

SAVANT

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-xx/PAV-VIMAP4S-xx)
- (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) Product Regulatory Insert (009-1950-xx)

Required Components

- Savant Audio/Video over IP Device
- Savant System Host
- Savant qualified 10G Managed Network Switch
- Savant User Interface (Pro App)
- Savant Development Environment (SDE)

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	Width	Depth	Weight
Device	5.21 in (13.23 cm)	17.30 in (43.94 cm)	14.24 in (36.17 cm)	14.5 lb (6.59 kg)
Shipping	22.0 in (55.88 cm)	22.0 in (55.88 cm)	10.0 in (25.4 cm)	18.25 lb (8.27 kg)
Rack Space	3U			
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.			
Compliance				
Safety and Emissions	FCC Part 15 	CE 	C-Tick 	ETL  Intertek
RoHS	Compliant			
Supported Releases				
PAV-VIMAP8S-00	da Vinci 8.8 and higher			
PAV-VIMAP4S-00				
PAV-VIMAP8S-10	da Vinci 9.3.4 and higher			
PAV-VIMAP4S-10				

Network Requirements

For more information, see the [Savant Device Networking Guidelines](#) on the [Savant Customer Community](#).

Front Panel



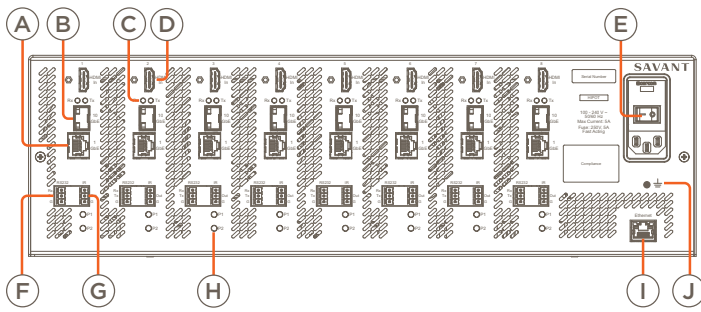
Item	Description
A On / Off Button	Reboots the main board (MCU) and power cycles the IP Video transmit (Tx) cards Press and Release: Resets the IP Video transmit (Tx) cards.
B Reset Button	Press and hold: Clears the network settings. Press and hold button for 5 seconds until Status LED blinks red rapidly; then release.
C Power LED	Green: Main board is powered. Amber: FPGA is currently being updated. Off: Device is off. No power applied. Green: Host has established communications with the embedded system. Green Blinking: Embedded system is ready, but no communication has been established with the host. Amber: Host is updating the embedded firmware. Amber Blinking: Embedded system has a valid link local IP address and is connecting to the host. Red: Host has determined the firmware needs to be updated, but a problem occurred during the process that will initiate a reset. Red Blinking: Embedded firmware is running, but has not received a DHCP IP address. Off: Embedded processor is resetting, or is powered up, and is booting the embedded firmware. Hardware Failure: 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.
D Status 1 LED	
E Status 2 LED	Reserved for future use.

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)

Rear Panel



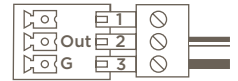
Item	Description
	1G of reserved network data bandwidth. Commonly used to connect any network compliant device to transmit its data onto the Ethernet network by sharing the 10G network link. 8-Pin RJ-45 female connection.
A	1 Gigabit Ethernet
	IMPORTANT NOTES: <ul style="list-style-type: none"> - Do not connect these ports to a network switch. - This is a courtesy port. It will not work for all network functions. For example, Spanning tree devices are not supported by this port.
	SFP+ Housing; Used for connectivity to the 10G Ethernet Network Switch.
B	10 Gigabit Ethernet
	IMPORTANT! 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)
	Rx - Link Activity LED indicator for all data received on the 10G connection Tx - 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. NOTE: Includes a field replaceable 5A 250V Fast acting fuse. For replacement information see the Replacing the Fuse section below.
F	RS-232 Control Port
	RS232 - 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
	IR - 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

The following is a description of connections that can be made to the Audio/Video over IP Switch:

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.



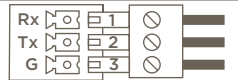
PIN 1	Not Used
PIN 2	IR +
PIN 3	IR -

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

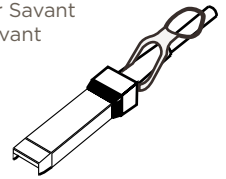
Serial control connections are made using a 3-pin Control Connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector.



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](#).

Supported Audio and Video Formats

Video			
HDR	Supported		
	640x480 ⁵	1280x1024 ⁵	3840x2160 ¹
	720x480 ⁵	1920x1080 ¹	3840x2160 ²
	720x576 ⁴	1920x1080 ³	3840x2160 ³
Supported Formats	800x600 ⁵	1920x1080 ⁴	3840x2160 ⁴
	1024x768 ⁵	1920x1080 ⁵	3840x2160 ⁵
	1280x720 ⁴	1920x1200 ⁵	4096x2160 ³
	1280x720 ⁵	3840x2160 ¹	4096x2160 ⁵
Dolby® Vision			
1 = at 24 Hz	3 = at 30 Hz	5 = at 60 Hz	
2 = at 25 Hz	4 = at 50 Hz		
Audio (Pass-through)			
- DTS®	- DTS-X®	- DTS-HD Master Audio™	- DTS-HD (LBR)
- DTS-HD (HRA)	- DTS Digital Surround 96/24™	- Dolby® Atmos	- Dolby® TrueHD™
		- Dolby® Digital (AC-3)	- Dolby® Digital Plus (E-AC-3)
		- Multi-Channel PCM	- All HDMI Audio Formats
Audio (Down Mix)			
- DTS®	- DTS-X®	- DTS-HD Master Audio™	- DTS-HD (LBR)
- DTS-HD (HRA)	- DTS Digital Surround 96/24™	- Dolby® TrueHD™	- Dolby® Digital (AC-3)
		- Dolby® Digital Plus (E-AC-3)	- Multi-Channel PCM

Replacing the Fuse

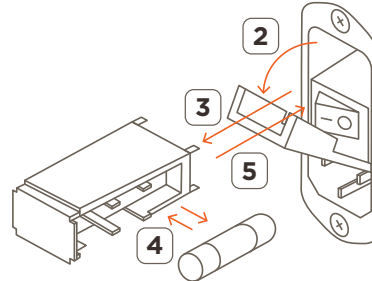
⚠️ ELECTRIC SHOCK HAZARD: Prior to starting the process of removing and replacing a fuse, remove the AC Power by unplugging the power cord from the rear of the unit.

⚠️ IMPORTANT: The orientation of the cartridge within the unit and location of the fuse within the cartridge are crucial to proper operation. Make note of the orientation of the cartridge and the fuse location within the cartridge before removing.

1. Verify the power cord is unplugged from either the wall outlet or the rear of the unit.
2. With a small flat blade screwdriver or similar, pry open and pivot down the fuse holder cover.
3. Using that same screwdriver, gently loosen and pull the fuse cartridge slowly out from the unit. Make note of the orientation of the fuse cartridge as it is removed. When re-Installing, it is important that it be positioned the same way as it came out to ensure proper operation. Refer to diagram below

TIP: Mark the chassis and fuse holder to ease the re-installation process.

4. Remove the old fuse from the cartridge and discard. Place the new fuse into the cartridge.
5. Place the cartridge part way into the receptacle being careful to align it as defined in the diagram. Gently push the fuse cartridge until it seats with the terminals at the rear of the slot. If resistance is encountered, DO NOT apply more pressure. Stop pushing on the cartridge, remove it, verify the orientation is correct, and repeat step 5 until cartridge is seated.



3-Pin Screw Down Connections

When making connections, follow the guidelines set below to ensure a safe and secure connection.

1. With a small slotted screwdriver, turn the screws on the connector counterclockwise (CCW) until the silver crimps open enough to slide a wire into the square slots.
2. Strip back insulation on each wire to $\frac{1}{4}$ inch and insert the stripped wire into the proper connection.
3. Turn the screw clockwise (CW) until the crimps tighten around each wire. Gently tug on each wire a bit to verify they are secure.

