AUD-DTE-16X16XLR Control4 Driver Guide

For Composer Pro · Driver version 1.0.0

The KanexPro AUD-DTE-16X16XLR driver lets a Control4 system control the AUD-DTE-16X16XLR over the network. It talks to the unit's own control port (TCP 8000): 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 AUD-DTE-16X16XLR on TCP port 8000. Give the unit a fixed IP address (or a DHCP reservation).

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1. INSTALL THE DRIVER

1. Download **KanexPro-AUD-DTE-16X16XLR-C4-1.0.0.zip** from the AUD-DTE-16X16XLR page on kanexpro.com (Resources) and unzip it.
2. In Composer Pro, add the driver from the file `KanexPro-AUD-DTE-16X16XLR-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 AUD-DTE-16X16XLR units, add the driver twice and give each its own IP address.

2. PROPERTIES

DRIVER PROPERTIES	
IP Address	The AUD-DTE-16X16XLR's address on the control network. Empty by default.
Port	8000 (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: 1.0.0.

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

3. PROGRAMMING COMMANDS

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

#	Command	Parameters	What it does
1	**Gain (dB)**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); Level (-60 to 12)	Sets the gain (dB) on the output you pick, from -60 to 12.

2	**Mute**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); State (a list: On, Off)	Mute: on or off on the output you pick.
3	**Delay (ms)**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); Value (a list: 0, 1, 2, 3 ...)	Sets the delay (ms) on the output you pick. Choices: 0; 1; 2; 3; 4, and 36 more.
4	**Output level**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); Value (a list: +20 dBu, +14 dBu, +4 dBu, 0 dBV ...)	Sets the output level on the output you pick. Choices: +20 dBu; +14 dBu; +4 dBu; 0 dBV; -18 dBV.
5	**Gain (dB) (In gain)**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); Level (-60 to 12)	Sets the gain (dB) on the input you pick, from -60 to 12.
6	**Mute (In mute)**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); State (a list: On, Off)	Mute: on or off on the input you pick.
7	**Sensitivity**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); Value (a list: +24 dBu, +14 dBu, +4 dBu, 0 dBV ...)	Sets the sensitivity on the input you pick. Choices: +24 dBu; +14 dBu; +4 dBu; 0 dBV; -18 dBV, and 1 more.
8	**Delay (ms) (In delay)**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); Value (a list: 0, 1, 2, 3 ...)	Sets the delay (ms) on the input you pick. Choices: 0; 1; 2; 3; 4, and 36 more.
9	**Volume**	Dca (a list: Input DCA 1, Input DCA 2, Input DCA 3, Input DCA 4 ...); Level (0 to 100)	Sets the volume, from 0 to 100.
10	**Mute (In dca mute)**	Dca (a list: Input DCA 1, Input DCA 2, Input DCA 3, Input DCA 4 ...); State (a list: On, Off)	Mute: on or off.
11	**Volume (Out dca vol)**	Dca (a list: Output DCA 1, Output DCA 2, Output DCA 3, Output DCA 4 ...); Level (0 to 100)	Sets the volume, from 0 to 100.

12	**Mute (Out dca mute)**	Dca (a list: Output DCA 1, Output DCA 2, Output DCA 3, Output DCA 4 ...); State (a list: On, Off)	Mute: on or off.
13	**EQ on**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); State (a list: On, Off)	EQ on: on or off on the output you pick.
14	**Clear the EQ**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...)	Press to clear the EQ on the output you pick.
15	**EQ on (In eq on)**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); State (a list: On, Off)	EQ on: on or off on the input you pick.
16	**Clear the EQ (In eq clear)**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...)	Press to clear the EQ on the input you pick.
17	**Expander on**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...); State (a list: On, Off)	Expander on: on or off on the input you pick.
18	**Clear the expander**	Input (a list: XLR in 1, XLR in 2, XLR in 3, XLR in 4 ...)	Press to clear the expander on the input you pick.
19	**Limiter on**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...); State (a list: On, Off)	Limiter on: on or off on the output you pick.
20	**Clear the limiter**	Output (a list: XLR out 1, XLR out 2, XLR out 3, XLR out 4 ...)	Press to clear the limiter on the output you pick.
21	**Presets**	Button (a list: 1, 2, 3, 4 ...)	Presses the button you pick: 1, 2, 3, 4, 5, 6, 7, 8.
22	**Save**	Button (a list: 1, 2, 3, 4 ...)	Presses the button you pick: 1, 2, 3, 4, 5, 6, 7, 8.
23	**Clear a preset**	Button (a list: 1, 2, 3, 4 ...)	Presses the button you pick: 1, 2, 3, 4, 5, 6, 7, 8.
24	**Standby after no sound (min, 0 = never)**	Level (0 to 100)	Sets the standby after no sound (min, 0 = never), from 0 to 100.
25	**Standby kind**	Value (a list: Standby, Sleep)	Sets the standby kind. Choices: Standby; Sleep.
26	**Power**	Button (a list: On, Standby)	Presses the button you pick: On, Standby.

4. VARIABLES

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

#	Variable	Kind	What it holds
1	`IN_DELAY_IN1`	text	XLR in 1 Delay (ms)
2	`IN_DELAY_IN2`	text	XLR in 2 Delay (ms)
3	`IN_DELAY_IN3`	text	XLR in 3 Delay (ms)
4	`IN_DELAY_IN4`	text	XLR in 4 Delay (ms)
5	`IN_DELAY_IN5`	text	XLR in 5 Delay (ms)
6	`IN_DELAY_IN6`	text	XLR in 6 Delay (ms)
7	`IN_DELAY_IN7`	text	XLR in 7 Delay (ms)
8	`IN_DELAY_IN8`	text	XLR in 8 Delay (ms)
9	`IN_DELAY_IN9`	text	XLR in 9 Delay (ms)
10	`IN_DELAY_IN10`	text	XLR in 10 Delay (ms)
11	`IN_DELAY_IN11`	text	XLR in 11 Delay (ms)
12	`IN_DELAY_IN12`	text	XLR in 12 Delay (ms)
13	`IN_DELAY_IN13`	text	XLR in 13 Delay (ms)
14	`IN_DELAY_IN14`	text	XLR in 14 Delay (ms)
15	`IN_DELAY_IN15`	text	XLR in 15 Delay (ms)
16	`IN_DELAY_IN16`	text	XLR in 16 Delay (ms)
17	`IN_DCA_VOL_DCA1`	number	Input DCA 1 Volume
18	`IN_DCA_VOL_DCA2`	number	Input DCA 2 Volume
19	`IN_DCA_VOL_DCA3`	number	Input DCA 3 Volume
20	`IN_DCA_VOL_DCA4`	number	Input DCA 4 Volume
21	`IN_DCA_VOL_DCA5`	number	Input DCA 5 Volume
22	`IN_DCA_VOL_DCA6`	number	Input DCA 6 Volume
23	`IN_DCA_VOL_DCA7`	number	Input DCA 7 Volume
24	`IN_DCA_VOL_DCA8`	number	Input DCA 8 Volume
25	`IN_DCA_MUTE_DCA1`	on/off	Input DCA 1 Mute
26	`IN_DCA_MUTE_DCA2`	on/off	Input DCA 2 Mute
27	`IN_DCA_MUTE_DCA3`	on/off	Input DCA 3 Mute
28	`IN_DCA_MUTE_DCA4`	on/off	Input DCA 4 Mute
29	`IN_DCA_MUTE_DCA5`	on/off	Input DCA 5 Mute
30	`IN_DCA_MUTE_DCA6`	on/off	Input DCA 6 Mute
31	`IN_DCA_MUTE_DCA7`	on/off	Input DCA 7 Mute
32	`IN_DCA_MUTE_DCA8`	on/off	Input DCA 8 Mute
33	`OUT_DCA_VOL_DCA1`	number	Output DCA 1 Volume
34	`OUT_DCA_VOL_DCA2`	number	Output DCA 2 Volume
35	`OUT_DCA_VOL_DCA3`	number	Output DCA 3 Volume
36	`OUT_DCA_VOL_DCA4`	number	Output DCA 4 Volume

37	OUT_DCA_VOL_DCA5	number	Output DCA 5 Volume
38	OUT_DCA_VOL_DCA6	number	Output DCA 6 Volume
39	OUT_DCA_VOL_DCA7	number	Output DCA 7 Volume
40	OUT_DCA_VOL_DCA8	number	Output DCA 8 Volume
41	OUT_DCA_MUTE_DCA1	on/off	Output DCA 1 Mute
42	OUT_DCA_MUTE_DCA2	on/off	Output DCA 2 Mute
43	OUT_DCA_MUTE_DCA3	on/off	Output DCA 3 Mute
44	OUT_DCA_MUTE_DCA4	on/off	Output DCA 4 Mute
45	OUT_DCA_MUTE_DCA5	on/off	Output DCA 5 Mute
46	OUT_DCA_MUTE_DCA6	on/off	Output DCA 6 Mute
47	OUT_DCA_MUTE_DCA7	on/off	Output DCA 7 Mute
48	OUT_DCA_MUTE_DCA8	on/off	Output DCA 8 Mute
49	EQ_ON_OUT1	on/off	XLR out 1 EQ on
50	EQ_ON_OUT2	on/off	XLR out 2 EQ on
51	EQ_ON_OUT3	on/off	XLR out 3 EQ on
52	EQ_ON_OUT4	on/off	XLR out 4 EQ on
53	EQ_ON_OUT5	on/off	XLR out 5 EQ on
54	EQ_ON_OUT6	on/off	XLR out 6 EQ on
55	EQ_ON_OUT7	on/off	XLR out 7 EQ on
56	EQ_ON_OUT8	on/off	XLR out 8 EQ on
57	EQ_ON_OUT9	on/off	XLR out 9 EQ on
58	EQ_ON_OUT10	on/off	XLR out 10 EQ on
59	EQ_ON_OUT11	on/off	XLR out 11 EQ on
60	EQ_ON_OUT12	on/off	XLR out 12 EQ on
61	EQ_ON_OUT13	on/off	XLR out 13 EQ on
62	EQ_ON_OUT14	on/off	XLR out 14 EQ on
63	EQ_ON_OUT15	on/off	XLR out 15 EQ on
64	EQ_ON_OUT16	on/off	XLR out 16 EQ on
65	IN_EQ_ON_IN1	on/off	XLR in 1 EQ on
66	IN_EQ_ON_IN2	on/off	XLR in 2 EQ on
67	IN_EQ_ON_IN3	on/off	XLR in 3 EQ on
68	IN_EQ_ON_IN4	on/off	XLR in 4 EQ on
69	IN_EQ_ON_IN5	on/off	XLR in 5 EQ on
70	IN_EQ_ON_IN6	on/off	XLR in 6 EQ on
71	IN_EQ_ON_IN7	on/off	XLR in 7 EQ on
72	IN_EQ_ON_IN8	on/off	XLR in 8 EQ on
73	IN_EQ_ON_IN9	on/off	XLR in 9 EQ on
74	IN_EQ_ON_IN10	on/off	XLR in 10 EQ on
75	IN_EQ_ON_IN11	on/off	XLR in 11 EQ on

76	IN_EQ_ON_IN12	on/off	XLR in 12 EQ on
77	IN_EQ_ON_IN13	on/off	XLR in 13 EQ on
78	IN_EQ_ON_IN14	on/off	XLR in 14 EQ on
79	IN_EQ_ON_IN15	on/off	XLR in 15 EQ on
80	IN_EQ_ON_IN16	on/off	XLR in 16 EQ on
81	IN_EXP_ON_IN1	on/off	XLR in 1 Expander on
82	IN_EXP_ON_IN2	on/off	XLR in 2 Expander on
83	IN_EXP_ON_IN3	on/off	XLR in 3 Expander on
84	IN_EXP_ON_IN4	on/off	XLR in 4 Expander on
85	IN_EXP_ON_IN5	on/off	XLR in 5 Expander on
86	IN_EXP_ON_IN6	on/off	XLR in 6 Expander on
87	IN_EXP_ON_IN7	on/off	XLR in 7 Expander on
88	IN_EXP_ON_IN8	on/off	XLR in 8 Expander on
89	IN_EXP_ON_IN9	on/off	XLR in 9 Expander on
90	IN_EXP_ON_IN10	on/off	XLR in 10 Expander on
91	IN_EXP_ON_IN11	on/off	XLR in 11 Expander on
92	IN_EXP_ON_IN12	on/off	XLR in 12 Expander on
93	IN_EXP_ON_IN13	on/off	XLR in 13 Expander on
94	IN_EXP_ON_IN14	on/off	XLR in 14 Expander on
95	IN_EXP_ON_IN15	on/off	XLR in 15 Expander on
96	IN_EXP_ON_IN16	on/off	XLR in 16 Expander on
97	OUT_LIM_ON_OUT1	on/off	XLR out 1 Limiter on
98	OUT_LIM_ON_OUT2	on/off	XLR out 2 Limiter on
99	OUT_LIM_ON_OUT3	on/off	XLR out 3 Limiter on
100	OUT_LIM_ON_OUT4	on/off	XLR out 4 Limiter on
101	OUT_LIM_ON_OUT5	on/off	XLR out 5 Limiter on
102	OUT_LIM_ON_OUT6	on/off	XLR out 6 Limiter on
103	OUT_LIM_ON_OUT7	on/off	XLR out 7 Limiter on
104	OUT_LIM_ON_OUT8	on/off	XLR out 8 Limiter on
105	OUT_LIM_ON_OUT9	on/off	XLR out 9 Limiter on
106	OUT_LIM_ON_OUT10	on/off	XLR out 10 Limiter on
107	OUT_LIM_ON_OUT11	on/off	XLR out 11 Limiter on
108	OUT_LIM_ON_OUT12	on/off	XLR out 12 Limiter on
109	OUT_LIM_ON_OUT13	on/off	XLR out 13 Limiter on
110	OUT_LIM_ON_OUT14	on/off	XLR out 14 Limiter on
111	OUT_LIM_ON_OUT15	on/off	XLR out 15 Limiter on
112	OUT_LIM_ON_OUT16	on/off	XLR out 16 Limiter on

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 8000 to the unit. Leave the Port property at 8000 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.