## **DENON®**

## **DENON HOME AMP**

**Wireless Streaming Amplifier** 

## **Owner's Manual**



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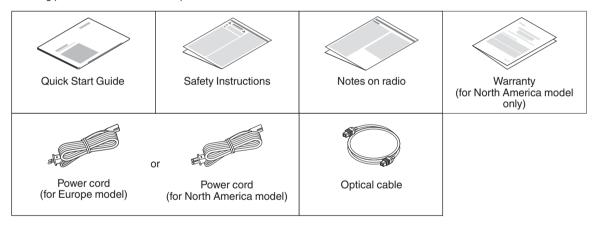
Thank you for purchasing this Denon product.

To ensure proper operation, please read this owner's manual carefully before using the product.

After reading this manual, be sure to keep it for future reference.

## **Accessories**

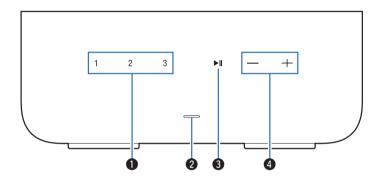
Check that the following parts are included with the product.





### Part names and functions

## **Front panel**



#### Quick select buttons (1 - 3)

Register input source, volume and other settings to these buttons or recall those settings. ( ) p. 30)

#### Status LED

Please refer to the "Status LED table" for LED color and state meaning. ( $\nearrow$  p. 37)

#### 3 Play/Pause key (►/II)

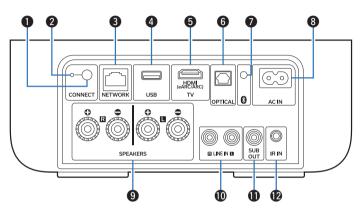
- Press this key to pause during playback. If pressed while paused or stopped, resumes playback from the last track played.
- Double-tap the key to play the next track.
- Triple-tap the key to restart the current track or play the previous track.
- Press and hold the key for about 5 seconds to enter Deep Standby mode. (Pp p. 44)

#### ■ Volume keys (+, -)

These adjusts the volume level.



## Rear panel



- 1 CONNECT button Used for Wi-Fi setup. (☞ p. 14)
- 2 CONNECT LED Indicates the status of this unit (Prop. 37).
- NETWORK connector

  Used to connect this unit to a wired Ethernet network. ( p. 13)
- USB port Used to connect USB storage devices. (such as USB flash drives) ( p. 9)

(STV connector (HDMI (eARC/ARC))
Used to connect an eARC/ARC function-compatible TV.
(FF p. 8)

- (§) OPTICAL input connector

  Used to connect audio devices equipped with optical audio output connector. (☞ p. 8)
- 3 AC inlet (AC IN)
  Used to connect the power cord. (PP p. 10)
- ¶ Speaker terminals (SPEAKERS)
  Used to connect speakers. (© p. 7)
- **(b)** LINE IN connectors
  Used to connect audio devices equipped with analog audio output connectors. ((☼) p. 9)
- (1) Subwoofer connector (SUB OUT)
  Used to connect a powered subwoofer. (127 p. 8)
- \*\*DIR IN jack\*\* Used to connect a control box, etc. (\*\*\* p. 10)



## Connecting

## Connecting

## ■ Connecting speakers

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

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



2 Turn the speaker terminal counterclockwise to loosen it.



Insert the speaker cable's core wire to the hilt into the speaker terminal.

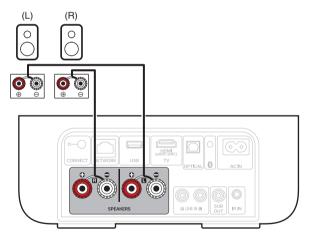


Turn the speaker terminal clockwise to tighten it.



#### NOTE

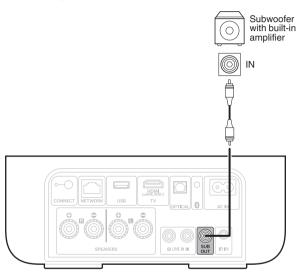
- Disconnect this unit's power plug from the power outlet before connecting the speakers. Also, turn off any connected powered subwoofers.
- Connect so that the speaker cable core wires do not protrude from the speaker terminal. The protection circuit may be activated if the core wires touch the rear panel or if the + and - sides touch each other.
- Never touch the speaker terminals while the power cord is connected. Doing so could result in electric shock.
- Use speakers with an impedance of 4 16  $\Omega$ /ohms. The protection circuit may be activated if speakers with an impedance other than specified are used.





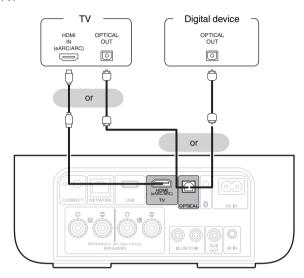
## ■ Connecting a subwoofer

Connect the SUB OUT connector to an input on your powered subwoofer or your subwoofer amplifier.



#### ■ Connecting a digital device

Connect this unit to a device with digital output connectors, such as a TV.



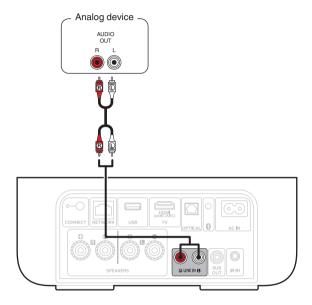


- When connecting a TV to this unit, turn off the audio output of the TV's internal speakers. See the owner's manual of your TV for details.
- When connecting the HDMI (eARC/ARC) terminal of this unit to your TV, connect it to the HDMI input terminal of your TV that supports the eARC/ARC function.
- When connecting to a TV that does not support the eARC/ARC function, use an optical connection to play the TV audio.



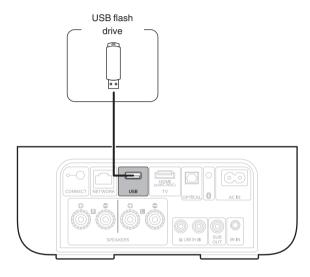
## ■ Connecting an analog device

Connect the LINE IN connectors to an audio playback device with analog audio output.



### ■ Connecting a USB flash drive

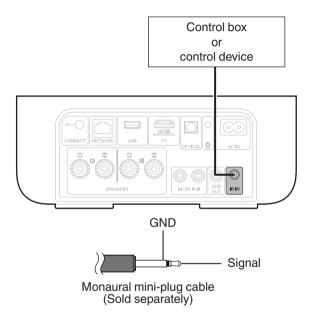
Connect a FAT32 or NTFS formatted USB flash drive containing digital music files to the USB port.





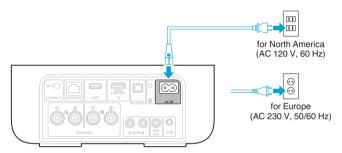
### ■ Connecting an external control device

This unit can be controlled by connecting a control box or other control device to the IR IN jack of this unit.



#### ■ Connecting the power cord

Connect the power cord included in the box to the back of this unit and the plug to a wall outlet.





## **Getting the HEOS app**

You can use many online music streaming services from the HEOS app. Depending upon your geographical location, there are several options to choose from.

Download the HEOS app for iOS or Android by searching App Store<sup>®</sup>, Google Play™ store or Amazon App Store for "HEOS".







For the purpose of improvement, the specifications and design are subject to change without notice.



## Setting up the HEOS app for the first time with a HEOS Built-in device

Once you have placed this unit in your listening room and have downloaded the HEOS app, you are ready to configure this unit for music playback. This involves following a few simple steps to get this unit connected to your existing home network:



- DO NOT connect the Ethernet cable if you are connecting this unit to a wireless network. If you are connecting this unit to a wired network, use an Ethernet cable to connect this unit to your network or router.
- Make sure your mobile device is connected to your wireless network (the same network you want this unit connected to).

You can check this in the "Settings" - "Wi-Fi" menu of your iOS or Android device.



- If your wireless network is secure, make sure you know the password to join your network.
- 2 Launch the HEOS app on your mobile device.



- 3 Tap the "Setup Now" button at the top of the screen.
- 4 Follow the instructions to add this unit to your wireless network.



 If you have any problems connecting this unit, jump to the Troubleshooting section (F) p. 31).



## Adding the registration of HEOS Built-in devices in the HEOS app

The HEOS system is a true multi-room audio system that automatically synchronizes audio playback between multiple HEOS Built-in devices so that the audio coming from different rooms is perfectly in sync and always sounds amazing! You can easily add up to 32 HEOS Built-in devices to your HEOS system.

## Adding wired HEOS Built-in devices

Just connect the HEOS Built-in devices to your home network using an Ethernet cable and the HEOS Built-in device will appear on your HEOS app as a new room in the Rooms screen.

At your convenience, you can assign a name to the HEOS Built-in device to indicate which room you have it placed in.

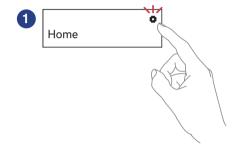


- Use only a shielded STP or ScTP LAN cable which is easily available at electronics stores (CAT-5 or greater recommended).
- The normal shielded-type LAN cable is recommended. If a flat-type cable or unshielded-type cable is used, other devices could be affected by noise.
- Do not connect a NETWORK connector directly to the LAN port/Ethernet connector on your computer.



## **Adding wireless HEOS Built-in devices**

You can add additional wireless HEOS Built-in devices to your HEOS system by selecting "Add Device" from the HEOS app's settings menu and follow the instructions:







### **HEOS** account

#### What is a HEOS account?

A HEOS account is a master account or "keychain" for managing all of your HEOS music services with one single username and password.

## Why do I need a HEOS account?

With a HEOS account, you only need to enter your music services login names and passwords once. This allows you to easily and quickly use multiple controller apps on different devices. You just log into your HEOS account on any device and you will have access to all of your associated music services, play history and custom playlists, even if you are at a friend's house listening to music on their HEOS system.

#### Signing up for a HEOS account

You will be instructed to signup for a HEOS account the first time you try to access any music service from the "Home" screen of the HEOS app.

## ■ Changing your HEOS account

- 1 Tap the "Home" tab.
- 2 Select the Settings icon **the upper-right corner of** the screen.
- 3 Select the HEOS Account icon 8.
- Change your location, change your password, delete your account or sign out of your account.



## **Dirac Live Setup**

Dirac Live is a powerful solution that helps you get the best from your speakers.

Dirac Live and its various features use research-driven acoustic processing algorithms to analyze your room and reduce its impact on sound quality, resulting in speaker performance that would be physically impossible otherwise.

You will need to create a Dirac Live account and purchase a license before running Dirac Live.

You can create an account and purchase a license on the website below.

www.dirac.com/denon/



See the Dirac Live Room Correction manual for details on Dirac Live.

https://manuals.denon.com/DiracLiveAmp/ALL/EN/





## Playing from streaming music services

A music service is an online music company that provides access to vast music collections via free and/or paid subscriptions. Depending upon your geographical location, there are several options to choose from.

#### NOTE

 The HEOS app and brand is not affiliated with any manufacturer of any mobile device. Availability of music services may vary by region. Not all services may be available at time of purchase. Some services may be added or discontinued from time to time based on decisions of the music service providers or others.

## Selecting a room/device

Tap the "Rooms" tab. Select "Denon XXXXXXX" if there are multiple HEOS built-in devices.



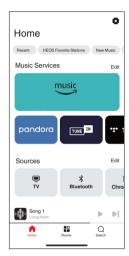
 Tap the 3 dots menu icon icon at the top right to switch edit mode. You can change the displayed name.





## Selecting the music track or station from music sources

Tap the "Home" tab and select a music source.





• All music services displayed may not be available in your location.

### **9** Browse the music to play.

After selecting a music track or radio station the app will automatically change to the "Now Playing" screen.







 The "Now Playing" banner appears on the "Home" screen, "Rooms" screen and "Search" screen. You can check the song currently playing and perform simple playback operations no matter which screen is displayed.



## Listening to the same music in multiple rooms

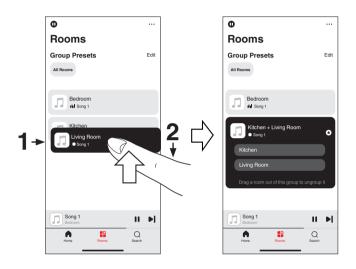
This system is a true multi-room audio system. You can create one or more HEOS groups to automatically synchronize audio playback between multiple products with HEOS Built-in so that the music playing different rooms is perfectly in sync and always sounds amazing! You can easily add up to 32 products to your system in total. You can group up to 16 individual products to have them play the same song fully synchronized.

## **Grouping rooms**

- Press and hold your finger on room that is not playing music.
- 2 Drag it into the room that is playing music and lift your finger.

The two rooms will be grouped together into a single device group and both rooms will be playing the same music in perfect sync.







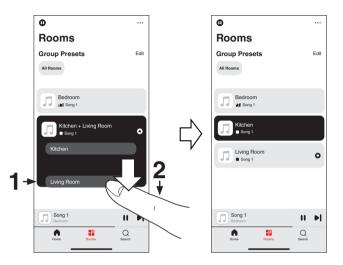
## **Ungrouping rooms**

- 1 Press and hold your finger on room that you want to remove from the group.
- **2** Drag it out of the group and lift your finger.

#### NOTE

• You can not remove the first room that started playing the music before grouping.





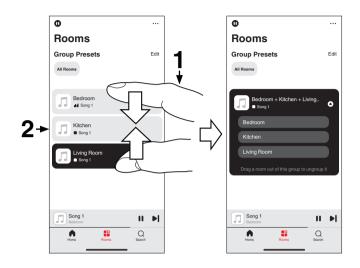


## **Grouping all rooms**

You can easily group all rooms (up to 16 rooms) together by using a "pinch" gesture.

- Place two fingers on the screen over the list of rooms.
- Quickly pinch your two fingers together and release.
  All of your rooms will be joined together and begin playing the same music in perfect sync.







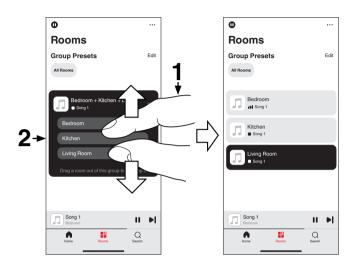
## **Ungrouping all rooms**

You can easily ungroup all of your rooms by using a "spread" gesture.

- 1 Place two fingers close together on the screen over list of rooms.
- Quickly spread your two fingers apart from each other and release.

All of your rooms will be ungrouped.







## **Listening to Internet Radio**

The HEOS system includes access to more than 100,000 free internet radio streams from all corners of the globe via the TuneIn radio service. Just select the TuneIn logo from the "Home" screen and browse among the 100,000 stations neatly organized into popular categories and select a station that appeals to your mood.



 If you have a TuneIn account, tap "Edit" from the "Music Services" section of the "Home" screen, select "TuneIn" and sign in to the TuneIn service to access all "My Favorites" TuneIn stations.

#### NOTE

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

## Playing music stored on your mobile

- 1 Tap the "Home" tab.
- **9** Select "This Phone" from the "Sources" section.
- 3 Browse the local music on your phone and select something to play.

## Playing back files stored on a PC or NAS

- 1 Tap the "Home" tab.
- **9** Select "Server" from the "Sources" section.
- 3 Select the name of your networked PC or NAS (Network Attached Storage) server.
- Browse the music on your PC/NAS and select something to play.



## Playing music from an external device

- 1 Connect an external device to the digital optical, analog RCA stereo or HDMI input on the back of this unit.
- 2 Tap the "Home" tab.
- 3 Select "Inputs" from the "Sources" section.
- 4 Select the name of this unit and which input to which you connected the audio device in step 1.
- 5 Initiate playback on the audio device.

#### ■ HDMI control function

Connect this unit to a TV that supports the HDMI control function with an HDMI cable and enable the HDMI control setting on the TV to perform basic operations on this unit (changing the input source, turning the power on and off, adjusting the volume) with the remote control of the TV.

Refer to "About HDMI" (Pp. 46) for more information about the HDMI control function.

## Playing music from a USB flash drive

- 1 Insert a FAT32 or NTFS formatted USB flash drive into the USB port on the rear panel of this unit.
- **7** Tap the "Home" tab.
- Select "USB" from the "Sources" section.
- Select the name of this unit.
- 5 Browse the music on your USB flash drive and select something to play.

#### NOTE

- It may take several minutes for the name of this unit to appear in the "USB" list if you have a large number of files on your USB flash drive.
- It is not possible to connect and use a computer via the USB port of this unit using a USB cable.



## Playing music from a Bluetooth device

- 1 Activate the Bluetooth setting on your mobile device.
- Press and hold the Bluetooth button (3) located on the back of this unit for 3 seconds and release the button when you see a pattern of two green flashes on the status LED.
- 3 Select "Denon Home Amp" from the list of available Bluetooth devices.

In a few seconds, your mobile device will indicate that it is connected to this unit.

4 Play music using any app on your device.

The sound will now play from this unit.

#### NOTE

 If no sound is heard, disconnect and reconnect Bluetooth connections from your Bluetooth device.



## **AirPlay function**

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



- Input source will be switched to "AirPlay" when AirPlay playback is started.
- You can stop AirPlay playback by choosing another input source.
- The screen may differ depending on the OS and software versions.

#### This device supports AirPlay 2<sup>®</sup>.

Sync multiple AirPlay 2 compatible devices/speakers for simultaneous playback.



## Playing songs from your iPhone, iPod touch, iPad or Mac

You can stream music stored in your "iPhone/iPod touch/iPad/Mac" directly to this unit.

- 1 Connect your iPhone, iPod touch, iPad or Mac Wi-Fi to the same network as this unit.
  - For details, see your device's manual.
- Open Apple Music and play music from your iPhone, iPod touch, iPad or Mac.
- 3 Tap or click the AirPlay icon and select this unit.

[Example] iOS 15 or macOS 13



[Example] iOS 10





- You can also use AirPlay to stream music from other applications. Open the Control Center, tap or click the AirPlay icon, then select this unit.
- To use AirPlay, your iOS device must support iOS 10.0.2 or later, or OS X Mountain Lion 10.8 or later

## **Playing songs from Windows PC**

- Install iTunes 10, or later, on a Windows PC that is connected to the same network as this unit.
- 2 Start iTunes and click the AirPlay icon to select this unit.

[Example] iTunes



3 Choose a song and click play in iTunes.

The music will stream to this unit.



• For information about how to use iTunes, also see the Help for iTunes.



# Play a song from your iPhone, iPod touch, iPad or Mac on multiple synced devices (AirPlay 2)

Songs from an iPhone, iPod touch, iPad or Mac can be synced with multiple AirPlay 2 supported devices for simultaneous playback.

Play the song on your iPhone, iPod touch, iPad or Mac.
AirPlay icon is displayed on the iPhone, iPod touch, iPad or Mac screen.



### 2 Tap or click the AirPlay icon and select this unit.

Displays a list of devices/speakers that can be played back on the same network.

• A circle is displayed to the right of AirPlay 2 compatible devices.



- 3 Select the devices/speakers you want to use.
  - Multiple AirPlay 2 compatible devices can be selected.





 To use AirPlay 2, your iOS device must support iOS 11.4 or later, or macOS Catalina or later.



## **Spotify Connect function**

Spotify is all the music you'll ever need. Millions of songs available instantly. Just search for the music you love, or let Spotify play you something great. Spotify works on your phone, tablet, computer and home speakers. So you'll always have the perfect soundtrack for whatever you're doing. Now you can enjoy Spotify with your free account as well as a Premium account.

Use your phone, tablet or computer as a remote control for Spotify. Go to **www.spotify.com/connect** to learn how.

The Spotify software is subject to third party licenses found here: www.spotify.com/connect/third-party-licenses

## Playing Spotify music with this unit

Download the "Spotify App" onto your iOS or Android device beforehand.

- 1 Connect the Wi-Fi settings of the iOS or Android device in the same network as this unit.
- 2 Launch the Spotify App.
- 3 Play back a Spotify track.
- 4 Tap the Spotify icon [6] to select the unit.

The music will stream to this unit.



## **Quick Select function**

Input source, volume level, sound mode, night mode, dialog enhancer and Dirac Live Filter settings can be registered to the Quick select buttons (1 - 3).

1 Press and hold down one of the Quick select buttons (1 - 3) on the front panel for 3 seconds.

The current settings are registered to the selected button.



- The status LED on the main unit flashes once when registration is complete.
- To recall the registered settings, press the Quick select button on the front panel.

#### [Default settings]

Button	Input source	Volume	Sound mode	Night mode	Dialog enhancer	Dirac Live Filter	
Quick Select 1	TV						
Quick Select 2	LINE IN	25	Stereo	Off	Off	Off	
Quick Select 3	OPTICAL						



## **Troubleshooting**

If a problem should arise, first check the following:

- 1. Are the connections correct?
- 2. Is the set being operated as described in the owner's manual?
- 3. Are the other devices operating properly?



• If steps 1 to 3 above do not improve the problem, restarting the device may improve the problem. Remove and re-insert the power cord of the unit.

If this unit does not operate properly, check the corresponding symptoms in this section.

If the symptoms do not match any of those described here, consult your dealer as it could be due to a fault in this unit. In this case, disconnect the power immediately and contact the store where you purchased this unit.



## Cannot connect this unit to the network

- Make sure your mobile device is connected to your wireless network before setting up your device. (12) p. 12)
- Alternatively, you can connect this unit to your network router using an Ethernet cable sold separately. Once connected via Ethernet, the HEOS app should recognize the device and you can manually move it to your wireless network using "Settings" "My Devices" ("Device Name") "Advanced" "NETWORK SETTINGS". (\*\*\*) p. 13)

## Cannot pair a Bluetooth mobile device with this unit

• The connection from the Bluetooth mobile device is malfunctioning. Power cycle the mobile device, remove the pairing information and re-pair this unit to the mobile device.

### **Cannot hear Bluetooth music**

- · Your Bluetooth mobile device is not paired with this unit. Re-pair this unit to the mobile device.
- This unit is Wi-Fi mode etc. Pair and connect Bluetooth device to this unit.
- The Bluetooth mobile device is connected to another audio device. Make sure your Bluetooth device is connected to this unit.
- The volume on your Bluetooth mobile device or your speaker is set too low. Check the volume on the Bluetooth mobile device. Check the volume on this unit.



## The Power is turned off and the status LED flashes in red (fast blink)

- The protection circuit has been activated due to a rise in temperature within this unit. Turn the power off, wait about an hour until this unit cools down sufficiently, and then turn the power on again.
- Check the speaker connections. The protection circuit may have been activated because speaker cable core wires came in contact with each other or a core wire was disconnected from the connector and came in contact with the rear panel of this unit. After unplugging the power cord, take corrective action such as firmly re-twisting the core wire or taking care of the connector, and then reconnect the wire. (127) p. 7)

## Music cuts out or delays sometimes

- Make sure your Internet connection is operating correctly. If you are sharing your network with other users or devices, they may be using most of your bandwidth (especially if they are streaming video).
- Make sure this unit is within range of your wireless network.
- Make sure this unit is not located near other electronic devices that could interfere with its wireless connectivity (like microwave ovens, cordless phones, TVs, etc.).



## Cannot connect to a network using an iOS device

- This unit supports Apple's "WAC (Wireless Accessory Configuration)" setup mode. WAC setup mode allows you to connect this unit to your network without requiring you to type in the network name and password.
  - 1. The CONNECT LED on the rear of this unit will slowly blink amber to indicate that WAC setup mode is active. If the rear LED is not blinking amber, press and hold volume down (-) and ▶■■ buttons on this unit for 3 seconds until you see the LED blinking amber.
- 2. On your iOS device, go to the Wi-Fi menu under Settings.
- 3. Select "Denon Home Amp" under SET UP NEW AIRPLAY SPEAKER... at the bottom of the list.
- 4. Select the network you want this unit to connect to and select "Next".
- 5. Follow the instructions on the screen to complete setup.
- 6. When the connection is complete, the status LED on the front of this unit will turn solid blue.

This unit will stay in WAC setup mode for 15 minutes. If this unit is not setup within 15 minutes, it will revert back to its previous network connection. Press the ►■ button on this unit if you want to cancel WAC setup mode.

## I hear a delay when using the external input with my TV

- If you are connecting the External input with your cable or satellite box for enjoying TV audio through multiple HEOS built-in devices, you may hear a delay between when you see someone speak and when you hear the audio. This is because the HEOS system must buffer the audio before it sends it out to the HEOS built-in devices so that it arrives at all devices at the same time.
- You can avoid this delay by listening only to the device which is directly connected to the set top box.



#### Cannot connect to a WPS network

 If your wireless router support WPS (Wi-Fi Protected Setup<sup>™</sup>) this unit can optionally connect to your network using the "Push Button" method by following these steps:

Wi-Fi Protected Setup™ is trademarks of Wi-Fi Alliance.

- 1. Press the WPS button on your router.
- 2. Within 2 minutes, press and hold the CONNECT button on the rear panel of this unit for 5 seconds.
- 3. The LED on the front of this unit will flash green for several seconds as it connects to your WPS router.
- 4. When the connection is complete, the LED on the front of this unit will turn solid Green.

## Resetting this unit

Resetting this unit will clear out the wireless network info, EQ, and name but retain it's current software. You will have to use Settings - Add Device to reconnect this unit to your home network before it can be used.
 To reset this unit, press and hold the CONNECT and Bluetooth (3) buttons located on the back of this unit for 5 seconds until the front LED begins to flash amber.

## The HDMI control function does not work

#### The HDMI control function does not work.

- You cannot operate devices that are not compatible with the HDMI control function. In addition, depending on the connected device or the settings, the HDMI control function may not work. In this case, operate the external device directly.
- Check that the HDMI control function setting is enabled on the TV connected to this unit.

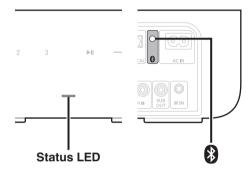


## Resetting the firmware to the default state

When the network function or this unit does not operate correctly, the problem may be solved by resetting the firmware to the default state.

- It is confirmed that the network connection has no problem, but the unit cannot connect to the Internet.
- The solution described in "Resetting this unit" does not work. (@p. 35)

For such cases, perform the following operation:



- 1 Unplug the power cord from the power outlet.
- 2 Plug in the power cord while holding down the Bluetooth(3) button.
- 3 Release the button after the status LED starts to blink in orange.

When the status LED switches from blinking orange to solid, the recovery process is complete.



- Since this process includes a firmware recovery, it takes some time to complete.
- This process will clear out all the information that you set.
- After performing this RESET to default state, an update to actual firmware version is needed.
- Do not unplug the power cord until the entire process completes.
- If the problem is not solved after performing this operation, contact our customer service center.



## **Status LED table**

The LEDs on the front panel and rear panel change to indicate the current status.

Status	Front LED action	Rear LED action	Description		
Deep Standby mode	(off)	(off)	Power is off, or this unit is in Deep Standby mode. (@p. 44)		
Network Standby mode	(dimmed solid)	(off)	This unit is in Network Standby mode (Connected to your network). (Fig. p. 43)		
	(dimmed solid)	(dimmed solid)	This unit is in Network Standby mode (Not connected to your network). (P p. 43)		



Status	Front LED action	Rear LED action	Description		
	(blink)	(off)	This unit is starting up or connecting to the network.		
Power on	(solid)	(off)	This unit is connected to the network.		
	(solid)	(solid)	This unit is unable to connect to the network. Try to connect this unit again.		



Status	Front LED action	Rear LED action	Description	
	(fast blink)	(fast blink)	This unit is connecting to the network via WPS.	
WPS	(for 3 sec. solid)	(solid)	This unit is connected to the network via WPS.	
	(for 3 sec. solid)	(solid)	WPS has timed out.	



Status	Front LED action	Rear LED action	Description
	(two blinks)	(two blinks)	This unit is pairing via Bluetooth.
Bluetooth	(one blink)	(off)	This unit is paired via Bluetooth.
	(for 3 sec. solid)	(for 3 sec. solid)	This unit failed to pair to the Bluetooth device. Try to pair again. (🖙 p. 25)



Status	Front LED action	Rear LED action	Description		
Volume anti-	(quick blink)	(off)	Volume is being adjusted.		
Volume setting	(slow blink)	(off)	This unit is muted.		
Eirmuora undata	(blink)	(blink)	Firmware is being updated.		
Firmware update	(slow blink (Not fade))	(off)	There is a firmware error. Check your Internet connection quality, relaunch the app, then try to update the firmware again.		



Status	Front LED action	Rear LED action	Description		
	(solid)	(solid)	There was a setup error. Check your usage environment, then follow the correct procedure to try setup again. If the error occurs again, restore factory settings and try setup again. (127 p. 36)		
Error	,	,			
	*		There is a hardware error. Unplug the power cord, wait about 30 seconds, then plug the power cord back in.		
	(fast blink)	(off)			
Reset	*		Factory settings have been restored.		
	(fast blink)	(solid)			



## **Power management**

### ■ Network Standby mode

This unit automatically enters "Network Standby mode" to save power in the following cases. This unit will automatically resume to full power whenever the device is selected and playing music.

During "Network Standby mode", the status LED lights in dim blue or dim amber.

#### ☐ Ethernet

After 20 minutes of no operation and no network access after playing music via Ethernet.

#### ☐ Wi-Fi

After 20 minutes of no operation and no network access after playing music via Wi-Fi.

#### ☐ USB

After 20 minutes of no operation and no network access after playing music from a USB flash drive.

#### □ Bluetooth

After the Bluetooth connection is disconnected and there is 20 minutes of no operation and no network access after playing music via Bluetooth.

### Optical input

After 20 minutes of no operation after optical device is put into standby.

#### ■ TV HDMI (eARC/ARC)

Connect this unit and the eARC/ARC compatible TV with HDMI cable and play TV. 20 minutes after TV is put into standby.



### ■ Deep Standby mode

This unit also has the ability to automatically enter "Deep Standby mode" whenever the wired or wireless network connection is removed for more than 60 minutes in "Network Standby mode". The front panel LED will turn off during "Deep Standby mode".

To wake this unit from "Deep Standby mode",

- · Press any button on this unit.
- Input audio signal to optical input.
- CEC (Consumer Electronics Control) command over HDMI eARC/ARC



 You also press the ►II key for 5 seconds, the device enters the Deep Standby.

#### NOTE

 If "Power Saving" is set to "Quick Start" in the HEOS app, the unit will not switch to Deep Standby Mode. ("Settings" - "My Devices" - ("Device Name") -"Power Saving")

### ■ Off

To completely turn off the power to the device, you must remove the mains plug from the power outlet.



## Supported file types and codecs

Sampling frequency	Bit length	File extension	Codec	Bit rates
32/44.1/48/88.2/96/176.4/192 kHz	16/24 bit	wav	PCM	-
32/44.1/48 kHz	16 bit	mp3	MPEG-1 Audio Layer 3 CBR/VBR	32 - 320 kbps
32/44.1/48 kHz	16 bit	m4a aac	AAC-LC	48 - 320 kbps
32/44.1/48 kHz	16 bit	wma	wma9 CBR	CBR:48 - 192 kbps
44.1/48/88.2/96/176.4/192 kHz	16/24 bit	flac	flac	-
44.1/48/88.2/96/176.4/192 kHz	16/24 bit	m4a	ALAC	_
2.8/5.6 MHz	1 bit	dff dsf	DSDIFF DSF	_

#### NOTE

- For USB flash drive, the limited numbers of folders and files that can be played back on this unit are as follows.
  - Number of folder directory levels: 8 levels (The limited number includes the root folder.)
  - Number of folders: 500
  - Number of files: 5000 (The allowable number of files may differ according to the USB flash drive capacity and the file size.)
- Files protected by DRM, such as Apple's FairPlay DRM, are not supported.
- The ALAC decoder is distributed under the Apache License, Version 2.0 (http://www.apache.org/licenses/LICENSE-2.0)

## **Supported audio formats (Optical)**

2-channel Linear PCM:2-channel, 32 kHz – 192 kHz, 16/20/24 bit Bitstream:Dolby Digital



### **About HDMI**

This unit supports the following HDMI functions.

• eARC (Enhanced Audio Return Channel)/ARC (Audio Return Channel) function

Enjoy movies, music, etc., on your TV simply by connecting an eARC/ARC function-compatible TV to this unit via HDMI.

HDMI control function

Connect an HDMI control-compatible TV and this unit via HDMI and enable the HDMI control to enable linked control from either device.

- Input source switching
- If the TV is turned on, this unit automatically powers on and switches the input source.
- · Power off link
  - The TV power off operation is linked so this unit also turns off.
- Volume adjustment
  - The volume of this unit can be adjusted using the TV remote control.
- Audio output destination switching
   If this unit is turned on, TV audio is output from this unit. If this unit is turned off, TV audio is output from the speakers of the TV.



• Some functions may not operate depending on the connected TV.



### **Trademark information**



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Wi-Fi Certification provides assurance that the device has passed the interoperability test conducted by the Wi-Fi Alliance, a group that certifies interoperability among wireless LAN devices.



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# **COON READY**

Being Roon Ready means that Denon uses Roon streaming technology, for an incredible user interface, simple setup, rock-solid daily reliability, and the highest levels of audio performance, without compromise.



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## **Specifications**

#### ■ Audio section

Power amplifier

Rated output: 100 W + 100 W (8 Ω/ohms, 20 Hz - 20 kHz with 0.05 % T.H.D. LPF 20 kHz)

125 W + 125 W (4  $\Omega$ /ohms, 1 kHz with 0.05 % T.H.D.)

Output connectors:  $4 - 16 \Omega/\text{ohms}$ 

S/N (IHF-A): OPTICAL IN, HDMI IN (ARC/eARC): 105 dB

LINE IN: 91 dB

Frequency response: 20 Hz - 40 kHz ±3 dB

• Analog (LINE IN)

Input sensitivity/impedance: 200 mV/20 k $\Omega$ /kohms

Maximum allowable input level: 2.5 V



#### ■ Wireless LAN section

Network type (wireless LAN standard): Conforming to IEEE 802.11a/b/g/n/ac

(Wi-Fi® compliant) \*1

Security: WEP 64 bit, WEP 128 bit

WPA/WPA2-PSK (AES) WPA/WPA2-PSK (TKIP)

WPA3-SAE (AES)

**Used frequency range:** 2.4 GHz, 5 GHz

\*1 The Wi-Fi® CERTIFIED Logo and the Wi-Fi CERTIFIED On-Product Logo are registered trademarks of the Wi-Fi Alliance.

#### ■ Bluetooth section

Communications system:Bluetooth Specification Version 4.2Transmission power:Bluetooth Specification Power Class 1Maximum communication range:Approx. 98.4 ft/30 m in line of sight \*2

Used frequency range: 2.4 GHz

Modulation scheme: FHSS (Frequency-Hopping Spread Spectrum)

Supported profiles: A2DP (Advanced Audio Distribution Profile) 1.3.2

AVRCP (Audio Video Remote Control Profile) 1.6.2

Corresponding codec: SBC

**Transmission range (A2DP):** 20 Hz – 20,000 Hz

\*2 The actual communication range varies depending on the influence of such factors as obstructions between devices, electromagnetic waves from microwave ovens, static electricity, cordless phones, reception sensitivity, antenna performance, operating system, application software etc.



#### ■ General

Operating temperature:  $41 \,^{\circ}\text{F} - 95 \,^{\circ}\text{F} \, (5 \,^{\circ}\text{C} - 35 \,^{\circ}\text{C})$ 

**Power supply:** AC 120 V, 60 Hz (for North America)

AC 230 V, 50/60 Hz (for Europe)

Power consumption: 70 W

Power consumption in Network Standby mode:

Standby modes	Setting items in the HEOS app				Power consumption
Stallaby filodes	TV Input	Auto-Play	Wi-Fi	Bluetooth	Power consumption
Normal standby	None	Off	Off	Off	1.7 W (for North America) 1.9 W (for Europe)
Optical standby	Optical	On	Off	Off	1.7 W (for North America) 1.9 W (for Europe)
CEC standby	HDMI ARC/ eARC	On	Off	Off	1.7 W (for North America) 1.9 W (for Europe)
Wi-Fi connect (5 GHz)	None	Off	On	Off	1.8 W (for North America) 1.9 W (for Europe)
Bluetooth connect	None	Off	Off	On	1.7 W (for North America) 1.9 W (for Europe)
Ethernet connect	None	Off	Off	Off	1.7 W (for North America) 1.9 W (for Europe)
All standby	HDMI ARC/ eARC	On	On	On	2.0 W (for North America) 2.2 W (for Europe)

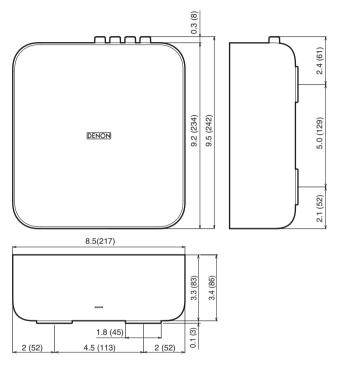
Power consumption in Deep Standby mode: 0.3 W (for North America)

0.4 W (for Europe)

For the purpose of improvement, the specifications and design are subject to change without notice.



■ **Dimensions** (Unit : in. (mm))



■ Weight: 4 lbs 10 oz (2.1 kg)





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