

# Crestron Module Documentation

for an

# **ATLONA**

## **AT-HD-CLSO-612** **6 Input Scaler Switcher**

Module developed for Atlona by Front Side Solutions.

[www.frontsidesolutions.com](http://www.frontsidesolutions.com)

## General Information:

Notes	
SIMPLWINDOWS NAME:	Atlona AT-HD-CLSO-612 r1.1.umc
CATEGORY:	Multi Input Scaler Switch
VERSION:	r1.1
SUMMARY:	This module controls Power, Switching and multiple controllable setting values of the Atlona AT-HD-CLSO-612 Scaler Switch.
GENERAL NOTES:	<p>This module controls Power, Switching and multiple controllable setting values of the Atlona AT-HD-CLSO-612 Scaler Switch.</p> <p>Note that the Input Poll/Delete feature of the Atlona switcher is not supported by this module. For this module to properly work, all inputs MUST be enabled on the analog inputs. This module will force this to happen.</p>
CRESTRON HARDWARE REQUIRED:	ST-COM, C2-COM, C2ENET-1/2
SETUP OF CRESTRON HARDWARE:	Unit Default is RS232 Baud: 19200 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.
Device_Rx_\$	S	Connect to RS232/IP client receive.
Poll_Enable	D	Pulse for a quick poll of the switcher. If latched, switcher will be polled every few 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 to make switching changes, polling beyond the initial sync is optional.
Power_On	D	Pulse to turn unit on.
Power_Off	D	Pulse to turn unit off.
XXX_Input	D	Pulse to select indicated input.
Input_Direct	A	Pulse to select input with an analog: 1= HDMI1, 2= HDMI2, 3= HDBaseT3, 4= HDBaseT4, 5~8= Input 5a~d, 9~12= Input 6a~d.
Vol_+/-	D	Pulse to ramp volume up or down.
Vol_Direct	A	Use to set volume directly to a level. Valid range is -80d to +10d.
Vol_Mute_On/Off	D	Pulse to mute/unmute volume.
Mic_Gain +/-	D	Pulse to ramp mic gain up or down.
Mic_Gain_Direct	A	Use to set mic gain directly to a level. Valid range

		is -80d to + 30d.
Line_In_Gain +/-	D	Pulse to ramp Line gain up or down.
Line_In_Gain_Direct	A	Use to set Line gain directly to a level. Valid range is -80d to + 30d.
InputX_Gain +/-	D	Pulse to ramp input 1-6 gain up or down.
InputX_Gain_Direct	A	Use to set input 1-6 gain directly to a level. Valid range is -80d to 0d.
Ducking On/Off	D	Pulse to turning microphone ducking on or off.
Sense_Level	A	Use to set sense level for ducking. Range of -30d to -60d.
Reduce_Level	A	Use to set reduction level when ducking engaged. Range of 0d to +30d.
Attack_Time_XXXms	D	Pulse to set attack time of ducker in ms.
Release_Time_XXXXms	D	Pulse to set release time of ducker in ms.
Output_Res_XXX	D	Pulse to set output resolution as indicated.
Output_Res_Direct	A	Use to directly set the output resolution. 0 = pass-thru, 254 = Native. All others are 1-39 as counted on the digital list.
Pref_Timing+_XXX	D	Pulse to set preferred timing to resolution indicated.
VGA_Pref_Timing+_XXX	D	Pulse to set preferred VGA timing to resolution indicated.
Block/Mosquito/Random_NR_XXX	D	Pulse to set Block, Mosquito or Random noise reduction to Off, Low, Medium or High.
HDMI1~4_Input_HDCP_Mode_On/Off	D	Pulse to turn HDCP mode on/off for the indicated input.
Aspect_Ratio_XXX	D	Pulse to set aspect ratio as desired.
H_Position +/-	D	Pulse to change H Position +/- . Does not ramp.
H_Position_Direct	A	Use to set H Position directly to a level. Valid range is 0d to 40d.
Phase +/-	D	Pulse to change Phase +/- . Does not ramp.
Phase_Direct	A	Use to set Phase directly to a level. Valid range is 0d to 63d.
Audio Input[X]_Passthru	D	Pulse to set audio to passthru from native input[X].
Audio_Input[X]_Analog5	D	Pulse to assign Analog audio input 5 to Input [X].
Audio_Input[X]_Analog6	D	Pulse to assign Analog audio input 6 to Input [X].
Auto_Switch_On/Off	D	Pulse to turn auto-switching on/off
VGA_Auto_Switch_On/Off	D	Pulse to turn VGA auto-switching on/off. Note that Auto-switching must also be on to use.
OSD_Function_On/Off	D	Pulse to Turn the OSD function on/off.
OSD_Info_On/Off	D	Pulse to turn the OSD Info on/off. Note that OSD function must be on to use.
OSD_Menu_Sw/Up/Dn/Lt/Rt/Select/Info/Exit	D	Pulse to emulate front panel/remote control functions.
Front_Pnl_Lock/Unlock	D	Pulse to lock or unlock the front panel.

Factory_Reset	D	Pulse to restore the unit to factory defaults. Use judiciously!
Fm_Comport_Zone1~3_Tx_\$	S	Allows for feeding comport Expansion Modules into this module. Zones 1 & 2 are the HDBaseT Inputs, Zone3 is the HDBaseT Output.

## Feedback

Signal Name	Type	Notes
Device_Tx_\$	S	Connect to RS232/IP client transmit.
Power_On_Fb	D	Power On feedback.
Power_Off_Fb	D	Power Off feedback.
XXX_Input_Fb	D	Feedback indicating the selected input.
Input_Direct_Fb	A	Feedback indicating the selected input: 1= HDMI1, 2= HDMI2, 3= HDBaseT3, 4= HDBaseT4, 5~8= Input 5a~d, 9~12= Input 6a~d.
Vol_Fb	A	Volume level feedback in range of -80 to + 10.
Vol_Mute_On/Off_Fb	D	Volume mute feedback.
Mic_Gain_Fb	A	Feedback in range of -80 to + 30.
Line_In_Gain_Fb	A	Feedback in range of -80 to + 30.
InputX_Gain_Fb	A	Feedback in range of -80 to 0.
Ducking_On/Off_Fb	D	Microphone ducking on or off feedback.
Sense_Level_Fb	A	Feedback range of -30d to -60d.
Reduce_Level_Fb	A	Feedback range of 0d to +30d.
Attack_Time_XXXms_Fb	D	Attack time of ducker in ms feedback.
Release_Time_XXXXms_Fb	D	Release time of ducker in ms feedback.
Output_Res_XXX_Fb	D	Feedback of output resolution as indicated.
Output_Res_Fb	A	Feedback of directly set output resolution. 0 = pass-thru, 254 = Native. All others are 1-39 as counted on the digital list.
Pref_Timing+_XXX_Fb	D	Feedback of set preferred timing at resolution indicated.
VGA_Pref_Timing+_XXX_Fb	D	Feedback of set preferred VGA timing at resolution indicated.
Block/Mosquito/Random_NR_XXX_Fb	D	Feedback for Block, Mosquito or Random noise reduction indicating Off, Low, Medium or High.
HDMI1~4_Input_HDCP_Mode_On/Off_Fb	D	Feedback showing if HDCP mode is on/off for the indicated input.
Aspect_Ratio_XXX_Fb	D	Feedback showing selected aspect ratio.
H_Position_Direct_Fb	A	H Position feedback in range of 0d to 40d.
Phase_Direct_Fb	A	Phase feedback in range of 0d to 63d.
Audio Input[X]_Passthru_Fb	D	Feedback if passthru set on native input[X].
Audio_Input[X]_Analog5_Fb	D	Feedback if analog audio input 5 is set to Input [X].
Audio_Input[X]_Analog6_Fb	D	Feedback if analog audio input 6 is set to Input [X].

Auto_Switch_On/Off_Fb	D	Feedback if auto-switching is on/off.
VGA_Auto_Switch_On/Off_Fb	D	Feedback if VGA auto-switching is on/off.
OSD_Function_On/Off_Fb	D	Feedback if the OSD function is on/off.
OSD_Info_On/Off_Fb	D	Feedback if the OSD Info is on/off.
ComPort_Zone1~3_Enable	D	Tie to Comport Expansion modules to enable them when this module is ready for them.

## Parameters

Parameter Name	Notes
Volume_Ramp_Rate	The speed that Volume +/- is pulsed when held. Default .2s
Mic_Gain_Ramp_Rate	The speed that Mic Gain +/- is pulsed when held. Default .2s
Input_Gain_Ramp_Rate	The speed that Input Gain +/- is pulsed when held. Default .2s
EQ_Ramp_Rate	The speed that EQ +/- is pulsed when held. Default .8s
Username	Used with IP Control only. Default is 'root'.
Password	Used with IP Control only. Default is 'Atlona'.

## Testing

Notes	
OPS USED FOR TESTING:	CP3N: 1.010.0060
SIMPL WINDOWS USED FOR TESTING:	4.02.56
DEVICE DB USED FOR TESTING:	62.01.001.00
CRESTRON DB USED FOR TESTING:	49.06.005.00
SAMPLE PROGRAM:	Atlona AT-HD-CLSO-612 r1.1.smw
DEVICE FIRMWARE USED FOR TESTING:	1.0.46

## Revision History

Date	Initials	Comments
06.01.2014	CDR	V0.0 Beta/Initial Release
02.23.2015	CDR	V1.0 Updated with New API Commands.
06.15.2015	CDR	V1.1 Fixed audio level controls feedback.