Crestron Driver for Netvio MV-H2-0401

|  |  |
| --- | --- |
| Revision | Initial Release1.0.3 |
| Written By | Peter Woods |
| Date | 27/07/2025 |

Table of Contents

[Known Issues 1](#_Toc204782587)

[Supported Devices and Configurations 2](#_Toc204782588)

[Development Parameters 2](#_Toc204782589)

[Files 2](#_Toc204782590)

[Setup For Using Netvio Controller Based System 2](#_Toc204782591)

[Setup For Using Direct Control 3](#_Toc204782592)

[Set Parameters on Crestron Module 3](#_Toc204782593)

[Touch Screen 4](#_Toc204782594)

[SIMPL file example 4](#_Toc204782595)

[Testing and Operation 4](#_Toc204782596)

[Screen Layouts 4](#_Toc204782597)

[Content+ 9](#_Toc204782598)

[Passthru 9](#_Toc204782599)

[Troubleshooting 9](#_Toc204782600)

[Button Text Labels 10](#_Toc204782601)

### Known Issues

Version 1.0.3, Initial release

Window border commands are disabled.

### Supported Devices and Configurations

Connection to Multiviewer MV-H2-0401 (MV) through JP4 series CL controllers to endpoint serial ports

Connection to MV through MX matrix series controllers to endpoint serial ports

Connection to MV directly to a Crestron processor serial port

Connection to MV via IP to Serial convertor

Module complied for Series 3 and Series 4 Crestron processors

### Development Parameters

|  |  |
| --- | --- |
| Application / Hardware | SW/ FW Version |
| SIMPL WIndows | 4.3000.01.01 |
| SIMPL+ Cross Compiler | 1.3 |
| Crestron Database | 228.20.002.00 |
| Device Database | 200.410.002.0 |
| Crestron VTProe | 6.2.02.08 |
| Crestron Pro3 | 1.8001.5761.26293 |
| Netvio CL-10 Controller | CL: 1.9.13 |
| Netvio MV-H2-0401, MCU | 1.10.02 |
| Netvio MV-H2-0401, SCALER | 20240328-11 |

### Files

It is recommended to unzip all the files included in the archive into your Crestron project directory.

### Setup For Using Netvio Controller Based System

Ensure that Permission to access Plaintext API has been selected on the Auth & API Settings tab In Netvio 360.

A blue line on a dark background

Description automatically generated

The port serial parameters are sent to the defined endpoint at login to the controller. The following settings are applied to the port:

A screenshot of a computer

AI-generated content may be incorrect.

### Setup For Using Direct Control

When using direct control the serial port settings are set by the third party control devices. The recommended setting is 115200, N, 8, 1.

### Set Parameters on Crestron Module

A screenshot of a computer

AI-generated content may be incorrect.

|  |  |
| --- | --- |
| Parameter | Function |
| Control\_Connection | Connection point to MV |
| IPAddress | IP address of MV or 3rd party convertor |
| IPPort | IP port of MV or 3rd party convertor |
| Netvio\_Username | Netvio controller username |
| Netvio\_Password | Netvio controller password |
| Netvio\_Endpoint\_Type | Netvio endpoint type (Tx or RX) |
| Netvio\_Endpoint\_Channel | Netvio endpoint channel (number) |

### Touch Screen

The touch screen file when used in conjunction with the supplied SIMPL file provides an example of all the available functionality of the MV. With the exception of the page navigation buttons all of the button text labels are generated by the module. The buttons used have not been modified with the exception of button size and the setting of Press Digital Joins and Indirect Text Serial Joins. At the end of this document is a list of the button labels to aid in creating custom panels.

Setting Disable\_btn\_Txt high will not allow text to be applied to buttons.

Setting Init\_btn\_Txt will apply button text to buttons.

Setting Disable\_Hide\_Show high will disable button visibility control.

### SIMPL file example

The file contains the main module as well as a directory containing a Content+ example.

### Testing and Operation

It is recommended to initially load and test with the module as supplied. The touchscreen will initially appear with no text on the buttons. The labels are sent at system boot and when the touch panel comes online.

Buttons always generate commands and button feedback is based on feedback from the MV.

### Screen Layouts

Video and Audio / Single Window

A screenshot of a computer program

AI-generated content may be incorrect.

Video and Audio / PIP

A screenshot of a computer program

AI-generated content may be incorrect.

Video and Audio / PBP

A screenshot of a computer program

AI-generated content may be incorrect.

Video and Audio / Triple Window

A screenshot of a computer program

AI-generated content may be incorrect.

Video and Audio / Quad Window

A screenshot of a computer program

AI-generated content may be incorrect.

KVM & Video

A screenshot of a computer

AI-generated content may be incorrect.

EDID & Scaler

A screenshot of a computer

AI-generated content may be incorrect.

Borders

A screenshot of a computer

AI-generated content may be incorrect.

### Content+

A basic example of configuring Content+ is included in the SIMPL program file. The main control module is not required to enable Content+. Symbol S-2.2 requires the rtsp stream information be entered for the appropriate transmitters. There are a number of options available from Crestron for displaying video on a touch screen. This example uses the “Enhanced Embedded Video\_2” button which has multiple options to configure and control the image.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

### Passthru

Passthru allows custom commands to be passed through direct to the currently defined endpoint.

### Troubleshooting

### Button Text Labels

btnTxtCmd[1].VolUp[1]=”Volume Up”;

btnTxtCmd[1].VolDown[1]=”Volume Down”;

btnTxtCmd[1].VolMute[1]=”Volume Mute”;

btnTxtCmd[1].Layout[1]=”Single Window”;

btnTxtCmd[1].Layout[2]=”PIP”;

btnTxtCmd[1].Layout[3]=”PBP”;

btnTxtCmd[1].Layout[4]=”Triple Window”;

btnTxtCmd[1].Layout[5]=”Quad Window”;

btnTxtCmd[1].SingleConfig[1]=”Auto Follow Input Select”;

btnTxtCmd[1].PIPConfig[1]=”Top L”;

btnTxtCmd[1].PIPConfig[5]=”Small”;

btnTxtCmd[1].PIPConfig[2]=”Top R”;

btnTxtCmd[1].PIPConfig[6]=”Medium”;

btnTxtCmd[1].PIPConfig[3]=”Bottom L”;

btnTxtCmd[1].PIPConfig[7]=”Large”;

btnTxtCmd[1].PIPConfig[4]=”Bottom R”;

btnTxtCmd[1].PBPConfig[1]=”Mode 1”;

btnTxtCmd[1].PBPConfig[3]=”Full Scr”;

btnTxtCmd[1].PBPConfig[2]=”Mode 2”;

btnTxtCmd[1].PBPConfig[4]=”16:9”;

btnTxtCmd[1].TripleConfig[1]=”Mode 1”;

btnTxtCmd[1].TripleConfig[3]=”Full Scr”;

btnTxtCmd[1].TripleConfig[2]=”Mode 2”;

btnTxtCmd[1].TripleConfig[4]=”16:9”;

btnTxtCmd[1].QuadConfig[1]=”Mode 1”;

btnTxtCmd[1].QuadConfig[3]=”Full Scr”;

btnTxtCmd[1].QuadConfig[2]=”Mode 2”;

btnTxtCmd[1].QuadConfig[4]=”16:9”;

btnTxtCmd[1].SrcVidWindow[1]=”HDMI 1”;

btnTxtCmd[1].SrcVidWindow[2]=”HDMI 2”;

btnTxtCmd[1].SrcVidWindow[3]=”HDMI 3”;

btnTxtCmd[1].SrcVidWindow[4]=”HDMI 4”;

btnTxtCmd[1].SrcAudio[5]=”Auto Follow Window 1”;

btnTxtCmd[1].SrcAudio[1]=”HDMI 1”;

btnTxtCmd[1].SrcAudio[2]=”HDMI 2”;

btnTxtCmd[1].SrcAudio[3]=”HDMI 3”;

btnTxtCmd[1].SrcAudio[4]=”HDMI 4”;

btnTxtCmd[1].SrcKVM[5]=”KBFV”;

btnTxtCmd[1].SrcKVM[1]=”Keyboard 1”;

btnTxtCmd[1].SrcKVM[2]=”Keyboard 2”;

btnTxtCmd[1].SrcKVM[3]=”Keyboard 3”;

btnTxtCmd[1].SrcKVM[4]=”Keyboard 4”;

btnTxtCmd[1].SelInputEDID[1]=”4K2K60\_444,Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[2]=”4K2K60\_444,Dolby/DTS 5.1”; btnTxtCmd[1].SelInputEDID[3]=”4K2K60\_444,HD Audio 7.1”; btnTxtCmd[1].SelInputEDID[4]=”4K2K30\_444,Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[5]=”4K2K30\_444,Dolby/DTS 5.1”; btnTxtCmd[1].SelInputEDID[6]=”4K2K30\_444,HD Audio 7.1”; btnTxtCmd[1].SelInputEDID[7]=”1080P,Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[8]=”1080P,Dolby/DTS 5.1”; btnTxtCmd[1].SelInputEDID[9]=”1080P,HD Audio 7.1”; btnTxtCmd[1].SelInputEDID[10]=”1920x1200 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[11]=”1680x1050 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[12]=”1600x1200 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[13]=”1440x900 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[14]=”1360x768 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[15]=”1280x1024 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[16]=”1024x768 Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[17]=”720p Stereo Audio 2.0”; btnTxtCmd[1].SelInputEDID[18]=”Copy From HDMI Out”;

btnTxtCmd[1].SelOutputResolution[1]=”4096x2160 p60”;

btnTxtCmd[1].SelOutputResolution[2]=”4096x2160 p50”;

btnTxtCmd[1].SelOutputResolution[3]=”3840x2160 p60”;

btnTxtCmd[1].SelOutputResolution[4]=”3840x2160 p50”;

btnTxtCmd[1].SelOutputResolution[5]=”3840x2160 p30”;

btnTxtCmd[1].SelOutputResolution[6]=”3840x2160 p25”;

btnTxtCmd[1].SelOutputResolution[7]=”1920x1200 p60RB”;

btnTxtCmd[1].SelOutputResolution[8]=”1920x1080 p60”;

btnTxtCmd[1].SelOutputResolution[9]=”1920x1080 p50”;

btnTxtCmd[1].SelHDCPmode[1]=”HDCP 1.4”;

btnTxtCmd[1].SelHDCPmode[2]=”HDCP 2.2”;

btnTxtCmd[1].SelHDCPmode[3]=”HDCP Off”;

btnTxtCmd[1].SelVidOutColor[1]=”Black”;

btnTxtCmd[1].SelVidOutColor[2]=”Blue”;

btnTxtCmd[1].SelVideoMode[1]=”Video”;

btnTxtCmd[1].SelVideoMode[2]=”PC”;

btnTxtCmd[1].BorderOnOff[1]=”Window 1”;

btnTxtCmd[1].BorderOnOff[2]=”Window 2”;

btnTxtCmd[1].BorderOnOff[3]=”Window 3”;

btnTxtCmd[1].BorderOnOff[4]=”Window 4”;

btnTxtCmd[1].SelBorderEdit[1]=”Window 1”;

btnTxtCmd[1].SelBorderEdit[2]=”Window 2”;

btnTxtCmd[1].SelBorderEdit[3]=”Window 3”;

btnTxtCmd[1].SelBorderEdit[4]=”Window 4”;

btnTxtCmd[1].SelBorderColor[1]=”Black”;

btnTxtCmd[1].SelBorderColor[2]=”Red”;

btnTxtCmd[1].SelBorderColor[3]=”Green”;

btnTxtCmd[1].SelBorderColor[4]=”Blue”;

btnTxtCmd[1].SelBorderColor[5]=”Yellow”;

btnTxtCmd[1].SelBorderColor[6]=”Magenta”;

btnTxtCmd[1].SelBorderColor[7]=”Cyan”;

btnTxtCmd[1].SelBorderColor[8]=”White”;

btnTxtCmd[1].SelBorderColor[9]=”Gray”;