Crestron Module Documentation

for an

ATLONA

AT-UHD-CLSO-H
8 Input, 2 Output Presentation Switcher

General Information:

Notes	
SIMPLWINDOWS NAME:	Atlona AT-UHD-CLSO-824 r0.0.umc
CATEGORY:	Multi Input Presentation Switch
VERSION:	r0.0
SUMMARY:	This module controls Power, Switching and multiple controllable setting values of the Atlona AT-UHD-CLSO-824 Presentation Switch.
GENERAL NOTES:	This module controls Power, Switching and multiple controllable setting values of the Atlona AT-UHD-CLSO-824 Presentation Switch. Note: It is recommended when using IP control to send the "Broadcast off" command via telnet or RS232 from a terminal. This decreases latency on responses and provides for smoother volume ramping. Se the product manual for details on this command. This module provides for up to (5) "expansion modules" to be used to expand the functionality of the module. This allows for using the internal queueing and pausing mechanisms in place for polling. This is to allow programmers an easy, non-intrusive way to expand the functionality of this module to include things like input level volume controls, or ducking controls, etc. that are not part of this modules feature set. This module should only be paired with the "Atlona Universal 2-way ComPort Gen 3 r0.0" Comport expansion module or newer.
SETUP OF CRESTRON HARDWARE:	Unit Default is RS232 Baud: 115,200 Parity: N Data Bits: 8 Stop Bits: 1. IP Control is default port 23.

Control

Signal Name	Type	Notes
Module_Enable	D	Latch to enable module. If using IP, at minimum, tie to the Connect-F of the IP client symbol.
Power_On	D	Pulse to turn unit on.
Power_Off	D	Pulse to turn unit off.
Out1/2	A	Set to desired input for the corresponding output. Note, while not directly supported in the protocol, this module allows for turning off the output by setting this signal to (0).
One to One	D	Pulse to set Outputs to matching Inputs.
Preset1~4	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 60 seconds for changes. 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 or web UI to make switching changes, polling beyond the initial sync is optional. Note that even if not used, the module will poll (1) time to synchronize itself whenever enable goes high.
Device_Rx_$	S	Connect to RS232 or TCP/IP Client receive.
VolOut1/2_+/-	D	Pulse to increment /decrement the master volume up or down for the indicated output. If held for the period defined in parameter, will ramp volume up or down at the repeat rate defined in the parameter.
VolOut1_Lvl	A	Use to set volume directly to a level. Supported range is -90d to +10d, correspoing directly with the dB level. Note this may be changed by Atlona to a range of -80d to +10d in a future firmware release to synchronize it with other products. We advise early adopters to use this range if implementing this control so that it is not broken by a firmware update later; -80dB should not be audible.
VolOut1/2_Mute_On/Off	D	Pulse to mute/unmute audio for particular output.
Aud1/2_AFV	D	Pulse to set corresponding output to Audio Follow Video.
Aud1/2_AFOV	D	Pulse to set corresponding output to Audio Follow Other Video.
Aud1/2_Aux1	D	Pulse to set corresponding output to Aux 1 Audio only.
Aud1/2_Aux2	D	Pulse to set corresponding output to Aux 2 Audio only.
Aud1/2_Mix_Off	D	Pulse to set the corresponding output to Mix Off.
Aud1/2_Mix_Aux1	D	Pulse to set the corresponding output to Mix Aux 1 Only.
Aud1/2_Mix_Aux2	D	Pulse to set the corresponding output to Mix Aux 2 Only.
Aud1/2_Mix_Both	D	Pulse to set the corresponding output to Mix Aux 1 & Aux 2 Mics.
Preset1~4_Recall	D	Pulse to recall matrix presets. Holding will not save preset, this is recall only
Preset1~4_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 of the basic Presets 1-4 above.
Fm_ComPort_Mod1~15_Tx_$	S	Allows for feeding comport Expansion Modules into this module. Zones 1 & 10 are the ports available on the CLSO itself, Zones 11-13 are HDBaseT Inputs, Zones 14 & 15are the HDBaseT Outputs.

		Note, the sequence of "]\r" (without quotes) is the only known sting values that cannot be sent, as this is the terminator for the device protocol.
Fm_Expansion_Mod1~5_Tx $	S	Allows for feeding additional user written expansion modules into this one to take advantage of the built in poll triggering and queueing.

Feedback

Signal Name	Type	Notes
Power_On_Fb	D	Power On feedback.
Power_Off_Fb	D	Power Off feedback.
Out1/2_Fb	A	Feedback indicating the selected input on the corresponding output..
Preset1~4_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/IP client transmit.
VolOut1/2_Lvl_Fb		Volume level feedback in range of -90 to + 10. **See note above on potential future change on this range
VolOut1/2_Mute_On/Off_Fb	D	Volume mute feedback.
Aud1/2_AFV_Fb	D	Feedback that corresponding output is set to Audio Follow Video.
Aud1/2_AFOV_Fb	D	Feedback that corresponding output is set to Audio Follow Other Video.
Aud1/2_Aux1_Fb	D	Feedback that corresponding output is set to Aux 1 Audio only.
Aud1/2_Aux2_Fb	D	Feedback that corresponding output is set to Aux 2 Audio only.
Aud1/2_Mix_Off_Fb	D	Feedback that corresponding output is set to Mix Off.
Aud1/2_Mix_Aux1_Fb	D	Feedback that corresponding output is set to Mix Aux 1 Only.
Aud1/2_Mix_Aux2_Fb	D	Feedback that corresponding output is set to Mix Aux 2 Only.
Aud1/2_Mix_Both_Fb	D	Feedback that corresponding output is set to Mix Aux 1 & Aux 2 Mics.
Preset1~4_Recall_Fb	D	Momentary feedback indicating that a Preset was recalled.
Preset1~4_Save_Fb	D	Momentary feedback indicating that a Preset was saved.
To_ComPort_Mod1~15_Rx_$	S	Sends return strings to comport modules. See above for details on zoning.
To_ComPort_Mod1~15_Enable	D	Connect to ComPort Module enables to turn them on when this module is ready to process their strings.
To_Expansion_Mod1~5_Poll_Pulse	D	Provides a pulsed output for expansion modules

	controlled by the master poll process.

Parameters

Parameter Name	Notes
Preset Save Hold Time	Time in Seconds that Preset1~4 should be held before the preset is saved using the basic press-and-hold functionality.
Vol Hold Before Ramping	Length of time VolOut1/2_+/- needs to be held before pulses ramping occurs.
Vol Pulse Rate	Repeat rate that volume commands will be sent with ramping.

Testing

Notes	
SAMPLE PROGRAM:	Atlona AT-UHD-CLSO-824 r0.0.smw
DEVICE FIRMWARE USED FOR TESTING:	Pre-release

Revision History

Date	Initials	Comments
07.16.2015	CDR	V0.0 Beta/Initial Release