



EXTRON MVC121 Plus

Overview:

There are many uses of this driver, however the main purpose is to allow an installer to easily overlay and mix up to 2 microphones (more if using another mixer in addition to the MVC121 Plus) with program audio in a conference room scenario.

Features:

- 2-Way RS-232 communication
- Discrete Volume & Mute Control & Feedback
- Easily Mix Up to 2 Microphones over Program Audio
- Includes 3 easy-to-use experience buttons for controlling microphone mute and volume levels via a Control interface
- Includes 1 universal microphone experience button for other applications
- Includes 3 Contact sensors to use for various programming events.

Installation:

Here is the suggested method of configuring the driver:

FIRST* *IMPORTANT

Load the saved MVC121+ configuration file (Included) into your MVC121 Plus to properly configure the inputs, outputs, and gain levels of the MVC121 Plus

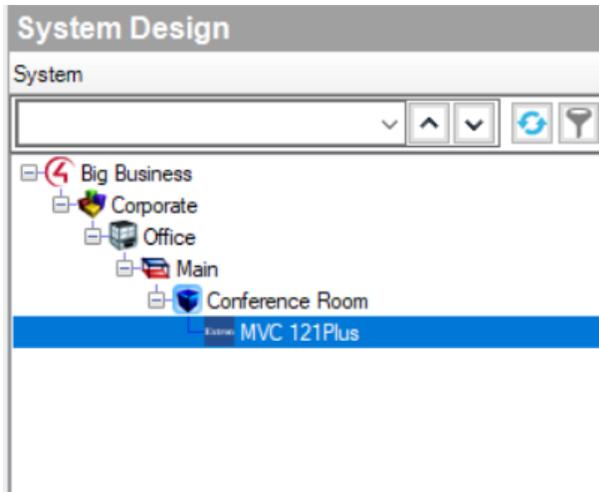
--Then--

Place the MVC121 Plus and microphone experience drivers into your Control4 driver directory. (Typically *C:\Users\yourusername\Documents\Control4\Drivers*)

Create 1 room:

- A) Conference Room

Add the MVC121 Plus driver to the project



Make a physical connection AND programming connection between your line level program audio source and “Program Input (Input 3)” on the MVC121 Plus. In this example, the television audio output is connected to the MVC121 Plus.

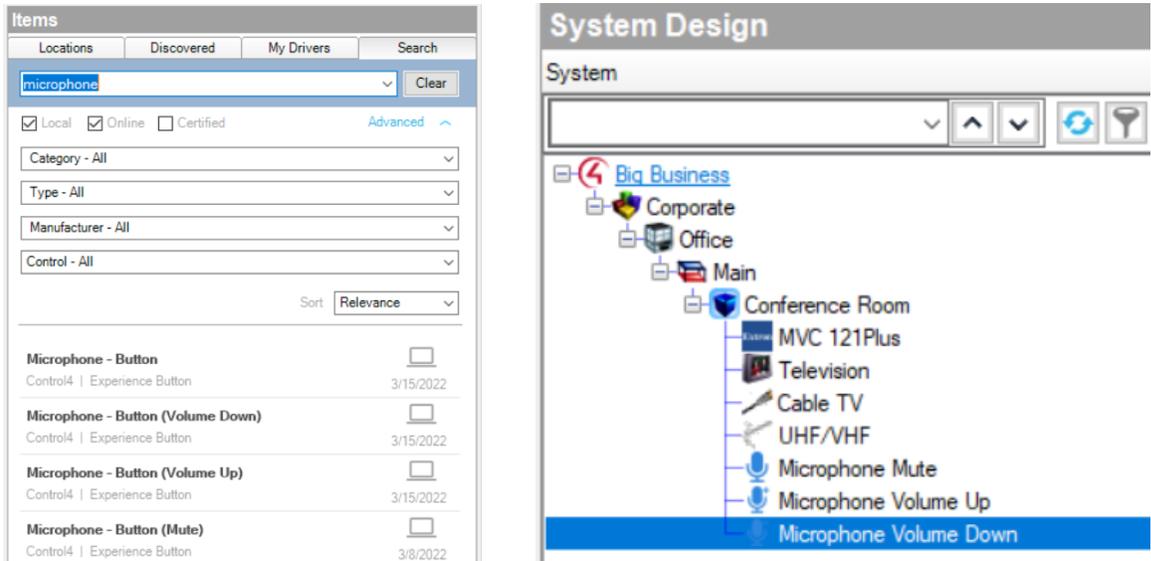
Connections		Control & Audio Video Connections				
Control/AV		MVC 121Plus				
		Name	Type	Connection	Input/Output	Connected To
Audio/Video Inputs						
	Program Input (Input 3)	Audio	STEREO	Input	Television->Output	
Audio/Video Outputs						
	Program Output	Audio	STEREO	Output		
Control Inputs						
	Serial RS-232	Control	RS_232	Input		
Control Outputs						
	Digital Input 1	Control	CONTACT_SENSOR	Output		
	Digital Input 2	Control	CONTACT_SENSOR	Output		
	Digital Input 3	Control	CONTACT_SENSOR	Output		

Set the MVC121 Plus as the Audio endpoint 1, Audio Volume 1 endpoint, Video Volume 1 endpoint, and Video's Audio endpoint 1 endpoints for the Conference Room:

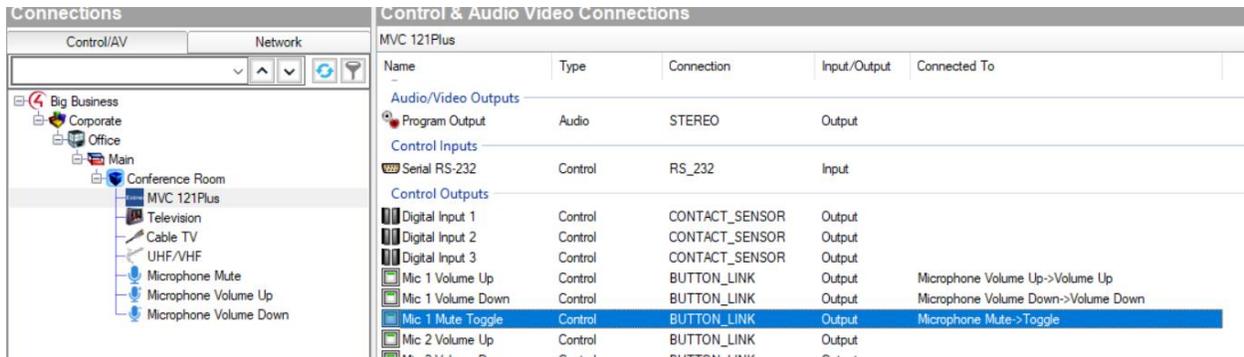
Connections		Control & Audio Video Connections				
Control/AV		Conference Room				
		Name	Type	Connection	Input/Output	Connected To
Control Inputs						
	IR Input Control	Control	IR_IN	Input		
Room Control						
	Video End-Point	RoomControl	VIDEO_SELECTION	Input	Television->Room Control	
	Audio End-Point 1	RoomControl	AUDIO_SELECTION	Input	MVC 121Plus->Room Selection - Program Output	
	Video's Audio End-Point 1	RoomControl	AUDIO_SELECTION	Input	MVC 121Plus->Room Selection - Program Output	
	Video Volume 1	RoomControl	AUDIO_VOLUME	Input	MVC 121Plus->Room Selection - Program Output	
	Audio Volume 1	RoomControl	AUDIO_VOLUME	Input	MVC 121Plus->Room Selection - Program Output	
	On-Screen Device	RoomControl	ONSCREEN_SELECTI...	Input		
	Video Volume 2	RoomControl	AUDIO_VOLUME	Input		

Included in this driver package are 4 microphone experience buttons that are used to control microphone levels and mute status from any Control4 navigator.

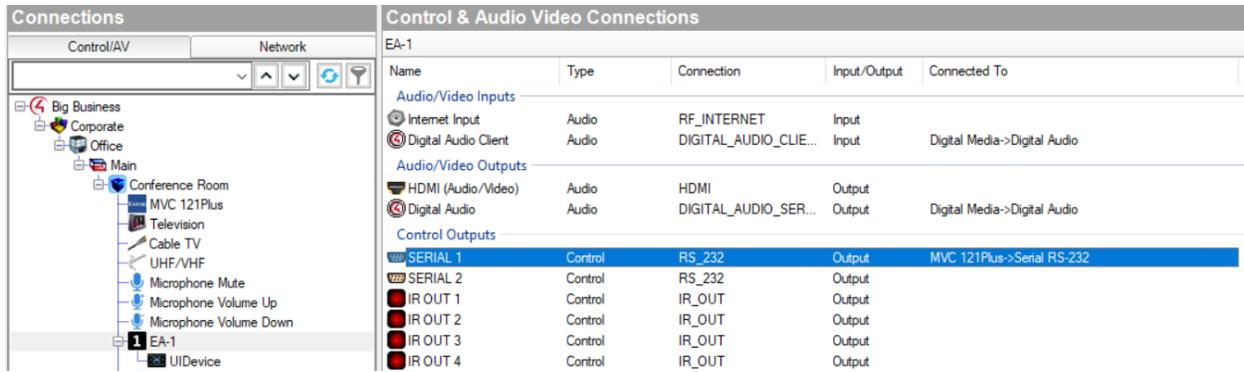
Search and add the “Microphone – Button (Mute)”, “Microphone – Button (Volume Up)”, and “Microphone – Button (Volume Down)” drivers to the project.



Bind the Experience Buttons to the corresponding BUTTON_LINK connections on the MVC 121 Plus



Make a physical and programming connection between the serial connection on the MVC121 Plus and an open serial port on your Control4 devices.



IMPORTANT

Connect the MVC121 Plus Pinouts according to the manual to the proper RS-232 pinouts on the Control4 controller... If you are not able to properly communicate with the MVC121 Plus, you may want to switch from strait-through to NULL wiring.

Enter a valid activation code on the Properties tap of the driver (Or use free 72 hour trial)

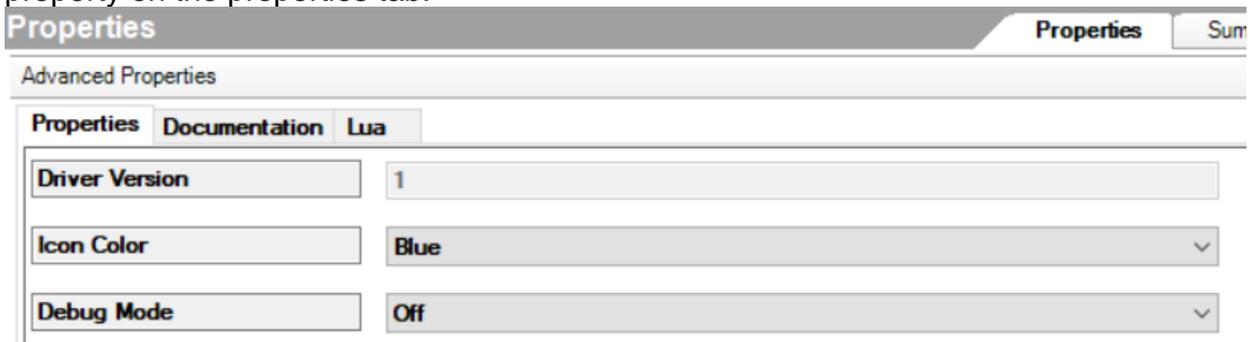
Refresh Navigators

That's It!

***Don't forget to "unhide" the microphone experience buttons in Navigator.**

Additional Features:

- 1) You can change the color of the microphone experience buttons via the color property on the properties tab.



- Bind the BUTTON_LINK connections on the MVC121 Plus driver to Keypad buttons to control volume and mute features of the microphones.



Don't forget to set the color of the Button LEDs to:

- LED Behavior = "Follow Connection"
- On Color = Color you prefer LED to be when Mute is ON
- Off Color = Color you prefer LED to be when Mute is OFF



- The experience button called "Microphone – Button" is a universal experience button with an analog audio connection that can be added to any Control4 system and configured as an analog audio source. Icon color can be chosen from the Properties page as well.

Properties:

License Status: Displays the current license status of the driver according to Blackwire Designs licensing server.

License Key: Input the license key from your Blackwire Designs dealer account and press the "set" button to activate the driver.

Front Panel Lockout: Allows you to enable or disable the buttons/dials on the front of the MVC121 Plus chassis.

Mic 1 Maximum Volume: Allows you to set the maximum volume level of Microphone 1 in the overall audio mix

Mic 2 Maximum Volume: Allows you to set the maximum volume level of

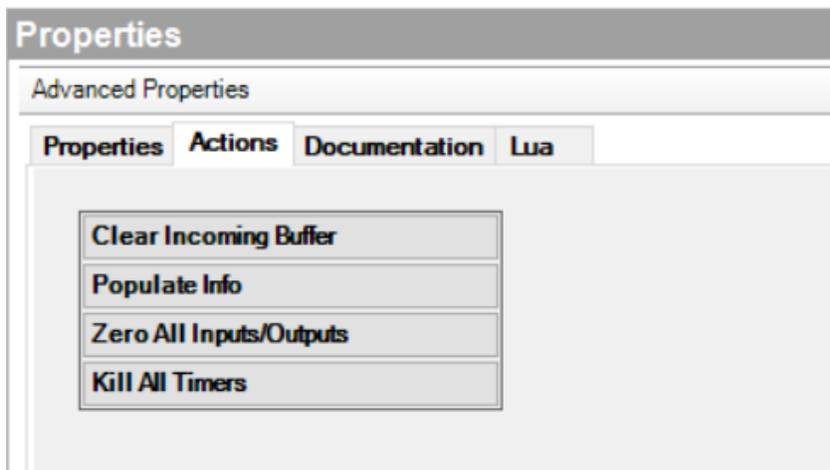
Microphone 2 in the overall audio mix

Program Out Maximum Volume: Allows you to set the maximum volume level of Program Audio in the overall audio mix

Command Delay: Displays the delay (in milliseconds) that Control4 will delay transmitting consecutive RS-232 commands to the Extron MVC121 Plus device. If it is determined that some commands are 'missed/ignored' by the MVC121 Plus device, adjust the command delay to speed up or slow down transmitted commands.

Debug Mode: Select a mode to debug the driver. Debug mode will revert to "off" after a predetermined time.

Actions:



Clear Incoming Buffer: Forces all timers within the driver to expire. Use if it is determined the MVC121 Plus has stopped responding to commands.

Populate Info: Requests product details from the MVC121 Plus device and displays it on the Properties tab. Use if the product details did not automatically populate on the Properties tab.

Zero All Inputs/Outputs: Resets all volume levels to the original volume levels.

Kill All Timers: Forces all timers within the driver to expire. Use if it is determined the MVC121 Plus has stopped responding to commands.

Limitations:

-Because of the limited volume range of the MVC121 Plus (-12db to 24db in 1db increments), you will notice volume increments will go up by 3ish % when you adjust

the volume with Control4. Additionally, you may notice that when you set a Maximum volume level via the properties page, the volume level you set might change slightly to the nearest 3rd percentage. Additionally, the slider on Control4 navigators may be slightly different than the actual volume levels due to rounding errors.

IMPORTANT

-Out of the box, the Digital inputs might continue to mute the inputs despite being configured as “No Action” in the Extron configuration software. This is a firmware bug confirmed by Extron. To fix this, change each trigger type to “Level, Lo”, apply, then close the configure digital input box. Re-open the configure digital input menu, and set each trigger type to “No Action/Off”. Hit apply and then close the configure digital input box. [The Digital inputs may result in undesired behavior if you skip this step.](#)

-This driver requires Composer version 2.8.2 or higher. Using on a previous version may work, however it is untested.