



# Josh.ai is excited to announce expanded support for Crestron Home devices. Josh now officially supports Crestron Home, including Crestron Home AV.

Josh support for Crestron Home AV is limited to Crestron Processors MC4-R and CP4-R with Crestron Home OS 3.0. For Crestron Home OS 2.0 and Crestron Pyng devices please see:

<https://help.josh.ai/kb/crestron-pyng-integration>

## Home AV Integration

Building on top of Josh.ai's integration with Crestron Home environmentals (Lighting, Shades, Climate, etc...), Home AV adds another layer of automation and magic to the home. Home AV allows residents to request music artists, songs, albums, genres, movies, TV shows, TV channels, and AV sources. Utilizing Josh.ai's deep Roku, Dish, Xfinity, Sonos, and other device linking, a resident can simply walk into a room containing a Josh device and say "Watch ESPN" or "Listen to rock music". These location-aware and natural language commands activate source devices, route the sources to the room, and turn on the appropriate AV devices seamlessly. Below are some example commands that are now possible with Josh in control of Crestron Home AV.

- "Listen to The Beatles"
- "Watch Food Network"
- "Switch to the Xbox"
- "Play classical music"
- "Close the shades, turn the lights down, and watch Breaking Bad"

Commands for rooms without Josh devices and grouping requests allow residents to control their whole home AV system from any room with a Josh device. Below are some example commands.

- "Listen to Pool Music in the pool"
- "Watch HBO in the bedroom and the living room"
- "Watch the PlayStation in the game room"

Use the Josh iOS app to choose music for your Crestron Home audio zones and control AV source devices such as Roku, Xfinity, Dish, and Sonos.



Fig. 1: The music player UI in the Josh app

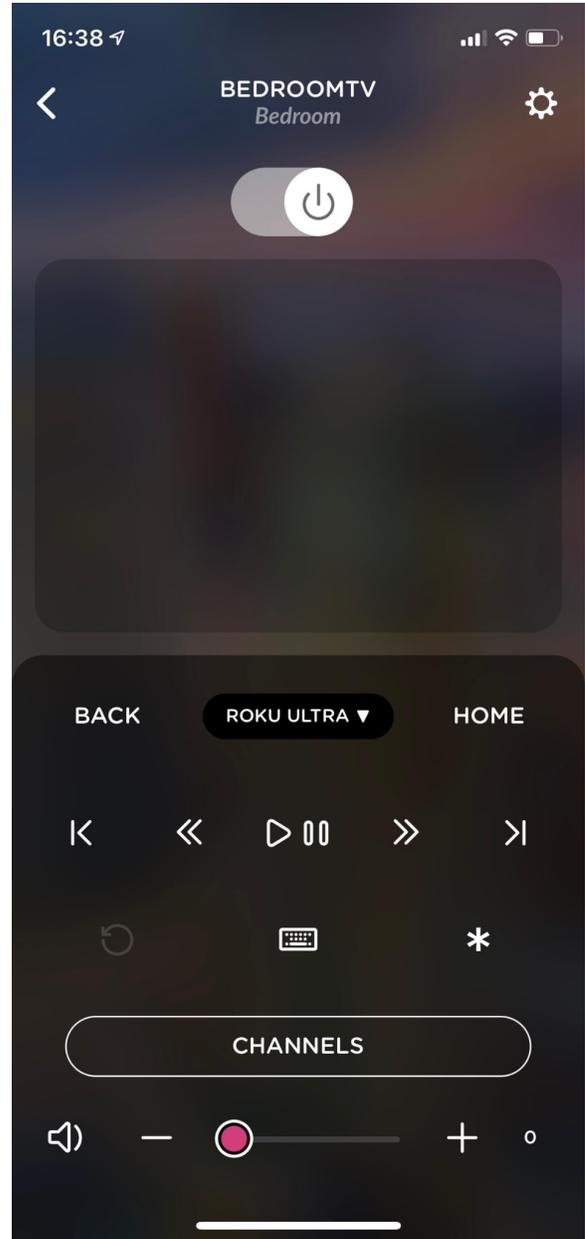


Fig. 2: The AV source control UI in the Josh app



## Crestron Home: Josh Setup Instructions

Crestron uses a variety of credentials for different purposes. To control your Crestron Home system, Josh will need to authenticate with two Crestron Home credentials. All these credentials and their uses are listed below along with the credentials necessary for Josh integration.

<b>Credential</b>	<b>Usage</b>
<i>Admin</i>	<i>Installer's credentials used for the setup app and Crestron Toolbox. Unused for Josh</i>
<b>User Interface Device Password</b>	<b>Allows control by remotes, touchpads, and Josh for Home AV</b>
<i>Advanced User Password</i>	<i>Unused for Josh</i>
<i>Common Device Password</i>	<i>Unused for Josh</i>
<b>Authentication Token</b>	<b>Allows control by Josh for environmentals (Lighting, Climate, Shades, ...)</b>

Please skip to Crestron Home AV Setup if your Crestron Home processor is already authorized (using the Authentication Token) with Josh.



## Initial Processor Setup

**WARNING:** Make sure the hub is set to use the default ports (Port 443 for Secure and Port 80 for Unsecure)

### Step 1:

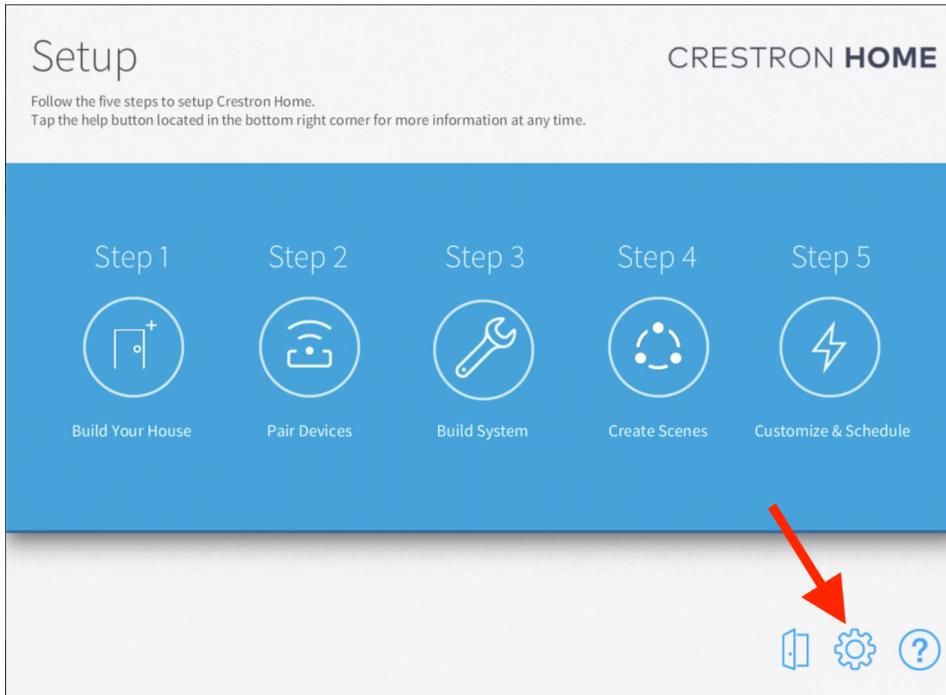
Make sure your Crestron Home Hub is up-to-date (with a minimum OS version of 3.005).

### Step 2:

Open the Crestron Home Setup iPad app, and login with your Admin Username and Password.

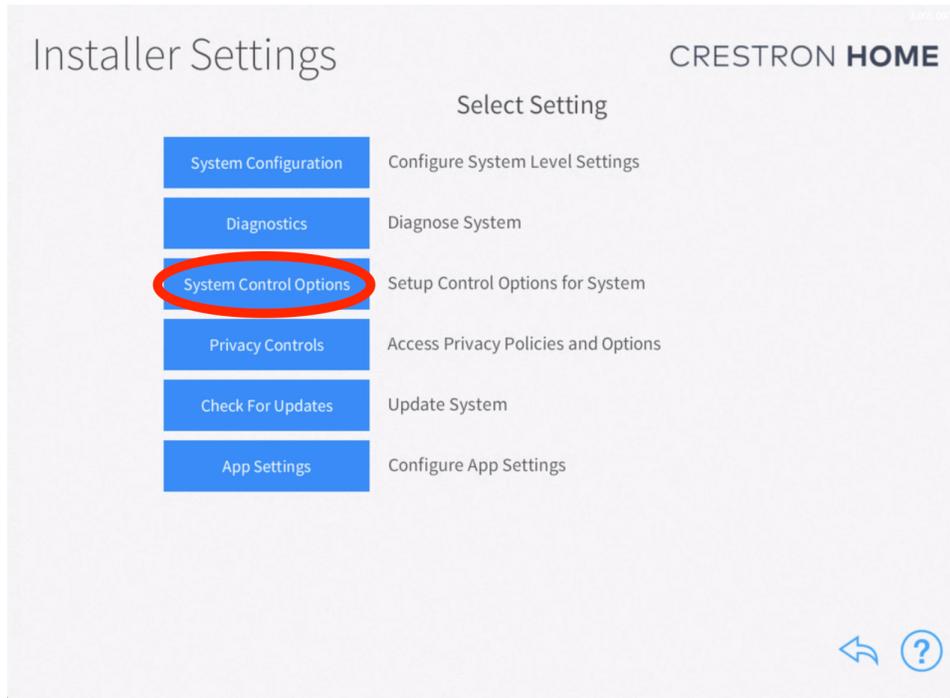
### Step 3:

Tap the gear on the bottom right of the app.

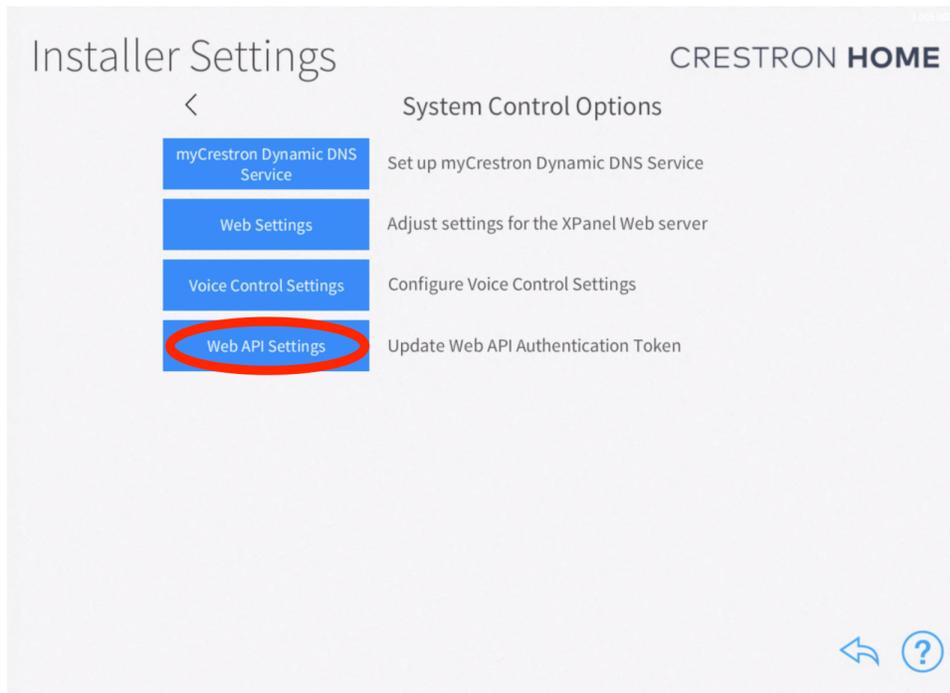




Tap System Control Options

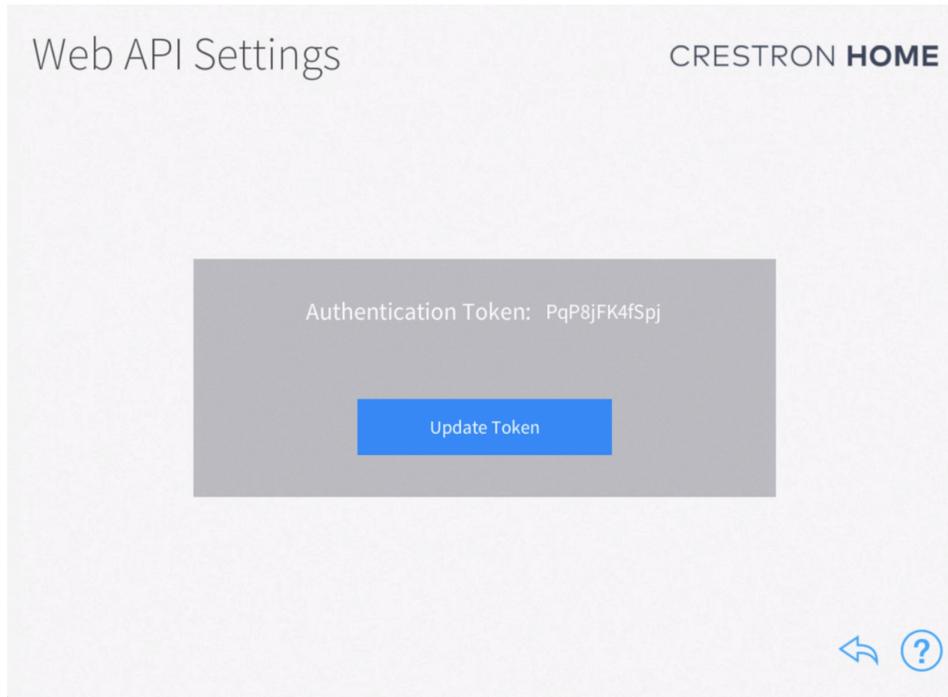


Tap Web API Settings





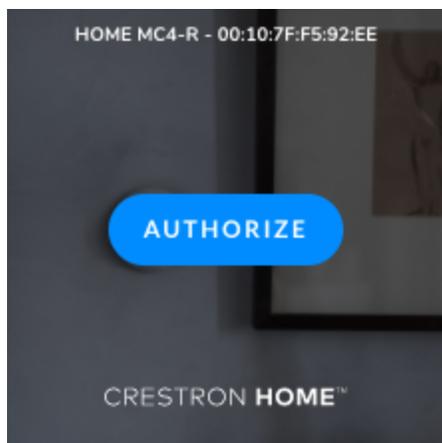
The Authentication Token is displayed and will be used in **Step 4**.



**Step 4:**

Navigate to Josh Portal Crestron Home Auth Devices (Portal > Settings > Auth Devices > Crestron Home). Click "AUTHORIZE" on the Crestron Home tile with the Crestron Home Processor model name.

**Warning! Ensure you are authorizing the Processor and not the AV Hub. Processor tiles start with "Home MC4-R" or "Home CP4-R".**



Supply the **Authentication Token** from the iPad app and click the "Authorize" button.



## Crestron Home AV Setup

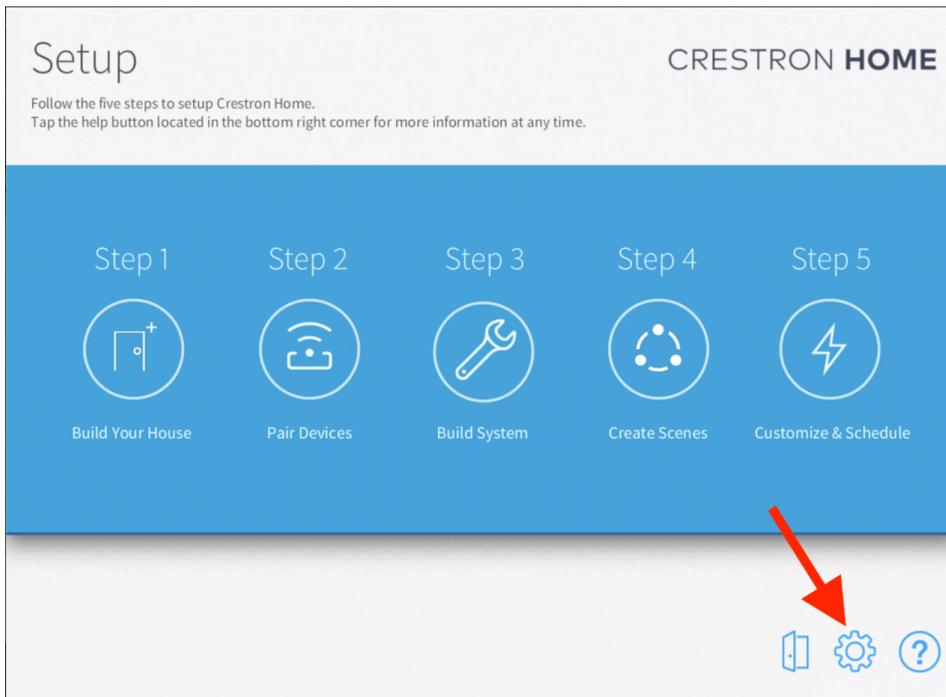
Skip to Step 3 if you have already created a User Interface Device Password and the Device Port is set to 50001.

### Step 1:

Open the Crestron Home Setup iPad app, and login with your Admin Username and Password.

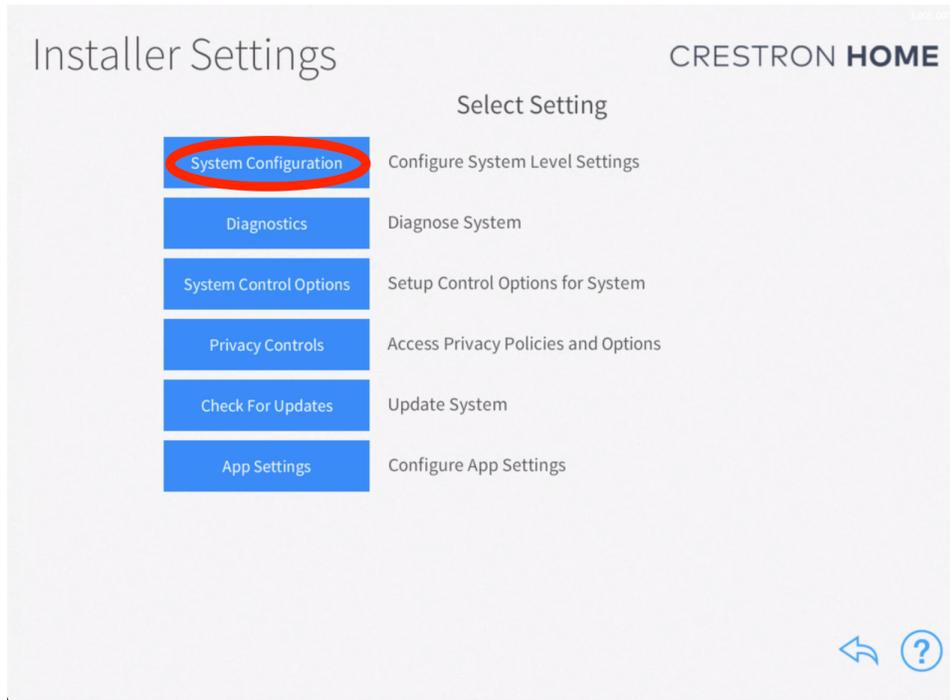
### Step 2:

Tap the gear on the bottom right of the app.

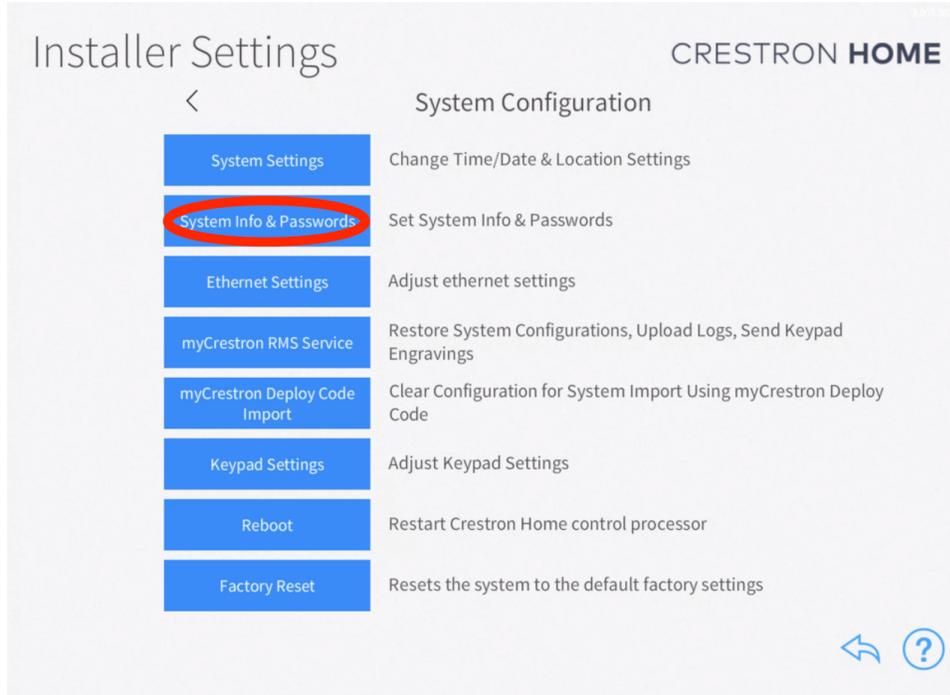




Tap System Configuration

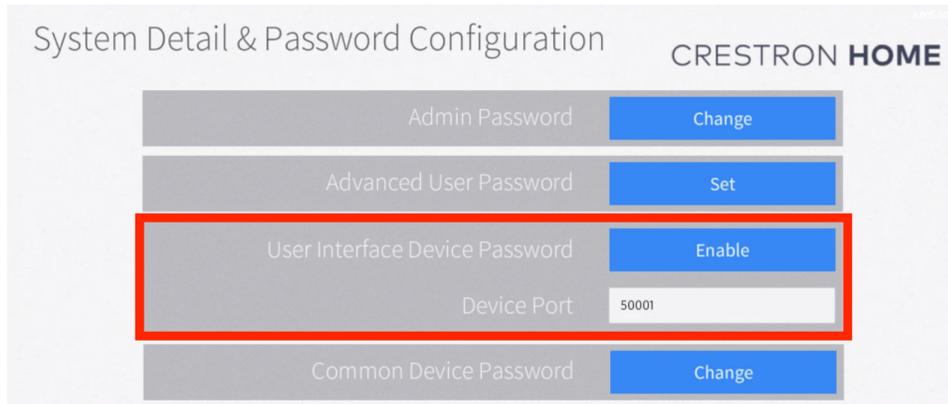


Tap System Info & Passwords. If you have not yet set a User Interface Device Password, your app will appear as follows.



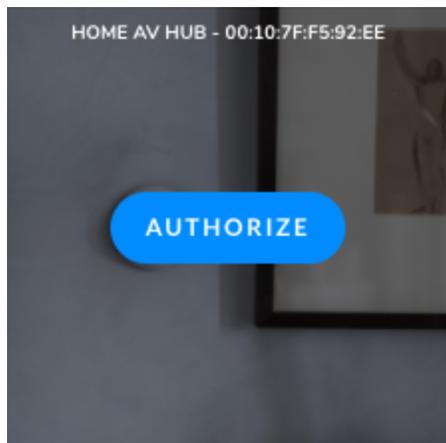


Create a User Interface Device Password and ensure the Device Port is set to 50001.



### Step 3:

Navigate to Josh Portal Crestron Home Auth Devices (Josh Portal > Settings > Auth Devices > Crestron Home). Click "AUTHORIZE" on the Home AV Hub tile.



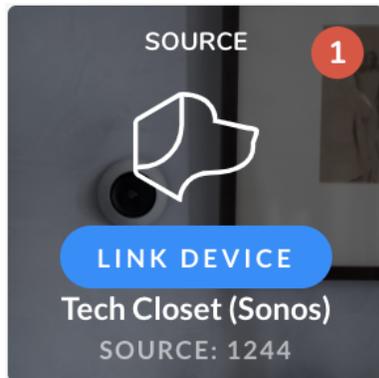
This should be the only remaining tile to authorize for Crestron Home. Supply the User Interface Device Password and click the "Authorize" button.



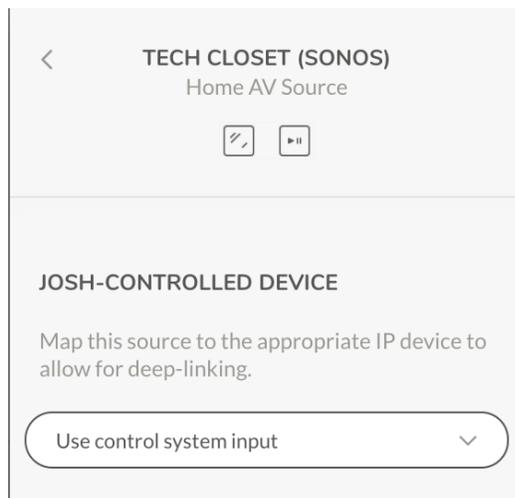
## Home AV Integration

Here are a few steps to improve integration between Josh and Crestron Home AV.

- Set default sources In Crestron Home Setup for all video and audio endpoints in all media rooms. At a minimum, set every default source to "Use last source". Turning on a video endpoint (TV/Display) through Josh will automatically route all default sources for that media room.
- Ensure Crestron Home room names match Josh room names.
- Prior to linking devices in Josh Portal AV Setup...
  - Ensure all sources are removed from Josh controlled TVs. Sources/Devices will not be linkable to Crestron Home if they are linked to Josh controlled TVs.
  - Only one Sonos output is supported per room. This includes room audio from a Sonos source (Connect or Port) and amplified Sonos standalone speakers.
  - Delete Josh controlled TVs on the Josh Portal Diagnostics page to allow Crestron Home to control all AV devices.
- Link Crestron Home devices to Josh controlled devices (Roku, Dish and Xfinity set-top boxes, Sonos)
  - Navigate to Josh Portal > AV Setup > Crestron Home AV Hub
  - Click the "Link Device" button on the tile of the source.



- In the right side panel, click the dropdown and select the Josh controlled device to deep-link the devices.



- The source tile will now appear as a Josh controlled device



## Important Integration Notes

- Crestron Home requires a startup volume for their Audio Switchers and Amps. Josh commands such as "Play The Beatles at #% volume" will start playing music at the Crestron Home startup volume not the volume in the Josh voice command.
- Crestron recommends creating and managing audio groups within the Crestron Home app. **Josh currently supports commands to play music in one room at a time.** The ability to play to multiple rooms or change groups in Josh will be added in a future update.