

## SIMPL AV SWITCHER DRIVER FOR CRESTRON HOME

Revision: 2.00

Date: 28 May 2026

### CRESTRON HOME ONLY

This document describes the configuration of Ultamation's SIMPL AV Switcher device drivers for Crestron Home only. The AV Switcher provides a way to leverage legacy or otherwise unsupported audio and video switching equipment as though it was natively supported in Crestron Home. The module is compatible with every Crestron custom series, right from 2-Series through to 4-Series.

### SUMMARY - WHAT DOES THE MODULE DO?

Although Crestron Home has excellent support for many 3<sup>rd</sup> party audio and video switcher, there are often situations where a driver is not available for Home but may be supported in Crestron Custom.

This driver provides a generic "native" AV Switcher in Crestron Home that passes instructions over to a Crestron Custom program which, in turn, can then be written to integrate with any legacy Crestron or 3<sup>rd</sup> party AV switchers.

This does require the use of a custom Crestron processor, but we have written the SIMPL module to be compatible with all Crestron processors from 2-Series upwards. That means that even though you may need a second processor, you can source a QM-RMC from eBay economically.

The driver provides ONE WAY control for a generic 32x32 matrix, and supports:

- Power Required/Power Not Required
- Audio Output Source (0 = not routed)
- Video Output Source (0 = not routed)
- Audio Output
  - Level (full scale 0-65535) OR
  - Volume Up/Down
- Audio Output Muted state

## CONFIGURATION

The drivers are located under is added to Crestron Home in

Devices > AV Switchers > Ultamation > SIMPL AV Switcher

There are TWO different versions of the driver. One supports discrete volume level control (i.e. a slider) and the other supports volume up/down control. Use the version that suits your scenario and ensure that this matches the signal connections on the SIMPL program – the two modes cannot be used together.

Each device to be controlled will require a separate definition using the driver, but the same licence can be used for multiple devices on a single processor.

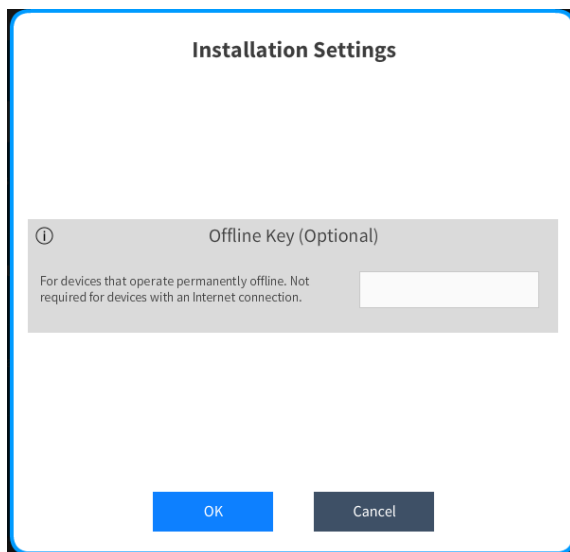
### Adding the Tile

Ensure a room is selected, and then click on the '+' against the driver item.

You will be asked to provide a descriptive name for the tile – this can be anything you wish.

You must enter the IP address for the target SIMPL host and select an IP port for the communication. For a single driver, the default port of 10023 is probably ok, but for multiple instances, each driver must use a different port.

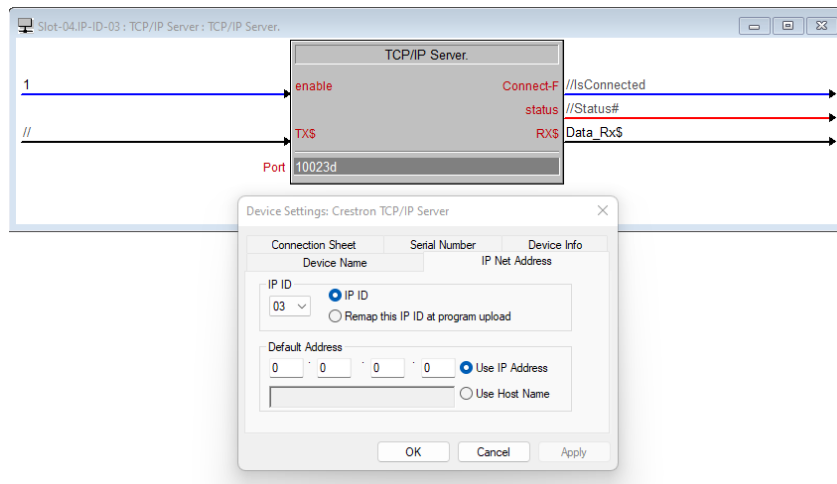
The same port must be used when setting up the TCP Server in SIMPL.



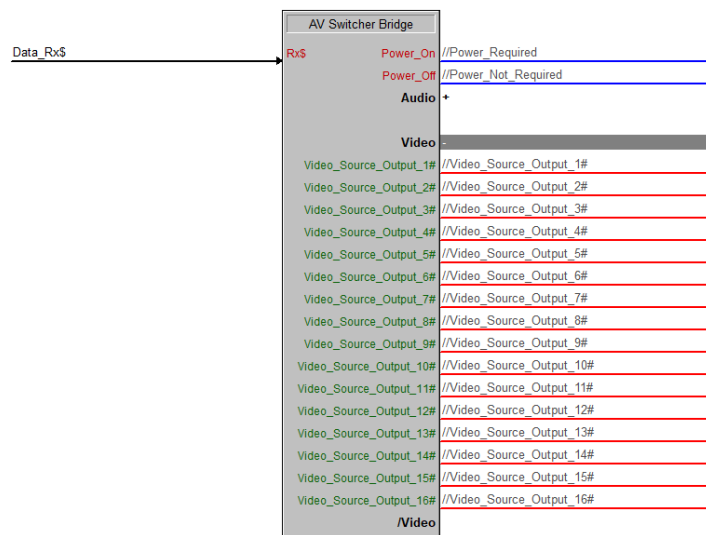
The driver is licenced via the cloud, but an optional 'offline' key can be request under special circumstances. Please FIRST refer to the 'Licencing' section below and then contact [support@ultamation.com](mailto:support@ultamation.com) if you REQUIRE offline activation. The same offline key can be used for multiple driver instances in the same system. If you do not have a licence, the system will function for ONE hour and then control will be suspended. The offline licence key can be entered at any time after initial setup without having to reconfigure each tile

Extract the provided modules from the Example SIMPL Windows program. You will find TWO modules – AV Switcher Bridge.umc and AV Switcher Processor.usp/.ush.

You will need to add the AV Switcher Bridge to your program along with a corresponding TCP/IP Server module. The TCP Server should be configured as shown below.



The RX\$ from the TCP server will be fed into the AV Switcher Bridge Module as shown below:



You can then link the outputs from the AV Switcher Bridge module to your chosen matrix driver or hardware definition.

Note – the power on/off signals are managed by Crestron Home and may not switch immediately when the routes are all cleared. If you wish this behaviour, you will need to interrogate the Audio/Video Source outputs to see when they are all 0 (zero).

Depending on the CH driver used, volume is EITHER discrete, in which case you should use the Audio Level outputs.

The Audio Level outputs are full scale integer – i.e. 0 – 65535d (0-100%)

If you use the relative volume module in Crestron Home, then you must use the Volume Up/Volume Down signals. These signals held high while CH sends volume up/down commands. Volume should be changed on only one output at a time.

NOTE: There is NO feedback to Crestron Home.

## CRESTRON HOME CONFIGURATION

Configure the AV switcher as normal – as shown in the image below.

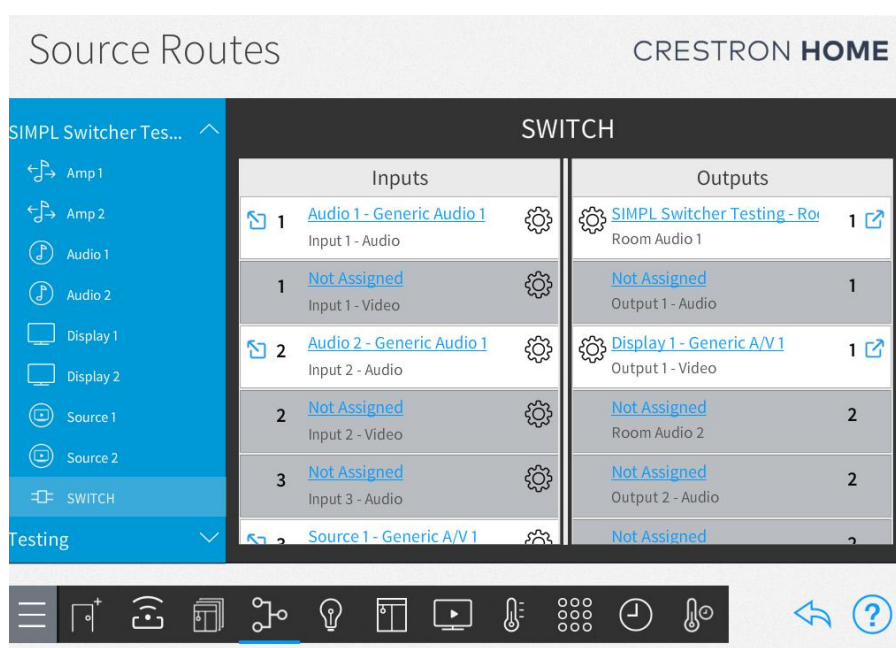
Audio only sources should be connected to the Audio Inputs.

If you wish to use the AV Switcher to control volume, connect the "Room Audio" output to the appropriate room.

If you wish a downstream amplifier to manage volume, connect the Audio Output to the amplifier.

Connect video/combined AV sources to the video inputs.

Connect Video Outputs to the appropriate display.



Confirm connection using the SIMPL debugger and as you select sources and change the volume, these changes will be reflected in the SIMPL Windows program.

If the driver is offline, please confirm you have the TCP Server correctly defined and present in the IPTable of the Crestron Custom processor.

Remember, this even works on old 2-Series processors!

## SUPPORT

If you have any issues with an integration solution please let us know by contacting Ultamation support on [support@ultamation.com](mailto: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 integration solution (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 integration solution 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 integration solution's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this integration solution and this will be a separate, purchasable, product.

## CLOUD LICENCE

This integration solution contacts Ultamation's licencing server at startup. If the server finds a matching licence for the integration solution and processor then the integration solution will be licenced. Otherwise, the integration solution will check the offline licence key. If you purchase a licence **after** you have loaded the integration solution, 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 integration solution **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 integration solution 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](mailto: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 integration solution to a new processor will require an additional licence purchase.