

Wave Electronics MX Matrix - Control4 Driver

Release Notes

Current Version: 200

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, MyDocuments\Control4\Drivers) and then open Composer. The drivers can be found under:

Device Type: A/V Switch

Manufacturer: Wave Electronics

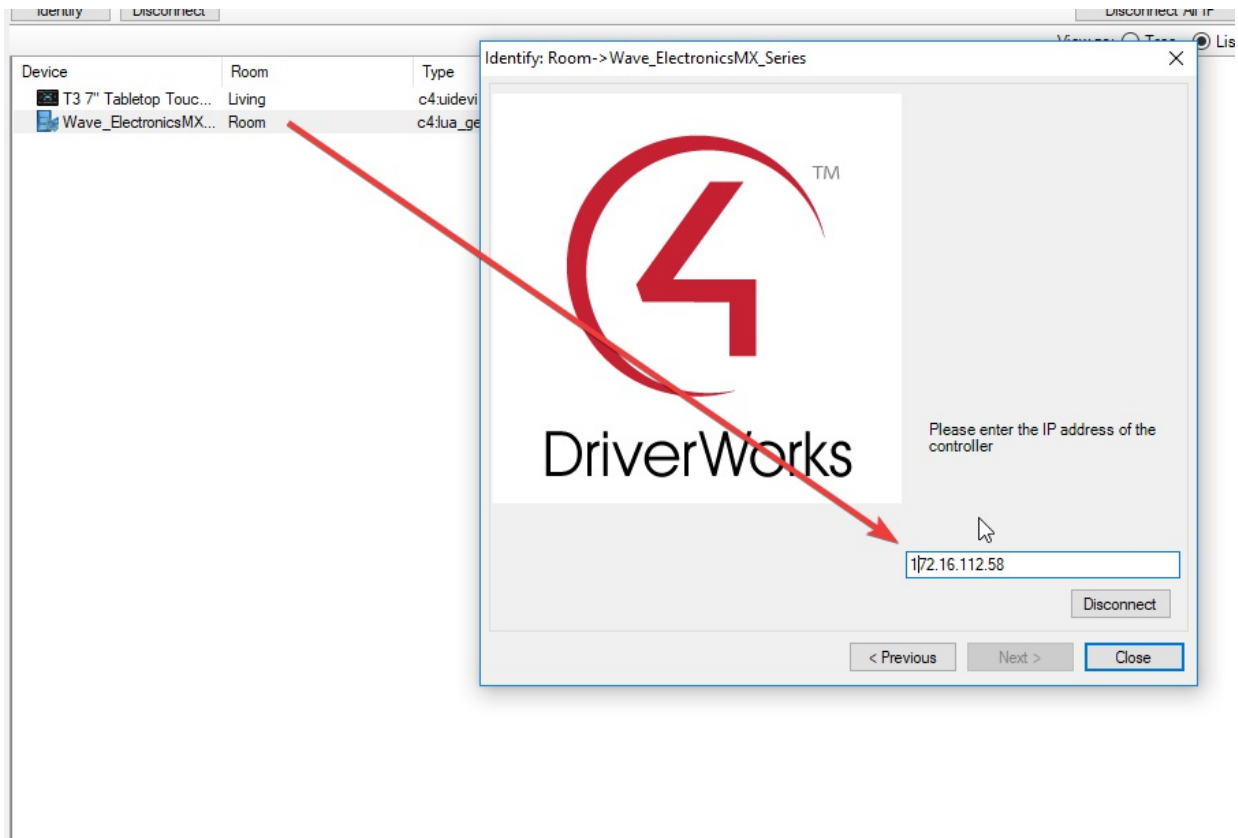
Model: Wave Electronics MX Series [matrix size] [connection type] [audio mode]

...**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:



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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 | |
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| Room Selection - OUTP... | RoomControl | AUDIO_VOLUME | Output | |

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

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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 |
|------------------------------------|---|
| 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 | |
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| Room Selection - OUTP... | RoomControl | AUDIO_VOLUME | Output | |

