructions for playing a source (such as a DVD disc) with your home theater system. *VSX-1130/VSX-930*



VSX-830



1 Switch on your system components and receiver.

Start by switching on the playback component (for example a DVD player), your TV and subwoofer (if you have one), then the receiver (press d' **STANDBY/ON**).

Make sure that the TV's video input is set to this receiver.

2 Select the input function you want to play.

- You can use the input function buttons on the remote control or the front panel INPUT SELECTOR dial.
- As necessary, select the type of audio input signal (page 73).



Playing an iPod

This receiver has the **iPod/iPhone** terminal that will allow you to control playback of audio content from your iPod using the controls of this receiver.

Here we describe the procedure for playback on an iPod. For playback on a USB device, see <u>Playing a USB device</u> on <u>page 64</u>.

🕑 Important

- USB works with iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPhone 3GS, iPod touch (4th through 5th generation) and iPod nano (4th through 7th generation).
 However, some of the functions may be restricted for some models.
- This receiver has been developed and tested for the software version of iPod/iPhone indicated on the website
 of Pioneer.

http://pioneer.jp/homeav/support/ios/eu/ (for Europe)

http://pioneer.jp/homeav/support/ios/ao/ (for Australia and New Zealand)

- Installing software versions other than indicated on the website of Pioneer to your iPod/iPhone may result in incompatibility with this receiver.
- iPod and iPhone are licensed for reproduction of non-copyrighted materials or materials the user is legally permitted to reproduce.
- Features such as the equalizer cannot be controlled using this receiver, and we recommend switching the equalizer off before connecting.
- Pioneer cannot under any circumstances accept responsibility for any direct or indirect loss arising from any inconvenience or loss of recorded material resulting from the iPod failure.
- *Excluding VSX-830:* When listening to a track on the iPod in the main zone, it is possible to control the sub zone, but not to listen to a different track in the sub zone from the one playing in the main zone.

1 Press 🕁 STANDBY/ON to switch on the receiver and your TV.

For iPod or iPhone connections, refer to page 34 (VSX-1130/VSX-930) or page 46 (VSX-830). About one minute is required between turning the power on and completion of startup.

• It is also possible to operate the iPod on the iPod itself, without using the TV screen. For details, see Switching the iPod controls on page 63.

2 Press iPod USB on the remote control to switch the receiver to the iPod/USB.

When the display shows the names of folders and files, you're ready to play music from the iPod.

Playing back audio files stored on an iPod

To navigate songs on your iPod, you can take advantage of the GUI screen of your TV connected to this receiver. You can also control all operations for music in the front panel display of this receiver.

- Note that characters that cannot be displayed on this receiver are displayed as #.
- This feature is not available for photos on your iPod.

Finding what you want to play

When your iPod is connected to this receiver, you can browse songs stored on your iPod by playlist, artist name, album name, song name, genre or composer, similar to using your iPod directly.

1 Use \uparrow/\downarrow to select a category, then press ENTER to browse that category.

- When Idd or Idd is pressed at the list screen, the page switches.
- To return to the previous level any time, press **RETURN**.
- 2 Use 1/4 to browse the selected category (e.g., albums).
- Use ←/→ to move to previous/next levels.

3 Continue browsing until you arrive at what you want to play, then press ► to start playback.

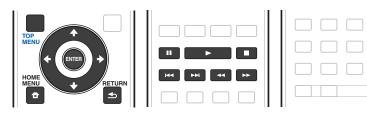
• On the playback screen, pressing RETURN displays a list screen. To return to the playback screen, press DISP

Note

You can play all of the songs in a particular category by selecting the **All** item at the top of each category list. For example, you can play all the songs by a particular artist.

Basic playback controls

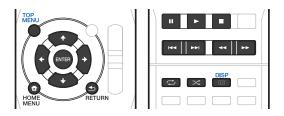
This receiver's remote control buttons can be used for basic playback of files stored on an iPod. *VSX-1130/VSX-930*











Switching the iPod controls

You can switch over the iPod controls between the iPod and the receiver.

1 Press HOME MENU to switch the iPod controls.

This enables operation and display on your iPod, and this receiver's remote control and GUI screen become inactive.

2 Press HOME MENU again to switch back to the receiver controls.



Change the receiver's input to the iPod in one action by pressing the **iPod iPhone DIRECT CONTROL** button on the front panel to enable iPod operations on the iPod.



06

Playing a USB device

It is possible to play files using the USB interface on the front of this receiver.

- Compatible USB devices include external magnetic hard drives, portable flash memory drives (particularly key drives) and digital audio players (MP3 players) of format FAT16/32.
- Pioneer cannot guarantee compatibility (operation and/or bus power) with all USB mass storage devices and assumes no responsibility for any loss of data that may occur when connected to this receiver.

1 Press \odot STANDBY/ON to switch on the receiver and your TV.

For connection of USB memory, refer to <u>page 34</u> (VSX-1130/VSX-930) or <u>page 46</u> (VSX-830). About one minute is required between turning the power on and completion of startup.

Make sure the receiver is in standby when disconnecting the USB device.

2 Press iPod USB on the remote control to switch the receiver to the iPod/USB.

When the display shows the names of folders and files, you're ready to play from the USB device.

🖉 _{Note}

If an **Over Current** message lights in the display, the power requirements of the USB device are too high for this receiver. Try following the points below:

• Switch the receiver off, then on again.

- Reconnect the USB device with the receiver switched off.
- Use a dedicated AC adapter (supplied with the device) for USB power.
- If this doesn't remedy the problem, it is likely your USB device is incompatible.

Playing back audio files stored on a USB memory device

The maximum number of levels that you can select in Step 2 (below) is 9.

- Note that non-Roman characters in the playlist are displayed as #.
- 1 Use \uparrow/\downarrow to select a folder, then press ENTER to browse that folder.
- To return to the previous level any time, press **RETURN**.

2 Continue browsing until you arrive at what you want to play, then press ► to start playback.

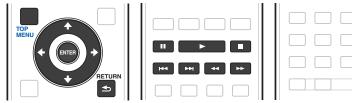
- Copyrighted audio files cannot be played back on this receiver.
- DRM-protected audio files cannot be played back on this receiver.
- On the playback screen, pressing **RETURN** displays a list screen. To return to the playback screen, press **DISP**.

Basic playback controls

This receiver's remote control buttons can be used for basic playback of files stored on USB memory devices.

Press **iPod USB** to switch the remote control to the iPod/USB operation mode.

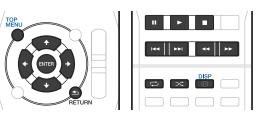
VSX-1130/VSX-930



DISP	



VSX-830



Playing back photo files stored on a USB memory device

- Photo files cannot be played in the sub zone.
- 1 Use **↑**/↓ to select a folder, then press ENTER to browse that folder.
- For high resolution files, some time may be required for the photo to appear.
- To return to the previous level any time, press **RETURN**.

2 Continue browsing until you arrive at what you want to play, then press ENTER to start playback.

The selected content is displayed in full screen and a slideshow starts.

Basic playback controls

Button(s)	What it does
ENTER, ►	Starts displaying a photo and playing a slideshow.
	Stops the player and returns to the previous menu.

🔅 _{Тір}

Slide shows of photo files can be played while listening to music files by returning to the folder/file list display while playing a music file on a USB device and then playing the photo files. At that time, select music files with a sampling frequency of 48 kHz or less.

About playable file formats

The USB function of this receiver supports the following file formats. Note that some file formats are not available for playback although they are listed as playable file formats.

- For MP3, WAV, AAC, FLAC, AIFF, Apple Lossless, and DSD files, gapless play will be performed when a music file with identical format, sampling frequency, number of quantization bits, and number of channels is continuously played.
- When AAC or MP3 format is used, sound is reproduced with the minimum gap. If you are conscious about gaps, use WAV or FLAC files.

Music files

Category	Extension		Stream	
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
			Quantization bitrate	16 bit
MP3 <a>	.mp3	MPEG-1 Audio Layer-3	Channel	2 ch
<a>		_	Bitrate	8 kbps to 320 kbps
		_	VBR/CBR	Supported/Supported
WAV	.wav	LPCM _	Sampling frequency 	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz 192 kHz
			Quantization bitrate	16 bit, 24 bit
			Channel	2 ch, 5.0 ch, 5.1 ch
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
		WMA2/7/8/9	Quantization bitrate	16 bit
WMA	.wma		Channel	2 ch
			Bitrate	5 kbps to 320 kbps
			VBR/CBR	Supported/Supported
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
	.m4a .aac .3gp .3g2	MPEG-4 AAC LC MPEG-4 HE AAC —	Quantization bitrate	16 bit
AAC			Channel	2 ch
			Bitrate	16 kbps to 320 kbps
			VBR/CBR	Supported/Supported
Apple Lossless	.m4a	Apple Lossless	Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kH: 192 kHz
	.mp4		Quantization bitrate	16 bit, 24 bit
			Channel	2 ch
FLAC	.flac	FLAC	Sampling frequency 	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz 192 kHz
<d></d>		_	Quantization bitrate	16 bit, 24 bit
			Channel	2 ch, 5.0 ch, 5.1 ch
AIFF	.aiff AIFF		Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kH 192 kHz
	.aif		Quantization bitrate	16 bit, 24 bit
		_	Channel	2 ch

c	Category	Extension		Stream		
	DSD	.dff	DSDIFF	Sampling frequency	2.8224 MHz, 5.6448 MHz <f></f>	
	<e></e>	.dsf	DSF	Quantization bitrate	1 bit	
				Channel	2 ch	

- a "MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia."
- b 176.4 kHz and 192 kHz support 2-channel audio sources only.
- c Files encoded using Windows Media Codec 9 may be playable but some parts of the specification are not supported; specifically, Pro, Lossless, Voice.
- d Uncompressed FLAC files are not supported. Pioneer does not guarantee playback.
- e DSD files cannot be played in the sub zone.
- f 5.6448 MHz signals cannot be played on the VSX-830.

Photo files

Category	Extension	Format	
JPEG	.jpg	Meeting the following conditions: • Baseline JPEG format • Y:Cb:Cr – 4:2:2	

Playing an MHL-compatible device

MHL (Mobile High-definition Link) is an interface standard for transmitting digital signals with mobile devices. MHL can carry high quality multi-channel audio data and 3D/Full-HD video formats.

The MHL-compatible device's video signals are output from the TV connected to the receiver, the audio signals are output from the speakers connected to the receiver or TV.

1 Press 🖞 STANDBY/ON to switch on the receiver and your TV.

For connection of MHL standard-compatible equipment, refer to <u>page 34</u> (VSX-1130/VSX-930) or <u>page 47</u> (VSX-830).

- 2 Press MHL on the remote control to switch the receiver to the MHL.
- 3 Select and play the desired contents on the MHL-compatible device.

Notes

- MHL-compatible devices can be operated with the receiver's remote control by pressing the remote control's MHL button, but depending on the MHL-compatible device being used, some buttons may not be operable.
- To playback from a MHL-compatible device connected to the receiver on a TV that is also connected to the receiver, the power to the receiver must be turned on.

Listening to the radio

The following steps show you how to tune in to FM and AM radio broadcasts using the automatic (search) and manual (step) tuning functions. If you already know the frequency of the station you want, see Tuning directly to a station below. Once you are tuned to a station you can memorize the frequency for recall later-see <u>Saving station</u> presets on page <u>66</u> for more on how to do this.

- 1 Press TUNER to select the tuner.
- 2 Use BAND to change the band (FM or AM), if necessary.

3 Tune to a station.

There are three ways to do this:

- Automatic tuning To search for stations in the currently selected band, press and hold **TUNE +/–** for about a second. The receiver will start searching for the next station, stopping when it has found one. Repeat to search for other stations.
- Manual tuning To change the frequency one step at a time, press TUNE +/-.
- High speed tuning Press and hold TUNE +/- for high speed tuning. Release the button at the frequency you want.

Improving FM sound

Excluding VSX-830

If the **TUNED** or **STEREO** indicator doesn't light when tuning to an FM station because the signal is weak, press **MPX** to switch the receiver into mono reception mode. This should improve the sound quality and allow you to enjoy the broadcast.

Tuning directly to a station

- 1 Press TUNER to select the tuner.
- 2 Use BAND to change the band (FM or AM), if necessary.
- 3 Press D.ACCESS (Direct Access).
- 4 Use the number buttons to enter the frequency of the radio station.

For example, to tune to **106.00** (FM), press **1**, **0**, **6**, **0**, **0**.

If you make a mistake halfway through, press D.ACCESS twice to cancel the frequency and start over.

Saving station presets

If you often listen to a particular radio station, it's convenient to have the receiver store the frequency for easy recall whenever you want to listen to that station. This saves the effort of manually tuning in each time. This receiver can memorize up to 63 stations, stored in seven banks, or classes (A to G) of 9 stations each.

1 Tune to a station you want to memorize.

See Listening to the radio on page 66 for more on this.

2 Press TOOLS (TUNER EDIT).

The display shows PRESET MEMORY, then a blinking memory class.

3 Press CLASS to select one of the seven classes, then press PRESET +/- to select the station preset you want.

You can also use the number buttons to select a station preset.

4 Press ENTER.

After pressing **ENTER**, the preset class and number stop blinking and the receiver stores the station.

Listening to station presets

- 1 Press TUNER to select the tuner.
- 2 Press CLASS to select the class in which the station is stored.

Press repeatedly to cycle through classes A to G.

- 3 Press PRESET +/- to select the station preset you want.
- You can also use the number buttons on the remote control to recall the station preset.

Naming station presets

For easier identification, you can name your station presets.

1 Choose the station preset you want to name.

See Listening to station presets on page 66 for how to do this.

2 Press TOOLS (TUNER EDIT).

The display shows **PRESET NAME**, then a blinking cursor at the first character position.

3 Input the name you want.



Use \uparrow/\downarrow (or **TUNE** \uparrow/\downarrow of front panel) to select a character, \leftarrow/\rightarrow (or **PRESET** \leftarrow/\rightarrow of front panel) to set the position, and **ENTER** to confirm your selection.

Notes

- To erase a station name, simply repeat steps 1 to 3 and input eight spaces instead of a name.
- Once you have named a station preset, you can press **DISP** when listening to a station to switch the display between name and frequency.

An introduction to RDS (for Europe)

Radio Data System (RDS) is a system used by most FM radio stations to provide listeners with various kinds of information-the name of the station and the kind of show they're broadcasting, for example. One feature of RDS is that you can search by type of program. For example, you can search for a station that's broadcasting a show with the program type. **JAZZ**.

You can search the following program types:

• In addition, there are two other program types, TEST and NONE. You can't search for these.

NEWS - News AFFAIRS - Current Affairs INFO - General Information SPORT - Sport EDUCATE - Educational DRAMA - Radio plays, etc. CULTURE - National or regional culture, theater, etc. SCIENCE - Science and technology VARIED - Usually talk-based material, such as quiz shows or interviews. POP M - Pop music ROCK M - Rock music EASY M - Easy listening LIGHT M - 'Light' classical music CLASSICS - 'Serious' classical music OTHER M - Music not fitting above categories WEATHER - Weather reports	FINANCE - Stock market reports, commerce, trading, etc. CHILDREN - Programs for children SOCIAL - Social affairs RELIGION - Programs concerning religion PHONE IN - Public expressing their views by phone TRAVEL - Holiday-type travel rather than traffic announce- ments LEISURE - Leisure interests and hobbies JAZZ - Jazz COUNTRY - Country music NATION M - Popular music in a language other than English OLDIES - Popular music from the '50s and '60s FOLK M - Folk music DOCUMENT - Documentary
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Searching for RDS programs

One of the most useful features of RDS is the ability to search for a particular kind of radio program. You can search for any of the program types listed above.

1 Press TUNER to select the FM band.

RDS is only possible in the FM band.

2 Press PTY.

PTY SEARCH shows in the display.

3 Press PRESET +/- to select the program type you want to hear.

4 Press ENTER to search for the program type.

The system starts searching through all frequencies for a match. When it finds one, the search stops and the station plays for five seconds.

5 If you want to keep listening to the station, press ENTER within the five seconds.

If you don't press **ENTER**, searching resumes.

If **NO PTY** is displayed it means the tuner couldn't find that program type at the time of the search.

• RDS searches all frequencies. If the program type could not be found among all the frequencies, **NO PTY** is displayed.

Displaying RDS information

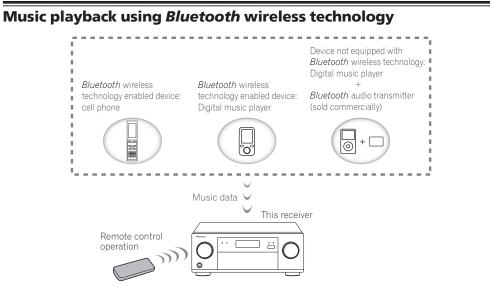
Use the **DISP** button to display the different types of RDS information available.

- If any noise is picked up while displaying the RT scroll, some characters may be displayed incorrectly.
- If you see NO RT DATA in the RT display, it means no RT data is sent from the broadcast station.
- If you see **NO PS DATA** in the PS display, it means no PS data can be received.
- If you see NO PTY DATA in the PTY display, it means no PTY data can be received.

• Press DISP for RDS information.

Each press changes the display as follows:

- Radio Text (**RT**) Messages sent by the radio station. For example, a talk radio station may provide a phone number as RT.
- Program Service Name (**PS**) The name of the radio station.
- Program Type (PTY) This indicates the kind of program currently being broadcast.
- Current tuner frequency.



The unit is capable of playing back music stored on *Bluetooth* capable devices (cell phones, digital music players etc.) wirelessly. You can also use a *Bluetooth* audio transmitter (sold separately) to enjoy music from devices that do not have *Bluetooth* functionality. Please refer to the user's manual for your *Bluetooth* capable device for more details.



- The *Bluetooth* wireless technology enabled device must support A2DP profiles.
- Pioneer does not guarantee proper connection and operation of this unit with all wireless technology enabled devices.

Remote control operation

The remote control supplied with this unit allows you to play and stop media, and perform other operations.



- The Bluetooth wireless technology enabled device must support AVRCP profiles.
- Remote control operations cannot be guaranteed for all *Bluetooth* wireless technology enabled devices.

Pairing with the unit (Initial registration)

In order for the unit to playback music stored on a Bluetooth capable device, pairing must first be performed. Pairing should be performed when first using the unit with the *Bluetooth* capable device, or when the pairing data on the device has been erased for any reason. Pairing is a step required to allow communication using *Bluetooth* wireless technology to be carried out.

- Pairing is performed the first time that you use the unit and the *Bluetooth* capable device together.
- In order to allow communication using *Bluetooth* wireless technology to take place, pairing must be performed on both the unit and the *Bluetooth* capable device.
- After pressing the BT and switching to BT AUDIO input, perform the pairing procedure on the Bluetooth capable device. If pairing has been performed correctly, you will not need to perform the pairing procedures for the unit as shown below.

Please refer to the user's manual for your Bluetooth capable device for more details.

1 Press BT and after choosing the input for BT AUDIO, perform operations 2 and 3 within 5 minutes.

2 Turn on the power to the *Bluetooth* capable device that you wish to pair with, and perform pairing procedure on it.

Pairing will start.

- Place the *Bluetooth* capable device close to the unit.
- Please refer to the user's manual for your Bluetooth capable device for details on when pairing can be performed and the procedures required for pairing.
- The name of this receiver indicated on the equipment that has the Bluetooth functionality is "VSX-1130 XXXXXX (equipment unique symbol)", "VSX-930 XXXXXX (equipment unique symbol)" or "VSX-830 XXXXXX (equipment unique symbol)".

3 Confirm on the *Bluetooth* capable device that pairing has been completed.

If pairing with the Bluetooth capable device has been completed correctly, CONNECTED will be displayed on the front panel of the unit.

Listen to music on the unit from a *Bluetooth* capable device

1 A *Bluetooth* connection will be created between the *Bluetooth* capable device and the unit.

Procedures for connecting to the unit should be performed from the *Bluetooth* capable device.

• Please refer to the user's manual for your *Bluetooth* capable device for details of the connection procedures.

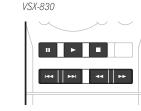
2 Playback music from the *Bluetooth* capable device.

This receiver's remote control buttons can be used for basic playback of files stored on Bluetooth wireless technology devices.

- When the Network Standby and Bluetooth Setup for Network, Bluetooth settings are set as ON, the main power of this receiver will automatically be on by playing the equipment using the Bluetooth function.
- When play is started on the equipment with the *Bluetooth* function, the zone input set at **Play ZONE Setup** will automatically switch to BT AUDIO.



VSX-1130/VSX-930



3 While listening to a source, set the remote control to the receiver operation mode, then press ADV repeatedly to select SOUND RETRIEVER AIR.

Notes

- With this receiver, when an iPod is connected or disconnected while the music of a Bluetooth wireless technology device is playing, the connection with the *Bluetooth* wireless technology device may be canceled.
- The SOUND RETRIEVER AIR listening mode can only be selected when the BT AUDIO input.

Radio wave caution

This unit uses a 2.4 GHz radio wave frequency, which is a band used by other wireless systems (see list below). To prevent noise or interrupted communication, do not use this unit nearby such devices, or make sure these devices are switched off during use.

- Cordless phones
- Cordless facsimiles
- Microwave ovens
- Wireless LAN devices (IEEE802.11b/g)
- Wireless AV equipment
- Wireless controllers for game systems
- Microwave-based health aids
- Some baby monitors
- Other, less common, equipment that may operate on the same frequency:
- Anti-theft systems
- Amateur radio stations (HAM)
- Warehouse logistic management systems
- Discrimination systems for train or emergency vehicles





Notes

- In the event noise appears in your television image, there is the possibility that a *Bluetooth* wireless technology
 enabled device or this unit (including products supported by this unit) are causing signal interference with
 the antenna input connector of your television, video, satellite tuner, etc. In this event, increase the distance
 between the antenna input connector and the *Bluetooth* wireless technology enabled device or this unit
 (including products supported by this unit).
- If there is something obstructing the path between this unit (including devices supported by this unit) and the device equipped with *Bluetooth* wireless technology (such as a metal door, concrete wall, or insulation containing tinfoil), you may need to change the location of your system to prevent signal noise and interruptions.

Scope of operation

Use of this unit is limited to home use. (Transmission distances may be reduced depending on communication environment).

In the following locations, poor condition or inability to receive radio waves may cause the audio to be interrupted or stopped:

- In reinforced concrete buildings or steel framed or iron-framed buildings.
- Near large metallic furniture.
- In a crowd of people or near a building or obstacle.
- In a location exposed to the magnetic field, static electricity or radio wave interference from radio communication equipment using the same frequency band (2.4 GHz) as this unit, such as a 2.4 GHz wireless LAN device (IEEE802.11b/g) or microwave oven.
- If you live in a heavily populated residential area (apartment, townhouse, etc.) and if your neighbor's microwave is placed near your system, you may experience radio wave interference. If this occurs, move your unit to a different place. When the microwave is not in use, there will be no radio wave interference.

Radio wave reflections

The radio waves received by this unit include the radio wave coming directly from the device equipped with *Bluetooth* wireless technology (direct wave) and waves coming from various directions due to reflections by walls, furniture and building (reflected waves). The reflected waves (due to obstacles and reflecting objects) further produce a variety of reflected waves as well as variation in reception condition depending on locations. If the audio cannot be received properly due to this phenomenon, try moving the location of the device equipped with *Bluetooth* wireless technology a little. Also note that audio may be interrupted due to the reflected waves when a person crosses or approaches the space between this unit and the device equipped with *Bluetooth* wireless technology.

Precautions regarding connections to products supported by this unit

- Complete connections for all devices supported by this unit, including all audio cords and power cables before connecting them to this unit.
- After completing connections to this unit, check the audio and power cables to confirm that they not twisted together.
- When disconnecting this unit, confirm that you have sufficient working space in the surrounding area.
- When changing connections of audio or other cables for products supported by this unit, confirm that you have sufficient working space in the surrounding area.

P

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Listening to your system

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Enjoying various types of playback using the listening modes

Using this receiver, you can listen to any source in surround sound. However, the options available will depend on your speaker setup and the type of source you're listening to.

To play with surround sound, check "<u>Standard surround sound</u>" or "<u>Using the Advanced surround effects</u>" below and select the desired mode.

To play with the optimum mode for the input signal, see "<u>Auto playback</u>" or "<u>Using Stream Direct</u>". (The sound is played in stereo when 2-channel signals are input, in surround when multi-channel signals are input.)

Important

• The listening modes and many features described in this section may not be available depending on the current source, settings and status of the receiver.

Auto playback

There are many ways to listen back to sources using this receiver, but the simplest, most direct listening option is the Auto Surround feature. The receiver automatically detects what kind of source you're playing and selects multichannel or stereo playback as necessary.

• While listening to a source, press AUTO (AUTO SURR/ALC/STREAM DIRECT) for auto playback of a source.

AUTO SURROUND shows briefly in the display before showing the decoding or playback format. Check the digital format indicators in the front panel display to see how the source is being processed.

- If the source is Dolby Digital, DTS, or Dolby Surround encoded, the proper decoding format will automatically be selected and shows in the display.
- When listening to the BT AUDIO input, the SOUND RETRIEVER AIR feature is selected automatically.
- ALC In the Auto level control (ALC) mode, this receiver equalizes playback sound levels.

Also, the low and high frequency sounds, dialogs, surround effects, etc., that are difficult to hear when the volume is low are adjusted to be optimal for the volume level. This mode is particularly optimum when listening at night.

When **ALC** is selected, the effect level can be adjusted using the **EFFECT** parameter in <u>Setting the Audio options</u> on <u>page 85</u>.

Standard surround sound

The following modes provide basic surround sound for stereo and multichannel sources.

In case of VSX-1130/VSX-930

• While listening to a source, press SURR (STANDARD SURROUND).

If necessary, press repeatedly to select a listening mode.

• If the source is Dolby Digital, DTS, or Dolby Surround encoded, the proper decoding format will automatically be selected and shows in the display.

With two channel sources, you can select from:

- EXT.STEREO Gives multichannel sound to a stereo source, using all of your speakers
- **Dolby Surround** Dolby Surround is played with a maximum of 7.1 ch including top-middle and surround back using up-mix technology that can expand sound to speakers arranged in three-dimensions, in lieu of the conventional Pro Logic II, Pro Logix IIx, and Pro Logic IIz.
- Neo:6 CINEMA Up to 7.1 channel sound (surround back or front wide), especially suited to movie sources
- Neo:6 MUSIC Up to 7.1 channel sound (surround back or front wide), especially suited to music sources
- STEREO The audio is heard with your sound settings and you can still use the audio options.

With multichannel sources, if you have connected surround back, top middle, front wide speakers, you can select (according to format):

- EXT.STEREO See above
- Dolby Surround See above
- STEREO See above
- DTS Neo:6 Allows you to hear 6.1 channel playback with DTS encoded sources
- DTS-ES Matrix or DTS-ES Discrete Allows you to hear 6.1 channel playback with DTS-ES encoded sources
- Straight Decode Plays back without the effects above.

Notes

- When listening to 2-channel sources in Neo:6 Cinema or Neo:6 Music mode, you can also adjust the center image effect (see <u>Setting the Audio options</u> on page 85).
- When listening through headphones, you can select **STEREO** mode only.
- When Dolby Surround is selected, C.SPREAD can be adjusted (page 85).
- When **Dolby Surround** is selected, audio is not output from the front wide speaker and surround back speaker when it is the only one connected (set).
- When Neo:6 CINEMA or Neo:6 MUSIC is selected, audio is not output from the top middle speaker.

In case of VSX-830

• While listening to a source, press SURR (STANDARD SURROUND).

If necessary, press repeatedly to select a listening mode.

• If the source is Dolby Digital, DTS, or Dolby Surround encoded, the proper decoding format will automatically be selected and shows in the display.

With two channel sources, you can select from:

- EXT.STEREO Gives multichannel sound to a stereo source, using all of your speakers
- Pro Logic II MOVIE Up to 5.1 channel sound, especially suited to movie sources
- **TO Pro Logic II MUSIC** Up to 5.1 channel sound, especially suited to music sources
- I Pro Logic II GAME Up to 5.1 channel sound, especially suited to video games
- **IX PRO LOGIC** 4.1 channel surround sound (sound from the surround speakers is mono)
- Neo:6 CINEMA Up to 5.1 channel sound, especially suited to movie sources
- Neo:6 MUSIC Up to 5.1 channel sound, especially suited to music sources
- STEREO The audio is heard with your sound settings and you can still use the audio options.

With multichannel sources, if you have connected surround speakers, you can select (according to format):

- EXT.STEREO See above
- DTS-ES Matrix or DTS-ES Discrete Allows you to hear 5.1 channel playback with DTS-ES encoded sources
- DTS Neo:6 Allows you to hear 5.1 channel playback with DTS encoded sources
- Neo:6 Allows you to hear 5.1 channel playback
- STEREO See above
- Straight Decode Plays back without the effects above.

🖉 Notes

- When listening to 2-channel sources in Dolby Pro Logic II Music mode, there are three further parameters you
 can adjust: C.WIDTH, DIMENSION and PANORAMA. See <u>Setting the Audio options</u> on <u>page 85</u> to adjust
 them.
- When listening to 2-channel sources in Neo:6 Cinema or Neo:6 Music mode, you can also adjust the center image effect (see <u>Setting the Audio options</u> on page 85).
- When listening through headphones, you can select **STEREO** mode only.





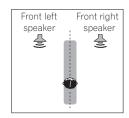


Using the Advanced surround effects

The Advanced surround effects can be used for a variety of additional surround sound effects. Most Advanced Surround modes are designed to be used with film soundtracks, but some modes are also suited for music sources. Try different settings with various soundtracks to see which you like.

• Press ADV (ADVANCED SURROUND) repeatedly to select a listening mode.

- ACTION Designed for action movies with dynamic soundtracks
- DRAMA Designed for movies with lots of dialog
- ADVANCED GAME Suitable for video games
- **SPORTS** Suitable for sports programs
- CLASSICAL Gives a large concert hall-type sound
- ROCK/POP Creates a live concert sound for rock and/or pop music
- **F.S.SURROUND** Use to provide a rich surround sound effect directed to the center of where the front left and right speakers sound projection area converges.



- SOUND RETRIEVER AIR Suitable for listening to the sound from a *Bluetooth* wireless technology device. The SOUND RETRIEVER AIR listening mode can only be selected when the **BT AUDIO** input.
- PHONES SURR When listening through headphones, you can still get the effect of overall surround.
- ECO MODE 1 Select this to play for example music that has a high audio level with a lower power consumption than usual.
- ECO MODE 2 Select this to play movies, etc., with a high ratio of low volume scenes and high volume scenes (a large dynamic ratio) with a lower power consumption than usual. This mode provides greater power savings than ECO MODE 1.

💋 _{Notes}

- The Front Stage Surround Advance (**F.S.SURROUND**) function allows you to create natural surround sound effects using just the front speakers and the subwoofer.
- When ECO MODE 1 or ECO MODE 2 is selected, the front panel's display lights with the dimmest brightness.
- Since ECO MODE 1 and ECO MODE 2 reduce the power consumption, the speakers are switched in function
 of the number of input channels. Because of this, a speaker switching sound (clicking sound) may be produced when the number of input channels is switched. If this bothers you, switch to a different listening mode.
- When using headphones, SOUND RETRIEVER AIR (only with the BT AUDIO input), PHONES SURR, ECO MODE 1 and ECO MODE 2 can be selected.

Using Stream Direct

Use the Stream Direct modes when you want to hear the truest possible reproduction of a source. All unnecessary signal processing is bypassed, and you're left with the pure analog or digital sound source. Processing differs depending on the input signal and whether or not surround back speakers are connected. For details, see <u>Auto Surround</u>, <u>ALC and Stream Direct with different input signal formats</u> on page 127.

• While listening to a source, press AUTO (AUTO SURR/ALC/STREAM DIRECT) to select the mode you want.

Check the digital format indicators in the front panel display to see how the source is being processed.

- AUTO SURROUND See <u>Auto playback</u> on page 71.
- ALC Listening in Auto level control mode (page 71).
- ---When ALC is selected, the effect level can be adjusted using the EFFECT parameter in <u>Setting the Audio</u> options on page 85.
- **DIRECT** Plays back sound from the source with the least modification next to **PURE DIRECT**. With **DIRECT**, the only modifications added to **PURE DIRECT** playback are calibration of the sound field by the MCACC system and the Phase Control effect.
- PURE DIRECT Plays back unmodified sound from source with only minimal digital treatment.

Note

When listening through headphones, you can select **ALC** or **PURE DIRECT** mode only.

About Dolby Atmos

Excluding VSX-830

This AV receiver supports the latest Dolby Atmos surround sound system. Dolby Atmos is a new technology in which, through real time calculation of audio data and meta data (position and time information) included in the audio signal, a surround sound space is achieved irrespective of the speaker layout and number of speakers. Dolby Atmos contents are required to enjoy Dolby Atmos. For Blu-ray discs with Dolby Atmos, Dolby Atmos can be played by connecting most conventional Blu-ray discs with this receiver using HDMI. In addition, the following connection and settings are necessary to play Dolby Atmos.

- Any one of top-middle, surround back, or front-wide must be selected.
- The listening mode of any one of AUTO SURROUND, DIRECT, PURE DIRECT must be selected.
- Settings for **RENDER** must be **OBJECT** (page 85).
- For details on Dolby Atmos, see page 131.



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When playing back Dolby Atmos content, the program format indicator does not light (page 15). **'Dolby Atmos**' is displayed in the display of this receiver.







Selecting MCACC presets

• Default setting: MEMORY 1

If you have calibrated your system for different listening positions, you can switch between settings to suit the kind of source you're listening to and where you're sitting (for example, watching movies from a sofa, or playing a video game close to the TV).

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press AUDIO P..

2 Use ↑/↓ to select 'MCACC'.

An indicator such as **◄ M1. MEMORY 1** ► is displayed in the front panel display.

3 Use \Leftarrow/\Rightarrow to select the setting.

Press repeatedly to select one of the six MCACC presets. See <u>Data Management</u> on <u>page 104</u> to check and manage your current settings.

- These settings have no effect when headphones are connected.
- You can also press ←/→ to select the MCACC preset.

Choosing the input signal

On this receiver, it is possible to switch the input signals for the different inputs as described below.

- This receiver can only play back Dolby Digital, PCM (32 kHz to 192 kHz) and DTS (including DTS 96/24) digital signal formats. The compatible signals via the HDMI terminals are: Dolby Digital, DTS, PCM (32 kHz to 192 kHz), Dolby TrueHD, Dolby Digital Plus, DTS-EXPRESS, DTS-HD Master Audio and SACD.
- You may get digital noise when an LD, CD, DVD or BD player compatible with DTS is playing an analog signal. To prevent noise, make the proper digital connections (page 26) and set the signal input to **DIGITAL**.
- Some DVD players don't output DTS signals. For more details, refer to the instruction manual supplied with your DVD player.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press AUDIO P..

2 Use ↑/↓ to select 'SIGSEL'.

3 Use \Leftarrow/\Rightarrow to select the input signal corresponding to the source component.

Each press cycles through the options as follows:

- AUTO The receiver selects the first available signal in the following order: HDMI; DIGITAL; ANALOG.
- ANALOG Selects an analog signal.
- DIGITAL Select an optical or coaxial digital input signal. 'DIGITL' is displayed on the front panel display.
- HDMI Selects an HDMI signal.
- When the HDMI audio output parameter is set to THROUGH, the sound will be heard through your TV, not from this receiver.

When set to **DIGITAL**, **HDMI** or **AUTO** (only selected **DIGITAL** or **HDMI**), the indicators light according to the signal being decoded (see <u>Display</u> on page 15).

Better sound using Phase Control

This receiver's Phase Control feature uses phase correction measures to make sure your sound source arrives at the listening position in phase, preventing unwanted distortion and/or coloring of the sound.

Phase Control technology provides coherent sound reproduction through the use of phase matching for an optimal sound image. The default setting is on and we recommend leaving Phase Control switched on for all sound sources.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press AUDIO P..

2 Use ↑/↓ to select 'PHASE'.

3 Use \Leftarrow/\Rightarrow to switch on phase correction.

The PHASE CONTROL indicator on the front panel lights.

Notes

Phase matching is a very important factor in achieving proper sound reproduction. If two waveforms are 'in
phase', they crest and trough together, resulting in increased amplitude, clarity and presence of the sound
signal. If a crest of a wave meets a trough, then the sound will be 'out of phase' and an unreliable sound image
will be produced.



- For discs created with standards other than Phase Control, the LFE channel is delayed upon recording in the first place. Phase Control Plus function corrects for phase shifting on such discs. For instructions on setting the Phase Control Plus, see <u>Setting the Audio options</u> on <u>page 85</u>.
- If your subwoofer has a phase control switch, set it to the plus (+) sign (or 0°). However, the effect you can actually feel when **PHASE CONTROL** is set to **ON** on this receiver depends on the type of your subwoofer. Set your subwoofer to maximize the effect. It is also recommended you try changing the orientation or the place of your subwoofer.
- Set the built-in lowpass filter switch of your subwoofer to off. If this cannot be done on your subwoofer, set the cutoff frequency to a higher value.
- If the speaker distance is not properly set, you may not have a maximized PHASE CONTROL effect.
- The PHASE CONTROL mode cannot be set to ON in the following cases:
- -When headphones are plugged in.
- -When the PURE DIRECT mode is switched on.
- -When the HDMI audio output parameter is set to THROUGH in Setting the Setting the Audio options on page 85.

Better sound using Phase Control and Full Band Phase Control

Excluding VSX-830

This receiver is equipped with the two types of functions that correct phase distortion and group delay: Phase Control and Full Band Phase Control. Activating Full Band Phase Control is strongly recommended because it also involves the effects of Phase Control.

The Full Band Phase Control feature calibrates the frequency-phase characteristics of the speakers connected. Standard speakers designed exclusively for audio use generally reproduce sound with the divided frequency bands output from a speaker system consisting of multiple speakers (in case of typical 3-way speakers, for instance, the tweeter, the squawker (midrange), and the woofer output sound in the high-, middle-, and low-frequency ranges, respectively). Though these speakers are designed to flatten the frequency-amplitude characteristics across wide ranges, there are cases where the group delay characteristics are not effectively flattened. This phase distortion of the speakers subsequently causes group delay (the delay of low-frequency sound against high-frequency sound) during audio signal playback.

This receiver analyzes the frequency-phase characteristics of the speakers by measuring test signals output from the speakers with the supplied microphone, therefore flattening the analyzed frequency-phase characteristics during audio signal playback - the same correction is made for a pair of left and right speakers. This correction minimizes group delay between the ranges of a speaker and improves the frequency-phase characteristics across all ranges.

Furthermore, the enhanced frequency-phase characteristics between channels ensure better surround sound integration for multichannel setting.

• Upon shipment from the factory, the Phase Control function is in on status. If you perform **Full Auto MCACC** (page 57) or **Full Band Phase Ctrl** of **Auto MCACC** (page 99), the Full Band Phase Control function is automatically turned on after measurement. By turning Full Band Phase Control on, the Phase Control function is turned on as well. Therefore, we recommend that usually the function be used with Full Band Phase Control on.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press AUDIO P..

2 Use ↑/↓ to select 'PHASE'.

3 Use \Leftarrow/\Rightarrow to select 'FULLBND'.

Both the Phase Control and Full Band Phase Control functions are switched on. The **FULL BAND** and *P* indicator, on the front panel lights.

🖉 Notes

- The original characteristics of group delay of the speakers calibrated and the targeted characteristics after correction can be displayed graphically in the GUI screen (see <u>Checking MCACC Data</u> on <u>page 103</u>). Also, by transferring the measurement data to the computer using the CD-ROM, the original characteristics of group delay of the speakers calibrated and the corrected characteristics of group delay can be displayed in 3-dimension on your PC. For details, refer to the operating instructions for the MCACC PRO PC Display Application Software included on the CD-ROM.
- Depending on the input signal and listening mode, it may not be possible to set the **Full Band Phase Ctrl** mode to **ON**.
- The Full Band Phase Ctrl mode cannot be set to ON in the following cases:
- -When headphones are plugged in.
- —When the **PURE DIRECT** mode is switched on.
- -When the HDMI audio output parameter is set to THROUGH in Setting the <u>Setting the Audio options</u> on page 85.
- The Full Band Phase Control function does not work for Dolby Enabled Speakers since they are full-range speakers.

Playback with NETWORK features

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Introduction

This receiver is equipped with the LAN terminal and you can enjoy the following features by connecting your components to these terminals.

Listening to Internet radio stations

You can select and listen to your favorite Internet radio station from the list of Internet radio stations created, edited, and managed by the vTuner database service exclusively for use with the Pioneer products. → See Playback with Network functions on page 77 and Listening to Internet radio stations on page 77.

Playback the music files stored in PCs

You can playback a lot of musics stored in your PCs using this unit.

- Besides a PC, you can also play back audio files stored on your other components with the built-in media server function based on DLNA 1.0 or DLNA 1.5 framework and protocols (i.e. network-capable hard disks and audio systems).
- → See <u>Playback with Network functions</u> on page 77 and <u>Playing back audio files stored on components on the</u> <u>network</u> on page 79.

Listening to Pandora Internet Radio

→See Listening to Pandora Internet Radio on page 78.

Listening to Spotify audio streaming playback

→See <u>About the Spotify audio stream playback function</u> on page 78.



- To listen to Internet radio stations, you must sign a contract with an ISP (Internet Service Provider) beforehand.
- Photo or video files cannot be played back.
- With Windows Media Player 11 or Windows Media Player 12, DRM-protected audio files cannot be played back on this receiver.

About playable DLNA network devices

This unit allows you to play music on media servers connected on an identical Local Area Network (LAN) as the receiver. This unit allows for the playing of files stored on the following devices:

- PCs running Microsoft Windows 7 or Windows 8 with Windows Media Player 12 installed
- DLNA-compatible digital media servers (on PCs or other components)

Files stored in a PC or DMS (Digital Media Server) as described above can be played via command from an external Digital Media Controller (DMC). Devices controlled by this DMC to play files are called DMRs (Digital Media Renderers). This receiver supports this DMR function. When in the DMR mode, such operations as playing and stopping files can be performed from the external controller. Volume adjustment and the muting control are also possible. The DMR mode is canceled if the remote control unit is operated while in the DMR mode (aside from certain buttons, including the **VOLUME +/–**, **MUTE** and **DISP**).

• Depending on the external controller being used, playback may be interrupted when the volume is adjusted from the controller. In this case, adjust the volume from the receiver or remote control.

Using AirPlay on iPod touch, iPhone, iPad, and iTunes

AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later.

To use AirPlay, select your receiver on your iPod touch, iPhone, iPad or in iTunes. *1 The receiver's input will switch automatically to AirPlay when AirPlay is in use. *2 The following operations can be performed when in AirPlay mode:

- Adjustment of the receiver's volume from iPod touch, iPhone, iPad or iTunes.
- Pause/resume, next/previous track, and shuffle/repeat from the remote control of the receiver. *3
- Display of the currently playing track information on the receiver's display, including artist, song and album name.
- \star 1: For more information, see the Apple website (http://www.apple.com).

*2: The receiver's power automatically turns on when **Network Standby** at **Network Option** is set to **ON**. *3: If operation is not possible, press **NET**, then operate again.



- A network environment is required to use AirPlay.
- The receiver's name that shows up in the AirPlay UI on iPod touch, iPhone, iPad and iTunes can be changed by Friendly Name from Network Option.
- AirPlay provided on this receiver has been developed and tested based on the software versions for the iPod, iPhone, iPad and the software versions for iTunes that are indicated on the Pioneer website. AirPlay may not be compatible with iPod, iPhone, iPad or iTunes software versions other than those indicated on the Pioneer website.

http://pioneer.jp/homeav/support/ios/eu/ (for Europe) http://pioneer.jp/homeav/support/ios/ao/ (for Australia and New Zealand)

About the DHCP server function

To play back audio files stored on components on the network or listen to Internet radio stations, you must turn on the DHCP server function of your router. In case your router does not have the built-in DHCP server function, it is necessary to set up the network manually. Otherwise, you cannot play back audio files stored on components on the network or listen to Internet radio stations. See <u>Setting network connection on page 51</u> for more on this.

Authorizing this receiver

This receiver must be authorized to enable playback. This happens automatically when the receiver makes a connection over the network to the PC. If not, please authorize this receiver manually on the PC. The authorization (or permission) method for access varies depending on the type of server currently being connected. For more information on authorizing this receiver, refer to the instruction manual of your server.









About HTC Connect

This receiver features "HTC Connect", a simple way to enjoy music content from your HTC Connect certified smart phone.

- 1 HTC Connect music streaming provided on this product has been developed based on interoperability testing as defined by the HTC Connect Certification program with the HTC Connect-compatible smartphones.
- 2 Music Navigation via the music progress bar is not currently supported with HTC Connect.
- 3 Third party music applications (those other than HTC's pre-installed "Music" app) have not been tested for compatibility and may not work. HTC Connect has been tested with MP3, AAC, WMA and WAV encoding formats. Other formats may not be compatible.
- 4 High network congestion may interfere with the operation of HTC Connect.

HTC Connect Certified Smartphones

The HTC Connect-compatible smartphones, Please check Pioneer website for up to date information about compatible devices and audio format support.

http://www.pioneer.eu/eur/content/products/htc-connect.html

Ø Notes

- Specifications and design subject to modification without notice.
- HTC, HTC Connect and the HTC Connect logo are trademarks of HTC Corporation.

Playback with Network functions

Important

- About one minute is required between turning the power on and completion of startup.
- When you play back audio files, '**Connecting...**' is displayed before playback starts. The display may continue for several seconds depending on the type of file.
- In case a domain is configured in a Windows network environment, you cannot access a PC on the network while you are logged onto the domain. Instead of logging onto the domain, log onto the local machine.
- There are cases where the time elapsed may not be correctly displayed.

1 Press NET repeatedly to select the category you want to play back.

It may take several seconds for this receiver to access the network.

- Select a category from the following list:
- INTERNET RADIO Internet radio
- When INTERNET RADIO is selected, the radio station that was playing last time is played.
- **PANDORA** Internet radio that supports Pandora
- Spotify Music streaming distribution service
- MEDIA SERVER Server components on the network
- FAVORITES Favorite songs currently being registered

Depending on the selected category, the names of folders, files, and Internet radio stations are displayed.

2 Use \uparrow/\downarrow to select the folder, music files or Internet radio station to play back, and then press ENTER.

Press **↑/↓** to scroll up and down the list and select the desired item. When you press **ENTER**, playback starts with the playback screen being displayed for the selected item. To return to the list screen, press **RETURN**. When the list screen is displayed from the playback screen, the playback screen reappears automatically if no operation is performed for three minutes while the list screen is displayed.

Only audio files with the J mark can be played. In case of the folders with the \Box mark, use \uparrow/\downarrow and **ENTER** to select the desired folder and audio files.

- When Idd or Idd is pressed at the list screen, the page switches.
- To return to the playback screen from the list display, press DISP.

3 Repeat step 2 to play back the desired song.

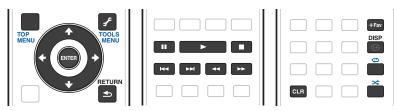
For detailed operating instructions, refer to the section shown below.

- Internet radio stations See Listening to Internet radio stations on page 77.
- Pandora See Listening to Pandora Internet Radio on page 78.
- Spotify See <u>About the Spotify audio stream playback function</u> on page 78.
- Media server See Playing back audio files stored on components on the network on page 79.
- Favorites See Playing back your favorite songs on page 79.

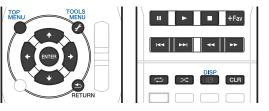
Basic playback controls

You can perform the following operations with the remote control of this receiver. Note that some buttons are not available for operation depending on the category currently being played back.

• Press **NET** to switch the remote control to the network operation mode. *VSX-1130/VSX-930*







Notes

- When input is **MEDIA SERVER** or **FAVORITES**, the following action is taken, depending on the server or file. — II may not work.
- \blacktriangleleft and $\triangleright \triangleright$ may not work or may take the same action as $\blacksquare \blacklozenge$ and $\triangleright \triangleright$.
- When input is **MEDIA SERVER**, by pressing **TOOLS** on the list display screen, you can switch the displayed titles in alphabetical order or track order.

Listening to Internet radio stations

Internet radio is an audio broadcasting service transmitted via the Internet. There are a large number of Internet radio stations broadcasting a variety of services from every corner of the world. Some are hosted, managed, and broadcast by private individuals while others are by the corresponding traditional terrestrial radio stations or radio networks. Whereas terrestrial, or OTA (over-the-air), radio stations are geographically restricted on the range of radio waves broadcast from a transmitter through the air, Internet radio stations are accessible from anywhere in the world, as long as there is a connection to the Internet, as services are not transmitted through the air but are delivered over the World Wide Web. On this receiver you can select Internet radio stations by genre as well as by region.

Depending on the Internet line conditions, the sound may not be smooth when playing Internet radio.







About list of Internet radio

The list of Internet radio stations on this receiver is created, edited, and managed by the vTuner database service exclusively for use with this receiver. For details about vTuner, see <u>vTuner</u> on <u>page 132</u>.

Saving and retrieving Internet radio stations

You can easily save and retrieve saved Internet radio stations. See <u>Playing back your favorite songs</u> on <u>page 79</u> for more on this.

- To listen to Internet radio stations, you must have high-speed broadband Internet access. With a 56 K or ISDN modem, you may not enjoy the full benefits of Internet radio.
- The port number varies depending on the Internet radio station. Check the firewall settings.
- A list of Internet radio stations provided by the vTuner database service is subject to change or deletion without notice due to various reasons.
- Broadcasts may be stopped or interrupted depending on the Internet radio station. In this case, you cannot listen to a radio station selected from the list of Internet radio stations.

Registering broadcast stations not on the vTuner list from the special Pioneer site

With the receiver, broadcast stations not included on the list of station distributed by vTuner can be registered and played. Check the access code required for registration on the receiver, use this access code to access the special Pioneer Internet radio site and register the desired broadcast stations in your favorites. The address of the special Pioneer Internet radio site is:

http://www.radio-pioneer.com

1 Display the Internet Radio list screen.

To display the Internet Radio list screen, perform step 1 at <u>Playback with Network functions</u> on page 77.

2 Use ↑/↓ to select 'Help', then press ENTER.

3 Use \uparrow/\downarrow to select 'Get access code', then press ENTER.

The access code required for registration on the special Pioneer Internet radio site is displayed. Make a memo of this address.

The following can be checked on the **Help** screen:

- Get access code The access code required for registration on the special Pioneer Internet radio site is displayed.
- Show Your WebID/PW After registering on the special Pioneer Internet radio site, the registered ID and password are displayed.
- Reset Your WebID/PW Resets all the information registered on the special Pioneer Internet radio site. When reset, all the registered broadcast stations are also cleared. If you want to listen to the same stations, re-register after resetting.

4 Access the special Pioneer Internet radio site from your computer and perform the registration process.

http://www.radio-pioneer.com

Access the above site and use the access code in step 3 to perform user registration, following the instructions on the screen.

5 Register the desired broadcast stations as your favorites, following the instructions on the computer's screen.

Both broadcast stations not on the vTuner list and stations on the vTuner list can be registered. In this case they are registered on the receiver as favorite broadcast stations and can be played.

Listening to Pandora Internet Radio

(For Australian Model Only)

Pandora is personalized internet radio that is designed to help you discover new music you'll love mixed in with music you already know.

For details, check the website: http://www.pandora.com

- You must have a registered account in order to listen to songs using Pandora Internet Radio. Select **PANDORA**, then follow the instructions on the screen to make the account settings.
- See the Pandora website for regions in which the Pandora service is offered.
- Some functions may be changed at Pandora's discretion.

🖉 Notes

- When disposing of the product, we recommend you reset it to delete the data. See <u>Resetting the system</u> on page 91.
- Pandora[®], the leading internet radio service, gives people music they love anytime, anywhere, through personalized radio stations.

Inputting characters using the software keyboard

- 1 Press TOOLS to switch to the software keyboard operation mode.
- 2 Use $\uparrow/\downarrow/\Leftarrow/\Rightarrow$ to select letters or symbols, then press ENTER.

Repeat this until all the desired characters have been input.

3 Select 'OK' on the software keyboard, then press ENTER.

• To quit inputting characters using the software keyboard, press the TOOLS button.

About the Spotify audio stream playback function

Spotify is a music streaming distribution service managed and operated by Spotify Ltd. and distributing music over the Internet.

Spotify audio streams can be enjoyed using this unit and your smartphone or other mobile digital device.

Preparations (1) Installing the Spotify application on mobile digital devices and registering a Spotify Premium account



• The Spotify application must be installed on mobile digital devices and you must have registered a Spotify Premium account (for a charge) in order to use the Spotify audio stream playback function on this unit. For registration procedures and other Spotify services, see the Spotify website.

http://www.spotify.com/ http://www.spotify.com/connect/

• For information on the countries and regions where Spotify services can be used, see the website below. http://www.spotify.com/

Spotify functions may be changed without notice.

An Internet connection is required on the mobile digital device in order to use the Spotify application. Using the mobile telephone line for the Internet connection tends to lead to high packet communication charges, so we recommend subscribing to a fixed packet rate plan. For details, contact your mobile telephone operator.







Preparations (2) Connecting this unit to the network

- Connect this unit to the network and also to the Internet (pages <u>33</u>, <u>46</u>).
- Connect the mobile digital device by Wi-Fi to the wireless LAN router of the same network as the one to which this unit is connected. For instructions on connecting, see the operating instructions of the mobile digital device and the wireless LAN router.

Using This Device With Spotify Connect

Spotify lets you listen to millions of songs – the artists you love, the latest hits and discoveries just for you. If you are a Spotify user, you can control this device using your Spotify app.

- Step 1. Connect your device to the same wifi network as your phone, tablet or PC running the Spotify app.
- **Step 2.** Open the Spotify app, and play any song.

Step 3. Tap the song image in the bottom left of the screen.

Step 4. Tap the Connect icon 📦.

Step 5. Pick your device from the list.

For information on how to set up and use Spotify Connect please visit http://www.spotify.com/connect/

Even if you are away from home, if you start Spotify audio streaming to play music on your mobile digital device and this unit is selected, the sound will be output from this unit. Depending on the volume level, the output may be loud, so be sure to check the audio output selection carefully before starting audio streaming. In addition, if you accidentally select this unit and play the sound on it, switch the audio output selection to the mobile digital device.

Notes

- A separate contract with/payment to an Internet service provider is required to use the Spotify audio stream playback function.
- This unit's name is displayed as the playback device on the Spotify application. Also, this unit's name can be changed at **Friendly Name** in the network settings.
- When this unit is selected with the Spotify application, the account information is registered on this unit as well. When disposing of this unit, reset this unit's settings in order to delete the account information registered on this unit. For instructions on resetting, see this unit's operating instructions.

Playing back audio files stored on components on the network

This unit allows you to play music on media servers connected on an identical Local Area Network (LAN) as the receiver. This unit allows for the playing of files stored on the following devices:

- PCs running Microsoft Windows Vista or XP with Windows Media Player 11 installed
- PCs running Microsoft Windows 7 or Windows 8 with Windows Media Player 12 installed
- DLNA-compatible digital media servers (on PCs or other components)

Playing back your favorite songs

Up to 64 favorite tracks on the media server and/or Internet radio stations can be registered in the Favorites folder. Note that only the audio files stored on components on the network can be registered.

Registering and deleting audio files and Internet radio stations in and from the Favorites folder

1 Press NET repeatedly to select the INTERNET RADIO or MEDIA SERVER.

2 With the track or Internet radio station you want to register selected, press +Fav (Favorite). The selected song or Internet radio station is then registered in the Favorite.

Note

To delete tracks or Internet radio stations that have been registered, set the input to **FAVORITES**, select the track or station to be deleted, then press the **CLR** button.

About network playback

The network playback function of this unit uses the following technologies:

Windows Media Player

See <u>Windows Media Player 11/Windows Media Player 12</u> on page 132 for more on this.

DLNA



DLNA CERTIFIED[™] Audio Player

The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.

The DLNA certification logo makes it easy to find products that comply with the DLNA Interoperability Guidelines. This unit complies with DLNA Interoperability Guidelines v1.5.

When a PC running DLNA server software or other DLNA compatible device is connected to this player, some setting changes of software or other devices may be required. Please refer to the operating instructions for the software or device for more information.

DLNATM, the DLNA Logo and DLNA CERTIFIEDTM are trademarks, service marks, or certification marks of the Digital Living Network Alliance.

Content playable over a network

- Even when encoded in a compatible format, some files may not play correctly.
- Movie or Photo files cannot be played back.
- There are cases where you cannot listen to an Internet radio station even if the station can be selected from a list of radio stations.
- Some functions may not be supported depending on the server type or version used.
- Supported file formats vary by server. As such, files not supported by your server are not displayed on this unit. For more information check with the manufacturer of your server.

Disclaimer for Third Party Content

Access to content provided by third parties requires a high speed internet connection and may also require account registration and a paid subscription.

Third party content services may be changed, suspended, interrupted, or discontinued at any time without notice, and Pioneer disclaims any liability in connection with such occurrences.

Pioneer does not represent or warrant that content services will continue to be provided or available for a particular period of time, and any such warranty, express or implied, is disclaimed.







About playback behavior over a network

- Playback may stall when the PC is switched off or any media files stored on it are deleted while playing content.
- If there are problems within the network environment (heavy network traffic, etc.) content may not be displayed or played properly (playback may be interrupted or stalled). For best performance, a 100BASE-TX connection between player and PC is recommended.
- If several clients are playing simultaneously, as the case may be, playback is interrupted or stalled.
- Depending on the security software installed on a connected PC and the setting of such software, network connection may be blocked.

Pioneer is not responsible for any malfunction of the player and/or the NETWORK features due to communication error/malfunctions associated with your network connection and/or your PC, or other connected equipment. Please contact your PC manufacturer or Internet service provider.

This product includes technology owned by Microsoft Corporation and cannot be used or distributed without a license from Microsoft Licensing, Inc.

Microsoft, Windows, Windows Media and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

About playable file formats

The NETWORK feature of this receiver supports the following file formats. Note that some file formats are not available for playback although they are listed as playable file formats. Also, the compatibility of file formats varies depending on the type of server. Check with your server to ensure the compatibility of file formats supported by your server.

- Internet radio playback may be affected by the Internet communications environment, and in this case playback may not be possible even with the file formats listed here.
- · With MP3, WAV, AAC, FLAC, AIFF and Apple Lossless files, when music files with the same format, sampling frequency, quantization bit number and number of channels are played successively, they are played with no gap.
- -Gapless playback is not possible when the format is being converted (transcoded) by the server.
- -Gapless playback is not possible in the DMR mode.
- -When AAC or MP3 format is used, sound is reproduced with the minimum gap. If you are conscious about gaps, use WAV or FLAC files.

Music files

Category	Extension	Stream		
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
MP3 .mp3			Quantization bitrate	16 bit
	MPEG-1 Audio Layer-3	Channel	2 ch	
<α>			Bitrate	8 kbps to 320 kbps
			VBR/CBR	Supported/Supported
WAV .wav		Sampling frequency 	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz	
	.wav	LPCM	Quantization bitrate	16 bit, 24 bit
			Channel	2 ch, 5.0 ch, 5.1 ch
			Chaimer	<c></c>

Category	Extension	Stream		
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
		M/MAA 0/7/0/0	Quantization bitrate	16 bit
WMA	.wma	WMA2/7/8/9 <d></d>	Channel	2 ch
			Bitrate	5 kbps to 320 kbps
			VBR/CBR	Supported/Supported
			Sampling frequency	32 kHz, 44.1 kHz, 48 kHz
	.m4a		Quantization bitrate	16 bit
AAC	.aac .3gp	MPEG-4 AAC LC MPEG-4 HE AAC	Channel	2 ch
	.3g2		Bitrate	16 kbps to 320 kbps
			VBR/CBR	Supported/Supported
Apple Lossless	.m4a .mp4	Apple Lossless	Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
, ipple 20001000			Quantization bitrate	16 bit, 24 bit
			Channel	2 ch
FLAC	.flac FLAC	FLAC	Sampling frequency 	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
<e></e>			Quantization bitrate	16 bit, 24 bit
			Channel	2 ch, 5.0 ch, 5.1 ch <c></c>
AIFF	.aiff	.aiff	Sampling frequency	32 kHz, 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz
	.aif	.aif	Quantization bitrate	16 bit, 24 bit
			Channel	2 ch
DSD	.dff		Sampling frequency	2.8224 MHz, 5.6448 MHz <g></g>
<f></f>	.dsf		Quantization bitrate	1 bit
			Channel	2 ch

a "MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia."

b 32 kHz, 176.4 kHz and 192 kHz support 2-channel audio sources only.

c • When playing the 5.0 channel or 5.1 channel file in the sub zone, only the front left and right sound is played. Multichannel playback is only available with the main zone.

Audio for 5.0 ch and 5.1 ch for wireless connection can be played only when the sampling frequency is 48 kHz or below.

d Files encoded using Windows Media Codec 9 may be playable but some parts of the specification are not supported; specifically, Pro, Lossless, Voice.

e Uncompressed FLAC files are not supported. Pioneer does not guarantee playback.

f DSD files cannot be played in the sub zone.

g 5.6448 MHz signals cannot be played on the VSX-830.









Control with HDMI function

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About the Control with HDMI function

Synchronized operations below with a **Control** with HDMI-compatible Pioneer TV or Blu-ray Disc player are possible when the component is connected to the receiver using an HDMI cable.

- The receiver's volume can be set and the sound can be muted using the TV's remote control.
- The receiver's input switches over automatically when the TV's input is changed or a **Control** with HDMIcompatible component is played.
- The receiver's power is also set to standby, when the TV's power is set to standby.

Important

- With Pioneer devices, the Control with HDMI functions are referred to as "KURO LINK".
- You cannot use this function with components that do not support Control with HDMI.
- We only guarantee this receiver will work with Pioneer Control with HDMI-compatible components. However, we do not guarantee that all synchronized operations will work with components that support the Control with HDMI function.
- Use a High Speed HDMI[®]/[™] cable when you want to use the **Control** with HDMI function. The **Control** with HDMI function may not work properly if a different type of HDMI cable is used.
- For details about concrete operations, settings, etc., refer to also the operating instructions for each component.

Making Control with HDMI connections

You can use synchronized operation for a connected TV and other components.

• Be sure to connect the TV's audio cable to the audio input of this unit. When the TV and receiver are connected by HDMI connections, if the TV supports the HDMI ARC (Audio Return Channel) function, the sound of the TV is input to the receiver via the **HDMI OUT 1** terminal, so there is no need to connect an audio cable. In this case, set **ARC** at **HDMI Setup** to **ON** (see <u>HDMI Setup</u> on <u>page 82</u>).

For details, see Connecting your TV and playback components on page 27 or 41.

Important

- When connecting this system or changing connections, be sure to switch the power off and disconnect the power cord from the wall socket. After completing all connections, connect the power cords to the wall socket.
- After this receiver is connected to an AC outlet, a 2 second to 10 second HDMI initialization process begins. You cannot carry out any operations during this process. The HDMI indicator in the front panel display blinks during this process, and you can turn on this receiver once it has stopped blinking. When you set the Control with HDMI to OFF, you can skip this process. For details about the Control with HDMI feature, see <u>Control with</u> <u>HDMI function</u> on page 81.
- To get the most out of this function, we recommend that you connect your HDMI component not to a TV but rather directly to the HDMI terminal on this receiver.
- The **Control** with HDMI function can be used with a TV connected to the **HDMI OUT 1** terminal, but not with a TV connected to the **HDMI OUT 2** terminal.

HDMI Setup

You must adjust the settings of this receiver as well as the connected **Control** with HDMI-compatible components in order to make use of the **Control** with HDMI function. For more information see the operating instructions for each component.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

- 2 Select 'System Setup', then press ENTER.
- 3 Select 'HDMI Setup', then press ENTER.
- 4 Select the 'Control' setting you want.

Choose whether to set this unit's **Control** with HDMI function **ON** or **OFF**. You will need to set it to **ON** to use the **Control** with HDMI function.

When using a component that does not support the **Control** with HDMI function, set this to **OFF**.

• **ON** – Enables the **Control** with HDMI function. Set **Control Mode** and **ARC** in the subsequent setting items to the desired values.

Also, by connecting a player compatible with Sound Retriever Link to this receiver and setting **ON**, each function can be linked for operation. For Sound Retriever Link, see <u>Setting the Audio options</u> on page 85.

• **OFF** – The **Control** with HDMI is disabled. The **Control Mode** and **ARC** functions in the subsequent setting items cannot be used.

5 Select the 'Control Mode' setting you want.

Choose whether you want to enable synchronized operations.

- **ON** Enabled for the synchronized operations.
- **OFF** The synchronized operations disabled.

6 Select the 'ARC' setting you want.

When a TV supporting the HDMI ARC (Audio Return Channel) function is connected to the receiver, the sound of the TV can be input via the **HDMI OUT 1** terminal.

After setting the **ARC**, some time may be required for the connected device to be recognized and the sound to be produced.

- **ON** The TV's sound is input via the HDMI terminal.
- OFF The TV's sound is input from the Audio input terminals other than HDMI inputs.

7 Select the 'Standby Through' setting you want.

It is possible to transfer signals from an HDMI-connected player to the TV when this receiver's power is on standby.

Select the HDMI input whose HDMI signal is to be input for through transfer when in the standby mode. When **LAST** is selected, the signal being input to the currently selected HDMI input is transferred. When **OFF** is selected, no HDMI input is transferred through when in the standby mode. (However, when **Control** is set to **ON**, the HDMI signal is transferred through by the **Control** with HDMI function even when in the standby mode.)

- When anything other than OFF is set for this setting, the receiver's HDMI input can be switched even when the receiver is in the standby mode. (Switch by pointing the remote control at the receiver and pressing the HDMI, BD, DVD or SAT/CBL button.)
- Setting to anything other than OFF increases power consumption in the standby mode.
- This setting can be used even with devices that are not compatible with the **Control** with HDMI function.
- The Standby Through function cannot be used with MHL-compatible devices.
- 8 When you're finished, press HOME MENU.



Before using synchronization

Once you have finished all connections and settings, you must:

- 1 Put all components into standby mode.
- 2 Turn the power on for all components, with the power for the TV being turned on last.

3 Choose the HDMI input to which the TV is connected to this receiver, and see if video output from connected components displays properly on the screen or not.

4 Check whether the components connected to all HDMI inputs are properly displayed.

About synchronized operations

Important

 Synchronized operations are enabled when Control Mode is set to ON after setting Control in HDMI Setup to ON. For details, see <u>HDMI Setup</u> on page 82.

The **Control** with HDMI-compatible component connected to the receiver operates in sync as described below.

- From the menu screen of the **Control** with HDMI-compatible TV, set audio to be played through this receiver, and the receiver will switch to the synchronized amp mode.
- When in the synchronized amp mode, you can adjust the receiver's volume or mute the sound using the TV's remote control.
- When in the synchronized amp mode, the synchronized amp mode is canceled when the receiver's power is turned off. To turn the synchronized amp mode back on, set audio to be played through the receiver from the TV's menu screen, etc. This receiver will power up and switch to the synchronized amp mode.
- When the synchronized amp mode is canceled, the receiver's power turns off if you were viewing an HDMI input or a TV program on the TV.
- When in the synchronized amp mode, the synchronized amp mode is canceled if an operation that produces sound from the TV is performed from the TV's menu screen, etc.
- When the TV's power is set to standby, the receiver's power is also set to standby. (Only when the input for a component connected to the receiver by HDMI connection is selected or when watching the TV.)
- The receiver's input switches automatically when the **Control** with HDMI-compatible component is played.
- The receiver's input switches automatically when the TV's input is switched.
- The synchronized amp mode remains in effect even if the receiver's input is switched to a component other than one connected by HDMI.

The operations below can also be used on Pioneer **Control** with HDMI-compatible TVs.

- When the receiver's volume is adjusted or the sound is muted, the volume status is displayed on the TV's screen.
- When the OSD language is switched on the TV, the receiver's language setting also switches accordingly.

Sound Retriever Link

These are automatic functions allowing you to output optimum audio and video signals from the receiver using the **Control** with HDMI function. When a player supporting the respective function is connected to the receiver by HDMI, the sound/picture is optimized for the compressed audio/video file played on the player.

- Depending on the compressed audio/video file format, it may not be operated automatically.
- Also see the player's operating instructions.

When playing a compressed audio file on the player, the file's bitrate information is acquired using the **Control** with HDMI function, and the sound is optimized on the receiver based on this information. To activate the Sound Retriever Link function, make the setting below.

1 Set the HDMI Setup's Control to ON, and set the Control Mode setting to ON.

See <u>HDMI Setup</u> on <u>page 82</u>.

2 Set the S.RTRV (Auto Sound Retriever) setting to ON.

See Setting the Audio options on page 85.

Cautions on the Control with HDMI function

- Connect the TV directly to this receiver. Interrupting a direct connection with other amps or an AV converter (such as an HDMI switch) can cause operational errors.
- Only connect components (Blu-ray Disc player, etc.) you intend to use as a source to the HDMI input of this receiver. Interrupting a direct connection with other amps or an AV converter (such as an HDMI switch) can cause operational errors.
- When the receiver's **Control** is turned **ON**, even if the receiver's power is in the standby mode, it is possible to output the audio and video signals from a player via HDMI to the TV without producing sound from the receiver, but only when a **Control** with HDMI-compatible component (Blu-ray Disc player, etc.) and compatible TV are connected. In this case, the receiver's power turns on and the power and **HDMI** indicators light.
- If the **Control** setting is not set to **OFF**, the power consumption during standby will increase.









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P

ABC

Setting the Audio options

There are a number of additional sound settings you can make using the AUDIO PARAMETER menu. The defaults, if not stated, are listed in bold.

Important

• Note that if a setting doesn't appear in the AUDIO PARAMETER menu, it is unavailable due to the current source, settings and status of the receiver.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press AUDIO P...

2 Use \uparrow/\downarrow to select the setting you want to adjust.

Depending on the current status/mode of the receiver, certain options may not be able to be selected. Check the table below for notes on this.

3 Use \Leftarrow/\Rightarrow to set as necessary.

See the table below for the options available for each setting.

4 Press RETURN to confirm and exit the menu.

Audio parameter menu

Setting	What it does	Option(s)
MCACC (MCACC preset)	Selects your favorite MCACC preset memory when multiple preset memories are saved. When an MCACC preset memory has been renamed, the given name is displayed.	 ✓ M1. MEMORY 1 to M6. MEMORY 6 ► Default: M1. MEMORY 1
EQ	Switches on/off the effects of EQ Pro.	ON
(Acoustic Calibration EQ)		OFF
S-WAVE	Switches on/off the effects of Standing Wave Control.	ON
(Standing Wave)	Switches on on the enects of Standing wave Control.	OFF
	Switches on/off the effects of Phase Control (page 73).	FULLBND
PHASE	It is automatically set to FULLBND when Full Band Phase Control	<d></d>
(Phase Control)		ON
	before the measurement.	OFF
PHASE C+ (Phase Control Plus) <a>	For discs created with standards other than Phase Control, the LFE channel is delayed upon recording in the first place. This function corrects for phase shifting on such discs. This function is particularly effective when playing multi-channel music containing low frequency effects (LFE). When AUTO is selected, not only the low range delay but also the polarity and correlation are detected to achieve the optimum effect.	▲ AUTO/0 to 16 (ms) ► Default: AUTO
DELAY (Sound Delay)	Some monitors have a slight delay when showing video, so the soundtrack will be slightly out of sync with the picture. By adding a bit of delay, you can adjust the sound to match the presentation of the video.	 ◀ 0 to 800 (ms) ► Default: 0
	Applies the treble and bass tone controls to a source, or bypasses	BYPASS
TONE (Tone Control)	them completely. <i>VSX-830 only:</i> This setting is only displayed when the listening mode is STEREO , Auto surround (STEREO) or SOUND RETRIEVER AIR .	ON

Setting	What it does	Option(s)
BASS 	Adjusts the amount of bass.	 4 -6 to +6 (dB) ► Default: 0 (dB)
TREBLE 	Adjusts the amount of treble.	 4 –6 to +6 (dB) ► Default: 0 (dB)
S.RTRV (Auto Sound Retriever) <c></c>	With the Auto Sound Retriever function, DSP processing is used to compensate for the loss of audio data upon compression, improving the sound's sense of density and modulation. Also, when a player supporting the Sound Retriever Link function is connected to the receiver by HDMI, by setting this to ON , the bitrate information of the compressed audio file being played on the player is acquired using the Control with HDMI function, and the sound is optimized based on this information (Sound Retriever Link).	OFF
	May improve the quality of sound in a noisy source (for example, video	OFF
DNR (Digital Noise Reduction)	tape with lots of background noise) when switched on. This only has an effect with 2-channel signal inputs. This mode is effective for contents with a sampling frequency of 48 kHz or less.	ON
DIALOG E (Dialog Enhancement)	Localizes dialog in the center channel to make it stand out from other background sounds in a TV or movie soundtrack.	 ✓ OFF/FLAT ► Default: OFF
Hi-bit24 <d> <e></e></d>	Creates a wider dynamic range with digital sources like CDs, DVDs or BDs. 16- and 20-bit PCM as well as compressed audio is requantized to 24 bits, more subtle musical expression. This mode is effective for contents with a sampling frequency of 48 kHz or less.	OFF
	N 12 0F 1655.	CH1 – Channel 1 is heard only
DUAL	Specifies how dual mono encoded Dolby Digital soundtracks should be played. Dual mono is not widely used, but is sometimes necessary when two languages need to be sent to separate channels.	CH2 – Channel 2 is heard only
(Dual Mono)		CH1 CH2 – Both chan- nels heard from front speakers
		AUTO
SIGSEL (Signal Select)	Use to switch the input signal type (analog/digital/HDMI) (page 73).	ANALOG DIGITAL <f></f>
		HDMI
Fixed PCM	This is useful if you find there is a slight delay before OFF recognizes the PCM signal on a CD, for instance. When ON is selected, noise may be output during playback of non- PCM sources. Please select another input signal if this is a problem.	OFF ON
	Adjusts the level of dynamic range for movie soundtracks optimized	AUTO
DRC (Dynamic Range Control)	for Dolby Digital, DTS, Dolby Digital Plus, Dolby TrueHD, DTS-HD and	MAX
<g></g>	DTS-HD Master Audio (you may need to use this feature when listen- ing to surround sound at low volumes).	MID
		OFF
Loud Mgmt (Loudness Management)	This is a setting of the post process function of the Dolby TrueHD decoder. By setting to OFF, you can enjoy higher sound quality. This can only be set when DRC is set to OFF and the input signal is a Dolby TrueHD signal.	OFF

Setting	What it does	Option(s)
LFE (LFE Attenuate)	Some audio sources include ultra-low bass tones. Set the LFE attenu- ator as necessary to prevent the ultra-low bass tones from distorting the sound from the speakers. When set to the recommended value of 0 dB, the LFE is not restricted. When set to a value other than 0 dB, the LFE is restricted to the set value. When OFF is selected, the sound is not output from the LFE channel.	 OFF/ -20dB/ -15dB, -10dB/ -5dB/ -4dB/ -3dB/ -2dB/ -1dB/ 0dB ► Default: 0dB
INPUT ATT	If the sound is distorted, this can be used to lower the input signal	OFF
(Input attenuate) <h></h>	level and reduce the distortion.	ON
HDMI	Specifies the routing of the HDMI audio signal out of this receiver	AMP
(HDMI Audio) <i></i>	(amp) or through to a TV. When THROUGH is selected, no sound is output from this receiver.	THROUGH
	This feature automatically corrects the audio-to-video delay between	OFF
A.DELAY (Auto delay) <j></j>	components connected with an HDMI cable. The audio delay time is set depending on the operational status of the display connected with an HDMI cable. The video delay time is automatically adjusted according to the audio delay time.	ON
C.WIDTH (Center Width) (Applicable only when using a center speaker) <k></k>	Provides a better blend of the front speakers by spreading the center channel between the front right and left speakers, making it sound wider (higher settings) or narrower (lower settings).	● 0 to 7 Default: 3
DIMENSION <k></k>	Adjusts the depth of the surround sound balance from front to back, making the sound more distant (minus settings), or more forward (positive settings).	 -3 to +3 ► Default: 0
PANORAMA	Extends the front stereo image to include the surround speakers for a	OFF
<k></k>	'wraparound' effect.	ON
C.IMAGE (Center Image) (Applicable only when using a center speaker) <i></i>	Adjusts the center image to create a wider stereo effect with vocals. Adjust the effect from 0 (all center channel sent to front right and left speakers) to 10 (center channel sent to the center speaker only).	 ◆ 0 to 10 ► Defaults: Neo:6 CINEMA: 10 Neo:6 MUSIC: 3
EFFECT	Sets the effect level for the ALC mode.	 ◀ 10 to 90 ► Defaults: 50
C.SPREAD	Center spread expands the center channel signal to the left and right	ON
(Center Spread) <d> <m></m></d>	front speakers to create a wider frontal audio image for the listener. It is optimized and designed primarily for playback of stereo music content.	OFF
	When AUTO is selected, the sound field is created with the surround	AUTO
V.SPs (Virtual Speakers)	back and front wide channels whose Speaker Setting is set to NO automatically complemented. To set the respective channels individually, select MANUAL .	MANUAL
V.SB	When you're not using surround back speakers, selecting this mode	OFF
(Virtual Surround Back) <n></n>	allows you to hear a virtual surround back channel through your sur- round speakers. You can choose to listen to sources with no surround back channel information.	ON
V.HEIGHT		OFF
(Virtual Height) <o></o>	Settings to create virtual front height channel audio.	ON

Setting V.WIDE (Virtual Wide)	What it does When you're not using front wide speakers, selecting this mode allows you to hear a virtual front wide channel through your front speakers.	Option(s) OFF
	This improves the continuity of the sound from the front channel to the surround channels.	ON
RENDER		OBJECT
(Rendering Mode)	Allows you to choose which signal, object base (OBJECT) or channel	
<d></d>	base (LEGACY) to decode when playing back Dolby Atmos content.	LEGACY
<		
There are disks that car	nnot be adjusted using AUTO. When '' is displayed on the front panel displa	y, please adjust manually.
The adjustment can be	made only when TONE is set to ON .	
	nges depending on the type of input (<u>page 91</u>).	
	, the Sound Retriever effect is optimized based on the bitrate information of th	
	INTERNET RADIO, PANDORA, Spotify, MEDIA SERVER, FAVORITES (digit	al audio input only) to
achieve high sound qua		
	NTERNET RADIO, PANDORA, Spotify, MEDIA SERVER, FAVORITES or BT A	UDIO input function, by
default S.RTRV is set to		
	, optimum correction of the audio signals input via the HDMI OUT terminal is annel) function, and the sound of digital TV broadcasts is produced with HD g	
,	anel) function, and the sound of digital 14 broadcasts is produced with HD gi ad ARC in HDMI Setup is set to ON . (See <u>HDMI Setup</u> on <u>page 82</u> .)	uanty. This is valid when
Excluding VSX-830	a ARC IN HDWI Setup is set to ON. (See <u>FIDWI Setup</u> on <u>page oz</u> .)	
0	vork when the sampling frequency is 32 kHz.	
On the front panel disp		
	for Dolby TrueHD signals. Select MAX or MID for signals other than Dolby Tru	ueHD
	vailable when using the Stream Direct (ANALOG DIRECT) modes.	301121
	not function when the listening mode is set to PURE DIRECT with AirPlay.	
	ng cannot be switched while performing synchronized amp mode operations.	
 The synchronized am 	p mode must be turned on in order to play the receiver's HDMI audio and vide	o input signals from the TV
with the receiver's powe	er in the standby mode. See <u>About synchronized operations</u> on <u>page 83</u> .	
• VSX-830 only: Even if t	he THROUGH settings are made, DSD signals cannot be output.	
This feature is only avai	lable when the connected display supports the automatic audio/video synchro	onizing capability ('lipsync')
for HDMI. If you find the	e automatically set delay time unsuitable, set A.DELAY to OFF and adjust the	delay time manually. For
more details about the	lipsync feature of your display, contact the manufacturer directly.	
• VSX-830 only.		
, 0	o 2-channel sources in Dolby Pro Logic II Music mode.	
, 0	2-channel sources in Neo:6 MUSIC/CINEMA mode.	
	jes depending on the type of input (<u>page 91</u>).	
	MANUAL is selected for V.SPs.	
• You can't use the Virt	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive	r or when any of the stereo,
• You can't use the Virt Front Stage Surround A	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive advance, Sound Retriever Air or Stream Direct modes is selected.	-
You can't use the Virt Front Stage Surround A Excluding VSX-830: You	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive advance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o	on and the SB setting is
 You can't use the Virt Front Stage Surround A <i>Excluding VSX-830:</i> You set to NO or if Front Bi- 	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S	on and the SB setting is
• You can't use the Virt Front Stage Surround A • <i>Excluding VSX-830:</i> You set to NO or if Front Bi- Speaker System and S	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive advance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P:>A+B ON is selected with the OUT P. button.	on and the SB setting is peaker B is selected at
 You can't use the Virt Front Stage Surround A Excluding VSX-830: You set to NO or if Front Bi- Speaker System and S VSX-830 only: This set 	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receiver dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o •Amp or HDZONE is selected at Speaker System. It can also be used when S P:►A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2	on and the SB setting is peaker B is selected at
 You can't use the Virt Front Stage Surround A Excluding VSX-830: You set to NO or if Front Bi- Speaker System and S VSX-830 only: This set This mode is effective 	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P ► A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2 of contents with a sampling frequency of 48 kHz or less.	on and the SB setting is peaker B is selected at
You can't use the Virt Front Stage Surround A <i>Excluding VSX-830</i> : Yoi set to NO or if Front Bi- Speaker System and S <i>VSX-830 only</i> : This sett This mode is effective o This can be set when	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receiver dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P:▶ A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2 for contents with a sampling frequency of 48 kHz or less. MANUAL is selected for V.SPs.	on and the SB setting is peaker B is selected at ch .
You can't use the Virt Front Stage Surround A <i>Excluding VSX-830:</i> You set to NO or if Front Bi- Speaker System and S <i>VSX-830 only:</i> This set This mode is effective O This can be set when You can't use the Virt	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P:►A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2 for contents with a sampling frequency of 48 kHz or less. MANUAL is selected for V.SPs. ual Height mode when the headphones are connected to this receiver or when	on and the SB setting is peaker B is selected at ch .
You can't use the Virt Front Stage Surround A <i>Excluding VSX-830:</i> You set to NO or if Front Bi- Speaker System and S <i>VSX-830 only:</i> This sett This mode is effective O This can be set when You can't use the Virt Stage Surround Advance	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receiver dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P:►A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2 for contents with a sampling frequency of 48 kHz or less. MANUAL is selected for V.SPs. ual Height mode when the headphones are connected to this receiver or wher be, Sound Retriever Air or Stream Direct modes is selected.	on and the SB setting is peaker B is selected at ch .
You can't use the Virt Front Stage Surround A <i>Excluding VSX-830:</i> You set to NO or if Front Bi- Speaker System and S <i>VSX-830 only:</i> This seth This mode is effective o This can be set when You can't use the Virt Stage Surround Advance <i>Excluding VSX-830:</i> You	MANUAL is selected for V.SPs. ual Surround Back mode when the headphones are connected to this receive dvance, Sound Retriever Air or Stream Direct modes is selected. u can only use the Virtual Surround Back mode if the surround speakers are o Amp or HDZONE is selected at Speaker System. It can also be used when S P:►A+B ON is selected with the OUT P. button. ting is available when the surround speaker is on, and Speaker System is 5.2 for contents with a sampling frequency of 48 kHz or less. MANUAL is selected for V.SPs. ual Height mode when the headphones are connected to this receiver or when	on and the SB setting is peaker B is selected at ich . n any of the stereo, Front

p • This can be set when MANUAL is selected for V.SPs.

• You can't use the Virtual Wide mode when the headphones are connected to this receiver or when any of the stereo, Front Stage Surround Advance, Sound Retriever Air or Stream Direct modes is selected.

• Excluding VSX-830: You can only use the Virtual Wide mode if the surround speakers are on and the FW setting is set to NO. It can also not be used when playing signals containing actual front wide channel information.

- VSX-830 only: This setting is available when the surround speaker is on, and Speaker System is 5.2ch.
- This mode is effective for contents with a sampling frequency of 48 kHz or less.
- q When neither the top middle, surround back, or front wide speaker is connected, Dolby Atmos does not play.

Setting the Video options

Resolution can be set here. Select the settings according to your preference.



- Note that if an option cannot be selected on the VIDEO PARAMETER menu, it is unavailable due to the current source, setting and status of the receiver.
- All of the setting items can be set for each input function.
 However, with the audio only input function, VIDEO PARAMETER cannot be set.
- Excluding VSX-830: When MAIN/HDZONE is set to HDZONE, the VIDEO PARAMETER menu setting only
 affects the HDMI OUT 1 terminal signal.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press VIDEO P..

2 Use \uparrow/\downarrow to select the setting you want to adjust.

Depending on the current status/mode of the receiver, certain options may not be able to be selected. Check the table below for notes on this.

3 Use ←/⇒ to set as necessary.

See the table below for the options available for each setting.

4 Press RETURN to confirm and exit the menu.

Video parameter menu

Setting	What it does	Option(s)
SCAL		AUTO
(Scaling) <a>	1080p HDMI input video is up scaled to 4K and output.	PURE
	Detailed feel of materials and accurate outlines are reproduced.	0
	Setting is made by selecting one of 0 (Off), +1 , +2 or +3 and sharper	+1
SUPER RES (Super resolution) 	images are delivered with greater values.	+2
	0	
	+3	+3
	(The image is only an example for checking the effect.)	

a Video may not be output properly depending on the HDMI cable that is upscaling to 4K. In that case, switch to **PURE**.
When setting the **AUTO** when connected to a television that is 4K compatible, 1080p/60 is up-scaled to 4K/60p and 1080p/24 is up-scaled to 4K/24p. Input video other than HDMI is output as the input resolution. Also, when selecting **PURE**, the input resolution is output as is (<u>About the video converter</u> on page 26).

• When PURE is selected and the input signal is 480i, the on-screen display cannot be displayed.

b You can perform this setting only when AUTO is selected with SCAL. This is effective when up-scaling 1080p to 4K.







Switching the output (OUTPUT PARAMETER)

You can press OUT P. to switch the output of speaker terminals or HDMI terminals to be played.

Switching the speaker terminals

In case of VSX-1130/VSX-930

If you selected **7.2ch/5.2.2ch**, **7.2ch SB/FW** or **Speaker B** at <u>Speaker system setting</u> on <u>page 106</u>, you can switch between speakers using the **OUT P.** button.

If you selected Front Bi-Amp or HDZONE, the button will simply switch your main speaker terminals on or off.

1 Press OUT P..

- You can perform the same operation by pressing **SPEAKERS** on the front panel.
- 2 Use **↑**/↓ to select 'SP'.

3 Use \Leftarrow/\Rightarrow to switch the speaker terminals to be played.

As mentioned above, if you have selected **Front Bi-Amp** or **HDZONE**, the button will simply switch your main speaker terminal (A) on or off.

Press repeatedly to choose a speaker terminal option:

When you select 7.2ch/5.2.2ch, you can select from:

- SP: SB/TMd ON Surround back or top middle channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output. The surround back and top middle channels are switched automatically according to the audio input signal.
- SP: SB ON Surround back channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output.
- SP: TMd ON Top middle channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output.
- SP: OFF No sound is output from the speakers.

When you select 7.2ch SB/FW, you can select from:

- SP: SB/FW ON Surround back or front wide channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output. The surround back and front wide channels are switched automatically according to the audio input signal.
- SP: SB ON Surround back channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output.
- SP: FW ON Front wide channels are added to the front, center and surround channels (maximum 5 channels) and a maximum of 7 channels are output.
- SP: OFF No sound is output from the speakers.

When you select Speaker B, you can select from:

- SP: A ON Sound is output from the A-speaker terminals (up to 7 channels (including surround back channels), depending on the source).
- SP: B ON Sound is output from the two speakers connected to the B-speaker terminals. Multichannel sources will not be heard.
- SP: A+B ON Sound is output from the A-speaker terminals (up to 5 channels, depending on the source), the two speakers connected to the B-speaker terminals, and the subwoofer. The sound from the B-speaker terminals will be the same as the sound from the A-speaker terminals (multichannel sources will be downmixed to 2 channels).
- SP: OFF No sound is output from the speakers.

🖉 Notes

- The subwoofer output depends on the settings you made in <u>Manual speaker setup</u> on <u>page 106</u>. However, if SP: B ON is selected above, no sound is heard from the subwoofer (the LFE channel is not downmixed).
- All speaker systems (except Speaker B connections) are switched off when headphones are connected.

In case of VSX-830

• Press SP-A/B.

- Switches the speaker play on/off.
- You can perform the same operation by pressing SPEAKERS on the front panel.

Switching the HDMI output

Excluding VSX-830

Set which terminal to use when outputting video and audio signals from the HDMI output terminals. The **HDMI OUT 1** terminal is compatible with the **Control** with HDMI function.

- 1 Press OUT P..
- 2 Use ↑/↓ to select 'OUT 1/2'.

3 Use \Leftarrow/\Rightarrow to select the output settings for the HDMI OUT 1 and HDMI OUT 2 terminals.

Please wait a while when **Please wait** ... is displayed

The output switches among OUT 1+2, OUT 1, OUT 2 and OFF each time the button is pressed.

- The synchronized amp mode is canceled when the HDMI output is switched. If you wish to use the synchronized amp mode, switch to **OUT 1**, then select the synchronized amp mode on the TV using the TV's remote control.
- When MAIN/HDZONE is set to HDZONE, it is not possible to switch to OUT 2 (page 111).
- 4 When you're finished, press RETURN.

HDMI 4K/60p signal output setting

If the TV to be connected using HDMI supports 4K/60p, you can switch the 4K/60p signal output setting in accordance with TV performance.

Operation is performed on the front panel of the unit. You cannot perform the setting if the multizone function is not set to **MULTI ZONE OFF** (page 89).

1 Switch the receiver into standby.

2 While holding down ENTER on the front panel, press **()** STANDBY/ON.

The display shows **RESET** ◄ **NO** ►.

- 3 Select an input terminal that you wish to change settings using \uparrow/\downarrow .
- 4K/60pBD Sets the signal for the BD IN terminal.
- 4K/60pH1 Sets the signal for the HDMI IN 1 terminal.
- 4K/60pH2 Sets the signal for the HDMI IN 2 terminal.

4 Use \Leftarrow/\Rightarrow to select the signal to set.

- 4:4:4 Select this setting when connecting to a 4K/60p 4:4:4 24 bit compatible TV using HDMI. More high quality video images can be enjoyed.
- When the HDMI cable does not support 4K/60p 4:4:4 24 bit (18 Gbps transmission), video image may not be output properly. In that case, select 4:2:0 to watch a 4K/60p 4:2:0 24 bit video image.
- 4:2:0 Select this setting when connecting to a 4K/60p 4:2:0 24 bit compatible TV using HDMI.

5 When you're finished, press RETURN.

6 Press 🖰 STANDBY/ON to switch on the receiver and your TV.

Make sure that the TV's video input is set to this receiver.

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Changing the channel level while listening

Using the channel level settings, you can adjust the overall balance of your speaker system, an important factor when setting up a home theater system.

- 1 Press CH LV..
- 2 Use \uparrow/\downarrow to select the channel you wish to adjust.
- 3 Adjust the volume using \leftarrow / \rightarrow .

The volume can be adjusted in the range of **-12.0dB** to **+12.0dB**, 0.5 dB steps.

4 When you're finished, press RETURN.

Input Volume Absorber

This can be used to correct for the difference in volume between input sources.

- 1 Switch to the input whose volume you want to adjust.
- 2 Press CH LV..
- 3 Use ↑/↓ to select 'ALL'.

4 Adjust the volume using \leftarrow / \rightarrow .

The volume can be adjusted in the range of -12.0dB to +12.0dB, 0.5 dB steps.

5 When you're finished, press RETURN.

Using the MULTI-ZONE controls

Excluding VSX-830

The following steps use the front panel controls to adjust the sub zone volume and select sources. See <u>HDZONE</u> remote controls on page 89.

Important

• The settings must be changed at ZONE Setup in order to use the multi-zone function (page 111).

1 Press MULTI-ZONE ON/OFF on the front panel.

The zone switches between on and off each time the button is pressed.

The MULTI-ZONE indicator lights when the MULTI-ZONE control has been switched ON.

2 Press MULTI-ZONE CONTROL on the front panel.

Each press will switch between main zone and sub zone control.

• When the receiver is on, make sure that any operations for the sub zone are done while ZONE and your selected sub zone(s) show in the display. If this is not showing, the front panel controls affect the main zone only.

If the receiver is in standby, the display is dimmed, and ZONE and your selected sub zone(s) continue to show in the display.

3 Use the INPUT SELECTOR dial to select the source for the zone you have selected.

For example, **HDZONE SAT/CBL** sends the source connected to the **SAT/CBL** inputs to the primary (**HDZONE**) sub room.

 If you select **TUNER**, you can use the tuner controls to select a preset station (see <u>Saving station presets</u> on <u>page 66</u> if you're unsure how to do this). The tuner cannot be tuned to more than one station at a time. Therefore, changing the station in one zone also changes the station in the other zone. Please be careful not to change stations when recording a radio broadcast. 4 Use the MASTER VOLUME dial to adjust the volume for the sub zone.

5 When you're finished, press MULTI-ZONE CONTROL again to return to the main zone controls.

You can also press **MULTI-ZONE ON/OFF** on the front panel to switch off all output to the sub zone.

- You won't be able to switch the main zone off completely unless you've switched off the MULTI-ZONE control first.
- If you don't plan to use the MULTI-ZONE feature for a while, turn off the power in both the sub and main rooms so that this receiver is in standby.

💋 _{Note}

When HDZONE is turned on, the video converter function is disabled. For that reason, video connected with the video cable or component cable is not output from the HDMI terminal. To enable the video converter function, turn off HDZONE.

HDZONE remote controls

Before operation, hold down **HDZ** on the remote control (for 1.5 seconds) until the remote control LED flashes one time.

The following table shows the possible HDZONE remote controls:

Button(s)	What it does
Ċ	Switches on/off power in the HDZONE.
ALL	Use to select the input function in the HDZONE.
Input function buttons	Use to select the input function directly (this may not work for some functions) in the HDZONE.
VOLUME +/- <a>	Use to set the listening volume in the HDZONE.
MUTE <a>	Mutes the sound or restores the sound if it has been muted (adjusting the volume also restores the sound).

a You can operate this only when Speaker System is set to HDZONE.

Network settings from a web browser

Network settings and Pandora account settings can be made using the browser on a computer connected to the same LAN as the receiver.

- **1** Press \bigcirc STANDBY/ON to switch on the receiver.
- 2 Turn on the computer's power and launch the Internet browser.
- 3 Input the receiver's IP address into the browser's address input field.

Access the IP address "http://(the receiver's IP address)" from a web browser. You can display the IP address of the unit on the unit's display by pressing the **STATUS** button on the remote control. When connected with the receiver, the AVNavigator menu screen appears in the browser.

- 4 On the AVNavigator menu screen, select Network Setup.
- 5 Select the item you want to set.





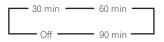
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Using the sleep timer

The sleep timer switches the receiver into standby after a specified amount of time so you can fall asleep without worrying about the receiver being left on all night. Use the remote control to set the sleep timer.

Press SLEEP repeatedly to set the sleep time.



- You can check the remaining sleep time at any time by pressing **SLEEP** once. Pressing repeatedly will cycle through the sleep options again.
- The sleep timer is valid for all zones. If any zone is on, the sleep timer continues functioning.

Dimming the display

You can choose between four brightness levels for the front panel display. Note that when selecting sources, the display automatically brightens for a few seconds.

Turning off the display is effective for suppressing noise from the display that affects sound quality.

- Press DIMMER repeatedly to change the brightness of the front panel display.
- You can also choose to turn the display off. In this case, the **FL OFF** indicator lights.

Checking your system settings

Use the status display screen to check your current settings for features such as surround back channel processing and your current MCACC preset.

1 Press STATUS.

2 Use \uparrow/\downarrow to check the system setting.

The information on the main unit display switches as shown below each time one of the buttons is pressed. IP address \leftrightarrow Wi-Fi status (displayed only when using Wi-Fi) \leftrightarrow audio format \leftrightarrow sampling frequency \leftrightarrow MCACC memory \leftrightarrow Auto phase control plus correction result \leftrightarrow Play input source using **HDZONE** (excluding VSX-830) \leftrightarrow HDMI output settings (excluding VSX-830)

- For some settings, some items are not displayed.
- When the auto phase control plus correction value displays '---', disks cannot be adjusted using **AUTO**. Please adjust manually (page 85).
- 3 When you're finished, press STATUS again to switch off the display.







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Resetting the system

Use this procedure to reset all the receiver's settings to the factory default. Use the front panel controls to do this. Set MULTI-ZONE to **MULTI ZONE OFF**.

- Disconnect the iPod and USB memory device from the receiver beforehand.
- Set the Control with HDMI to OFF (see HDMI Setup on page 82).
- 1 Switch the receiver into standby.
- 2 While holding down ENTER on the front panel, press ♂ STANDBY/ON. The display shows RESET < NO ►.
- 3 Select 'RESET' using PRESET ←/→, then press ENTER on the front panel. The display shows RESET? OK.

4 Press ENTER to confirm.

OK appears in the display to indicate that the receiver has been reset to the factory default settings.

• Note that all settings will be saved, even if the receiver is unplugged.

Default system settings

Setting	Default
SPEAKERS	SB/TMd ON <a>/ON
Speaker System	7.2ch/5.2.2ch <a>/5.2ch
Front	SMALL
Center	SMALL
TMd	SMALL
<a>	SIMALL
Speaker Setting FW	SMALL
<a>	JIIAL
Surr	SMALL
SB	SMALLx2
_ <a>	-
SW	YES
Surround Position <a>	ON SIDE
Crossover	80Hz
X-Curve	OFF
DIMMER	Medium bright
Inputs	
See Input function default and possible settings on page 59.	
Input Volume Absorber All Inputs	0dB
НДМІ	
HDMI Audio	AMP
Control	OFF
Control Mode	(OFF)
ARC (Audio Return Channel)	(OFF)
Standby Through	OFF
4K/60pBD	4:2:0

Setting		Default	
4K/60pH2 (HDMI IN 2)		4:2:0	
DSP			
Power On Level		LAST	
Volume Limit		OFF	
Mute Level		FULL	
Phase Control		ON	
Auto Sound Retriever		OFF	
Sound Delay		0 ms	
Dual Mono		CH1	
DRC		OFF	
LFE Attenuate		0dB	
Auto delay		OFF	
Digital Safety		OFF	
Effect Level	ALC (Auto Level Control)	50	
Center Spread <a>		OFF	
	Center Width	3	
PL II Music Options	Dimension	0	
<d></d>	Panorama	OFF	
Neo:6 Options Center Image		Neo:6 CINEMA: 10 Neo:6 MUSIC: 3	
All leaves	Listening Mode (2 ch/multi ch)	AUTO SURROUND	
All Inputs	Listening Mode (Headphones)	STEREO	
See also <u>Setting the Audio options</u> or	n <u>page 85</u> for other default DSP settings.		
MCACC			
MCACC Position Memory		M1. MEMORY 1	
Channel Level (M1 to M6)		0.0 dB	
Speaker Distance (M1 to M6)		3.00 m	
	ATT of all channels/filters	0.0 dB	
Standing Wave (M1 to M6)	SWch Wide Trim	0.0 dB	
	All channels/bands	0.0 dB	
EQ Data (M1 to M6)	EQ Wide Trim	0.0 dB	
Network			
Network Standby		ON	
DHCP		ON	

a Excluding VSX-830

b VSX-830 only.

Operation of other devices by remote control (excluding VSX-830)

About the Remote Setup menu	93
Operating multiple receivers	93
Setting the remote to control other components	
Selecting preset codes directly	
Programming signals from other remote controls	
Erasing one of the remote control button settings	94
Erasing all learnt settings that are in one input function	95
Using All Zone Standby	
Setting the switching time for the receiver operation mode	
Resetting the remote control settings	
Controlling components	



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About the Remote Setup menu

The Remote Setup mode is set by pressing the number button while pressing **RCU SETUP**. The different items on the Remote Setup menu are described below. For their setting procedures, refer to the explanations for the respective items.

Setting	What it does
Change RC mode	If you have multiple Pioneer receivers, amplifiers, etc., this setting can be used to prevent other units from operating simultaneously when the remote control unit is operated. See <u>Operating multiple receivers</u> on page 93.
Preset recall	Preset codes can be set for the various input functions. The remote control codes of a number of other devices (including products of other brands) are preset in the remote control to allow these devices to be operated. See <u>Selecting preset codes directly on page 93</u> .
Code learning	If the desired operations cannot be performed even though you have set the preset codes, the remote control signals of other devices can be learned directly. See <u>Programming signals from other remote controls</u> on page 94.
Erase learning	This function is used to erase remote control codes that have been learned. Codes learned for the different input functions can be erased individually. See <u>Erasing one of the remote control button settings</u> on page <u>94</u> .
Reset function	This is a function for resetting preset codes that have been set. Key resetting can be done for individual input functions. See <u>Erasing all learnt settings that are in one input function</u> on page 95.
Operation mode switching time	You can set to automatically switch to AV amplifier operation mode when a certain period of time elapses after remote operation of each input function is finished. See <u>Setting the switching time for the receiver</u> operation mode on page <u>95</u> .
All reset	This is a function for resetting all remote control unit settings you have made to the defaults set upon ship- ment from the factory. See <u>Resetting the remote control settings</u> on page 95.

🖉 Notes

- You can cancel or exit any of the steps by pressing RCU SETUP.
- After one minute of inactivity, the remote automatically exits the operation.

Operating multiple receivers

Up to four receivers can be operated discretely using this receiver's remote control when using multiple receivers, provided they are of the same model as this receiver. The receiver to be operated is switched by inputting the preset code to set the remote control setting.

• Set the remote modes on the receivers before using this function (see <u>Remote Control Mode Setup</u> on <u>page 110</u>).

1 Press and hold RCU SETUP, then press '4' for three seconds.

Release the button after the LED flashes once. The LED continues to flash.

• To cancel the preset setup mode press RCU SETUP.

2 Press the number button for the receiver ("Receiver 1" to "Receiver 4") you wish to operate.

For example, to operate "Receiver 2", press '2'.

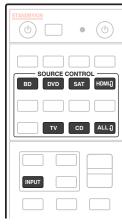
If the LED lights for one second, the setting has been successfully completed. When the preset code is input, the LED flashes three times to indicate that the setting has failed.

Setting the remote to control other components

Most components can be assigned to one of the input function buttons (such as **DVD** or **CD**) using the component's manufacturer preset code stored in the remote.

However, there are cases where only certain functions may be controllable after assigning the proper preset code, or the codes for the manufacturer in the remote control will not work for the model that you are using. If you can't find a preset code that matches the component you want to control, you can still teach the remote individual commands from another remote control (see <u>Programming signals from other remote controls</u> on page 94).

- With the TV buttons, the TV can be operated regardless of the input set for the remote control's operation
 mode. When using one TV set, we recommend assigning the same TV's preset codes to the TV INPUT button
 and the TV button. When using two TV sets, for better convenience assign the TV connected to the MONITOR
 OUT terminals to the TV INPUT button, the other TV to the TV button.
- Devices may be assigned to the following input function buttons.





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Selecting preset codes directly

1 Press and hold RCU SETUP, then press '1' for three seconds.

- Release the button after the LED flashes once. The LED continues to flash.
- To cancel the preset setup mode press RCU SETUP.

2 Press the input function button for the component you want to control.

To assign the preset codes of the TV to be operated with the **TV** function, press the **TV INPUT** button. The LED of the remote control lights.

3 Use the number buttons to enter the 4-digit preset code.

See Preset code list on page 137.

If the LED lights for one second and continues to flash, the setting has been successfully completed. When the preset code is fully input, the LED flashes three times to indicate that the setting has failed. If this happens, enter the 4-digit preset code again.

4 Repeat steps 2 through 3 for the other components you want to control.

To try out the remote control, switch the component on or off (into standby) by pressing **& SOURCE**. If it doesn't seem to work, select the next code from the list (if there is one).

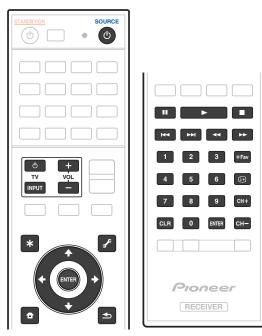
5 Press RCU SETUP to exit the preset setup mode.

Programming signals from other remote controls

If the preset code for your component is not available, or the available preset codes do not operate correctly, you can program signals from the remote control of another component. This can also be used to program additional operations (buttons not covered in the presets) after assigning a preset code.

The remote can store about 120 preset codes from other components (this has been tested with codes of Pioneer format only).

Certain buttons represent operations that cannot be learned from other remote controls. The buttons available are shown below:



1 Press and hold RCU SETUP, then press '2' for three seconds.

Release the button after the LED flashes once. The LED continues to flash.

- To "learn" codes at the **TV** buttons, proceed to step 3.
- To cancel the preset setup mode press RCU SETUP.

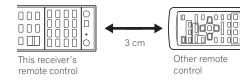
2 Press the input function button for the component you want to control.

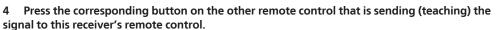
The LED blinks once and flashes continuously.

3 Point the two remote controls towards each other, then press the button that will be doing the learning on this receiver's remote control.

The LED flashes once, then stops flashing, remaining lit.

• The remote controls should be 3 cm apart.





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If the LED lights for one second and continues to flash, the setting has been successfully completed.

- If the LED flashes for five seconds, it means the memory is full. See <u>Erasing all learnt settings that are in one input function</u> on <u>page 95</u> to erase a programmed button you're not using to free up more memory (note that some signals may take more memory than others).
- Note that interference from TVs or other devices will sometimes result in the remote control learning the wrong signal.
- Some commands from other remote controls cannot be learned, but in most cases the remotes just need to be moved closer together or farther apart.

5 To program additional signals for the current component repeat steps 3 and 4.

To program signals for another component, exit and repeat steps 2 through 4.

6 Press RCU SETUP to exit the programming mode.

Erasing one of the remote control button settings

This erases one of the buttons you have programmed and restores the button to the factory default.

1 Press and hold RCU SETUP, then press '8' for three seconds.

Release the button after the LED flashes once. The LED continues to flash.

- To erase operations registered at the **TV** buttons, proceed to step 3.
- To cancel the preset setup mode press RCU SETUP.

2 Press the input function button corresponding to the command to be erased. The LED flashes once.

3 Press and hold the button to be erased for three seconds.

If the LED lights for one second, the erasing has been successfully completed.

- 4 Repeat step 3 to erase other buttons.
- 5 Press RCU SETUP to exit the erasing mode.

94

Erasing all learnt settings that are in one input function

This operation erases all the operational settings of other devices that have been programmed in one input function, and restores the factory default.

This function is handy for erasing all data programmed for devices no longer being used.

1 Press and hold RCU SETUP, then press '9' for three seconds.

Release the button after the LED flashes once. The LED continues to flash.

• To cancel the preset setup mode press **RCU SETUP**.

2 Press and hold the input function button corresponding to the command to be erased for three seconds.

To erase the operations registered at all the **TV** buttons, press the **TV INPUT** button for 3 seconds. If the LED lights for one second, the erasing has been successfully completed.

Using All Zone Standby

The All Zone Standby can be used to turn all zones to OFF when the receiver's power is switched to standby. Also, when using separate Pioneer amplifiers/receivers for the sub zones, they can also be set to standby simultaneously.

- In order to set the power of amplifiers/receivers connected to sub zones to the standby mode, the connected amplifiers/receivers must be installed or connected in such a way that they can receive remote control signals.
- The power of the amplifiers/receivers can be switched to standby with this operation even when using multiple Pioneer amplifiers/receivers and their **Remote Control Mode** have been changed.

1 Press ALL ZONE STBY.

The LED continues to flash.

2 Press 🕁 STANDBY/ON.

The receiver's power switches to standby and all zones are turned off.

Setting the switching time for the receiver operation mode

• Default setting: The AV amplifier operation mode is not switched automatically.

After pressing **SOURCE CONTROL** to operate another device, you need to press **MAIN RECEIVER** to switch the mode to receiver operation mode to operate this unit.

You can set to automatically switch to AV amplifier operation mode when a certain period of time elapses after remote operation of each input function is finished. See <u>Setting the switching time for the receiver operation</u> mode on page 95.

1 Press and hold RCU SETUP, then press '5' for three seconds.

The LED flashes once.

2 Press the number buttons of the time you wish to set.

- 1 The mode is not automatically switched to AV amplifier operation mode.
- **2** Switches in five minute.
- **3** Switches in three minute.
- **4** Switches in one minute.
- 5 Switches in 30 seconds.
- 3 Press RCU SETUP to exit the setup.

Resetting the remote control settings

Use this procedure to reset all the remote control's settings to the factory default.

• When preset codes are set, all the signals learned in the input function buttons are cleared. This function is convenient when you want to reset some but not all of input function buttons.

1 Press and hold RCU SETUP, then press '0' for three seconds.

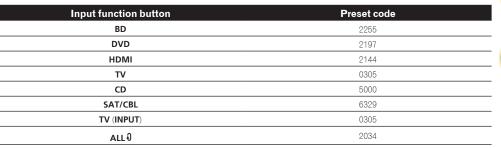
Release the button after the LED flashes once. The LED continues to flash.

2 Hold down the ENTER button for five seconds.

If the LED lights for one second, the erasing has been successfully completed.

Default preset codes

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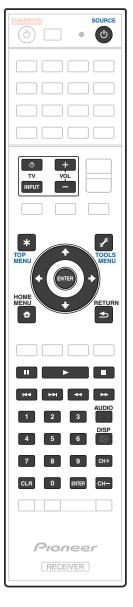




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Controlling components

This remote control can control components after entering the proper codes (see <u>Setting the remote to control</u> <u>other components</u> on <u>page 93</u> for more on this). Use the input function buttons to select the component.



Button(s)	тν	TV (Monitor)	BD/DVD	HDD/BDR/ DVR	VCR	SAT/CATV
് SOURCE	POWER ON/ OFF	POWER ON/ OFF	POWER ON/ OFF	POWER ON/ OFF	POWER ON/ OFF	POWER ON/ OFF
Number buttons	numerics	numerics	numerics	numerics	numerics	numerics
CLR	• (dot)	KURO LINK	CLEAR	+	_	*
ENTER (CLASS)	CH ENTER	CH ENTER	ENTER	ENTER	_	ENTER
*	EXIT/INFO	EXIT	TOP MENU	TOP MENU	_	LIST
£	TOOLS/GUIDE/ EPG	USER MENU	TOOLS <a>	GUIDE	_	GUIDE
↑ /↓/←/→	↑ /↓/←/→	↑ /↓/←/→	↑ /↓/←/→	↑ /↓/←/→	_	↑ /↓/←/→
ENTER	ENTER	ENTER	ENTER	ENTER	_	ENTER
D	HOME MENU	HOME MENU	HOME MENU	HOME MENU	_	HOME MENU
◆	RETURN	RETURN	RETURN	RETURN	-	RETURN
•	_	_	•	•	•	•
н	_	AUTO SETUP	11	н	н	н
	_	FREEZE				
	_	—				
••	_	_	>>	>>	••	**
	TV/DTV	AV SELECTION			_	
	_	SCREEN SIZE				
AUDIO	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
DISP	DISPLAY	DISPLAY	DISPLAY	DISPLAY	_	DISPLAY/INFC
CH +/-	CH +/-	CH +/-	Subtitle (CH +) Popup menu (CH –) <a>	Subtitle (CH +) or CH +/-	CH +/-	CH +/-

a Controls for BD.

TV and Audio/Video components







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ABC

Audio/Video components

Button(s)	LD	CD/CD-R/SACD	MD/DAT	ΤΑΡΕ
ப் SOURCE	POWER ON/OFF	POWER ON/OFF	POWER ON/OFF	POWER ON/OFF
Number buttons	numerics	numerics	numerics	—
CLR	+10	>10/CLEAR	CLEAR <a>	CLEAR
ENTER (CLASS)	ENTER	DISC/ENTER	OPEN/CLOSE <a>	ENTER
*	TOP MENU	_	_	MS←
£	_	LEGATO LINK 	_	MS→
↑ /↓/←/→	↑ /↓/←/→	—	—	
ENTER	ENTER	—	_	—
1	_	SACD SETUP 	_	_
€	RETURN	_	_	_
•	•	•	•	•
11	н	н	П	II
•				
44	44	44		44
>>	>>	>>	>>	••
	I44			
AUDIO	AUDIO	PURE AUDIO 	_	_
DISP	DISPLAY/INFO	TIME 		_

а	Controls	for	MD

b Controls for SACD.

TV (Projector)	
Button(s)	TV (Projector)
& SOURCE	POWER ON
1	MOVIE
2	STANDARD
3	DYNAMIC
4	USER1
5	USER2
6	USER3
7	COLOR+
8	SHARP+
9	GAMMA
0	COLOR-
CLR	SHARP-
ENTER (CLASS)	COLOR TEMP
*	EXIT
£	INFO
↑ /↓/←/→	↑ /↓/←/→
ENTER	ENTER
	TEST
●	HIDE
×	MENU
	HDMI1
•	HDMI2
••	COMP.
	VIDEO
н	S-VIDEO
	BRIGHT-
	BRIGHT+
AUDIO	POWER OFF
DISP	ASPECT
CH +/-	CONTRAST+/-

The MCACC PRO (VSX-1130/VSX-930)/ Advanced MCACC (VSX-830) menu

Making receiver settings from the MCACC PRO (VSX-1130/VSX-930)/	
Advanced MCACC (VSX-830) menu	
Automatic MCACC (Expert)	
Manual MCACC setup	
Checking MCACC Data	
Data Management	



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Making receiver settings from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu

The MCACC PRO/Advanced MCACC (Multi Channel ACoustic Calibration) system was developed in Pioneer's laboratories with the aim of making it possible for home users to perform adjustments of the same level as in a studio easily and with high precision. The acoustic characteristics of the listening environment are measured and the frequency response is calibrated accordingly to allow high precision, automatic analysis and optimal calibration of the sound field to bring it closer to a studio environment than ever before. Furthermore, while it was previously difficult to eliminate standing waves, this receiver is equipped with a standing wave control function using a unique process to perform acoustic analysis and reduce their influence.

This section describes how to calibrate the sound field automatically and fine-adjust the sound field data manually.

1 Press () STANDBY/ON to switch on the receiver and your TV.

Make sure that the TV's video input is set to this receiver.

2 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/(\leftarrow/\rightarrow)$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

Press HOME MENU at any time to exit the HOME MENU.

3 Select 'MCACC PRO' (VSX-1130/VSX-930)/'Advanced MCACC' (VSX-830) from the HOME MENU, then press ENTER.

4 Select the setting you want to adjust.

- Full Auto MCACC See Automatically conducting optimum sound tuning (Full Auto MCACC) on page 57 for a guick and effective automatic surround setup.
- Auto MCACC See Automatic MCACC (Expert) on page 99 for a more detailed MCACC setup.
- Manual MCACC Fine-tunes your speaker settings and customizes the Acoustic Calibration EQ (see Manual MCACC setup on page 101).
- MCACC Data Check This displays the Advanced MCACC measurement results. Use it to check the MCACC memory. For details, see Checking MCACC Data on page 103.
- Data Management Use this to manage the data in the MCACC memory. For details, see Data Management on page 104.
- Demo No settings are saved and no errors occur. When the speakers are connected to this receiver, the test tone is output repeatedly. Press RETURN to cancel the test tone.

Automatic MCACC (Expert)

If your setup requires more detailed settings than those provided in Automatically conducting optimum sound tuning (Full Auto MCACC) on page 57, you can customize your setup options below. You can calibrate your system differently for up to six different MCACC presets, which are useful if you have different listening positions depending on the type of source (for example, watching movies from a sofa, or playing a video game close to the TV).

Important

- Make sure the microphone/speakers are not moved during the Auto MCACC Setup.
- The screen saver will automatically appear after five minutes of inactivity.

- The test tones used in the Auto MCACC Setup are output at high volume.
- 1 Select 'Auto MCACC' from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu, then press ENTER.



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If the Advanced MCACC screen is not displayed, refer to Making receiver settings from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu on page 99.

2 Select the parameters you want to set.

Use \uparrow/\downarrow to select the item, then use \leftarrow/\rightarrow to set.

- Auto MCACC The default is ALL (recommended), but you can limit the system calibration to only one setting (to save time) if you want.
- When data measurement is taken (after selecting ALL or Keep SP System), the reverb characteristics data (both before- and after-calibration) that this receiver had been storing will be overwritten.
- When measurement is performed with other than **SYMMETRY** (after selecting **ALL** or **Keep SP System**), the reverberation characteristics after calibration cannot be predicted, so the graph for the characteristics after calibration ("After") cannot be displayed. If you will need to display the graph for the characteristics after calibration ("After"), take the measurement using the EQ Professional menu in the Manual MCACC setup (page 101).
- The EQ Pro & S-Wave measurement is also taken when ALL or Keep SP System is selected. See Acoustic Calibration EQ Professional on page 102 for more on this.
- Either effect of Acoustic Calibration EQ Professional and Standing Wave can be switched on and off in the respective MCACC preset. For details, see Setting the Audio options on page 85.
- EQ Type (only available when the Auto MCACC Menu above is EQ Pro & S-Wave) This determines how the frequency balance is adjusted.

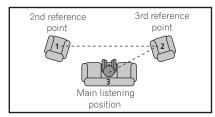
After a single calibration is performed, each of the following three correction curves can be stored separately in the MCACC memory.

- SYMMETRY implements symmetric correction for each pair of left and right speakers to flatten the frequency-amplitude characteristics.
- ALL CH ADJ is a 'flat' setting where all the speakers are set individually so no special weighting is given to any one channel.
- FRONT ALIGN sets all speakers in accordance with the front speaker settings (no equalization is applied to the front left and right channels).

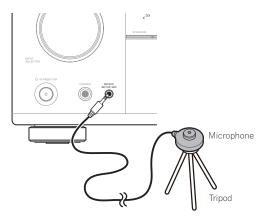
If you selected ALL or Keep SP System as your Auto MCACC menu, you can specify the MCACC preset where you want to save the SYMMETRY, ALL CH ADJ and FRONT ALIGN settings.

EQ of subwoofer is automatically set when in ALL CH ADJ mode.

STAND.WAVE Multi-Point (only available when the Auto MCACC Menu above is EQ Pro & S-Wave) – In
addition to measurements at the listening position, you can use two more reference points for which test
tones will be analyzed for standing waves. This is useful if you want to get a balanced 'flat' calibration for several seating positions in your listening area. Place the microphone at the reference point indicated on-screen
and note that the last microphone placement will be at your main listening position:



- Dolby Enabled Speaker (excluding VSX-830. Setting is possible only when Auto MCACC and ALL are selected in Speaker Setting): Select a speaker that uses (TMd). When a Dolby Enabled Speaker is not used, select NO (page 24).
- SP to ceiling (excluding VSX-830. When setting to use the Dolby Enabled Speaker, using Auto MCACC, you can perform the settings when ALL, Keep SP System, and Channel Level & Speaker Distance are selected): Input the vertical distance from the speaker to the ceiling when using a Dolby Enabled Speaker (page 24).
- **3 Connect the microphone to the MCACC SETUP MIC jack on the front panel.** Make sure there are no obstacles between the speakers and the microphone.



If you have a tripod, use it to place the microphone so that it's about ear level at your normal listening position. If you do not have a tripod, use some other object to install the microphone.

- It may not be possible to measure correctly if the microphone is placed on a table, sofa, etc.
- 4 When you're finished setting the options, select START then press ENTER.
- 5 Follow the instructions on-screen.

6 Wait for the Auto MCACC Setup to finish outputting test tones.

A progress report is displayed on-screen while the receiver outputs test tones to determine the speakers present in your setup. Try to be as quiet as possible while it's doing this.

- With error messages (such as Too much ambient noise! or Check microphone.), select RETRY after checking for ambient noise (see <u>Problems when using the Auto MCACC Setup</u> on page 58) and verifying the mic connection. If there doesn't seem to be a problem, you can simply select GO NEXT and continue.
- Do not adjust the volume during the test tones. This may result in incorrect speaker settings.

7 If necessary, confirm the speaker configuration in the GUI screen.

The configuration shown on-screen should reflect the actual speakers you have.

If no operations are performed for 10 seconds while the speaker configuration check screen is being displayed, the Auto MCACC Setup will resume automatically. In this case, you don't need to select '**OK**' and press **ENTER** in step 8.

- If you see an ERR message (or the speaker configuration displayed isn't correct), there may be a problem with the speaker connection. If selecting RETRY doesn't work, turn off the power and check the speaker connections. If there doesn't seem to be a problem, you can simply use ↑/↓ to select the speaker and ←/→ to change the setting and continue.
- If the speaker is not pointed to the microphone (listening position) or when using speakers that affect the phase (dipole speakers, reflective speakers, etc.), **Reverse Phase** may be displayed even if the speakers are properly connected.

If ${\it Reverse \ Phase}$ is displayed, the speaker's wiring (+ and –) may be inverted. Check the speaker connections.

- If the connections were wrong, turn off the power, disconnect the power cord, then reconnect properly. After this, perform the Auto MCACC procedure again.
- If the connections were right, select **GO NEXT** and continue.

8 Make sure 'OK' is selected, then press ENTER.

A progress report is displayed on-screen while the receiver outputs more test tones to determine the optimum receiver settings.

Again, try to be as quiet as possible while this is happening. It may take 3 to 7 minutes.

• If you selected a **STAND.WAVE Multi-Point** setup (in step 2), you will be asked to place the mic at the 2nd and 3rd reference points before finally placing it at your main listening position.

9 The Auto MCACC Setup procedure is completed and the Advanced MCACC menu reappears automatically.

The settings made in the Auto MCACC Setup should give you excellent surround sound from your system, but it is also possible to adjust these settings manually using the **Manual MCACC** setup menu (starting below) or **Manual SP Setup** menu (starting on <u>page 106</u>).

- Depending on the characteristics of your room, sometimes identical speakers with cone sizes of around 12 cm (5 inches) will end up with different size settings. You can correct the setting manually using the <u>Manual</u> <u>speaker setup</u> on <u>page 106</u>.
- The subwoofer distance setting may be farther than the actual distance from the listening position. This setting should be accurate (taking delay and room characteristics into account) and generally does not need to be changed.
- If Auto MCACC Setup measurement results are incorrect due to the interaction of the speakers and viewing environment, we recommend adjusting the settings manually.

You can also choose to view the settings by selecting individual parameters from the **MCACC Data Check** screen (see <u>Checking MCACC Data</u> on <u>page 103</u>).

Press **RETURN** after you have finished checking each screen. When you're finished, select **RETURN** to go back to the **HOME MENU**.

Be sure to disconnect the microphone from this receiver upon completion of the Auto MCACC Setup.





Manual MCACC setup

You can use the settings in the **Manual MCACC** setup menu to make detailed adjustments when you're more familiar with the system. Before making these settings, you should have already completed <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on page 57.

You only need to make these settings once (unless you change the placement of your current speaker system or add new speakers).

• The test tones used in the Manual MCACC setup are output at high volume.

Important

- Press the MCACC button while the pertinent setup screens are displayed to select MCACC presets.
- For some of the settings below, you'll have to connect the setup microphone to the front panel and place it about ear level at your normal listening position. Press **HOME MENU** to display the **HOME MENU** before you connect the microphone to this receiver.
- See <u>Problems when using the Auto MCACC Setup</u> on page <u>58</u> for notes regarding high background noise levels and other possible interference.
- If you're using a subwoofer, switch it on and turn up the volume to the middle position.

1 Select 'Manual MCACC' from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu, then press ENTER.

See <u>Making receiver settings from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu</u> on page 99 if you're not already at this screen.

2 Select the setting you want to adjust.

If you're doing this for the first time, you might want to make these settings in order.

- Fine Channel Level Make fine adjustments to the overall balance of your speaker system (see <u>Fine Channel Level</u> on page 101).
- Fine SP Distance Make precise delay settings for your speaker system (see <u>Fine Speaker Distance</u> on <u>page</u> 101).
- Standing Wave Control overly resonant low frequencies in your listening room (see <u>Standing Wave</u> on page 102).

The last two settings are specifically for customizing the parameters explained in <u>Acoustic Calibration EQ Adjust</u> on <u>page 102</u>:

- EQ Adjust Manually adjust the frequency balance of your speaker system while listening to test tones (see Acoustic Calibration EQ Adjust on page 102).
- EQ Professional Calibrate your system based on the direct sound coming from the speakers and make detailed settings according to your room's reverb characteristics (see <u>Acoustic Calibration EO Professional</u> on <u>page 102</u>).

Fine Channel Level

• Default setting: 0.0dB (all channels)

You can achieve better surround sound by properly adjusting the overall balance of your speaker system. You can adjust the Channel Level of each speaker in 0.5 dB increments. The following setting can help you make detailed adjustments that you may not achieve using the <u>Manual speaker setup</u> on <u>page 106</u>.

1 Select 'Fine Channel Level' from the Manual MCACC setup menu.

The volume increases to the 0.0 dB reference level.

2 Adjust the level of the left channel.

This will be the reference speaker level, so you may want to keep the level around **0.0dB** so that you'll have plenty of room to adjust the other speaker levels.

• After pressing ENTER, test tones will be output.

3 Select each channel in turn and adjust the levels (+/-12.0 dB) as necessary.

Use \leftarrow/\rightarrow to adjust the volume of the speaker you selected to match the reference speaker. When it sounds like both tones are the same volume, press \downarrow to confirm and continue to the next channel.

- For comparison purposes, the reference speaker will change depending on which speaker you select.
- If you want to go back and adjust a channel, simply use ↑/↓ to select it.

4 When you're finished, press RETURN.

You will return to the Manual MCACC setup menu.

Fine Speaker Distance

• Default setting: 3.00 m (all speakers)

For proper sound depth and separation with your system, it is necessary to add a slight bit of delay to some speakers so that all sounds will arrive at the listening position at the same time. You can adjust the distance of each speaker in half inch increments. The following setting can help you make detailed adjustments that you may not achieve using the <u>Manual speaker setup</u> on <u>page 106</u>.

1 Select 'Fine SP Distance' from the Manual MCACC setup menu.

2 Adjust the distance of the left channel from the listening position.

Excluding VSX-830: When setting the Dolby Enabled Speaker, input the vertical distance from the speaker to the ceiling and the distance to each Dolby Enabled Speaker from the listening/viewing position (page 24).

3 Select each channel in turn and adjust the distance as necessary.

Adjust using the \leftarrow/\rightarrow button. (excluding VSX-830: If Dolby Enabled Speaker is used, the distance reached by the speaker sound reflected at the ceiling is displayed (<u>page 24</u>).)

Listen to the reference speaker and use it to measure the target channel. From the listening position, face the two speakers with your arms outstretched pointing at each speaker. Try to make the two tones sound as if they are arriving simultaneously at a position slightly in front of you and between your arm span.

- If you can't seem to achieve this by adjusting the distance setting, you may need to change the angle of your speakers very slightly.
- The subwoofer's test tone differs in tone from other channels. Adjust so that the sound of the subwoofer can be heard distinctly. Note that when adjusting the subwoofer, depending on the low frequency response of your speaker, it may be difficult to hear the change even when the setting is increased or decreased or when the position of the speaker is changed. Note that it may be difficult to compare this tone with the other speakers in your setup (depending on the low frequency response of the reference speaker).



When it sounds like the delay settings are matched up, press 4 to confirm and continue to the next channel.

- · For comparison purposes, the reference speaker will change depending on which speaker you select.
- If you want to go back and adjust a channel, simply use ↑/↓ to select it.

4 When you're finished, press RETURN.

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You will return to the Manual MCACC setup menu.



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Standing Wave

• Default setting: ON/ATT 0.0dB (all filters)

Acoustic standing waves occur when, under certain conditions, sound waves from your speaker system resonate mutually with sound waves reflected off the walls in your listening area. This can have a negative effect on the overall sound, especially at certain lower frequencies. Depending on speaker placement, your listening position, and ultimately the shape of your room, it results in an overly resonant ('boomy') sound. The Standing Wave Control uses filters to reduce the effect of overly resonant sounds in your listening area. During playback of a source, you can customize the filters used for Standing Wave Control for each of your MCACC presets.

- Standing Wave control filter settings cannot be changed during playback of sources using the HDMI connection.
- 1 Select 'Standing Wave' from the Manual MCACC setup menu.
- 2 Adjust the parameters for the Standing Wave Control.
- Filter Channel Select the channel to which you will apply the filter(s): MAIN (all except center channel and subwoofer), Center or SW (subwoofer).
- **TRIM** (only available when the filter channel above is **SW**) Adjust the subwoofer channel level (to compensate for the difference in output post-filter).
- Freq / Q / ATT These are the filter parameters where Freq represents the frequency you will be targeting and Q is the bandwidth (the higher the Q, the narrower the bandwidth, or range) of the attenuation (ATT, the amount of reduction to the targeted frequency).
- 3 When you're finished, press RETURN.

You will return to the Manual MCACC setup menu.

Acoustic Calibration EQ Adjust

• Default setting: **ON/0.0dB** (all channels/bands)

Acoustic Calibration Equalization is a kind of room equalizer for your speakers (excluding the subwoofer). It works by measuring the acoustic characteristics of your room and neutralizing the ambient characteristics that can color the original source material (providing a 'flat' equalization setting). If you're not satisfied with the adjustment provided in <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on page 57 or <u>Automatic MCACC (Expert)</u> on page 99, you can also adjust these settings manually to get a frequency balance that suits your tastes.

1 Select 'EQ Adjust' from the Manual MCACC setup menu.

2 Select the channel(s) you want and adjust to your liking.

Use \uparrow/\downarrow to select the channel.

Use \leftarrow/\rightarrow to select the frequency and \uparrow/\downarrow to boost or cut the EQ. When you're finished, go back to the top of the screen and press \leftarrow to return to **Ch**, then use \uparrow/\downarrow to select the channel.

• The **OVER!** indicator shows in the display if the frequency adjustment is too drastic and might distort. If this happens, bring the level down until **OVER!** disappears from the display.

3 When you're finished, press RETURN.

You will return to the Manual MCACC setup menu.

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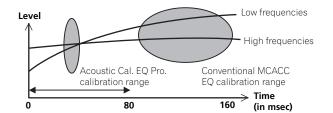
- Changing the frequency curve of one channel too drastically will affect the overall balance. If the speaker balance seems uneven, you can raise or lower channel levels using test tones with the TRIM feature. Use ←/→ to select TRIM, then use ↑/↓ to raise or lower the channel level for the current speaker.
- Speaker Setting channels set as SMALL or Dolby Sp at 63Hz cannot be selected.
- The frequencies that can be adjusted by the SW channel are 31Hz, 63Hz, 125Hz and 250Hz.
- Depending on the crossover frequency setting, some frequencies are less effective.

Acoustic Calibration EQ Professional

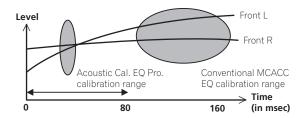
This setup minimizes the unwanted effects of room reverberation by allowing you to calibrate your system based on the direct sound coming from the speakers.

Performing the Acoustic Calibration EQ Professional procedure is effective when the lower frequencies seem overly reverberant in your listening room (i.e. it sounds 'boomy') as shown at Type A below, or when different channels seem to exhibit different reverb characteristics as shown at Type B.

• Type A: Reverberance of high vs. low frequencies



• Type B: Reverb characteristics for different channels



Using Acoustic Calibration EQ Professional

- 1 Select 'EQ Professional', then press ENTER.
- 2 Select an option and press ENTER.
- Reverb Measurement Use this to measure the reverb characteristics before and after calibration.
- Reverb View You can check the reverb measurements made for specified frequency ranges in each channel.
- If the **Reverb View** procedure is performed after the **Reverb Measurement** operation, depending on the standing wave control setting, differences may appear on the reverb graph. With the **Auto MCACC** function, the reverberations are measured with the standing waves controlled, so the reverb characteristics graph shows the characteristics with the effect of the standing waves eliminated. By contrast, the **Reverb Measurement** function measures the reverberations without controlling the standing waves, so the graph indicates the reverb characteristics including the effect of the standing waves. If you wish to check the reverb characteristics of the room itself (with the standing waves as such), we recommend using the **Reverb Measurement** function.
- Advanced EQ Setup Use this to select the time period that will be used for frequency adjustment and calibration, based on the reverb measurement of your listening area. Note that customizing system calibration using this setup will alter the settings you made in <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on page 57 or <u>Automatic MCACC (Expert)</u> on page 99 and is not necessary if you're satisfied with these settings.









3 If you selected 'Reverb Measurement', select EQ ON or EQ OFF, and then START.

The following options determine how the reverb characteristics of your listening area are displayed in **Reverb View**:

- EQ OFF You will see the reverb characteristics of your listening area without the equalization performed by this receiver (before calibration).
- EQ ON You will see the reverb characteristics of your listening area with the equalization performed by this receiver (after calibration). Note that the EQ response may not appear entirely flat due to adjustments necessary for your listening area.
- The calibration corresponding to the currently selected MCACC preset will be used when EQ ON is selected. To use another MCACC preset, press MCACC to select the MCACC memory you want to store.
- After auto calibration with EQ Type : SYMMETRY (Full Auto MCACC, etc.), the graph for the inferred reverb characteristics can be displayed by selecting Reverb View. To display the actually measured reverb characteristics after EQ calibration, measure with EQ ON.

When the reverb measurement is finished, you can select **Reverb View** to see the results on-screen. See <u>Professional Calibration EQ graphical output</u> on <u>page 117</u> for troubleshooting information.

4 If you selected 'Reverb View', you can check the reverb characteristics for each channel. Press RETURN when you're done.

The reverb characteristics are displayed when the **Reverb Measurement** measurements are conducted. Use \leftarrow/\rightarrow to select the channel, frequency and calibration setting you want to check. Use \uparrow/\downarrow to go back and forth between the three. The reverb characteristics graph before and after EQ calibration can be displayed by selecting **Calibration** : **Before** / **After**. Note that the markers on the vertical axis indicate decibels in 2 dB steps.

5 If 'Advanced EQ Setup' is selected, select the MCACC memory to be stored, then enter the desired time setting for calibration, and then select START.

• To specify the place where the MCACC memory is to be stored, press **MCACC** to select the MCACC memory you want to store.

Based on the reverb measurement above, you can choose the time period that will be used for the final frequency adjustment and calibration. Even though you can make this setting without reverb measurement, it is best to use the measurement results as a reference for your time setting. For an optimal system calibration based on the direct sound coming from the speakers, we recommend using the **30-50ms** setting.

Use \leftarrow/\rightarrow to select the setting. Use \uparrow/\downarrow to switch between them.

Select the setting from the following time periods (in milliseconds): **0-20ms**, **10-30ms**, **20-40ms**, **30-50ms**, **40-60ms**, **50-70ms** and **60-80ms**. This setting will be applied to all channels during calibration. When you're finished, select **START**. It will take about 2 to 4 minutes for the calibration to finish.

After the Acoustic Calibration Equalization is set, you are given the option to check the settings on-screen.

Checking MCACC Data

At the procedure of <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on <u>page 57</u>, the procedure of <u>Automatic MCACC (Expert)</u> on <u>page 99</u> or after fine-adjusting at <u>Manual MCACC setup</u> on <u>page 101</u>, you can check your calibrated settings using the GUI screen.

1 Select 'MCACC Data Check' from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu, then press ENTER.

2 Select the setting you want to check.

- Speaker Setting Used to check the settings of the speaker systems. See <u>Speaker Setting</u> on page 103 for more on this.
- Channel Level Used to check the output level of the different speakers. See <u>Channel Level</u> on page 103 for more on this.
- Speaker Distance Used to check the distance to the different speakers. See <u>Speaker Distance</u> on <u>page</u> 103 for more on this.

- **Standing Wave** Used to check the standing wave control filter settings. See <u>Standing Wave</u> on page 103 for more on this.
- Acoustic Cal EQ Used to check the calibration values of the listening environment's frequency response. See <u>Acoustic Cal EQ</u> on <u>page 104</u> for more on this.

3 Press RETURN to go back to the MCACC Data Check menu, repeating steps 2 and 3 to check other settings.

4 When you're finished, press RETURN.

You will return to the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu.

Speaker Setting

Use this to display the speaker size and number of speakers. See Speaker Setting on page 107 for more on this

- 1 Select 'Speaker Setting' from the MCACC Data Check menu.
- 2 Select the channel you want to check.

Use \uparrow/\downarrow to select the channel. The corresponding channel on the layout diagram is highlighted.

Channel Level

Use this to display the level of the various channels. See <u>Channel Level</u> on <u>page 108</u> for more on this.

1 Select 'Channel Level' from the MCACC Data Check menu.

2 When 'MCACC' is highlighted, use ←/→ to select the MCACC preset you want to check.

The level of the various channels set at the selected MCACC preset is displayed. '---' is displayed for channels that are not connected.

Speaker Distance

Use this to display the distance from the different channels to the listening position. See <u>Speaker Distance</u> on page 108 for more on this.

1 Select 'Speaker Distance' from the MCACC Data Check menu.

2 When 'MCACC' is highlighted, use \Leftarrow/\Rightarrow to select the MCACC preset you want to check.

The distance from the various channels set at the selected MCACC preset is displayed. '---' is displayed for channels that are not connected.

Standing Wave

Use this to display the standing wave related adjustment values for the various MCACC memories. See <u>Standing</u> <u>Wave</u> on <u>page 102</u> for more on this.

1 Select 'Standing Wave' from the MCACC Data Check menu.

2 When 'Filter Channel' is highlighted, use \uparrow/\downarrow to select the channel for which you want to check standing wave control.

The standing wave related calibration value for the selected channel stored at the selected MCACC preset and its graph are displayed.

3 Press \leftarrow to highlight 'MCACC', then use \uparrow/\downarrow to select the MCACC preset you want to check.





Acoustic Cal EQ

Use this to display the calibration values for the frequency response of the various channels set in the different MCACC presets. See <u>Acoustic Calibration EQ Adjust</u> on page 102 for more on this.

1 Select 'Acoustic Cal EQ' from the MCACC Data Check menu.

2 When 'Ch' is highlighted, use \uparrow/\downarrow to select the channel.

The calibration value for the frequency response of the selected channel stored at the selected MCACC preset and its graph are displayed.

3 Press \leftarrow to highlight 'MCACC', then use \uparrow/\downarrow to select the MCACC preset you want to check.

Group Delay

Use this to display the calibrated speaker group delay results. See <u>Better sound using Phase Control</u> on <u>page</u> <u>73</u> for more on this.

- 1 Select 'Group Delay' from the MCACC Data Check menu.
- 2 When 'Channel' is highlighted, use \Leftarrow/\Rightarrow to select the channel you want to check.

The result of group delay calibration for the selected channel is displayed.

When measurements have been performed with **Full Auto MCACC** selected at **Advanced MCACC** or with **ALL** or **Full Band Phase Ctrl** selected when **Auto MCACC** is selected, the graph before group delay calibration is also displayed.

When **After** is selected at **Calibration**, the group delay after calibration is displayed. Compared to when **Before** is selected, with **After** there is less difference in the delay between frequency bands and the group delay between the different channels is uniform, allowing you to check the full band phase control effect.

No Data is displayed if the selected group delay has not been measured.

Data Management

This system allows you to store up to six MCACC presets, allowing you to calibrate your system for different listening positions (or frequency adjustments for the same listening position). This is useful for alternate settings to match the kind of source you're listening to and where you're sitting (for example, watching movies from a sofa, or playing a video game close to the TV).

From this menu you can copy from one preset to another, name presets for easier identification and clear any ones you don't need.

• This can be done in <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on <u>page 57</u> or <u>Automatic MCACC (Expert)</u> on <u>page 99</u>, either of which you should have already completed.

1 Select 'Data Management' from the MCACC PRO (VSX-1130/VSX-930)/Advanced MCACC (VSX-830) menu, then press ENTER.

- 2 Select the setting you want to adjust.
- Memory Rename Name your MCACC presets for easy identification (see <u>Renaming MCACC presets</u> on page 104).
- MCACC Memory Copy Copy settings from one MCACC preset to another (see <u>Copying MCACC preset data</u> on page 104).
- MCACC Memory Clear Clear any MCACC presets that you don't want (see <u>Clearing MCACC presets</u> on page 104).

Renaming MCACC presets

If you have several different MCACC presets that you're using, you may want to rename them for easier identification.

- 1 Select 'Memory Rename' from the Data Management setup menu.
- 2 Select the MCACC preset you want to rename, then select an appropriate preset name.
- Use \uparrow/\downarrow to select the preset, then \leftarrow/\rightarrow to select a preset name.
- **3** Repeat for as many MCACC presets as necessary, then press RETURN when you're finished. You will return to the Data Management setup menu.

Copying MCACC preset data

If you want to manually adjust the Acoustic Calibration EQ (see <u>Manual MCACC setup</u> on <u>page 101</u>), we recommend copying your current settings to an unused MCACC preset. Instead of just a flat EQ curve, this will give you a reference point from which to start.

- The settings made in <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on page 57 or <u>Automatic MCACC (Expert)</u> on page 99.
- 1 Select 'MCACC Memory Copy' from the Data Management setup menu.
- 2 Select the setting you want to copy.
- All Data Copies all the settings of the selected MCACC preset memory.
- Level & Distance Copies only the channel level and speaker distance settings of the selected MCACC preset memory.

3 Select the MCACC preset you'll be copying the settings 'From', then specify where you want to copy them 'To'.

Make sure you don't overwrite an MCACC preset you're currently using (this can't be undone).

4 Select 'OK' to confirm and copy the settings.

When **MCACC Memory Copy?** is displayed, select **YES**. If **NO** is selected, the memory is not copied. **Completed!** shows in the GUI screen to confirm the MCACC preset has been copied, then you automatically return to the **Data Management** setup menu.

Clearing MCACC presets

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If you are no longer using one of the MCACC presets stored in memory, you can choose to clear the calibration settings of that preset.

- 1 Select 'MCACC Memory Clear' from the Data Management setup menu.
- 2 Select the MCACC preset you want to clear.

Make sure you don't clear an MCACC preset you're currently using (this can't be undone).

3 Select 'OK' to confirm and clear the preset.

When **MCACC Memory Clear?** is displayed, select **YES**. If **NO** is selected, the memory is not cleared. **Completed!** shows in the GUI screen to confirm the MCACC preset has been cleared, then you automatically return to the **Data Management** setup menu.







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The System Setup and Other Setup menus

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Making receiver settings from the System Setup menu

The following section describes how to change the speaker-related settings manually and make various other settings (input selection, OSD language selection, etc.).

• With factory default settings, the on-screen display will be output from all HDMI output terminals and displayed on any TV connected via HDMI cable.

Excluding VSX-830: You can change where the screen is output in the **MAIN/HDZONE** (page 111) and HDMI output (page 88) settings.

1 Press \odot STANDBY/ON to switch on the receiver and your TV.

Make sure that the TV's video input is set to this receiver.

2 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/\leftarrow/\rightarrow$ and **ENTER** to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

- Press HOME MENU at any time to exit the HOME MENU.
- 3 Select 'System Setup' from the HOME MENU, then press ENTER.
- 4 Select the setting you want to adjust.
- Input Setup Specifies what you've connected to the digital, HDMI and component video inputs (see <u>The</u> <u>Input Setup menu</u> on page 59).
- HDMI Setup Synchronizes this receiver with your Pioneer component supporting Control with HDMI (page 81).
- Manual SP Setup Sets the type of connection used for surround back terminals and the size, number distance and overall balance of the connected speakers (see <u>Manual speaker setup</u> on <u>page 106</u>).
- MHL Setup Changes the settings related to MHL (see MHL Setup on page 109).
- OSD Language The GUI screen's display language can be changed (see <u>Changing the OSD display language</u> (OSD Language) on page 60).
- Other Setup Makes customized settings to reflect how you are using the receiver (see <u>The Other Setup</u> menu on page 109).

Manual speaker setup

This receiver allows you to make detailed settings to optimize the surround sound performance. You only need to make these settings once (unless you change the placement of your current speaker system or add new speakers).

These settings are designed to customize your system, but if you're satisfied with the settings made in <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on <u>page 57</u>, it isn't necessary to make all of these settings.



• The test tones used in the Manual SP Setup are output at high volume.

1 Select 'Manual SP Setup', then press ENTER.

See Making receiver settings from the System Setup menu on page 106 if you're not already at this screen.

2 Select the setting you want to adjust.

If you are doing this for the first time, you may want to adjust these settings in order:

- **Speaker System** Specifies how you are using your surround back speaker terminals and B speaker terminals (page 106).
- Speaker Setting Specifies the size and number of speakers you've connected (page 107).
- Channel Level Adjusts the overall balance of your speaker system (page 108).
- Speaker Distance Specifies the distance of your speakers from the listening position (page 108).
- **X-Curve** Adjusts the tonal balance of your speaker system for movie soundtracks (page 108).

3 Make the adjustments necessary for each setting, pressing RETURN to confirm after each screen.

Speaker system setting



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In case of VSX-1130/VSX-930

• Default setting: 7.2ch/5.2.2ch

This receiver can be used for various applications such as surround back terminal and top middle speaker terminal. Here, application for these terminals are set. Select from the following items.

1 Select 'Speaker System' from the Manual SP Setup menu.

See <u>Making receiver settings from the System Setup menu</u> on page 106 if you're not already at this screen.

2 Select the speaker system setting.

- 7.2ch/5.2.2ch Select when connecting surround back or top middle speaker and playing a maximum 7.2 ch surround.
- 7.2ch SB/FW Select when connecting surround back or front wide speaker and playing a maximum 7.2 ch surround.
- **Speaker B** Select to use the B speaker terminals to listen to stereo playback in another room (see <u>Switching</u> the speaker terminals on page 88).
- Front Bi-Amp Select this setting if you're bi-amping your front speakers (see <u>Bi-amping your speakers</u> on page 25).
- HDZONE Select to use the surround back speaker terminals for an independent system in HDZONE (see Using the MULTI-ZONE controls on page 89).

3 If you selected 7.2ch/5.2.2ch, 7.2ch SB/FW, or Speaker B in Step 2, select the placement of the surround speakers.

In a 7.2-channel surround system with surround speakers placed directly at the sides of the listening position, the surround sound of 5.1-channel sources is heard from the side. This function mixes the sound of the surround speakers with the surround back speakers so that the surround sound is heard from diagonally to the rear as it should be.

Depending on the positions of the speakers and the sound source, in some cases it may not be possible to achieve good results. In this case, set the setting to **ON SIDE** or **IN REAR**.

- **ON SIDE** Select when the surround speakers is positioned right beside you.
- IN REAR Select when the surround speaker is positioned obliquely behind you.

4 When 'Setting Change?' is displayed, select Yes.

If **No** is selected, the setting is not changed.

You will return to the Manual SP Setup menu.

In case of VSX-830

• Default setting: 5.2ch

1 Select 'Speaker System' from the Manual SP Setup menu.

See Making receiver settings from the System Setup menu on page 106 if you're not already at this screen.

2 Select the speaker system setting.

- 5.2ch Select when connecting surround speaker and playing a maximum 5.2 ch surround.
- Front Bi-Amp Select this setting if you're bi-amping your front speakers (see <u>Bi-amping your speakers</u> on page 40).

3 When 'Setting Change?' is displayed, select Yes.

If **No** is selected, the setting is not changed. You will return to the **Manual SP Setup** menu.

Speaker Setting

In case of VSX-1130/VSX-930

Use this setting to specify your speaker configuration (size, number of speakers and crossover frequency). It is a good idea to make sure that the settings made in <u>Automatically conducting optimum sound tuning (Full Auto MCACC</u>) on page 57 are correct. Note that this setting applies to all MCACC presets, and cannot be set independently.

1 Select 'Speaker Setting' from the Manual SP Setup menu.

2 Choose the set of speakers that you want to set, then select a speaker size.

Use \leftarrow / \Rightarrow to select the size (and number) of each of the following speakers:

- SW LFE signals and bass frequencies of channels set to SMALL are output from the subwoofer when YES is selected. Choose the PLUS setting if you want the subwoofer to output bass sound continuously or you want deeper bass (the bass frequencies that would normally come out the front and center speakers are also routed to the subwoofer). If you did not connect a subwoofer choose NO (the bass frequencies are output from other speakers).
- If you have a subwoofer and like lots of bass, it may seem logical to select LARGE for your front speakers and PLUS for the subwoofer. This may not, however, yield the best bass results. Depending on the speaker placement of your room you may actually experience a decrease in the amount of bass due low frequency cancellations. In this case, try changing the position or direction of speakers. If you can't get good results, listen to the bass response with it set to PLUS and YES or the front speakers set to LARGE and SMALL alternatively and let your ears judge which sounds best. If you're having problems, the easiest option is to route all the bass sounds to the subwoofer by selecting SMALL for the front speakers.
- Front Select LARGE if your front speakers reproduce bass frequencies effectively, or if you didn't connect a subwoofer. Select SMALL to send the bass frequencies to the subwoofer.
- Center Select LARGE if your center speaker reproduces bass frequencies effectively, or select SMALL to send bass frequencies to the other speakers or subwoofer. If you didn't connect a center speaker, choose NO (the center channel is sent to the front speakers).
- **TMd** Select **LARGE** if your top middle speakers reproduce bass frequencies effectively, or select **SMALL** to send bass frequencies to the other speakers or subwoofer. When setting up the Dolby Enabled Speaker on the front speaker, please select **Dolby Sp (Front)**. When setting up the Dolby Enabled Speaker on the surround speaker, please select **Dolby Sp (Surr)**. If you didn't connect the top middle speakers, choose **NO** (the top middle channel is sent to the front speakers).
- You can adjust this setting only when Speaker System setting is 7.2ch/5.2.2ch.

— If you change the setting from Dolby Sp (Surr) or Dolby Sp (Front) to SMALL or LARGE, the set value for Speaker Distance may be changed. This is because the maximum value of Speaker Distance when set to Dolby Sp (Surr) or Dolby Sp (Front) is bigger than the maximum value of Speaker Distance when set to SMALL or LARGE. If the value of Speaker Distance set to Dolby Sp (Surr) or Dolby Sp (Front) exceeds the maximum value of Speaker Distance for SMALL or LARGE. Speaker Distance for SMALL or LARGE is set to its maximum value.



- FW Select LARGE if your front wide speakers reproduce bass frequencies effectively, or select SMALL to send bass frequencies to the other speakers or subwoofer. If you didn't connect front wide speakers, choose NO (the front wide channel is sent to the front speakers).
- You can adjust this setting only when Speaker System setting is 7.2ch SB/FW.
- If the surround speakers are set to NO, this setting will automatically be set to NO.
- Surr Select LARGE if your surround speakers reproduce bass frequencies effectively. Select SMALL to send bass frequencies to the other speakers or subwoofer. If you didn't connect surround speakers choose NO (the sound of the surround channels is sent to the front speakers or a subwoofer).



- SB Select the number of surround back speakers you have (one, two or none). Select LARGEx2 or LARGEx1 if your
 surround back speakers reproduce bass frequencies effectively. Select SMALLx2 or SMALLx1 to send bass frequencies to the other speakers or subwoofer. If you didn't connect surround back speakers choose NO.
- You can adjust this setting only when Speaker System setting is 7.2ch/5.2.2ch, 7.2ch SB/FW or Speaker B.

— If the surround speakers are set to NO, the surround back speakers will automatically be set to NO. If you select NO for the subwoofer, the front speakers will automatically be fixed to LARGE. Also, the center, top middle, surround, surround back and front wide speakers can't be set to LARGE if the front speakers are set to SMALL. In this case, all bass frequencies are sent to the subwoofer.

3 Select 'X. OVER' and set the crossover frequency.

Frequencies below this point will be sent to the subwoofer (or LARGE speakers).

- This setting decides the cutoff between bass sounds playing back from the speakers selected as LARGE, or the subwoofer, and bass sounds playing back from those selected as SMALL. It also decides where the cutoff will be for bass sounds in the LFE channel.
- With Full Auto MCACC setup or Auto MCACC setup (ALL or Speaker Setting), the setting here will not
 apply and the crossover frequency will be automatically set. Crossover frequency is a frequency aimed at
 achieving the optimal sound field taking into account the bass capacity of all connected speakers and human
 aural characteristics.

4 When you're finished, press RETURN.

You will return to the Manual SP Setup menu.



In case of VSX-830

Use this setting to specify your speaker configuration (size, number of speakers and crossover frequency). It is a good idea to make sure that the settings made in <u>Automatically conducting optimum sound tuning (Full</u> <u>Auto MCACC</u>) on <u>page 57</u> are correct. Note that this setting applies to all MCACC presets, and cannot be set independently.

1 Select 'Speaker Setting' from the Manual SP Setup menu.

2 Choose the set of speakers that you want to set, then select a speaker size.

- Use \leftarrow/\Rightarrow to select the size (and number) of each of the following speakers:
- SW LFE signals and bass frequencies of channels set to SMALL are output from the subwoofer when YES is selected. Choose the PLUS setting if you want the subwoofer to output bass sound continuously or you want deeper bass (the bass frequencies that would normally come out the front and center speakers are also routed to the subwoofer). If you did not connect a subwoofer choose NO (the bass frequencies are output from other speakers).
- If you have a subwoofer and like lots of bass, it may seem logical to select LARGE for your front speakers and PLUS for the subwoofer. This may not, however, yield the best bass results. Depending on the speaker placement of your room you may actually experience a decrease in the amount of bass due low frequency cancellations. In this case, try changing the position or direction of speakers. If you can't get good results, listen to the bass response with it set to PLUS and YES or the front speakers set to LARGE and SMALL alternatively and let your ears judge which sounds best. If you're having problems, the easiest option is to route all the bass sounds to the subwoofer by selecting SMALL for the front speakers.
- Front Select LARGE if your front speakers reproduce bass frequencies effectively, or if you didn't connect a subwoofer. Select SMALL to send the bass frequencies to the subwoofer.
- Center Select LARGE if your center speaker reproduces bass frequencies effectively, or select SMALL to send bass frequencies to the other speakers or subwoofer. If you didn't connect a center speaker, choose NO (the center channel is sent to the front speakers).
- Surr Select LARGE if your surround speakers reproduce bass frequencies effectively. Select SMALL to send bass frequencies to the other speakers or subwoofer. If you didn't connect surround speakers choose NO (the sound of the surround channels is sent to the front speakers or a subwoofer).

If you select **NO** for the subwoofer, the front speakers will automatically be fixed to **LARGE**. Also, the center and surround speakers can't be set to **LARGE** if the front speakers are set to **SMALL**. In this case, all bass frequencies are sent to the subwoofer.

3 Select 'X. OVER' and set the crossover frequency.

Frequencies below this point will be sent to the subwoofer (or LARGE speakers).

- This setting decides the cutoff between bass sounds playing back from the speakers selected as LARGE, or the subwoofer, and bass sounds playing back from those selected as SMALL. It also decides where the cutoff will be for bass sounds in the LFE channel.
- With Full Auto MCACC setup or Auto MCACC setup (ALL or Speaker Setting), the setting here will not
 apply and the crossover frequency will be automatically set. Crossover frequency is a frequency aimed at
 achieving the optimal sound field taking into account the bass capacity of all connected speakers and human
 aural characteristics.

4 When you're finished, press RETURN.

You will return to the Manual SP Setup menu.

Channel Level

Using the channel level settings, you can adjust the overall balance of your speaker system, an important factor when setting up a home theater system.

1 Select 'Channel Level' from the Manual SP Setup menu.

The test tones will start.

2 Adjust the level of each channel using \leftarrow/\Rightarrow .

Use \uparrow/\downarrow to switch speakers.

Adjust the level of each speaker as the test tone is emitted.

• If you are using a Sound Pressure Level (SPL) meter, take the readings from your main listening position and adjust the level of each speaker to 75 dB SPL (C-weighting/slow reading).

3 When you're finished, press RETURN.

You will return to the Manual SP Setup menu.

Speaker Distance

For good sound depth and separation from your system, you need to specify the distance of your speakers from the listening position. (When Dolby Enabled Speaker is used, specify the distance reached by the speaker sound reflected at the ceiling (page 24).) The receiver can then add the proper delay needed for effective surround sound.

1 Select 'Speaker Distance' from the Manual SP Setup menu.

2 Adjust the distance of each speaker using \leftarrow / \rightarrow .

You can adjust the distance of each speaker in 0.01 m increments.

3 When you're finished, press RETURN.

You will return to the **Manual SP Setup** menu.



For best surround sound, make sure the surround back speakers are the same distance from the listening position.

X-Curve

Most soundtracks mixed for cinema sound too bright when played back in large rooms. The X-Curve setting acts as a kind of re-equalization for home theater listening, and restores proper tonal balance of movie soundtracks.

1 Select 'X-Curve' from the Manual SP Setup menu.

2 Choose the X-Curve setting you want.

Use \leftarrow/\rightarrow to adjust the setting. The X-Curve is expressed as a downwards slope in decibels per octave, starting at 2 kHz. The sound becomes less bright as the slope increases (to a maximum of **-3.0dB/oct**). Use the following guidelines to set the X-Curve according to your room size:

Room size (m ²)	≤36	≤48	≤60	≤72	≤300	≤1000
X-Curve (dB/oct)	-0.5	-1.0	-1.5	-2.0	-2.5	-3.0

- If you select OFF, the frequency curve will be flat and the X-Curve has no effect.
- 3 When you're finished, press RETURN.







MHL Setup

Select whether or not to switch the input automatically to the MHL input when an MHL-compatible device is connected.

• Default setting: ON

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/ \leftarrow / \Rightarrow$ and ENTER to navigate through the screens and select menu items. Press RETURN to exit the current menu.

- Press HOME MENU at any time to exit the HOME MENU.
- 2 Select 'System Setup' from the HOME MENU, then press ENTER.
- 3 Select 'MHL Setup' from the System Setup menu.
- 4 Select the 'Auto input switching' from the MHL Setup menu.
- 5 Use \Leftarrow/\Rightarrow to select the setting.
- OFF Does not automaticly switch to MHL input.
- ON Automatically switches to MHL input.

6 Select 'OK', then press ENTER.

Ø Notes

- This is only valid for MHL-compatible devices supporting this function.
- When the power is on, the MHL-compatible device is charged. (This receiver supports charging of devices up to 0.9 A.)

The Other Setup menu

The Other Setup menu is where you can make customized settings to reflect how you are using the receiver.

1 Press MAIN RECEIVER to switch the remote control to the receiver operation mode, and then press HOME MENU.

A Graphical User Interface (GUI) screen appears on your TV. Use $\uparrow/\downarrow/ \leftarrow / \Rightarrow$ and ENTER to navigate through the screens and select menu items. Press **RETURN** to exit the current menu.

- 2 Select 'System Setup' from the HOME MENU.
- Select 'Other Setup', then press ENTER. 3

Select the setting you want to adjust. 4

If you are doing this for the first time, you may want to adjust these settings in order:

- Auto Power Down Sets the power to turn off automatically when the receiver is not being used (page 109).
- Volume Setup Sets up the volume-related operations of this receiver (page 109).
- Software Update Use to update the receiver's software and check the version (page 110).
- On Screen Display Setup (excluding VSX-830) Setting of whether or not to display the status on the display when the receiver is operated (page 110).
- Remote Control Mode Setup (excluding VSX-830) Setting remote control mode on the receiver side (page 110).
- ZONE Setup (excluding VSX-830) Sub zone related setting (page 111).

5 Make the adjustments necessary for each setting, pressing RETURN to confirm after each screen.

Auto Power Down

The power can be set to turn off automatically if no operation has been performed for a specific amount of time with no audio or video signals being input to the receiver.

Excluding VSX-830: When using HDZONE, the HDZONE power can also be set to turn off, but for HDZONE the power turns off automatically after the amount of time set here even if signals are being input or operations have been performed. Different times can be set for the main zone and HDZONE.

- 1 Select 'Auto Power Down' from the Other Setup menu.
- 2 Select the zone you want to set and set the time after which the power turns off.
- MAIN The time can be selected from among "15 min", "30 min", "60 min" and "OFF". The power turns off after there has been no signal and no operation for the selected time.
- HDZONE (excluding VSX-830) Can select from 30 min, 1 hour, 3 hours, 6 hours, 9 hours and OFF. The power turns off when the time selected elapses.

Ø Notes

- · Depending on the connected devices, the Auto Power Down function may not work properly due to excessive noise or other reasons.
- When using WAC mode (page 53), this feature does not work.

Volume Setup

You can set the maximum volume of this receiver or specify what the volume level will be when the power is turned on.

1 Select 'Volume Setup' from the Other Setup menu.

2 Select the Power ON Level setting you want.

The volume can be set so that it is always set to the same level when the receiver's power is turned on.

- LAST (default) When the power is turned on, the volume is set to the same level as when the power was last turned off.
- "---" When the power is turned on, the volume is set to minimum level.
- -80.0dB to +12.0dB Specify the volume to be set when the power is turned on, in steps of 0.5 dB.

It is not possible to set a volume level greater than the value specified at Volume Limit setup (see below).

3 Select the Volume Limit setting you want.

Use this function to limit the maximum volume. The volume cannot be increased above the level set here, even by operating **VOLUME** button (or the dial on the front panel).

- OFF (default) The maximum volume is not limited.
- -20.0dB/-15.0dB/-10.0dB/-5.0dB/0.0dB The maximum volume is limited to the value set here.

4 Select the Mute Level setting you want.

- This sets how much the volume is to be turned down when **MUTE** is pressed.
- FULL (default) No sound.
- -40.0dB/-20.0dB The volume will be turned down to the level specified here.

5 When you're finished, press RETURN.

You will return to the Other Setup menu.



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Software Update

Use this procedure to update the receiver's software and check the version. There are two ways to update: via the Internet and via a USB memory device.

Updating via the Internet is performed by accessing the file server from the receiver and downloading the file. This procedure is only possible if the receiver is connected to the Internet.

Updating via a USB memory device is performed by downloading the update file from a computer, reading this file onto a USB memory device then inserting this USB memory device into the USB port on the receiver's front panel. With this procedure, the USB memory device containing the update file must first be inserted into the USB port on the receiver's front panel.

If an update file is provided on the Pioneer website, download it onto your computer. When downloading an
update file from the Pioneer website onto your computer, the file will be in ZIP format. Unzip the ZIP file before
saving it on the USB memory device. If there are any old downloaded files or downloaded files for other models
on the USB memory device, delete them.

http://pioneer.jp/homeav/support/ios/eu/ (for Europe)

- http://pioneer.jp/homeav/support/ios/ao/ (for Australia and New Zealand)
- If an update file does not exist in the Pioneer's website, updating the software for the receiver is not necessary.

Important

- DO NOT unplug the power cord during updating.
- When updating via the Internet, do not disconnect the LAN cable. When updating via a USB memory device, do not disconnect the USB memory device.
- If updating is interrupted before it is completed, start updating over from the beginning.
- The receiver's settings may be reset when the software is updated. Information on the models for which the settings are reset is provided on the Pioneer website. Check the website before updating.
- 1 Select 'Software Update' from the Other Setup menu.

2 Select the update procedure.

- Update via Internet The receiver checks whether updatable software is available via the Internet.
- Update via USB Memory The receiver checks whether the USB memory device inserted into the USB port on the receiver's front panel contains updatable software.

"Accessing" is displayed and the update file is checked. Wait a while.

3 Check on the screen whether or not an update file was found.

If "**New version found**." is displayed, the update file has been found. The version number and updating time are displayed.

If "This is the latest version. There is no need to update." is displayed, no update file has been found.

4 To update, select OK.

- The updating screen appears and updating is performed.
- The power turns off automatically once updating is completed.

Software Update messages

Status messages	Descriptions
FILE ERROR	Try disconnecting then reconnecting the USB device or storing the update file again. If the error still occurs, try using a different USB memory device.
FILE ERROR	No update file was found on the USB memory device. Store the file in the USB memory device's root directory.
UPDATE ERROR 1 to UPDATE ERROR 7	Turn the receiver's power off, then turn it back on and try updating the software again.
Update via USB	If this message flashes, updating has failed. Update via a USB memory device. Put the update file on a USB memory device and connect the device to the USB port. When the file is found, software updating starts automatically.
UE11	
UE22	Updating has failed. Use the same procedure to update the software again.
UE33	

On Screen Display Setup

When the receiver is operated, its status (the input name, listening mode, etc.) is displayed superimposed over the video output on the display. This status display can be turned off by switching this setting to **OFF**. The setting can be made for the main zone and HDZONE, respectively.

- Default: **ON** (both the main zone and HDZONE)
- 1 Select 'On Screen Display Setup' from the Other Setup menu.
- 2 Select and set the main zone or HDZONE (excluding VSX-830) for which you wish to change the setting.
- 3 Select the On Screen Display setting you want.
- 4 When you're finished, press RETURN.

You will return to the **Other Setup** menu.

💋 Notes

- The on-screen display is only displayed for video output from the HDMI terminal.
- When the video input signal is a 3D signal, the on-screen display may not be displayed.
- The size of the characters displayed differs according to the output resolution.

Remote Control Mode Setup

Excluding VSX-830

• Default setting: 1

This sets this receiver's remote control mode to prevent erroneous operation when multiple units of the receiver are being used.

- 1 Select 'Remote Control Mode Setup' from the Other Setup menu.
- 2 Select the Remote Control Mode setting you want.
- 3 Select 'OK' to change the remote control mode.
- **4** Follow the instructions on the screen to change the remote control's setting. See <u>Operating multiple receivers</u> on page <u>93</u>.
- 5 When you're finished, press RETURN.

You will return to the Other Setup menu.





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ZONE Setup

Excluding VSX-830

Switches the sub-zone setting.

- 1 Select 'ZONE Setup' from the Other Setup menu.
- 2 Select 'MAIN/HDZONE', then press ENTER.
- 3 Set the usage of the HDMI OUT 2 terminal.
- MAIN: Select this to output the same input source as in the main zone. After setting this to MAIN, exit the home menu, then press OUT P. and select the terminal for HDMI output (page 88).
- HDZONE (default): Use the HDMI output's multizone function (HDZONE) to output an input source different from the one in the main zone (page 89).
- 4 Select 'OK', then press ENTER.
- 5 When you're finished, press RETURN.

You will return to the Other Setup menu.

Making network settings using Safari

- 1 Launch Safari on your computer.
- 2 Press Bookmark icon. Click Bonjour list (a), and then select this receiver's name (Friendly Name) (b) in Bookmark.

If **Bonjour** list is not displayed, access the IP address "http://(the receiver's IP address)" from Safari.



3 On the AVNavigator menu screen, select Network Setup.



5 Setup the network settings manually and then press Apply.









This setting for the network has been confirmed for OS X v 10.7 and Safari 5.1.

Using Safari to set a friendly name

1 Launch Safari on your computer.

2 Press Bookmark icon. Click Bonjour list (a), and then select this receiver's name (Friendly Name) (b) in Bookmark.

If Bonjour list is not displayed, access the IP address "http://(the receiver's IP address)" from Safari.

- 3 On the AVNavigator menu screen, select Network Setup.
- 4 Click Friendly Name.
- 5 Input a friendly name, then press Apply.



Ø	Note	•	
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This setting for the network has been confirmed for OS X v 10.7 and Safari 5.1.

Using Safari to update the firmware

- 1 Launch Safari on your computer.
- 2 Press Bookmark icon. Click Bonjour list (a), and then select this receiver's name (Friendly Name) (b) in Bookmark.

If **Bonjour** list is not displayed, access the IP address "http://(the receiver's IP address)" from Safari.

- 3 On the AVNavigator menu screen, select Network Setup.
- 4 Click Firmware Update.

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5 Press Start.

The firmware update prepare screen is displayed. If the screen does not switch automatically, click Click here.

ystem information	Firmware Update	
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letwork Standby		
Parental Lock		
ort Number Setting		
rmware Update		
irmware Update		

6 Browse the latest firmware on your computer (a) and then press Upload (b).

Firmware files have the extension "fw". Select a file with the extension "fw".

The confirmation screen is displayed. If you continue the firmware update, press **OK**. Once the firmware update process starts, you cannot stop it. Wait until the file is uploaded (about one minute may be required depending on your LAN connection environment).

Firmware Update	Firmware Update		
Firmware Update	Software Version:	·····)	
	Upload new firmware	Chaose File or the selected	а
			~

7 The firmware upload status screen is displayed.

"**The upload process finished successfully**." will be shown when the update is completed. Once updating is completed, the receiver's power automatically turns off.

This setting for the network has been confirmed for OS X v 10.7 and Safari 5.1.











Ø Note



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FAQ

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Troubleshooting

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest Pioneer authorized independent service company to carry out repair work.

• If the unit does not operate normally due to external effects such as static electricity disconnect the power plug from the outlet and insert again to return to normal operating conditions.

If the problem is not solved after the troubleshooting below, if the screen freezes unexpectedly or if the buttons on the remote control or front panel stop working completely, do the following:

- Press & STANDBY/ON on the front panel to turn off the power, then turn the power back on.
 If this does not solve the problem, turn off the power again, then press and hold the & STANDBY/ON button on the front panel for at least five seconds. (The power turns on, then turns off after five seconds.)
- If the power cannot be turned off, press and hold **O STANDBY/ON** on the front panel for over five seconds. The power will turn off. In this case, the various settings made on the receiver may be cleared.

Power

Symptom	Remedy
The power does not turn on.	Make sure that the power cord is plugged in to an active power outlet.
	Try disconnecting from the power outlet, then plugging back in.
Power automatically turns off.	When Auto Power Down is set, the power automatically turns off at the set time (page 109).
When the power is turned on, the WIRELESS indicator slowly flashes.	After unpacking, turning on the power, and returning to initial factory settings (page 91), the WIRELESS indicator slowly flashes. This is not a malfunction.
	This receiver is designed to automatically enter WAC mode when turning on the power of this receiver in the initial factory settings state. For details about WAC mode, please refer to page 53. After the network settings (page 51) have been completed, the WIRELESS indicator flashing disappears.
	When the network is not connected, even though the WIRELESS indicator is blinking, there is no problem using it in this state.
<i>Excluding VSX-830:</i> Power cannot be turned off. (HDZONE ON is displayed.)	Press the HDZ button on the remote control for 1.5 seconds and then press the O STANDBY/ON button to turn OFF the power.
The receiver suddenly switches off or the WIRELESS indicator blinks.	Check that there are no loose strands of speaker wire touching the rear panel or another set of wires. If so, re-attach the speaker wires, making sure there are no stray strands.
	The receiver may have a serious problem. Disconnect from the power and call a Pioneer authorized independent service company.
During loud playback the power sud-	Turn down the volume.
denly switches off.	Lower the 63 Hz and 125 Hz equalizer levels in the Manual MCACC setup on page 101.
	Switch on the digital safety feature. While holding down ENTER on the front panel, press ♂ STANDBY/ON to set this receiver to the standby mode. Use TUNE ↑/↓ to select D.SAFETY
	If there is very little low frequency information in the source material, change your speaker settings to Front: SMALL / Subwoofer: YES , or Front: LARGE / Subwoofer: PLUS (see <u>Speaker Setting</u> on page 107).

Symptom	Remedy	
The unit does not respond when the	Try switching the receiver off, then back on again.	
buttons are pressed.	Try disconnecting the power cord, then connect again.	
AMP ERR is indicated and the main power turns off. The MCACC PRO (VSX-1130/VSX-930) / Advanced MCACC (VSX-830) indica- tor blinks and the main power does not turn on.	The receiver may have a serious problem. Do not try switching the receiver on. Unplug the receiver from the wall and call a Pioneer authorized independent service company.	
The receiver suddenly switches off or the FL OFF indicator blinks.	There is a possibility that the power supply circuit of the receiver has failed. Wait at least one minute and then turn ON the power again. If the same symptom appears again after turning ON the power again, stop using the receiver, disconnect the power cable and request repair.	
AMP OVERHEAT blinks in the display and the FL OFF indicator flash and the power turns off.	Allow the unit to cool down in a well-ventilated place before switching back on (see Installing the receiver on page 10).	
	Check whether the cables used to connect the speakers are short-circuited.	
	Wait at least 1 minute, then try turning the power on again.	
	The temperature within the unit has exceeded the allowablevalue.	
	Lower the volume level.	
The main power suddenly turns off, and MCACC PRO (VSX-1130/VSX- 930) / Advanced MCACC (VSX-830)	The power unit is damaged. Unplug the receiver from the wall and call a Pioneer autho- rized independent service company.	

No sound

indicator blinks.

Symptom	Remedy
There is no sound output, the sound gets cut off, or there is noise present.	If Fixed PCM in audio parameter is set to ON , you will not be able to playback audio in formats other than PCM audio. For other audio formats than PCM audio, select OFF (See <u>Setting the Audio options</u> on <u>page 85</u>).
No sound is output when an input function is selected.	Turn the volume up to approx. –30 dB.
	Check that the speaker selector setting is set to OFF (page 88).
	Make sure the correct input function is selected.
	Make sure the correct input signal is selected (see <u>Choosing the input signal</u> on <u>page</u> <u>73</u>).
	Check that the source equipment is correctly connected (Refer to page 19 (VSX-1130/ VSX-930) or page 37 (VSX-830)) for <u>Connecting your equipment</u> .
	Check that the speakers are connected properly (see <u>Connecting the speakers</u> on <u>page</u> <u>23</u>).
No sound from the surround or center speakers.	Check that the Stereo listening mode or the Front Stage Surround Advance mode isn't selected; select one of the surround listening modes (see <u>Enjoying various types of playback using the listening modes</u> on page 71).
	Check that the surround/center speakers are not set to NO (see <u>Speaker Setting</u> on page 107).
	Check the speaker connections (see <u>Connecting the speakers</u> on <u>page 23</u>).

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DN or	Everything seer rectly, but the p The Phase Cont
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	seem to have ar
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ned up.	front panel or the remote control.
<u>ge 107</u>).	There seems to
racteris-	between the sp of the subwoofe
r : PLUS	The maximum ((shown in the fr lower than the -
<u>, the</u>	Certain listenin HOME MENU i
	selected.
	The volume leve cally.
	Volume seems
	is switched.
	<i>Excluding VSX-8</i> ON , multi-chan not output in th
nent is	Excluding VSX-8
	sound is output
	ect ious

Other audio problems

Symptom	Remedy
Broadcast stations cannot be selected automatically, or there is	Fully extend the FM wire antenna, adjust the position for best reception and secure to a wall, etc.
considerable noise in radio broad- casts.	Use an outdoor antenna for better reception (see pages $31, 45$).
	Adjust the position and direction of the AM antenna.
	Noise may be caused by interference from other equipment, such as a fluorescent light, motor, etc. Switch off or move the other equipment, or move the AM antenna.
Subwoofer output is very low.	To route more signal to the subwoofer, set it to PLUS or set the front speakers to SMALL (see <u>Speaker Setting</u> on page 107).
Everything seems to be set up cor- rectly, but the playback sound is odd.	The speakers may be out of phase. Check that the positive/negative speaker terminals on the receiver are matched with the corresponding terminals on the speakers (see <u>Connecting the speakers</u> on <u>page 23</u>).
The Phase Control feature doesn't seem to have an audible effect.	If applicable, check that the lowpass filter switch on your subwoofer is off, or the lowpass cutoff is set to the highest frequency setting. If there is a PHASE setting on your subwoofer, set it to 0° (or depending on the subwoofer, the setting where you think it has the best overall effect on the sound).
	Make sure the speaker distance setting is correct for all speakers (see <u>Speaker Distance</u> on page 108).
Can't select some Input functions by the INPUT SELECTOR on the front panel or the ALL button on the remote control.	Check the Input Skip settings in the Input Setup menu (see <u>The Input Setup menu</u> on <u>page 59</u>).
	Check the HDMI Input assignment in the Input Setup menu then try OFF (see <u>The Input</u> <u>Setup menu</u> on <u>page 59</u>).
There seems to be a time lag between the speakers and the output of the subwoofer.	See <u>Automatically conducting optimum sound tuning (Full Auto MCACC)</u> on page 57 to set up your system again using MCACC (this will automatically compensate for a delay in the subwoofer output).
The maximum volume available	Check that the Volume Limit is set to OFF (see <u>Volume Setup</u> on page 109).
(shown in the front panel display) is lower than the +12dB maximum.	The channel level setting may be over 0.0dB .
Certain listening modes or HOME MENU items cannot be selected.	Some functions cannot be selected, depending on the input signal and listening mode.
The volume level drops automati- cally.	The temperature within the unit has exceeded the allowable value. Try moving the unit for better ventilation (see <u>Installing the receiver</u> on <u>page 10</u>).
Volume seems different when input is switched.	Set the Channel Level setting to ALL , then adjust the volume of the respective input sources (see Input Volume Absorber on page 89).
<i>Excluding VSX-830:</i> When HDZONE is ON , multi-channel audio sources are not output in the main zone.	When HDZONE is selected in Speaker System and also the same HDMI input is selected for both the main zone and HDZONE, 2-channel PCM audio sources are output from the main zone as well. To output multi-channel audio sources, set HDZONE to OFF or change the HDZONE input.
<i>Excluding VSX-830:</i> No HDZONE sound is output.	With HDZONE, multi-channel audio may not be output. In this case, set the audio output setting of your playback device to 2-channel PCM.







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BT AUDIO

Symptom	Remedy
The <i>Bluetooth</i> wireless technology device cannot be connected or oper- ated. Sound from the <i>Bluetooth</i> wire- less technology device is not emitted or the sound is interrupted.	Check that no object that emits electromagnetic waves in the 2.4 GHz band (microwave oven, wireless LAN device or <i>Bluetooth</i> wireless technology apparatus) is near the unit. If such an object is near the unit, set the unit far from it. Or, stop using the object emitting the electromagnetic waves.
	Check that the <i>Bluetooth</i> wireless technology device is not too far from the unit and that obstructions are not set between the <i>Bluetooth</i> wireless technology device and the unit. Set the <i>Bluetooth</i> wireless technology device and the unit so that the distance between them is less than about 10 m (33 ft.) and no obstructions exist between them.
	The <i>Bluetooth</i> wireless technology device may not be set to the communication mode supporting the <i>Bluetooth</i> wireless technology. Check the setting of the <i>Bluetooth</i> wireless technology device.
	Check that pairing is correct. The pairing setting was deleted from this unit or the <i>Blue</i> - tooth wireless technology device. Reset the pairing.
	Check that the profile is correct. Use a <i>Bluetooth</i> wireless technology device that supports A2DP profile and AVRCP profile.

Video

Symptom	Remedy
No image is output when an input is selected.	Check the video connections of the source component.
	Make sure the input assignment is correct for components connected using component video or HDMI cables (see <u>The Input Setup menu</u> on page 59).
	Check the video output settings of the source component.
	Check that the video input you selected on your TV is correct.
	Excluding VSX-830: When the HDMI OUT 1/2 setting of the output parameter function is set to OFF , set it to ON .
	Excluding VSX-830: If HDZONE is set to on, video images connected using a video cable or component cable are not output from the HDMI terminal. To output video images, turn HDZONE off (page 89).
	When content that is protected by the HDCP 2.2 protocol is output from a source player, output of video is not possible on televisions and projectors that do not support HDCP 2.2. Please prepare a television or projector that supports HDCP 2.2. Also, this receiver's HDCP 2.2 compatible input terminals are BD , HDMI IN 1 , and HDMI IN 2 . When making connections other than the said terminal(s), please use these terminals instead.
Noisy, intermittent, or distorted picture.	Sometimes a video deck may output a noisy video signal (during scanning, for example), or the video quality may just be poor (with some video game units, for example). The pic- ture quality may also depend on the settings, etc. of your display device. Reconnect the source and display device using the same type of connection (component or composite), then start playback again.
Video parameters cannot be used.	For audio only input (TUNER, CD, and TV), the video parameter function cannot be used. Use for video or input with a GUI display.

Settings Symptom Remedy The Auto MCACC Setup continually The ambient noise level may be too high. Keep the noise level in the room as low as posshows an error. sible (see also Problems when using the Auto MCACC Setup on page 58). If the noise level cannot be kept low enough, you will have to set up the surround sound manually (page 106). When using only one surround back speaker, connect it to the SURROUND BACK L (Single) terminals. To use a 5.1-channel speaker set, use the surround speakers for the surround channel, not the surround back channel. Make sure there are no obstacles between the speakers and the microphone. If Reverse Phase is displayed, try the following: - The speaker's wiring (+ and -) may be inverted. Check the speaker connections. - Depending on the type of speakers and their installation conditions, Reverse Phase may be displayed even if the speakers are properly connected. If this happens, select GO NEXT and continue. - If the speaker is not pointed to the microphone (listening position) or when using speakers that affect the phase (dipole speakers, reflective speakers, etc.), it may not be possible to properly identify the polarity. After using the Auto MCACC Setup, There may have been some low frequency noise in the room from an air-conditioner, motor, etc. Switch off all other appliances in the room and use Auto MCACC Setup again. the speaker size setting is incorrect. Depending on a number of factors (bass reproduction capabilities of the speakers, room size, speaker placement, etc.) this may occur in some cases. Change the speaker setting manually in Speaker Setting on page 107, and use the ALL (Keep SP System) option for the Auto MCACC menu in Automatic MCACC (Expert) on page 99 if this is a recurring problem. Can't adjust the Fine Speaker Dis-Check that the speakers are all in phase (make sure the positive (+) and negative (-) tance setting properly. terminals are matched up properly). The display shows **KEY LOCK ON** With the receiver in standby, press & STANDBY/ON for about 5 seconds while holding when you try to make settings. down SPEAKERS to disable the key lock. Most recent settings have been The power cord was disconnected from the wall while adjusting this setting. erased. Settings are only stored if all the zones are turned off. Turn off all the zones before unplugging the power cord. The various system settings are not Do not pull out the power cord while conducting the settings. (The settings will be stored stored. when both the main zone and sub zone turn off. Turn off all zones before pulling out the power cord.) Feels like there is no subwoofer EQ The effect becomes less when the set frequency value of the crossover frequency is low. effect. When setting a high frequency value, the subwoofer EQ effect becomes stronger. However, setting a higher crossover frequency increases the share that the subwoofer bears for low-frequency playback. For that reason, it is disadvantageous in terms of the phase

point of view. Set to your preference.

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Remote control

Symptom	Remedy
Cannot be remote controlled.	Set the remote control unit's remote control mode so that it matches the setting on the main unit (see <u>Operating multiple receivers</u> on page 93).
	Check whether the receiver's remote control mode is properly set (see <u>Remote Control</u> <u>Mode Setup</u> on <u>page 110</u>).
	Try replacing the batteries in the remote control (see <u>Loading the batteries</u> on <u>page 10</u>).
	Be sure to operate within 7 m and a 30° angle of the remote sensor on the front panel (see <u>Operating range of remote control unit</u> on page 10).
	Check that there are no obstacles between the receiver and the remote control.
	Make sure that there is no fluorescent or other strong light shining on to the remote sensor.
<i>Excluding VSX-830:</i> Other components can't be operated with the system remote.	If the battery ran down, the preset codes may have been cleared. Re-enter the preset codes.
	The preset code may be incorrect. Redo the procedure for entering preset codes.
	When commands from the remote control units of other devices are registered using the learning function, in some cases they may not be learned properly. In this case, register the commands again using the learning function (see <u>page 94</u>). If they still do not work, they may be in a special format that cannot be registered on this receiver's remote control. Operate the device using another remote control.

Professional Calibration EQ graphical output

Symptom	Remedy	
The reverb characteristics graph after EQ calibration does not appear entirely flat.	There are cases where the graph does not appear flat (even when selecting ALL CH ADJ in the Auto MCACC Setup) due to adjustments made to compensate for room characteristics to achieve optimal sound.	
	Areas of the graph may appear identical (before and after) when there is little or no adjustment needed.	
	The graph may appear to have shifted vertically when comparing before and after mea- surements.	
EQ adjustments made using the Manual MCACC setup do not appear to change the reverb characteristics graph after EQ calibration.	Despite level adjustments being made, the filters used for analysis may not display these adjustments in the reverb characteristics graph after EQ calibration. However, these adjustments are taken into account by the filters dedicated to overall system calibration.	
Lower frequency response curves do not seem to have been calibrated for SMALL speakers.	Low frequencies used in bass management (the subwoofer channel) will not change for speakers that have been specified as SMALL in the configuration, or do not output these frequencies.	
	Calibration is performed, but due to your speakers' low frequency limitations, no measur- able sound is output for display.	

Display

Symptom	Remedy	
The display is dark or off.	Press DIMMER repeatedly to select a different brightness.	
The OSD screen is not displayed.	The on-screen display is not displayed unless this receiver's HDMI OUT terminal is con- nected to the TV by HDMI cable. If the TV does not support HDMI, watch this receiver's front panel display when performing operations and making settings.	
	When the input is a 3D signal, OSD cannot be displayed.	
Even through the input is switched, DIGITAL does not light.	Check the digital connections and make sure that the digital inputs are assigned cor- rectly (see <u>The Input Setup menu</u> on <u>page 59</u>).	
When playing Dolby Digital or DTS sources, the receiver's format indica-	Check that the player isn't set up so that Dolby Digital and DTS sources are converted to PCM.	
tors do not light.	Ensure that if there are several audio tracks on the disc, the Dolby Digital or DTS is selected.	
When AUTO is set with the Auto Phase Control Plus feature, '' is displayed.	There are disks that cannot be adjusted using AUTO . Please adjust manually (page 85).	

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HDMI		Symptom	Remedy	
		Synchronized operation not possible using Control with HDMI function.	Check the HDMI connections.	
Symptom	Remedy		The cable may be damaged.	
The HDMI indicator blinks continu-	Check all the points below.		Select ON for the Control Mode with HDMI setting (see <u>HDMI Setup</u> on <u>page 82</u>).	
ously.			Turn the TV's power on before turning on this receiver's power.	
Video/audio is not output or is inter- rupted.	This receiver is HDCP-compatible. Check that the components you are connecting are also HDCP-compatible. If they are not, please connect them using the component or		Set the TV side Control with HDMI setting to on (see TV's operating instructions).	
aptour	composite video jacks.		Excluding VSX-830: Connect the TV to the HDMI OUT 1 terminal and set the HDMI output	
	Depending on the connected source component, it's possible that it will not work with this receiver (even if it is HDCP-compatible). In this case, connect using the component or composite video jacks between source and receiver.	<i>Excluding VSX-830:</i> When HDZONE is set to ON, the video resolution and	ing the same input in the main zone and HDZONE, video and audio signals that can be	
	If the problem still persists when connecting your HDMI component directly to your monitor, please consult the component or monitor manual or contact the manufacturer	number of audio channels for the main zone side changes. <i>Excluding VSX-830:</i> HDZONE cannot	output in common for all the devices connected to the HDMI OUT 1 and HDMI OUT 2 (HDZONE) terminals are set. Set Output Setting at MAIN/HDZONE to HDZONE (page 111).	
	for support.	be turned on.	Set Output Setting at MAIN/HDZONE to HDZONE (page 111).	
	If video images do not appear on your TV, try adjusting the resolution, Deep Color or other setting for your component.	Excluding VSX-830: When the input	This is because the HDMI devices need to recognize each other again. This is not a	
	While analog video signals are being output over HDMI, use a separate connection for audio output.	source for the main or HDZONE is switched or when the power of the respective zones is turned on and	malfunction. If the picture is disturbed or not displayed, turn off the power of the devices in all the zones, then try again. Also try temporarily turning the Network Standby and Standby Through settings OFF .	
	To output signals in Deep Color, use an HDMI cable (High Speed HDMI®/ [®] / TM Cable) to connect this receiver to a component or TV with the Deep Color feature.	off, the audio or video of the HDMI output terminal that is not being		
The picture and sound output get cut		operated is sometimes interrupted.		
off, or there is no output produced.	to not be produced or to get cut off. In this case, press OUT P. , and make sure to use an output other than the HDMI output to which that TV is connected.	Excluding VSX-830: Such menus as the HOME MENU as well as the on-	Press OUT P. and switch the HDMI OUT 1/2 setting.	
No picture.	Try changing the SCAL setting (in <u>Setting the Video options</u> on <u>page 87</u>).	screen display are not displayed for		
	Excluding VSX-830: To use the HDMI OUT 2 terminal in the main zone, set the	HDMI OUT 1 or HDMI OUT 2.		
	MAIN/HDZONE Output Setting to MAIN (page 111).	Cannot upscale to 4K.	Change SCAL. (page 87)	
No sound, or sound suddenly ceases.	Check that the HDMI Audio setting is set to AMP (Setting the Audio options on page 85).	<i>Excluding VSX-830:</i> 4K video is not output even though a 4K compliant	When the MAIN/HDZONE setting is MAIN and the HDMI output setting is OUT 1+2 and when the MAIN/HDZONE setting is HDZONE and HDZONE is the same input as with the	
	If the component is a DVI device, use a separate connection for the audio.	TV is connected.	main zone, video is output with the lower resolution of the TV connected to HDMI OL	
	If analog video is being output over HDMI, please use a separate connection for the audio.		and HDMI OUT 2. When there is only one 4K compliant TV, connect it to HDMI OUT 1 and set the HDMI output setting to OUT 1 or turn off HDZONE so that video is only output	
	Check the audio output settings of the source component.		to the 4K compliant TV.	
	HDMI format digital audio transmissions require a longer time to be recognized. Due	Even though a 4K/60p 4:4:4 24 bit	Set the HDMI 4K/60p signal output setting to 4:4:4 (page 88).	
	to this, interruption in the audio may occur when switching between audio formats or beginning playback.	compatible TV is connected, the 4K/60p 4:4:4 24 bit video image is not	When the HDMI cable does not support 4K/60p 4:4:4 24 bit (18 Gbps transmission),	
	Turning on/off the device connected to this unit's HDMI OUT terminal during playback, or disconnecting/connecting the HDMI cable during playback, may cause noise or inter-	output correctly.	video images may not be output properly. In that case, replace the cable with a comp ible HDMI cable or change the HDMI 4K/60p signal output setting to 4:2:0 to watch t 4K/60p 4:2:0 24 bit video image.	
	rupted audio.		Excluding VSX-830: The HDMI OUT 2 terminal does not output a 4K/60p 4:4:4 24 bit v	
Noisy or distorted picture.	Sometimes a video deck may output a noisy video signal (during scanning, for example), or the video quality may just be poor (with some video game units, for example). The		image if MAIN/HDZONE is set to HDZONE. Set MAIN/HDZONE to MAIN or use the HDMI OUT 1 terminals.	
	picture quality may also depend on the settings, etc. of your display device. Switch off the video converter and reconnect the source and display device using the same type of connection (component or composite), then start playback again.		You cannot input 4K/60p 4:4:4 24 bit video from HDMI IN 3 to IN 5 terminal or HDMI IN 6 (excluding VSX-830). Use BD IN, HDMI IN 1 or HDMI IN 2 terminal.	
	If the problem still persists when connecting your HDMI component directly to your monitor, please consult the component or monitor manual or contact the manufacturer for support.			

MHL	
Symptom	Remedy
When playing an MHL-compatible device connected to the MHL terminal, the Standby Through function does not work and the power turns off.	The MHL device will not operate unless power is being supplied from this receiver. Wher this receiver is in the Standby Through mode, power cannot be supplied due to reduced power consumption. Because of this, the MHL device will not operate. This is not a mal- function.
MHL-compatible device cannot be operated with the remote control.	Press MHL to set the remote control to the MHL control mode.
MHL POW ERR is displayed on the display.	There is a problem with the power supply for the MHL device. After turning OFF the receiver, disconnect the MHL device, connect the MHL device again and then turn ON the power of the receiver. If the error is displayed even though the above operation is repeated several times, there is a problem with the receiver or the MHL device. Disconnect the power cable and request repair.

Built-in AVNavigator

Symptom	Cause	Remedy
AVNavigator does not inter- act well with the receiver.	The receiver's power is not turned on.	Turn the receiver's power on. (Wait about 60 seconds after the power turns on for network functions to start.)
	The receiver or computer is not connected to the LAN.	Connect a LAN cable to the receiver or computer (pages <u>33, 46</u>).
	The router's power is off.	Turn the router's power on.
	Network connections could be restricted due to the computer's network settings, security settings, etc.	Check the computer's network settings, security settings, etc.
In the middle of Wiring Navi , you are instructed to turn off the power of the unit and then connect other equip- ment or speakers.	This is to avoid failure of the receiver due to a short-circuit between cables or from static electricity.	Per the Wiring Navi instructions, turn OFF the power of the receiver. As long as the browser has not quit, Wiring Navi resumes guidance upon turning ON the receiver.
When Wiring Navi or Interactive Operation Guide (excluding VSX-830) is started up, an alarm for security protection will be displayed by the browser.	This is because of the browser's security function.	This is not a problem. Perform the operation to authorize the blocked contents.
AVNavigator screen is not displayed on the browser.	This receiver's IP address has not been entered into the browser correctly.	Check the receiver's IP address and enter it correctly in the browser (page 56).
Receiver settings cannot be made from a browser.	JavaScript is disabled on the inter- net browser.	Enable JavaScript.
	The browser is not compatible with JavaScript.	Use an internet browser that is compatible with JavaScript.

USB interface

Symptom	Cause	Remedy		
The folders/files stored on a USB memory device are not displayed.	The folders/files are currently stored in a region other than the FAT (File Allocation Table) region.	Store the folders/files in the FAT region.		
	The number of levels in a folder is more than 9.	Limit the maximum number of levels in a folder to 9 (<u>page</u> <u>64</u>).		
	The audio files are copyrighted.	Copyrighted audio files stored on a USB memory device cannot be played back (page 64).		
A USB memory device is not recognized.	The USB memory device does not support the mass storage class specifications.	Try using a USB memory device compatible with the mass storage class specifications. Note that there are cases where even the audio files stored on a USB memory device compatible with the mass storage class specifications are not played back on this receiver (page 64).		
		Connect the USB memory device and switch on this receiver (pages <u>34, 46</u>).		
	A USB hub is currently being used.	This receiver does not support USB hubs (page 64).		
	This receiver recognizes the USB memory device as a fraud.	Switch off and on again this receiver.		
		Reconnect the USB device with the receiver switched off.		
		Change to an input other than iPod/USB, then set the input back to iPod/USB.		
A USB memory device is connected and displayed, but the audio files stored on the USB memory device	Some formats of USB memory devices, including FAT 12, NTFS, and HFS, cannot be played back on this receiver.	Check whether the format of your USB memory device is either FAT 16 or FAT 32. Note that the FAT 12, NTFS, and HFS formats cannot be played back on this receiver (page 64).		
cannot be played back.	The file format cannot be properly played back on this receiver.	See the list of file formats that can be played back on this receiver (page 65).		
The USB memory cannot be operated with the remote control.	_	Press iPod USB to set the remote control to the iPod USB control mode.		
Over Current shows in the display.	_	There is a problem with the power supply for the USB memory. After turning off the receiver, disconnect the USB memory, connect the USB memory again and then turn o the power of the receiver. If Over Current is displayed even though the above opera- tion is repeated several times, there is a problem with the receiver or USB memory. Disconnect the power cable and request repair.		



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iPod

Symptom	Cause	Remedy	
iPod is not recognized.	This receiver recognizes the iPod as	Switch off and on again this receiver.	
	a fraud.	Reconnect the iPod with the receiver switched off.	
		Change to an input other than iPod/USB, then set the input back to iPod/USB.	
iPod touch/iPhone is not recognized or otherwise does not operate properly.	The iPod's operation may be unstable.	Try performing the operation below. 1. Press the sleep/sleep cancel button on the iPod touch/ iPhone simultaneously with the home button for at least 10 seconds to restart the device. 2. Turn this receiver's power on. 3. Connect the iPod touch/iPhone to this receiver.	
iPod cannot be operated with the remote control.	—	Press iPod USB to set the remote control to the iPod USB control mode.	
No audio is output when operating from an iPod.	_	Press iPod iPhone DIRECT CONTROL on the front panel, to switch to iPod operation.	

Network

Symptom	Cause	Remedy
Cannot access the network.	The LAN cable is not firmly con- nected.	Firmly connect the LAN cable (pages $\underline{33}, \underline{46}$).
	The router is not switched on.	Switch on the router.
	Internet security software is cur- rently installed in the connected component.	There are cases where a component with Internet security software installed cannot be accessed.
	The audio component on the net- work which has been switched off is switched on.	Switch on the audio component on the network before switching on this receiver.
Fails Wireless Accessory Configuration.	iOS equipment is not connected to the Wi-Fi equipment.	Connect the iOS equipment to Wi-Fi.
Playback does not start while " Connecting " con- tinues to be displayed.	The component is currently discon- nected from this receiver or the power supply.	Check whether the component is properly connected to this receiver or the power supply.
The network function can- not be operated with the remote control.	_	Press NET to set the remote control to the network function control mode.
The PC or Internet radio is not properly operated.	The corresponding IP address is not properly set.	Switch on the built-in DHCP server function of your router, or set up the network manually according to your network environment (page 51).
	The IP address is being automati- cally configured.	The automatic configuration process takes time. Please wait.

Symptom	Cause	Remedy
The audio files stored on components on the net- work, such as a PC, cannot	Windows Media Player 11 or Windows Media Player 12 is not cur- rently installed on your PC.	Install Windows Media Player 11 or Windows Media Player 12 on your PC (<u>page 76</u>).
be played back.	The audio file currently being played back was not recorded in a format playable on this receiver.	Audio files recorded in MPEG-4 AAC or FLAC cannot be played back on Windows Media Player 11 or Windows Media Player 12. Try using another server. Refer to the operation manual supplied with your server.
	The component connected to the network is not properly operated.	Check whether the component is affected by special cir- cumstances or is in the sleep mode. Try rebooting the component if necessary.
	The component connected to the network does not permit file sharing.	Try changing the settings for the component connected to the network.
	The folder stored on the component connected to the network has been deleted or damaged.	Check the folder stored on the component connected to the network.
	Network connections could be restricted due to the computer's net- work settings, security settings, etc.	Check the computer's network settings, security settings, etc.
	Supported file formats vary by server. As such, files not supported by your server are not displayed on this unit.	For more information check with the manufacturer of your server.
	The audio files are copyrighted.	DRM-protected audio files cannot be played back on this receiver.
Cannot access the com- ponent connected to the network.	The component connected to the network is not properly set.	If the client is automatically authorized, you need to enter the corresponding information again. Check whether the connection status is set to "Do not authorize".
	There are no playable audio files on the component connected to the network.	Check the audio files stored on the component connected to the network.

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Symptom	Cause	Remedy	Symptom	Cause	Remedy
ably stopped or disturbed. back was no	The audio file currently being played back was not recorded in a format	Check whether the audio file was recorded in a format supported by this receiver.	This unit cannot be selected from the Spotify	_	An Internet connection is required for both the mobile digital device and this unit.
	playable on this receiver.	Check whether the folder has been damaged or corrupted. Note that there are cases where even the audio files listed as playable on this receiver cannot be played back or directory (conc. 00)	application.		Connect the mobile digital device by Wi-Fi to the wireless LAN router of the same network as the one to which this unit is connected.
	The LAN cable is currently discon- nected.	displayed (<u>page 80</u>). Connect the LAN cable properly (pages <u>33, 46</u>).			A Spotify Premium account (for a charge) must be regis- tered on the Spotify application.
	There is heavy traffic on the network with the Internet being accessed on	Use 100BASE-TX to access the components on the net- work.			When this unit is in standby, it cannot be selected from th Spotify application.
	the same network.	WOLK.	The sound of the Spotify	—	Check whether this unit is selected on the Spotify applica-
	When in the DMR mode, depend-	In this case, adjust the volume from the receiver or remote	audio stream is not pro- duced.		
	ing on the external controller being used, playback may be interrupted when a volume operation is per-	control.			Check that contents are playing on the Spotify application. If the above does not solve the problem, turn this unit's power off then back on.
	formed from the controller. There is a connection routed through a wireless LAN on the same network.	The band frequency used for wireless LAN may not be suf- ficient. Connect using wired LAN.		Excluding VSX-830: With an AV receiver that has the ' Network, Bluetooth '	If this is the case, set which zone the sound is to be played in at the play zone settings.
		Place away from equipment that releases band frequency electromagnetic waves used in wireless LAN communica- tions (microwave oven, game console, etc.). If there is still no improvement, stop using other equipment that releases electromagnetic waves.		→ 'Network Option' → 'Play ZONE Setup' option, the sound may be playing in another zone.	
			This unit's volume does not increase when the volume	A volume upper limit is provided so that the volume will not inadvertently	
Entry of password is requested when starting	_	Enter the password set with AirPlay Password at Wireless Accessory Configuration or Network Option . If you have	slider in the Spotify applica- tion is raised.	go up too much.	is being used, you can use the application to increase the volume.
AirPlay. Cannot access Windows	In case of Windows Media Player	forgotten the password, it can be reset. Instead of logging onto the domain, log onto the local	Playback continues on this unit when the Spotify application is quit.	The Spotify audio stream continues from this unit, even when the Spotify application is guit.	To operate again, relaunch the Spotify application.
Media Player 11 or Windows Media Player 12.	11: You are currently logged onto the domain through your PC with Windows Vista installed. In case of Windows Media Player 12: You are currently logged onto the domain through your PC with	machine (<u>page 77</u>).	The main power cannot be turned on with iControlAV5 and the like during network standby.	When network communication is disconnected during network	Turn the main power on with the button on the remote control or main device.
Cannot listen to Internet radio stations.	ernet The firewall settings for components Check the firewall settings for components on the network. DMR mode or AirPlay i	<i>Excluding VSX-830:</i> When DMR mode or AirPlay is used from a computer, smartphone, etc., the	Play ZONE Setup is not set to MAIN.	Change Play ZONE Setup to MAIN (<u>page 57</u>).	
Ye th Tr ra	You are currently disconnected from the Internet.	Check the connection settings for components on the network, and consult with your network service provider if necessary (page 51).	sound is played in subzone.		
	The broadcasts from an Internet radio station are stopped or inter- rupted.	There are cases where you cannot listen to some Internet radio stations even when they are listed in the list of Internet radio stations on this receiver (page 77).			

Wireless LAN

Symptoms	Causes	Remedies
Network cannot be accessed via wireless LAN.	SSID uses double-byte characters such as in the Japanese language.	This receiver is compatible only with single-byte alphanu- merical characters and some symbols such as the under- bar. If characters other than these are used, change the SSID before executing network settings. Refer to the user's manual for your router for information on SSID.
	There is distance or obstacles between this receiver and equipment including the wireless LAN router.	Improve the wireless LAN environment such as making the distance between this receiver and equipment including wireless LAN router closer.
	There is a microwave oven or other device generating electromagnetic	Use the system in a place away from microwave ovens or others device generating electromagnetic waves.
	waves near the wireless LAN envi- ronment.	Avoid using devices generating electromagnetic waves as much as possible when using the system with the wireless LAN.
	Multiple devices are connected to the wireless LAN router.	When connecting multiple devices to the wireless LAN router, the IP address of the connected devices must be changed.
	The wireless LAN connection set- tings of this receiver and equipment such as wireless LAN router is not correct.	When wireless LAN connections for this receiver and wire- less LAN router are not setup, the connection between this receiver and equipment such as the wireless LAN router must be set.
	The IP address settings of this receiver do not match the settings of the wireless LAN router and the like.	Check the IP address settings (including DHCP settings) of this receiver. If the receiver's DHCP setting is "ON", turn the receiver's power off, then turn the power back on. Check that the IP address for this receiver matches the settings of the wireless LAN router. If the receiver's DHCP setting is "OFF", set an IP address matching the network of the base unit (wireless LAN router, etc.). For example, if the wireless LAN router's IP address is "192.168.1.1", set the receiver's IP address to "192.168.1.1XXX" (*1), the subnet mask to "255.255.255.0", the gateway and DNS to "192.168.1.1". (*1) Set the "XXX" in "192.168.1.XXX" to a number between 2 and 248 that is not assigned to other devices.
	The access point is set to conceal the SSID.	In this case, it may not be shown in the access point list screen. If it is not shown, set the SSID etc. of this receiver.
	The access point's security settings use WEP 152-bit length code key or shared key authentication.	The receiver does not support WEP 152-bit length code key or shared key authentication.
	There is a possibility that the chan- nel used by the wireless network is a wireless channel that cannot be used with this receiver.	Change the wireless network channel to a wireless channel that can be used with this receiver, then check the connection.
Wireless Direct is not connected when the main power of this receiver is turned off once and turned on again.	The Security Protocol is set to None.	Because there are security risks, settings are necessary to connect to Wireless Direct again. Set Security Protocol of Wireless Direct to WEP (<u>page 55</u>).

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Additional information

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About Wi-Fi®



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The Wi-Fi Protected Setup Identifier Mark is a certification mark of Wi-Fi Alliance.

SABRE DACTM



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About HDMI

HDMI (High-Definition Multimedia Interface) is a digital transfer standard for receiving video and audio data with a single cable. It is an adaptation of DVI (Digital Visual Interface), a display connection technology, for use in home audio devices. This interface standard is for next-generation TVs providing High-bandwidth Digital Content Protection (HDCP).



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HTC Connect



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About iPod





AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later.

USB works with iPhone 6 Plus, iPhone 6, iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPhone 3GS, iPod touch (4th through 5th generation) and iPod nano (4th through 7th generation).

"Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance. *Apple, AirPlay, iPad, iPhone, iPod, iPod nano, iPod touch, iTunes, Safari, Bonjour, Mac, Mac OS and OS X are trademarks of Apple Inc., registered in the U.S. and other countries.*

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About Apple Lossless Audio Codec

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About FLAC

FLAC Decoder

Copyright © 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009 Josh Coalson

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About Spotify

The Spotify software is subject to third party licenses found here: www.spotify.com/connect/third-party-licenses



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About Performance Audio Framework

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Surround sound formats

Below is a brief description of the main surround sound formats you'll find on BDs, DVDs, satellite, cable and terrestrial broadcasts, and video cassettes.

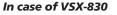
Dolby

The Dolby technologies are explained below. See http://www.dolby.com for more detailed information.

In case of VSX-1130/VSX-930

DOLBY ATMOS

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DTS

The DTS technologies are explained below. See http://www.dts.com for more detailed information.



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Auto Surround, ALC and Stream Direct with different input signal formats

The following charts show what you will hear with different input signal formats, depending on the Stream Direct mode (see <u>Using Stream Direct</u> on <u>page 72</u>) you have selected.

Stereo (2 channel) signal formats

In case of VSX-1130/VSX-930

	Auto Surround / PURE DIRECT / DIRECT		
Input signal format	Rendering Mode : OBJECT	Rendering Mode : LEGACY	ALC
Dolby: 2.0 Surround	Dolby S	urround	Dolby Digital
Dolby Digital Plus	Dolby Surround	Dolby Digital Plus	Dolby Digital Plus
Dolby TrueHD	Dolby Surround	Dolby TrueHD	Dolby TrueHD
DTS Surround	Neo:6	CINEMA	DTS
Other stereo sources	Stereo playback		Stereo playback
Analog sources	As above/ANALOG DIRECT (stereo) <a>		As above
PCM sources	Stereo playback		As above
DVD-A sources	As above		As above
SACD sources	As above/DSD DIRECT (stereo) 		As above

a ANALOG DIRECT is available when the listening mode set to PURE DIRECT.

b DSD DIRECT is available when the listening mode set to PURE DIRECT.

In case of VSX-830

Input signal format	Auto Surround / DIRECT	ALC	PURE DIRECT
Dolby: 2.0 Surround	II Pro Logic II MOVIE	Dolby Digital	II Pro Logic II MOVIE
DTS Surround	Neo:6 CINEMA	DTS	Neo:6 CINEMA
Other stereo sources	Stereo playback	Stereo playback	Stereo playback
Analog sources	As above	As above	ANALOG DIRECT (stereo)
PCM sources	As above	As above	Stereo playback
DVD-A sources	As above	As above	As above
SACD sources	As above	As above	As above

Multichannel signal formats

In case of VSX-1130/VSX-930

	Auto Surround / PU	RE DIRECT / DIRECT	
Input signal format	Rendering Mode : OBJECT	Rendering Mode : LEGACY	ALC
Surround Back speaker(s): Co	nnected		
Dolby: Surround EX	Dolby	Surround	Dolby Digital
Dolby Digital Plus	Dolby Surround	Dolby Digital Plus	Dolby Digital Plus
Dolby TrueHD	Dolby Surround	Dolby TrueHD	Dolby TrueHD
DTS-HD Master Audio ES (6.1 channel flagged)	DTS-E	S (Matrix)	DTS
DTS-ES (6.1 channel sources/6.1 channel flagged)	DTS-ES (Ma	DTS-ES (Matrix/Discrete)	
Other 5.1/6.1/7.1 channel sources	Straight	Straight decoding	
Top middle/Front wide speake	ers: Connected		
Dolby: Surround EX	Dolby	Surround	Dolby Digital
Dolby Digital Plus	Dolby Surround	Dolby Digital Plus	Dolby Digital Plus
Dolby TrueHD	Dolby Surround	Dolby TrueHD	Dolby TrueHD
DTS-HD Master Audio ES (6.1 channel flagged)	Straight	Straight decoding	
DTS-ES (6.1 channel sources/6.1 channel flagged)	Straight	t decoding	DTS
Other 5.1/6.1/7.1 channel sources	Straight	Straight decoding	
Surround Back, Top middle ar	nd Front wide speakers: Not	connected	
All 5.1/6.1/7.1 channel sources	Straight	t decoding	Straight decoding

In case of VSX-830

Input signal format	Auto Surround / DIRECT	ALC	PURE DIRECT
All 5.1/6.1/7.1 channel sources	Straight decoding	Straight decoding	Straight decoding

Dolby Atmos format

Excluding VSX-830

	Auto Surround / PURE DIRECT / DIRECT		
Input signal format	Rendering Mode : OBJECT	Rendering Mode : LEGACY	ALC
Surround Back/Top middle/Front wide speaker(s): Connected			
Dolby Atmos	Dolby Atmos	Channel decode	Channel decode
Surround Back, Top middle and Front wide speakers: Not connected			
Dolby Atmos	Channel decode	Channel decode	Channel decode



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Speaker Setting Guide

In order to achieve an even better surround effect, it is important to accurately position the speakers and make their volume and tone characteristics uniform so as to finely focus the multi-channel sound.

The three major elements in positioning the speakers are **distance**, **angle** and **orientation** (the direction in which the speakers are pointing).

Distance: The distance of all the speakers should be equal.

Angle: The speakers should be horizontally symmetrical.

Orientation: The orientation should be horizontally symmetrical.

In most homes, however, it is not possible to achieve this environment. For the distance, on this receiver it is possible to automatically correct the speaker distance electrically to a precision of 1 cm using the Full Auto MCACC Setup function (page 57).

Step 1: Speaker layout and distance adjustment

Use speaker stands or the like to make sure the speakers are steady, and leave at least 10 cm from the surrounding walls. Position the speakers attentively so that the speakers on the left and right are at equal angles from the listening position (center of the adjustments). (We recommend using cords, etc., when adjusting the layout.) Ideally all the speakers should be equidistant from the listening position.

Ø Note

If the speakers cannot be set at equal distances (on a circle), use the Auto MCACC Setup speaker distance correction and Fine Speaker Distance functions to make them equalize the distance artificially.

Step 2: Adjusting the speaker height

Adjust the heights (angles) of the different speakers.

Adjust so that the front speaker units reproducing mid- and high frequencies is roughly at the height of the ears. If the center speaker cannot be set at the same height as the front speakers, adjust its angle of elevation to point it to the listening position.

Set surround speaker 1 so that it is not under the height of the ears.

Step 3: Adjusting the speaker orientation

If the left and right speakers are not pointing in the same direction, the tone will not be the same on the right and left, and as a result the sound field will not be reproduced properly. However, if all the speakers are pointed towards the listening position, the sound field will seem cramped. Testing by the Pioneer Multi-channel Research Group has shown that a good sense of sound positioning can be achieved by pointing all the speakers towards an area 30 cm to 80 cm behind the listening position (between the surround speakers and the listening position). However, the sense of sound positioning can differ according to the conditions in the room and the speakers being used. In smaller environments in particular (when the front speakers are close to the listening position), with this method the speakers will be pointed too inward. We suggest you use this example of installation as reference when trying out different installation methods.

Step 4: Positioning and adjusting the subwoofer

Placing the subwoofer between the center and front speakers makes even music sources sound more natural (ii there is only one subwoofer, it doesn't matter if it is placed on the left or right side). The low bass sound output from the subwoofer is not directional and there is no need to adjust the height. Normally the subwoofer is placed on the floor. Put it in a position at which it will not cancel out the bass sound output from the other speakers. Also note that placing it near a wall may result in sympathetic vibrations with the building that could excessively amplify the bass sound.

If the subwoofer must be installed near a wall, place it at an angle so that it is not parallel to the wall surface. This can help reduce any sympathetic vibrations, but depending on the shape of the room this could result in standing waves. However, even if standing waves are generated, their influence on the sound quality can be prevented using the Auto MCACC's standing wave control function (page 102).

Step 5: Default settings with the Auto MCACC Setup (auto sound field correction) function

It is more effective to perform the Full Auto MCACC Setup (page 57) procedure once the adjustments described above have been completed.

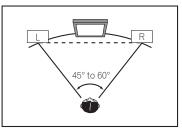
Note

The distance to the subwoofer may be slightly larger than the distance actually measured with a tape measure. etc. This is because this distance is corrected for electric delay, and is not a problem.

Positional relationship between speakers and monitor

Position of front speakers and monitor

The front speakers should be as equidistant as possible to the monitor.



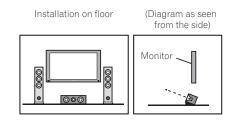




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Position of center speaker and monitor

Since mostly dialogs are output from the center speaker, keeping the center speaker as close as possible to the screen makes the overall sound more natural. For TVs using Braun tubes, however, when installing the center speaker on the floor, adjust its angle of elevation to point it towards the listening position.



- If the center speaker is not of the shielded type, install it away from the TV.
- When installing the center speaker on top of the monitor, place it facing slightly downwards towards the listening position.

About messages displayed when using network functions

Refer to the following information when you come up with a status message while operating the Network functions.

Status messages	Descriptions
Connection Down	The selected category or Internet radio station cannot be accessed.
File Format Error	Cannot be played back for some reasons.
Track Not Found	The selected song has not been found anywhere on the network.
Server Error	The selected server cannot be accessed.
Server Disconnected	The server has been disconnected.
Empty	There are no files stored in the selected folder.
License Error	The license for the contents to be played back is invalid.
Item Already Exists	This is displayed when the file you have attempted to register in the Favorites folder has already been registered.
Favorite List Full	This is displayed when you have attempted to register a file in the Favorites folder but the Favorites folder is already full.

Important information regarding the HDMI connection

There are cases where you may not be able to route HDMI signals through this receiver (this depends on the HDMI-equipped component you are connecting-check with the manufacturer for HDMI compatibility information).

If you aren't receiving HDMI signals properly through this receiver (from your component), please try one of the following configurations when connecting up.

Configuration A

Use component video cables to connect the video output of your HDMI-equipped component to the receiver's component video input. The receiver can then convert the analog component video signal to a digital HDMI signal for transmission to the display. For this configuration, use the most convenient connection (digital is recommended) for sending audio to the receiver. See the operating instructions for more on audio connections.



The picture quality will change slightly during conversion.

Configuration B

Connect your HDMI-equipped component directly to the display using an HDMI cable. Then use the most convenient connection (digital is recommended) for sending audio to the receiver. See the operating instructions for more on audio connections. Set the display volume to minimum when using this configuration.



- If your display only has one HDMI terminal, you can only receive HDMI video from the connected component.
- Depending on the component, audio output may be limited to the number of channels available from the connected display unit (for example audio output is reduced to 2 channels for a monitor with stereo audio limitations).
- If you want to switch the input function, you'll have to switch functions on both the receiver and your display unit.
- Since the sound is muted on the display when using the HDMI connection, you must adjust the volume on the display every time you switch input functions.

Cleaning the unit

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surface is dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleansers.
- Never use thinners, benzene, insecticide sprays or other chemicals on or near this unit, since these will corrode the surface.







Declaration of Conformity with regard to the R&TTE Directive 1999/5/EC

Manufacturer:

PIONEER HOME ELECTRONICS CORPORATION

1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan EU Representative's: **Pioneer Europe NV** Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium http://www.pioneer.eu

[*] VSX-1130-K, VSX-930-K, VSX-930-S, VSX-830-K, VSX-830-S

English:

Hereby, Pioneer, declares that this [*] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Suomi:

Pioneer vakuuttaa täten että [*] tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Nederlands:

Hierbij verklaart Pioneer dat het toestel [*] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG

Français:

Par la présente Pioneer déclare que l'appareil [*] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE

Svenska:

Härmed intygar Pioneer att denna [*] står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Dansk:

Undertegnede Pioneer erklærer herved, at følgende udstyr [*] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF

Deutsch:

Hiermit erklärt Pioneer, dass sich dieses [*] in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)

Ελληνικά:

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Pioneer ΔΗΛΩΝΕΙ ΟΤΙ [*] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ

Italiano:

Con la presente Pioneer dichiara che questo [*] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Español:

Por medio de la presente Pioneer declara que el [*] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE

Português:

Pioneer declara que este [*] está conforme os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Čeština:

Pioneer tímto prohlašuje, že tento [*] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES

Eesti:

Käesolevaga kinnitab Pioneer seadme [*] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

Magyar:

Alulírott, Pioneer nyilatkozom, hogy a [*] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

Latviešu valoda:

Ar šo Pioneer deklarē, ka [*] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

Lietuvių kalba:

Šiuo Pioneer deklaruoja, kad šis [*] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

Malti:

Hawnhekk, Pioneer jiddikjara li dan [*] jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC

Slovenčina:

Pioneer týmto vyhlasuje, že [*] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

Slovenščina:

Pioneer izjavlja, da je ta [*] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

Română:

Prin prezenta, Pioneer declara ca acest [*] este in conformitate cu cerintele esentiale si alte prevederi ale Directivei 1999/5/EU.

български:

С настоящето, Pioneer декларира, че този [*] отговаря на основните изисквания и други съответни постановления на Директива 1999/5/EC.

Polski:

Niniejszym Pioneer oświadcza, że [*] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC

Norsk:

Pioneer erklærer herved at utstyret [*] er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

Íslenska:

Hér með lýsir Pioneer yfir því að [*] er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC

Hrvatski:

Ovime tvrtka Pioneer izjavljuje da je ovaj [*] u skladu osnovnim zahtjevima i ostalim odredbama Direktive 1999/5/EC.







Glossary

Audio formats/Decoding

Dolby

The Dolby technologies are explained below. See http://www.dolby.com for more detailed information.

Dolby Digital

Dolby Digital is a multichannel digital audio coding system widely used in cinemas, and in the home for DVD and digital broadcast soundtracks.

Dolby TrueHD

Dolby TrueHD is the lossless encoding technology developed for high-definition optical discs in the upcoming era.

Dolby Digital Plus

Dolby Digital Plus is the audio technology for all high-definition programming and media. It combines the efficiency to meet future broadcast demands with the power and flexibility to realize the full audio potential expected in the upcoming high-definition era.

Dolby Atmos

Features

- Provides a powerful and dramatically new listening experience for cinema sound.
- Creates a 3 dimensional listening environment where sounds can be transported through the room.
- Reproduces a natural sound that matches the story exactly and sounds as if real.
- Addition of audio elements in the height space above the listener. Height audio is reproduced by either overhead or Dolby enabled speakers.
- The original intention of the producers can be expressed, no matter what kind of system setup you have in your home.

Technical information

- Placement for clearer, more accurate cinema sound is possible. With mixing that uses "objects", independent sound elements can be superimposed on channel-based material.
- By importing all of the intentions of the director as meta data, it is possible to customize play back for every home.
- Soundtracks are scaled to achieve best performance through your specific speaker system.
- Dolby Atmos uses a multi layering approach for building soundtracks. In combination with the conventional channel-based method, the base layer is composed of mainly motionless environmental sounds. On top of this layer is the layer that realizes the sound elements that have "movement". Here, sound can be placed and moved so that it is linked accurately with the images on-screen.

In the meta data, it is indicated how this type of sound element will act when it is played back. This indication enables playback that reflects the intention of the director as much as possible, in any playback environment. This dual-layer approach not only allows moviemakers to freely make full use of a variety of expressions, but also enables users to experience the intentions of the producer in any type of home theater setup.

• Dolby Atmos contents are required to enjoy Dolby Atmos. For Blu-ray discs with Dolby Atmos, Dolby Atmos can be played by connecting most conventional Blu-ray discs with this receiver using HDMI.

DTS

The DTS technologies are explained below. See http://www.dts.com for more detailed information.

DTS Digital Surround

DTS Digital Surround is a 5.1-channel audio coding system from DTS Inc. now widely used for DVD-Video, DVD-Audio, 5.1 music discs, digital broadcasts, and video games.

DTS-HD Master Audio

DTS-HD Master Audio is a technology that delivers master audio sources recorded in a professional studio to listeners without any loss of data, preserving audio quality.

DTS-HD High Resolution Audio

A high definition audio technology by which signals can be transferred over HDMI cables.

DTS-ES

DTS-ES (the ES stands for Extended Surround) is a decoder that is capable of decoding both DTS-ES Discrete 6.1 and DTS-ES Matrix 6.1 encoded sources.

DTS Neo:6

DTS Neo:6 can generate 7.1 channel surround sound from any matrixed stereo source (such as video or TV) and from 5.1 channel sources.

Decoding

A technology for converting digital signals that have been compressed upon recording by a digital signal processing circuit, etc., into the original signals. The term "decoding" (or "matrix decoding") is also used for the technology which converts 2-channel sound sources into multiple channels or expands 5.1-channel signals into 6.1 or 7.1 channels.

Calibrating the sound field/Improving the sound quality

Phase Control

The Phase Control technology incorporated into this receiver's design provides coherent sound reproduction through the use of phase matching for an optimal sound image at your listening position.

Phase Control Plus (Auto Phase Control Plus)

Corrects the delay in the contents' low frequency effects (LFE). When properly corrected, the bass sound is more powerful, improving the balance of the sound.

When **AUTO** is selected, the contents are analyzed in real time, allowing them to be played in optimal conditions. This is effective for contents with low frequency effects (LFE), such as Dolby Digital 5.1-channel contents.

Virtual Speakers

Virtual playback of a maximum of 11.2 channels combining the actually installed speakers and the virtual speakers is possible. This makes for smoother connection between the sounds and an improved 3D feel.

Virtual Surround Back

When you're not using surround back speakers, selecting this mode allows you to hear a virtual surround back channel through your surround speakers. You can choose to listen to sources with no surround back channel information.

Virtual Height

Settings to create virtual front height channel audio.

Virtual Wide

When you're not using front wide speakers, selecting this mode allows you to hear a virtual front wide channel through your front speakers.

Auto Sound Retriever

The Auto Sound Retriever feature employs DSP technology to restore sound pressure and smooth jagged artifacts left over after compression.

With some audio inputs, the Sound Retriever effect is automatically optimized based on the bitrate information of the contents that have been input to achieve high sound quality.

Sound Retriever Air

Sound Retriever Air compensates for reduced sound quality due to compression when sending *Bluetooth* signals.









ALC (Auto Level Control)

In the Auto level control (ALC) mode, this receiver equalizes playback sound levels.

Also, the low and high frequency sounds, dialogs, surround effects, etc., that are difficult to hear when the volume is low are adjusted to be optimal for the volume level. This mode is particularly optimum when listening at night.

Front Stage Surround Advance

With the Front Stage Surround Advance feature, you can enjoy seamless, natural surround sound effects using only the front speakers, without deteriorating the quality of the original sound.

MCACC

The Auto MCACC Setup provides a quick but accurate surround sound setup, which includes the advanced features of Professional Acoustic Calibration EQ.

_____ HDMI

Control with HDMI function

Synchronized operations below with a **Control** with HDMI-compatible Pioneer TV or Blu-ray Disc player are possible when the component is connected to the receiver using an HDMI cable.

- The receiver's volume can be set and the sound can be muted using the TV's remote control.
- The receiver's input switches over automatically when the TV's input is changed or a Control with HDMIcompatible component is played.
- The receiver's power is also set to standby, when the TV's power is set to standby.

ARC (Audio Return Channel)

When a TV supporting the HDMI ARC (Audio Return Channel) function is connected to the receiver, the sound of the TV can be input via the HDMI OUT terminal.

The sound of the TV can be input from the receiver's HDMI OUT terminal, so connection with the TV can be completed with a single HDMI cable.

Network function

AirPlav

AirPlay works with iPhone, iPad, and iPod touch with iOS 4.3.3 or later, Mac with OS X Mountain Lion or later, and PC with iTunes 10.2.2 or later.

For more information, see the Apple website (http://www.apple.com).

DLNA

The Digital Living Network Alliance (DLNA) is a cross-industry organization of consumer electronics, computing industry and mobile device companies. Digital Living provides consumers with easy sharing of digital media through a wired or wireless network in the home.

vTuner

vTuner is a paid online database service that allows you to listen to radio and TV broadcasts on the Internet. vTuner lists thousands of stations from over 100 different countries around the globe. For more detail about vTuner, visit the following website:

http://www.radio-pioneer.com

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Apple Lossless (ALAC)

"ALAC" stands for Apple Lossless Audio Codec. This is a loseless type audio codec and is used for example for iTunes[®]. It compresses non-compressed files (such as WAV and AIFF) to about one half the original size with no loss of sound quality.

FLAC

FLAC (Free Lossless Audio Codec) is an audio format allows lossless codec. Audio is compressed in FLAC with out any loss in quality. For more details about FLAC, visit the following website: http://flac.sourceforge.net/

Windows Media

Windows Media is a multimedia framework for media creation and distribution for Microsoft Windows. Windows Media is either a registered trademark or trademark of Microsoft Corporation in the U.S. and/or other countries. Use an application licensed by Microsoft Corporation to author, distribute, or play Windows Media formatted content. Using an application unauthorized by Microsoft Corporation is subject to malfunction.

Windows Media Player 11/Windows Media Player 12

Windows Media Player is software to deliver music, photos and movies from a Microsoft Windows computer to home stereo systems and TVs.

With this software, you can play back files stored on the PC through various devices wherever you like in your home.

This software can be downloaded from Microsoft's website.

Windows Media Player 11 (for Windows Vista)

 Windows Media Player 12 (for Windows 7 or Windows 8) For more information check the official Microsoft website.

Router

A device for relaying data flowing on a network to another network. In homes, routers often also function as DHCP servers. Products with built-in wireless LAN access points are called "wireless LAN routers".

DHCP

Abbreviation of Dynamic Host Configuration Protocol. A protocol for automatically assigning such setting information as IP addresses within network connections. This offers convenience in that, when enabled, it allows network functions to be used simply by connecting the devices to the network.

Wireless LAN/Wi-Fi

"Wi-Fi" (Wireless Fidelity) is a trademark coined by the Wi-Fi Alliance trade association to increase recognition of wireless LAN standards. With the increase in the number of devices connected to computers in recent years, Wi-Fi offers the advantage of eliminating the complexity of making connections with LAN cables by using wireless connection. As a way of reassuring users, products that have passed interoperability tests carry the logo "Wi-Fi Certified" to indicate that compatibility is assured.

WPS

Abbreviation of Wi-Fi Protected Setup. A standard established by the Wi-Fi Alliance industry group for a function allowing settings related to interconnection of WPS-compatible wireless LAN devices and encryption to be made with simple operations. There are a number of methods, including push-button configuration and PIN code configuration. This AV receiver supports both push-button configuration and PIN code configuration.

SSID

Abbreviation of Service Set IDentifier. A wireless LAN access point identifier. Can be set as desired using up to 32 characters of English letters and numbers.







Bluetooth function

Bluetooth wireless technology

A short-range wireless communications standard for digital devices. Information is exchanged between devices several meters to several tens of meters apart using radio waves. It uses radio waves on the 2.4 GHz band which does not require applications for licenses or usage registration for applications conducting wireless exchange of digital information at relatively low speeds, such as computer mouses and keyboards, mobile phones, smartphones, text and audio information for PDAs, etc.

Receiver function

MHL

MHL (Mobile High-definition Link) is an interface standard for transmitting digital signals with mobile devices. MHL can carry high quality multi-channel audio data and 3D/Full-HD video formats. "This receiver incorporates MHL 2."







Features index

AVNavigator See <u>How to use the built-in AVNavigator</u> on <u>page 49</u>.

ECO MODE 1, 2 See <u>Using the Advanced surround effects</u> on <u>page 72</u>.

HDZONE See <u>Making MULTI-ZONE connections</u> on page 32.

HTC Connect See <u>About HTC Connect</u> on <u>page 77</u>.

Pandora See <u>Listening to Pandora Internet Radio</u> on page <u>78</u>.

Play ZONE See <u>Play ZONE Setup</u> on page 57.

4K pass through/up scaling See <u>About HDMI</u> on <u>page 27</u>.

Full Auto MCACC See Automatically conducting optimum sound tuning (Full Auto MCACC) on page 57.

Automatic MCACC (Expert) See <u>Automatic MCACC (Expert)</u> on page 99.

Manual MCACC setup See <u>Manual MCACC setup</u> on <u>page 101</u>.

Phase Control See <u>Better sound using Phase Control</u> on page 73.

Standing Wave See <u>Setting the Audio options</u> on <u>page 85</u>.

Phase Control Plus See <u>Setting the Audio options</u> on <u>page 85</u>.

Auto Sound Retriever See <u>Setting the Audio options</u> on <u>page 85</u>.

ALC (Auto Level Control) See <u>Auto playback</u> on <u>page 71</u>.

Front Stage Surround Advance See Enjoying various types of playback using the listening modes on page 71.

Sound Retriever Air See Enjoying various types of playback using the listening modes on page 71.

Dialog Enhancement See <u>Setting the Audio options</u> on <u>page 85</u>.

Internet radio See Listening to Internet radio stations on page 77.

vTuner See Listening to Internet radio stations on page 77.

DLNA See <u>About network playback</u> on <u>page 79</u>.

AirPlay

See Using AirPlay on iPod touch, iPhone, iPad, and iTunes on page 76.

Wireless LAN

See Connecting to the network through LAN interface on page 33 (VSX-1130/VSX-930) or 46 (VSX-830).

Playback High Resolution audio file See About playable file formats on page 80. See Playing a USB device on page 64.

See Playing back photo files stored on a USB memory device on page 64.

Bluetooth See <u>Music playback using Bluetooth wireless technology</u> on page 67.

ARC (Audio Return Channel) See <u>HDMI Setup</u> on page 82.

Auto delay See Setting the Audio options on page 85.

Virtual Surround Back See <u>Setting the Audio options on page 85</u>.

Virtual Height See <u>Setting the Audio options</u> on page 85.

Virtual Wide See <u>Setting the Audio options</u> on <u>page 85</u>.

Digital Video Converter See <u>Setting the Video options</u> on <u>page 87</u>.

Pure Cinema See <u>Setting the Video options</u> on <u>page 87</u>.

Progressive Motion See <u>Setting the Video options</u> on page 87.

Advanced Video Adjust See Setting the Video options on page 87.

Auto Power Down See <u>The Other Setup menu</u> on <u>page 109</u>.









Specifications

Audio Section (VSX-1130/VSX-930)	
Rated power output (1 kHz, 6 Ω , 1 %)	
Front, Center, Surround, Surround back	150 W per channel
Rated power output (20 Hz to 20 kHz, 8 Ω, 0.09 %)	
Front, Center, Surround, Surround back	
For Oceania model: Maximum power output (1 kHz, 6 Ω , 10 %)	
Front, Center, Surround, Surround back	
Total harmonic distortion	0.06 % (20 Hz to 20 kHz, 50 W/ch, 8 Ω)
Guaranteed speaker impedance	
Signal-to-Noise Ratio (IHF, short circuited, A network)	
LINE	
Frequency Response	5 Hz to 100 000 Hz $^{+0}_{-3}$ dB (Pure Direct Mode)
Input (Sensitivity/Impedance)	
LINE	
Audio Section (VSX-830)	
Rated power output (1 kHz, 6 Ω , 1 %)	
Front. Center. Surround	130 W por channel
Rated power output (20 Hz to 20 kHz, 8 Ω , 0.09 %)	
Front, Center, Surround	100 W por chapped
Total harmonic distortion	
Guaranteed speaker impedance.	
Signal-to-Noise Ratio (IHF, short circuited, A network)	
LINE	100 dB
Frequency Response	
Input (Sensitivity/Impedance)	3 112 to 100 000 112 -3 dB (1 dre Bhect Mode)
	315 m\//47 k O
Tuner Section	
Frequency Range (FM)	
Antenna Input (FM)	
Frequency Range (AM)	
Antenna (AM)	Loop antenna (balanced)

Video Section

Signal level	
Composite Video	1 Vp-p (75 Ω)
Component Video (excluding VSX-830)	Υ: 1.0 Vp-p (75 Ω), PB/PR: 0.7 Vp-p (75 Ω)
Corresponding maximum resolution	
Component Video (excluding VSX-830)	

Bluetooth Section

Version	1
Output	
Estimated line-of-sight transmission distance*	
*The line-of-sight transmission distance is an estimate. Actual transm	nission distances supported may differ
depending on surrounding conditions.	
Frequency range	
Supported Bluetooth profiles	
Supported Codec	SBC (Subband Codec), AAC

Digital In/Out Section

HDMI output type		
USB terminal	USB2.0 High Speed (Type A) 5 V, 1 A USB	
	ø 3.5 Mini-jack (MONO) High Active (High Level: 2.0 V)	
Network Section (Wired) LAN terminal Network Section (Wireless)		
	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n	
2.4 GHz band (2.412 GHz to 2.472 GHz) 5 GHz band (5.180 GHz to 5.240 GHz) Security	Channel 1 to Channel 13 Channel 36 to Channel 48 Disabled (no encryption) WEP (Key length: 64 bit/128 bit, Key format: ASCII/Hex) 2. Encryption method: TKIP/AES. Recognition method: PSK)	A
Miscellaneous	2, Encryption method. TRIP/AES, Recognition method. PSR)	

Power requirements	AC 220 V to 230 V, 50 Hz/60 Hz
Power consumption	550 W (VSX-1130/VSX-930)/450 W (VSX-830)
In standby	0.1 W
In standby (HDMI control on)	0.3 W
In standby (Network standby on)	
In standby (Network standby on, wireless LAN connected)	
In standby (HDMI control on, Network standby on)	
In standby (HDMI control on, Network standby on, wireless LAI	
Auto power down	
Dimensions	
VSX-1130/VSX-930	
VSX-830	
Weight (without package)	
VSX-1130	
VSX-930	
VSX-830	
	0.7 kg

Number of Furnished Parts

MCACC Setup microphone	. 1
Remote control unit	.1
AAA size IEC R03 dry cell batteries	2
AM loop antenna	
FM wire antenna	
Power cord	
CD-ROM	
Quick start guide	
Safety Brochure	
Warranty sheet	





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Notes

- These specifications are applicable when the power supply is 230 V.
- Specifications and the design are subject to possible modifications without notice, due to improvements.
- This product includes FontAvenue® fonts licensed by NEC Corporation. FontAvenue is a registered trademark of NEC Corporation.
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Preset code list

Excluding VSX-830

You should have no problem controlling a component if you find the manufacturer in this list, but please note that there are cases where codes for the manufacturer in the list will not work for the model that you are using. There are also cases where only certain functions may be controllable after assigning the proper preset code.

Important

• We do not guarantee the operations of all the manufacturers and devices listed. Operation may not be possible even if a preset code is entered.

If you can't find a preset code that matches the component you want to control, you can still teach the remote individual commands from another remote control (see Programming signals from other remote controls on page 94).

TV

Pioneer 0113, 0233, 0252, 0275, 0291, 0295, 0296, 0305 A.R. Systems 0155 Acme 0141 Acura 0142, 0154 **ADC** 0140 Admiral 0138, 0139, 0140. 0145.0146 Adyson 0141, 0228, 0229 Agashi 0228, 0229 Agazi 0140 Aiko 0141, 0142, 0154, 0155. Atori 0142, 0154 0228.0229 Aim 0155 Aiwa 0199 Akai 0142, 0143, 0149, 0152, 0154, 0155, 0228, 0229 Akiba 0143. 0155 Akura 0140, 0143, 0154. 0155 Alaron 0228 Alba 0125, 0141, 0142, 0143. 0147.0150.0152.0154.0155. 0190.0193.0203.0228 Alcyon 0132 Allorgan 0229 Allstar 0149, 0155 AMOi 0224 Amplivision 0125, 0141, 0156.0229 Amstrad 0140, 0142, 0143. 0154.0155 Anam 0142 Anglo 0142, 0154 Anitech 0132, 0140, 0142. 0154.0155 Ansonic 0125, 0133, 0142, 0144.0154.0155

0229

Arcam 0228, 0229 Arcam Delta 0141 0159 Aristona 0149, 0152, 0155 Arthur Martin 0156 ASA 0138. 0146 0155 Asbera 0132, 0149, 0155 Astra 0142 Asuka 0140, 0141, 0143. 0228.0229 Atlantic 0141, 0149, 0152. 0155.0228 Auchan 0156 Audiosonic 0125, 0141. 0142, 0143, 0149, 0152, 0155, AudioTon 0125, 0141, 0229 Ausind 0132 Autovox 0132, 0138, 0140. 0141.0229 Awa 0228, 0229 Baird 0229 Bang & Olufsen 0138, 0230 Basic Line 0142, 0143, 0149. 0154 0155 0229 Bastide 0141.0229 Baur 0152.0155 Bazin 0229 Beko 0125, 0150, 0155, 0175 CMS Hightec 0229 Bena 0219 Beon 0149, 0152, 0155 Best 0125 Bestar 0125, 0149, 0155 Binatone 0141, 0229 Blue Skv 0143, 0155 Blue Star 0151 Boots 0141, 0229 BPL 0151, 0155

Brandt 0148, 0153, 0157, Brinkmann 0155 Brionvega 0138, 0149, 0152, Britannia 0141. 0228. 0229 Bruns 0138 BTC 0143 Bush 0142, 0143, 0145, 0147. 0149.0151.0152.0154.0155. 0180.0193.0229 **Capsonic** 0140 Carena 0155 Carrefour 0147 Cascade 0142, 0154, 0155 Casio 0221 Cathav 0149, 0152, 0155 CCE 0229 Centurion 0149, 0152, 0155 Century 0138 CGE 0125. 0132 **Cimline** 0142, 0154 City 0142, 0154 **Clarivox** 0152 Clatronic 0125, 0132, 0140. 0141.0142.0143.0149.0150. 0154.0155.0229 CMS 0228 Concorde 0142, 0154 Condor 0125, 0141, 0149. 0150, 0154, 0155, 0228 Contec 0141, 0142, 0147. 0154 0228 Continental Edison 0148 Cosmel 0142, 0154 Crosley 0132, 0138

Crown 0125, 0132, 0142, 0149, 0150, 0152, 0154, 0155 CS Electronics 0141, 0143,

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CTC Clatronic 0144 Cvbertron 0143 Daewoo 0128, 0141, 0142, 0149.0154.0155.0169.0179. 0206.0228.0229 Dainichi 0143 0228 Dansai 0140, 0149, 0152. 0155.0228.0229 Dantax 0125. 0152 Dawa 0155 Davtron 0142, 0154 **De Graaf** 0145 Decca 0141. 0149. 0152. 0155.0229 Denver 0213, 0218 Desmet 0149, 0152, 0155 **Diamant** 0155 Diamond 0228 Dixi 0142, 0149, 0152, 0154, 0155.0229 DTS 0142, 0154 Dual 0141, 0155, 0229 Dual-Tec 0141, 0142 Dumont 0138, 0141, 0144, 0229 **Dux** 0152 Dynatron 0149, 0152, 0155 Elbe 0125, 0133, 0155, 0229 Elcit 0138 Electa 0151 ELECTRO TECH 0142 Elin 0141, 0149, 0152, 0154, 0155.0228 Elite 0143, 0149, 0155

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Emerson 0125, 0138, 0155 Epson 0216 Erres 0149, 0152, 0155 ESC 0229 Etron 0142 Eurofeel 0229. 0140 Euroline 0152 Euroman 0125, 0140, 0141. 0149.0155.0228.0229 Europhon 0141, 0144, 0149, 0155.0228.0229 **Expert** 0156 Exquisit 0155 Fenner 0142, 0154 Ferguson 0148, 0152, 0153. 0157 Fidelity 0141, 0145, 0155. 0228 **Filsai** 0229 Finlandia 0145 Finlux 0132, 0138, 0141. 0144, 0149, 0152, 0155, 0229 Firstline 0141, 0142, 0149. 0154, 0155, 0228, 0229 Fisher 0125, 0138, 0141, 0147.0150.0229 Flint 0149, 0155 Formenti 0132, 0138, 0139. 0141.0152.0228 Formenti/Phoenix 0228 Fortress 0138, 0139 Fraba 0125, 0155 Friac 0125 Frontech 0140, 0142, 0145, 0146, 0154, 0229 Fuiitsu 0229 Fujitsu General 0229 Funai 0140 Galaxi 0155. 0150 Galaxis 0125, 0155 GBC 0142, 0147, 0154 Geant Casino 0156 **GEC** 0141, 0146, 0149, 0152. 0155.0229 Geloso 0142, 0145, 0154 General Technic 0142, 0154 Genexxa 0143 0146 0149 0155 Giant 0229 GoldHand 0228 Goldline 0155

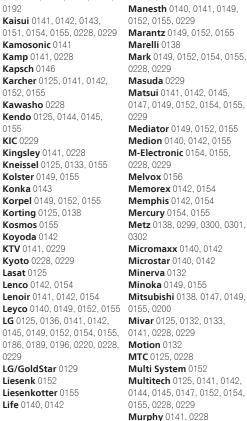
Elman 0144

Elta 0142, 0154, 0228 0228, 0229 0222.0229 **GPM** 0143 Graetz 0146 0229 0152 Gronic 0229 0155.0162 0229 0155 0229 Hantor 0155 Higashi 0228 HiLine 0155 0229 Hoshai 0143 0228.0229 Iberia 0155 ICeS 0228 Ingelen 0146

Inno Hit 0132, 0141, 0142. Goldstar 0125, 0141, 0142, 0145, 0149, 0152, 0154, 0155, 0143, 0149, 0152, 0154, 0155, 0155 0229 Goodmans 0140, 0142. Innovation 0140. 0142 0147.0149.0152.0154.0155. Interactive 0125 Interbuy 0142, 0154 Gorenje 0125, 0150 Interfunk 0125, 0138, 0146, 0149.0152.0155 International 0228 Granada 0132, 0141, 0145. Intervision 0125, 0140. 0147.0149.0152.0155.0156. 0141.0144.0155.0229 Irradio 0132, 0142, 0143. Grandin 0142, 0143, 0151. 0149.0152.0154.0155 Isukai 0143. 0155 ITC 0141, 0229 Grundia 0124, 0125, 0132. ITS 0143, 0149, 0151, 0155, 0228 Halifax 0140. 0141. 0228. ITT 0142, 0146 ITV 0142, 0152, 0155 Hampton 0141, 0228, 0229 JVC 0134, 0135, 0147, 0149. Hanseatic 0125, 0133, 0141. 0192 0142, 0147, 0149, 0152, 0154, Kaisui 0141, 0142, 0143. 0151.0154.0155.0228.0229 Hantarex 0142, 0154, 0155 Kamosonic 0141 Kamp 0141, 0228 Harwood 0154, 0155 Kapsch 0146 HCM 0140, 0141, 0142, 0151. Karcher 0125, 0141, 0142, 0154, 0155, 0229 0152,0155 Hema 0154. 0229 Kawasho 0228 Kendo 0125, 0144, 0145. 0155 Hinari 0142, 0143, 0147. KIC 0229 0149.0152.0154.0155 Kingsley 0141, 0228 Hisawa 0143, 0151, 0156 Kneissel 0125, 0133, 0155 Hitachi 0137. 0141. 0145. Kolster 0149, 0155 0146, 0147, 0155, 0191, 0226, Konka 0143 Korpel 0149, 0152, 0155 Hornyphon 0149, 0155 Korting 0125, 0138 Kosmos 0155 Huanvu 0141, 0228 **Kovoda** 0142 Hygashi 0141, 0228, 0229 KTV 0141.0229 Hyper 0141, 0142, 0154, Kyoto 0228, 0229 Lasat 0125 Hypson 0140, 0141, 0149, Lenco 0142, 0154 0151, 0152, 0155, 0156, 0229 Lenoir 0141, 0142, 0154 Levco 0140, 0149, 0152, 0155 0155, 0200 ICE 0140, 0141, 0142, 0143, LG 0125, 0136, 0141, 0142. 0149, 0154, 0155, 0228, 0229 0145, 0149, 0152, 0154, 0155, 0229 Imperial 0125, 0132, 0146, 0149 0150 0155 LG/GoldStar 0129 Indiana 0149, 0152, 0155 Liesenk 0152 Liesenkotter 0155 Ingersol 0142, 0154 Life 0140.0142

Lifetec 0140, 0142, 0154.

Llovds 0154 Loewe 0125, 0133, 0155. 0166.0167 Loewe Opta 0138, 0149, 0152 Luma 0145, 0152, 0154, 0155 Lumatron 0145, 0149, 0152, 0155.0229 Lux May 0149 Luxor 0141, 0145, 0229 M Electronic 0141, 0142, 0146, 0148, 0149, 0152 Magnadyne 0138, 0144, 0152 Magnafon 0132, 0141, 0144 0228 Magnum 0140, 0142 Mandor 0140



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Powerpoint 2189

Prosonic 2190

Provision 2184

Naonis 0145 NEC 0147.0229 Neckermann 0125, 0138, 0141, 0145, 0149, 0150, 0152, 0155.0229 **NEI** 0149, 0152, 0155 Neufunk 0154, 0155 New Tech 0142, 0149, 0154. 0155.0229 New World 0143 Nicamagic 0141.0228 Nikkai 0140, 0141, 0143. 0149.0152.0154.0155.0228. 0229 Nobliko 0132, 0141, 0144. 0228 Nokia 0146 Nordic 0229 Nordmende 0138 0146 0148.0149 Nordvision 0152 Novatronic 0155 Oceanic 0146. 0156 Okano 0125, 0150, 0155 **ONCEAS** 0141 **Opera** 0155 Orbit 0149.0155 Orion 0142, 0149, 0152. 0154, 0155, 0194 **Orline** 0155 Osaki 0140. 0141. 0143. 0155.0229 **Oso** 0143 Otto Versand 0139. 0141. 0147.0149.0151.0152.0155. 0229 Pael 0141. 0228 Palladium 0125, 0141, 0150. Redstar 0155 0155.0229 Palsonic 0229 Panama 0140. 0141. 0142. 0154.0155.0228.0229 Panasonic 0123, 0146, 0155. 0158, 0164, 0214, 0217 Panavision 0155 Pathe Cinema 0125, 0133. 0141.0156.0228 Pausa 0142. 0154 Perdio 0155 0228 Perfekt 0155 Philco 0125 0132 0138 0155 Philharmonic 0141, 0229 Philips 0115, 0117, 0138. 0141, 0149, 0152, 0155, 0160.

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If operations are not possible using the preset codes below, you may be able to conduct operations with the preset codes for the BD. DVR (BDR, HDR).

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If operations are not possible using the preset codes below, you may be able to conduct operations with the preset codes for the DVD, DVR (BDR, HDR).

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If operations are not possible using the preset codes below, you may be able to conduct operations with the preset codes for the DVD, BD.

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PIONEER HOME ELECTRONICS CORPORATION

1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan
PIONEER ELECTRONICS (USA) INC.
P.O. BOX 1540, Long Beach, California 90801-1540, U.S.A. TEL: (800) 421-1404
PIONEER ELECTRONICS OF CANADA, INC.
340 Ferrier Street, Unit 2, Markham, Ontario L3R 2Z5, Canada TEL: 1-877-283-5901, 905-479-4411

PIONEER EUROPE NV

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium TEL: 03/570.05.11

PIONEER ELECTRONICS ASIACENTRE PTE. LTD.

253 Alexandra Road, #04-01, Singapore 159936 TEL: 65-6472-7555

PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 5 Arco Lane, Heatherton, Victoria, 3202, Australia, TEL: (03) 9586-6300

PIONEER ELECTRONICS DE MEXICO S.A. DE C.V. Bivd.Manuel Avila Camacho 138 10 piso Col.Lomas de Chapultepec, Mexico, D.F. 11000 TEL: 55-9178-4270 K002_B3_En

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