



## Savant® ProAV Video 8 or 4 Input IP Transmitter 4K UHD with Audio Processing and Control (PAV-VIMAP8S/PAV-VIMAP4S) Quick Reference Guide

### Box Contents

- (1) Audio/Video over IP Switch (PAV-VIMAP8S-00/PAV-VIMAP4S-00)
- (1) Installation Kit (075-0192-xx/075-0197-xx)
  - (2) Standard 3U Rack Mounting Brackets (071-0638-xx)
  - (4) M5 x 8 mm Flat-head Phillips Screws (039-0180-xx)
  - (1) 4 ft Power Cord (064-0443-xx N. America) or 4ft Power Cord (International can vary)
- (16 or 8) 3-pin Control Connectors (028-9351-xx)
- (1) Quick Reference Guide (this document)

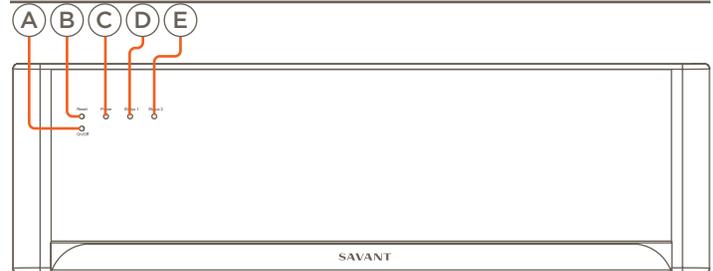
### Specifications

Environmental																			
Temperature	32° to 104° F (0° to 40° C)																		
Humidity	10% to 90% Relative Humidity (non-condensing)																		
Cooling	70 cubic feet per minute (CFM) recommended																		
BTU	1365 BTU/hr																		
Dimensions and Weights																			
Height	5.21 in (132.3 mm)   Rack Space 3U																		
Width	17.30 in (439.4 mm)																		
Depth	14.24 in (361.7 mm)																		
Weight	Net: 14.5lb (6.59 kg)   Shipping 18.25lb (8.27 kg)																		
Power																			
Input Power	100-240V AC 50/60Hz, (5A maximum)																		
Nominal Power	N. America - 144VA - (1.2 A @ 120V AC, 60Hz) International - 156VA - (.68 A @ 240V AC 50Hz)																		
Maximum Power	N. America - 400VA - (4 A @ 120V AC, 60Hz) International - 432VA - (1.8 A @ 240V AC 50Hz)																		
Power Cable	IEC320 C13 three-pole detachable power card																		
Audio																			
Audio Down Mixing to Stereo PCM	Multi-Channel PCM Dolby® TrueHD™ Dolby® Digital (AC-3) Dolby® Digital Plus (Enhanced AC-3) - AAC DTS® DTS-HD Master Audio™ DTS Digital Surround 96/24™ DTS-HD Low Bit Rate (LBR) DTS-HD High Resolution Audio™																		
Supports pass-through of all HDMI audio formats.																			
Video																			
HDR	Supported																		
Supported Formats	<table border="1"> <tr> <td>640x480<sup>5</sup></td> <td>1280x720<sup>5</sup></td> <td>1920x1200<sup>5</sup></td> </tr> <tr> <td>720x480<sup>5</sup></td> <td>1280x1024<sup>5</sup></td> <td>3840x2160<sup>1</sup></td> </tr> <tr> <td>720x576<sup>4</sup></td> <td>1920x1080<sup>1</sup></td> <td>3840x2160<sup>2</sup></td> </tr> <tr> <td>800x600<sup>5</sup></td> <td>1920x1080<sup>3</sup></td> <td>3840x2160<sup>3</sup></td> </tr> <tr> <td>1024x768<sup>5</sup></td> <td>1920x1080<sup>4</sup></td> <td>3840x2160<sup>4</sup></td> </tr> <tr> <td>1280x720<sup>4</sup></td> <td>1920x1080<sup>5</sup></td> <td>3840x2160<sup>5</sup></td> </tr> </table>	640x480 <sup>5</sup>	1280x720 <sup>5</sup>	1920x1200 <sup>5</sup>	720x480 <sup>5</sup>	1280x1024 <sup>5</sup>	3840x2160 <sup>1</sup>	720x576 <sup>4</sup>	1920x1080 <sup>1</sup>	3840x2160 <sup>2</sup>	800x600 <sup>5</sup>	1920x1080 <sup>3</sup>	3840x2160 <sup>3</sup>	1024x768 <sup>5</sup>	1920x1080 <sup>4</sup>	3840x2160 <sup>4</sup>	1280x720 <sup>4</sup>	1920x1080 <sup>5</sup>	3840x2160 <sup>5</sup>
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1 = at 24 Hz	3 = at 30 Hz	5 = at 60 Hz																	
2 = at 25 Hz	4 = at 50 Hz																		
Compliance																			
Safety and Emissions	FCC Part 15	CE	C-Tick	ETL Intertek															
RoHS	Compliant																		

### Required Components

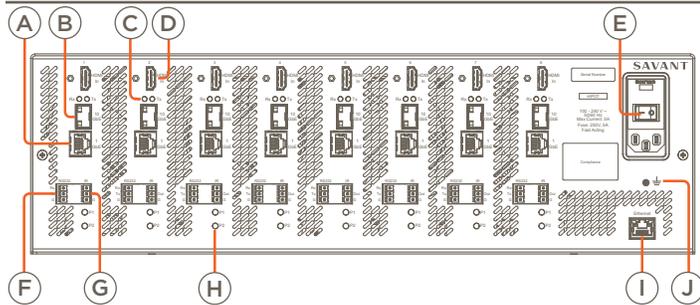
- Savant Audio/Video over IP Device (PAV-VOMVP1F/PAV-VOMVP1C)
- Savant System Host
- Savant qualified 10G Managed Network Switch
- Savant User Interface
- Savant Design and Configuration Tools

### Front Panel



Item	Description
<b>A</b> On / Off Button	Reboots the main board (mcu) and power cycles the IP Video transmit (Tx) cards
<b>B</b> Reset Button	<b>Press and Release</b> - Resets the IP Video transmit (Tx) cards. <b>Press and hold</b> - Clears the network settings. Press and hold button for 5 seconds until Status LED blinks red rapidly; then release.
<b>C</b> Power LED	<b>Off</b> - Device is off. No power applied. <b>Green</b> - Main board is powered  <b>Green Blinking:</b> Embedded system is ready, but no communication has been established with the host. <b>Green:</b> Host has established communications with the embedded system. <b>Red Blinking:</b> Embedded firmware is running, but has not received a DHCP IP Address. <b>Red:</b> Host has determined the firmware needs to be updated, but a problem occurred during the process that will initiate a reset. <b>Amber Blinking:</b> Embedded system has a valid link local IP Address and is connecting to the host. <b>Amber:</b> Host is updating the embedded firmware. <b>Off:</b> Embedded processor is resetting, or is powered up, and is booting the embedded firmware. <b>Hardware Failure:</b> If a hardware failure occurs, the status LED indication will be interrupted every three seconds with a solid red indication. For example, if the LED is blinking green when a hardware failure occurs, the LED will alternate between blinking green and solid red at three-second intervals.
<b>D</b> Status 1 LED	Reserved for future use.
<b>E</b> Status 2 LED	Reserved for future use.

## Rear Panel

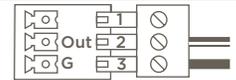


Item	Description
(A) 1 Gigabit Ethernet	1G of reserved network data bandwidth commonly used to connect any network compliant device to transmit its data onto the Ethernet network by sharing the 10G network link. 8-Pin RJ-45 female connection. This is a courtesy port it will not work for all network functions. Example: Spanning tree devices are not supported by this port. <b>IMPORTANT!</b> Do not connect these ports to a network switch.
(B) 10 Gigabit Ethernet	SFP+ Housing; Used for connectivity to the 10G Ethernet Network Switch <b>IMPORTANT!</b> For all 10G connections, use only Savant certified SFP+ Direct-Attach Copper (DAC) cables, or Savant certified fiber and fiber connectors along with Savant certified SFP+ modules.
(C) Rx/Tx LEDs (10 GbE)	<b>Rx</b> - Link Activity LED indicator for all data received on the 10G connection <b>Tx</b> - Link Activity LED indicator for all data transmitted from the 10G connection
(D) HDMI In	19-Pin Type A HDMI female digital audio/video input. Supports HDMI 2.0a HDMI 2.0 compliant cable is required for 4K content.
(E) Power Input Module	100-240V AC 5A 50/60Hz power input module with On/Off switch. I - Applies power to the device. O - Removes power to the device. <b>NOTE:</b> Includes a field replaceable 5A 250V Fast acting fuse. For replacement information see Video over IP Deployment Guide on the Savant Customer Community.
(F) RS-232 Control Port	<b>RS232</b> - 3-pin Screw down plug-in connection. Transmits and receives serial data to and from serial controllable devices. For pin-out information, refer to the RS-232 Wiring section below.
(G) IR Control Port	<b>IR</b> - 3-pin Screw down plug-in connection. Transmits IR signals via an IR Flasher (5V tolerant) to devices with an IR input or IR receiver. For pin-out information, refer to the IR Wiring section below.
(H) Push Buttons	Push buttons - Reserved for future use.
(I) Ethernet	8-Pin RJ-45 female connection. Used to communicate with the Savant System Host. Supports Audio Video Bridging (AVB)/Time Sensitive Networking (TSN)
(J) Grounding	Chassis Ground (optional)

## Wiring and Connections

### IR Wiring

IR connections are made using a 3-pin Control Connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector.



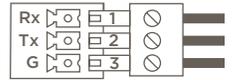
PIN 1	Not Used
PIN 2	IR +
PIN 3	IR -

### IMPORTANT: IR Wiring Precautions

Ensure that all IR emitters are within 15 feet (4.6 meters) from the controller's location. Use of 3rd party blinking IR emitters with Talk Back is not recommended. These types of emitters can draw voltage away from the IR signal that can degrade IR performance.

### RS-232 Wiring

Serial control connections are made using a 3-pin Control Connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector.



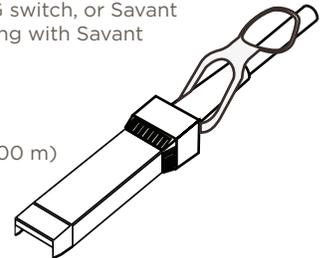
PIN 1	Receive
PIN 2	Transmit
PIN 3	Ground

### SFP+ 10 GbE

Enhanced small form-factor pluggable connection. Use a Savant certified Direct Access Copper (DAC) SFP+ cable to connect the chassis to the 10G switch, or Savant certified fiber and fiber connectors along with Savant certified SFP+ modules.

### Transport Distance

DAC cable	6 ft (2 m)
OM3 multi-mode Fiber	1000ft (300 m)



### Installation

The Savant Audio/Video over IP 8-Port / 4-port Transmitter chassis can be mounted using the included rack mounting ears and hardware in a 3U rack style enclosure and is compatible with all standard 19-inch National Electrical Manufacturers Association (NEMA) rack mounts. For more information see the **Savant Video over IP Deployment Guide** on the **Savant Customer Community**.

### Network Configuration

To ensure that the IP Address will not change due to a power outage, Savant recommends using DHCP reservation within the router. By using this method IP Addresses for all devices can be managed from a single UI, avoiding the need to access devices individually.

**NOTE:** Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation.

### Network Requirements

Connect all Savant devices to the same local area network (LAN) or subnet as the host. Savant recommends not implementing any type of traffic or packet shaping in your network topology for the Savant devices as this may interfere with performance. This connection can be made to a Savant qualified AVB/TSN switch.

The Video over IP, video connections require a Savant qualified 10G managed switch. This switch must be configured for the Video over IP devices. For more information on this see the **Savant Video over IP Network Configuration Guide** on the **Savant Customer Community**.

### Additional Information

Refer to the following documents located on the **Savant Customer Community** for additional information.

- Savant Video over IP Deployment Guide (009-1551-xx)
- Savant Video over IP Network Configuration Guide (009-1552-xx)
- Savant IP Audio Deployment Guide (009-1571-xx)