

SIMPL AV SWITCHER DRIVER FOR CRESTRON HOME

Revision: 1.01

Date: 15 July 2022

LICENCING

Please visit <https://shop.ultamation.com/> to obtain a licence key for your Crestron processor. Only a single licence is required for each Crestron Home processor and the module can be used multiple times with the same licence.

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 3rd 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 3rd 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)
- Audio Output Muted state

CONFIGURATION

The driver located under is added to Crestron Home in

Devices > AV Switchers > Ultamation > SIMPL AV Switcher

Each device to be controlled will require a separate definition using the driver, but the same licence key 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.

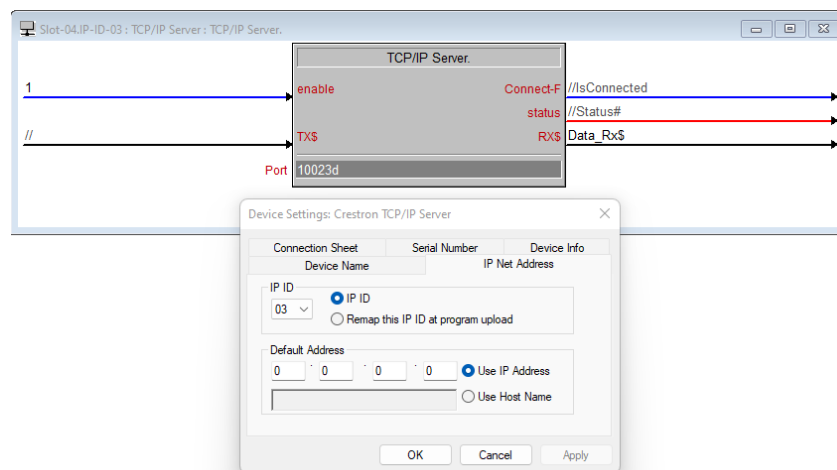
You must enter the IP address for the target SIMPL host and select an IP port for the communication. For a single driver, the default port of 10023 is probably ok, but for multiple instances, each driver must use a different port.

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

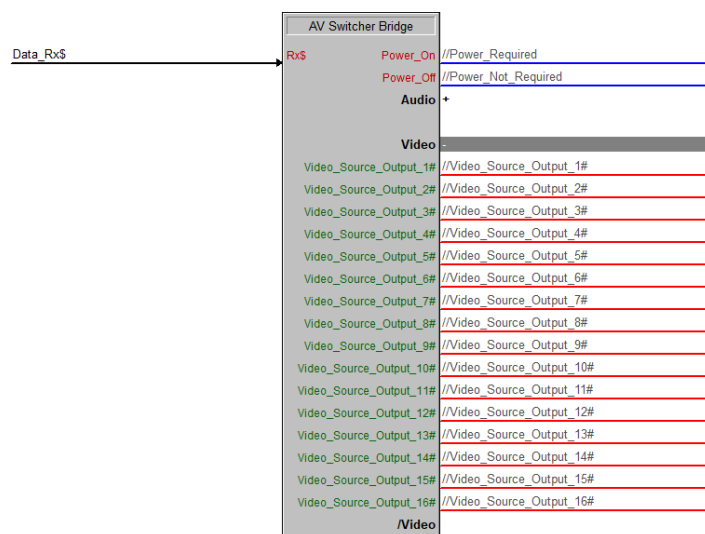
Finally, enter the licence key for the Crestron Home processor. This will be the same for ALL instances of the driver and it sent to you electronically when you purchase a licence from the online shop. If you do not set a licence, you can still use the driver in trial mode for up to an hour. You do not need to reinstall the driver when entering a licence key – just overwrite the old key value and the licence will reset.

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).

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

NOTE: There is NO feedback to Crestron Home.

NOTE: Volume is DISCRETE ONLY. There are no up/down ramps.

CRESTRON HOME CONFIGURATION

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

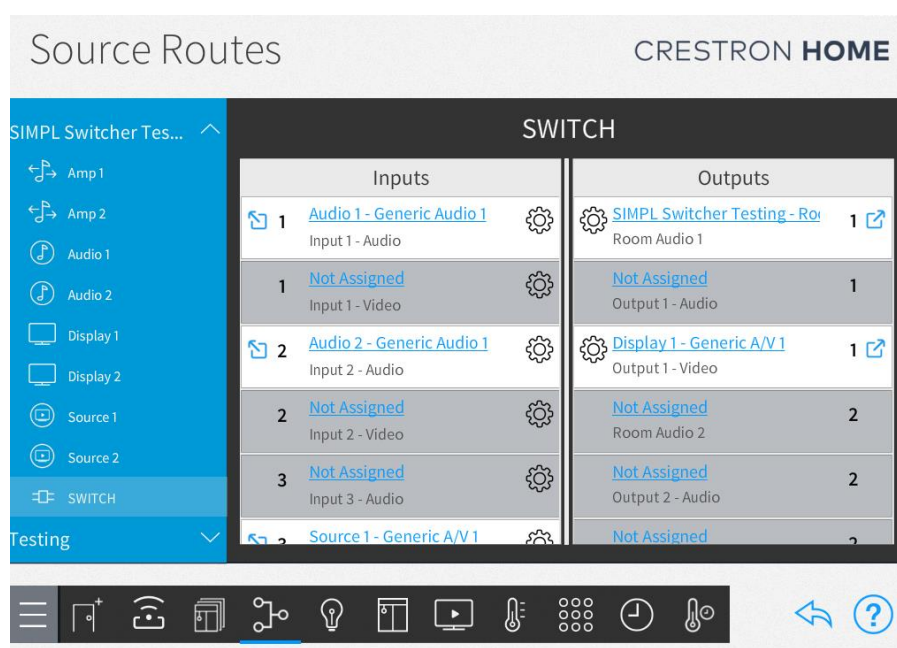
Audio only sources should be connected to the Audio Inputs.

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 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.

LICENCE

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

A licence key is generated at the point of purchase and is linked at that time to specific information that MUST be provided at the time of purchase. A purchase should not be completed without correct information as refunds cannot be issued for errors or changes made to details following purchase.

The licence key for each device will be delivered via email along with links to download the module. There is no physical delivery.

The module 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 module's functionality and any bug fixes will be provided free-of-charge. Additional functionality may be released as a variation of this module and this will be a separate, purchasable, product.

RELEASE NOTES

V1.00 - Initial release (16x16)

V1.01 - Upgraded I/O to 32x32