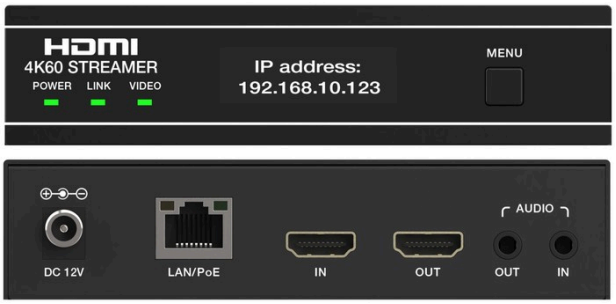
4K60 H.265/H.264 HDMI Streaming Encoder — RTMP Push & RTSP

Stream Live Without a Capture PC — Direct RTMP Push, Multicast RTSP & TS/UDP, Audio-Only Stream, 802.3af PoE over 1G



Streams a 4K60 HDMI source live to a streaming platform, the local network and a preview monitor at once, without a capture PC. The AVO-IP265-STREAM encodes the full 3840x2160 signal at up to 60Hz in H.265 or H.264, rather than taking 4K in and encoding only 1080p. It also runs a 1080p30 second stream and a 1280x720 JPEG preview stream at the same time. The compact 5.12 x 6.30 x 1.18 in metal unit draws 7.2W and runs on 802.3af PoE from the network switch, or on the included 12V locking adapter. It fits 1U or 6U V2 rack installations, so a full rack of streamers takes very little space. It is the right choice for lecture halls, houses of worship, town-hall rooms and IPTV venues where a true 4K60 encode and direct platform push matter more than a PC, capture card and software encoder at every source.

Every stream uses a standard protocol: RTSP/UDP, RTSP/TCP, RTP/UDP, TS/UDP and RTMP, in unicast or multicast. That means VMS and recording systems, IPTV players, media players and live platforms can all receive it directly. A separate audio-only multicast stream feeds overflow and paging zones. The 3.5mm input embeds a mixer or microphone feed into the stream, and the 3.5mm output extracts program audio for local speakers. The HDMI loop output keeps the room display live while the unit encodes. Setup runs in an HTTP/HTTPS web GUI, and third-party control systems can manage the unit over Telnet, SSH or a TCP socket. 802.1X port authentication lets it join locked-down enterprise and campus networks, and the front-panel OLED speeds up commissioning. The single strongest differentiator is the full 4K60 encode with RTMP push and two more simultaneous streams from one PoE-powered box, so one source covers the recorder, the online audience and the room.

> **Surge Protection Recommended —** This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

TABLE OF CONTENTS

1. Features 2
2. Package Contents 2
3. Specifications 3
4. Introduction 4
5. Panel descriptions 5
Front panel 5
Rear panel 6
6. Certifications 6
7. Rack Mounting Instruction 6
6U V2 rack mounting 6
1U V2 rack mounting 6
8. Stream Service Introduction 6
Platform building 7
Web GUI Operation 7
Status 7
Encoder 8
Network 9
System 9
Device List 9

continued

Admin 9
RTSP/TS Stream Operation 9
RTMP Push Stream (YouTube) Operation 10
Audio Only Stream Operation 10
9. Control with RelayAV 10
10. Connection Diagram 11
11. Troubleshooting 11
12. Installation FAQ 12
13. Integration FAQ 12

1. Features

- ✓ 4K@60Hz H.264/H.265 (HEVC) Ultra HD encoder
- ✓ HDMI 2.0b input with 18Gbps video bandwidth, accepting up to 4K@60Hz 4:4:4
- ✓ Three simultaneous streams: 4K@60Hz H.264/H.265 main stream, 1080p@30 H.264 second stream and 1280x720@5 JPEG image stream
- ✓ RTSP/UDP, RTSP/TCP, RTP/UDP, TS/UDP and RTMP stream standards
- ✓ Main stream output up to 4K60Hz; second stream output up to 1080p30Hz
- ✓ Unicast and multicast streaming
- ✓ Audio-only multicast stream
- ✓ LPCM 2-channel audio at 48kHz
- ✓ Stream control (play/pause/stop) for each stream
- ✓ Adjustable bitrate (VBR/CBR), resolution, frame rate, GOP and EDID
- ✓ API control for third-party control systems over a Telnet/SSH login or a TCP socket connection
- ✓ Control and management in an HTTP/HTTPS web GUI
- ✓ 802.1X port authentication
- ✓ Image preview and signal distribution
- ✓ HDMI loop output for a local display
- ✓ Analog audio embedding and extraction over 3.5mm input and output
- ✓ 100M/1G Ethernet port with PoE (802.3af powered device)
- ✓ OSD text overlay, uploadable splash screen and configuration save/load
- ✓ Fits 1U and 6U V2 rack installations
- ✓ OLED display showing device name and IP address
- ✓ Works with RelayAV, KanexPro's control app: starting and stopping each stream and the live RTMP push, push addresses and stream keys, HLS, RTSP and multicast delivery, codec, resolution, bitrate and frame rate for both streams, the sound source, text and stream info on the picture, and the box's name, fan and front-button lock, from the RelayAV app

2. Package Contents

- ✓ 1x AVO-IP265-STREAM AV streamer
- ✓ 1x 12V/1A locking power adapter
- ✓ 2x Mounting ears
- ✓ 4x Machine screws (KM3x6)

3. Specifications

VIDEO	
Encoding	H.265 / H.264 (main stream); H.264 (second stream); JPEG (image stream)
Video Bandwidth	18Gbps
HDMI Compliance	HDMI 2.0b
Input Video Resolution	Up to 4K@60Hz 4:4:4
Main Stream Resolution	Same as input, 3840x2160, 1920x1080, 1280x720, 640x480
Second Stream Resolution	1920x1080, 1280x720, 640x480
Image Stream	1280x720 JPEG at 5fps
Push Stream Frame Rate	5–60Hz
Color Space	HDMI input: RGB, YCbCr 4:4:4 / 4:2:2 / 4:2:0; push stream encoding: 4:2:0
Color Depth	HDMI input: 8/10/12-bit; push stream output: 8-bit
HDR	Not supported
Bitrate Control	VBR / CBR, adjustable bitrate
Second Stream H.264 Level	Baseline, Main, High
STREAMING	
Stream Protocols	RTSP/UDP, RTSP/TCP, RTP/UDP, TS/UDP, RTMP
Transport	Unicast and multicast
Push Streams	Main and second stream RTMP push
Audio-Only Stream	Multicast, LPCM
AUDIO	
Audio Format	LPCM 2CH, 48kHz
Audio Source	HDMI or analog (selectable)
Audio Latency	< 60ms
AUDIO PARAMETERS (L/R OUT)	
Output Impedance	330 Ohms
Line Input/Output Level (Max.)	2Vrms
Frequency Response	20Hz–20kHz (+0.5dB / -1dB)
S/N Ratio	> 90dB @ 2Vrms, 1kHz, A-weighted
THD+N	< 0.05% @ 2Vrms, 1kHz
CONNECTIONS	
Inputs	1 x HDMI IN (Type A, 19-pin female); 1 x AUDIO IN (3.5mm jack)
Outputs	1 x HDMI OUT loop (Type A, 19-pin female); 1 x AUDIO OUT (3.5mm jack)
Network	1 x LAN/PoE (RJ45, 802.3af PoE)
NETWORK & CONTROL	
Network Video Bandwidth	1G

continued

Transmission Distance	16 ft (5 m) over HDMI; 328 ft (100 m) over CAT6/6A/7
IP Mode	DHCP or static
Default IP Address	169.254.1.11
Network Security	802.1X; HTTPS web GUI
Control	HTTP/HTTPS web GUI; API over Telnet/SSH or TCP socket; RelayAV
Time Sync	NTP
Front Panel	OLED display, MENU button, POWER / LINK / VIDEO LEDs
POWER	
Power Supply	Input: AC 100–240V, 50/60Hz; output: DC 12V/1A (US/EU standards)
PoE	802.3af, powered device (PD)
Power Consumption	7.2W
PHYSICAL	
Dimensions (W x D x H)	5.12 x 6.30 x 1.18 in (130 x 160 x 30 mm)
Weight	1.45 lbs (0.659 kg)
Housing	Aluminum and iron
Color	Black
Mounting	1U and 6U V2 rack compatible
ENVIRONMENTAL	
Operating Temperature	32–104°F (0–40°C)
Storage Temperature	-4–140°F (-20–60°C)
Relative Humidity	20–90% RH (non-condensing)
ESD Protection	IEC 61000-4-2: +/-15kV air-gap discharge, +/-8kV contact discharge
CERTIFICATIONS	
Power Adapter	CE / FCC / UL

4. Introduction

The AVO-IP265-STREAM is a 4K60 AV streamer. It uses H.265/H.264 compression to send 4K60Hz HDMI signals over a 100M/1G network. It produces three streams at once:

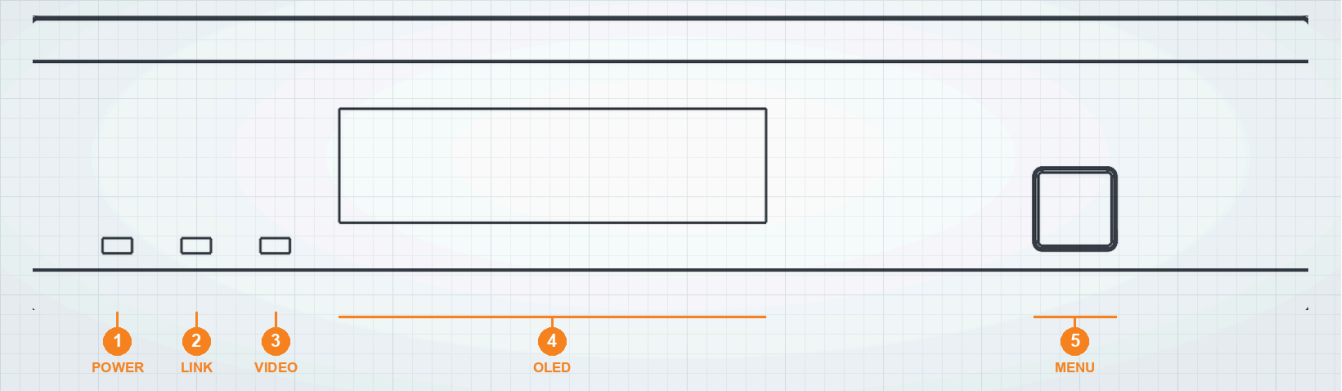
- a 4K@60Hz H.264/H.265 main stream
- a 1080P@30 H.264 second stream
- a 1280x720@5 JPEG image stream

You can set the bitrate. The HDMI input accepts resolutions up to 3840x2160@60Hz 4:4:4.

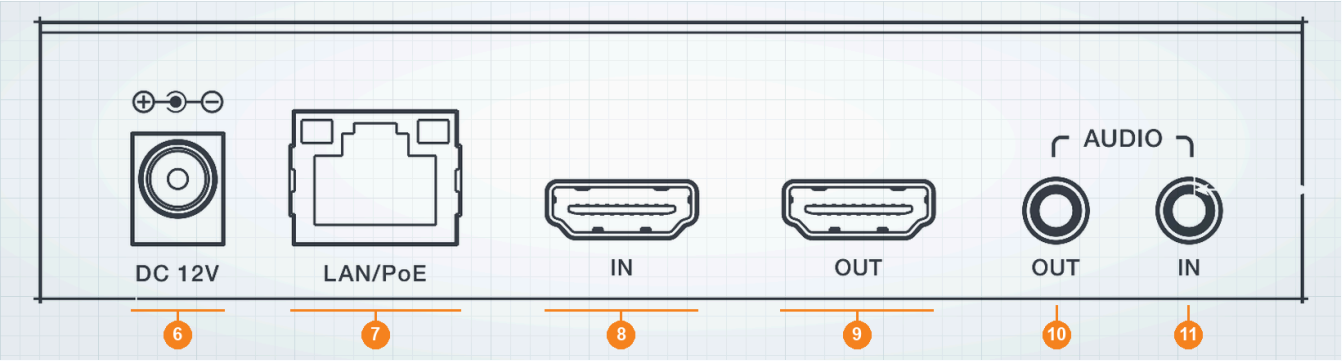
The streamer can also take analog audio in and embed it in the stream, or pull audio out of the HDMI signal. An HDMI loop output passes the source through to a local display. You set it up and manage it from the built-in web interface. Third-party control systems can manage it with API commands.

Electrical spikes, surges, electric shock and lightning can damage the sensitive components inside this product. We strongly recommend a surge protection device to protect your equipment and extend its life.

5. Panel descriptions



Front Panel



Rear Panel

FRONT PANEL

No.	Name	Function description
1	**POWER LED (green)**	Lights steadily when the unit is powered on and goes out when it is powered off.
2	**OLED display screen**	Shows the device name and IP address (the home page) once the unit is powered on and working normally. After 10 seconds the text scrolls from right to left, and after 60 seconds the screen turns off. When the screen is off, press the MENU button to turn it back on; it always comes back on at the first page. While the screen is lit or scrolling, press MENU to move through the pages.
3	**MENU button**	Press briefly to turn on the OLED screen or to move to the next page. Hold for 10 seconds to restore the unit to its KanexPro default settings.
4	**LINK LED (green)**	1G network connection indicator. On means the unit has a network connection. Off means it has none. Flashing at 1Hz means a push stream is in progress.

continued

No.	Name	Function description
5	VIDEO LED (green)	Video stream status indicator. On means a locked signal is being transmitted. Off means no signal is being transmitted. Flashing at 2Hz means an unlocked signal is being transmitted.

REAR PANEL

No.	Name	Function description
1	DC 12V	Power input for the included 12V/1A locking power adapter. You can power the unit from a local DC 12V/1A supply or with PoE from the network switch, where the unit acts as a powered device. If both are connected, the local DC supply takes priority.
2	IN	HDMI signal input. Connect an HDMI source such as a DVD player or TV box with an HDMI cable.
3	LAN/PoE	1G network port with PoE 802.3af power. Connect it to your 1G Ethernet network for streaming.
4	OUT	HDMI loop output. Connect an HDMI display such as a TV or monitor with an HDMI cable.
5	AUDIO OUT	Analog audio output. Carries the audio extracted from the HDMI IN port.
6	AUDIO IN	Analog audio input for audio embedding. The encoded streams and push streams carry the audio from this port, while the HDMI loop output keeps the original audio from HDMI IN.

6. Certifications

The manual states that the included power adapter is CE, FCC and UL certified.

7. Rack Mounting Instruction

6U V2 RACK MOUNTING

The streamer fits a standard 6U V2 rack, which holds up to six units side by side, standing vertically. The rack is sold separately; contact your supplier for one.

1. Use the included screws to fit the two mounting ears to the unit. 2. Slide the unit, with its ears fitted, into the 6U V2 rack. 3. Screw the mounting ears to the rack to finish.

1U V2 RACK MOUNTING

The streamer also fits a standard 1U V2 rack, which holds two units side by side, horizontally. The 1U V2 rack panels and brackets are not in the package.

1. Use the included screws to fit two 1U V2 rack panels to the unit, then fix the rack panels to the 1U V2 brackets. 2. Fit two rack panels and two brackets to the second unit in the same way. Then screw the two 1U V2 brackets together, so that both units are held in the 1U V2 rack.

8. Stream Service Introduction

The streamer serves RTSP and RTMP streams over the network.

PLATFORM BUILDING

Follow these steps to set up the system:

1. Connect the source device, the TV, and the audio input and output devices to the streamer. Then connect the streamer, the PC, the router and the TV app device to the same 1G network switch. 2. Power on the streamer. Press the MENU button on the front panel until the OLED screen shows the IP address page. Write down the address shown; in this example it is 192.168.10.80. The unit's default IP address is 169.254.1.11. 3. Set your PC's IP address to the same network segment as the streamer. 4. Open Google Chrome on the PC, type the streamer's current IP address (in this example, 192.168.10.80) into the address bar and press Enter. The web GUI opens.

WEB GUI OPERATION

A login page opens before the web GUI. There are two usernames, **admin** and **user**. The default admin password is **admin** and the default user password is **123456**. Enter the username and password, choose a language, and click **Login**.

STATUS

The Status page shows how the unit and its streams are doing:

- ① **Input Status** shows the input signal. A green dot means a signal is present, and the page shows its video and audio format, for example 1080P60 with two-channel stereo. A red dot with "No Signal" means there is no input.
- ② **Channel Number** is the unit's channel number, for example 005.
- ③ **Device Name** is the name of the unit.
- ④ **Uptime** shows how long the unit has been running.
- ⑤ **Stream Status** shows each output stream. For the Main Stream, Second Stream and Audio Only Stream, a red dot means the stream is stopped, an orange dot means it is paused, and a green dot means it is active. **Audio Out** shows a green dot when audio is being output and a red dot when it is not. **Splashscreen Active** shows a green dot when the main stream is displaying the splash screen and a red dot when it is not.
- ⑥ **Stream control buttons** let you start and stop each stream. Each stream has three buttons: ACTIVE starts it, PAUSE pauses it and STOP stops it. Its state shows under ⑤.
- ⑦ **Image Capture** shows a captured picture from the input (area A). The manual states that clicking **Freeze** (B) refreshes the picture at 5Hz. Click **Download Picture** (C) to save the captured picture to your computer.
- ⑧ **Logout** logs you out of the web GUI.

ENCODER

① **Main Encoding Setting**

- **Encoding Type:** H.264 or H.265. This choice is only available on the main stream.
- **Encoding Resolution:** Same as input, 3840x2160, 1920x1080, 1280x720 or 640x480. "Same as input" and 3840x2160 are only available on the main stream. "Same as input" encodes at the input's own resolution.
- **Frame Rate (Hz):** the frame rate of the encoded stream.
- **GOP:** the group of pictures, meaning the interval between two I-frames.
- **Bitrate Control:** VBR (variable bit rate) or CBR (constant bit rate).
- **Bitrate (kbit):** the bitrate value.
- **Level:** the main stream supports the Baseline level only.

② **Second Encoding Setting**

- **Encoding Resolution:** 1920x1080, 1280x720 or 640x480.
- **Frame Rate, GOP, Bitrate Control and Bitrate:** work the same way as on the main stream.
- **H.264 Level:** Baseline, Main or High.

③ **Audio Setting**

- **Audio Encoding** and **Sample Frequency (kHz)** are shown for information only and cannot be changed.
- **Audio Source:** choose HDMI or Analog as the audio for the stream.

④ **Stream Multicast Setting**

- **Channel Number:** the broadcast channel of the stream. A green dot beside it means the channel is available. A red dot means it is unavailable, possibly because another device has the same channel number.
- **Multicast IP addresses:** the unit assigns these automatically from the channel number. They are shown for information only.

⑤ **RTSP Unicast Stream Setting**

- **RTSP Unicast Stream:** use the drop-down menu to turn the RTSP unicast stream on or off.
- **Main Stream RTSP Unicast URL** and **Second Stream RTSP Unicast URL:** once the unicast stream is on, click **Copy** beside the URL you want and paste it into a media player to play the stream.

⑥ **RTSP Multicast Stream Setting**

- **RTSP Multicast Stream:** use the drop-down menu to turn the RTSP multicast stream on or off.
- **RTSP Multicast Port:** the port number for the RTSP multicast stream. It applies to both the main stream and the second stream.
- **Main Stream RTSP Multicast URL** and **Second Stream RTSP Multicast URL:** once the multicast stream is on, click **Copy** and paste the URL into a media player to play the stream.

⑦ **TS Multicast Stream Setting**

- **TS Multicast Stream:** use the drop-down menu to turn the TS multicast stream on or off.
- **TS Multicast Port:** the port number for the TS multicast stream. It applies to both the main stream and the second stream.
- **Main Stream TS Multicast URL** and **Second Stream TS Multicast URL:** once the TS multicast stream is on, click **Copy** and paste the URL into a media player to play the stream.

⑧ **Audio Only Multicast Stream Setting**

- **Audio Only Multicast Stream:** use the drop-down menu to turn the audio-only multicast stream on or off.
- **Audio Only Multicast Port:** the port number for the audio-only multicast stream.
- **Audio Only Multicast URL:** once the stream is on, you can play it on a computer with software such as VLC media player. See "Audio Only Stream Operation" below.

⑨ **RTMP/RTMPS Push Stream Setting**

- **Main RTMP/RTMPS Stream** and **Second RTMP/RTMPS Stream:** use the drop-down menus to turn each push stream on or off.
- **Main RTMP/RTMPS Push URL** and **Second RTMP/RTMPS Push URL:** the address the stream is pushed to. A push stream only starts when **Enable** is selected. A green dot means the push stream is working. A red dot means there is no push stream or it has failed.

After you change the encoding, stream, channel or audio settings, click **Apply** to make them take effect.

NETWORK

- ① **LAN Setting:** choose DHCP or Static as the IP mode. With Static, enter the IP address, subnet mask and gateway yourself, then click **Apply**. With DHCP, the router or another DHCP server assigns these settings automatically.
- ② **DNS Setting:** shows the preferred and alternate DNS servers, for information only.
- ③ **HTTPS Setting:** the web GUI uses HTTP by default. Turn this switch on to use HTTPS. The unit reboots whenever you switch between HTTP and HTTPS.
- ④ **NTP Server Setting:** enter the address and port of your NTP server. **NTP Status** shows a green dot when the unit can reach the NTP server and a red dot when it cannot.
- ⑤ **802.1x Setting:** use the drop-down menu to turn 802.1x on or off, and enter the 802.1x username and password.

Click **Set Network Defaults** to restore the network settings to their defaults. Click **Apply** to save your changes; until you do, they do not take effect.

SYSTEM

- ① **Device Name Setting:** type a new name for the unit and click **Apply**.
- ② **OSD Setting:** places text on the screen. **X** is the horizontal position and **Y** the vertical position, both measured from the top left of the screen. Type your text in **OSD Text** and click **Apply** to show it. Click **Clear OSD** to remove it.
- ③ **Fan Speed Setting:** choose Silent, Low Speed, Standard Speed or High Speed.
- ④ **Front Panel Menu Button Lock:** choose Enable or Disable to lock or unlock the MENU button on the front panel.
- ⑤ **Configuration:** click **Save** to export the unit's current configuration to your computer. To import a configuration, click **Select File**, choose the file and click **Load**.
- ⑥ **Splashscreen:** a grey dot beside **Splash Screen Active** means no splash-screen image has been uploaded yet; a green dot means one has. To upload an image, click **Select File**, choose the picture and click **Update**.
- ⑦ **EDID Setting:** choose an EDID from the **Select EDID** drop-down menu. To use your own EDID, first click **Select File** under **Upload EDID to User**, choose your EDID file (a 256-byte binary file) and click **Load**. Then select **User EDID**.
- ⑧ **Firmware: Firmware Version** shows the current firmware. To update, click **Select File**, choose the firmware file and click **Update**. Click **Reboot** to restart the unit, or **Reset** to restore it to its KanexPro default settings.

DEVICE LIST

This page lists every compatible device found on the network.

COLUMN	MEANING
IP Address	The IP address of the device
Location	Whether the device is the local one
Channel Number	The device's channel number. If two devices share a channel number, both are shown in red.
Device Name	The name of the device
MAC Address	The MAC address of the device
Product	The model of the product

ADMIN

You can change the web login password for admin or user here. Enter the old password, then the new password twice, and click **Apply**.

RTSP/TS STREAM OPERATION

You can play the RTSP or TS stream on a computer with software such as VLC media player, and still use the web GUI to adjust the stream while it plays.

1. On the web GUI's Encoder page, turn on the RTSP or TS stream you want. 2. Click **Copy** beside that stream to copy its URL. 3. Install VLC media player on your PC from https://www.videolan.org/. 4. Open VLC media player. 5. Click **Media > Open Network Stream**. In the Open Media window, paste the stream URL into the URL box and click **Play**.

To check the stream settings you made on the Encoder page, choose **Tools > Codec Information** in VLC. To see the current bitrate, open the **Statistics** tab in the same window. The bitrate moves up and down while you watch it. This is normal.

RTMP PUSH STREAM (YOUTUBE) OPERATION

The streamer can push an RTMP stream to a website such as YouTube, and you can still adjust the stream from the web GUI.

1. Sign in to https://www.youtube.com/ and click the Create icon to start a live stream. 2. Get the push stream URL. RTMP is the default. The push URL is the live stream URL followed by your stream key, for example `rtmp://a.rtmp.youtube.com/live2/<your-stream-key>`. 3. On the web GUI's Encoder page, enter this URL as the **Main RTMP/RTMPS Push URL** and select **Enable** from the drop-down menu. 4. Refresh the page and wait for the red dot to turn green. A green dot means the push stream is working.

AUDIO ONLY STREAM OPERATION

You can play the audio-only multicast stream on a computer with software such as VLC media player, and still adjust the stream from the web GUI.

1. On the web GUI's Encoder page, turn on **Audio Only Multicast Stream**. 2. Open a TCP command tool on your PC. Enter the unit's IP address (in this example, 192.168.10.80) and port **8000**, then click **Connect**. 3. Send the command `STMR GETSDP!`. The unit replies with a stream description. 4. Copy the description from the reply into a new text file and save it as `RTP_AUDIO-STREAM-PCM.sdp`. 5. In VLC media player, click **Media > Open File** and open the `.sdp` file. The audio-only multicast stream starts to play.

9. Control with RelayAV

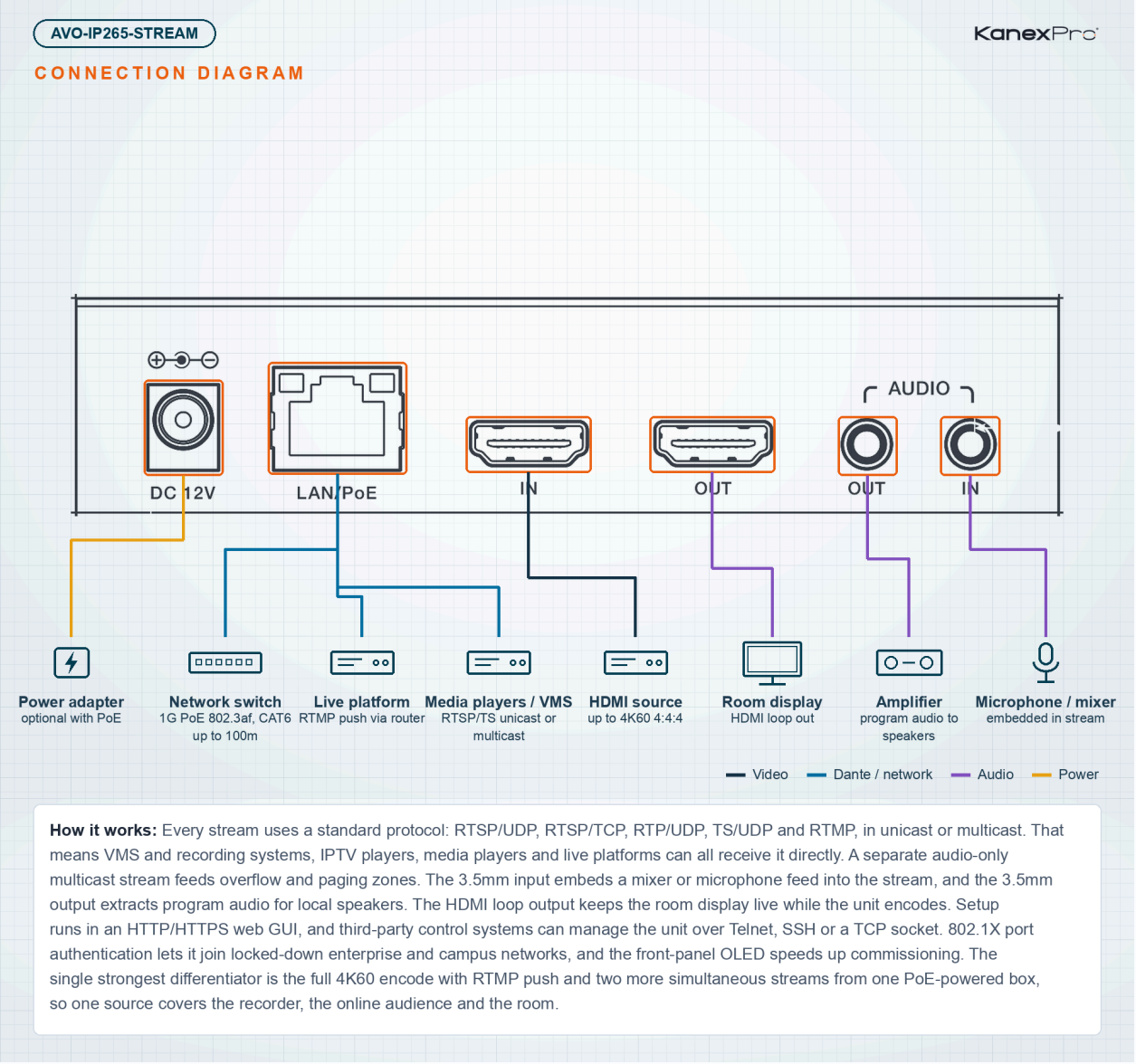
RelayAV is KanexPro's control app. Once the AVO-IP265-STREAM is on a RelayAV site, these controls are in the RelayAV app, and control systems reach the same controls through the RelayAV API and MCP.

- **On air:** All streams; Main stream (4K); Second stream (HD); Audio-only stream
- **Live push:** Push the main stream live (RTMP); Push the second stream live (RTMP)
- **Push address:** Main stream: push address and stream key; Second stream: push address and stream key
- **Delivery:** Main stream as HLS (web players on the network); Second stream as HLS; RTSP (one viewer each); RTSP multicast; TS multicast; Audio-only multicast; TS multicast port; RTSP multicast port (an even number); Audio-only multicast port (an even number); Channel number; Ask RTSP viewers for a login; RTSP without a login
- **Main stream:** Codec; Resolution; Bitrate (kb/s); Bitrate kind; Frames per second; Key frame every (frames); Profile
- **Second stream:** Resolution; Bitrate (kb/s); Bitrate kind; Frames per second; Key frame every (frames); Profile (H.264)
- **Sound:** Sound from
- **Input:** EDID it shows the source
- **On the picture:** Show stream info on the picture; Put text on the picture; Take the text off
- **This box:** Its own name (16 letters, no spaces); Fan; Lock its front buttons; Time zone (its own list, 0-138)
- **Reads (status):** Main live push; Second live push; Signal; Input; Text on the picture; Its text; Main multicast (TS, RTSP); Second multicast (TS, RTSP); Audio-only multicast; Main HLS address; Second HLS address; Its own RTMP address (main); Its own RTMP address (second); RTSP asks for a login; Audio stream description (SDP); Its own name; Firmware; Serial number; Processor load; Memory in use; Hours running; Streamers it sees on the network; Address from; Address; Subnet mask; Gateway; MAC address; DNS; Second DNS; Time server; Time server port; Web page over HTTPS; 802.1X network login; Closed system mode
  RelayAV asks before it starts a stream or a live push, changes a push address or stream key, or changes the RTSP login. The stream key and the RTSP login password are sent to the box and never kept, shown or read back.

Set elsewhere, or not in RelayAV:

- On its own web page only: its network settings (address, DNS, time server, HTTPS, 802.1X), logins, the start-up picture, an EDID file, picture freeze, audio delay and firmware updates.

10. Connection Diagram



How it works: Every stream uses a standard protocol: RTSP/UDP, RTSP/TCP, RTP/UDP, TS/UDP and RTMP, in unicast or multicast. That means VMS and recording systems, IPTV players, media players and live platforms can all receive it directly. A separate audio-only multicast stream feeds overflow and paging zones. The 3.5mm input embeds a mixer or microphone feed into the stream, and the 3.5mm output extracts program audio for local speakers. The HDMI loop output keeps the room display live while the unit encodes. Setup runs in an HTTP/HTTPS web GUI, and third-party control systems can manage the unit over Telnet, SSH or a TCP socket. 802.1X port authentication lets it join locked-down enterprise and campus networks, and the front-panel OLED speeds up commissioning. The single strongest differentiator is the full 4K60 encode with RTMP push and two more simultaneous streams from one PoE-powered box, so one source covers the recorder, the online audience and the room.

11. Troubleshooting

Q: The stream shows no picture. What should I check?
A: Check the VIDEO LED first: off means no signal, and flashing at 2Hz means the signal is unlocked. On the web GUI Status page, a red dot with No Signal under Input Status means no HDMI input, so check the source and the HDMI cable to IN. If the source still will not lock, try a different EDID on the System page.

Q: I cannot reach the web interface.
A: Press MENU to read the current IP address on the OLED screen, and check that your PC is on the same network segment. If HTTPS was turned on, open the address with https. As a last resort, hold MENU for 10 seconds to reset it to KanexPro default settings, which returns the unit to 169.254.1.11.

Need help? — For additional support, visit kanexpro.com/support, or scan the QR code below for the product page.

12. Installation FAQ

Q: How do I find the unit and open its web interface for the first time?
A: Press the MENU button until the OLED screen shows the IP address page (the default address is 169.254.1.11). Set your PC to the same network segment, then type that address into Chrome to open the login page.

Q: Can it join a network that uses 802.1X port authentication or HTTPS-only management?
A: Yes. On the Network page, turn 802.1x on and enter its username and password, then click Apply. The HTTPS switch on the same page moves the web GUI from HTTP to HTTPS, and the unit reboots when you change it.

13. Integration FAQ

Q: How do I stream live to YouTube?
A: Copy the RTMP live stream URL with your stream key from YouTube, for example rtmp://a.rtmp.youtube.com/live2/<your-stream-key>. Paste it into Main RTMP/RTMPS Push URL on the Encoder page and select Enable. Refresh the page; a green dot means the push is working.

Q: How do I play the RTSP or TS stream on a PC?
A: On the Encoder page, turn on the RTSP or TS stream and click Copy beside its URL. In VLC, choose Media > Open Network Stream, paste the URL and click Play. Tools > Codec Information shows the stream settings and the current bitrate.

Q: How do I receive the audio-only multicast stream?
A: Turn on Audio Only Multicast Stream on the Encoder page. Open a TCP connection to the unit's IP on port 8000 and send STMR GETSDP!, then save the reply as an .sdp file and open it in VLC with Media > Open File.

Q: Can I copy one unit's setup to others, or brand the stream?
A: Yes. On the System page, Save exports the configuration to a file, and Load imports it on another unit. The same page can upload a splash-screen image and place OSD text at an X/Y position on the picture.

Q: Can I control it from the RelayAV app?
A: Yes. RelayAV, KanexPro's control app, gives you starting and stopping each stream and the live RTMP push, push addresses and stream keys, HLS, RTSP and multicast delivery, codec, resolution, bitrate and frame rate for both streams, the sound source, text and stream info on the picture, and the box's name, fan and front-button lock. Control systems reach the same controls through the RelayAV API and MCP. RelayAV asks before it starts a stream or a live push or changes a stream key. Its network settings, logins and firmware updates stay on its own web page.