SAVANT

Savant® IP Audio 1 with Integrated Host and Savant Music 2.0

Quick Reference Guide

Box Contents

- IP Audio 1 with Integrated Host (HST-SIPA1SM) (1) Or IP Audio 1 with Integrated Savant Music [Subordinate] (PAV-SIPA1SM) (1) Installation Kit with Mounting Hardware
 - (1) Speaker connector 4-pin phoenix connector (028-0702-xx)
 - (2) 6-pin Screw-down connectors (028-9352-xx)
 - (4) Mounting bracket screws [M3 x 6mm] (039-0001-xx)
 - (2) Side-mounting brackets (071-0628-xx)
 - (1) Power cord C13 6 ft (country-specific)
- (1) Product Regulatory Insert (009-1950-xx)

Specifications

Environmental			
Temperature	32° to 104° F (0° to 40°C)		
Humidity	10% to 90% (non-condensing)		
Dimensions and V	Veights		
	Device	Shipping	
Height	1.70 in (4.34 cm)	3.0 in (7.62 cm)	
Width	7.89 in (20.04 cm)	11.75 in (29.85 cm)	
Depth	7.68 in (19.50 cm)	11.5 in. (29.21 cm)	
Weight	3.5 lbs (1.59 kg)	5.6 lbs (2.54 kg)	
Rack Space	1U; 2 units can be placed side-by-side in a standard 19" NEMA rack.		
Power			
Input	100/240V AC (50/60 Hz) 3.6A		
Maximum	414W		
Operating Parame	eters		
Rated Power (Speaker Output)	125 WPC at 4/8 ohms (THD+N < 0.1%)		
Frequency Response	20 Hz to 20 kHz (± 0.5 dB), speaker output		
Signal-to-Noise Ratio (SNR)	>100 dB, speaker output		
Supported Digital Input Format	44.1 kHz / 48 kHz / 96 kHz / 192 kHz		
Networking			
Supported	IEEE 802.1 AVB/TSN switches		
	IEEE 802.3 Ethernet		
Regulatory			
Safety and Emissions	FCC Part 15 CE	C-Tick UL UKC/	
RoHS	Compliant		
Minimum Support	ed Release		
Savant OS	da Vinci 9.2		

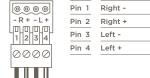
Optional Accessories

The SIPA1SM can be combined with an optional rack-mounting kit (RMB-SIPA12F-00), which allows 2 units to be installed side-by-side in a 1U rack mounting. Check the Savant Store for details and purchasing information.

Rear Panel			
A B C	G H J K		
D	E F I		
A Reset	Using a paper-clip or similar, press and hold for 5 seconds to clear statically assigned IP address, restart unit, and pull IP from DHCP.		
B Power LED	Green: Unit has power, operating normally. Red: Unit in standby mode, most circuitry is powered down.		
C Status LED	Off: Unit not receiving power. Host Mode Off: Disconnected from power supply Green: Connected to the local network and is assigned an IP Address. Red: Host is booting/rebooting and is disconnected from the network Subordinate Mode (Not functioning as the Host)		
	 Off: Embedded processor resetting or booting firmware. Green: Communication with Host established. Blinking Green: System ready but no communication with Host. Red: Firmware update failure, unit will reset. Red Blinking: Firmware is running but has not received a DHCP IP address. Amber: Firmware update in progress. Blinking Amber: Valid link-local IP address. Hardware Failure: If hardware failure is detected a red blink will interrupt any other status LED 		
D Speaker Output	state at 3-second intervals. Single zone speaker output. Uses included 4-pin speaker connector. Supports 8 ohm or 4 ohm speakers.		
E Analog Audio Output	2-channel preamp analog stereo output (Left and Right) Direct line-level 2.1-V output.		
F Analog Audio Input	2-channel analog stereo input (Left and Right) RCA line-level input 2.1-VRMS in; 22kΩ input impedance.		
G Digital Audio Input	Digital optical audio (TOSLink) input. Supports up to 192kHz/24-bit digital audio in; PCM stereo format only.		
H IR Control Ports	(3x) IR ports - uses 6-pin IR connector to send IR control signal to devices with IR input or via IR flasher (5V tolerant only). See IR Wiring section for important precautions before making connections.		
1 Ports	(2x) RS-232 serial ports used to transmit and receive serial binary data to/from serial controllable devices. Utilizes included 6-pin connector. See Serial Connections section below for pin-out information.		
J Ethernet Port	8-pin RJ-45 auto-negotiating network connection port. Supports Audio Video Bridging (AVB). Activity LED: green blinking: activity (Tx/Rx), Off: no activity. Link LED: green solid: link established, Off: no link established.		
K Input Power	100/240V AC (50/60 Hz) 3.6A maximum. Fuse: 250V 5A fast acting fuse; field replaceable.		

Speaker Connections

Speaker wiring connections are made using 4-pin Speaker Connectors supplied with the device. The wire slips into the hole and locks with the screw located at the top of the connector. Speaker connectors accept up to 12AWG speaker cable



Wire order shown does not represent any specific wiring standard. It may differ from one deployment to another.

IR Wiring

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

-1+-2+-3+	Pin 1	IR 1 -
200000	Pin 2	IR 1 +
	Pin 3	IR 2 -
	Pin 4	IR 2 +
200000	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) of 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..

Serial Connections (RS-232)

Serial connections are made using 6-pin connectors supplied with the device.

The wire slips into the hole and locks with the screw located at the top of the connector.



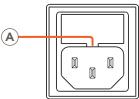
Pin 1	RS-232 1 ground
Pin 2	RS-232 1 transmit
Pin 3	RS-232 1 receive
Pin 4	RS-232 2 ground
Pin 5	RS-232 2 transmit
Pin 6	RS-232 2 receive

NOTES:

- CTS/RTS handshaking for flow control is not supported.
- For further details on RS-232 serial control adapters, conversion, and wiring, refer to the RS-232 Conversion to DB-9 and RS-422/485 Pinout Reference Guide and/or the RS-232 Serial Communication Troubleshooting Guide on the Savant Customer Community.

Replacing the Fuse

- ELECTRIC SHOCK HAZARD! Disconnect the unit from AC power by removing the power cord from the AC outlet and the unit before replacing the fuse.
- Disconnect the unit from AC power by removing the power cord. 1
- Remove the fuse cartridge by pulling the tab marked (\mathbf{A}) in the 2.
- image below.
- 3. Remove the old fuse from the cartridge and discard.
- 4. Gently clip the new fuse into the cartridge, and slide the cartridge part-way into the receptacle, ensuring that alignment is correct. 5
- Press cartridge fully into receptacle, ensuring that it is seated and secure.



NOTE: If any resistance is encountered while seating the cartridge, DO NOT apply more pressure. Stop pressing on the cartridge, remove it, verify that the fuse is properly seated, align cartridge carefully, and reinsert.

Network Requirements

All Savant devices must be connected to the same local area network (LAN) or subnet as the host. Savant recommends not implementing any type of traffic or packet shaping in the network topology, as this may interfere with performance.

IMPORTANT!

It is recommended that the SIPA1SM be connected to an AVB switch. This is required for AVB distribution of audio content.

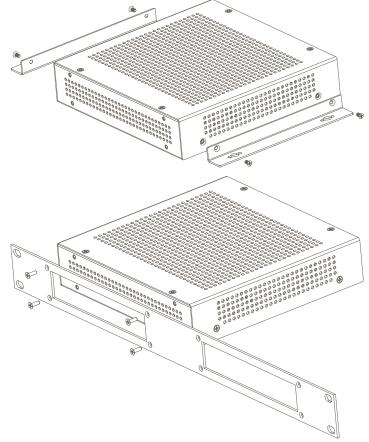
Network Configuration

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.

Setting DHCP reservation varies from router to router. Refer to the documentation for the router to configure DHCP reservation. Refer to the Savant IP Audio Deployment Guide (009-1571-xx) located on the Savant Customer Community for more information.

Installation

The IP Audio 1 includes side-mounting brackets for installation in a structured media panel, enclosure, or on a wall. The unit can also be placed on any flat surface, such as a table or shelf, or can be combined with an optional rack mounting kit (RMB-SIPA12F-00) which allows 2 units to be placed side by side in a standard 1U rack mounting.



Further Product Information

To view available documentation, detailed product specs, and more:

- Visit the Savant Knowledge tab via the Savant Customer Community to search all Savant documentation.
- The Spotify Software is subject to third party licenses found here: https://www.spotify.com/connect/third-party-licenses.