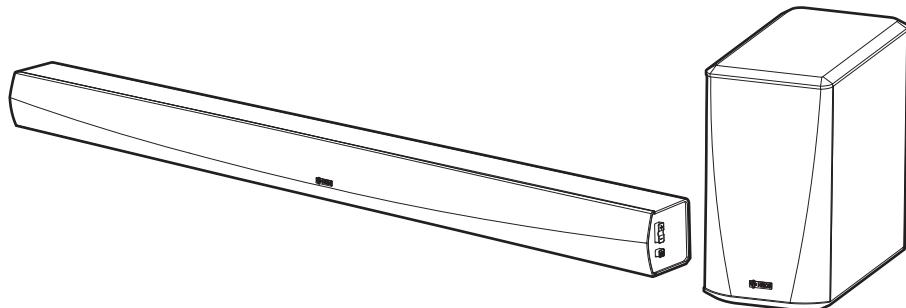




# Owner's Manual

HEOS HomeCinema



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Thank you for purchasing this HEOS product. To ensure proper operation, please read this owner's manual carefully before using the product.

**NOTE**

- THIS DOCUMENT CONTAINS INFORMATION THAT IS SUBJECT TO CHANGE WITHOUT NOTICE.  
For latest information, please visit <http://www.HEOSbyDenon.com>

## Introduction

The HEOS HomeCinema is part of the HEOS wireless multi-room sound system that enables you to enjoy your favorite music anywhere and everywhere around your home. By utilizing your existing home network and the HEOS app on your iOS or Android™ device, you can explore, browse, and play music from your own music library or from many online streaming music services.

- True multi-room audio - play different songs in different rooms or the same song in every room
- Utilizes your existing home wireless network for quick and easy setup
- Industry leading microsecond audio synchronization between HEOS device
- Legendary Denon audio quality
- If you are in a hurry, you can be enjoying great sounding music in no time by following the steps outlined in the HEOS Quick Start Guide (packaged with your HEOS device).



Please continue reading this Owner's Manual for more detailed information about the features and benefits of your HEOS HomeCinema.

# Before your begin

## NOTE

- If you have already installed at least one HEOS device, please skip to the section “Adding more HEOS devices” ( p. 20).

## System requirements

Before you begin installing your first HEOS device, please make sure you understand and meet a few basic requirements.

### ■ Network requirements

**Wireless Router** - In order to use your HEOS music system, you should have a working wireless (Wi-Fi) network in your home. If you do not have a wireless network, please contact your local Denon dealer or electronics retailer to assist you with purchasing and installing a wireless network in your home.

**High Speed Internet Connection** - HEOS accesses the Internet to stream music to your home from many popular online music services. HEOS is also designed to provide you with software updates, which are delivered via your home Internet connection. DSL, Cable, and Fiber services will provide the best experience and reliability. You may experience performance issues with slower Internet connections like satellite based services.

## ■ Controller requirements

You can control your HEOS wireless multi-room sound system using the free HEOS app on any iOS or Android mobile device that meets these minimum requirements:



### iOS Minimum Requirements

- iOS version 7.0 or later
- iPhone® 4 or newer
- iPad® 2 or newer
- iPod touch® (5th generation) or newer

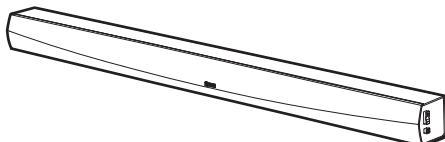


### Android Minimum Requirements

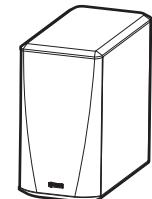
- Android OS version 4.0 or later
- All resolutions

## Getting to know your HEOS HomeCinema

Unpack your speaker from the box and verify that the following items are included:



HEOS HomeCinema Soundbar  
(Soundbar)



HEOS HomeCinema Subwoofer  
(Subwoofer)



Quick Start Guide



Safety Instructions



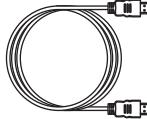
Warranty  
(North America model only)



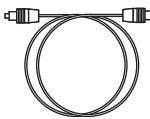
Extended Protection Plan  
(North America model only)



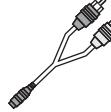
Audio/Setup cable



HDMI cable



Digital optical cable



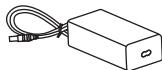
RCA to 3.5mm adaptor



Ethernet cable



IR blaster

Short feet  
(3/4 inch / 19 mm)Tall feet  
(1 1/4 inch / 31 mm)Power cord for Soundbar  
(3.28 ft / 1.0 m)

AC adaptor for Soundbar



Non-skid adhesive pads for Soundbar

Power cord for Subwoofer  
(6.56 ft / 2.0 m)

Non-skid adhesive pads for Subwoofer

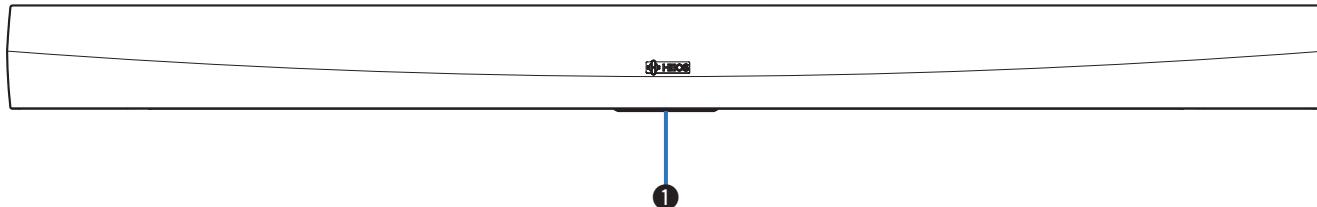


Wall mount Template

**NOTE**

- Please use the power supply and power cord included in the box for your device.

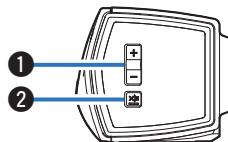
## ■ Front panel of soundbar



### ① Status LED

Please refer to the "Status LED table" for LED color and state meaning. (☞ p. 63)

## ■ Control of soundbar



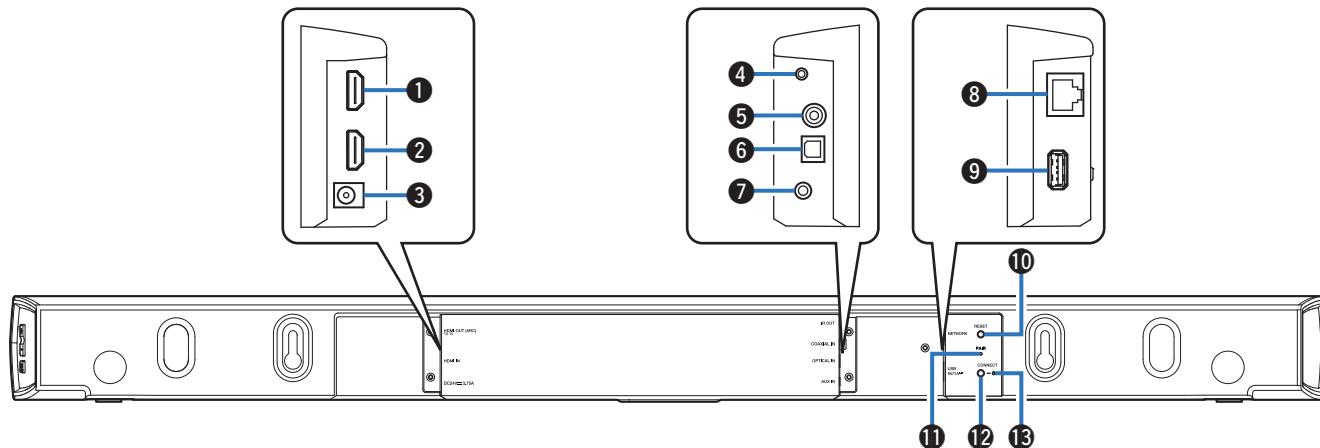
### ① Volume up/down buttons (+, -)

Adjusts the HEOS device's volume level up or down.

### ② Mute button (Mute icon)

Mutes or unmutes the HEOS device's volume.

## ■ Back panel



### ① HDMI OUT to TV (ARC)

Used to connect to the TV with an HDMI cable. (Compatible with the ARC function)

### ② HDMI IN

Used to connect to the HDMI equipment with an HDMI cable.

### ③ Power Input (DC24V 3.75A)

Used to connect the external power supply (☞ p. 18).

### ④ IR OUT

Used to connect the supplied IR Blaster.

### ⑤ COAXIAL IN

Used to connect to television's coaxial digital audio.

### ⑥ OPTICAL IN

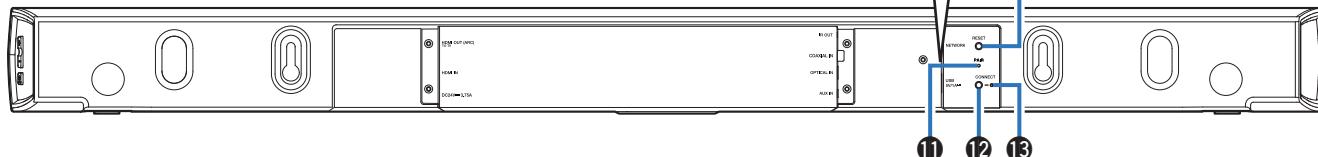
Used to connect to television's optical digital out.

### ⑦ AUX IN

- Used to connect to television's rear panel audio out.
- Used to add the speaker to your wireless network (☞ p. 20).

### ⑧ Network Connector (NETWORK)

Used to connect this unit to a wired Ethernet network (☞ p. 20).

**⑨ USB Input (USB)**

Used to connect USB storage devices.

**⑩ Reset Button (RESET)**

Various settings are reset to the factory default values  
([p. 60](#)).

**⑪ Pair Button (PAIR)**

Used to re-pair with subwoofer (Pre-paired at the factory.)

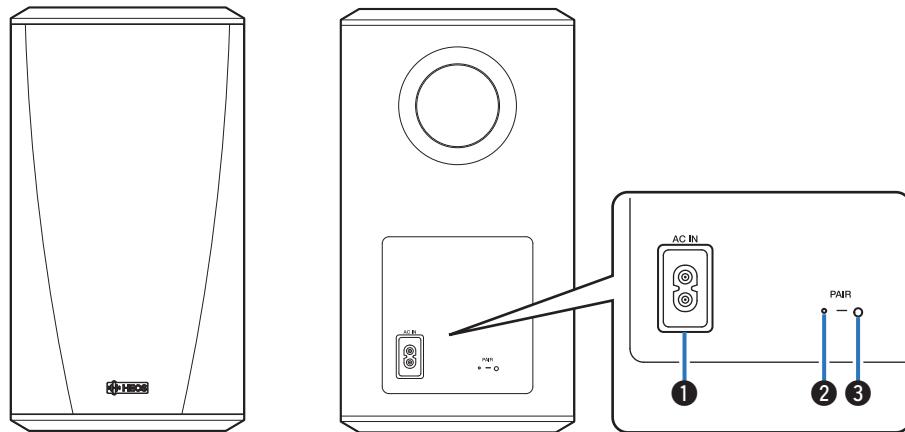
**⑫ Connect Button (CONNECT)**

Used for Wi-Fi setup ([p. 60](#)).

**⑬ Connect in Status LED**

Indicates the status of this unit ([p. 63](#)).

## ■ Subwoofer



### ① Power Input (AC IN)

Used to connect the external power supply.

### ② Status LED

### ③ Pair Button (PAIR)

Used to re-pair with soundbar (Pre-paired at the factory.)

## Placing your HEOS speaker

You can place your HEOS speaker anywhere you want to enjoy great sounding music. Please follow these simple guidelines when determining where to place your speaker...

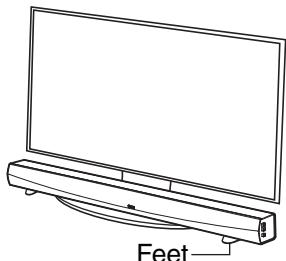
- The HEOS speaker must be within range of your wireless network.
- Place the speaker across the room from where you will be listening, as close to ear level as possible.
- The HEOS speaker is not waterproof. Do not place it near any water source and do not leave it outside in the rain or snow.

### Placing your HEOS HomeCinema

The soundbar of the HEOS HomeCinema should be placed as close as possible to the television screen. It should be centered left-to-right with the screen, and ideally no more than a few inches above or below.

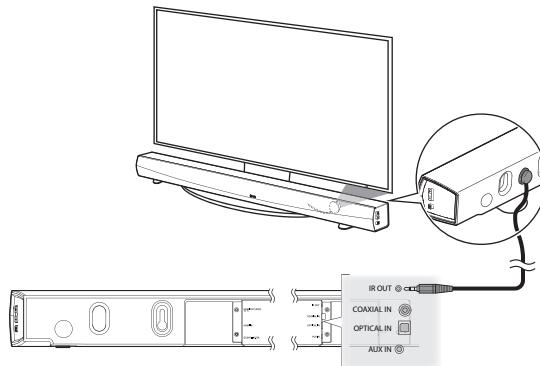
The most common location is below the screen. Sometimes this location can be difficult, because the base of the TV gets in the way.

The HEOS HomeCinema has two sets of feet – 19 mm and 31 mm high – that raise the soundbar off the shelf, for a more stable and attractive installation when used with this type of television.



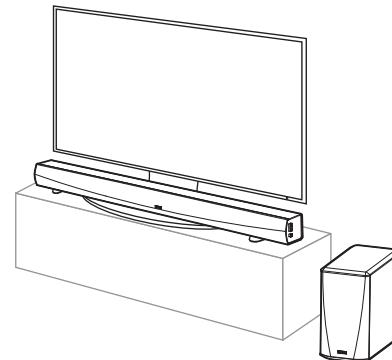
#### NOTE

- Depending on your TV model or installation location, the remote control receiver on the TV may be hidden by the soundbar, preventing the remote control from being used because the remote control signals cannot reach the TV. In this case, connect the supplied IR Blaster. Attach the tip of the IR Blaster near the TV remote control signal receiver and check that the remote control can be used to control the TV.



You may also place HEOS HomeCinema soundbar on a shelf, or furniture, above or below the screen. It should be centered with the screen, and ideally no more than a few inches above or below. The system will usually sound best when the front of the soundbar is close to, or flush with, the front edge of the furniture or shelf on which it rests. This reduces unwanted sound reflections.

Place the wireless subwoofer anywhere in the room. For the best sound, place the subwoofer near a wall or corner, within 6 meters of the soundbar, and on the same side of the room as the soundbar. The wireless subwoofer range is 8 meters. Wireless subwoofer can be positioned vertically or horizontally. Attach the supplied non-slip stickers to the subwoofer.

**NOTE**

- Don't put the subwoofer where curtains or furniture will block the sound. The port on the back of the subwoofer cabinet should be unobstructed.

## ■ Wall-Mounting

The HEOS HomeCinema soundbar can be wall-mounted using the integrated keyhole mounts. A mounting template can be found in the product carton. Using a level, position and tape the template to the wall in the desired location. Install hardware\* using the template as a guide and then remove the mounting template from the wall. Connect the audio and power cables prior to mounting the soundbar on the wall.

\* Consult a person knowledgeable about your wall type to recommend suitable hardware for hanging the speaker.

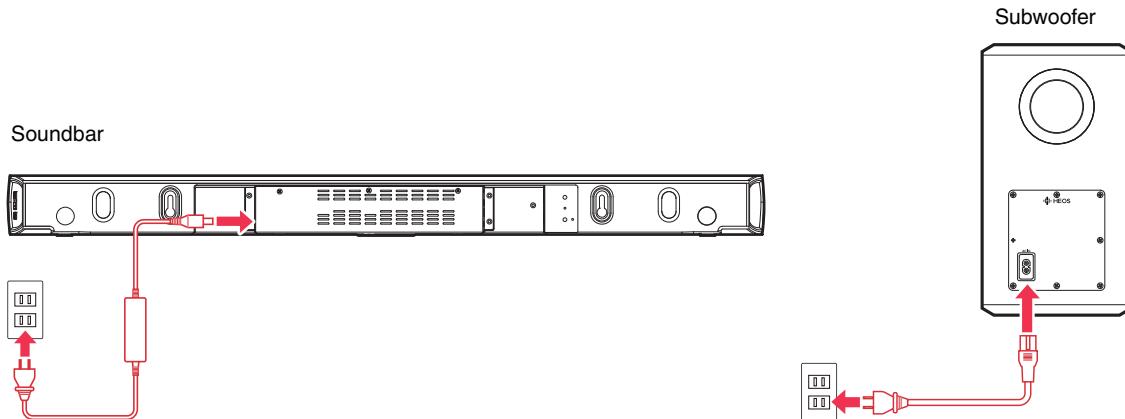


### NOTE

- To ensure safety, request a contractor perform the mounting work when mounting onto a wall.
- In order to use the unit safely, do not place items on or hang items from the unit.
- Be sure to fix connection cables to the wall to ensure that cannot be pulled or tripped over causing the unit to fall. Check that the unit is mounted safely after the mounting work is complete. Recommend installing a safety wire (not included) at the safety wiring hole on the bottom of the soundbar in order to prevent injury to the user and others or damage to property should the soundbar fall for some reason.
- Also, periodically check the safety of the unit and whether there is a possibility that the unit may fall.
- Denon cannot accept any responsibility for damage, injury or accidents caused by problems with the mounting location or mounting method.

## Powering your HEOS speaker

Connect the power cord included in the box to the back of the speaker and the plug to a wall outlet. The speaker is capable of automatically switching between 100 - 240 V.



## Getting the HEOS app

The HEOS app is the heart of the HEOS experience. Using your mobile device and the HEOS app, you can setup, browse, explore, and control your HEOS system right in the palm of your hand, from anywhere in your home.

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



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

# Setting up your first HEOS HomeCinema

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

## Caution

- DO NOT connect the Ethernet cable if you are connecting your HEOS HomeCinema to a wireless network. If you are connecting the speaker to a wired network, use an Ethernet cable to connect the speaker to your network or router.

## 1 Make sure your mobile device is connected to your wireless network (the same network you want your speakers connected to).

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

### NOTE

- If your wireless network is secure, make sure you know the password to join your network.

## 2 Make sure you have the included Audio/Setup cable handy.



## 3 Launch the HEOS app on your mobile device.



## 4 Tap the “Setup Now” button at the top of the screen.

## 5 Follow the instructions to add the HEOS HomeCinema to your wireless network and to select an input on your HEOS HomeCinema.

The Wi-Fi settings from your mobile device will be copied to the HEOS HomeCinema via the audio cable.

### NOTE

- If you have any problems connecting your HEOS device, jump to the Troubleshooting section. (☞ p. 56)

# Adding more HEOS devices

The HEOS wireless multi-room sound system is a true multiroom audio system that automatically synchronizes audio playback between multiple HEOS 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 devices to your HEOS system.

## Adding wired speakers

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

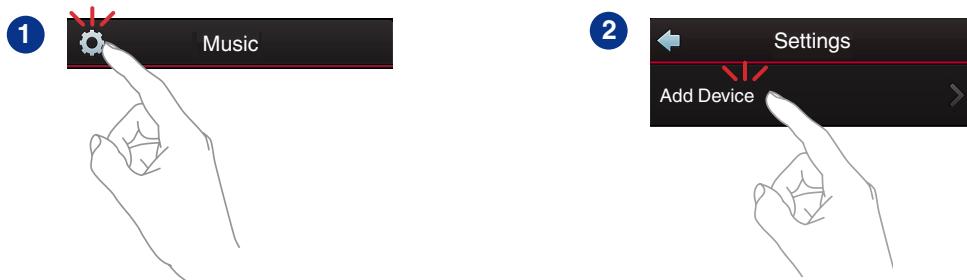
At your convenience, you can assign a name to the HEOS device to indicate which room you have it placed in.



- Use only a shielded STP or ScTP LAN cable which is easily available at electronics stores (CAT-5 or greater recommended).
- Do not connect a Network Connector directly to the LAN port/Ethernet connector on your computer.

## Adding wireless HEOS devices

You can add additional wireless HEOS devices to your HEOS system by selecting “Add Device” from the HEOS app’s settings menu and follow the instructions:



# Using your HEOS HomeCinema for TV

Once you have your HEOS HomeCinema connected to your television and the HEOS app installed on your mobile device, it's easy to start enjoying your television sound.

"Setup Assistant" can be re-executed when changing the TV connection. (☞ p. 48)

## Connecting to your TV

### ■ HDMI connection

You can enjoy high quality audio and video playback by connecting this unit and a TV or this unit and a device such as a Blu-ray Disc recorder or game console using a HDMI cable to transmit high resolution digital video signals and Blu-ray Disc audio signals.

- ARC (Audio Return Channel) function

The TV audio can be played back through this unit using the HDMI cable used to connect this unit to the TV (\*1).

\*1 The TV also needs to be compatible with the ARC function.

- HDMI control function

You can switch off the power, switch input source and adjust the volume of this unit using the TV (\*2) remote control.

\*2 The TV also needs to be compatible with the HDMI control function. This function may not operate due to connected devices or settings.

### ■ Setting the HDMI control function

When the connection to the TV is the same as 1) or 2), enable the HDMI control function on the TV.

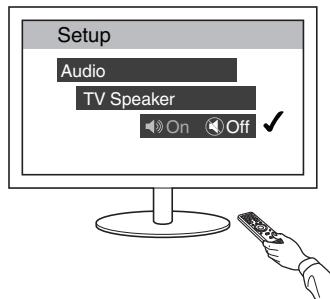
If the TV is compatible with the ARC function, enable the ARC function on the TV.

(See the TV Owner's Manual for details.)

## ■ Disable your television's speakers

When the connection to the TV is the same as 3) – 4), disable your television's built-in speakers when using HEOS HomeCinema.

Usually, this is done with an on-screen setup menu on your television. Look for an “Audio” or “Sound” sub-menu, and a “Speakers Off”, “Disable Speakers”, “External Speakers” or similar menu item. Some televisions have a switch on the rear panel to disable the built-in speakers.



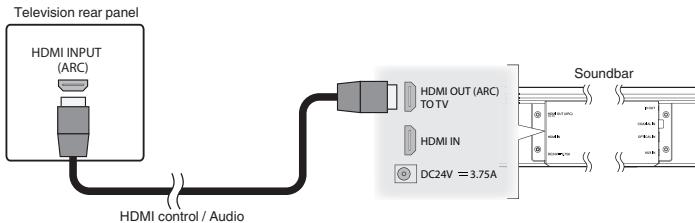
## 1) Playing HDMI (ARC) - Best choice

If your television has an ARC (audio return channel) HDMI connector, connect it to the HDMI output of the HEOS HomeCinema. This will provide the best sound and several other benefits.

- 1 Connect your television with an ARC (audio return channel) HDMI connector to the HDMI OUT (ARC) on your HEOS HomeCinema using the included HDMI cable.**
- 2 Select “TV” from the music tab.**
- 3 Select the name of the HEOS HomeCinema to which you connected the television in step 1.**
- 4 The sound from your television can be played directly on the HEOS HomeCinema.**

### NOTE

- The TV also needs to be compatible with the ARC function. Turn the TV HDMI control function on. See the TV Owner's Manual for details.



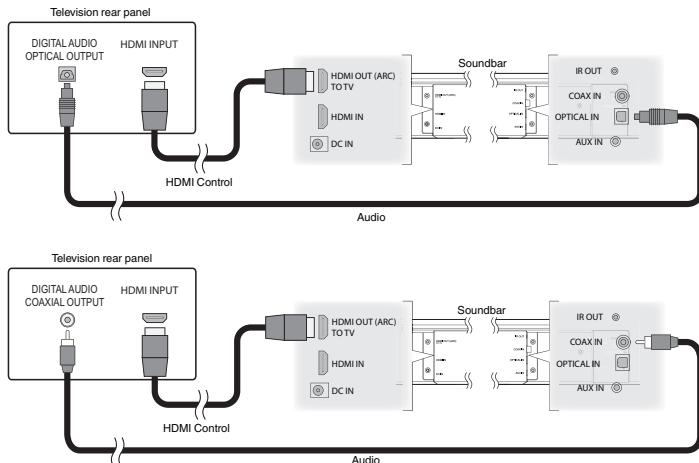
## 2) Playing HDMI (without ARC) - Better choice

Connect to a TV that is not compatible with the ARC (Audio Return Channel) function using the HDMI cable and audio input cable.

- 1 **Connect your television with an HDMI connector to HDMI OUT (ARC) on your HEOS HomeCinema using the included HDMI cable.**
- 2 **Connect your television to your HEOS HomeCinema using either an included digital optical cable or a digital coaxial cable (not included).**
- 3 **Select “TV” from the music tab.**
- 4 **Select the name of the HEOS HomeCinema to which you connected the television in step 1 and 2.**
- 5 **The sound from your television can be played directly on the HEOS HomeCinema.**

### NOTE

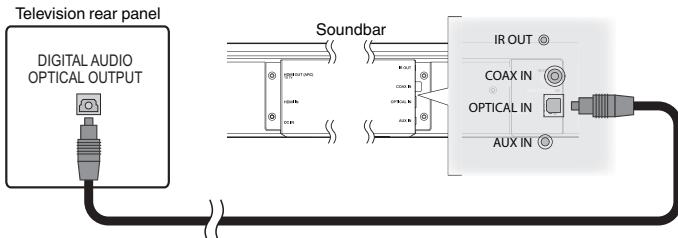
- The TV audio cannot be played back on this unit when it is only connected with the HDMI cable.



### 3) Playing digital optical input - Good choice

A digital optical cable connection from the television also provides excellent sound.

- 1 Connect your television with an optical output to the OPTICAL IN on your HEOS HomeCinema using the included Digital Optical cable.**
- 2 Select “TV” from the music tab.**
- 3 Select the name of the HEOS HomeCinema to which you connected the television in step 1.**
- 4 The sound from your television can be played directly on the HEOS HomeCinema.**

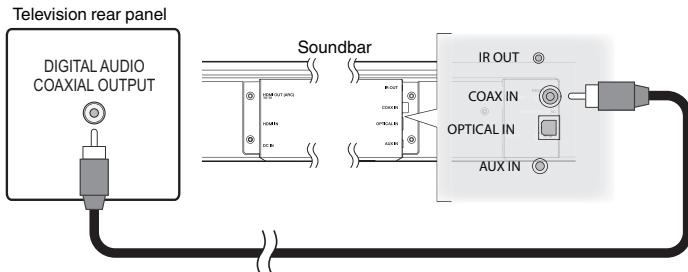


The optical connector looks square, but it is “keyed” and will only plug in one way; don't force it.

## 4) Playing digital coaxial input - Good choice

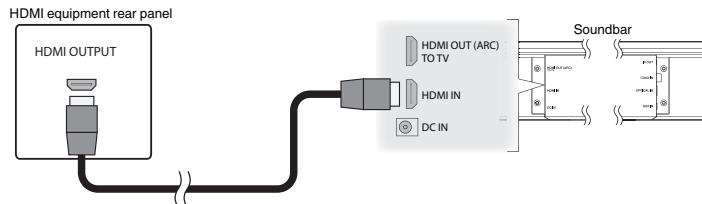
Another way to supply a digital audio signal to the HEOS HomeCinema.

- 1** Connect your television with an optical output to the COAX IN on your HEOS HomeCinema using an “RCA” type cable (not included).
- 2** Select “TV” from the music tab.
- 3** Select the name of the HEOS HomeCinema to which you connected the television in step 1.
- 4** The sound from your television can be played directly on the HEOS HomeCinema.



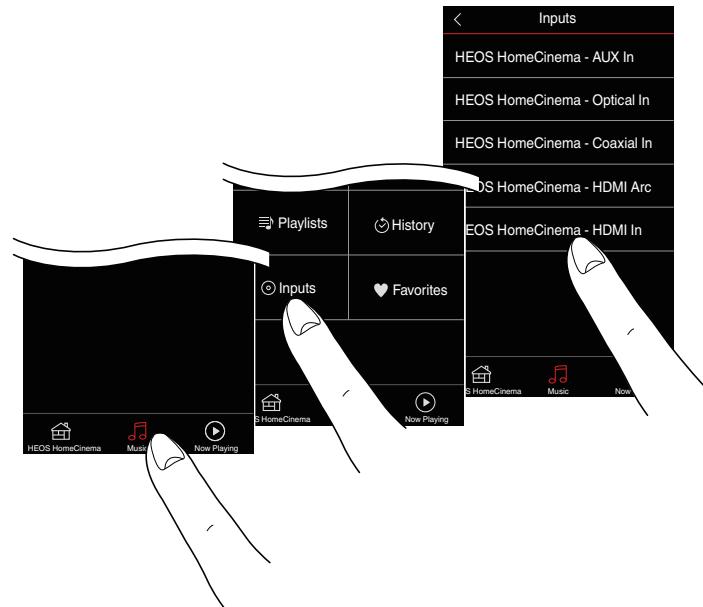
## Connecting HEOS HomeCinema to your HDMI equipment

Connect an HDMI device such as a Blu-ray player to the HDMI IN terminal on your HEOS HomeCinema.



### NOTE

- DTS audio can not be passed from your TV over an optical connection so it is recommended to connect your Blu-ray player to the HDMI IN terminal on the HomeCinema to enjoy DTS encoded discs.



## Listening to TV Audio

Once you have connected your HEOS HomeCinema to your TV, and setup the TV input you are ready to enjoy sound from your TV.

(☞ p. 48)

- 1 Tap the “Music” tab.
- 2 Tap “TV”.

### ■ Adjusting the dialog sound

The Dialog enhancer highlights center-recorded sounds such as movie dialog, television announcers, or musical soloists; it is valuable for everyday television viewing.

### ■ Listening at night

The night mode improves low-volume listening by subtly lifting softer sounds, and lowering very loud ones. While you may use the night mode whenever you like, for maximum dynamic realism from television programing, movies, or music, leave the night mode turned off.

### ■ Adjusting sound mode

You can select the sound mode either “MOVIE” or “MUSIC”. The movie mode deploys HEOS HomeCinema’s maximum processing for the “biggest” possible sound on action films or other large-scaled content. The music mode widens the “soundstage” somewhat for a more enveloping, involving sound.

### ■ Checking the audio status

You can check the input and signal format by pressing the ⓘ at the left top area.



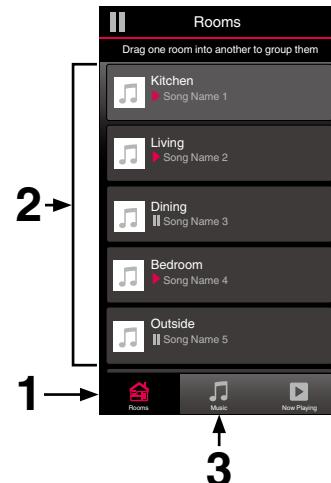
# Using your HEOS HomeCinema for music

Once you have your HEOS device connected to your network and the HEOS app installed on your mobile device, it's easy to start enjoying your favorite music. You can listen to something different on every HEOS devices or the same music perfectly synchronized on all HEOS devices. It's up to you!

## Selecting a room/speaker

If you have more than one HEOS device, you must tell the HEOS system which HEOS device you want to control:

- 1 Tap the “Rooms” tab.
- 2 Select the Room/Speaker you want to control.
- 3 Select the “Music” tab to select a music source or the “Now Playing” tab to control what is currently playing in the selected room.

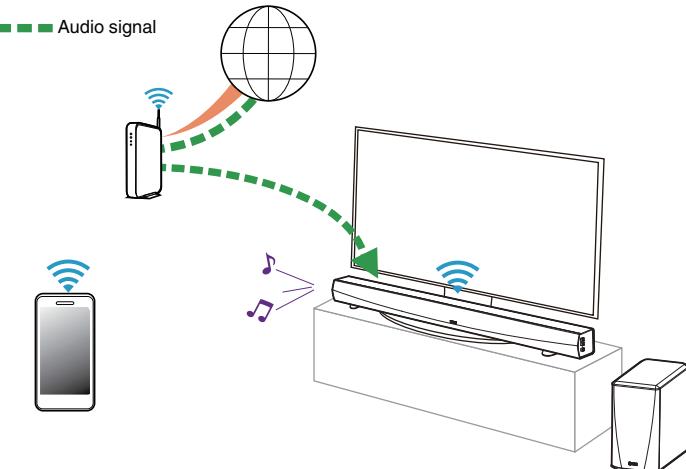


## Listening to radio

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

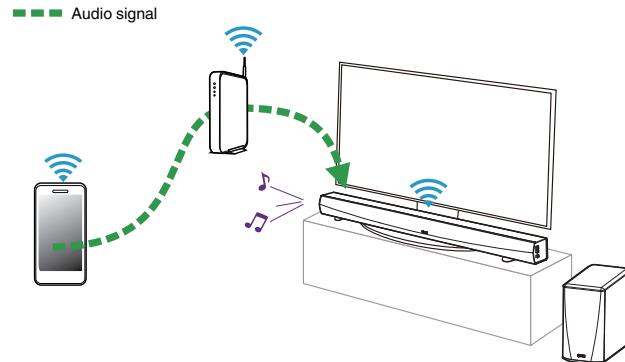
### NOTE

- If you have a Tuneln account, you can sign into the Tuneln service under Settings - Music Sources - Tuneln, and access all of your “My Favorites” Tuneln stations.



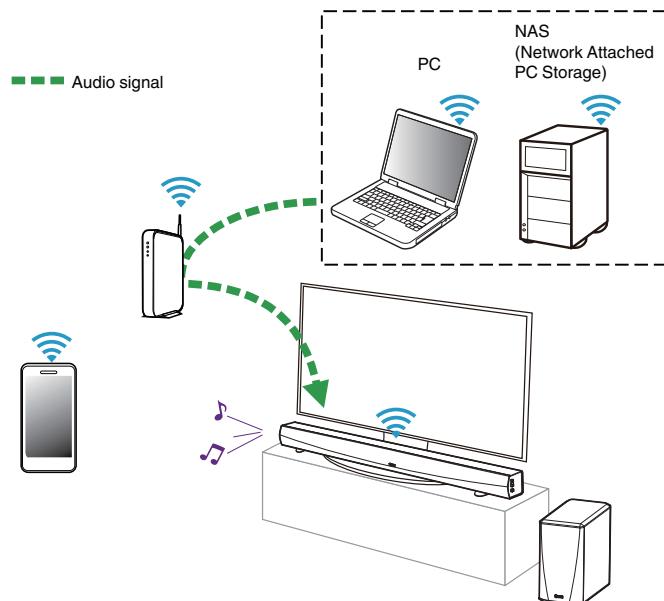
## Playing music stored on your mobile device

- 1 Tap the “Music” tab.
- 2 Select “This iPhone/iPod/iPad/Phone”.
- 3 Browse the local music on your phone and select something to play.



## Playing music from your networked PC or NAS

- 1 Select “Music Servers” from the “Music” tab.
- 2 Select the name of your networked PC or NAS (Network Attached Storage) server.
- 3 Browse the music on your PC/NAS and select something to play.

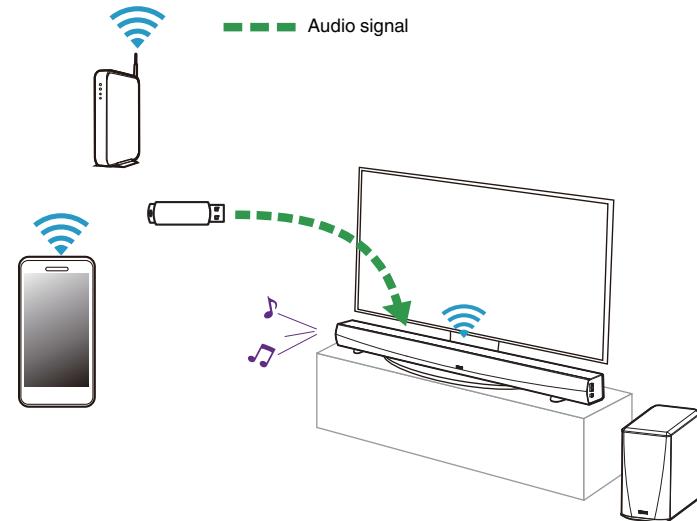


## Playing music from a USB device

- 1 Insert a FAT32 formatted USB device into the USB port on the back of the HEOS speaker.
- 2 Select “USB Music” from the Music tab.
- 3 Select the name of your HEOS speaker.
- 4 Browse the music on your USB device and select something to play.

### NOTE

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



## Playing music from the AUX input

The sound from the audio device can be played directly on the selected speaker or digitized and sent over your network to other speakers.

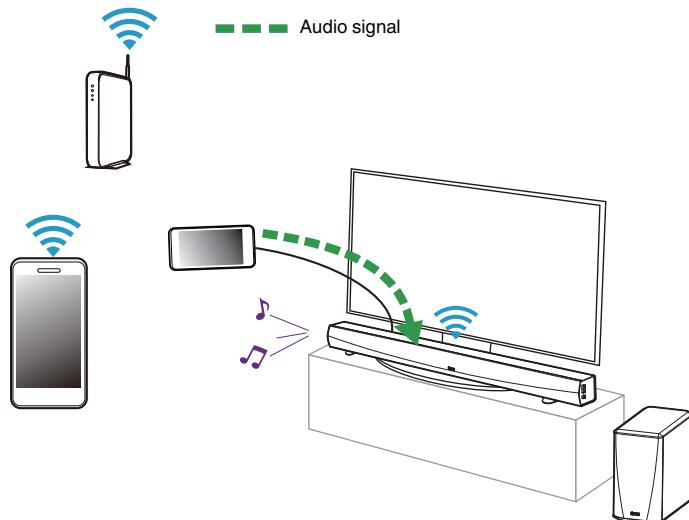
- 1 Connect an audio device with a 3.5 mm stereo audio output to the AUX input on your speaker using the included 3.5 mm stereo audio cable.

When a stereo audio cable is connected to AUX IN, the source automatically switches to Inputs.

**NOTE**

- When there is a cable connected to AUX IN, select "Inputs" from the Music tab.

- 2 Initiate playback on the audio device.



## Managing AUX inputs

If you connected external audio source components to any of your HEOS speakers AUX inputs, you can rename the default input names to describe the actual source or hide any inputs that are not being used.

- 1 Select the **Settings**  icon located in the upper left corner of the main “Music” menu to display the **Settings** menu.
- 2 Select “Music Sources”.
- 3 Select “Inputs”.
- 4 Select the speaker which you connect your external audio source device to.

### ■ Changing the name of the AUX inputs

- 1 Select “AUX In”.
- 2 Select “Name”.
- 3 Select or enter a new name to describe the source that you connected.
- 4 Select the **Save** button to save your changes.

### ■ Hiding an AUX input

- 1 Select “AUX In”.
- 2 Toggle “Hide Input” to ON to prevent this AUX input from appearing under the **Inputs** tile on the main Music menu.

## Managing your phone

Your smartphone or tablet can be hidden if it does not need to be in the “Music Sources” menu.

- 1** Select the Settings  icon located in the upper left corner of the main “Music” menu to display the Settings menu.
- 2** Select “Music Sources”.
- 3** Select “This iPhone/iPod/iPad/Phone”.
- 4** Toggle “This iPhone/iPod/iPad/Phone” to OFF to prevent the service logo from appearing on the main “Music” menu.

## HEOS account

### ■ What is a HEOS account?

A HEOS account is 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 the HEOS account you just have to enter your music services login names and passwords one time. 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 main “Music” menu of the HEOS app.

### ■ Changing your HEOS account

- 1 Tap the “Music” tab.
- 2 Select the Settings  icon in the upper left corner of the screen.
- 3 Select “HEOS Account”.
- 4 Change your location, change your password, delete your account or sign out of your account.

## 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. For more information about which services are available in your area please visit <http://www.HEOSbyDenon.com>

### ■ Adding a music service

Once you've setup your HEOS account, you can add supported music services to your HEOS system by tapping on the music service logo in the "Music" tab.

Follow the instructions on the screen to add your username and password for the selected music service. You only have to enter your account information once as the HEOS account service will securely remember your login information so you don't have to enter it each time you want to play music from the music service.

Additional music services may be available under Settings - Music Services.

### ■ Changing music service settings

- 1** Tap the "Music" tab.
- 2** Select the Settings  icon in the upper left corner of the screen.
- 3** Select "Music Sources".
- 4** Select "Online Music".
- 5** Select the name of the online music service you want to edit.
- 6** Sign out, then sign in again to associate your username and password with your HEOS account.
- 7** Select "Hide for Now" to prevent the service logo from appearing on the main "Music" menu.

## Listening to the same music in multiple rooms

The HEOS system is a true multiroom audio system that automatically synchronizes audio playback between multiple HEOS 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 devices to your HEOS system.

You can join or group up to 16 individual HEOS devices into a group of HEOS devices that function as if they were a single HEOS device.

### ■ Grouping rooms

- 1 Tap the “Rooms” tab.
- 2 Press and hold your finger on room that is not playing music.
- 3 Drag it into the room that is playing music (indicated by the red outline) 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

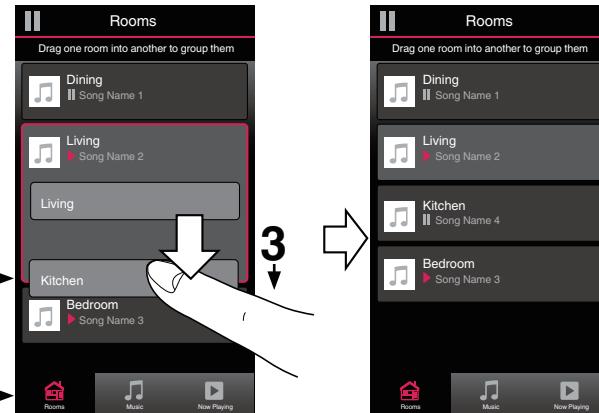
- 1 Tap the “Rooms” tab.
- 2 Press and hold your finger on room that you want to remove from the group.

### NOTE

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

- 3 Drag it out of the group and lift your finger.

Music will stop playing in the room you dragged out of the group but will continue playing in any remaining rooms.



## ■ Grouping all rooms (party mode)

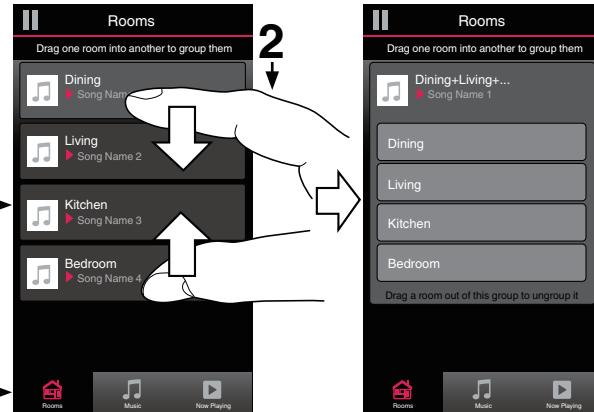
You can easily group 16 rooms together into Party Mode by using a “pinch” gesture.

**1** Tap the “Rooms” tab.

**2** Place two fingers on the screen over the list of rooms.

**3** 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.

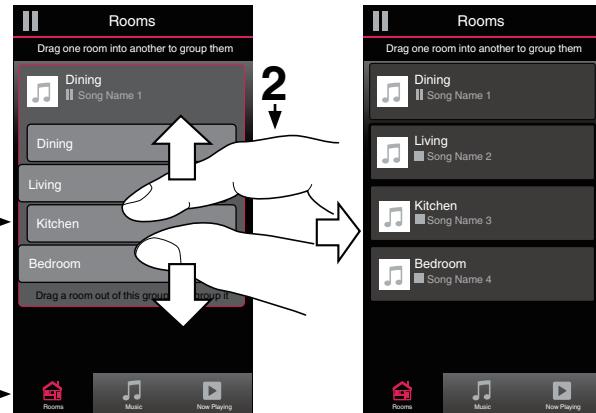


## ■ Ungrouping all rooms

You can easily ungroup all of your rooms and exit Party Mode by using a “spread” gesture.

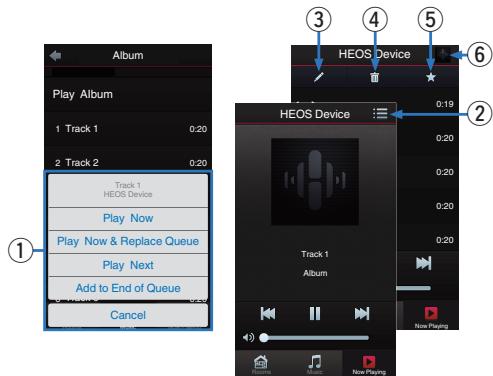
- 1 Tap the “Rooms” tab.
- 2 Place two fingers close together on the screen over list of rooms.
- 3 Quickly spread your two fingers apart from each other and release.

All of your rooms will be ungrouped and music will stop playing in every room (except the original “master” room that was playing before you grouped the rooms together).



## Using the now playing queue

HEOS uses a Now Playing “Queue” to line up music that you want to listen to. Music can be selected from any of your local or online music sources (as long as they are not preprogrammed “radio” or “station” type streams). This feature works similarly to how a jukebox works. You select something to play (a song, album, playlist or even your entire music collection) and add it to the “Queue”. When you select something to play you will be asked how you want to queue up your music.



### 1 Queue Menu

When you select something to play you will be asked how you want to queue up your music.

### 2 Queue icon

### 3 Pencil icon

### 4 Delete icon

### 5 Save icon

### 6 Cover art or HEOS icon

You can return to the Now Playing screen display by tapping the cover art or the HEOS icon.

### ■ Play Now

Inserts the item into the queue after the currently playing track and plays the selected item immediately.

### ■ Play Now & Replace Queue

Clears the queue and plays the selected item immediately.

### ■ Play Next

Inserts the item into the queue after the current song and plays it when the current song ends.

### ■ Add to End of Queue

Adds the item to the end of the queue.

## Rearranging the now playing queue

Once you have songs lined up in your queue, you might want to rearrange the order or remove some songs:

- 1 Tap the “Now Playing” tab.
- 2 Tap the Queue  icon in the upper right corner of the screen.
- 3 Tap the Pencil  icon to enter Edit mode.
- 4 Rearrange the order of your queue by dragging the list  icon (on the right side of each track row) up or down.

## Deleting songs from the play queue

You can remove songs one at a time from the Now Playing Queue:

- 1 Tap the “Now Playing” tab.
- 2 Tap the Queue  icon in the upper right corner of the screen.
- 3 Tap the Pencil  icon to enter Edit mode.
- 4 Tap the track(s) that you want to delete.
- 5 Tap the Delete  icon to delete all of the selected tracks from the play queue.

## Deleting all songs from the play queue

You can remove all of the songs from the Now Playing Queue:

- 1 Tap the “Now Playing” tab.
- 2 Tap the Queue  icon in the upper right corner of the screen.
- 3 Tap the Delete  icon to confirm that you want to delete all songs from the queue.

## Saving playlists

You can save the Now Playing Queue as a HEOS Playlist that you can recall later. The new playlist will be available from the Playlists button on the “Music” tab on every controller app connected to your HEOS system.

- 1 Tap the “Now Playing” tab.
- 2 Tap the Queue  icon in the upper right corner of the screen.
- 3 Tap on the Save  icon.
- 4 Enter a name for your Playlist and tap the Save  icon.

## Performing repeat and shuffle playback

The playback controls are visible on the “Now Playing” screen.

- 1 Tap the “Now Playing” tab.
- 2 Tap the cover art to reveal the repeat  and shuffle  controls.

## Using the favorite

HEOS uses a "HEOS Favorite" to line up station you want to start play quickly the favorite stations.

Station can be selected from online music sources such as "Radio" or "Station" type streams. "HEOS Favorite" will display a list of the stations of various services.

### ■ Adding to HEOS favorite

Inserts the item into the queue after the currently playing track and plays the selected item immediately.

Select a station of an online music source. When the action menu screen is displayed, select "Add station to HEOS favorite".

#### NOTE

- This can also be done by selecting "Add station to HEOS favorite" from the station menu of the station being played.

### ■ Deleting station from the HEOS favorite

Inserts the item into the queue after the currently playing track and plays the selected item immediately.

- 1 Tap the "Music" tab.
- 2 Select "Favorite".
- 3 Tap the Pencil  icon to enter Edit mode.
- 4 Tap the delete  icon that you want to delete station.
- 5 Tap the "Delete" that you want to delete station.

# Making speaker adjustments

You can adjust specific settings for each of your HEOS HomeCinema in your system:

- 1** Select the **Settings**  icon located in the upper left corner of the main “Music” menu to display the **Settings** menu.
- 2** Select “**My Devices**” to display a list of your HEOS devices.
- 3** Select the HEOS HomeCinema you want to adjust.

## Changing the wireless network connection

- 1** Select “**Network**”.
- 2** A list of wireless networks that your HEOS HomeCinema can access is displayed.
- 3** Select the network you want your HEOS HomeCinema to join.
- 4** Wait as the HEOS HomeCinema’s network connection is changed.

### NOTE

- Wired networking is automatically selected when the speaker is connected to a wired Ethernet network. To switch back to using a wireless network you must remove the Ethernet cable from the back of the HEOS HomeCinema.

## Changing the name

- 1** Select “**Name**”.
- 2** Select or enter a new name for your HEOS HomeCinema.
- 3** Tap the “**Next**” to save your changes.

## Changing the equalizer and subwoofer level

- 1 Select “EQ”.**
- 2 Adjust the Treble, Bass or Subwoofer level up or down.**
  - Select the Reset button to restore the default settings.

## Adjusting the audio quality

Selects the transcoding option for rebroadcasting audio from one HEOS device to another HEOS device (or group of devices) across the network. When set to “Normal”, high bit rate audio sources originating from the first device (such as AUX input, WAV, FLAC and PCM) will be transcoded to ensure the highest level of reliability for the audio stream.

- 1 Select “Quality”.**
- 2 Select Normal (default) or High.**



- If you have selected High and you experience audio dropouts when streaming sources from one device to other devices, please select Normal (default).
- This setting does not affect the AUX input when played on the connected device by itself (there are no other devices grouped to it), in which case the original source quality and bit rate are maintained and there is no inherent delay.

## Changing the TV connection

“Setup Assistant” can be re-executed when changing the TV connection.

- 1** Select “Setup Assistant”.
- 2** Turn on your TV.
- 3** Select which input you want to use to connect your TV.

## Adjusting the status light brightness

- 1** Select “Status Light”.
- 2** Adjust the brightness up or down or set the slider to the OFF position to completely disable the status light.

## Setting the TV Input and Auto-Play

- 1** Select “TV Input”.
- 2** Select “Default Input”.
- 3** Select new default input.

### Auto-Play

When Auto-Play is enabled, the HomeCinema switches to the Default Input as the audio source. If streaming music playback is stopped.

## Controlling your HEOS HomeCinema

HEOS HomeCinema can be operated using the remote control unit of the TV.

### 1 Select “Remote Control”.

The setup below is not required when device control by HDMI is active. (A check mark will be displayed by “HDMI CEC” in this case)

### 2 Select “IR Control”.

### 3 Select a HEOS HomeCinema command you would like to control by your remote controller.

## Advanced settings

### Caution

- Adjusting these settings may disconnect your HEOS HomeCinema from your network and possibly render your HEOS HomeCinema unusable. Do not use these features unless you are comfortable making advanced adjustments to your HEOS HomeCinema.

### ■ Network settings

#### 1 Select “Advanced”.

#### 2 Select “NETWORK SETTINGS” tab.

#### 3 Scroll down to see all of the options for

- a. Network Interface (Ethernet or Wireless)
- b. Wireless Settings
- c. IP Address Settings (Automatic or Manual)
- d. Wireless Power Saving

#### 4 Select Save Settings to apply the new settings or Cancel Changes to revert to the previous settings.

## ■ About wireless power saving

The Wireless Power Savings feature saves power by turning off power to the wireless radio inside the HEOS device when the device is connected to an Ethernet network. If you disconnect the Ethernet cable from the HEOS device, Wireless Power Saving will automatically turn off and the wireless radio will turn on so that the HEOS device can be discovered over your wireless network.

### NOTE

- If Wireless Power Savings is ON, Wi-Fi power will be temporarily turned on when accessing the My Devices - (My Devices) - Network screen in the HEOS app or whenever the Connect button on the device is pressed.

## ■ Firmware upgrade

- 1 Select “Advanced”.
- 2 Select “FIRMWARE UPDATE” tab.

### Update status

Manually check for a firmware upgrade.

### Allow updates

ON: Allows updates

OFF: Does not allow updates

- 3 Select Save Settings to apply the new settings or Cancel Changes to revert to the previous settings.

## ■ About

Viewing technical details about the HEOS device.

- 1** Select “Advanced”.
- 2** Select “ABOUT” tab.
- 3** Scroll down to see information about the speaker’s
  - a. Hardware
  - b. Software
  - c. Device

# Updating your system

HEOS has the ability to add enhancements and updated functionality via your high speed Internet connection. Follow the instructions on the screen to update the HEOS device and/or your controller App.

- 1 Select the Settings  icon located in the upper left corner of the main “Music” menu to display the Settings menu.
- 2 Select “Software Update”.

## Check for Update

Follow the instructions on screen to install any available updates to your HEOS system.

## Auto-Update

ON: Valid updates are performed automatically.

OFF: You will be notified of valid updates on the HEOS app.

## Advanced features

There are a few advanced features of the HEOS system that you may want to explore once you become familiar with the basic operations. You can access the advanced features of the HEOS system by following these steps:

- 1 Select the Settings  icon located in the upper left corner of the main “Music” menu to display the Settings menu.**
- 2 Select “Advanced Settings” to display a list the available settings.**

### Sharing music from your mobile device

The HEOS app has a feature called “Music Sharing” which can share the local music stored on your mobile device to other HEOS app users on your local network. To enable this feature, select “Music Sharing”, and set it on “ON”.

The name of the device you are sharing from will appear as a music server allowing other HEOS controller apps to browse and play music from the your device.

### Wireless performance

You can check the wireless connection status of your HEOS device.

**Quality**

Excellent / Good / Poor

**NOTE**

- If the quality level of your HEOS device is “Poor”, make sure your HEOS devices are not located near other electronic devices that could interfere with it’s wireless connectivity (like microwave ovens, cordless phones, TVs, etc...)

**Signal**

Excellent / Good / Poor

**NOTE**

- If the signal level of your HEOS device is “Poor”, make sure your HEOS devices are within range of your wireless network.

## Submit diagnostics

If you are having trouble with your network or HEOS system, you may be asked by Denon technical support personnel to select this option. This feature will automatically send Denon technical support diagnostic information about your HEOS system.

### NOTE

- No personal information is sent and your information will never be shared with anyone.

## Resetting your controller app

This feature will reset the control app to its original state when you first installed it on your mobile device without requiring you to remove, download, and reinstall it from the app store.

## Pairing the soundbar and subwoofer

The subwoofer and soundbar are paired at the factory. However if the communication is interrupted, follow this procedure.

- 1 **Press the “PAIR” Button on the subwoofer until the Status LED flashes blue.**

The soundbar power is turned on.

- 2 **Press the “PAIR” Button on the back of the soundbar.**

The Status LED on the subwoofer will be solid blue.

### Status LED

**Amber LED:** Subwoofer is not paired to soundbar.

**Blue LED:** Subwoofer is paired to soundbar. Your system is ready.

# Power management

## Power modes

### ■ Quick Start Mode

To save power, the device will automatically enter “Quick Start Mode” whenever there is no network access or playback for 20 minutes and will automatically resume to full power whenever the device is selected and playing music.

### ■ Deep Standby

The device also has the ability to automatically enter “Deep Standby” whenever the wired or wireless network connection is removed for more than 60 minutes in Network Standby. The front panel LED will turn off during Deep Standby. To “wake” a HEOS HomeCinema from Deep Standby,

- Press the volume or mute buttons.
- Input audio signal to HDMI/Optical/Coaxial/AUX.
- Press the button on your remote controller which you taught HEOS HomeCinema by “Controlling your HEOS HomeCinema”.

#### NOTE

- It may take around 40 seconds to wake up your HEOS HomeCinema from the deep standby.

### ■ Off

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

# Basic troubleshooting

## No sound

| Solution  | Refer to Page |
|---|---------------|
| • Is HEOS HomeCinema's volume turned up? (Don't laugh; we do this one ourselves all the time.)  | —             |
| • Is HEOS HomeCinema muted (if so, the front LED is slowly blinking.).  | —             |
| • Is the audio source a volume-controlled television or cable/satellite box output? If so, you must turn up the volume of the television or cable/satellite box to send adequate signal-level to HEOS HomeCinema. (For this reason it is best to choose fixed-level outputs where possible; some televisions have separate physical outputs, others employ on-screen menu settings to manage this.) | —             |
| • Check connections: remember that HEOS HomeCinema auto-prioritizes multiple incoming signals, selecting HDMI, optical-digital, coaxial-digital, and analog-mini plug, in that order. Confirm that the television is routing audio to the appropriate output; there may be TV-menu settings to manage this.   | —             |

## No subwoofer sound, sound interrupted, or noise occurring

| Solution  | Refer to Page |
|---|---------------|
| • Check that the Status LED is lit in blue on the subwoofer. When the Status LED is lit in amber, disconnect from the wall outlet and then reconnect to it, or try to pair again. | 54            |
| • When there is an obstacle between the soundbar and the subwoofer, remove it or place the subwoofer closer to the soundbar.  | —             |

## Distorted sound from the HEOS HomeCinema

| Solution   | Refer to Page |
|--|---------------|
| • If the signal source is a volume-controlled output, turn it down a couple of steps from maximum. | —             |
| • Check the signal source to be sure the distortion is not originating there.                      | —             |
| • If HEOS HomeCinema's volume is set to its maximum, turn it down a few steps.                     | —             |

## Trouble teaching HEOS HomeCinema remote control commands

| Solution   | Refer to Page |
|--|---------------|
| Remember that while HEOS HomeCinema can learn almost all IR (infrared) remote commands, there remain a few rare code formats that cannot be taught (much like some engineers we know). | —             |

## Television speakers keep getting turned back up

| Solution   | Refer to Page |
|--|---------------|
| Disable the television's speakers (usually a setup-menu option, but a rear-panel switch on some televisions). If this is not possible, the problem is likely that the television responds to press-and-hold (ramping) volume commands more quickly than the HEOS HomeCinema; in this rare case use HEOS HomeCinema's front-panel or supplied remote to turn the HEOS HomeCinema's volume up. | —             |

## My speaker won't connect to my network using the audio cable

| Solution   | Refer to Page |
|--|---------------|
| • Make sure your mobile device is connected to your wireless network before setting up your speaker.   | 19            |
| • Alternatively, you can connect your speaker to your network router using the included Ethernet cable. Once connected via Ethernet, the HEOS by Denon App should recognize the speaker and you can manually move it to your wireless network using Settings/My Devices/Device_Name/Advanced/Network Settings. | 20            |

## Music cuts out or delays sometimes

| Solution   | Refer to Page      |
|--|--------------------|
| • 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). | <a href="#">6</a>  |
| • Make sure your speakers are within range of your wireless network.   | <a href="#">53</a> |
| • Make sure your speakers are not located near other electronic devices that could interfere with its wireless connectivity (like microwave ovens, cordless phones, TVs, etc....).                           | <a href="#">53</a> |

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

| Solution   | Refer to Page |
|--|---------------|
| • If you are connecting the External input with your cable or satellite box for enjoying TV audio through multiple HEOS 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 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.   | —             |

## Connecting to a WPS network

| Solution   | Refer to Page |
|--|---------------|
| <p>If your wireless router support WPS (Wi-Fi Protected Setup™) your HEOS wireless speaker can optionally connect to your network using the “Push Button” method by following these steps:</p> <p>Wi-Fi Protected Setup™ is trademarks of Wi-Fi Alliance.</p> <ol style="list-style-type: none"><li>1. Press the WPS button on your router.</li><li>2. Within 2 minutes, rapidly press the Connect button 3 times (within 2 seconds of each press).</li><li>3. The LED on the front of the speaker will flash green for several seconds as it connects to your WPS router.</li><li>4. When the connection is complete, the LED on the front of the speaker will turn solid blue.</li></ol> | 6             |

## Resetting your speaker

| Solution  | Refer to Page |
|---|---------------|
| <p>Resetting your speaker will clear out the wireless network info, EQ, and name but retain it's current software. You will have to use Settings - Add Speaker to reconnect the speaker to your home network before it can be used.</p> <p>To reset your speaker, gently insert a small paperclip into the Reset button hole on the back of the speaker and hold it in until the front LED begins to flash amber.</p> | –             |

## Restoring the speaker to factory defaults

| Solution  | Refer to Page |
|---|---------------|
| <p>Restoring the HEOS device to its factory defaults will clear all of the settings and restore the original software which was installed at the factory.</p> <p><b>Caution</b></p> <ul style="list-style-type: none"><li>• All settings will be erased and the software will likely be downgraded!</li></ul> <p>To restore your HEOS device to the factory defaults, unplug the power cable from the back of the HEOS device. Insert a small paperclip into the RESET button hole on the back of the HEOS device, reconnect the power cable, and hold it in until the front LED begins to flash amber.</p> | –             |

\* For further information, please visit <http://www.HEOSbyDenon.com>

## HEOS HomeCinema takes long time to turn on

| Solution   | Refer to Page |
|--|---------------|
| In case the HEOS HomeCinema as in the DEEP standby mode, it may takes around 40 second to turn on. | –             |

## Contact Denon

### For U.S. & Canada only:

If you need further assistance with your HEOS product, please contact HEOS by Denon Customer Support Services below:

Website: [www.HEOSbyDenon.com/Support](http://www.HEOSbyDenon.com/Support)

Email: [Support@HEOSbyDenon.com](mailto:Support@HEOSbyDenon.com)

Live Chat: [www.HEOSbyDenon.com/LiveChat](http://www.HEOSbyDenon.com/LiveChat)

Telephone: Toll Free (855) 499 2820

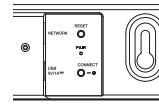
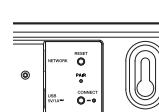
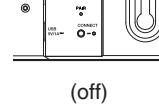
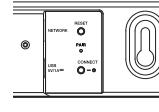
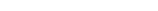
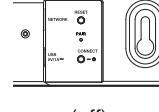
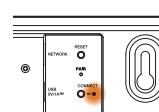
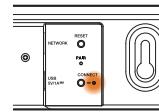
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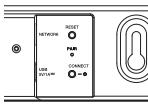
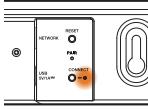
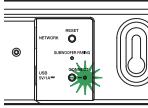
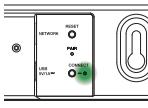
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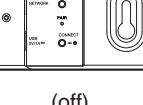
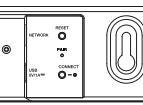
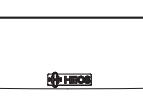
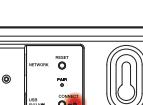
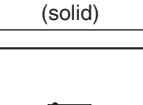
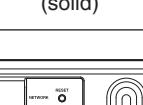
If you need additional help in solving problems, please contact Denon customer service in your area or visit <http://www.HEOSbyDenon.com>

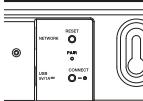
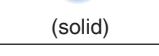
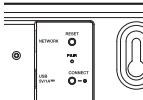
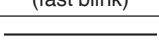
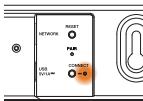
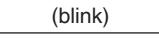
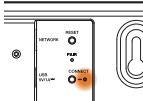
# Status LED table

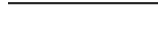
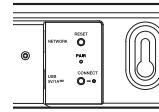
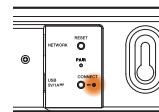
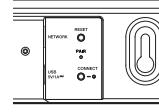
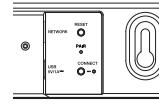
## Soundbar

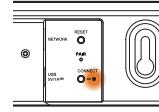
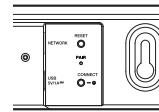
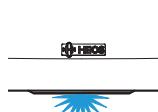
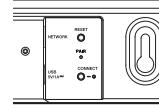
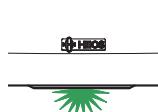
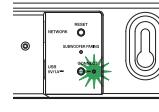
| Device Operation | Description                                    | Front LED Action   | Rear LED Action   |
|------------------|--|--|---|
| Off              | No AC power or Deep Standby                    | <br> | <br>  |
| Plug in          | Booting  | <br> | <br>  |
| On               | Ready-Configured and connected to your network | <br> | <br>  |
| On               | Not Connected to your network                  | <br> | <br> |

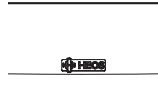
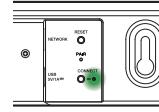
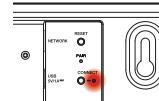
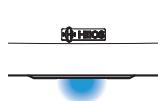
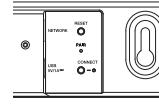
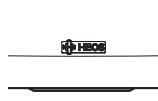
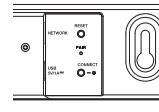
| Device Operation | Description                | Front LED Action  | Rear LED Action  |
|------------------|----------------------------|---|--|
| Change Network   | Connecting to your network | <br><br>(blink) | <br>(off)   |
| Setup            | Not connected              | <br>(solid)  | <br>(solid) |
|                  | Connect button was pressed | <br>(blink)  | <br>(blink) |
|                  | Cable connection is OK     | <br>(solid)  | <br>(solid) |

| Device Operation | Description                              | Front LED Action  | Rear LED Action   |
|------------------|--|---|---|
|                  | Connecting to your network               |  |  |
|                  | Configured and connected to your network |  |  |
|                  | Error                                    |  |  |
| Update           | Updating                                 |  |  |

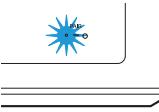
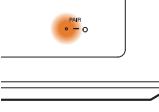
| Device Operation | Description                                    | Front LED Action   | Rear LED Action  |
|------------------|--|--|--|
|                  | Rebooting                                      | <br><br>(solid)      | <br>(off)   |
|                  | Ready-Configured and connected to your network | <br><br>(solid)      | <br>(off)   |
| Reset            | Soft reset - Clear user settings               | <br><br>(fast blink) | <br>(solid) |
|                  | Hard reset - Factory restore                   | <br><br>(solid)      | <br>(solid) |

| Device Operation | Description          | Front LED Action  | Rear LED Action  |
|------------------|----------------------|---|--|
|                  | Rebooting            | <br><br>(blink) | <br>(off)   |
|                  | Ready-Not Configured | <br>(solid)  | <br>(solid) |
| Errors           | Firmware Error       | <br>(slow blink (NOT fade))  | <br>(off)   |
|                  | Hardware Error       | <br>(fast blink)   | <br>(off)   |

| Device Operation | Description             | Front LED Action   | Rear LED Action   |
|------------------|-------------------------|--|---|
|                  | Network Error           | <br>(solid)       | <br>(solid)      |
| Volume Change    |                         | <br>(quick blink) | <br>(off)        |
| Mute             |                         | <br>(slow blink)  | <br>(off)        |
| WPS              | a WPS session is active | <br>(fast blink)  | <br>(fast blink) |

| Device Operation | Description     | Front LED Action  | Rear LED Action  |
|------------------|-----------------|---|--|
|                  | WPS connected   | <br>(for 3 sec. solid) | <br>(solid) |
|                  | WPS time-out    | <br>(for 3 sec. solid) | <br>(solid) |
| Power Management | Network Standby | <br>(solid)            | <br>(off)   |
|                  | Deep Standby    | <br>(off)              | <br>(off)   |

**Subwoofer**

| Device Operation  | Description | Rear LED Action  |
|-------------------|-------------|--|
| Subwoofer pairing | Paired      | <br>(solid) |
|                   | Pairing     | <br>(blink) |
|                   | Not paired  | <br>(solid) |

## Supported file types and codecs

| Frequency                    | Sample Rate | File Extension | Codec                           | Bit Rates         |
|------------------------------|-------------|----------------|---------------------------------|-------------------|
| 32 kHz<br>44.1 kHz<br>48 kHz | 16 bit      | wav            | PCM                             | ---               |
| 32 kHz<br>44.1 kHz<br>48 kHz | 16 bit      | mp3            | MPEG-1 Audio Layer 3<br>CBR/VBR | 32 - 320 kbps     |
| 32 kHz<br>44.1 kHz<br>48 kHz | 16 bit      | m4a<br>aac     | AAC-LC                          | 48 - 320 kbps     |
| 32 kHz<br>44.1 kHz<br>48 kHz | 16 bit      | wma            | wma9<br>CBR                     | CBR:48 - 192 kbps |
| 44.1 kHz<br>48 kHz           | 16 bit      | flac           | flac                            | ---               |
| 44.1 kHz<br>48 kHz           | 16 bit      | m4a            | ALAC                            | ---               |

### NOTE

- Files protected by DRM such as Apple's Fairplay DRM, are not supported.

## Supported audio formats (Coaxial/Optical)

2-channel Linear PCM:2-channel, 32 kHz – 96 kHz, 16/20/24 bit

Bitstream:Dolby Digital, DTS

# Specifications

## Speaker specifications

### ■ Soundbar

#### Wireless LAN

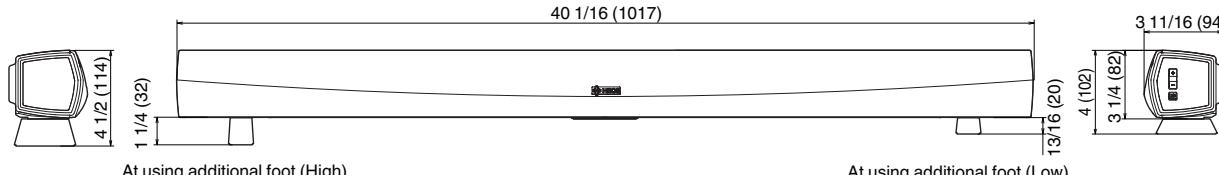
Network type: Conforming to IEEE 802.11a/b/g/n  
Used frequency range: 2.4 GHz, 5 GHz

#### General

Wireless Technology: 5.8 GHz frequency hopping  
Operating temperature: 41 °F - 95 °F (5 °C - 35 °C)  
Power supply: AC 100 – 240 V, 50/60 Hz  
Power consumption: DC24V, 3.75A  
Power consumption in Quick Start Mode: 5.0 W  
Power consumption in Deep Standby Mode: 0.5 W  
Max Analog Input: 2 Vrms

#### Dimensions

Unit : in. (mm)



**Weight: 6 lbs 3oz (2.8Kg)**

## ■ Subwoofer

### General

Wireless Technology:

5.8 GHz frequency hopping

Operating temperature:

41 °F - 95 °F (5 °C - 35 °C)

Power supply:

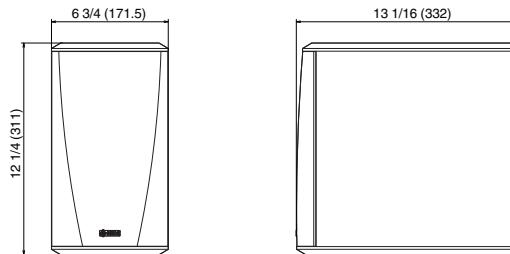
AC 100 - 240 V, 50/60 Hz

Power consumption:

75W

### Dimensions

Unit : in. (mm)



**Weight: 14 lbs 9 oz (6.6Kg)**

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

# Information

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#### □ GPL

| Open Source Used  | Version    |
|-------------------|------------|
| bridge-utils      | 2.8        |
| busybox           | 1.21.1     |
| ebtables          | 2.0.10-4   |
| Linux kernel      | 2.6.30     |
| mtd-utils         | 1.4.3      |
| ntfs-3g_ntfsprogs | 2011.4.12  |
| ntpclient         | 2007       |
| u-boot            | 2011.06    |
| wireless-tools    | version 29 |

#### □ LGPL

| Open Source Used | Version |
|------------------|---------|
| ffmpeg           | 0.8.3   |
| glibc            | 2.9     |
| libmms           | 0.6.2   |

#### □ curl-7.24.0

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## ❑ e2fsprogs-libs-1.40.8/lib/uuid

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## ❑ expat-2.0.1

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## ❑ getopt

<http://cvsweb.netbsd.org/bsdweb.cgi/src/lib/libc/stdlib/>

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## ❑ jQuery

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## ❑ libtar-1.2.11

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## ❑ mDNS 320.10.80

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## ❑ mongoose

<https://github.com/cesanta/mongoose/>

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## ❑ portmap-6.0

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## ❑ pstdint.h-0.1.12

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## ❑ **rl78flash 2000.3.1**

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## ❑ **sqlite 2003.5.7**

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## ❑ strlcpy.c , v1.11

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## ❑ taglib-1.5

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## ❑ tinyxml 2002.4.3

[www.sourceforge.net/projects/tinyxml](http://www.sourceforge.net/projects/tinyxml)

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## ❑ Tremor

<http://wiki.xiph.org/index.php/Tremor>

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## ❑ zlib

<http://www.zlib.net/>

zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.3, July 18th, 2005

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