





SAVANT

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-xx)
- (1) Installation Kit (075-0194-xx)
 - (2) 6-pin Control Connector (028-9352-xx)
 - (1) 5V DC 3A Power Supply (025-0216-xx)
- (1) Product Regulatory Statement (009-1950-xx)

Specifications

Environmental				
Temperature	32° to 104° C (0° to 40° C)			
Humidity	10% to 80% Relative Humidity (non-condensing)			
Dimensions and Weight				
	Height	Width	Depth	Weight
Device	1.6 in (4.15 cm)	8.5 in (21.50 cm)	3.7 in (9.33 cm)	1.4 lb (0.64 kg)
Shipping	2.2 in (5.58 cm)	12.0 in (30.48 cm)	7.3 in (18.54 cm)	2.3 lb (1.05 kg)
Power				
Input	5V DC 3A			
Maximum	15 Watts			
Power over Ethernet (PoE)	(PAV-AIM7C-10 and -20 Only) IEEE 802.3af			
Networking				
Supported Standard	IEEE 802.1 AVB/TSN switches IEEE 802.3 Ethernet			
Regulatory				
Safety and Emissions	FCC Part 15 	CE 	C-Tick 	UKCA 
RoHS	Compliant			
Supported Releases				
PAV-AIM7C-00	da Vinci 8.10.2 and higher			
PAV-AIM7C-10	da Vinci 8.10.2 and higher			
PAV-AIM7C-20	da Vinci 9.4.3 and higher			

Network Requirements

For networking guidelines and recommendations, refer to the **Savant Device Networking Guidelines** available on the [Savant Community Knowledge Base](#).

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.

B Status LED

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.

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-AIM7C 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.

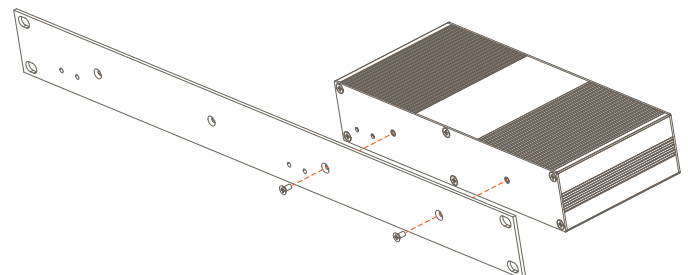
IMPORTANT! The PAV-AIM7C must be connected to an AVB Switch. A Savant AVB audio output device is also required.

Rack

The optional RMB-PAVAM2F-xx or RMB-PAVAM2-xx allows two devices to be mounted side by side. This rack is compatible with all standard 19-inch National Electrical Manufacturers Association (NEMA) rack mounts.

The instructions below show the RMB-PAVAM2F-xx, both brackets install the same way, face opposite directions.

1. Align the bracket with the device's mounting points.
2. Attach using the screws provided with the bracket.



Rear Panel

A

B

C

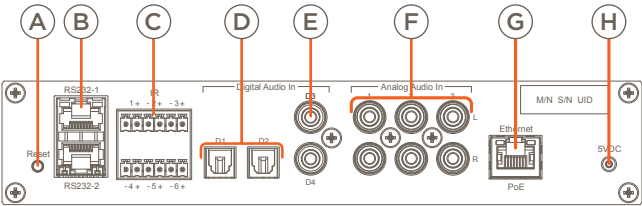
D

E

F

G

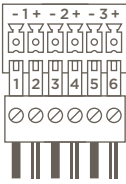
H



<div>A</div> 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.
<div>B</div> 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.
<div>C</div> 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.
<div>D</div> Digital Audio In (Optical)	(2) Digital optical audio inputs (TOSLINK). Supports up to 96kHz/24-bit digital audio in; PCM stereo format only.
<div>E</div> Digital Audio In (Coaxial)	(2) Digital coaxial audio inputs (S/PDIF). Supports up to 96kHz/24-bit digital audio in; PCM stereo format only.
<div>F</div> Analog Inputs	(3) Analog stereo inputs, RCA line-level inputs; 22 kΩ input impedance
<div>G</div> Ethernet	8-pin RJ-45 port, PoE (802.3af compliant). 10/100/1000 Base-T auto-negotiating port with Link/Activity LEDs. Supports Audio Video Bridging (AVB). Activity LED (left): Green Blinking - Activity (Rx/Tx). Off - No Activity. Link LED (right): Green Solid - Ethernet Link is established. Off - Ethernet link is not established. Supports Power over Ethernet on the PAV-AIM7C-10 and -20 versions only.
<div>H</div> 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.



Pin 1	IR 1 -
Pin 2	IR 1 +
Pin 3	IR 2 -
Pin 4	IR 2 +
Pin 5	IR 3 -
Pin 6	IR 3 +

Use white stripe for positive (+)

IMPORTANT: IR Wiring Precautions

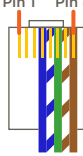
Ensure that all IR emitters are within 15 feet (4.6 meters) from the controller's location.

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.



RJ-45 Connector (Gold pins facing up)

Pin 1	No Connection
Pin 2	No Connection
Pin 3	No Connection
Pin 4	GND (RS-232)
Pin 5	RXD (RS-232)
Pin 6	TXD (RS-232)
Pin 7	CTS (RS-232)
Pin 8	RTS (RS-232)

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

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

Savant AVB devices can be connected in a single system, providing a virtual audio switch that can be configured to suit almost any need. The maximum number of devices verses based on the active da Vinci runtime.

Additional Documentation

Refer to the following documents located on the [Savant Customer Community](#) for additional information.

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