Quick Start Guide P-AVN-4 IPMX Transceiver



This guide is for helping new customers get their plexusAV P-AVN-4 transceiver hardware setup and running as quickly and easily as possible.

The P-AVN-4 is an IPMX device that will operate in one of two modes. By default, all units ship in **Decoder Mode** – which is used to receive IPMX signals over the network and output audio-video to a display. In **Encoder Mode** – the unit receives HDMI or USB-C AV signals and outputs an IMPX network stream. The front panel display will show if the P-AVN-4 is in Encode or Decode mode along with the IP address of the web-interface.

Download the Full User's Manual

The current versions of the full user's manuals can be obtained from the Download tab of individual product pages on our website: <u>www.plexusav.com</u> or by emailing ProCare support at <u>procare@plexusav.com</u>.

Unpack the Equipment

Check that there are no signs of damage to equipment due to transport. If the equipment appears to be damaged, please contact ProCare for support.

The P-AVN-4 product box should contain the appliance, a cloth bag to protect the finish during shipment, two phoenix adapters and a printed card with QR links.

Note: The P-AVN-4 is designed to be powered using a PoE+ network switch by default. A DC power supply for traditional outlet wiring is available as an additional accessory.

Equipment Installation and Power Up

The P-AVN-4 transceiver appliance can operate stand alone on a table or mounted in a rack using the 1RU (3-unit max) and 4RU (14-unit max) accessories. Additional accessory options are available for wall mounts, under a desk, or for rigging applications. Note that the top of the chassis has an intake fan for cooling and hot air will exhaust out the sides and back. There should be sufficient room for air to freely enter and exit the unit, ensuring proper cooling. The chassis requires top-to-back airflow, and the chassis height is designed to be under 1RU to ensure room for air intake.



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- 1. Power LED: will be illuminated green when the unit has power
- 2. Status LED: will be illuminated green or red depending on state of unit
- 3. LCD Matrix Display: will show unit mode/status text and IP information
- 4. IR Input: receives remote control signal from IR receiver accessory
- 5. IR Output: sends remote control signal out IR transmitter accessory
- 6. USB-C (Port 1): Keyboard/Mouse/Webcam USB Peripheral Port
- 7. USB-C (Port 2): Keyboard/Mouse/Webcam USB Peripheral Port
- 8. Factory Reset Button: recessed button (hold to default unit)

Figure 2: P-AVN-4 Rear Panel Interface



- 1. HDMI Input: receives AV signals up to 4K
- 2. HDMI Output: outputs AV signals up to 4K
- 3. USB-C (Port 3): connection to PC and receives AV signals up to 4K
- 4. Serial (5-PIN Phoenix):
- 5. Audio (5-PIN Phoenix):
- 6. SFP Fiber Port (1Gbps, 850nm or 1310nm pluggable insert required)
- 7. ETH2: Secondary Ethernet Port (no PoE support)
- 8. ETH1: Primary Ethernet Port (PoE+ support to power device)
- 9. POWER: Locking DC power adapter connection

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First-Time-Fire-Up

The P-AVN-4 transceiver minimum wiring requires Eth1 / PoE+ port connection to a PoE+ power capable switch, CAT6 network cable is recommended. The unit will show plexusAV logo and take approximately 60 seconds to boot up, after initialization the front panel display will show system information text including the IP address of the Eth1 port.



The default configuration of a new P-AVN-4 unit is set for Decoder mode with DHCP addressing on all network ports. If a DHCP server is not available to provide an IP address, the unit will generate an APIPA 169.254.X.X address and display on the front panel for Eth1 / PoE+ Port.

To access the local web-interface of the P-AVN-4 ensure the operator computer is configured to be on the same network and open a web-browser. In the URL address bar use the following format: *https://192.168.1.25* where the IP address example matches Eth1 shown on the front panel. The login page should appear.



Note: There may be a security prompt by the web-browser requesting approval to proceed without certificates. This is normal behavior and a proceed or allow approval may be needed to access the web-interface of the P-AVN-4.

Getting to know the P-AVN-4 Dashboard Page

The dashboard page will load by default when logging into the unit and is the main page used to control the unit.



1. Navigation Pane: click page name to move to different section of interface

- a. Dashboard: provides control for most common user settings
- b. Full Config: detailed configuration page and enable/disable widgets
- c. Reporting: alarms, logs, and fan diagnostics
- d. System: network settings, change IP, passwords, unit updates
- 2. Mode Selection: Select Encode or Decode mode, will prompt for reboot
- 3. Input Selection Widgets: use edit (pencil) icon to access manual settings
 - a. Encode Mode: be sure to set IP output values that don't conflict
 - b. Decode Mode: manual IP setting is available, but easier to use NMOS
- 4. Live Status: shows connected cables and state of interface
- 5. NMOS Discovery: one-click tuning
 - a. Decoder Mode AV Link: click link button to auto-configure IP inputs
 - b. Decoder Mode KVM Link: click link button to auto-configure USB IP
- 6. Video output and scaling settings
- 7. Decoder Mode Video Wall: Enable/Disable and configuration tool
- 8. Info Button quickly display unit name, software version, and IP settings

In general input widgets are on the left side, outputs on the right. The middle column will show data/processing and thumbnail image. Consult the full manual for additional information and instruction (linked on first page of this document).



First-Time Decoder Setup: Recommended Procedure

- 1. Set IP of user computer to access web-address of P-AVN-4 unit
- 2. Open browser and login to P-AVN-4
- Click EDIT button in NMOS widget and configure NMOS name if needed a. Default NMOS/Hostname is "P-AVN-4_<*serial number>*"
- **4.** Click System to access network setting and change IP of unit if needed a. Click network tab: Default IP setting is DHCP
- 5. Wire HDMI output to display verify live status image shows green icon
- 6. Verify START is green and unit is actively running
- 7. Inside NMOS widget, click the LINK button for detected IPMX channel
 - a. This will automatically enter IP multicast settings for audio/video/data
 - b. These can be set manually using edit/pencil icons as well
- 8. Verify thumbnail is enabled and shows image
- 9. Verify Video Input Selection widget shows input lock (codec/format/IP/BW)

First-Time Encoder Setup: Recommended Procedure

- 1. Set IP of user computer to access web-address of P-AVN-4 unit
- 2. Open browser and login to P-AVN-4
- 3. Click ENCODE button to change mode (will prompt to reboot)
- Click EDIT button in NMOS widget and configure NMOS name if needed

 Default NMOS/Hostname is "P-AVN-4_
 serial number>"
- 5. Click System to access network setting and change IP of unit if needed a. Click network tab: Default IP setting is DHCP
- 6. Wire HDMI input port to video source verify live status image shows green
- 7. Verify START is green and unit is actively running
- 8. Click Edit (pencil) icon under Primary Video Output widget
 - a. Configure unique IP/Port setting for video and data essence streams
 - b. If you don't know what to use start with IP 239.192.1.25 port 5000
 - c. Increment the bold part of IP example for each encoder
- 9. Click Edit (pencil) icon under Primary Audio Output
 - a. Configure unique IP/Port setting for audio essence stream
- 10. Verify thumbnail is enabled and shows image of output stream
- 11. Verify Primary Video Output Section widget shows format IP and bitrate



