Crestron modules for tvONE CORIOmaster RESTInterface

Integration Guide

1 – Summary

This document will assist Crestron programmers and installers with the integration of these modules into their program.

The modules were designed to control the CORIOmaster Multi Window Video Scaler Switcher. Using the REST API.

2 – Resources and Assumptions

2.1 – Supported Systems

The modules have been designed for Crestron Series 3 processors (or higher) with Ethernet capability. An X
Panel layout is provided. This panel is not intended for end users, but is provided so that all features of the modules can be demonstrated and exercised.

2.2 – Software and Firmware

This modules were developed using the following firmware and software versions. Ensure you are using the same version or newer.

- CORIOmaster Firmware - V1.410_05.P4
- Crestron Series 3 Processor Firmware - v1.502.3151.19579
- Simpl Windows - 4 .14.20
- Device Database – 200.00.012.00
- Crestron Database – 200.00.002.00
- Simpl+ - 4. 05.01
- Simpl+ Cross Compiler - 1.3
- Vision Tools Pro-e - 6.2
- Smart Graphics Version - 2.15.04.00

2.3 – Assumptions

It is assumed that you already have a good understanding of Crestron Programming and Integration. Knowledge of TCP/IP networking would also be beneficial.

It is assumed that the CORIOmaster is installed and functioning correctly, is on the same LAN as the Crestron processor, and is configured with required Presets and Macros.

3 – Crestron Modules

3.1 – Module Format

The modules have been provided as Simpl+ modules (.usp and .ush) embedded in a Simpl Windows module (.umc). A demo file has also been provided in .smw format to allow for easy copy and paste integration into your project.

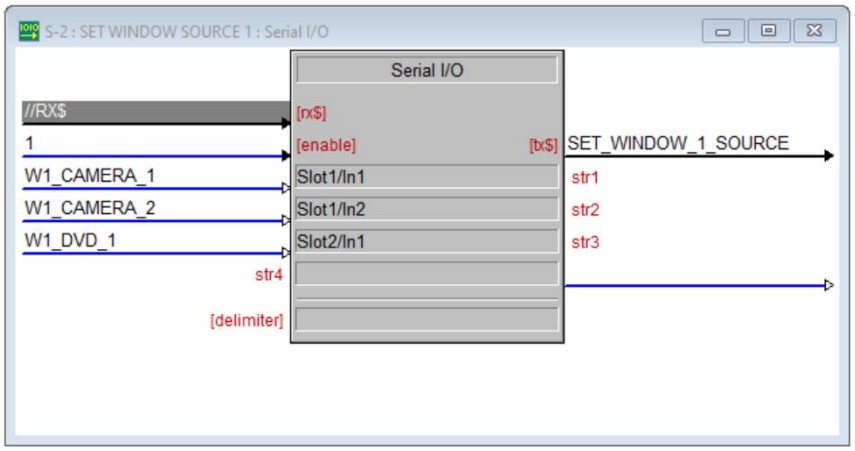
A touch panel file has been provided for X-Panels. This is purely for demonstration / evaluation of the modules, and is not intended for direct integration into your project.

3.2 – Features

- Preset Recall
- Window Source Selection
- Canvas Volume Control
- Canvas Mute Control
- Secure connection (TLS & HTTPS)

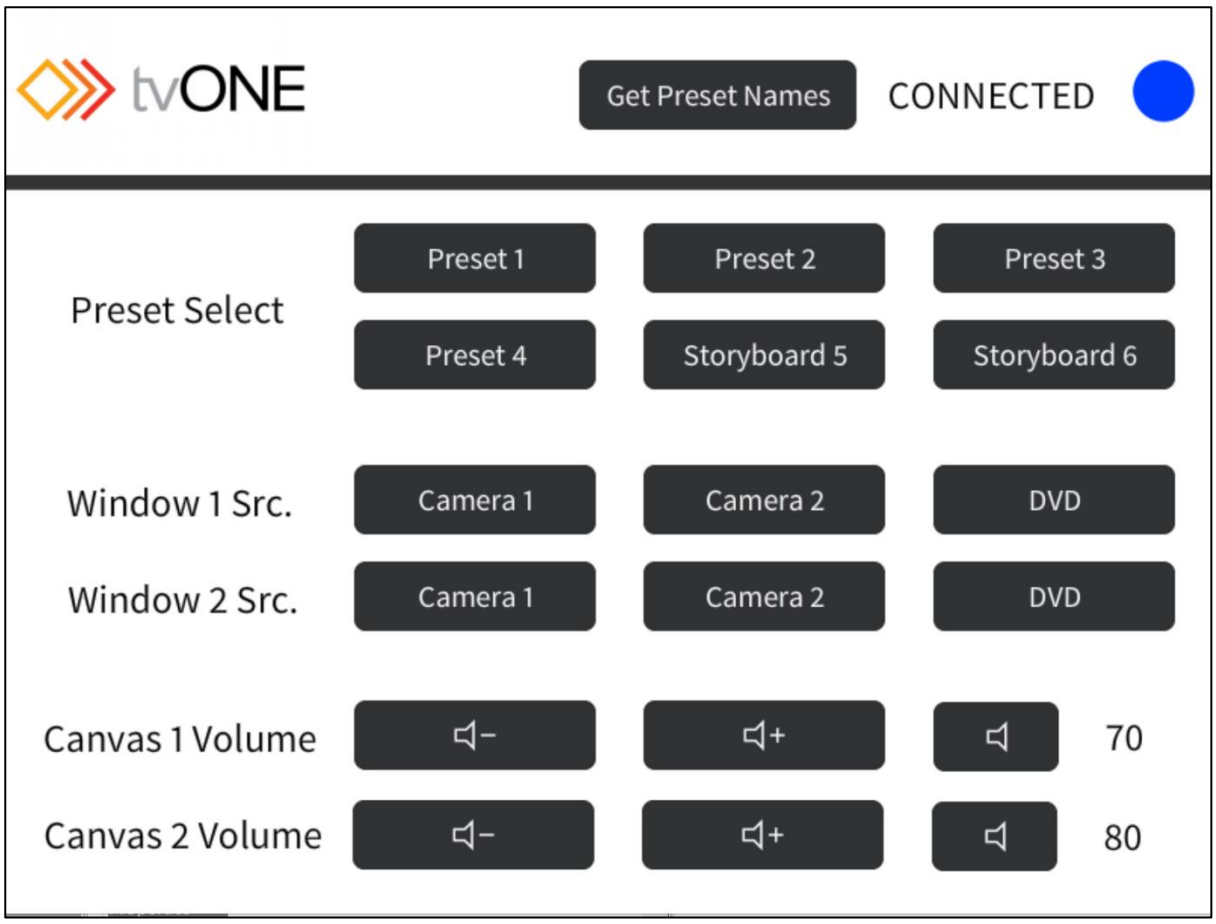
3.3 – Using the modules in your program

This example shows how to use a Serial I/O logic symbol to pass commands to the module in order to select the source for Window 1 from a set of inputs.

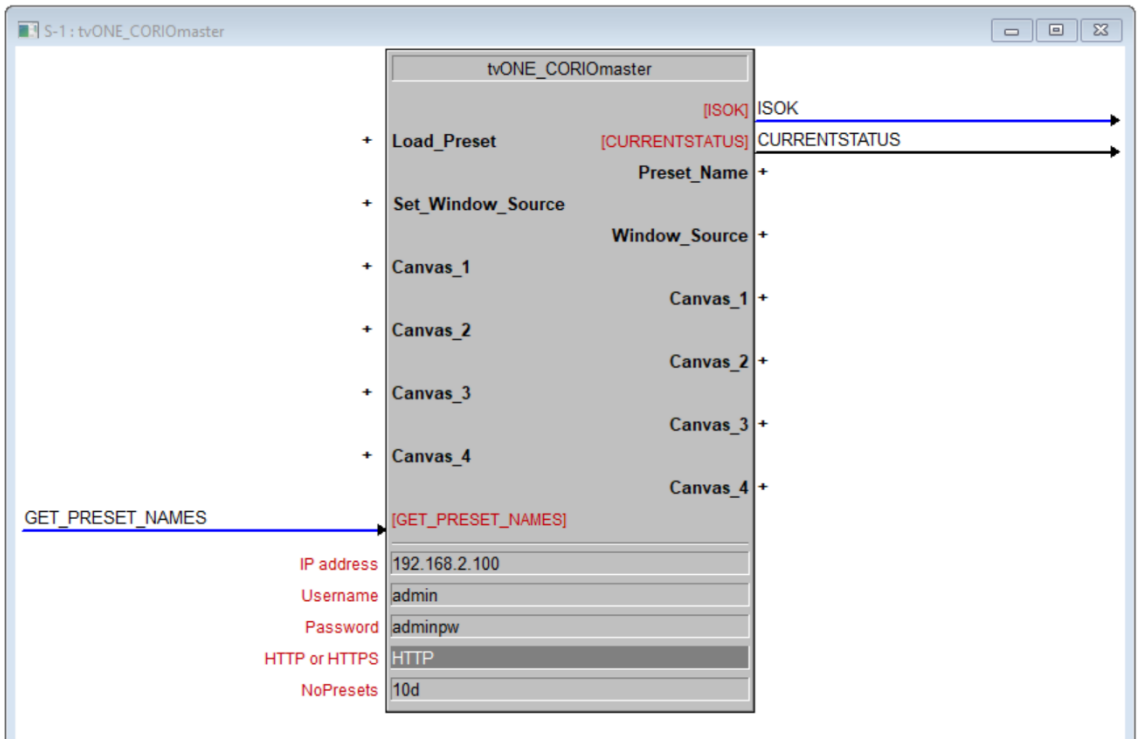


3.4 – Testing the modules using the supplied test harness

The supplied test harness, including an X-Panel file, may be used to test the modules.



4 – Module Arguments



4.1 – Parameters

IP_Address

Which IP address to use when opening a control connection to the CORIOmaster.

Default: 192.168.2.100

Username

CORIOmaster username

Default: admin

Password

CORIOmaster password

Default: adminpw

HTTP/HTTPS

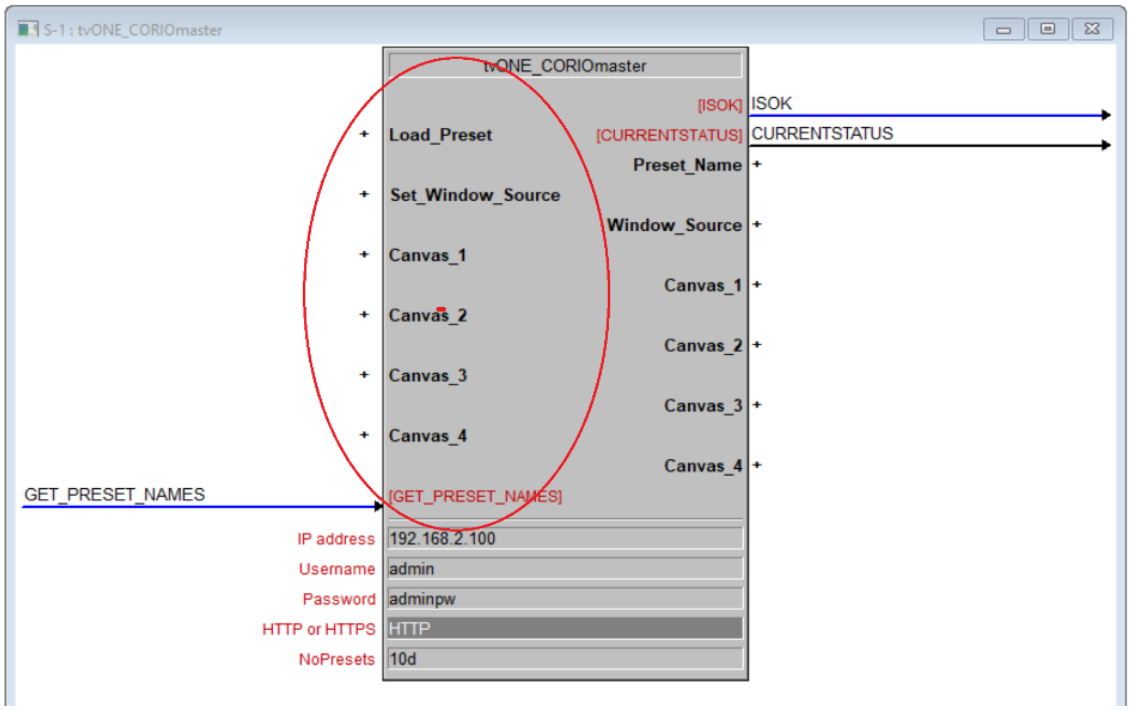
HTTP Connection Method to the CORIOmaster

Default: HTTP

NoPresets

Number of presets the module should poll for.

4.1.2 – Input types



DIGITAL_INPUT LOAD_PRESET_1 to LOAD_PRESET_50

Pulse to recall the specified Preset.

STRING_INPUTSET_WINDOW_1_SOURCE to SET_WINDOW_56_SOURCE
Select which source is routed to a window.
Examples:

Slot1/In1 means Slot1 In1
Slot2/In 4 means Slot 2 In 4

CANVAS 1 –4
Where x is the canvasId.

DIGITAL_INPUT [Volume_Up_x]
Increments the volume by5.

DIGITAL_INPUT [Volume_Down_x]
Decrements the volumeby5.

ANALOG_INPUT [Volume_Set_x]
Set the volume directly to a level between 0 and 100.

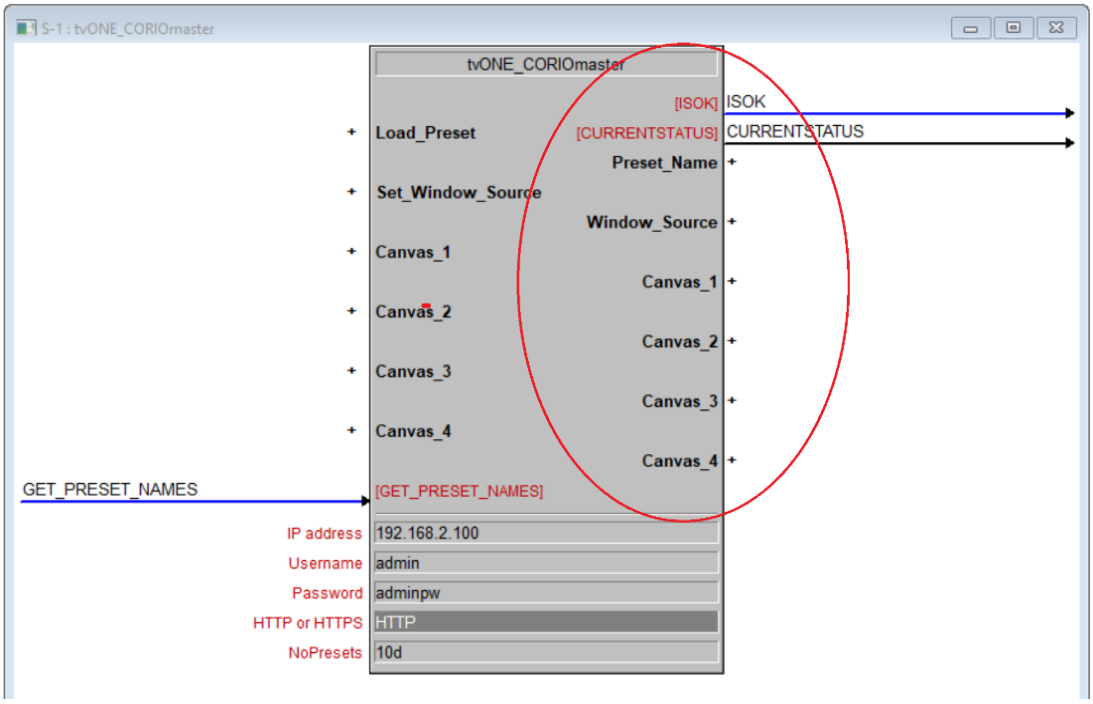
DIGITAL_INPUT [Mute_On_x]
Turn mute on.

DIGITAL_INPUT [Mute_Off_x]
Turn mute off.

DIGITAL_INPUT [Mute_Toggle_x]
Toggle the Mute State.

DIGITAL_INPUT [GET _PRESET_NAMES]
This gets the preset names from the unit. Please note that this may take some time.

4.1.3 – Output types



DIGITAL_OUTPUT [ISOK]
Connection State of unit.

STRING_OUTPUT [CURRENTSTATUS]
Text of connection status.

STRING_OUTPUT PRESET_NAME_1 to PRESET_NAME_50
Provides access to the name assigned to each preset. This might be used as an indirect text source for a button, showing the name of a preset.

STRING_OUTPUT WINDOW_1_SOURCE to WINDOW_56_SOURCE
Provides access to the name assigned to each preset. This might be used as an indirect text source for a button, showing the name of a preset.

CANVAS 1 –4

ANALOG_OUTPUT [Volume_x]
Current volume level between 0 and 100.

ANALOG_OUTPUT [Preset_x]
The current preset number on this canvas.

DIGITAL_OUTPUT [isMuted_x]
Mute state.

5 – Troubleshooting and tips

5.1 – No Connection

Check the IP_Address, HTTP connection Type, Username and Password fields are all correctly entered in the module properties.

Ensure the CORIOmaster is connected to the same LAN as the Crestron processor.