This Help Guide explains functions and settings that are not mentioned in the supplied Startup Guide or Operating Instructions.

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- Updating the software “UPDATE”
- Checking the software version “VER. X.XXX”

### Troubleshooting

#### Error messages

- PROTECT
- USB FAIL

#### General

- The receiver is turned off automatically.
- Cannot find an available input when connecting several digital devices.
- The receiver does not turn on even when the TV is turned on.
- The receiver turns off when the TV is turned off.
- The receiver does not turn off even when the TV is turned off.

#### Sound from connected TV

- No TV sound is output from the receiver.
- The sound is output from both the receiver and the TV.
- No image and/or sound is output from the TV when the receiver is in the standby mode.
- The sound is interrupted while watching a TV program or content on a Blu-ray Disc, etc.
- The sound field switches automatically.

#### Sound from devices other than TV

- No sound or only a very low level of sound is heard, no matter which device is selected.
- No sound or only a very low level of sound is heard from specific speakers.
- There is no sound from a specific device.
<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The left and right sound is unbalanced or reversed.</td>
</tr>
<tr>
<td>Dolby Digital or DTS multi-channel sound is not reproduced.</td>
</tr>
<tr>
<td>The surround effect cannot be obtained.</td>
</tr>
<tr>
<td>A test tone is not output from the speakers.</td>
</tr>
<tr>
<td>A test tone is output from a different speaker than the speaker displayed on the display panel.</td>
</tr>
<tr>
<td>No image and/or sound is output from the TV when the receiver is in the standby mode.</td>
</tr>
</tbody>
</table>

### Image

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No image appears on the TV screen.</td>
</tr>
<tr>
<td>No 4K content appears on the TV screen.</td>
</tr>
<tr>
<td>No image and/or sound is output from the TV when the receiver is in the standby mode.</td>
</tr>
<tr>
<td>The home menu does not appear on the TV screen.</td>
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</tr>
<tr>
<td>When the language for the on-screen display of the TV is changed, the on-screen display language of the receiver is changed simultaneously.</td>
</tr>
</tbody>
</table>

### Tuner

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The FM stereo reception is poor.</td>
</tr>
<tr>
<td>You cannot tune to radio stations.</td>
</tr>
<tr>
<td>RDS does not work (for European and Asia-Pacific models only).</td>
</tr>
</tbody>
</table>

### BLUETOOTH device

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pairing cannot be done.</td>
</tr>
<tr>
<td>Cannot make a BLUETOOTH connection.</td>
</tr>
<tr>
<td>The sound skips or fluctuates, or the connection is lost.</td>
</tr>
<tr>
<td>The sound of your BLUETOOTH device cannot be heard on the receiver.</td>
</tr>
<tr>
<td>Severe humming or noise.</td>
</tr>
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### “BRAVIA” Sync (Control for HDMI)

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Control for HDMI function does not work properly.</td>
</tr>
</tbody>
</table>

### Remote control

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The remote control does not function.</td>
</tr>
</tbody>
</table>

### If the problem is not solved

<table>
<thead>
<tr>
<th>Problem Description</th>
</tr>
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<tr>
<td>Reverting to the factory default settings</td>
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MULTI CHANNEL AV RECEIVER
STR-DH590

How to use this Help Guide

This Help Guide explains functions and settings that are not mentioned in the supplied Startup Guide or Operating Instructions. Refer to the Operating Instructions for explanation of how to install and prepare the receiver, and descriptions of parts and controls.

You can search for information in this Help Guide by entering a keyword. Press the search icon in the top left or top right of the screen to search for the desired topic.

Note

- This Help Guide mainly describes the procedures for using the remote control. You can also use the controls on the receiver if they have the same or similar names as those on the remote control.

- There are two types of setting menus that you can operate, as follows:
  - Menus displayed on the TV screen
  - Menus displayed on the display panel of the receiver

  Setting menu items and parameters displayed on the TV screen are indicated using [], and setting menu items displayed on the display panel of the receiver are indicated using " ".

- You cannot search by entering multiple keywords at the same time.
MULTI CHANNEL AV RECEIVER
STR-DH590

Using the home menu

You can display the menu of the receiver on the TV screen to select the desired setting menu.

1 Switch the input of the TV to the input to which the receiver is connected.

2 Press HOME to display the home menu on the TV screen.

3 Press ←/→ repeatedly to select the menu you want, and then press + to confirm the selection.

Home menu items

Watch, Listen: Select to enjoy videos or audio from AV devices or the built-in FM tuner.

- Playing back video and sound from connected AV devices
- Listening to FM radio
- Listening to sound from a BLUETOOTH device (Pairing operation)

Easy Setup: Select to perform Easy Setup.
For details, refer to the supplied Startup Guide or Operating Instructions.

Sound Effect: Select to enjoy sound effects.

- Selecting a sound field
- Selectable sound fields and their effects

Speaker Setting: Select to adjust the speaker settings.
For details, refer to the the topics under “Customizing the speaker settings to your preferences” in this Help Guide.

Hint

- While playing back videos or audio, you can display the options menu by pressing OPTIONS to select related settings.
- To return to the previous screen, press BACK.
- To exit any menu, press HOME to go back to the home menu, and then press HOME again.
- Settings that cannot be operated on the TV screen can be adjusted using the menus on the display panel. Press AMP MENU to display the menu on the display panel.
Overview

This topic explains the operations you can perform to enjoy movies and music with this receiver. For example, you can use multiple devices with this receiver as shown below.

**A BLUETOOTH devices**
Enjoying audio content from a WALKMAN®, smartphone or tablet
You can transmit audio from a WALKMAN, smartphone or tablet to the receiver via BLUETOOTH connection.

**Listening to sound from a BLUETOOTH device (Pairing operation)**

**B FM**
Listening to FM radio
You can listen to FM broadcasts in high-quality sound through the built-in tuner.
Preset function enables you to store up to 30 of your favorite FM stations as presets.

**Listening to FM radio**
**Presetting FM radio stations**

**C AV devices**
Enjoying movies or audio from AV devices such as the following:

- Media box
- Ultra HD Blu-ray™ player
- Blu-ray Disc™ player
- DVD player
- CD player
- Super Audio CD player
- MD deck
- Tape deck
- Turntable (*)
- Satellite box
**Game console such as PlayStation®4**
You can connect AV devices to the receiver to enjoy a wide range of content such as movies and audio. As the receiver is equipped with HDCP 2.2-compatible HDMI jacks, you can also enjoy 4K content via streaming services, satellite broadcasts, etc.

* To connect a turntable that only has a PHONO output jack, you need to connect a phono equalizer (not supplied) between the turntable and this receiver.

---

**Related Topic**
- Playing back video and sound from connected AV devices
Playing back video and sound from connected AV devices

1. Switch the input of the TV to the input to which the receiver is connected.

2. Press HOME.
   The home menu is displayed on the TV screen.
   Depending on the TV, the home menu may take some time to appear on the TV screen.

3. Select [Watch] or [Listen] from the home menu.
   Menu items will appear on the TV screen.

4. Select the device you want to play.

5. Turn on the device and start playback.

6. Press $\uparrow/$ to adjust the volume.
   You can also use MASTER VOLUME on the receiver.

Note
- Before you turn off the receiver, be sure to turn down the volume level. Otherwise, the next time you turn on the receiver, sound may be output at a high volume level and damage your speakers.

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

You can listen to FM broadcasts through the built-in tuner. Scan the radio frequencies by the following procedure to tune in to a station automatically. Be sure that the FM wire antenna (aerial) is connected to the receiver before performing this operation. For details on connecting the antenna (aerial), refer to the supplied Operating Instructions.

1 Select [Listen] - [FM] from the home menu.

   The FM screen appears.

2 Select [Tuning –] or [Tuning +].

   The frequency digits will begin to change on the FM screen. The receiver automatically scans the radio frequencies and stops scanning whenever a station is received.
   Repeat this step until you are tuned in to the desired station.

FM screen

A: Frequency indication

   Shows the frequency of the station which the tuner is receiving.

Hint

   You can also use TUNING+/– on the remote control or on the receiver for tuning.
MULTI CHANNEL AV RECEIVER
STR-DH590

Tuning to a station directly

You can enter the frequency of a station directly.

   The FM screen appears.

2. Select [Direct Tuning].

3. Enter the frequency.
   1. Press ◀/▶ to change the digit.
   2. Press ◀ to move to the next digit.
      You can move the input position backward and forward by pressing ◀/▶.

4. Repeat step 3 until the frequency you want to tune in is displayed, then press △.

Note
- Make sure you have entered the right frequency. If the tuned-in frequency is invalid or out of range, [---.-- MHz] will appear. If you cannot receive a station even though you entered the correct frequency, the frequency may not be in use in your area.

Hint
- The tuning scale for direct tuning is shown below:
  - USA and Canadian models
    100 kHz
  - Other models
    50 kHz
Presetting FM radio stations

You can store up to 30 FM stations as your favorite stations.

1 Select [Listen] - [FM] from the home menu.
   The FM screen appears.

2 Tune to the station that you want to preset.

3 Select [Preset Memory].

4 Press ↑/↓ to select a preset number, then press +.
   The station is stored as the selected preset number.

5 Repeat steps 2 to 4 to store another station.
   You can store FM stations as FM 01 through FM 30.

FM preset screen

A: Frequency indication
   Shows the frequency of the station which the tuner is receiving.

B: Preset station number
   Shows the preset number which you are selecting.

To tune in to a preset station

Select [Listen] - [FM] - [Preset List] from the home menu, and then press ↑/↓ to select the preset number.

Hint

- You can store the station currently being received to a preset memory by pressing MEMORY on the remote control.
You can also tune in to a preset station by pressing PRESET+/- on the remote control.

Related Topic

- Naming preset stations [Name In]
Setting the FM station receiving mode [FM Mode]

You can set the FM station receiving mode to the stereo mode or mono mode.

1. **Press [Listen] - [FM] from the home menu.**
   
   The FM screen appears.

2. **Select [FM Mode].**

3. **Press ▲/▼ to select the setting you want, then press ▼.**

   - **Stereo:** The FM station is received in stereo.
   - **Mono:** The FM station is received in monaural.

**Note**

- This function works only when [FM] is selected as the input.

**Hint**

- This operation can also be performed using the display panel on the receiver by pressing AMP MENU.

**Related Topic**

- [List of settings that can be adjusted using the menu on the display panel](#)
### Naming preset stations [Name In]

You can enter up to 8 characters as the name for a preset station.

1. **Select [Listen] - [FM] from the home menu.**
   The FM screen appears.

2. **Select [Preset List].**

3. **Press ▲/▼ to select the preset number to which you want to assign a name, then press ▶.**
   This will take you back to the FM preset screen.

4. **Select [Name In].**

5. **Press ◀/▶ repeatedly to select a character, then press ◀.**
   To move the input position forward or backward, press ◀/▶.

6. **Repeat step 5 to input characters one by one, then press ▶.**
   The name you entered is registered.
   To change the names of other preset stations, repeat steps 1 to 6.

### Canceling naming preset stations

Press BACK.

**Hint**
- This operation can also be performed using the display panel on the receiver by pressing AMP MENU.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Receiving RDS broadcasts (for European and Asia-Pacific models only)

This receiver allows you to use Radio Data System (RDS), which enables FM radio stations (*) to send additional information along with the regular programming signal. This receiver offers convenient RDS features, such as Program Service name display.

* Not all FM stations provide RDS service, nor do they provide the same type of services. If you are not familiar with the RDS services in your area, check with your local radio stations for details.


2. Select a station.

When you tune to a station that provides RDS services, the Program Service name appears on the display panel.

**Note**

- RDS may not work properly if the station you tuned to does not transmit the RDS signal or if the signal strength is weak.
- Some letters that can be displayed on the TV screen cannot be displayed on the display panel.

**Hint**

- You can check the frequency while a Program Service name is displayed by pressing DISPLAY repeatedly.
Selecting a sound field

You can select from a variety of sound fields according to the speaker connection and input source.

1 Select [Sound Effect] - [Sound Field] from the home menu.

2 Press ⇧/⇦ to select the sound field you want, then press ⬤.

For movies, a sound field labeled with [Movie] is recommended.
For music, a sound field labeled with [Music] is recommended.

**Note**

- When connecting headphones to the receiver, [Headphone(2ch)] is selected as a sound field automatically.
- The sound fields for movie and music may not work, depending on the input or the speaker pattern you select and the audio formats.
- The receiver may play signals at a lower sampling frequency than the actual sampling frequency of the input signals, depending on the audio format.
- Some speakers or the subwoofer may not output sound, depending on the sound field setting.

**Hint**

- You can also use 2CH/MULTI, MOVIE, MUSIC, or FRONT SURROUND on the remote control, or 2CH/MULTI, MOVIE, or MUSIC on the receiver to select a sound field.

**Related Topic**

- Selectable sound fields and their effects
- Relations between sound fields and speaker outputs
- Resetting sound fields to the default settings
## Selectable sound fields and their effects

<table>
<thead>
<tr>
<th>Button</th>
<th>Sound field</th>
<th>Display panel</th>
<th>Effects of the sound field</th>
</tr>
</thead>
<tbody>
<tr>
<td>2CH/MULTI</td>
<td>2ch Stereo</td>
<td>2CH ST.</td>
<td>Plays back 2-channel audio signals without adding any surround effect. Monaural and multi-channel audio signals are output after being converted into a 2-channel signal. This sound field is suited for playing back audio signals as they are from two front speakers only, without adding any virtual surround effect. The sound is output from the front left/right speakers only. There is no sound from the subwoofer.</td>
</tr>
<tr>
<td></td>
<td>Multi Ch</td>
<td>MULTI ST.</td>
<td>Outputs sound from all connected speakers. When 2-channel or monaural audio signals are input, the receiver outputs sound from all speakers without adding any surround effect. When multi-channel audio signals are input, sound may not be output from certain speakers depending on the speaker settings or playback content.</td>
</tr>
<tr>
<td>Direct</td>
<td>DIRECT</td>
<td></td>
<td>Plays back all audio signals without adding any surround effect.</td>
</tr>
<tr>
<td>MOVIE</td>
<td>HD-D.C.S.</td>
<td>HD-D.C.S.</td>
<td>HD Digital Cinema Sound (HD-D.C.S.) is Sony’s new innovative home theater technology using the latest acoustic and digital signal processing technologies. It is based on the precise response measurement data of a mastering studio. With this mode, you can enjoy Blu-ray and DVD movies at home with not only a high-quality of sound but also the optimal sound ambience, just as the movie’s sound engineer intended in the mastering process.</td>
</tr>
<tr>
<td>PLII Movie</td>
<td>PLII MV</td>
<td></td>
<td>Performs Dolby Pro Logic II Movie mode decoding. This setting is ideal for movies encoded in Dolby Surround. In addition, this mode can reproduce sound in 5.1-channel format when watching videos of overdubbed or old movies.</td>
</tr>
<tr>
<td>Front Surround (*)</td>
<td>FRT SUR.</td>
<td>Reproduces full surround effects with only two front speakers using Sony’s virtual signal processing technology.</td>
<td></td>
</tr>
<tr>
<td>MUSIC</td>
<td>Audio Enhancer</td>
<td>ENHANCER</td>
<td>Reproduces a clear enhanced sound from your portable audio device. This mode is ideal for MP3 and other compressed audio formats.</td>
</tr>
<tr>
<td></td>
<td>Hall</td>
<td>HALL</td>
<td>Reproduces the acoustics of a concert hall.</td>
</tr>
<tr>
<td></td>
<td>Jazz</td>
<td>JAZZ</td>
<td>Reproduces the acoustics of a jazz club.</td>
</tr>
<tr>
<td></td>
<td>Concert</td>
<td>CONCERT</td>
<td>Reproduces the acoustics of a 300-seat live house.</td>
</tr>
<tr>
<td></td>
<td>Stadium</td>
<td>STADIUM</td>
<td>Reproduces the feel of a large open-air stadium.</td>
</tr>
<tr>
<td></td>
<td>Sports</td>
<td>SPORTS</td>
<td>Reproduces the feel of sports broadcasting.</td>
</tr>
<tr>
<td></td>
<td>PLII Music</td>
<td>PLII MS</td>
<td>Performs Dolby Pro Logic II Music mode decoding. This setting is ideal for normal stereo sources such as CDs.</td>
</tr>
</tbody>
</table>
### Effects of the sound field

<table>
<thead>
<tr>
<th>Button (Sound field)</th>
<th>Display panel</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headphone(2ch)</td>
<td>HP 2CH</td>
<td>There is no button to select [Headphone(2ch)]. This mode is selected automatically if you use headphones (Other sound fields cannot be selected). Plays back 2-channel audio signals without adding any surround effect. Sound from monaural and multi-channel audio signals are output after being converted into a 2-channel signal.</td>
</tr>
</tbody>
</table>

* You can also use FRONT SURROUND on the remote control.

---

**Related Topic**
- [Selecting a sound field](#)
### Relations between sound fields and speaker outputs

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

**Note**
- When no sound is heard, check that all the speakers are securely connected to the correct speaker terminals, and the correct speaker pattern is selected.

#### 2-channel content

<table>
<thead>
<tr>
<th>Button</th>
<th>Sound field</th>
<th>Display panel</th>
<th>Front speakers</th>
<th>Center speaker</th>
<th>Surround speakers</th>
<th>Subwoofer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2CH/MULTI</td>
<td>2ch Stereo</td>
<td>2CH ST.</td>
<td>○</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Multi Ch Stereo</td>
<td>MULTI ST.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○ (*1)</td>
</tr>
<tr>
<td></td>
<td>Direct (Analog input)</td>
<td>DIRECT</td>
<td>○</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Direct (Others)</td>
<td>DIRECT</td>
<td>○</td>
<td>-</td>
<td>-</td>
<td>○ (*1)</td>
</tr>
<tr>
<td>MOVIE</td>
<td>HD-D.C.S.</td>
<td>HD-D.C.S.</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>

- : No sound is output.
○ : Outputs sound.
○ : Outputs sound depending on the speaker pattern setting and content to be played back.

*1 Outputs sound when you connect a subwoofer and set the speaker pattern to a setting that has a subwoofer (“x.1”).

*2 Outputs sound when you connect a subwoofer, set the speaker pattern to a setting that has a subwoofer (“x.1”), and [Small] is selected for [Size] in [Speaker Setting] menu.

#### Multi-channel content

<table>
<thead>
<tr>
<th>Button</th>
<th>Sound field</th>
<th>Display panel</th>
<th>Front speakers</th>
<th>Center speaker</th>
<th>Surround speakers</th>
<th>Subwoofer</th>
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- : No sound is output.
○ : Outputs sound.
○○○: Outputs sound depending on the speaker pattern setting and content to be played back.

Related Topic
- Selecting a sound field
Enjoying clear sound at a low volume level [Night Mode]

This function allows you to retain a theater-like environment at low volume levels. When watching a movie late at night, you will be able to hear the dialog clearly even at a low volume level. This function can be used with other sound fields.

1. Select [Sound Effect] - [Night Mode] from the home menu.

2. Select [On], then press ①.

Note
- This function does not work when [Direct] is selected and an analog input is selected.

Hint
- You can also set the Night Mode function on and off by using NIGHT MODE on the receiver or on the remote control.
- While the Night Mode function is turned on, the bass, treble, and effect levels increase, and “D. RANGE” is automatically set to “COMP. ON”.

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Selecting the Auto Calibration type [Calibration Type]

You can select a calibration type after you have performed the Auto Calibration and saved the settings. For details on Auto Calibration, refer to the supplied Operating Instructions.

1 Select [Sound Effect] - [Calibration Type] from the home menu.

2 Press ⇧/༓ to select the setting you want.

- **Full Flat**: Makes the measurement of frequency from each speaker flat.
- **Engineering**: Sets to “the Sony listening room standard” frequency characteristics.
- **Front Ref.**: Adjusts the characteristics of all of the speakers to match the characteristics of the front speaker.
- **Off**

**Note**

- This function does not work in the following cases:
  - [Direct] is selected and an analog input is selected.
  - Headphones are connected.
- The receiver may play signals at a lower sampling frequency than the actual sampling frequency of the input signals, depending on the audio format.
Adjusting the equalizer

You can adjust the bass/treble level (A) of the front speakers.

1. Select [Sound Effect] from the home menu.
2. Select [Bass] or [Treble].
3. Press ↑/↓ to adjust the level, and then press †.

Note

- This function does not work in the following cases:
  - [Direct] is selected and an analog input is selected.
  - Pure Direct function is activated.
- Depending on the audio format, the receiver may play signals at a lower sampling frequency than the original sampling frequency of the input signals.
- Frequencies for [Bass] and [Treble] are fixed.
**Enjoying high-fidelity sound [Pure Direct]**

You can enjoy higher-fidelity sound from all inputs using the Pure Direct function. When the Pure Direct function is on, the display panel is turned off to suppress noise that affects sound quality.

1. Select [Sound Effect] - [Pure Direct] from the home menu.

2. Select [On].
   - The display panel turns off and the PURE DIRECT indicator lights up in amber while Pure Direct is turned on.

**Canceling Pure Direct**

The Pure Direct function is canceled when you perform any of the following operations:

- Press PURE DIRECT on the remote control or the receiver.
- Change the sound field.
- Change the scene setting on the TV (Scene Select).
- Change the setting of [Bass], [Treble], [Night Mode] or “D. RANGE”.

**Note**

- Changes to the settings for [Bass], [Treble], [Night Mode], and “D. RANGE” are not effective while [Pure Direct] is set to [On]. These changes will only take effect after [Pure Direct] is switched to [Off].

**Hint**

- This operation can be performed by pressing PURE DIRECT on the front of the receiver or on the remote control.

**Related Topic**

- Selecting a sound field
- Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”
- Compressing the dynamic range “D. RANGE”
Resetting sound fields to the default settings

Be sure to use the buttons on the receiver to perform this operation.

1. Turn off the receiver.

2. While holding down MUSIC, press (power) on the receiver.
   “S.F. CLEAR” appears on the display panel and all sound fields are reset to their default setting.
What you can do with BLUETOOTH features

Listening to audio content from a BLUETOOTH device via this receiver
You can receive audio from a WALKMAN, smartphone, or tablet that has a BLUETOOTH function and listen to the received audio content via this receiver.

Listening to sound from a BLUETOOTH device (Pairing operation)

See “Compatible BLUETOOTH version and profiles” for details on BLUETOOTH device versions and profiles that can be paired.
Turning the BLUETOOTH function on/off “BT POWER”

You can turn the BLUETOOTH function on or off. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.
2. Select “<BT>” - “BT POWER” on the display panel.
3. Select “BT ON” or “BT OFF”.

**Note**
- You cannot set this function when [BT] (BLUETOOTH device) is selected as the input. (“BT POWER” on the display panel will become dimmed.)

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel

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Listening to sound from a BLUETOOTH device (Pairing operation)

Pairing is an operation where BLUETOOTH devices are registered to each other before connection. Once a pairing operation is performed, it does not need to be performed again.

1. Place the BLUETOOTH device within 1 meter (3.3 feet) of the receiver.
2. Press BLUETOOTH PAIRING to activate the pairing mode of the receiver.
   “PAIRING” will appear on the display panel and the BLUETOOTH indicator on the front panel will flash quickly.
3. Perform pairing on the BLUETOOTH device to detect this receiver.
   Perform this step within five minutes after step 2 is completed, or else pairing will be canceled. In this case, repeat step 2.
   For details, refer to the operating instructions of your BLUETOOTH device.
   A list of detected devices may appear on the BLUETOOTH device display depending on the type of BLUETOOTH device. This receiver is displayed as “STR-DH590”.
4. Select “STR-DH590” on the BLUETOOTH device display.
   If “STR-DH590” is not displayed, repeat this process from step 1.
5. Make sure that the connection is completed and that the BLUETOOTH indicator has stopped flashing and remains lit up.
   The paired device name appears on the display panel.
6. Start playback on the BLUETOOTH device.
7. Adjust the volume.
   Adjust the volume of the BLUETOOTH device first. If the volume level is still too low, adjust the volume level of the receiver.

Canceling pairing operation
Select an input other than [BT].

Note
- If the BLUETOOTH device does not support the AVRCP profile, you cannot perform playback or other operations on the receiver.
- If a passkey is required on the display of the BLUETOOTH device in step 5, enter [0000]. The passkey may be called “Passcode,” “PIN code,” “PIN number” or “Password.”
- You can pair up to 10 BLUETOOTH devices. If a 11th BLUETOOTH device is paired, the least recently connected device will be replaced by the new one.
**Hint**

- You can also activate the pairing mode of the receiver by pressing BLUETOOTH on the receiver.
- On some types of BLUETOOTH devices, you can adjust the volume using the controls of the BLUETOOTH device.
- You can check the BLUETOOTH device information by pressing DISPLAY repeatedly. Each time you press DISPLAY, the display will change cyclically as follows:
  - BLUETOOTH - BLUETOOTH device name - BLUETOOTH device address - Sound field currently applied - Volume level

**Related Topic**

- Setting the BLUETOOTH standby mode “BT STBY”
- Setting BLUETOOTH audio codecs “BT AAC”
Compatible BLUETOOTH version and profiles

“Profile” refers to a standard set of capabilities for various BLUETOOTH product capabilities. This receiver supports the following BLUETOOTH version and profiles:

- **Compatible BLUETOOTH version**: BLUETOOTH Specification Version 4.2
- **Compatible BLUETOOTH profiles**:
  - A2DP 1.2 (Advanced Audio Distribution Profile): Receives high-quality audio content.
  - AVRCP 1.6 (Audio Video Remote Control Profile): Controls audio/video devices (pausing, stopping, starting playback, volume control, etc.)

For the latest information about compatible BLUETOOTH devices, check the websites listed under “Customer support websites.”

**Note**
- The functions may differ depending on the specifications of the BLUETOOTH device.
- The audio playback on this receiver may be delayed from that on the BLUETOOTH device because of the characteristics of the BLUETOOTH wireless technology.
Adjusting the speaker size [Size]

You can adjust the size of each speaker (front, center and surround).

1. Select [Speaker Setting] from the home menu.

2. Press ↑/↓ repeatedly to select [Size].

3. Press ↑/↓ to select the speaker for which you want to adjust the size, then press +.

4. Press ↑/↓ to select the size you want, then press +.
   - **Large**: If you connect large speakers that will effectively reproduce bass frequencies, select [Large]. Select [Large] usually.
   - **Small**: If the sound is distorted or you hear a lack of surround effects when using multi channel surround sound, select [Small]. You can activate the bass redirection circuitry and output the bass frequencies of each channel from the subwoofer or other [Large] speakers.

**Note**
- [Size] cannot be set when headphones are connected.

**Hint**
- When the front speakers are set to [Small], the center and surround speakers are also automatically set to [Small].
- If you do not use the subwoofer, the front speakers are automatically set to [Large].
- You can also adjust the size of each speaker from the “<SPKR>” menu on the display panel.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Setting the crossover frequency of the speakers [Crossover Freq]

You can set the bass crossover frequency of speakers for which the speaker size has been set to [Small] in the [Speaker Setting] menu. A measured speaker crossover frequency is set for each speaker after the Auto Calibration is performed.

1. Select [Speaker Setting] from the home menu.

2. Press \( \uparrow / \downarrow \) repeatedly to select [Crossover Freq].

3. Press \( \uparrow / \downarrow \) to select the speaker for which you want to adjust the crossover frequency, then press \( \rightarrow \).

4. Press \( \uparrow / \downarrow \) to set the crossover frequency, then press \( \rightarrow \).

**Note**
- [Crossover Freq] cannot be set when headphones are connected.
- [Crossover Freq] for the particular speaker cannot be set if [Size] is set to [Large] in the [Speaker Setting] menu.

**Hint**
- You can also set the crossover frequency of speakers from the “<SPKR>” menu on the display panel.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Adjusting the speaker level [Level]

You can adjust the level of each speaker (front left/right, center, subwoofer and surround left/right).

1 Select [Speaker Setting] from the home menu.

2 Press ↑/↓ repeatedly to select [Level].

3 Press ↑/↓ to select the speaker you want to adjust, then press ⊚.

4 Press ↑/↓ to adjust the level, then press ⊚.

Note

- When [2ch Stereo] is selected as the sound field, no sound is output from the subwoofer.
- When one of the sound fields for music is selected, no sound is output from the subwoofer if [Size] for all of the speakers are set to [Large] in the [Speaker Setting] menu. However, sound will be output from the subwoofer if:
  - the digital input signal contains LFE signals.
  - [Size] for the front or surround speakers are set to [Small].
  - [PL II Music] is selected.
- If headphones are connected, you can only set [Level] for [Front Left] and [Front Right].

Hint

- You can also adjust the level of each speaker from the “<LEVEL>” menu on the display panel.

Related Topic

- Relations between sound fields and speaker outputs
- List of settings that can be adjusted using the menu on the display panel
Adjusting the speaker distance [Distance]

You can adjust the distance from listening position to each speaker (front left/right, center, subwoofer and surround left/right).

1. Select [Speaker Setting] from the home menu.
2. Press ‹/› repeatedly to select [Distance].
3. Press ‹/› to select the speaker for which you want to adjust the distance from your listening position, then press +.
4. Press ‹/› to adjust the distance, then press +.

**Note**
- Some parameters may not be available depending on the speaker pattern setting.
- [Distance] cannot be set when headphones are connected.

**Hint**
- You can also adjust the distance of each speaker from the "<SPKR>" menu on the display panel.
- You can switch the unit of measurement between “METER” and “FEET”.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
- Selecting the unit of measurement “DIST.UNIT”
What is “BRAVIA” Sync?

“BRAVIA” Sync is an extended function developed by Sony based on the Control for HDMI (*1) function. By connecting “BRAVIA” Sync-compatible devices, such as a TV or a Blu-ray Disc player, using an HDMI cable (*2) (not supplied) you can control the devices with the TV remote control. The following functions can be used with “BRAVIA” Sync.

- Turning off the receiver and connected devices simultaneously with the TV (System Power Off function) “STBY.LINK”
- Enjoying TV sound from the speakers connected to the receiver (System Audio Control function)
- Enjoying sound of a TV compatible with the Audio Return Channel (ARC) function
- Enjoying an input source from a connected device immediately (One-Touch Play function)
- Operating the receiver menu using the TV remote control (Remote Easy Control function)
- Enjoying content of a connected device without turning on the receiver “STBY.THRU”
- Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”
- About Home Theatre Control function
- About Language Follow function

*1 Control for HDMI is a standard used by CEC (Consumer Electronics Control) specification that enables interoperability of connected devices for HDMI (High-Definition Multimedia Interface) connections.

*2 Sony recommends a Premium High Speed HDMI Cable with Ethernet that supports 18 Gbps.

Note

- Functions such as System Power Off, System Audio Control, One-Touch Play, and Remote Easy Control may be used with devices other than ones manufactured by Sony that support the Control for HDMI function, but operation is not guaranteed.
Preparing to use the “BRAVIA” Sync function

Turn the Control for HDMI function on to use the “BRAVIA” Sync function. The Control for HDMI function needs to be turned on separately for the receiver and the connected device. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<HDMI>” - “CTRL.HDMI” on the display panel.

3. Select “CTRL ON”.
   The Control for HDMI function of the receiver is turned on.

4. Press AMP MENU to exit the menu.

5. Select the HDMI input of the TV to the input to which the receiver is connected using the TV remote control to display the settings menu of the TV.

6. Turn on the Control for HDMI function of the TV.
   For details on settings for the TV, refer to the operating instructions supplied with the TV.

7. Turn on the Control for HDMI function of the connected devices.
   For details on setting the connected device, refer to the operating instructions of the respective devices.

Note
- Perform the steps above again if you unplug the HDMI cable or change the connection.
Turning off the receiver and connected devices simultaneously with the TV (System Power Off function) “STBY.LINK”

You can automatically turn off the receiver and any device connected to the HDMI jack when you turn off the TV. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “STBY.LINK” on the display panel.

3 Select the setting you want.
   - AUTO: When the input of the receiver is set to [BD/DVD], [GAME], [SAT/CATV], [MEDIA BOX], or [TV], the receiver will turn off when the TV is turned off.
   - ON: The receiver will turn off when the TV is turned off, regardless of the input of the receiver.
   - OFF: The receiver does not turn off when the TV is turned off, regardless of the input of the receiver.

Note
- Depending on the status of the device, the connected device may not turn off.
- The System Power Off function may work with devices other than ones manufactured by Sony, but operation is not guaranteed.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Enjoying TV sound from the speakers connected to the receiver (System Audio Control function)

If you turn on the receiver while you are watching a connected TV, the TV sound will be output from the speakers connected to the receiver. The volume of the receiver can be adjusted using the TV remote control. When you turn on the TV, the receiver is turned on automatically and the TV sound is output from the speakers connected to the receiver. Operations can also be made using the TV menu. For details, refer to the operating instructions of the TV.

Note

- Depending on the TV, the number of the receiver volume level is displayed on the TV screen. The volume number displayed on the TV may differ from the number on the display panel of the receiver.
- System Audio Control function may work with devices other than ones manufactured by Sony, but operation is not guaranteed.
- Depending on the settings of the TV, the System Audio Control function may not be available. For details, refer to the operating instructions of the TV.
- Depending on the TV, if the sound for the TV was output from the TV speakers the last time you used the TV, the receiver may not turn on automatically when you turn on the TV.
- If the TV does not have a System Audio Control function, press AMP MENU, and then set “<HDMI>” - “AUDIO.OUT” to “TV+AMP” or “AMP” on the display panel.
- When “<HDMI>” - “CTRL.HDMI” is set to “CTRL ON,” “<HDMI>” - “AUDIO.OUT” will be set automatically according to the setting of the System Audio Control function.

Related Topic

- Setting the HDMI audio signal output of connected devices "AUDIO.OUT"
Enjoying an input source from a connected device immediately (One-Touch Play function)

When you play content on a device (Blu-ray Disc player, PlayStation®4, etc.) connected to the receiver, the receiver and the TV are turned on automatically, the input of the receiver is switched to the input of the device being played, and sound is output from the speakers connected to the receiver.

**Note**
- If “<HDMI>” - “STBY.THRU” is set to “AUTO” or “ON,” and the TV sound was output from the TV speakers the last time you watched the TV, the receiver may not turn on automatically, and the sound and picture may be output from the TV when you play content on the device.
- Depending on the TV, the beginning part of content being played may not play correctly.
- One-Touch Play function may work with devices other than ones manufactured by Sony, but operation is not guaranteed.

**Related Topic**
- Enjoying content of a connected device without turning on the receiver “STBY.THRU”
Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”

The sound field are selected automatically according to the Scene Select or Sound Mode setting on your TV. For details on this operation, refer to the operating instructions of the TV. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “S.F. SYNC” on the display panel.

3 Select the setting you want.
   - **ON**: A sound field is selected automatically according to the genre of the digitally broadcast TV program, or the Scene Select or Sound Mode setting on your TV.
   - **OFF**: Sound is output according to the sound field currently applied.

The Sound Mode/Scene Select setting and the sound field setting of the receiver will change as follows.

- **Cinema**: HD-D.C.S. (HD-D.C.S.)
- **Sports**: Sports (SPORTS)
- **Music**: Concert (CONCERT)
- **Animation**: Multi Ch Stereo (MULTI ST.)
- **Photo**: Multi Ch Stereo (MULTI ST.)
- **Game**: Multi Ch Stereo (MULTI ST.)
- **Graphics**: Multi Ch Stereo (MULTI ST.)
- **News**: Multi Ch Stereo (MULTI ST.)
- **Standard**: Multi Ch Stereo (MULTI ST.)

**Note**

- When the sound field switches according to the Scene Select or Sound Mode setting on your TV, the sound may be interrupted.
- The Sound Mode/Scene Select function is a function developed by Sony, and cannot be used on devices other than ones manufactured by Sony.

**Related Topic**

- List of settings that can be adjusted using the menu on the display panel
About Home Theatre Control function

Setting the receiver, the sound field settings, input switching, etc., can be done by selecting the Home Theatre Control application on the TV. This function can be used when the TV is compatible with the Home Theatre Control application and connected to the Internet. For details, refer to the operating instructions of the TV.

Note

- The Home Theatre Control function is a function developed by Sony, and cannot be used on devices other than ones manufactured by Sony.
Operating the receiver menu using the TV remote control (Remote Easy Control function)

You can select the receiver by the SYNC MENU of the TV and operate the receiver. This function can be used only if the TV supports the SYNC MENU. For details, refer to the operating instructions of the TV.

**Note**
- The receiver is recognized as [Tuner] by the TV.
- Some of the operations may not be available depending on the type of TV.
- Remote Easy Control function may work with devices other than ones manufactured by Sony, but operation is not guaranteed.
About Language Follow function

The on-screen display language of the receiver may be changed simultaneously when you change the language for the on-screen display of the TV.

Related Topic
- Preparing to use the “BRAVIA” Sync function
- Controlling HDMI devices “CTRL.HDMI”
Using the sleep timer

You can set the receiver to turn off automatically after a specified period of time (up to 2 hours).

1. Press SLEEP.

   Each time you press SLEEP, the display changes cyclically as follows:
   “0-30-00” - “1-00-00” - “1-30-00” - “2-00-00” - “OFF”
   “SLEEP” lights up on the display panel when the sleep timer is activated.

Hint

- To check the remaining time before the receiver turns off, press SLEEP. The remaining time appears on the display panel.
- The sleep timer will be canceled if you press (power).
Switching the brightness of the display panel

You can adjust the brightness of the display panel in three levels.

1 Press DIMMER.

   Each time you press DIMMER, the display on the display panel changes cyclically as follows:
   “BRIGHT” - “DARK” - no display

Hint

   You can also use DIMMER on the receiver.
Saving power during standby mode

You can save power by pressing AMP MENU and setting up the receiver on the display panel as follows:

- Set "<HDMI>" - "CTRL.HDMI" to "CTRL OFF".
- Set "<HDMI>" - "STBY.THRU" to "OFF".
- Set "<BT>" - "BT STBY" to "STBY OFF".

Related Topic
- Controlling HDMI devices “CTRL.HDMI”
- Enjoying content of a connected device without turning on the receiver “STBY.THRU”
- Setting the BLUETOOTH standby mode “BT STBY”
Help Guide

MULTI CHANNEL AV RECEIVER
STR-DH590

Viewing information on the display panel

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

1 Select the input for which you want to check information.

2 Press DISPLAY repeatedly.

Each time you press DISPLAY, the display will change cyclically as follows:
Input you have selected (*1) - Sound field currently applied (*2) - Volume level - Stream information (*3) - Index name of the input (*4)

When listening to FM radio
Preset station name (*4) - Frequency and preset number (*5) - Sound field currently applied (*2) - Volume level

When playing back from a BLUETOOTH device
BLUETOOTH - BLUETOOTH device name - BLUETOOTH device address - Sound field currently applied - Volume level

When receiving RDS broadcasts (for European and Asia-Pacific models only)
Program service name - Frequency and preset number (*5) - Sound field currently applied (*2) - Volume level

*1 If "$<INPUT>" - "IN MODE" is set to "ANALOG," the function you have selected will be displayed.
*2 If the Pure Direct function is selected, "PURE" will appear instead of displaying sound fields.
*3 Stream information may not be displayed.
*4 An index name or preset station name will appear only if you have assigned one to the input or preset station. An index name or preset station name will not appear if only blank spaces have been entered or the index name/preset station name is the same as the input name.
*5 A preset number will appear only if the frequency has been set in the preset memory.

Note
- Characters or marks in some languages may not be displayed.
Reverting to the factory default settings

You can clear all memorized settings and restore the receiver to the factory default settings by the following procedure. Be sure to use the buttons on the receiver to perform this operation.

1 Turn off the receiver.

2 Hold down (power) on the receiver for 5 seconds.

“CLEARING” flashes on the display panel for a while, then changes to “CLEARED *”.

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**Note**

- It takes a few minutes for the memory to be cleared completely. Do not turn the receiver off until “CLEARED *” appears on the display panel.
Operating the receiver with the menu on the display panel

You can operate this receiver using the display panel as well as the TV screen.

1. **Press AMP MENU.**
   - The menu is displayed on the display panel of the receiver.

2. **Press ‹/› repeatedly to select the menu you want, then press +.**

3. **Press ‹/› repeatedly to select the parameter you want to adjust, then press +.**

4. **Press ‹/› repeatedly to select the setting you want, then press +.**

To return to the previous display

Press ‹ or BACK.

To exit the menu

Press AMP MENU.

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

Related Topic
- Viewing information on the display panel
- List of settings that can be adjusted using the menu on the display panel
List of settings that can be adjusted using the menu on the display panel

You can adjust the following settings from the setting menu on the display panel of the receiver by pressing AMP MENU. Some settings can also be adjusted using the menu displayed on the TV screen.

**Auto Calibration settings “<A. CAL>”**
- **Auto Calibration start “START”**
  Auto Calibration can be performed through the steps of [Easy Setup]. For details on [Easy Setup], refer to the Operating Instructions.
- **Auto Calibration type “CAL TYPE” (*1)**
  This setting is explained using menus on the TV screen.
  Refer to “Selecting the Auto Calibration type [Calibration Type].”

**Level settings “<LEVEL>”**
- **Test tone “T. TONE” (*2)**

The settings below are explained using menus displayed on the TV screen.
Refer to “Adjusting the speaker level [Level].”

- Front left speaker level “FL LVL” (*2)
- Front right speaker level “FR LVL” (*2)
- Center speaker level “CNT LVL” (*2)
- Surround left speaker level “SL LVL” (*2)
- Surround right speaker level “SR LVL” (*2)
- Subwoofer level “SW LVL” (*2)

- **TV volume offset “TV.OFFSET”**

**Speaker settings “<SPKR>”**
- **Speaker pattern “PATTERN”**
  For details on the speaker pattern, refer to the Operating Instructions.

The settings below are explained using menus displayed on the TV screen.
Refer to “Adjusting the speaker size [Size].”

- Front speakers size “FRT SIZE” (*2)
- Center speaker size “CNT SIZE” (*2)
- Surround speakers size “SUR SIZE” (*2)

The settings below are explained using menus displayed on the TV screen.
Refer to “Adjusting the speaker distance [Distance].”

- Front left speaker distance “FL DIST.” (*2)
- Front right speaker distance “FR DIST.” (*2)
- Center speaker distance “CNT DIST.” (*2)
- Surround left speaker distance “SL DIST.” (*2)
- Surround right speaker distance “SR DIST.” (*2)
- Subwoofer distance “SW DIST.” (*2)

- Distance unit “DIST.UNIT”

The settings below are explained using menus displayed on the TV screen.
Refer to “Setting the crossover frequency of the speakers [Crossover Freq].”
Front speakers crossover frequency “FRT CRS.” (*3)
Center speaker crossover frequency “CNT CRS.” (*3)
Surround speakers crossover frequency “SUR CRS.” (*3)

Input settings “<INPUT>”
- Input mode “IN MODE”
- Naming inputs “NAME IN”
- Digital audio input assignment “A. ASSIGN”

Surround settings “<SURR>”
- HD-D.C.S. effect type “EFFECT” (*4)

EQ settings “<EQ>”
The settings below are explained using menus displayed on the TV screen.
Refer to “Adjusting the equalizer.”
- Front speakers bass level “BASS”
- Front speakers treble level “TREBLE”

Tuner settings “<TUNER>”
- FM station receiving mode “FM MODE”
  This setting is explained using menus displayed on the TV screen.
  Refer to “Setting the FM station receiving mode [FM Mode].”
- Naming preset stations “NAME IN”
  This setting is explained using menus displayed on the TV screen.
  Refer to “Naming preset stations [Name In].”

Audio settings “<AUDIO>”
- Night Mode “NIGHT M.”
  This setting is explained using menus displayed on the TV screen.
  Refer to “Enjoying clear sound at a low volume level [Night Mode].”
- Synchronizes audio with video output “A/V SYNC”
- Digital broadcast language selection “DUAL”
- Dynamic range compressor “D. RANGE”

HDMI settings “<HDMI>”
- Control for HDMI “CTRL.HDMI”
- Standby Linked to TV “STBY.LINK”
- Standby Through “STBY.THRU”
- HDMI Audio Out “AUDIO.OUT”
- HDMI Sound Field Sync “S.F. SYNC”
- HDMI Subwoofer Level “SW LVL”
- HDMI Signal Format “SIG. FMT.”
  For details on the HDMI Signal Format, refer to the Operating Instructions.

BLUETOOTH settings “<BT>”
- BLUETOOTH Standby mode “BT STBY” (*5)
- BLUETOOTH AAC “BT AAC”
- BLUETOOTH Power “BT POWER”

System settings “<SYSTEM>”
- Auto standby mode “AUTO.STBY”
- Sleep timer “SLEEP”
- USB update “UPDATE”
- Version display “VER. X.XXX” (*6)
- Model name display “STR-DH590”
*1 You can select this setting only when you have performed Auto Calibration and saved the settings.
*2 Some parameters or settings may not be available depending on the speaker pattern setting.
*3 You can only select this parameter if the speaker is set to “SMALL”.
*4 You can only select this parameter if you select “HD-D.C.S.” as the sound field.
*5 You can only select this parameter when a BLUETOOTH device is paired.
*6 X.XXX represents the version number.
Outputting a test tone from each speaker “T. TONE”

You can output a test tone from each speaker in sequence. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<LEVEL>” - “T. TONE” on the display panel.

3 Select the setting you want.
   - OFF
   - AUTO XXX (*): The test tone is output from each speaker in sequence.
   * XXX represents a speaker channel (FL, CNT, FR, SR, SL, SW). The speaker channels that appear on the display panel vary depending on the speaker pattern settings.

If you need to adjust the speaker level according to the results of outputting a test tone, refer to “Adjusting the speaker level [Level]” for how to adjust the level.

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

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Adjusting the output level according to the connected TV “TV.OFFSET” (TV volume offset function)

If the level of the TV sound output from speakers connected to the receiver is lower than that of other devices connected to the receiver, you can increase the TV output sound level. This function works when you connect a TV compatible with the Audio Return Channel (ARC) function to the HDMI TV OUT jack, or connect a TV to the OPTICAL IN jack or AUDIO TV IN jacks. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<LEVEL>” - “TV.OFFSET” on the display panel.

3. Adjust the level.
   You can adjust it within the range of “TV 0 dB” to “TV +6 dB”.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Selecting the unit of measurement “DIST.UNIT”

You can select the unit of measurement for setting distances. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<SPKR>” - “DIST.UNIT” on the display panel.

3 Select the setting you want.

- **FEET**: The distance is displayed in feet.
- **METER**: The distance is displayed in meters.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Switching between digital and analog audio “IN MODE”

When you connect devices to both digital and analog audio input jacks on the receiver, you can fix the audio input mode to either device, or switch from one to the other, depending on the type of material you intend to watch. This operation is only available using the display panel on the front of the receiver.

1. Press the input buttons to select the input.
2. Press AMP MENU.
3. Select “<INPUT>” - “IN MODE” on the display panel.
4. Select the setting you want.
   - AUTO: Gives priority to digital audio signals. If there are more than one digital connection, HDMI audio signals have priority. If there is no digital audio signals, analog audio signals are selected. When TV input is selected, priority is given to Audio Return Channel (ARC) signals. If your TV is not compatible with the Audio Return Channel (ARC) function, digital optical audio signals are selected.
   - OPT: Specifies input of digital audio signals to the OPTICAL IN jack.
   - COAX: Specifies input of digital audio signals to the COAXIAL IN jack.
   - ANALOG: Specifies input of analog audio signals to the AUDIO IN (L/R) jacks.

Note
- Depending on the input, “IN MODE” may be dimmed on the display panel and other modes cannot be selected.

Hint
- You can also use INPUT SELECTOR on the receiver to select the input in step 1.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Changing the name for each input “NAME IN”

You can enter up to 8 characters for each input name. This operation is only available using the display panel on the front of the receiver.

1. Select the input you want to change the name.
2. Press AMP MENU.
3. Select “<INPUT>” - “NAME IN” on the display panel.
4. Press ▲ / ▼ repeatedly to select a character, then press ►. You can move the input position backward and forward by pressing ◄ / ►.
5. Repeat step 4 to input characters one by one, then press ◄. The name you entered is registered.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Using other audio input jacks “A. ASSIGN”

You can reassign the OPTICAL/COAXIAL digital audio input jacks to other input if the default settings of the jacks do not correspond to your connected equipment.

E.g. When connecting a DVD player to the OPTICAL TV IN jack, assign the OPTICAL TV IN jack to [BD/DVD].

This operation is only available using the display panel on the front of the receiver.

1. Select the input name you want to assign.
2. Press AMP MENU.
3. Select “<INPUT>” - “A. ASSIGN”.
4. Select the jack you want to assign to the input.

Assignable audio input jacks

OPT:
MEDIA.B, BD/DVD, SAT, GAME, SA-CD

COAX:
MEDIA.B, BD/DVD, SAT, GAME, SA-CD (*)

NONE:
MEDIA.B (*), BD/DVD (*), SAT (*), GAME (*), SA-CD

* Default setting

Note

- When you assign the digital audio input, the “IN MODE” setting may change automatically.
- One reassignment is allowed for each input.
- If no sound is output from the jacks which you have assigned, also check the “IN MODE” settings.

Related Topic

- List of settings that can be adjusted using the menu on the display panel
Selecting the HD-D.C.S. effect type “EFFECT”

Select the HD-D.C.S. effect type you want. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select "<SURR>" - “EFFECT” on the display panel.

3 Select the setting you want.

- **DYNAMIC**: This setting is suitable for an environment which is reverberant but lacks a spacious feel (where sound absorption is not sufficient). It emphasizes the reflection of sound and reproduces the sound of a large, classic movie theater. This emphasizes the spacious feel of a dubbing theater and creates a unique acoustic field.
- **THEATER**: This setting is suitable for a general living room. It reproduces the reverberation of sound just like in a movie theater (dubbing theater). It is most appropriate for watching content recorded on a Blu-ray Disc when you want the atmosphere of a movie theater.
- **STUDIO**: This setting is suitable for a living room with the appropriate sound devices. It reproduces the reverberation of sound provided when a theatrical sound source is remixed for a Blu-ray Disc to a volume level suitable for home use. The level of reflection and reverberation of sound is kept to a minimum, while dialogues and surround effects are reproduced vividly.

**Note**

- This function works only when the sound field is set to [HD-D.C.S.].
- This function does not work when headphones are connected.

**Related Topic**

- Selecting a sound field
- Resetting sound fields to the default settings
- List of settings that can be adjusted using the menu on the display panel
Synchronizing audio with video output “A/V SYNC”

You can delay the output of audio to minimize the time gap between audio output and a visual display. This function is useful when using a large LCD or plasma monitor or a projector. You can set the function for each input independently.

During playback, you can also select this function from the options menu displayed by pressing OPTIONS. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<AUDIO>” - “A/V SYNC” on the display panel.

3. Select the setting you want.
   - **SYNC ON (Delay time: 60ms):** The audio output is delayed so that the time gap between the audio output and visual display is minimized.
   - **SYNC OFF (Delay time: 0ms):** The audio output is not delayed.

**Note**
- The receiver may play signals at a lower sampling frequency than the actual sampling frequency of the input signals, depending on the audio format.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Selecting the language of digital broadcasts “DUAL”

You can select the language you want when listening to a digital broadcast with dual audio. This function only works for Dolby Digital sources. During playback, you can also select this function from the options menu displayed by pressing OPTIONS. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<AUDIO>” - “DUAL” on the display panel.

3 Select the setting you want.
   - **MAIN/SUB**: Sound in the main language will be output through the front left speaker and sound in the sub language will be output through the front right speaker simultaneously.
   - **MAIN**: Sound in the main language will be output.
   - **SUB**: Sound in the sub language will be output.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Compressing the dynamic range “D. RANGE”

You can compress the dynamic range of the soundtrack. This may be useful when you want to watch movies at a low volume late at night, etc.
This function only works for Dolby Digital and Dolby TrueHD sources.
This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<AUDIO>” - “D. RANGE” on the display panel.

3 Select the setting you want.
   - **COMP. ON**: The dynamic range is compressed as intended by the recording engineer.
   - **COMP. AUTO**: The dynamic range is compressed automatically when there is a flag in the sound source that recommends using the D. RANGE function.
   - **COMP. OFF**

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Controlling HDMI devices “CTRL.HDMI”

You can turn the Control for HDMI function on or off. For details, see “Preparing to use the “BRAVIA” Sync function.” This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “CTRL.HDMI” on the display panel.

3 Select “CTRL ON” or “CTRL OFF”.

**Note**

- When you set “CTRL.HDMI” to “CTRL ON,” “AUDIO.OUT” setting may be changed automatically.
- When the receiver is in standby mode, the (power) indicator on the front panel lights up in red if “CTRL.HDMI” is set to “CTRL ON”.

**Related Topic**

- Preparing to use the “BRAVIA” Sync function
- List of settings that can be adjusted using the menu on the display panel
Turning off the receiver and connected devices simultaneously with the TV (System Power Off function) “STBY.LINK”

You can automatically turn off the receiver and any device connected to the HDMI jack when you turn off the TV. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “STBY.LINK” on the display panel.

3 Select the setting you want.

- **AUTO**: When the input of the receiver is set to [BD/DVD], [GAME], [SAT/CATV], [MEDIA BOX], or [TV], the receiver will turn off when the TV is turned off.
- **ON**: The receiver will turn off when the TV is turned off, regardless of the input of the receiver.
- **OFF**: The receiver does not turn off when the TV is turned off, regardless of the input of the receiver.

**Note**

- Depending on the status of the device, the connected device may not turn off.
- The System Power Off function may work with devices other than ones manufactured by Sony, but operation is not guaranteed.

**Related Topic**

- List of settings that can be adjusted using the menu on the display panel
Enjoying sound of a TV compatible with the Audio Return Channel (ARC) function

If the receiver is connected to a TV’s HDMI input jack compatible with Audio Return Channel (ARC) function, you can listen to TV sound from the speakers connected to the receiver without connecting an optical digital cable or an audio cable. Set the receiver by the following procedure to output the sound of the TV from the speakers connected to the receiver.

This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<HDMI>” - “CTRL.HDMI” on the display panel.

3. Select “CTRL ON”.

If you connect to a TV that is not compatible with the Audio Return Channel (ARC) function or you want to select an audio signal using a cable other than an HDMI cable (e.g. via an optical digital cable or an audio cable)

Switch the audio input mode. For details, “Switching between digital and analog audio “IN MODE”.”

Note

- Audio Return Channel (ARC) function may work on devices other than ones manufactured by Sony. However, operation is not guaranteed.
- Be sure to turn off the volume of the TV or activate the muting function of the TV.
- If your TV does not support the System Audio Control function, press AMP MENU, then set “<HDMI>” - “AUDIO.OUT” to “TV+AMP” on the display panel to output the sound of the TV from the TV speaker and the speakers connected to the receiver.

Related Topic

- Switching between digital and analog audio “IN MODE”
- List of settings that can be adjusted using the menu on the display panel
- Setting the HDMI audio signal output of connected devices “AUDIO.OUT”
- No TV sound is output from the receiver.
Enjoying content of a connected device without turning on the receiver “STBY.THRU”

This function allows you to enjoy the sound and image of a connected device without turning on the receiver.
This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “STBY.THRU” on the display panel.

3 Select the setting you want.

- **ON**: The receiver continuously outputs HDMI signals from the HDMI TV OUT jack when in standby mode. Sony recommends this setting if you are using a TV that is not manufactured by Sony.
- **AUTO**: The receiver outputs HDMI signals to the TV from the HDMI TV OUT jack when the TV is turned on while the receiver is in the standby mode. This setting saves power in the standby mode compared to the “ON” setting.
- **OFF**: The receiver does not output HDMI signals from the HDMI TV OUT jack when in standby mode. Turn on the receiver if you want to enjoy content of the connected device on the TV. This setting saves power in the standby mode compared to the “ON” setting.

**Note**

- When the receiver is in standby mode, the power indicator on the front panel lights up in red if “STBY.THRU” is set to “ON” or “AUTO”.
- When “AUTO” is selected, it may take a little more time for the image and sound to be output to the TV than when “ON” is selected.
- “AUTO” may work on devices other than ones manufactured by Sony. However, operation is not guaranteed.

**Related Topic**

- List of settings that can be adjusted using the menu on the display panel
Setting the HDMI audio signal output of connected devices “AUDIO.OUT”

You can set the HDMI audio signal output of playback devices connected to the receiver via an HDMI connection. This operation is only available using the display panel on the front of the receiver.

1 Press AMP MENU.

2 Select “<HDMI>” - “AUDIO.OUT” on the display panel.

3 Select the setting you want.
   - **AMP**: HDMI audio signals from playback devices are only output to the speakers connected to the receiver. Multi-channel sound can be played back as it is.
   - **TV+AMP**: The sound is output from the speaker of the TV and the speakers connected to the receiver.

**Note**

- Audio signals are not output from the speaker of the TV when “AUDIO.OUT” is set to “AMP”.
- When “TV+AMP” is selected, the sound quality of the playback equipment depends on the TV’s sound quality, such as the number of channels, and the sampling frequency, etc. If the TV has stereo speakers, the sound output from the receiver is also in stereo as that of the TV, even if you play back multi channel source.
- When you connect the receiver to a video device (projector, etc.), sound may not be output from the receiver. In this case, select “AMP”.
- When you select “TV+AMP,” only sound from the HDMI IN jacks is output from the speaker of the TV.

**Related Topic**

- List of settings that can be adjusted using the menu on the display panel
**Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”**

The sound field are selected automatically according to the Scene Select or Sound Mode setting on your TV. For details on this operation, refer to the operating instructions of the TV. This operation is only available using the display panel on the front of the receiver.

1. **Press AMP MENU.**

2. **Select “<HDMI>” - “S.F. SYNC” on the display panel.**

3. **Select the setting you want.**
   - **ON:** A sound field is selected automatically according to the genre of the digitally broadcast TV program, or the Scene Select or Sound Mode setting on your TV.
   - **OFF:** Sound is output according to the sound field currently applied.

The Sound Mode/Scene Select setting and the sound field setting of the receiver will change as follows.

- **Cinema:** HD-D.C.S. (HD-D.C.S.)
- **Sports:** Sports (SPORTS)
- **Music:** Concert (CONCERT)
- **Animation:** Multi Ch Stereo (MULTI ST.)
- **Photo:** Multi Ch Stereo (MULTI ST.)
- **Game:** Multi Ch Stereo (MULTI ST.)
- **Graphics:** Multi Ch Stereo (MULTI ST.)
- **News:** Multi Ch Stereo (MULTI ST.)
- **Standard:** Multi Ch Stereo (MULTI ST.)

**Note**
- When the sound field switches according to the Scene Select or Sound Mode setting on your TV, the sound may be interrupted.
- The Sound Mode/Scene Select function is a function developed by Sony, and cannot be used on devices other than ones manufactured by Sony.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Setting the level of the subwoofer “SW LVL”

You can set the level of the subwoofer to 0 dB or +10 dB when PCM signals are input via an HDMI connection. The level for each input to which an HDMI input jack is assigned can be set independently. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<HDMI>” - “SW LVL” on the display panel.

3. Select the setting you want.
   - SW AUTO: Automatically sets the level to 0 dB or +10 dB, depending on the audio stream.
   - SW +10 dB
   - SW 0 dB

Note
- This setting is invalid when [FM], [BT], [SA-CD/CD] or [TV] is selected.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Setting the BLUETOOTH standby mode “BT STBY”

When a BLUETOOTH device is paired, you can set the BLUETOOTH standby mode so that the receiver can be controlled by the BLUETOOTH device even when the receiver is in the standby mode. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<BT>” - “BT STBY” on the display panel.

3. Select the setting you want.
   - **STBY ON**: You can turn on the receiver from a BLUETOOTH device.
   - **STBY OFF**

**Note**

- If a previously paired device is paired when the receiver is in standby mode, the (power) indicator on the front panel lights up in red if “BT STBY” is set to “STBY ON”.

**Related Topic**

- List of settings that can be adjusted using the menu on the display panel
Setting BLUETOOTH audio codecs “BT AAC”

You can enable and disable AAC (Advanced Audio Coding) audio. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<BT>” - “BT AAC” on the display panel.

3. Select the setting you want.
   - **AAC ON**: AAC audio is available if the BLUETOOTH device supports AAC.
   - **AAC OFF**: AAC audio is not available.

**Note**
- If you change this setting, the setting is applied from the next time you connect the BLUETOOTH device.
- You cannot use this function while a BLUETOOTH device is connected. In this case, “BT AAC” on the display panel is dimmed.

**Hint**
- You can enjoy high-quality sound if AAC is enabled.

**Related Topic**
- List of settings that can be adjusted using the menu on the display panel
Turning the BLUETOOTH function on/off “BT POWER”

You can turn the BLUETOOTH function on or off. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.
2. Select “<BT>” - “BT POWER” on the display panel.
3. Select “BT ON” or “BT OFF”.

Note
- You cannot set this function when [BT] (BLUETOOTH device) is selected as the input. (“BT POWER” on the display panel will become dimmed.)

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Setting standby mode “AUTO.STBY”

You can set the receiver to switch to standby mode automatically when you do not operate the receiver or when no signals are input to the receiver. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.

2. Select “<SYSTEM>” - “AUTO.STBY” on the display panel.

3. Select the setting you want.
   - STBY ON: The receiver switches to standby mode after approximately 20 minutes.
   - STBY OFF

Note
- This function does not work when [FM] is selected as the input.
- If you use the “AUTO.STBY” function and the sleep timer at the same time, the sleep timer has priority.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
Updating the software “UPDATE”

Before updating, visit the customer support website to download the latest software version to your USB flash drive. This operation is only available using the display panel on the front of the receiver.

1. Connect the USB flash drive to the POWER SUPPLY port on the rear of the receiver.
2. Press AMP MENU.
3. Select “<SYSTEM>” - “UPDATE” on the display panel.
4. Select “START”.

“READING” will flash, and then “UPDT xxx” (*) will appear on the display panel. When the update is completed, “COMPLETE” appears on the display panel and the receiver restarts automatically.

* “xxx” represents a percentage of the update that is completed.

Note

- It may take about 15 minutes for the update to be completed.
- Do not turn the receiver off while the software is being updated. It may cause a malfunction.
- You cannot restore the old version after updating the software.

Related Topic

- Customer support websites
- List of settings that can be adjusted using the menu on the display panel
Checking the software version “VER. X.XXX”

You can display the software version information of the receiver. This operation is only available using the display panel on the front of the receiver.

1. Press AMP MENU.
2. Select “<SYSTEM>” on the display panel.
3. Press ↓ repeatedly until “VER. X.XXX” is displayed.
   Software version appears on the display panel.

Related Topic
- List of settings that can be adjusted using the menu on the display panel
If "PROTECT" appears on the display panel, the receiver will automatically turn off after a few seconds. Check the following:

- There may be an electrical surge or power failure. Unplug the AC power cord (mains lead) and then plug in the cord again after 30 minutes.
- The receiver may be covered and the ventilation holes are blocked. Remove the object covering the ventilation holes of the receiver.
- Disconnect all of the speakers and subwoofer.
- Check that the speaker wires are tightly twisted on both ends.
- Connect the front speaker first, plug in the AC power cord (mains lead) and turn on the receiver. Increase the volume level and operate the receiver for at least 30 minutes until it completely warms up. Then, connect each additional speaker one by one and test each additional speaker until you detect which speaker is causing the protection error.
- The impedance of the connected speakers may be below the rated impedance range indicated on the back panel of the receiver. Connect speakers whose impedance falls within the range.
- After checking the above items and fixing any problems, turn on the receiver. If the problem persists, consult your nearest Sony dealer.
USB FAIL

Overcurrent from the POWER SUPPLY port was detected. Turn off the receiver, disconnect the USB device, and then turn the receiver back on.
The receiver is turned off automatically.

- If "<SYSTEM>" - "AUTO.STBY" is set to "STBY ON" on the display panel, set it to "STBY OFF".
- The sleep timer function was activated.
- "PROTECT" was activated.

Related Topic

- Setting standby mode "AUTO.STBY"
- Using the sleep timer
- PROTECT
Cannot find an available input when connecting several digital devices.

You can reassign the COAXIAL/OPTICAL digital audio input jacks to other inputs. See "Using other audio input jacks "A. ASSIGN"."
The receiver does not turn on even when the TV is turned on.

- Press AMP MENU, then set "<HDMI>" - "CTRL: HDMI" to "CTRL ON" on the display panel. The TV must support the Control for HDMI function. For details, refer to the operating instructions of the TV.
- Check the speaker settings of the TV. The receiver power syncs with the speaker settings of the TV. For details, refer to the operating instructions of the TV.
- If sound was output from the speakers of the TV last time, the receiver does not turn on even when the TV is turned on.

Related Topic
- Preparing to use the “BRAVIA” Sync function
The receiver turns off when the TV is turned off.

- Press AMP MENU, then check “<HDMI>” - “STBY.LINK” on the display panel. When the function is set to “ON,” the receiver automatically turns off interlocked with the TV-power off operation, regardless of the input of the receiver.

Related Topic
- Turning off the receiver and connected devices simultaneously with the TV (System Power Off function) “STBY.LINK”
The receiver does not turn off even when the TV is turned off.

- Press AMP MENU, then set "<HDMI>" - "CTRL.HDMI" to "CTRL ON" on the display panel. The TV must support the Control for HDMI function. For details, refer to the operating instructions of the TV.
- Press AMP MENU, then check "<HDMI>" - "STBY.LINK" on the display panel. If you want the receiver to turn off when the TV is turned off regardless of the input of the receiver, set "STBY.LINK" to "ON". The TV must support the Control for HDMI function. For details, refer to the operating instructions of the TV.

Related Topic
- Preparing to use the "BRAVIA" Sync function
- Turning off the receiver and connected devices simultaneously with the TV (System Power Off function) "STBY.LINK"
No TV sound is output from the receiver.

- Check the type and connection of the HDMI cable, optical digital cable, or audio cable that is connected to the receiver and the TV (refer to the supplied Operating Instructions).
- When the receiver is connected to a TV compatible with Audio Return Channel (ARC) function, make sure the receiver is connected to an HDMI jack compatible with the Audio Return Channel (ARC) function (refer to the supplied Operating Instructions).
- If the TV is compatible with the Audio Return Channel (ARC) function, make sure the Control for HDMI function on the TV is turned on.
- Make sure that “<HDMI>” - “CTRL.HDMI” is set to “CTRL ON” on the display panel.
- Make sure that “<INPUT>” - “IN MODE” is set to “AUTO” on the display panel when the input of the receiver is set to [TV].
- Make sure the TV supports the System Audio Control function. Set the speaker setting of the TV (BRAVIA) to “Audio System.” Refer to the operating instructions of your TV regarding how to set the TV.
- If the TV does not have a System Audio Control function, press AMP MENU, then set on the display panel “<HDMI>” - “AUDIO.OUT” to:
  - “TV+AMP” if you want to listen to the sound from the TV speaker and receiver.
  - “AMP” if you want to listen to the sound from the receiver only.

- If the TV is not compatible with the Audio Return Channel (ARC) function, connect the receiver to the TV using an optical digital cable (not supplied) or audio cable (not supplied). There will be no TV sound from the connected speakers when the TV incompatible with the Audio Return Channel (ARC) function is connected via an HDMI connection.
- Depending on the order in which you connect the TV and the receiver, the receiver may be muted and “MUTING” is displayed on the display panel of the receiver. If this happens, turn on the TV first, then the receiver.
- Switch input of the receiver to [TV].
- Increase the volume on the receiver or cancel muting.
The sound is output from both the receiver and the TV.

- Mute the sound of the receiver or the TV.
- If audio signals from the connected HDMI device are output from both the speakers connected to the receiver and the TV speakers, press AMP MENU and then set “<HDMI>” - “AUDIO.OUT” to “AMP” on the display panel. Audio signals will be output from only the speakers connected to the receiver.
No image and/or sound is output from the TV when the receiver is in the standby mode.

- When the receiver enters the standby mode, image and/or sound from the HDMI device selected right before the receiver entered the standby mode is output to the TV. If no image and/or sound is output, perform the following operations:
  - Turn on the receiver, and then select the input to which the playback device is connected.
  - Press AMP MENU, then set "<HDMI>" - "CTRL.HDMI" to "CTRL ON," and then set "<HDMI>" - "STBY.THRU" to "AUTO" or "ON" on the display panel.

- If a device that supports the Control for HDMI function but is not manufactured by Sony is connected, press AMP MENU and set "<HDMI>" - "CTRL.HDMI" to "CTRL ON" on the display panel.
The sound is interrupted while watching a TV program or content on a Blu-ray Disc, etc.

- Press AMP MENU, and then check the setting for “<HDMI>” - “S.F. SYNC” on the display panel. If the function is set to “ON,” the sound may be interrupted when the sound field switches automatically according to the Scene Select or Sound Mode setting on your TV. To avoid the sound being interrupted, set the function to “OFF,” and then select the desired sound field.

Related Topic
- Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”
The sound field switches automatically.

- Press AMP MENU, and then check the setting for “<HDMI>” - “S.F. SYNC” on the display panel.
  - If the function is set to “ON,” the sound field will switch automatically according to information on the program currently being watched or the setting for Sound Mode/Scene Select.
  - If you do not want to switch the sound field automatically, set the function to “OFF”. This allows you to assign a sound field to each input of the receiver.

Related Topic
- Selecting the optimum sound field automatically (Sound Mode/Scene Select function) “S.F. SYNC”
No sound or only a very low level of sound is heard, no matter which device is selected.

- Check that all connecting cables are inserted to their input/output jacks on the receiver, speakers and the devices.
- Check that MASTER VOLUME on the receiver is not set to “VOL MIN”.
- Press SPEAKERS repeatedly on the receiver to select a setting other than “OFF”.
- Check that headphones are not connected to the receiver.
- Press \( \text{\LaTeX} \) to cancel the muting function.
- Try pressing the input button on the remote control or turning INPUT SELECTOR on the receiver to select the input to which you want to listen.
- If the sound of a cable box or satellite box connected to the TV is not output, connect the device to an HDMI input jack of the receiver and switch the input of the receiver to the input for the connected device (refer to the supplied Operating Instructions).
- If you want to listen to sound from the TV speaker, press AMP MENU, then set “<HDMI>” - “AUDIO.OUT” to “TV+AMP” on the display panel. If you cannot play multi-channel audio source, set to “AMP”. However, the sound will not be output through the TV speaker.
No sound or only a very low level of sound is heard from specific speakers.

- Check that the speaker settings are appropriate by using following settings:
  - Perform Auto Calibration in [Easy Setup] from the home menu.
  - Press AMP MENU, then select "<SPKR>" - "PATTERN" on the display panel.

Then check that sound is output from each speaker correctly by pressing AMP MENU and selecting "<LEVEL>" - "T. TONE" on the display panel.
- Make sure you have turned on your subwoofer.
- Check the volume level of the subwoofer.
- Depending on the selected sound field, sound may not be available from the subwoofer.
There is no sound from a specific device.

- Check that the device is correctly connected to the corresponding audio input jacks.
- Check that the cable(s) used for the connection is (are) fully inserted into the jacks on both the receiver and the device.
- Check that the device is correctly connected to the corresponding HDMI jack.
- Check the current input settings. If the correct input mode is not selected, press AMP MENU and select “<INPUT>” - “IN MODE” on the display panel, and then change the settings.
- The HDMI settings of some playback devices need to be configured. Refer to the operating instructions supplied with each device.
- Be sure to use a High Speed HDMI Cable with Ethernet when you view images or listen to sound, especially for 1080p, Deep Color (Deep Colour), 4K or 3D transmission. Premium High Speed HDMI Cable with Ethernet that supports 18 Gbps is required for 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit etc.
- Sound may not be output from the receiver while the home menu is displayed on the TV screen. Press HOME to exit the home menu.
- Audio signals (format, sampling frequency, bit length, etc.) transmitted from an HDMI jack may be suppressed by the connected device. Check the setup of a device connected via an HDMI cable if the image is poor or the sound does not come out of the device.
- When a connected device does not support the copyright protection technology (HDCP), the image and/or the sound from the HDMI TV OUT jack may be distorted or may not be output. If this is the case, check the specifications of the connected device.
- Set the image resolution of the playback device to more than 720p/1080i to enjoy High Bitrate Audio (DTS-HD Master Audio, Dolby TrueHD).
- The image resolution of the playback device may need to be configured to certain settings before you can enjoy DSD and Multi Channel Linear PCM. Refer to the operating instructions of the playback device.
- When you connect the receiver to a video device (projector, etc.), sound may not be output from the receiver. In this case, press AMP MENU, then set “<HDMI>” - “AUDIO.OUT” to “AMP” on the display panel.
- You cannot listen to the sound of a device connected to the receiver while TV input is selected on the receiver. Be sure to change the input of the receiver to HDMI if you want to watch a program on a device connected via HDMI connection to the receiver.
- When using the Control for HDMI function, you cannot control connected devices using the remote control of the TV.
  - Some devices and TVs need to be set up. Refer to the operating instructions supplied with each device and TV.
  - Change the input of the receiver to the HDMI input connected to the device.
- Check that the selected digital audio input jack is not assigned to another input.

Related Topic
- Setting the HDMI audio signal output of connected devices “AUDIO.OUT”
The left and right sound is unbalanced or reversed.

- Check that the speakers and device are connected correctly and securely.
- Adjust the sound level parameters using [Speaker Setting] from the home menu.
Dolby Digital or DTS multi-channel sound is not reproduced.

- Check that the DVD, etc., you are playing is recorded in Dolby Digital or DTS format.
- When connecting the DVD player, etc., to the digital input jacks of this receiver, make sure the digital audio output setting of the connected device is available.
- Press AMP MENU, then set "<HDMI>" - "AUDIO.OUT" to "AMP" on the display panel.
- You can only enjoy High Bitrate Audio (DTS-HD Master Audio and Dolby TrueHD), DSD and Multi Channel Linear PCM with an HDMI connection.
The surround effect cannot be obtained.

- Be sure to select the optimal sound field for the content. For details on the sound fields, see "Selectable sound fields and their effects."
- [PLII Movie] and [PLII Music] do not work when "<SPKR>" - "PATTERN" is set to "2.0" or "2.1".
A test tone is not output from the speakers.

- The speaker cables may not be connected securely. Check that they are connected securely and cannot be disconnected by pulling on them slightly.
- The speaker cables may have short-circuited.
A test tone is output from a different speaker than the speaker displayed on the display panel.

- The speaker pattern setting is incorrect. Make sure that the speaker connections and the speaker pattern match correctly.
MULTI CHANNEL AV RECEIVER
STR-DH590

No image and/or sound is output from the TV when the receiver is in the standby mode.

- When the receiver enters the standby mode, image and/or sound from the HDMI device selected right before the receiver entered the standby mode is output to the TV. If no image and/or sound is output, perform the following operations:
  - Turn on the receiver, and then select the input to which the playback device is connected.
  - Press AMP MENU, then set “<HDMI>” - “CTRL.HDMI” to “CTRL ON,” and then set “<HDMI>” - “STBY.THRU” to “AUTO” or “ON” on the display panel.

- If a device that supports the Control for HDMI function but is not manufactured by Sony is connected, press AMP MENU and set “<HDMI>” - “CTRL.HDMI” to “CTRL ON” on the display panel.
No image appears on the TV screen.

- Try pressing the input button on the remote control or turning INPUT SELECTOR on the receiver to select the input to which you want to watch.
- Set your TV to the appropriate input mode.
- Make sure that cables are correctly and securely connected to devices.
- Disconnect the HDMI cable from the receiver and TV, and then reconnect the cable.
- Set “SIG. FMT.” of the selected input to “STANDARD” in the “<HDMI>” menu.
- Some playback devices need to be set up. Refer to the operating instructions supplied with each device.
- Be sure to use a High Speed HDMI Cable with Ethernet when you view images or listen to sound, especially for 1080p, Deep Color (Deep Colour), 4K or 3D transmission. Premium High Speed HDMI Cable with Ethernet, which can support bandwidths up to 18 Gbps, is required for 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit, etc.
- If you want to play HDCP 2.2 content, connect the receiver to an HDMI input jack of a TV that is compatible with HDCP 2.2.
No 4K content appears on the TV screen.

- Depending on the TV or the video device, 4K content may not be displayed. Check the video capability and settings of your TV and video device.
- Be sure to use a High Speed HDMI Cable with Ethernet. When you use high bandwidth video formats such as 4K/60p 4:4:4, 4:2:2 and 4K/60p 4:2:0 10 bit, a Premium High Speed HDMI Cable with Ethernet, which can support bandwidth up to 18 Gbps, is required.
- If your TV has similar menu for high bandwidth video format, check the setting on the TV menu when you set “SIG. FMT.” to “ENHANCED” on this receiver (refer to the Operating Instructions). For details on the setting of the TV menu, refer to the operating instructions of the TV.
- Be sure to connect the receiver to an HDMI input jack of a TV or video device that supports 4K. You have to connect an HDMI cable to an HDMI jack that supports HDCP 2.2 when you use a playback device for 4K resolution video content, etc.
No image and/or sound is output from the TV when the receiver is in the standby mode.

- When the receiver enters the standby mode, image and/or sound from the HDMI device selected right before the receiver entered the standby mode is output to the TV. If no image and/or sound is output, perform the following operations:
  - Turn on the receiver, and then select the input to which the playback device is connected.
  - Press AMP MENU, then set “<HDMI>” - “CTRL.HDMI” to “CTRL ON,” and then set “<HDMI>” - “STBY.THRU” to “AUTO” or “ON” on the display panel.

- If a device that supports the Control for HDMI function but is not manufactured by Sony is connected, press AMP MENU and set “<HDMI>” - “CTRL.HDMI” to “CTRL ON” on the display panel.
The home menu does not appear on the TV screen.

- Disconnect the HDMI cable from the receiver and TV and then reconnect the cable.
- Press HOME to display the home menu.
- Check that the appropriate input is selected on the TV. Select the HDMI input to which the receiver is connected.
- The home menu may take some time to appear on the TV screen depending on the TV.
Display does not appear on the display panel.

- If the PURE DIRECT indicator on the front panel lights up, press PURE DIRECT on the receiver or on the remote control to turn off this function.
- Press DIMMER on the receiver or on the remote control to select “BRIGHT” or “DARK”.

Related Topic
- Enjoying high-fidelity sound [Pure Direct]
- Switching the brightness of the display panel
When the language for the on-screen display of the TV is changed, the on-screen display language of the receiver is changed simultaneously.

- Press AMP MENU, then check “<HDMI>” - “CTRL.HDMI” on the display panel. If “CTRL.HDMI” is set to “CTRL ON,” the on-screen display language of the receiver may be changed simultaneously when you change the language for the on-screen display of the TV. Select the language on the receiver again to return to the previous setting.
The FM stereo reception is poor.

- Select [Listen] - [FM] from the home menu, then select [FM Mode] - [Mono].

Related Topic
- Setting the FM station receiving mode [FM Mode]
You cannot tune to radio stations.

- The signal of the stations is too weak for automatic tuning. Use direct tuning.
- No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations is used). Preset the stations.
- Press DISPLAY repeatedly so that the frequency appears on the display panel.
RDS does not work (for European and Asia-Pacific models only).

- Make sure that you are tuned to an FM RDS station.
- The service may be temporarily out of order. Contact the radio station and find out whether they actually provide the service in question.
- Select a stronger FM station.
- The station you tuned to is not transmitting the RDS signal or the signal is weak.
Pairing cannot be done.

- Move the BLUETOOTH device closer to the receiver.
- Pairing may not be possible if there are other BLUETOOTH devices near the receiver. In this case, turn off the other BLUETOOTH devices.
- Correctly enter the same passkey that was entered on the BLUETOOTH device.
Cannot make a BLUETOOTH connection.

- The BLUETOOTH device you attempted to connect does not support the A2DP profile, and cannot be connected with the receiver.
- Press BLUETOOTH on the receiver to connect to the last connected BLUETOOTH device.
- Turn on the BLUETOOTH function of the BLUETOOTH device.
- Establish a connection from the BLUETOOTH device.
- The pairing registration information has been erased. Perform the pairing operation again.
- While connected to a BLUETOOTH device, this receiver cannot be detected by other BLUETOOTH devices.
- Erase the pairing registration information of the BLUETOOTH device and perform the pairing operation again.
The sound skips or fluctuates, or the connection is lost.

- The receiver and the BLUETOOTH device are too far apart.
- If there are obstructions between the receiver and your BLUETOOTH device, remove these or move the receiver and/or the BLUETOOTH device away from the obstructions.
- If there is a device that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move it away.
The sound of your BLUETOOTH device cannot be heard on the receiver.

- Turn up the volume on your BLUETOOTH device first, and then adjust the volume using + on the remote control (or MASTER VOLUME on the receiver).
Severe humming or noise.

- If there are obstructions between the receiver and your BLUETOOTH device, remove them or move the receiver and/or the BLUETOOTH device away from the obstructions.
- If there is a device that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move it away.
- Turn down the volume of the connected BLUETOOTH device.
The Control for HDMI function does not work properly.

- Check the HDMI connection with the receiver (refer to the supplied Operating Instructions).
- Enable the Control for HDMI function on the TV. For details, refer to the operating instructions of the TV.
- Wait for a while, and then try again. If you unplug the receiver, it will take a while before the operation is completed. Wait for 15 seconds or longer, and then try again.
- If you unplug the HDMI cable or change the connection, repeat the procedures of “Preparing to use the “BRAVIA” Sync function.”
- Make sure your TV is connected to the HDMI TV OUT jack of the receiver.
- Press AMP MENU, then set “<HDMI>” - “CTRL_HDMI” to “CTRL ON” on the display panel.
- Make sure the connected device supports the Control for HDMI function.
- Enable the Control for HDMI function on the connected device. For details, refer to the operating instructions of the connected device.
- The types and number of devices that can be controlled by the “BRAVIA” Sync feature are restricted by the HDMI CEC standard as follows:
  - Recording devices (Blu-ray Disc recorders, DVD recorders, etc.): up to 3 devices
  - Playback devices (Blu-ray Disc players, DVD players, etc.): up to 3 devices
  - Tuner-related devices: up to 4 devices (one of them is used by this receiver)
  - Audio system (receiver/headphones): up to 1 device (used by this receiver)
The remote control does not function.

- Point the remote control at the remote control sensor on the receiver.
- Remove any obstructions between the remote control and the receiver.
- Replace both of the batteries in the remote control with new ones if they are weak.
Reverting to the factory default settings

You can clear all memorized settings and restore the receiver to the factory default settings by the following procedure. Be sure to use the buttons on the receiver to perform this operation.

1. Turn off the receiver.

2. Hold down (power) on the receiver for 5 seconds.
   
   “CLEARING” flashes on the display panel for a while, then changes to “CLEARED *”.

**Note**

- It takes a few minutes for the memory to be cleared completely. Do not turn the receiver off until “CLEARED *” appears on the display panel.
Resetting sound fields to the default settings

Be sure to use the buttons on the receiver to perform this operation.

1 Turn off the receiver.
2 While holding down MUSIC, press (power) on the receiver.
   “S.F. CLEAR” appears on the display panel and all sound fields are reset to their default setting.
Customer support websites

Refer to the following websites for the latest information on the receiver.

For customers in the USA:
http://esupport.sony.com/

For customers in Canada:
http://esupport.sony.com/CA/

For customers in Europe:
www.sony.eu/support

For customers in Asia-Pacific countries and regions:
http://www.sony-asia.com/support
This receiver incorporates Dolby (*1) Digital, Pro Logic Surround and the DTS (*2) Digital Surround System.

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