Linn Drivers for Crestron Home
Setup Guide

Introduction

This document aims to give guidance in the setting up of a Crestron Home system that utilizes the support for Linn DSM devices in this ecosystem. On completion of this guide, you will have a working demo that utilizes the available features with a single Linn DSM device. This process can then be repeated for any other devices within the house. This guide assumes very minimal previous experience with Crestron Home.

Requirements:

1. A Crestron Home processor
2. Installation of Crestron Home app or a touch panel with Home OS
3. Installation of Crestron Home Setup app on iPad (alternatively the desktop version can be used)
4. A Linn DSM running CI-Gateway[1]

Configuring the Crestron Home system

First a basic setup must be configured for the drivers to work within. Open the Crestron Home Setup app and connect to your Crestron Home processor. You will be met with this screen once you are connected.
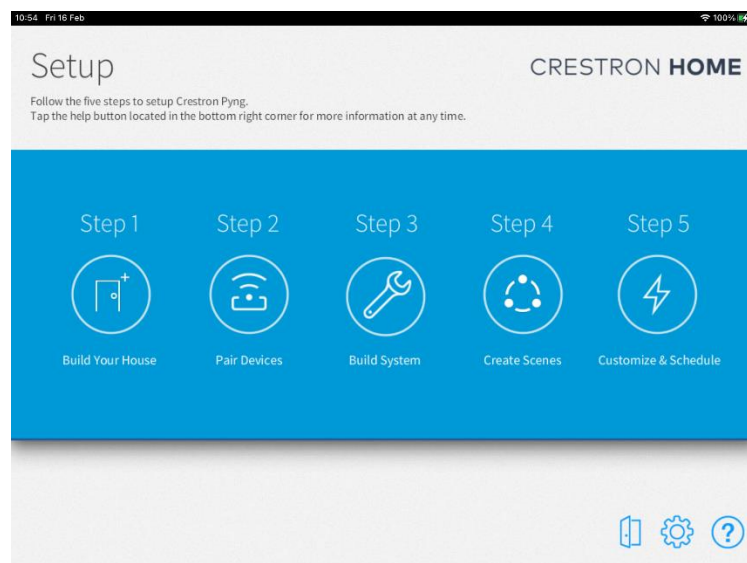
The first task is to define at least 1 room. Select "Build Your House" from the home screen and add one. In the following screenshot there is a room called 'Living Room':

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[1] CI-Gateway
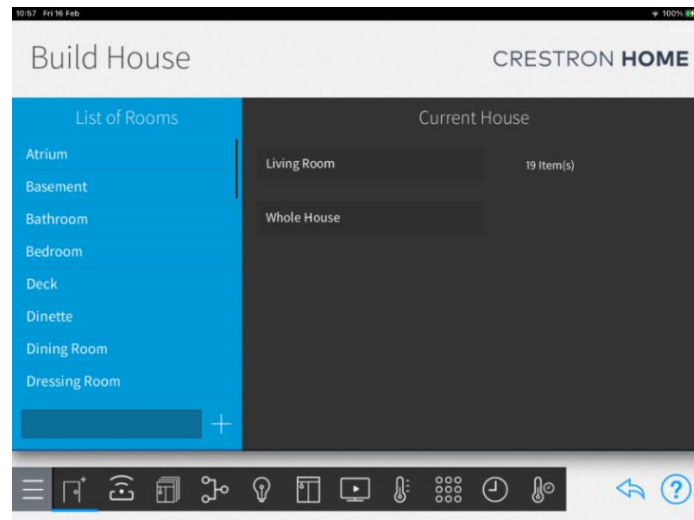
Shortcuts to the various setup stages are along the bar at the bottom.
These 3 are the only ones that are relevant for this setup guide.

If there's any issues at this stage, then see Crestron's official documentation for troubleshooting.

Adding Device Drivers

The next step is to add the three drivers that make up the support. These will be looked at one by one. These drivers are available directly within the Crestron Home Setup from the Crestron drivers database and no sideloading is required.

AV Receiver Device

Before starting this process, the Web API Authentication Token should first be noted for your processor. To view this, go to *Settings->System Control Options->Web API Settings* and it will be shown on screen.

Back to the setup and in the Pair Devices stage go to *Drivers->AV Receiver->Linn* and choose the driver that matches the model of DSM that you are using. **If the model of DS/DSM that you have isn't listed, then you can still use the "Generic DS" or "Generic DSM" driver type to include it. This is explained in more detail at the end of the document.**
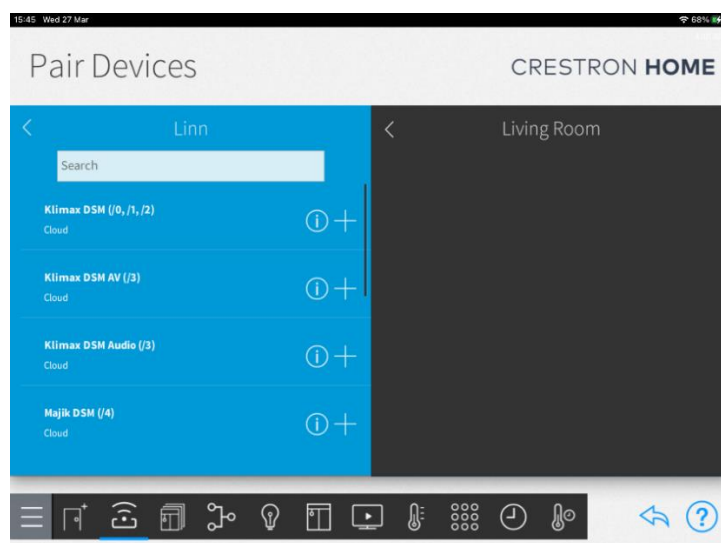
Add this device to the room you just created, and you will first get a popup message box to name the device. Simply name something appropriate (ie. 'MajikAvr').
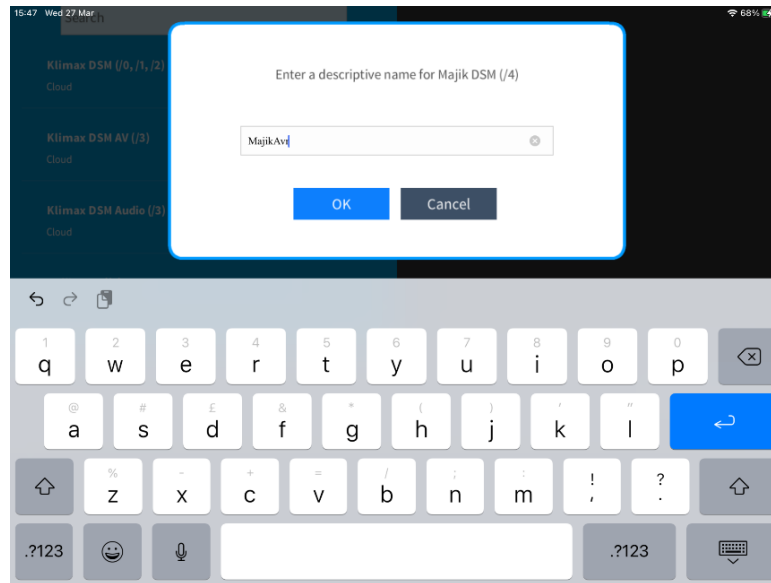
There will then be a follow up popup message box with further detail to input.

- **IP Address** – The IP Address of the Linn DSM on your network.
- **Auth Token** – The Web API auth token noted down.
- **Room Name** – The name of the Crestron Room (not the Linn DSM room name). For example, in my setup it is 'Living Room'.
- **Source Names** – The friendly names of source inputs must be named here. For example, on HDMI1 I have a source called 'Xbox' so I will enter this here. Unused inputs can be left as default and sources can be left as their system name – for example, Bluetooth will usually just be left as Bluetooth. It is worth noting down all these source names as they will be important in the next step.
- **Verbose Logging** – Checkbox to enable extra logging for debugging purposes, should be left unchecked unless reporting an issue.
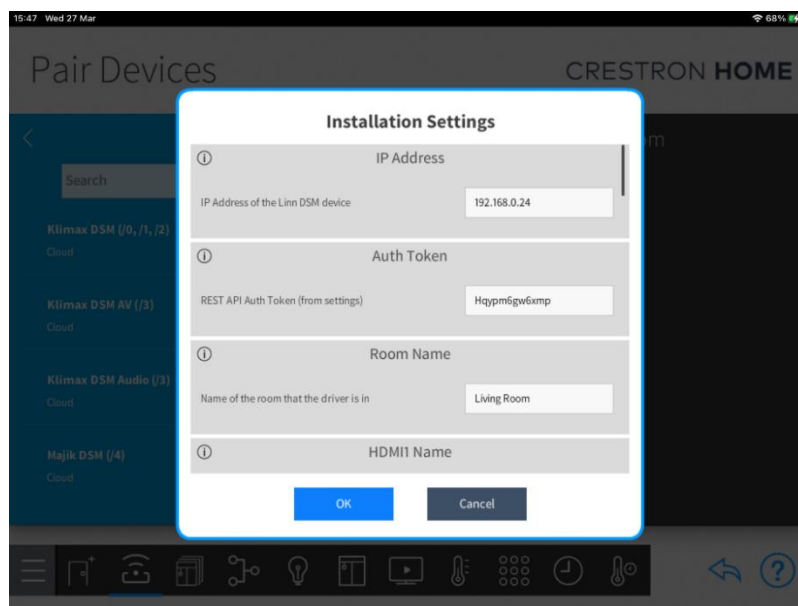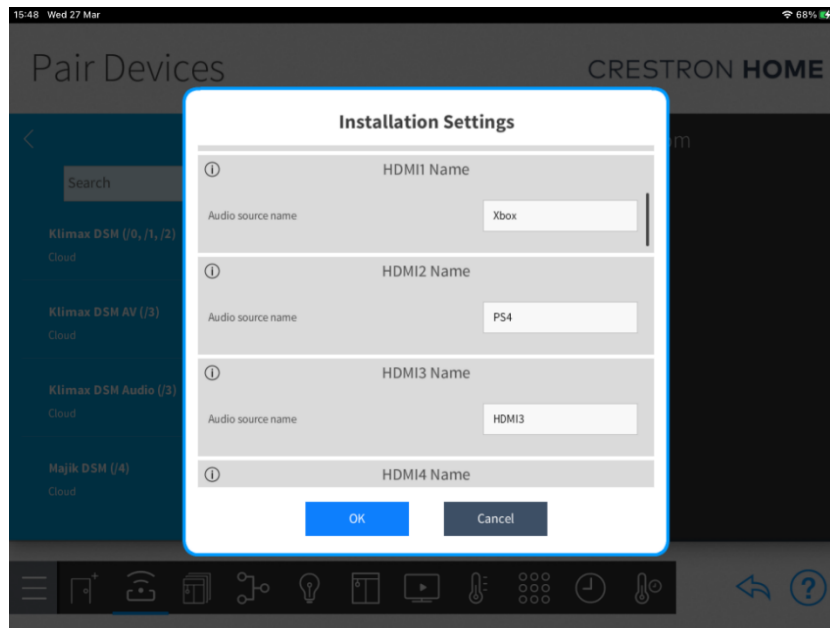
Next, sources devices must be added for each input that is in use – unused inputs can be omitted. These will generally be 'Uncontrolled Audio Sources' under the *Other* category. See the image below where several sources have been added to the room. These names **must** match the names given in the previous step to have accurate feedback on source changes. There may be a case where another third-party manufacturer could be added on a source. For example, you might have a Blu-ray player on an HDMI input – if a driver is available, you could add this as a source.


Uncontrolled Audio Sources must also be added for the non-external sources (ie. Radio, Bluetooth, Spotify etc). The Playlist source can be left out; we will add a driver specifically for this in the next step.

Playlist Input Device

A driver specifically for the Playlist source on the Linn DSM has been developed to allow for some extra integrated functionality within the Home OS GUI. This driver is found under *Drivers->Blu-ray-*

Player->Linn (Note: It is categorized as a blu-ray driver as there is currently no natively supported device type that resembles an audio source). You will be prompted to enter a descriptive name; call this 'Playlist' or if you changed the friendly name from default ensure it matches. The second pop up message box will then ask for some extra information:

- **IP Address** – The IP Address of the Linn DSM on your network.
- **Verbose Logging** – Checkbox to enable extra logging for debugging purposes, should be left unchecked unless reporting an issue.
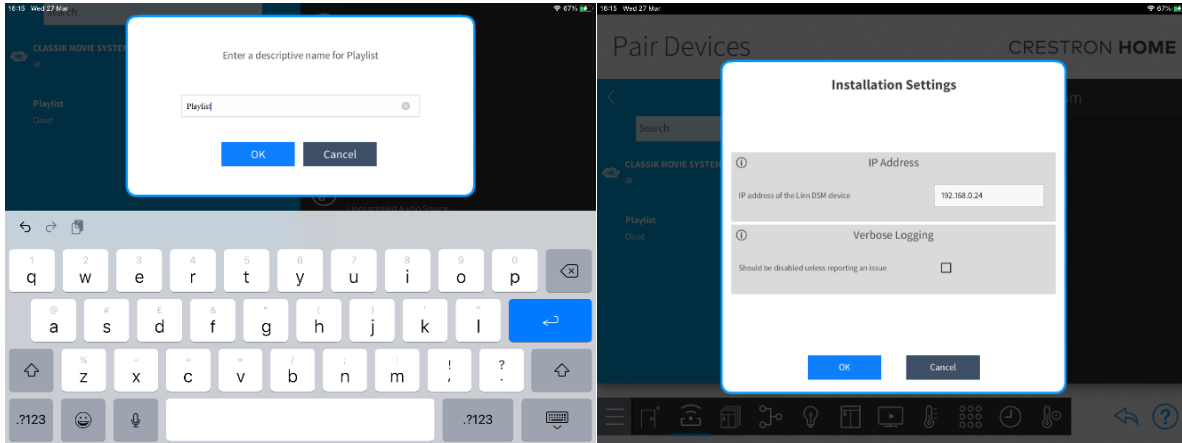

This is the only setup required for the Playlist source.

Helper Device

The last driver to add is the highly useful Helper driver. This is an extension driver that offers some deeper control over functionality although with less native integration. This driver is found under *Drivers->Media Player->Linn*. You will be prompted to give it a descriptive name. Call it something friendly that will appear on the tile in the Home OS GUI; for example, I named it 'Majik'. The second pop up message box will then ask for some extra information:

- **IP Address** – The IP Address of the Linn DSM on your network.
- **Verbose Logging** – Checkbox to enable extra logging for debugging purposes, should be left unchecked unless reporting an issue.
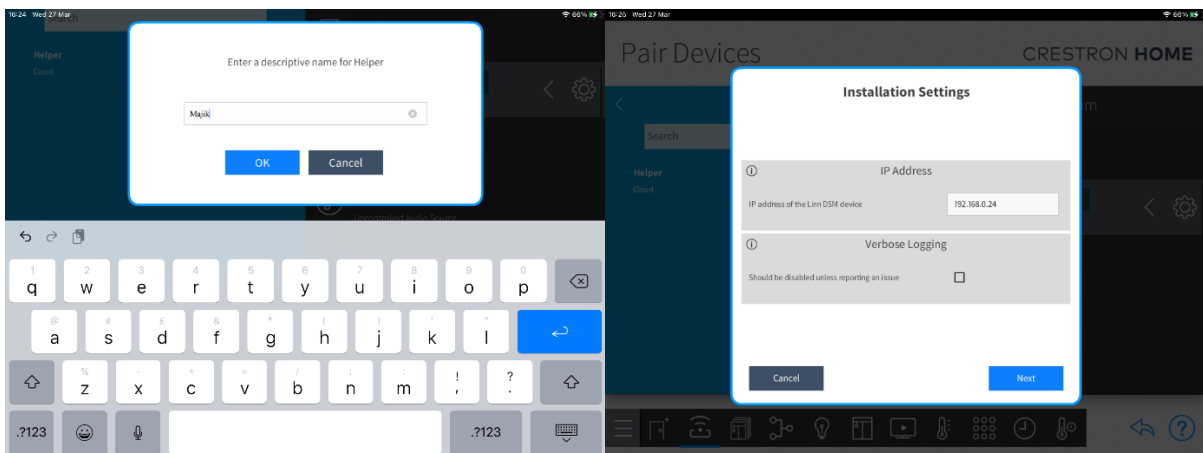
This concludes the adding of device drivers.

Source Routing

The last step before the demo is ready to try out is to configure the source routing. Go forward in the setup steps to the source routing page. Under the room, find the AV Receiver device. Here you can link up the sources to the AV Receiver driver. Inputs on the AV Receiver that are unused can just be left 'Not Assigned'.
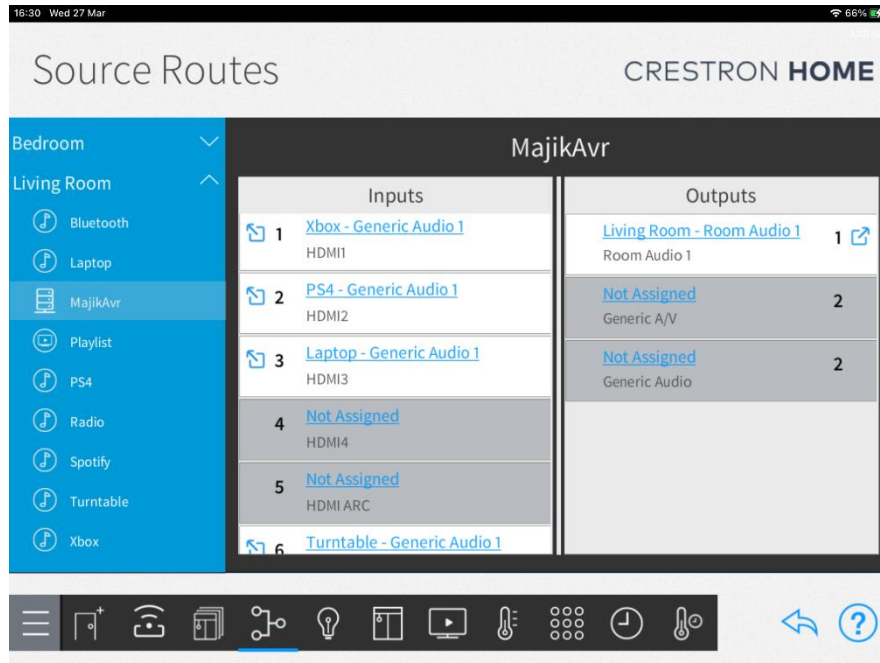
Once this is complete the Crestron Home app should be ready for testing out the features!

"Generic DS" and "Generic DSM" AVR Drivers

A selection of specific AV receiver drivers is available for a wide range of recent Linn DSM models. These come with a preconfigured list of sources that are available to the specific device to make setup and installation easier. For Linn devices that aren't included in this list there is still a way to include these products in a Crestron Home setup. Note that these devices won't support the CI Gateway and you will still require a method of running this. For example, another Linn DSM on the network which does support the CI Gateway.

These "generic" AV receiver drivers are written with every available source for every DS/DSM across the history of the product range; DS is software sources only while DSM additionally has external sources. It is then up to the installer to omit sources that are not relevant to their DS/DSM model.