

Description

As part of the line of Savant SmartSystems control solutions, the SmartAudio (SSA-3000) delivers 6 x 8 audio distribution and integrated control in a 2U fanless enclosure.

SmartAudio delivers stereo preamp processing, including independent control of volume, balance, bass, treble, and mute. SmartAudio enables music distribution in up to eight zones, with the flexibility to play the same content throughout the home, or unique content in each room simultaneously and independently.

SmartAudio can be controlled with an iPhone®, iPod touch®, or iPad® using Savant's TrueControl™ app.

The SSA-3000 has sixteen RCA jack connections for passing analog line-level audio signals to an external multi-channel amplifier, an ideal distributed audio solution. See also, the technical specifications for AMP-2000/AMP-2000I.

The SSA-3000 supports audio time-delay to compensate for lip sync errors. Audio can be delayed from 0 to 170 milliseconds (ms) in 1 ms increments for proper lip sync compensation on stereo 1-4 outputs only.

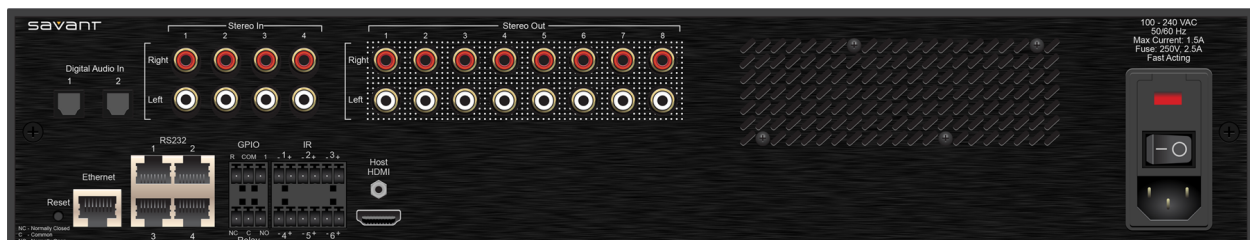
SmartAudio—when paired with an external host—provides an iTunes®-based media server. The iTunes® media server is a digital audio storage and music management system providing instant access to entire music collections from any Savant user interface. Play up to four independent audio streams from the iTunes® music archive simultaneously

Feature Summary

- 12 control ports including RS-232, IR, relay, and General Purpose Input Output (GPIO)
- Audio Switching and Processing
 - Multi-room audio switching, using six audio sources to eight rooms or zones
 - Stereo preamp processing: independent control of volume, balance, bass, treble, and mute
- Audio Inputs/Outputs
 - Audio Inputs: (4) Analog and (2) digital TosLink
 - Audio Outputs: (8) Stereo line-level audio outputs and (8) right and left RCA jacks;
 - Audio time-delay supported on outputs 1-4
- Host HDMI:
 - Input port for External Host with locking HDMI connector
 - Distributes up to four iTunes® sources from the External Host
- iTunes® Digital Media Server provided by the External Host (sold separately)
- Use RacePoint Blueprint™ design tool to configure and customize the SSA-3000



Front View of SSA-3000 (above)

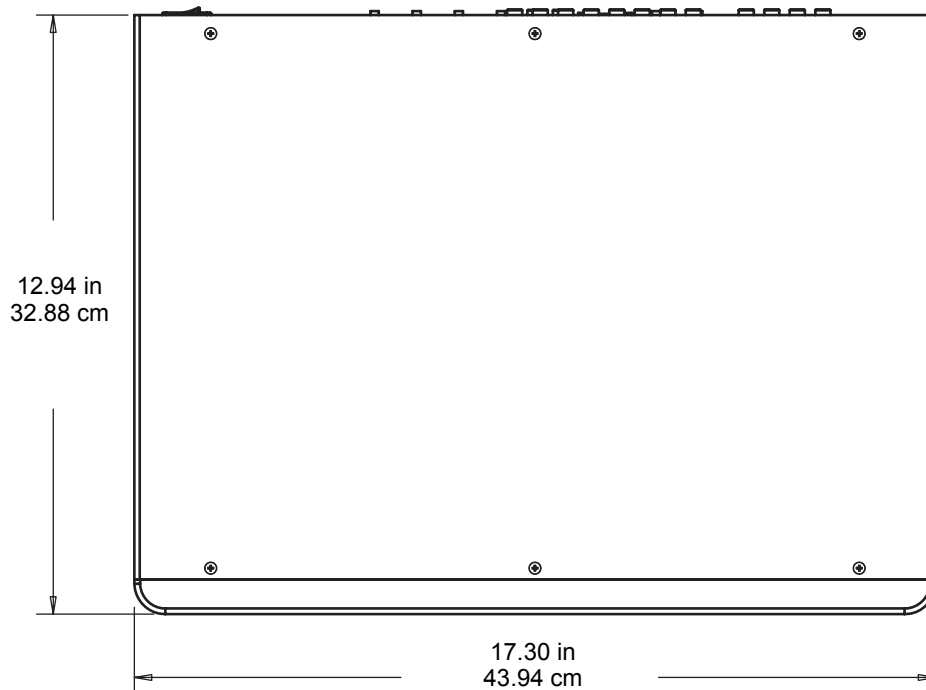


Rear View of SSA-3000 (above)

Dimensions

The next figures show the dimensions of the SSA-3000.

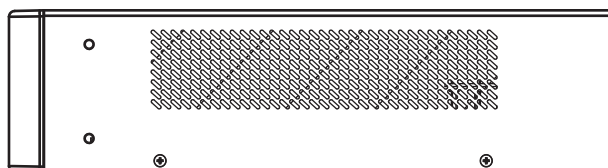
Top View



Front View (below)



Side View (below)



Specifications

Environmental		
Temperature	32° to 104° F (0° to 40° C)	
Humidity	10% to 80% Relative Humidity (non-condensing)	
Cooling	5 cubic feet per minute (CFM) recommended.	
Maximum BTUs	105 BTUs per hour	
Dimensions and Weight		
Height	3.46 in/8.79 cm	
Width	17.30 in/43.94 cm	
Depth	12.94 in/32.88 cm	
Weight	14.25 lb/6.5 kg	
Rack Space	2U	
Power		
Input Power	100-240V AC, 50/60 Hz	
Nominal Power	20 watts (40 VA) for 120V AC, 60Hz (N. America) 20 watts (50 VA) for 230V AC, 50Hz (Europe)	
Maximum Power	30 watts (60 VA) for 120V AC, 60Hz (N. America) 30 watts (70 VA) for 230V AC, 50Hz (Europe)	
Compliance		
Safety and Emissions	FCC Part 15 S Mark CE Mark C-Tick	
RoHS	Compliant	
Front LEDs		
The LEDs on the front panel are used for diagnostic purposes. A description of the LEDs is available in the SmartAudio (SSA-3000) Quick Reference Guide.		
Rear Panel		
See <i>Rear Panel Capabilities and Connectors</i> , page 5.		
Supported Audio Output Formats		
Audio Source Signal Type	Audio Output Connector Type: 2.0 Stereo RCA	
Dolby TrueHD	Not Supported	
DTS-HD Master Audio	Not Supported	
Dolby Digital	Not Supported	
Dolby Digital EX	Not Supported	
DTS Digital Surround	Not Supported	
DTS-ES Discrete 6.1	Not Supported	
DTS-HD Matrix 6.1	Not Supported	
DTS 96/24	Not Supported	
Multichannel PCM	Not Supported	
2.0 Stereo PCM	✓	
Enclosure		
Metal enclosure, matte black		

Included Items

The individual components contained in the installation kit (075-0075-XX) for the Savant SmartAudio (SSA-3000) are outlined in the next table.

Description	Quantity
2U Rack Mounting Brackets	2
Phillips Screws for Brackets (M5X12MM FLAT)	4
AC Power Cord (6 ft)	1
3-Pin Screw Down Connector for GPIO and relay ports	2
6-Pin Screw Down Connector for IR ports	2
HDMI Locking Cable (3 ft)	1
Quick Reference Guide	1

Required System Components

The system components required for use with the SSA-3000 are outlined in the next table.

Description	Model Number
Host Controllers	HST-4001, HST-4002 or SVR-4100
Ethernet Network	Enterprise-grade network deployment

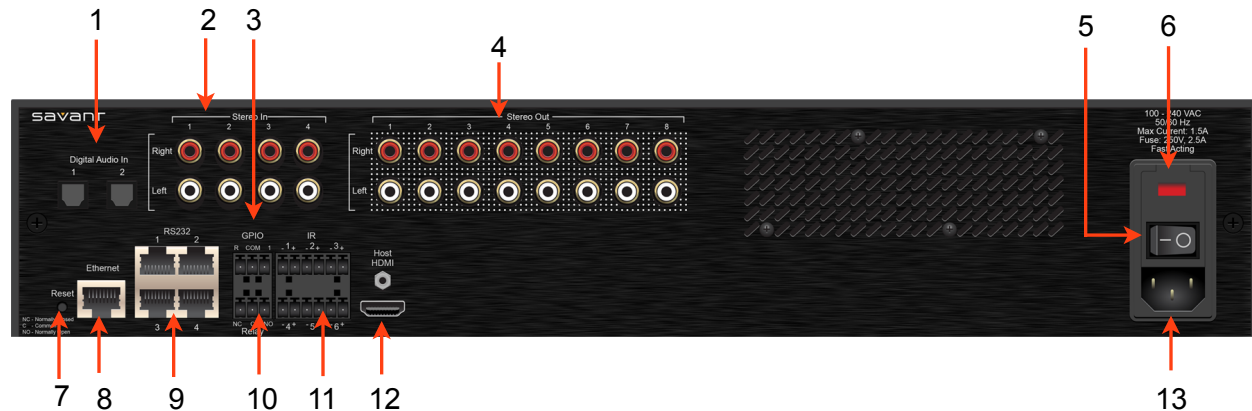
Optional Accessories

The optional accessories available for use with the SSA-3000 are outlined in the next table.

Description	Model Number
RS-232 Adapter Kit (5 pack)	SAK-1000
Infrared (IR) Emitter	IRB-1000
Infrared (IR) Emitters (10 pack)	IRB-1010
USB 2.0 over Cat 5e Digital Extender Set	UCX-2000
HDMI locking cable (3 ft)	CBL-3LHDMI
HDMI locking cable (6 ft)	CBL-6LHDMI
HDMI over Cat 5/6 Solution Set	HCX-1010
HDMI over COAX Solution Set	HCX-1100
HDMI over Multi-Mode Fiber Optic Cable Solution Set	HCX-1200
RJ-45 Serial Adapters Flow Null (10-pack)	CON-10FN
RJ-45 Serial Adapters Flow No Null (10-pack)	CON-10FNN
DB-9 Mini Gender Changer (10 pack)	CON-10GEN
RJ-45 Serial Adapters No Flow Null (10-pack)	CON-10NFN
RJ-45 Serial Adapters No Flow No Null (10-pack)	CON-10NFNN
3-pin Screw-Down Connector (25 pack)	CON-STC3
6-pin Screw-Down Connector (25 pack)	CON-STC6

Rear Panel Capabilities and Connectors

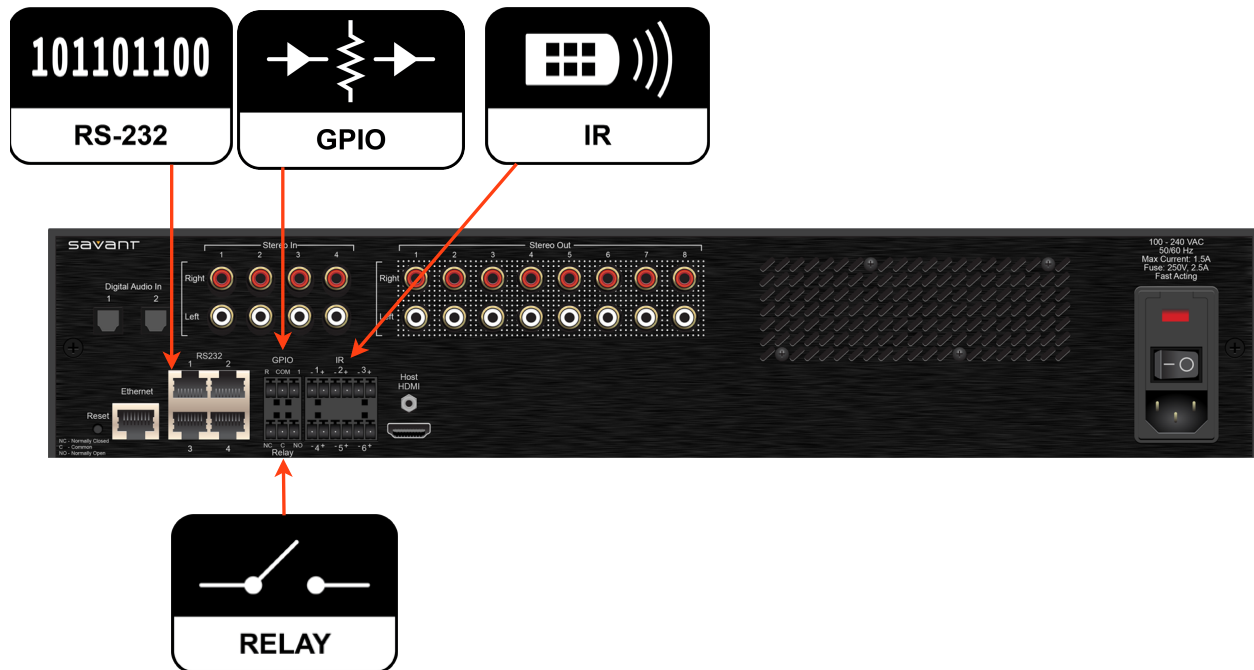
The next figure shows the rear panel of an SSA-3000. The numbered callouts on the figure are explained in the next table.







Number	Item	Description
1	Digital Audio In	TosLink input
2	Stereo In	Four Analog Audio Inputs
3	GPIO	General Purpose Input and Output ports—uses 3-pin screw-down connector. The digital GPIO ports are binary I/O ports used for contact closure, trigger (output), or detect (input). R is reserved (not used). The COM pin is used for common ground. Pin 1 is used for input or output.
	GPIO Input	When configured as an input, the port detects a voltage present (GPIO input). GPIO inputs can safely detect the presence of a voltage of 0-30V DC with a threshold of approximately 2.4V DC.
	GPIO Output	When configured as an output, a GPIO port outputs a voltage between 0-12V DC. The maximum current per port is 150 milliamps. An overcurrent condition shuts down the output until that condition is removed.
4	Stereo Out	Eight Stereo line-level audio outputs (8 Right and Left RCA jacks) with 1 - 4 support audio time-delay
5	I/O	On/Off button - I is used to power the controller to the On state. O is used to power the controller to the Off state.
6	Fuse	250V, 2.5A—Fast acting fuse. This is replaceable.
7	Reset Button	Press to reset the SSA-3000.
8	Ethernet	RJ-45 10/100 Base-T, auto-negotiating port
9	RS-232 (1-4)	RJ-45 ports used to transmit and receive serial binary data transmission.
10	Relay 1-3 NC/C/NO (Normally Closed/ Common Normally Open)	These ports provide dry contacts (open/closed) to control devices requiring basic on/off operation. A single relay port can carry a maximum of 30V DC with a maximum current of 1.0 amps. Input from a device to the Savant Controller is not supported through a relay. Uses a 3-pin screw-down connector (3.81 mm)
11	IR (1-6)	Infrared transmitter ports Uses 6-pin screw down connectors (3.81mm each)
12	Host HDMI	HDMI input ports used to receive digital audio (iTunes®) from host (such as HST-4001) —locking HDMI connector
13	Input Power	100-240V AC, 50/60 Hz

Devices Supported by SSA-3000

The next figure shows a rear view of the SSA-3000. The devices that can be controlled with an SSA-3000 are described in the next table.

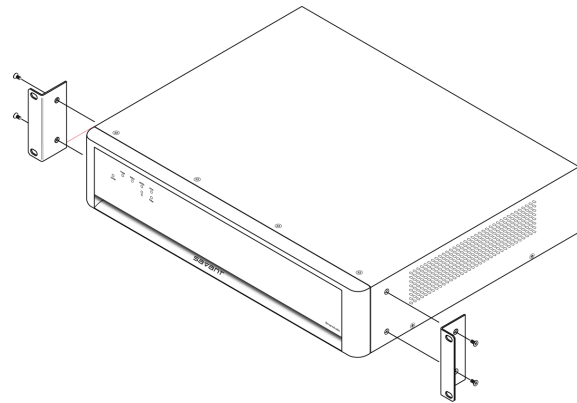
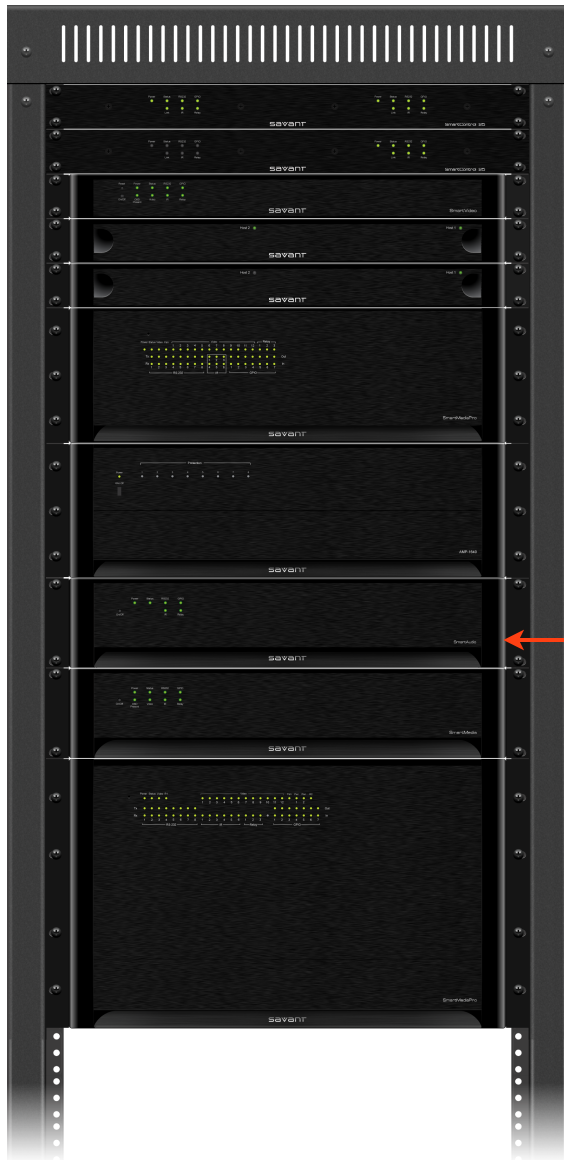


The next table describes the typical uses associated with the ports on the SSA-3000.

Port Quantity	Port Type	Port Icon	Typical Uses
4	Serial		Lighting, Displays, Door Entry Systems, and Heating Ventilation Air Conditioning (HVAC)
6	Infrared		Blu-ray Players, Displays, and Set Top Boxes (Cable and Satellite)
1	General Purpose Input Output		Equipment Power Sensing, and Voltage Control Applications
1	Relay		Shade Control, Gate Controllers, Door Latches, and Motorized Lifts

Specifications for Installing Device in Rack

The SSA-3000 can be mounted in a 2U rack style enclosure. The next figure shows a partial view of a typical rack used to house an SSA-3000 and other devices. The SSA-3000 is compatible with all standard 19-inch National Electrical Manufacturers Association (NEMA) rack-mounts.



SSA-3000 with 2U
mounting brackets (above)

SSA-3000

Installation Considerations

Savant recommends using cable supports on the rear of the chassis for audio/video control cabling.

This chassis needs adequate space on each side for air intake and exhaust—a minimum of two inches on each side.

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