






Savant® ProAV 7 Source Audio Input IP Transmitter with Control (PAV-AIM7C) Quick Reference Guide

Box Contents

- (1) 7 Source Audio Input IP Transmitter (PAV-AIM7C-00)
- (1) Installation Kit (075-0194-xx)
 - (2) 6-pin Control Connector (028-9352-xx)
 - (1) 5V DC 3A Power Supply (025-0153-xx)
- (1) Quick Reference Guide (this document)

Specifications

Environmental	
Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 80% Relative Humidity (non-condensing)
Dimensions and Weight	
Height	1.6in (41.5 mm)
Width	8.5in (215.0 mm)
Depth	3.7in (93.3 mm)
Weight	Net: 1.4lb (0.64 kg) Shipping: 2.3lb (1.05 kg)
Power	
Input Power	5V DC 3A
Max Power	15 Watts
Networking	
Supported Standard	IEEE 802.1 AVB/TSN switches IEEE 802.3 Ethernet
Regulatory	
Safety and Emissions	FCC Part 15  CE  C-Tick 
RoHS	Compliant

Network Configuration

To ensure that the IP Address will not change due to a power outage, a static IP Address or DHCP reservation should be configured. Savant recommends using DHCP reservation within the router. By using this method, static 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

The PAV-AIM7C requires a Audio Video Bridging (AVB) network. 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.

Front Panel



A Power LED

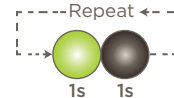
Green: System has power and is operating normally.

Off: System is not receiving power.

Off: Embedded processor is resetting, or is powered up, and is booting the embedded firmware.

Green: Host has established communications with the embedded system.

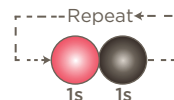
Green Blinking: Embedded system is ready, but no communication has been established with the host.



Red: Host has determined the firmware needs to be updated, but a problem occurred during the process that will initiate a reset.

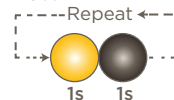
B Status LED

Red Blinking: Embedded firmware is running, but has not received a DHCP IP Address.



Amber: Host is updating the embedded firmware.

Amber Blinking: Embedded system has a valid link-local IP Address and is connecting to the host.



Installation

The PAV-AIM8C should be installed on a solid, flat, level surface. The device will fit on a 1U rack shelf. The location should be dry, well ventilated, and out of direct sunlight.

IMPORTANT! The PAV-AIM8C must be connected to a AVB Switch. Also a Savant AVB audio output device is required.

Rear Panel

A Reset	Resets the network settings of the device. Hold Reset Button for 5 seconds while powered on to clear network settings. Status LED will rapidly blink red when reset is complete.
B RS-232	8-pin RJ-45 port used to transmit and receive serial binary data to and from serial controllable devices. CTS/RTS handshaking availability based on component profile. See RS-232 Connections section for pin-outs.
C IR	(6) IR Ports Uses 6-pin Control Connectors to send IR signals to control devices with an IR input or IR receiver via an IR flasher (5V tolerant only). See IR Wiring section for important precautions regarding IR functionality before making any connections.
D Digital Audio In (Optical)	(2) Digital optical audio inputs (TOSLINK). Supports up to 96kHz/24-bit digital audio in; PCM stereo format only.
E Digital Audio In (Coaxial)	(2) Digital coaxial audio inputs (S/PDIF). Supports up to 96kHz/24-bit digital audio in; PCM stereo format only.
F Analog Inputs	(3) Analog stereo inputs, RCA line-level inputs; 22 kΩ input impedance
G Ethernet	8-pin RJ-45 port 10/100/1000 Base-T auto-negotiating port with Link/Activity LEDs. Supports Audio Video Bridging (AVB).
H Ethernet Activity LED	Green Blinking: Activity (Rx/Tx). Off: No Activity.
I Ethernet Link LED	Green Solid: Ethernet Link is established. Off: Ethernet link is not established.
J Power Input	5V DC 3A

IR Wiring

IR connections are made using 6-pin Control Connectors supplied with the device. The wire slips into the hole and locks with a screw located at the top of the connector.

- 1 + - 2 + - 3 +	PIN 1	IR 1 -
0 0 0 0 0 0	PIN 2	IR 1 +
0 0 0 0 0 0	PIN 3	IR 2 -
0 0 0 0 0 0	PIN 4	IR 2 +
0 0 0 0 0 0	PIN 5	IR 3 -
0 0 0 0 0 0	PIN 6	IR 3 +

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.

NOTE: While not shown in the diagram above, IR connections 4 to 6 follow the same wiring as 1 to 3.

RS-232 Connections

Pins 7 and 8 are only required for CTS/RTS handshaking.

IMPORTANT: When wiring to this port, do not connect any wires within the cable that are not required for communication.

PIN 1	No Connection
PIN 2	No Connection
PIN 3	No Connection
PIN 4	GND
PIN 5	RXD
PIN 6	TXD
PIN 7	CTS
PIN 8	RTS

RJ-45 CONNECTOR
(Gold pins facing up)

NOTES:

- CTS/RTS handshaking is supported for flow control based on the profile used in the configuration.
- Wire coloring is included to identify the pins used for this connection. Colors shown do not represent any wiring standard.
- The ProAV 7 Source does not support RS-422/485.

RJ-45 TO DB9 ADAPTERS: Savant offers RJ-45 to DB9 adapters in a variety of configurations that can be used for RS-232 control. Refer to the RS-232 Conversion to DB9 and Pinout Application Note located on the **Savant Customer Community** for more information on RJ-45 to DB9 adapters.

Expansion

Up to sixteen Savant AVB devices can be connected in a single system. Providing a virtual audio switch. That can be configured to suit almost any need.

Regulatory Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Additional Documentation

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

- ProAV IP Audio Deployment Guide (009-1571-xx)

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