AVO-IP265-STREAM Control4 Driver Guide

For Composer Pro · Driver version 1.0.0

The KanexPro AVO-IP265-STREAM driver lets a Control4 system control the AVO-IP265-STREAM 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 AVO-IP265-STREAM 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-AVO-IP265-STREAM-C4-1.0.0.zip** from the AVO-IP265-STREAM page on kanexpro.com (Resources) and unzip it.
2. In Composer Pro, add the driver from the file `KanexPro-AVO-IP265-STREAM-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 AVO-IP265-STREAM units, add the driver twice and give each its own IP address.

2. PROPERTIES

DRIVER PROPERTIES	
IP Address	The AVO-IP265-STREAM'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

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

#	Command	Parameters	What it does
1	**Main stream as HLS (web players on the network)**	State (a list: On, Off)	Main stream as HLS (web players on the network): on or off.
2	**Second stream as HLS**	State (a list: On, Off)	Second stream as HLS: on or off.
3	**RTSP (one viewer each)**	Value (a list: On, Off)	Sets the RTSP (one viewer each). Choices: On; Off.

4	**RTSP multicast**	Value (a list: On, Off)	Sets the RTSP multicast. Choices: On; Off.
5	**TS multicast**	Value (a list: On, Off)	Sets the TS multicast. Choices: On; Off.
6	**Audio-only multicast**	Value (a list: On, Off)	Sets the audio-only multicast. Choices: On; Off.
7	**TS multicast port**	Level (1 to 65535)	Sets the TS multicast port, from 1 to 65535.
8	**Channel number**	Level (0 to 999)	Sets the channel number, from 0 to 999.
9	**Codec**	Value (a list: H.265, H.264)	Sets the codec. Choices: H.265; H.264.
10	**Resolution**	Value (a list: Same as input, 2160p, 1080p, 720p)	Sets the resolution. Choices: Same as input; 2160p; 1080p; 720p.
11	**Bitrate (kb/s)**	Level (32 to 82000)	Sets the bitrate (kb/s), from 32 to 82000.
12	**Bitrate kind**	Value (a list: Variable, Constant)	Sets the bitrate kind. Choices: Variable; Constant.
13	**Frames per second**	Value (a list: 5, 6, 7, 8 ...)	Sets the frames per second. Choices: 5; 6; 7; 8; 9, and 51 more.
14	**Key frame every (frames)**	Level (5 to 300)	Sets the key frame every (frames), from 5 to 300.
15	**Profile**	Value (a list: Baseline, Main, High)	Sets the profile. Choices: Baseline; Main; High.
16	**Resolution (Resolution2)**	Value (a list: 1080p, 720p, 480p)	Sets the resolution. Choices: 1080p; 720p; 480p.
17	**Bitrate (kb/s) (Bitrate2)**	Level (32 to 32000)	Sets the bitrate (kb/s), from 32 to 32000.
18	**Bitrate kind (Rate control2)**	Value (a list: Variable, Constant)	Sets the bitrate kind. Choices: Variable; Constant.
19	**Frames per second (Fps2)**	Value (a list: 5, 6, 7, 8 ...)	Sets the frames per second. Choices: 5; 6; 7; 8; 9, and 21 more.
20	**Key frame every (frames) (Gop2)**	Level (5 to 300)	Sets the key frame every (frames), from 5 to 300.
21	**Profile (H.264)**	Value (a list: Baseline, Main, High)	Sets the profile (H.264). Choices: Baseline; Main; High.
22	**Sound from**	Value (a list: HDMI, Audio in)	Sets the sound from. Choices: HDMI; Audio in.
23	**EDID it shows the source**	Value (a list: 4K (2160p), 1080p, 720p, Its uploaded EDID)	Sets the EDID it shows the source. Choices: 4K (2160p); 1080p; 720p; Its uploaded EDID.
24	**Show stream info on the picture**	State (a list: On, Off)	Show stream info on the picture: on or off.
25	**Take the text off**	none	Press to take the text off.
26	**Fan**	Value (a list: Silent, Low, Standard, High)	Sets the fan. Choices: Silent; Low; Standard; High.
27	**Lock its front buttons**	State (a list: On, Off)	Lock its front buttons: on or off.

28	**Time zone (its own list, 0-138)**	Level (0 to 138)	Sets the time zone (its own list, 0-138), from 0 to 138.

4. VARIABLES

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

#	Variable	Kind	What it holds
1	`HLS`	on/off	Main stream as HLS (web players on the network)
2	`HLS2`	on/off	Second stream as HLS
3	`CHANNEL`	number	Channel number
4	`BITRATE`	number	Bitrate (kb/s)
5	`FPS`	text	Frames per second
6	`GOP`	number	Key frame every (frames)
7	`BITRATE2`	number	Bitrate (kb/s)
8	`FPS2`	text	Frames per second
9	`GOP2`	number	Key frame every (frames)
10	`OSD_INFO`	on/off	Show stream info on the picture
11	`FAN`	text	Fan
12	`MENU_LOCK`	on/off	Lock its front buttons
13	`TIME_ZONE`	number	Time zone (its own list, 0-138)
14	`RTMP`	on/off	Readings Rtmp
15	`RTMP_STATUS`	text	Readings Main live push
16	`RTMP2`	on/off	Readings Rtmp2
17	`RTMP2_STATUS`	text	Readings Second live push
18	`SIGNAL`	text	Readings Signal
19	`INPUT`	text	Readings Input
20	`OSD_ON`	on/off	Readings Text on the picture
21	`OSD_TEXT`	text	Readings Its text
22	`MULTICAST`	text	Readings Main multicast (TS, RTSP)
23	`MULTICAST2`	text	Readings Second multicast (TS, RTSP)
24	`MULTICAST_AUDIO`	text	Readings Audio-only multicast
25	`HLS_URL`	text	Readings Main HLS address
26	`HLS2_URL`	text	Readings Second HLS address
27	`LOCAL_RTMP`	text	Readings Its own RTMP address (main)
28	`LOCAL_RTMP2`	text	Readings Its own RTMP address (second)
29	`RTSP_LOGIN`	on/off	Readings RTSP asks for a login
30	`DEV_NAME`	text	Readings Its own name
31	`FIRMWARE`	text	Readings Firmware
32	`SERIAL_NO`	text	Readings Serial number
33	`CPU`	text	Readings Processor load
34	`MEMORY`	text	Readings Memory in use

35	RUN_HOURS	text	Readings Hours running
36	IP_METHOD	text	Readings Address from
37	IP_ADDR	text	Readings Address
38	SUBNET	text	Readings Subnet mask
39	GATEWAY	text	Readings Gateway
40	MAC	text	Readings MAC address
41	DNS1	text	Readings DNS
42	DNS2	text	Readings Second DNS
43	NTP	text	Readings Time server
44	NTP_PORT	text	Readings Time server port
45	HTTPS	on/off	Readings Web page over HTTPS
46	DOT1X	on/off	Readings 802.1X network login
47	CLOSE_MODE	text	Readings Closed system mode

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.