MMX-4X4VW Control4 Driver Guide

For Composer Pro · Driver version 1.0.1

The KanexPro MMX-4X4VW driver lets a Control4 system control the MMX-4X4VW over the network. It talks to the unit's own control port (TCP 8001): no other KanexPro software and no RS-232 cable are needed. Each control is a programming command, and each reading is a variable that follows changes made on the unit's front panel, remote or web page.

> **Before you start —** the Control4 controller must reach the MMX-4X4VW on TCP port 8001. Give the unit a fixed IP address (or a DHCP reservation).

TABLE OF CONTENTS

1. Install the driver
2. Properties
3. Programming commands
4. Variables
5. Troubleshooting

1. INSTALL THE DRIVER

1. Download **KanexPro-MMX-4X4VW-C4-1.0.1.zip** from the MMX-4X4VW page on kanexpro.com (Resources) and unzip it.
2. In Composer Pro, add the driver from the file `KanexPro-MMX-4X4VW-C4.c4z` (Driver > Add or Update Driver, or drag the file in).
3. Add it to the project in the room where the unit is.
4. Select it and set its properties (section 2). **Connection** shows Connected once it reaches the unit.

> **One driver per unit —** for two MMX-4X4VW units, add the driver twice and give each its own IP address.

2. PROPERTIES

DRIVER PROPERTIES	
IP Address	The MMX-4X4VW's address on the control network. Empty by default.
Port	8001 (TCP), the unit's control port. Change it only if the unit's own web page was set to another port.
Poll Interval	How often, in seconds, the driver reads the unit back. Default 10; 0 reads it only after a change from Control4.
Debug Mode	On prints every command and reply to the Lua output.
Connection	Read only: Connected, Connecting, Not connected (and why), Refused (and which command), or No IP address.
Driver Version	Read only: 1.0.1.

Action: **Reconnect** connects again at once.

3. PROGRAMMING COMMANDS

12 commands. Use them in Composer's Programming view, from any event.

#	Command	Parameters	What it does
1	**Route**	Output (a list: All outputs, Output 1, Output 2, Output 3 ...); Input (a list: Input 1, Input 2, Input 3, Input 4)	Sends the input you pick to the output you pick ("All outputs": every output at once).
2	**Wall layout**	Value (a list: 2x2, 2x1, 2x1-2, 1x2 ...)	Sets the wall layout. Choices: 2x2; 2x1; 2x1-2; 1x2; 1x2-2, and 5 more.

3	**Route (Wall group)**	Output (a list: All outputs, Output 1, Output 2, Output 3 ...); Input (a list: Input 1, Input 2, Input 3, Input 4)	Sends the input you pick to the output you pick ("All outputs": every output at once).
4	**Send a picture**	Output (a list: Output 1, Output 2, Output 3, Output 4); State (a list: On, Off)	Send a picture: on or off on the output you pick.
5	**Output resolution**	Output (a list: Output 1, Output 2, Output 3, Output 4); Value (a list: 4096x2160p30, 3840x2160p30, 1920x1200p60, 1920x1080p60 ...)	Sets the output resolution on the output you pick. Choices: 4096x2160p30; 3840x2160p30; 1920x1200p60; 1920x1080p60; 1920x1080p50, and 8 more.
6	**Colour space**	Output (a list: Output 1, Output 2, Output 3, Output 4); Value (a list: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2)	Sets the colour space on the output you pick. Choices: RGB 4:4:4; YCbCr 4:4:4; YCbCr 4:2:2.
7	**EDID**	Input (a list: Input 1, Input 2, Input 3, Input 4); Value (a list: 4K30 4:4:4, stereo, 4K30 4:4:4, Dolby/DTS 5.1, 1080p, stereo, 1080p, Dolby/DTS 5.1 ...)	Sets the EDID on the input you pick. Choices: 4K30 4:4:4, stereo; 4K30 4:4:4, Dolby/DTS 5.1; 1080p, stereo; 1080p, Dolby/DTS 5.1; 1920x1200, stereo, and 6 more.
8	**Mirror**	Output (a list: Output 1, Output 2, Output 3, Output 4); Value (a list: Off, Flip left-right, Flip upside down, Both)	Sets the mirror on the output you pick. Choices: Off; Flip left-right; Flip upside down; Both.
9	**Bezel, left-right**	Value (a list: 0, 1, 2, 3 ...)	Sets the bezel, left-right. Choices: 0; 1; 2; 3; 4, and 6 more.
10	**Bezel, top-bottom**	Value (a list: 0, 1, 2, 3 ...)	Sets the bezel, top-bottom. Choices: 0; 1; 2; 3; 4, and 6 more.
11	**Beep**	State (a list: On, Off)	Beep: on or off.
12	**Lock the front panel**	State (a list: On, Off)	Lock the front panel: on or off.

4. VARIABLES

`STATUS` is the Connection text. The others follow the unit, whoever changes it:

#	Variable	Kind	What it holds
1	`ROUTE_OUT1`	text	Output 1 Source
2	`ROUTE_OUT2`	text	Output 2 Source

3	ROUTE_OUT3	text	Output 3 Source
4	ROUTE_OUT4	text	Output 4 Source
5	WALL	text	Wall layout
6	WALL_GROUP_OUT1	text	Output 1 Source
7	WALL_GROUP_OUT2	text	Output 2 Source
8	WALL_GROUP_OUT3	text	Output 3 Source
9	WALL_GROUP_OUT4	text	Output 4 Source
10	STREAM_OUT1	on/off	Output 1 Send a picture
11	STREAM_OUT2	on/off	Output 2 Send a picture
12	STREAM_OUT3	on/off	Output 3 Send a picture
13	STREAM_OUT4	on/off	Output 4 Send a picture
14	RESOLUTION_OUT1	text	Output 1 Output resolution
15	RESOLUTION_OUT2	text	Output 2 Output resolution
16	RESOLUTION_OUT3	text	Output 3 Output resolution
17	RESOLUTION_OUT4	text	Output 4 Output resolution
18	COLOR_OUT1	text	Output 1 Colour space
19	COLOR_OUT2	text	Output 2 Colour space
20	COLOR_OUT3	text	Output 3 Colour space
21	COLOR_OUT4	text	Output 4 Colour space
22	EDID_IN1	text	Input 1 EDID
23	EDID_IN2	text	Input 2 EDID
24	EDID_IN3	text	Input 3 EDID
25	EDID_IN4	text	Input 4 EDID
26	MIRROR_OUT1	text	Output 1 Mirror
27	MIRROR_OUT2	text	Output 2 Mirror
28	MIRROR_OUT3	text	Output 3 Mirror
29	MIRROR_OUT4	text	Output 4 Mirror
30	H_BEZEL	text	Bezel, left-right
31	V_BEZEL	text	Bezel, top-bottom
32	BEEP	on/off	Beep
33	FRONT_LOCK	on/off	Lock the front panel
34	POWER	on/off	Readings Power
35	SIGNAL	text	Readings Signal
36	VERSION	text	Readings Firmware

5. TROUBLESHOOTING

Connection says Not connected.

Check the IP Address property against the unit's address (its front panel or its own web page). A unit on DHCP may have moved: give it a fixed address or a DHCP reservation. The driver tries again every 5 seconds by itself; the Reconnect action tries at once.

The address is right, but it still does not connect.

The Control4 controller and the unit must reach each other: the same network or VLAN, or a route between them. A firewall or switch ACL between them must allow TCP port 8001 to the unit. Leave the Port property at 8001 unless the unit's own web page was set to another port.

Connection says Refused, and names a command.
The unit refused that change. It may be in standby: turn it on first.

Changes made on the unit do not show in Control4.
Set Poll Interval above 0. Changes made on the unit's front panel, remote or web page then show in its variables within that many seconds.

I need to see what the driver sends.
Set Debug Mode to On: the Lua output in Composer shows every command sent and every reply.