




SAVANT

Savant® ProAV 16 Channel Balanced Audio Output IP Receiver with Control (PAV-AOMBAL8C) Quick Reference Guide

Box Contents

- (1) 16 Channel Balanced Audio Output IP Receiver (PAV-AOMBAL8C-xx)
- (1) Installation Kit (075-0204-xx)
 - (8) Stereo Connectors (028-9347-xx)
 - (2) 3-pin Control Connector (028-9351-xx)
 - (1) 5V 3A Multi-Blade Power Supply (025-0223-xx)
- (1) Product Information and Regulatory Insert (009-1950-xx)

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	
Power Supply	5V DC 3A Multi-Blade
Maximum Power	15 watts
Power over Ethernet (PoE)	(PAV-AOMBAL8C-10 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 
RoHS	Compliant
Supported Releases	
PAV-AOMBAL8C-00	da Vinci 8.10.2 and higher
PAV-AOMBAL8C-10	da Vinci 8.10.2, 9.3.4 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



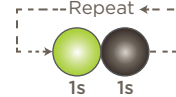
(A) Power LED

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.

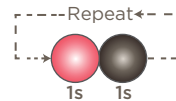
Green Blinking: Embedded system is ready, but no communication has been established with the host.



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

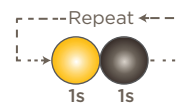
(B) Status LED

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.

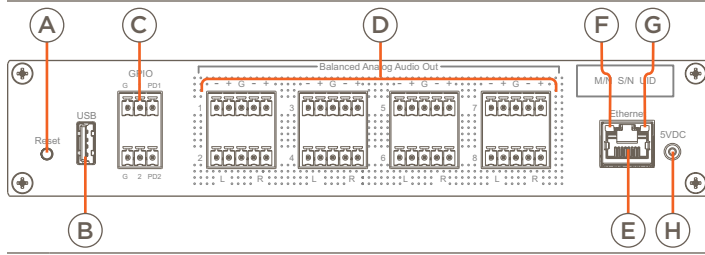


Installation

The PAV-AOMBAL8C 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-AOMBAL8C must to be connected to a AVB Switch. Also a Savant AVB audio input 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 USB	USB 2.0 Type A (reserved for future use).
C GPIO	3-pin Control Connector See GPIO Wiring for pinouts GPIO Input: When configured as an input the processor will look for a low (<0.8V DC) or a high (>2.4V DC) state. Minimum 0V DC / Maximum 12V DC. GPIO Output: When configured as an output, the port provides a binary output of 0-12V DC 150mA max.
D Balanced Audio Outputs	(8) Analog Stereo Balanced Line Output (Left & Right). Direct Line Level 4.2- V_{RMS} .
E Ethernet	8-pin RJ-45 port 10/100/1000 Base-T auto-negotiating port with Link/Activity LEDs. Supports Power over Ethernet (PoE). Supports Audio Video Bridging (AVB).
F Ethernet Activity LED	Green Blinking: Activity (Rx/Tx). Off: No Activity.
G Ethernet Link LED	Green Solid: Ethernet Link is established. Off: Ethernet link is not established.
H Power Input	5V DC 3A Multi-Blade

GPIO Wiring

General Purpose Input/Outputs (GPIO) are binary I/O ports used on Savant controllers to trigger an action within the system. Events can control a device, such as turning on an amplifier (output) or detecting a state change for a device (input) to perform a workflow. Pin 2 is used for input or output depending on configuration.



PIN 1	Ground
PIN 2	GPIO 1
PIN 3	Pull-Down Jumper 1

NOTE: While not shown in the diagram above, GPIO 2 follows the same wiring as GPIO 1.

GPIO Pull Down Resistor (PD) Usage

GPIO pins are configured as inputs and are pulled high to 12V while the host is booting up. To make the GPIO signal low during a host reboot and/or a power cycle, attach the GPIO 1 pin to the PD pin. The PD pin is a 1K ohm pull down resistor (to signal ground) which keeps the GPIO output below 0.8V during processor boot times.

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 varies based on the active da Vinci runtime.

Additional Documentation

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

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