

Crestron Module Documentation

for an

ATLONA

AT-UHD PRO3-Universal Matrix Switcher

Module developed for Atlona by Front Side Solutions.

www.frontsidesolutions.com

General Information:

Notes	
SIMPLWINDOWS NAME:	Atlona AT-UHD-PRO3-Universal r0.0.umc
CATEGORY:	Matrix Switch
VERSION:	r0.0
SUMMARY:	This module controls Power, Switching and Presets of the Atlona AT-UHD-PRO3 Series Matrix Switch. It also has advanced Preset functionality to allow more flexibility over the Basic module and adds in the ability to use ComPort Extender Modules which allow device control using the RS-232 ports on the switchers receiver units.
GENERAL NOTES:	<p>This module controls Power, Switching and Presets of the Atlona AT-UHD-PRO3 Series Matrix Switch. This module has built in queuing for use of expansion ComPort modules and future Volume control modules. This is a "Universal" module that will work with the 4x4 switcher up to the 16x16 size model, therefore the user must only use signals and input ranges relative to their switch.</p> <p>There are (2) variations of the ComPort module bundled with this switcher module; a fully tested and supported 1-way ComPort module, and an experimental 1.5-way ComPort module. Because of the way the RS-232 pass-thru functionality works on the switcher, it is not possible to provide usage of the RS-232 ports as true 2-way ports, however the 1.5-way module works fairly well in smaller systems. Please see the individual modules help files for more details.</p> <p>NOTE: All Digital inputs are buffered inside the module.</p>
CRESTRON HARDWARE REQUIRED:	ST-COM, C2-COM, C2ENET-1/2
SETUP OF CRESTRON HARDWARE:	Unit Default is RS232 Baud: 115,200 Parity: N Data Bits: 8 Stop Bits: 1.

Parameters:

Parameter Name	Notes
Preset Save Hold Time	Time in Seconds that Preset1~8 should be held before the preset is saved.
Rx \$ Span	This parameter is only needed when using the experimental 1.5-way ComPort expansion module. This helps account for latency when strings are returned from the switcher spanning multiple logic waves. Typically this would be set to (1) tick longer than the number of logic waves your return string spans, but as it is experimental, you may have to play with it.

Control

Signal Name	Type	Notes
Power_On	D	Pulse to turn unit on.
Power_Off	D	Pulse to turn unit off.
Enter(Take)	D	Pulse to send switch commands. May be latched High to allow switches to happen automatically if VideoOut1~16 is changed.
Out1~20	A	Set to value of 0~16 to represent the input to be sent to the output.
One_to_One	D	Pulse to reset all inputs to corresponding outputs (i.e. In1 to Out1, In2 to Out2, etc.).
Preset1~8	D	Pulse to recall matrix presets. Hold for time specified in "Preset Save Hold Time" to save a preset. Presets are stored in the unit, not in the Crestron processor. Presets can be set from the front panel of the unit.
Poll_Enable	D	Pulse for a quick poll of the switcher. If latched, switcher will be polled every (5) seconds for changes if the unit is off, and every (60) seconds if the unit is on. Module is updated based on real-time responses to commands sent to the unit, so if you do not expect the user to access the front panel to make switching changes, or if the front panel is locked out, polling beyond the initial sync is optional.
Device_Rx_\$	S	Connect to RS232 receive.
Preset1~8_Recall	D	Pulse to recall matrix presets. Holding will not save preset, this is recall only
Preset1~8_Save	D	Pulse to save matrix presets. Holding is not required. This is to allow programmers to use different methods of saving presets rather than the default Press And Hold functionality.
Fm_ComPort_Mod1~20_Tx_\$	S	Connect to the output of the ComPort expansion modules.
Fm_Expansion_Mod1~16_Tx_\$	S	Connect to the output of the future expansion modules.

Feedback

Signal Name	Type	Notes
Power_On_Fb	D	Unit is powered On feedback.
Power_Off_Fb	D	Unit is powered Off feedback.
Out1~16_Fb	A	Feedback representing the input that each output is at.
Preset1~8_Fb	D	Momentary feedback indicating that a Preset was recalled.
Preset_Saved_Fb	D	Latch High for (1) second to indicate that a preset has been saved.
Device_Tx_\$	S	Connect to RS232 transmit.
Preset1~8_Recall_Fb	D	Momentary feedback indicating that a Preset was recalled.
Preset1~8_Save_Fb	D	Momentary feedback indicating that a Preset was saved.

To_ComPort_Mod1~20_Rx_	S	Connect to the input of the ComPort expansion modules.
To_Expansion_Mod1~16_Poll_Pulse	D	Connect to the input of the Future expansion modules to poll them in sequence with the other properties of this module..

Testing

Notes	
OPS USED FOR TESTING:	CP3N: 1.010.0060
SIMPL WINDOWS USED FOR TESTING:	4.02.65.01
DEVICE DB USED FOR TESTING:	65.00.002.00
CRESTRON DB USED FOR TESTING:	51.00.003.00
SAMPLE PROGRAM:	Atlona AT-UHD-PRO3-Universal Demo r0.0.smw
DEVICE FIRMWARE USED FOR TESTING:	Pre-release

Revision History

Date	Initials	Comments
06.17.2015	CDR	V0.0 Initial Release