SAVANT

Savant® ProAV 8 or 4 Input Transmitter 4K UHD with Control [PAV-VIM8S/PAV-VIM4S]
Quick Reference Guide

Box Contents

(1)   Audio/Video over IP Switch (PAV-VIM8S-xx/PAV-VIM4S-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)   Power Cord (part number varies based on country)

    (16)   3-Pin Screw Down Connector (028-9351-xx) - PAV-VIM8S

    (8)   3-Pin Screw Down Connector (028-9351-xx) - PAV-VIM4S

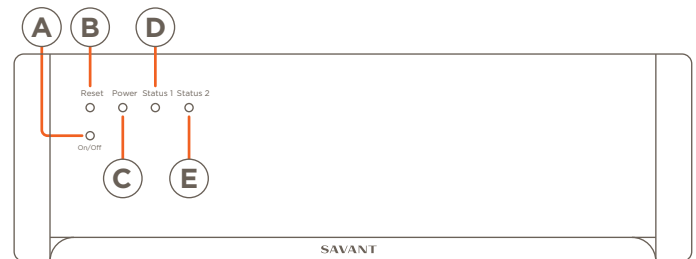(1)   Product Regulatory Statement (009-1950-xx)

Required Components

- Savant Audio/Video over IP Output Receiver
- Savant System Host
- Savant qualified 10G Managed Network Switch
- Savant User Interface
- Savant Design and Configuration Tools

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-VIM8S-00	da Vinci 8.7 and higher
PAV-VIM4S-00	
PAV-VIM8S-10	da Vinci 9.3.4 and higher
PAV-VIM4S-10	

Front Panel

Item		Description
A	On/Off Button	Reboots the main board (mcu) and power cycles the IP Video transmit (Tx) cards.
B	Reset Button	**Press and Release** - Resets the IP Video transmit (Tx) cards. **Press and hold** – Clears the network settings. Press and hold the button for 5 seconds until the Status LED blinks red rapidly; then release.
C	Power LED	**Off** – Device is off. No power applied. **Green** – Main board is powered.
D	Status 1 LED	**Blinks Twice** – Provisioned to the local network and is trying to connect to the Host. **Rapid Blink (green)** – The reset button was pressed and held for five seconds, and the device is performing a factory reset. All network settings get cleared. **Short Off Blink** – Firmware is updating.
E	Status 2 LED	Reserved for future use.

Network Configuration

To ensure 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

For more information, see the Savant Device Networking Guidelines on the Savant Customer Community
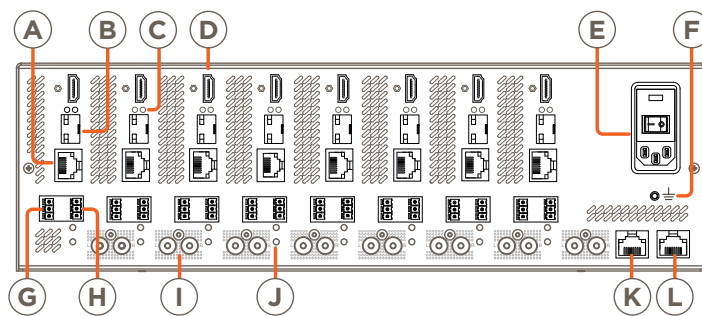
Installation

The Savant Pro AV 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 IP Video Deployment Guide (009-1977-xx) on the Savant Customer Community.

Additional Information

See the following documents located on the **Savant Customer Community** for more information.

- Savant IP Video Deployment Guide (009-1977-xx)
- Savant IP Video Network Configuration Guide (009-1552-xx)
- Savant IP Audio Deployment Guide (009-1571-xx)

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. **IMPORTANT!**: Do not connect these ports to a network switch.
B	10 Gigabit Ethernet	SFP+ Housing; Used for connectivity to the 10G Ethernet Network Switch **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 from the device. **NOTE**: Includes a field replaceable 5A 250V fast acting fuse.
F	Grounding	Chassis Ground (optional)
G	RS-232 Control Port	Transmits and receives serial data to and from controllable serial devices. For pin-out information, refer to the **RS-232 Wiring** section.
H	IR Control Port	IR signaling gets transmitted via an IR Flasher to devices with either an IR receiver (5V tolerant) or IR input port. Pin-out information is available in the **IR Wiring** section.
I	Analog Audio Out	RCA Analog Audio Output. Requires HDMI input stereo PCM audio format. Direct Line Level 2.1-V_{RMS} Output
J	Push Buttons	Push buttons – Reserved for future use.
K	Ethernet	8-Pin RJ-45 female connection. Used to communicate with the Savant Host.
L	Reserved	8-Pin RJ-45 female connection; Reserved for future use

Wiring and Connections

IR Wiring

IR connections are made using a 3-pin connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector. See the 3-Pin Screw Down Connections section below.

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

⚠️ **IMPORTANT PRECAUTIONS!**

- IR emitters must be located 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 connector supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector. See the 3-Pin Screw Down Connections section below.
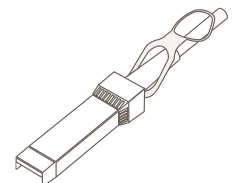

PIN 1	Receive
PIN 2	Transmit
PIN 3	Ground

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)

Supported Audio and Video Formats

Video				
HDR		Supported		
Dolby® Vision		Supported		
Supported Formats	640x480[5]	1280x720[4]	1920x1080[4]	3840x2160[3]
	720x480[5]	1280x720[5]	1920x1080[5]	3840x2160[4]
	720x576[4]	1280x1024[5]	1920x1200[5]	3840x2160[5]
	800x600[5]	1920x1080[1]	3840x2160[1]	4096x2160[3]
	1024X768[5]	1920x1080[3]	3840x2160[2]	4096x2160[5]

| 1 = at 24 Hz | 3 = at 30 Hz | |
| 2 = at 25 Hz | 4 = at 50 Hz | 5 = at 60 Hz |

Audio (Pass-though)	
– DTS®	– Dolby® Atmos
– DTS-X®	– Dolby® TrueHD™
– DTS-HD Master Audio™	– Dolby® Digital (AC-3)
– DTS-HD (LBR)	– Dolby® Digital Plus (E-AC-3)
– DTS-HD (HRA)	– Multi-Channel PCM
– DTS Digital Surround 96/24™	– All HDMI Audio formats

| Audio (Down Mix) |
|---|
| Multi-channel PCM Audio to 2-Channel Stereo 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.
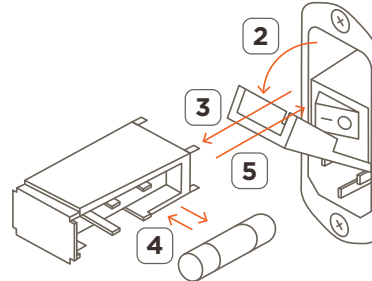
3-Pin Screw Down Connections

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 $1/4$ 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.

< 1/8 inch of bare wire exposed