

BLUOS DRIVER FOR CRESTRON HOME

Revision: 2.00

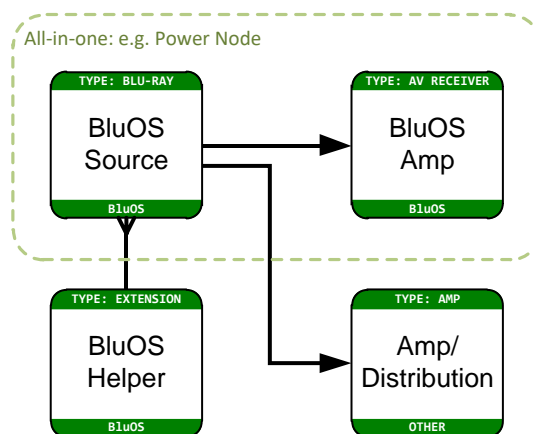
Date: 18 February 2025

ADDITIONAL READING

If you need to side-load the driver, please refer to the Using 3rd Party driver document for instructions on installation and configuration of the driver with Crestron Home.

MODULE DESCRIPTION

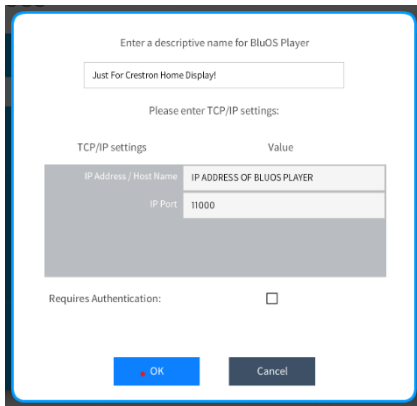
The BluOS driver suite has been developed to enable BluOS device support in the Crestron Home environment. At the time of writing, Crestron Home does not support 3rd party Media Players, so the BluOS support is handled by a collection of drivers. This is described below:



There are 3 modules in the suite.

 **BluOS Player – found under Blu-ray Player > BluOS**

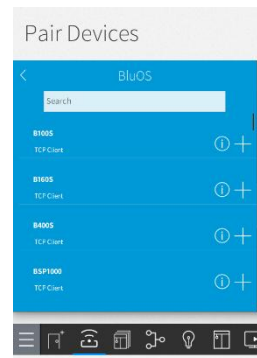
This module is REQUIRED and is found under the "Blu-ray Player" section of the Crestron Home drivers library. The reason for this is simply that this is the closest "standard" type



that can be defined that allows output routing.

Although various models are presented here, the driver is actually the same for all models, so it doesn't matter which specific model you select – other than wishing to document the model type within Crestron Home.

The module is linked to a specific, single BluOS zone through the IP address of the device and – in the case of multi-output devices, the "Output Index".



For example: If you have a Node 2i on IP address 192.168.1.100, you should set the IP address to 192.168.1.100, leave the port at 11000 and leave the Output Index at 1. The name given to the device in BluOS is not important in this case.

The name given to the device driver in Crestron Home is PURELY for display purposes on the Crestron Home.

For devices with multiple outputs (e.g. CI-580) you should use the IP address of the device, leave the port at 11000, and set the Output Index to the output you wish to control (1-4).

This module provides basic control of a BluOS source, with simple transport control and selection of presets made via the keypad (1-9, 0 mapping onto Presets 1-10 respectively).

There is NO feedback for the source within Crestron Home, The source can then be routed, as any other source within Crestron Home, to an audio input of an AVR, AV Switcher, Crestron amplifier or BluOS Amplifier.

 **BluOS Volume – found under AV Receiver > BluOS**

Use this module if you wish to control the output volume and/or input select of a BluOS device.

This module only provides volume, mute control and input select for the BluOS device via Crestron Home.

As for the Player module, the configuration points to a specific BluOS device (and, optionally, output) and the name given in Crestron Home can be description – e.g. “Lounge Volume”.

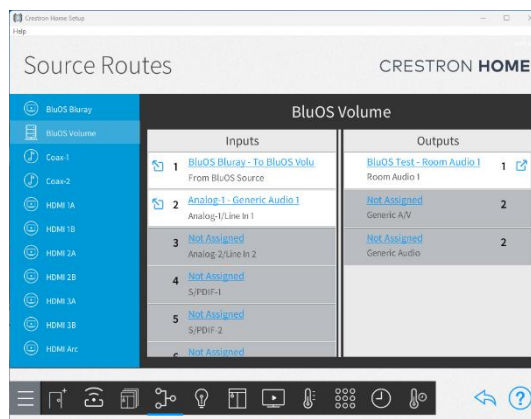
For a standalone device, such as a Power Node 2i, you would therefore use BOTH the Player and the Volume modules and route the player output directly to the volume input.

For input selection – Below are the following inputs.

- From BluOS Source
- Analog-1/Line In 1
- Analog-2/Line In 2
- S/PDIF-1
- S/PDIF-2
- Coax-1
- Coax-2
- AES/EBU
- Balanced In
- Microphone Input
- Phono-1/Vinyl
- Phono MM
- Phono MC
- HDMI Arc
- HDMI EARC
- HDMI-1A
- HDMI-2A
- HDMI-3A
- HDMI-ARCA
- HDMI-2A
- HDMI-2B
- HDMI-3B
- HDMI-ARCB
- Bluetooth

If you are using the BluOS Player driver to control transport controls, for streaming services within BluOS, please link up the BluOS Player Driver output “To BluOS Volume Control” to the BluOS Volume Driver input “From BluOS Source”. When selecting this source, Crestron Home will display transport controls for the current BluOS streaming service.

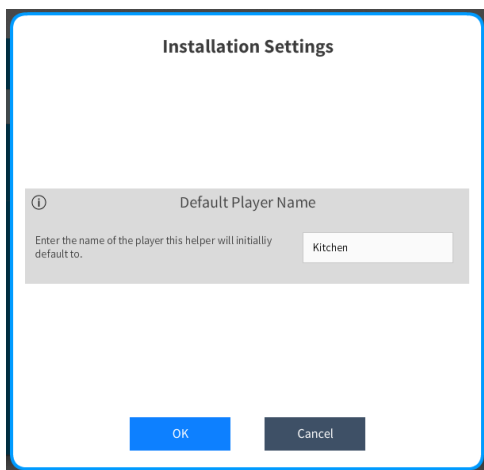
As BluOS API does not offer inputs selection for services such Spotify, Tidal, etc. We suggest you set up presets on the BluOS for the desired services. This will allow you to set up a quick action, to select the BluOS player module, as the source, and call the required streaming service as a preset.



BluOS Helper – found under Media Player > BluOS

This is a special “Extension” module that provides additional functionality. The helper can provide now playing feedback (not album art), transport control, repeat and shuffle, thumbs up/down and preset selection.

As this module is generic and does not connect intrinsically to any particular player, there is no model selection here – just the “BluOS Helper”.



The descriptive name for the BluOS Helper is, again, just for display purposes within the Crestron Home UI.

The “Default Player Name” should be set to the BluOS device name that you wish the helper to attach to by default. The example here shows a Helper that will try to connect to a BluOS device called “Kitchen”.

The Helper can be moved to point to any device in the system from the Crestron Home UI, and this can even be accomplished programmatically – so, for example, you could automatically select a specific player for the helper when making a source selection from a Quick Action.

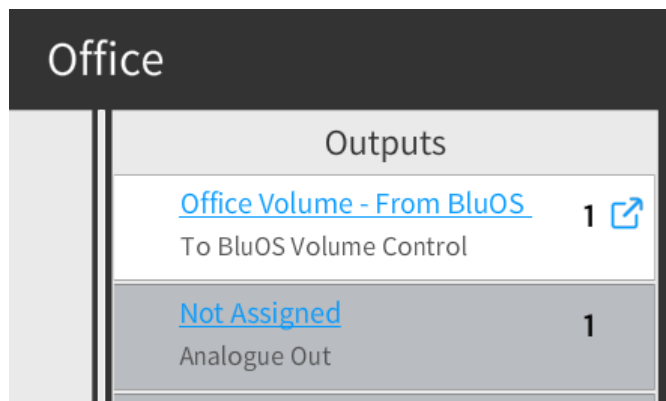
This is the only place in the configuration where we need to reflect the BluOS system’s device names.

As mentioned above, the helper module can be set to default to a specific source, programmatically select a source (via sequences) or you can manually select a source from the discovered players.

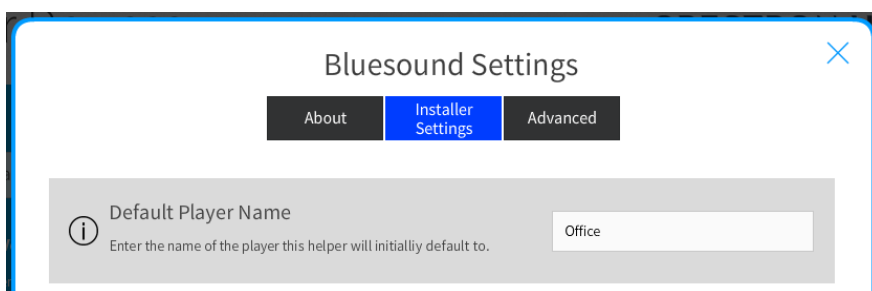
Unfortunately the helper module cannot automatically “follow” the room’s source (Crestron Home does not provide the facility) but this can be mitigated via sequences.

EXAMPLE DEPLOYMENTS

A room with a BluOS self-contained device would be configured with all three modules. The source (Bluray) would then be routed from the BluOS output and connected directly to the BluOS input on the amplifier (AVR) volume module.

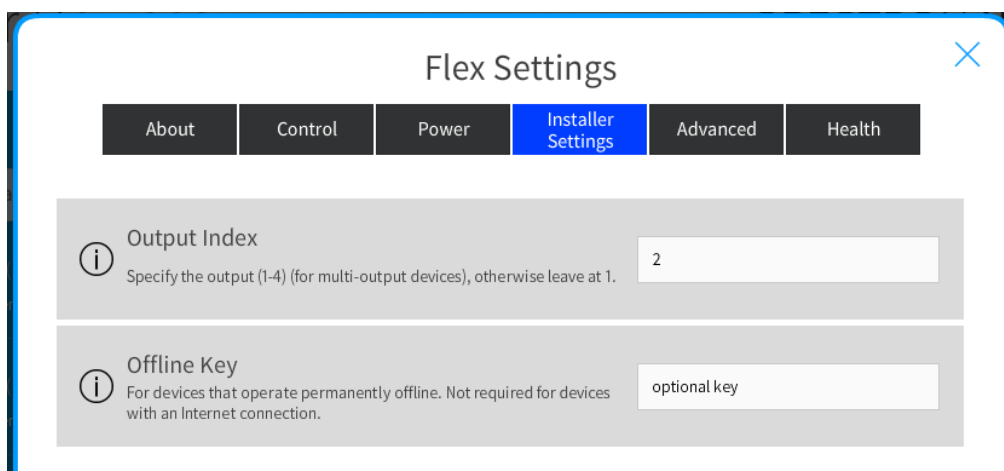


A helper module would then be added with the default player name matching the BluOS player name for the source.



In this configuration, the player room will use the device as a discrete unit, and the helper module will automatically link to the source.

For deployments with central sources (such as the CI-580 or B400S), each output of the central source will be defined with a discrete module, and the output should be defined via the user attribute as shown below:



Here, the second output has been specified.

The BluOS volume module will probably not be used in this scenario as the volume control will be handled by the downstream equipment.

The Helper module can then be added to each room requiring enhanced BluOS player control. At present, the helper module cannot automatically switch to reflect the room's current BluOS source – this must be done manually (via a touch screen UI) or using sequences.

OFFLINE KEY

A cloud licence or an offline key is required when configuring each player. A player module is therefore required for each physical device, even if – for some reason – you only wish to use the volume control.

An "offline" key can be requested under special circumstances. Please FIRST refer to the "Licencing" section below and then contact support@ultamation.com if you REQUIRE offline activation. If you do not have a cloud licence and do not enter a valid offline key, the system will function for 1 hour and then control will be suspended

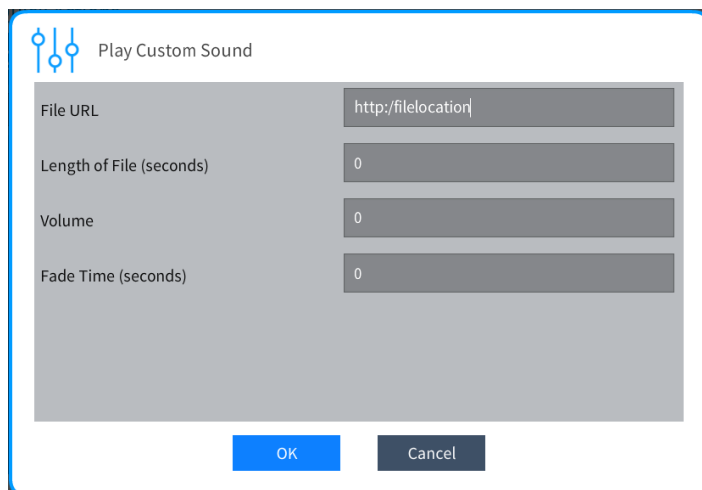
PROGRAMMABLE OPERATIONS

The Helper module can also be controlled via programmable operations (sequences) and triggered from events such as Quick Actions.

The following functions are provided:

- 🌟 Select Player (by Name)
- 🌟 Recall Preset (by ID)
- 🌟 Play
- 🌟 Pause
- 🌟 Play a custom sound (by URL)

Custom Sound Programmable Operation



Play Custom Sound

File URL	http/filelocation
Length of File (seconds)	0
Volume	0
Fade Time (seconds)	0

OK Cancel

This Programmable Operation interrupts what is currently playing and plays the sound file you have specified. Once that has finished it returns to what was originally playing and continues playing it.

It takes four inputs:

- 🌸 File URL – The location of the file you wish to play, must start with http://
- 🌸 Length of file (seconds) – The length of the file you wish to play in seconds. Unexpected behaviour will occur if you give a time longer than the length of the file.
- 🌸 Volume – The volume you wish to play the file at. Between 0 and 100
- 🌸 Fade Time (seconds) – The time you wish to fade into playing the file in seconds

SUPPORT

If you have any issues with a driver or installation please let us know by contacting Ultamation support on support@ultamation.com and please include as much detail about your issue as possible, such a recent processor error log.

Licence verification messages are posted to the error log, so please ensure you have checked this.

LICENCING

This driver (including software, images and all other associated assets distributed as part of the purchased download package) is licenced on a PER PROCESSOR basis.

A purchase should not be completed without correct information as refunds cannot be issued for errors or changes made to details following purchase.

This is an electronic product and there is no physical delivery.

The driver is provided without any warranty with respect to the reliability of the controlled device or changes to device protocol. We will endeavour, through best efforts, to maintain the driver's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this driver and this will be a separate, purchasable, product.

CLOUD LICENCE

This driver contacts Ultamation's licencing server at startup. If the server finds a matching licence for the driver and processor then the driver will be licenced. Otherwise, the driver will check the offline licence key. If you purchase a licence AFTER you have loaded the driver, please reboot the system to see changes take effect.

If you purchased a licence **before** it was migrated to the cloud service, i.e. you have a licence key already, you must enter this into the **Offline Key** user attribute. If you purchased the driver **after** it was migrated, and you don't have a licence key, no further action is required.

If no licence exists for the product/processor the driver will enter a short trial period (ONE HOUR) to allow for verification of correct control or evaluation.

To request an OFFLINE key, please contact support@ultamation.com with your order details and a brief explanation why you REQUIRE offline activation. Ultamation reserve the right to refuse offline activation.

NOTE: Once an offline key has been issued no further licence changes will be granted. Moving the product to a new processor will require an additional licence purchase.