

# **HEOS Integration Release Notes**

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## Introduction

Clare Controls announces the integration of Denon HEOS devices into the ClareHome system.

You can integrate the HEOS device to a ClareHome control system so that your customers can send commands and interact with HEOS through their ClareHome system from their Android or iOS devices.

HEOS integrates with ClareHome in a similar fashion to Sonos. All audio devices share a common UI to ensure user experience consistency.

All HEOS models are supported.

#### Services supported in ClareHome with HEOS:

- Amazon Music
- Pandora
- iHeart Radio

Nas Drive

Radio by TuneIn

Rhapsody

Tidal

Sirius XM

SoundCloud

**Note:** Services not currently supported in the ClareHome app can be saved as HEOS Favorites and called using scenes and rules in the ClareHome app. See "Configuring scenes with HEOS" on page17.

#### HEOS technical notes:

- A HEOS account is required for HEOS access in the ClareHome app. See "To access HEOS services with the ClareHome app" on page 4.
- You must use the HEOS app or software to initially configure your HEOS devices. HEOS must be set up before configuring it with Clare Controls.
- All HEOS playlist names are case sensitive.
- All music services available to HEOS appear on the app. If you have not configured a music service on HEOS, you cannot access it through the Clare Controls HEOS service. For example, Slacker may appear in the music service list, but it is inaccessible unless the Slacker account is configured with HEOS.

## Installation and device configuration

The HEOS devices must be connected to the home's Wi-Fi or hard wired to the data network using an Ethernet cable, and then configured according to the HEOS device's documentation. When configuring the HEOS device, you must provide the credentials (username and password) for each desired music service used with HEOS. For example, you must provide HEOS with the username and password of the Slacker account to stream it on the HEOS device.

## **Connecting HEOS devices to the network**

Note: This requires the homeowner's HEOS credentials.

Once the devices are connected and configured, add them to ClareHome.

A ClareHome user can add the HEOS device to their system. If they want to use HEOS with their existing CobraNet devices, their integrator must configure the HEOS and CobraNet devices using Fusion.

# Auto-discovery with HEOS and the ClareHome app

The ClareHome app uses auto-discovery to connect to HEOS devices.

**Note:** The HEOS device is auto discovered when it is powered on. To assign a name to the HEOS device, it must be configured in the HEOS app before changes are made in the ClareHome app. If a ClareHome user accesses the ClareHome app or the project is deployed before the HEOS device is configured, it cannot be assigned a name.

#### To auto-discover HEOS devices with the ClareHome app:

- 1. Configure your HEOS devices with the HEOS app.
- 2. Launch the ClareHome app, and HEOS is ready for use.
- 3. Tap the **Devices Menu** icon  $\blacksquare$ .
- 4. Tap Music.



5. Your HEOS devices are auto-discovered and functional.

<		Music	
	Add Ne	w Device Ico	n
1	Bathroom L	MS	•
1	Den LMS		•
1	Garage LMS	6	•
1	Left		•
1	Office LMS		•
1	Right		•
Ę	10	***	

6. Tap 🕂 to add the desired device to your space.

Note: HEOS devices can only be grouped with other HEOS devices.

To authorize your HEOS device:

**Note:** Before using the HEOS service, you must authorize the device.

 Tap the music service on your home screen, or, in the Devices music menu. The service has a **Cloud** icon <sup>O</sup> displayed to designate that it needs attention and is not fully prepared to communicate with Clare.



2. Enter your credentials, and then tap **Save**.

#### Notes

- This requires the homeowner's HEOS credentials.
- The authorization process configures all HEOS devices linked to the account at the same time. The user does not need to do this for each HEOS device.

<b>〈</b> Device Authorization	
Please enter your username and password from when you created your Heos account in the Heos app.	
Username	
Username	
Password	
Password	
Save	

The device page displays, confirming that the device is online.

Edit Device	
Device Name	
Desk	
Device Area	
Desk	×.
	Add an Area
Туре	
Denon-HEOS 1	
Status	
Device is offlitte	
Configure Devic	e ,

3. Return to your ClareHome space, the service no longer displays the **Cloud** icon. The service is now usable.



To update or change the HEOS credentials for the ClareHome account:

1. Launch the ClareHome app, and then tap the Mega Menu icon  $\equiv$ .



2. Tap Add/Edit Devices.

×	★ Add/Edit Devices :	
ſ°	Climate	
: <b>0</b> :	Lighting	
	Music	
•	Security	
	•	

3. Tap **Music**, and then select the HEOS device.

<	Music Devices	÷
Þ	Desk Denon / HEOS 1	:
	Play1 Sonos / PLAY:1	:

4. Tap Configure Device.

evice Name Desk evice Area Desk ↓ Add an Area rpe ♪ Denon-HEOS 1 atus @ Device is online Configure Device	Edit Devic	e
Desk vice Area Desk Add an Area PP ♪ Denon-HEOS 1 atus © Device is online Configure Device	Device Name	
evice Area Desk ✓ Add an Area rpe ♪ Denon-HEOS 1 atus ⑦ Device is online Configure Device	Desk	
Desk Add an Area	Device Area	
Add an Area	Desk	
rpe ♪ Denon-HEOS 1 atus ② Device is online Configure Device		Add an Area
Atus Device is online	Type ♪ Denon-HEOS 1	
Configure Device	Status Oevice is online	
	Configure Dev	rice

5. Enter your HEOS Username and Password, and then tap Save.



- To access HEOS services with the ClareHome app:
- 1. Access the HEOS service in the ClareHome app, and then tap to expand the music services menu.



2. Tap the **Music Note** icon **I** to view the music services.

× = л		0
< TuneIn	-	9
Local Radio	>	
Music	>	
News	>	
Sports	>	
Talk	>	
By Location	>	5
By Language	>	
Search TuneIn	>	
Podcasts	>	
		0:00

- 3. Tap a service in HEOS for example, Tunein.
- 4. Select a search method.

Each music service has different search options available, they match the Sonos options. For example, Tunein allows the user to search by location, language, and keywords.

× ≡ л		
< Tuneln	-	9
Local Radio	>	
Music	>	
News	>	
Sports	>	
Talk	>	
By Location	>	5
By Language	>	
Search TuneIn	>	
Podcasts	>	
		0.00

To change the Aux input in the ClareHome app:

1. Launch the ClareHome app, and then browse to your Denon HEOS music service.



2. Tap the Music Source icon **I**, and then tap the Aux Input.

× = л		-
Services		
Tuneln	>	
Deezer	>	
Napster	>	
iHeartRadio	>	
SiriusXM	>	
SoundCloud	>	
Tidal	>	
Amazon	>	
Local Music	>	
Playlists	>	
History	>	
AUX Input	>	0:00
Favorites	>	X

3. Select the HEOS device, and then select the desired input.



#### 4. Tap Play Now.

The new input plays through the HEOS device.



**Note**: The input devices, unless configured separately, are not managed using ClareHome. If configured, you can select the AUX input through ClareHome music, but are not able to control it using music in ClareHome.

# Configuring distributed audio with HEOS and the MR-8

HEOS amplifiers and devices working with CobraNet devices must be added and configured manually.

**Note:** Once HEOS is set as the audio input in the wizard, the auto-discovered and assigned services are removed. The services created using the wizard replace the auto-discovered defaults. If the HEOS device is not set as the input in the audio wizard, it will keep the auto-discovered services and prevent Fusion deployment.

To configure the HEOS device in Fusion:

- 1. Access your Fusion project, and then click the **Devices** tab.
- 2. Click the Audio Setup Wizard icon 🧠.

The Audio Setup Wizard displays.

C Audio Setup Wizard	$\odot$
Audio Type Selection	40
HEOS/Sonos Only (HEOS/Sonos will be dynamically discovered and created)	
HEOS/Sonos with CobraNet	
LMS with CobraNet	
	Cancel
	Cancel

**Note:** If you have any existing audio configured, a warning dialog displays. Click **Cancel** to exit the Wizard.

– or –

Click **OK** to erase old configurations and create a new audio service.

C Delete Audio Configuration	$\odot \otimes$
Starting the audio wizard will erase your current audio configuration. The data below will be deleted or updated. Are you sure you want to delete the current configuration?	
Devices will be deleted: Audio - CS-MR-8 Audio - CS-iMR-4 Audio - Media Server Audio - iMR-BR-1 (CLIQ)	
Services will be deleted: Dining DirecTV Family Room Greg Play Audio Service Kids Playroom	
Any Scenes or Rules referencing the devices or services above will be updated or deleted as neces	sary.
OK Can	cel

3. Select HEOS/Sonos with CobraNet, and then click Next >.

Note: LMS with CobraNet is not available on the CLIQ.mini.

4. Select the HEOS device (the input) in the left panel, and then select the speaker rooms in the right panel.

C Audio Setup Wizard		
Source Device and Room Selection		4
This wizard will guide you through setting up Ensure that you have already created all the	o the Streams Multi-Room Audio solution. e external audio devices and rooms before proceeding.	* •
Select audio devices to use:	Select rooms with speakers:	
type filter text	type filter text	
<ul> <li>Living Room</li> <li>Living Room HEOS</li> <li>Unassigned Devices</li> </ul>	Game Room Garage Great Room Guest Bedroom Guest Room Kitchen Lanai Main Bathroom Main Hallway Master Bedroom Mechanical Room	
	< Back Next > Finish	Cancel

- 5. Click Next.
- 6. The Configure Devices dialog displays. Click **Add** to view the Add Device dialog, and then select the desired CobraNet device in the Device drop-down.

•				0
ld Dev	ice			
elect a	nd configure a device			
	-			
evice:		 	 	
	CS-MR-8			
	CS-RE-1			
	CS-iMR-4			
	CS-iMR-6			
			Add Device	Cancel

- 7. Configure the CobraNet device.
  - Name: The desired name of the CobraNet device.
  - I/O Ports: The number of INs and OUTs used on the CobraNet device.
     Note: In our example we use HEOS as our only input, and have 4 speaker rooms as outputs. So, for IN we enter 1 and for OUT we enter 4.
  - **MAC Address:** The MAC address of the CobraNet device. It is found on the box of the device, or on the device's label.
  - Network Address: The IP address set for the CobraNet device. The CobraNet IP schematic is 172.30.100.x (x can be 2 through 254).

С	0	×
Add Device		4
Select and configu	re a device	
Device: CS-MR-8		r
Name:	MR8 with Heos	]
I/O Ports:	IN: 1 🖕 OUT: 4 🖕 Remaining: 3	
MAC Address:	ab:11:ab:11:a1:b1	]
Network Address:	172.30.100.3	]
	Add Davice Concol	
	Aud Device Calice	

- 8. Click Add Device, and then expand the CobraNet device.
- 9. Double-click the **--None--** drop-down next to IN-1 or IN-S/PDIF, and then select the HEOS device for the audio source.

C Audio Setup Wizard	$\odot \otimes$
Configure Devices	4
Add your audio devices below	
type filter text	
✓ MR8 with Heos (MR-8)	
Properties	
IN-1:NONE	
IN-S/PDIF:NONE	
• OUT-5:NONE	
▶ OUT-4:NONE	
> OUT-3:NONE	
> OUT-2:NONE	
Add Delete	
< Back Next > Finish Cance	1

10. Expand OUT-2, and then double-click --None-- to select the area, and then double-click --None-- to select the Receiver source. Repeat for each OUT.

C Audio Setup Wizard				$\odot$
Configure Devices				4.
Add your audio devices below				
type filter text				
MR8 with Heos (MR-8)				
<ul> <li>Properties</li> </ul>				
IN-1:NONE				
IN-S/PDIF: RE-1				
OUT-5: Game Room				
Receiver:NONE				
⊿ OUT-4: Garage				
Receiver:NONE				
⊿ OUT-3: Lanai				
Receiver:NONE				
✓ OUT-2: Living Room				
Receiver:NONE				
			Add	Delete
	< Back	Next >	Finish	Cancel

**Note:** You must click outside of the last box you configure. If you do not click outside of the last configured option, it will not save.

11. Click **Next** to view the Review page.

C Audio Setup Wizard				$\odot$
Review Devices and Services				46
Review the proposed devices and services				
Devices Services				
→ 📰 MR8 with Heos				
	< Back	Next >	Finish	Cancel

– or –

Click **Finish** to exit the Audio Setup Wizard.

# **Removing LMS and configuring HEOS**

When removing all LMS devices in the home and replacing them with HEOS only, follow the steps below.

#### To remove LMS and configure HEOS:

- 1. Access the project in Fusion.
- 2. Click the **Devices** tab, and then click 4 to launch the Audio Setup Wizard.

The Delete Audio Configuration dialog displays.

C Delete Audio Configuration	$\odot \otimes$
Starting the audio wizard will erase your current audio configuration. The data below will be deleted or updated. Are you sure you want to delete the current configuration?	
Devices will be deleted: Audio - CS-MR-8 Audio - CS-iMR-4 Audio - Media Server Audio - iMR-BR-1 (CLIQ)	
Services will be deleted: Dining DirecTV Family Room Greg Play Audio Service Kids Playroom	
Any Scenes or Rules referencing the devices or services above will be updated or deleted as neces	ssary.
ОК	ncel

- 3. Click OK.
- 4. All audio configurations are cleared and the Audio Setup Wizard displays.

C Audio Setup Wizard				
Audio Type Selection				40
HEOS/Sonos Only (HEOS/Sonos will be dynamically discover	red and created)			
HEOS/Sonos with CobraNet				
LMS with CobraNet				
	< Back	Next >	Finish	Cancel

5. Select HEOS/Sonos Only, click **Finish**, and then deploy the project.

# **Configuring scenes with HEOS**

Configure a scene for the HEOS device.

The following example sets a playlist scene. This scene plays a set playlist and increases the volume gradually to the desired point.

Note: The playlist name is case sensitive.

#### To create a playlist scene:

1. Access your project, and then click the **Scenes** tab.

🐻 Setup 📼 Devices 🔞 Services 👹 Scenes 🕛 Rules 📓 Troubleshooting	
	S 🕒 🕒
type filter text	
Name	Used
Game Room - Movie Time	no

2. Click the **New Scene** button 😳, and then enter a name for the scene.

Scene_1 🗙		- 8
Scene Info		H 🕑 🖬 🗖
Scene Name:	Scene_1	Add Action

3. Click Add Action, and then select Invoke Service Operation.



- 4. Click **OK**, and then configure the Invoke **Service Operation** field.
  - Service: Select the HEOS service in the desired location.
  - Control Point: Select the Playlist Manager.
  - **Operation:** Select Play Playlist, and then enter the name of the playlist as prompted.

Note: The playlist name is case sensitive.

Scene_1 X	
Scene Info	
Scene Name: HEOS - Play Playlist - HEOS Favorite	Add Action
Invoke Service Operation	Delay Before Execute (sec): 0.00
Service: <u>- Living Room</u> Control Point: Living Room(HEO: Operation: <sup>O</sup> Play Playlist () <sup>O</sup> Classic Rock 1	✓ ▼

- 5. Click Add Action, and then select Invoke Service Operation.
- 6. Click **OK**, and then configure the **Invoke Service Operation** field.
  - Service: Select the HEOS service in the desired location.
  - **Control Point:** Select the living room HEOS volume. If you are using distributed audio, use the MR-8's volume.
  - **Operation:** Select volume, and then enter the next desired volume as prompted.



7. Click Add Action, and then select Invoke Service Operation.

- 8. Click **OK**, and then configure the **Invoke Service Operation** field.
  - Delay Before Execute (sec): This is the time delay before the action occurs. We set it at 3 seconds.
  - Service: Select the HEOS service in the desired location.
  - **Control Point:** Select the living room HEOS volume. If you are using distributed audio, use the MR-8's volume.
  - **Operation:** Select volume, and then enter the next desired volume as prompted.

₩ *Scene_1 🗙		- 8
Scene Info		8 🙂 🖬 🗖
Scene Name:	HEOS - Play Playlist - HEOS Favorite	Add Action
Invokes Pl "Living Room	aylist Manager - "playPlaylist" on Delay Before Execute (sec): 0.00	🔶 🕹 🤤
<ul> <li>Sets Volum Room".</li> </ul>	ne - (volume=20) on "Living Delay Before Execute (sec): 0.00	📑 🛧 🐳 🤤
🗉 Sets Volum	ne - (volume=22) on "Living Room". Delay Before Execute (sec): 3.00	💠 🚖 🤤
Service:	- Living Room	
Control Point:	Living Room(HEOS) (Volume)	Ψ
Operation:	Volume = 22	Ŧ

- 9. Repeat steps 7 through 8 for each desired volume increase.
- 10. Click the **Save** button  $\blacksquare$ , and then configure rules for HEOS.

## **Configuring rules with HEOS**

Configure a rule for the HEOS device.

The following example sets a "disarmed by" security rule using HEOS. When the security panel is disarmed by John, the HEOS scene (configured above) runs.

To create a "disarmed by" rule using HEOS:

1. Once the scene is created and saved, click the **New Rule** icon  $\square$ .

🖀 HEOS - Play Playlist - HEOS Favorite 🔃 HEOS - Play Playlist - HEOS Favorite 🛿		
Rule Info		
Name: HEOS - Play Playlist - HEOS Favorite	Enabled	

2. The Rule Info tab displays.

If desired, change the rule name.

🚟 HEOS - Play Pl	aylist - HEOS Favorite 🕎 HEOS - Play Playlist - HEOS Favorite 🔀		- 8		
Rule Info		믭	7		
Name: HEOS -	Play Playlist - HEOS Favorite	Enabled			
Event Part					
Event Type: Cus	tom Button		=		
NOTE:	When all entertainment buttons are enabled, some custom buttons may not have room to ap To make room, remove some other entertainment buttons.	pear c			
Button Name:					
Service:	Click to select services and button priorities				
Selected services					
Services	Button Priority		•		

3. Configure the Event Part as below.

**Note:** This rule is an example and uses a pre-configured Interlogix NX-8 panel. The NX-8 allows individual pin numbers to be set in the panel. For configuration steps, follow the instructions included with the NX-8 panel.

- Event Type: Device Property Change Event
- Device: NX-8 Partition 1
- Function: Intrusion Partition
- **Property:** Disarmed By
- Constraint: =
- Value: John

Event Part		
Event Type:	Device Property Change Event	7
Device:	Entry - GE NX Series Security - GE NX-8, Partition 1	
Function:	Intrusion Partition	r
Property:	Disarmed By	r
Constraint:	=	r
Value:	John	]

4. The Action Part is configured for you.

Action Part		
Action Type: Scene		•
Action:	HEOS - Play Playlist - HEOS Favorite	▼ <u>Edit</u>
Interrupt behavior:	Continue with next command	

5. Click the **Save** button  $\square$ , and then deploy the project.

# **User interface**

The following figures show the HEOS controls on the ClareHome UI.

Figure 1: HEOS user interface



**Note:** Album artwork is not always available when remotely using the ClareHome app.

## **Contact information**

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