

Wave Electronics MX Matrix - Control4 Driver

Release Notes

Current Version: 1.0.3

Introduction

This driver has been designed to provide two-way control of a Wave Electronics MX matrix via TCP/IP and RS232. The following features are supported:

- **General Commands:**
 - Basic Input/Output switching
 - Switching one input to all outputs
- **CEC Commands:**
 - CEC Power On
 - CEC Power Off
- **Rebooting Commands:**
 - System Rebooting
- **Preset Commands:**
 - Preset Saving
 - Preset Recalling

This driver has been written and tested using the following Wave Electronics device types:

- MX0404
- MX0808

Driver Configuration

It is recommended that the Wave Electronics MX system be installed, configured and tested by a suitably qualified engineer, according to the Wave Electronic documentation, prior to integration with this driver.

Driver Installation

Copy the .c4z files from the zip package to your Control4 driver location (for example, MyDocuments4) and then open Composer. The drivers can be found under:

Device Type: AV Switch

Manufacturer: Wave Electronics

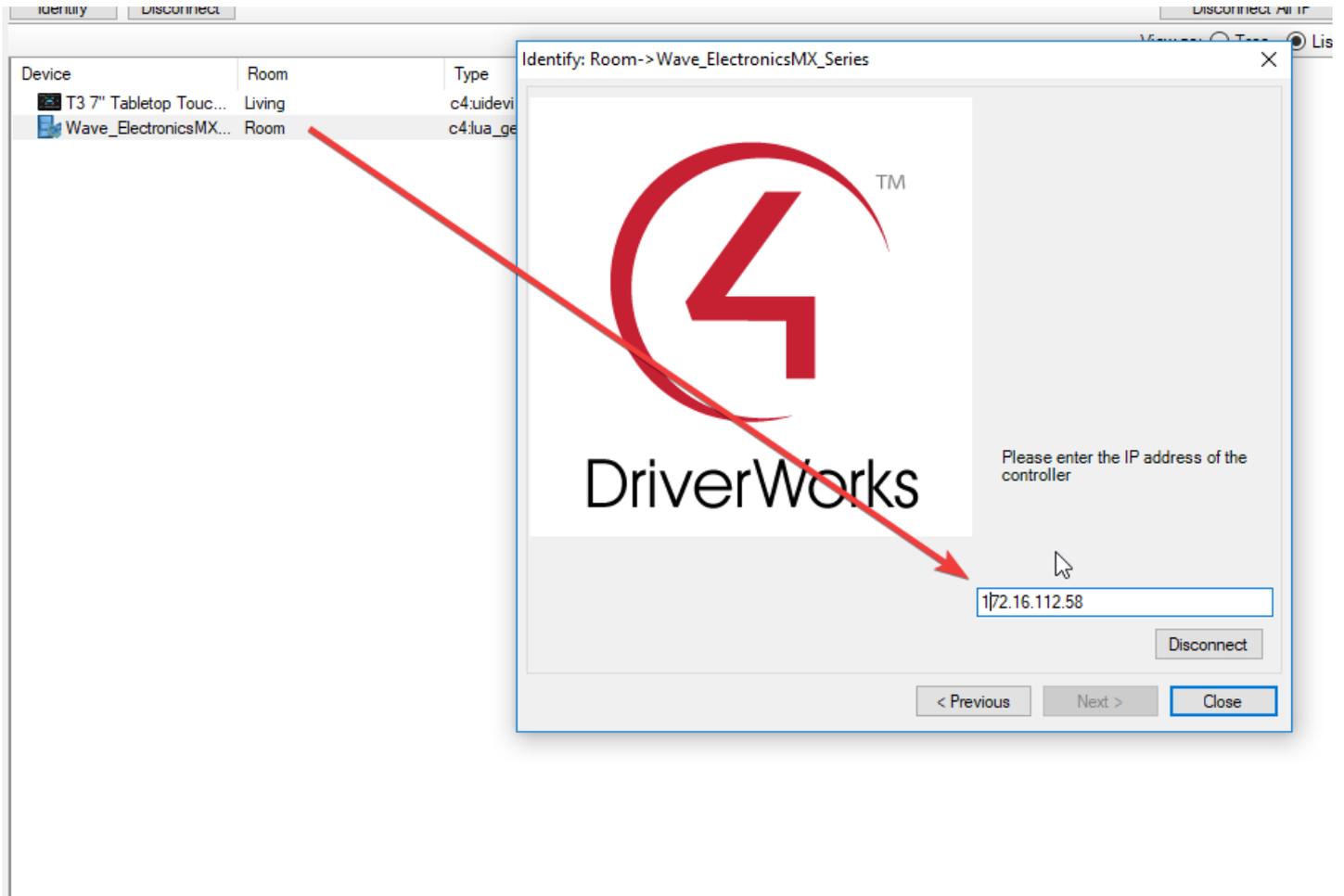
Model: Wave Electronics MX Series [matrix size] [connection type] [audio mode]

...**matrix size** is the number of *inputs* and *outputs*; **connection type** is either *IP* or *Serial*; **audio mode** is either *independent* or not specified (follow video matrix).

Choose the version that most closely matches your needs. The drivers are all effectively the same; different output configurations are provided to avoid cluttering your project with unwanted inputs and outputs.

To Establish an IP Connection

To establish a IP connection between the driver and the Wave system. First use a driver model with the correct *connection type* in its name. Next go to **Connections** and choose the **Network** tab. Double click on the Wave Electronics device and enter its IP address in the window that appears:



To Establish a Serial Connection

To establish a serial connection between the driver and the Wave system. First use a driver model with the correct *connection type* in its name. Next go to **Connections** and choose the **Control/AV** tab. Click on the Wave Electronics device, then find the serial connection under **Control Inputs**. Drag the Serial connection down to an available port.

Name	Type	Connection	Input/Output	Connected To
Audio Output 1	Audio	DIGITAL_COAX	Output	
Audio Output 2	Audio	STEREO	Output	
Audio Output 2	Audio	DIGITAL_COAX	Output	
Audio Output 3	Audio	STEREO	Output	
Audio Output 3	Audio	DIGITAL_COAX	Output	
Audio Output 4	Audio	STEREO	Output	
Audio Output 4	Audio	DIGITAL_COAX	Output	
Audio Output 5	Audio	STEREO	Output	
Audio Output 5	Audio	DIGITAL_COAX	Output	
Audio Output 6	Audio	STEREO	Output	
Audio Output 6	Audio	DIGITAL_COAX	Output	
Audio Output 7	Audio	STEREO	Output	
Audio Output 7	Audio	DIGITAL_COAX	Output	
Audio Output 8	Audio	STEREO	Output	
Audio Output 8	Audio	DIGITAL_COAX	Output	

Control Inputs			
Serial RS-232	Control	RS_232	Input

Room Control			
Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output
Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output
Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output
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Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output

RS_232 Output Devices			
Device	Name	Location	Connections
CA-1	SERIAL	System	

You may now configure the video connections in the **Control/AV** tab according to normal Control4 practice. Select the newly added driver in the **System Design** view to display its properties*:

Property	Description
Driver Version	The release version of the driver.
Status	Should be Operational when actually in communication with the Wave Electronic system. Any other status indicates a connection problem of some sort.
Debug Settings	Debug Mode – support use only Debug Subsystems – support use only Debug Level – support use only

*Serial settings such as baud rate, parity and stop bits are already defined. For IP, the port has also been defined already.

Commands

In this section you can find a list of all the available commands.

Command	Description
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Command	Description
Switching one input to all outputs	Switches one input to show on all outputs on matrix Input - Choose input to show on all outputs
CEC Command	Turns CEC on for a specific output Command - Choose the CEC command to send Outputs - Output numbers to which the command should be sent. These can be comma separated (e.g. "1,2,3,4") or defined as a range (e.g. "1-4"), or a combination of the two (e.g. "1,2-4").
System Rebooting	Reboots the matrix
Preset Saving	Saves current output to input configuration in selected preset Preset - Choose a preset number to save
Preset Recalling	Recalls selected preset Preset - Choose a preset number to recall

Important: Wave Switching Structure

Due to limitations in composer. A different matrix structure was required for this driver.

For all Control4 Wave drivers you will see duplicate inputs and outputs. Shown with the red squares. These will only appear in the matrix panel. They will not appear as connections.

These duplicates can be ignored.

Name	Type	Connection	Input/Output	Connected To
Audio/Video Inputs				
Input 1	Video	HDMI	Input	
Input 2	Video	HDMI	Input	
Input 3	Video	HDMI	Input	
Input 4	Video	HDMI	Input	
Audio/Video Outputs				
Output 1	Video	HDMI	Output	
Output 2	Video	HDMI	Output	
Output 3	Video	HDMI	Output	
Output 4	Video	HDMI	Output	
Audio Output 1	Audio	STEREO	Output	
Audio Output 2	Audio	STEREO	Output	
Audio Output 3	Audio	STEREO	Output	
Audio Output 4	Audio	STEREO	Output	
Room Control				
Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output	
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output	
Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output	
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output	
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Room Selection - OUTP...	RoomControl	AUDIO_SELECTION	Output	
Room Selection - OUTP...	RoomControl	AUDIO_VOLUME	Output	

