

Description

Savant Systems' AMP-8125 is a multi-room amplifier for distributed audio applications. The AMP-8125 is an ultra-efficient Class D amplifier delivering eight channels of reliable amplification rated at 125 watts per channel at 8 ohms in a 1U rack-space metal enclosure.

The AMP-8125 is the ideal complimentary solution when paired with Savant's multi-room audio solutions, and can be fine-tuned for any listening environment using the onboard independent gain controls for each channel.

The extraordinary power supply design provides the energy necessary to deliver a rich musical experience in a residential or commercial setting.

The audio-sense mode allows the turn-on sensing circuitry to detect an audio signal on an individual channel and turn the associated zone on. Once the audio signal stops, the sensing circuit waits 30 minutes and then turns that amplifier zone off. The amplifier is off when there is no audio signal present at any of the eight inputs, but the sensing circuitry is on.

The AMP-8125 features RCA phono input jacks and screw terminal speaker connections that can accommodate up to 16-gauge standard speaker wire.

If there is a power outage and the standby button is used to operate the AMP-8125, the amplifier will be in the OFF state when the power is restored. The standby button must be pressed to restore power. If there is a power outage and an external device is used to trigger the AMP-8125, the amplifier will be reinstated to its last state when the power is restored. If the AMP-8125 is to be on at all times, a simple DC power supply should be connected to the amplifier and plugged into an outlet.

Feature Summary

- Eight channels with 125 watts into 8 ohms, all channels driven
- Front panel Standby power switch and Channel status LED indicators
- High-efficiency, quiet convection-cooled fanless design
- Local/Bus RCA input selection and independent channel output level controls
- 12 volt trigger input/output and signalsensing channel inputs
- Power Save low-power consumption standby mode (less than 0.5 watts)
- Savant industrial design—can be 1U rack or shelf-mounted.
- Use RacePoint Blueprint[™] design tool to configure and customize AMP-8125

Ordering Information

AMP-8125

Multi-Room Eight-Channel Amplifier



Front View of AMP-8125 (above)



Rear View of AMP-8125 (above)



Specifications

Environmental		
Temperature	32° to 95° F (0° to 35° C)	
Humidity	10% to 80% Relative Humidity (non-condensing)	
Cooling	34 cubic feet per minute (CFM) recommended.	
BTUs	650 BTUs per hour	
Dimensions and Weight (without mounting feet)		
Height	1.7 in/4.5 cm	
Width	17.3 in/43.8 cm	
Depth	14.9 in/37.8 cm	
Weight	9.2 lb/4.2 kg	
Rack Space	1U	
Power		
Input Power	100-240V AC, 50/60 Hz	
Nominal Power	190 watts	
Operation Parameters		
Output Power	125W RMS/channel @ 8 ohms from 20Hz - 20kHz (all channels driven)	
Frequency Response	20Hz - 20kHz +0dB/-1.5dB	
Total Harmonic Distortion (THD)	20Hz - 20KHz (At Full Rated Power)	
Signal-to-Noise Ratio (SNR)	<-105dB below rated full power A-weighted	
Crosstalk	<-70dB @ 14 kHz	
Input Sensitivity	1.12 volts for 125 watts out in 8 ohms	
Gain	29dB	
Input Impedance	100K ohms (typical)	
12V DC Trigger Signal	Current = 0.12 mA	
Compliance		
Safety and Emissions	FCC Part 15 CE CAN/CSA C-Tick	
RoHS	Compliant	
Front LEDs		
Standby Button	RED indicates that the unit is in standby mode. BLUE indicates that the system is powered on.	
Channel Status	The LEDs on the front panel are used for diagnostic purposes. A description of the LEDs is available in the Amplifier AMP-8125 Quick Reference Guide.	



Included Items

The individual components contained in the installation kit (075-0142-XX) for the AMP-8145 are outlined in the next table.

Description	Quantity
Rack Mounting Brackets	2
Pan Head Screws for Rack Mounts	4
Torx Screws for Brackets	4
Torx Key for Torx Screws	1
Plastic Feet	4
Pan Head Phillips Screws for Feet	4
Audio Trigger Cable (1/8 inch/3.5mm) mono mini plug	1
Audio Trigger Cable phoenix connector	4
AC Power Cord- 3 ft	1

Required System Components

The system components required for use with the AMP-8125 are outlined in the next table.

Description	Model Number
Savant Host	HST-XXXX or SVR-XXXX
Ethernet Network	Enterprise-grade network deployment

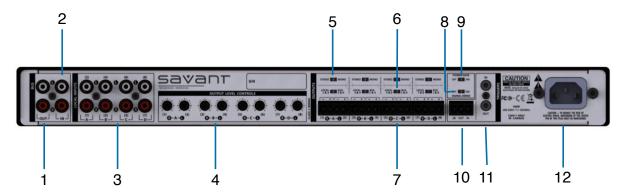
Optional Accessories

The optional accessories available for use with the AMP-8125 are outlined in the next table.

Description	Model Number
1000 watt Subwoofer Amplifier	SPK-SUBAMP-00
4-Inch In-Wall Speaker	SPK-40IW-00
6.5-Inch In-Wall Speaker Pair	SPK-60IW-00
6.5-Inch In-Wall Speaker	SPK-65IW-00
8-Inch In-Wall Speaker Pair	SPK-80IW-00
7-Inch In-Ceiling Speaker Pair	SPK-70IC-00
7-Inch DVC In-Ceiling Speaker	SPK-72IC-00
7-Inch In-Ceiling Speaker	SPK-75IC-00
7-Inch Audiophile In-Ceiling Speaker	SPK-78IC-00
In-Wall Subwoofer Speaker	SPK-USUB-00
Speaker Bracket for SPK-40IW Pair	SPK-BR40-00
In-Wall Speaker Bracket	SPK-BR60-00
Speaker Bracket for Pair	SPK-BR68-00
In-Wall Sub Bracket	SPK-BR70-00
In-Ceiling Speaker Back Box	SPK-MFLR-00
PC Series 70 Volt Transformer (For SPK-70IC, SPK-72IC, SPK-75IC)	SPK-PC70V-00



Rear Panel Capabilities and Connectors The next figure shows the rear panel of an AMP-8125. The callouts on the figure are explained in the next table.



The next table provides descriptions of the callouts (right to left) on the previous figure.

No.	Item	Description	
1	Bus Output	Provides RCA connector loop/pass-through output for connecting multiple AMP-8125s in a system utilizing a single bus input signal.	
2	Bus Input	Provides a line-level RCA connector input to simultaneously feed all speaker output channels utilizing a single bus input signal.	
3	Local Inputs	Provides a line-level RCA connector input to feed a corresponding speaker-level output channel.	
4	Output Level Controls	Provides speaker-level attenuation for each output channel.	
5	Stereo Mono Selection	Selects between Stereo and Mono output configuration for each group of speaker output pairs.	
6	Local/Bus Selection	Selects between Local and Bus inputs for each group of speaker output pairs.	
7	Speaker Outputs	Provides connection for up to four pair of stereo speakers to the AMP-8125 (eight speakers total).	
8	Signal Sense On/Off	Enables the audio Signal Sense circuitry for the Bus and Local inputs.	
9	Power Save On/Off	Enables the extreme low-power automatic standby mode of the AMP-8125.	
10	Trigger In/Out connector (Phoenix-style)	Provides connectivity for remote 5-15V DC trigger signals used to activate and	
11	Trigger In/Out connector (Mono mini-plug)	deactivate the standby mode of the AMP-8125.	
12	Input Power	Provides an AC power connection for the 3-pole detachable power cord.	

8-Channel Digital Audio Amplifier: AMP-8125



Distributed Audio

The AMP-8125 is an ideal eight-zone multi-room music system when paired with a Savant multi-room audio solution. A multi-room distributed audio solution is defined by how many listening zones it has. Within a listening zone only one audio source can be heard at a time - for example, Internet radio, CD, or music server at a time. A multi-zone system allows different sources to be heard in each of the zones, simultaneously.

Signal Sense

The Signal Sense circuitry allows the AMP-8125 to activate a channel (1, 2, 3, 4, 5, 6, 7, or 8) when an audio signal is detected at the corresponding input and deactivate a channel (1, 2, 3, 4, 5, 6, 7, or 8) when no audio signal has been present for 30 minutes. When the AMP-8125 is powered on and the Signal Sense switch is set to the On position, amplifier channels with signal present will be active. Channels without signals present will remain switched off until signals are detected. In this mode, power consumption is lowered by switching off idle channels and audio performance is improved by eliminating crosstalk on adjacent unused channels. In cases where Signal Sense is On and no audio signals are present on any channels for more that 30 minutes, all channels will be switched off and only the front panel standby button will glow BLUE while the AMP-8125 continues to monitor all inputs for a signal.

Efficient Design

The AMP-8125 is a highly efficient design with lower-than-average power consumption at standby, idle and in normal operation mode. The Power Save mode can be enabled to lower standby power consumption even further by disabling all circuitry except that required for the front panel standby button. If the Power Save switch is set to the On position, the AMP-8125 will automatically revert to standby and enter this extreme low-power state after one hour without signal present at any of the inputs.

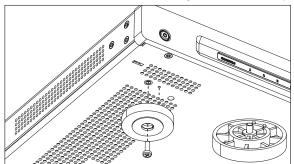
Specifications for Installing Device

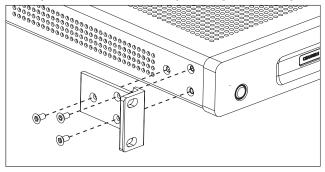
The AMP-8125 can be mounted in a 1U rack style enclosure. The AMP-8125 is compatible with all standard 19-inch National Electrical Manufacturers Association (NEMA) rack-mounts. Savant recommends using cable supports on the rear of the chassis for audio/video control cabling.

NOTE: If multiple AMP-8125 units are to be rack-mounted together, it is acceptable to "flat stack" them one on top of another in adjacent rack spaces without additional ventilation spaces left between them. However, in some installations or in heavy usage scenarios where multiple channels are consistently driven at high outputs for long periods of time, it might be necessary to leave one empty rack space between the amplifiers to assist with heat dissipation and prevent thermal protection due to overheating.

Installation Options

The AMP-8125 is shipped without feet or rack mount brackets installed. Both are included in the Installation Kit. One or both will need to be installed depending upon the type of installation/mounting required. If the AMP-8125 is to be placed on a shelf or audio furniture, attach the four plastic feet to the bottom of the amplifier using a #2 Phillips screwdriver and the included hardware. (See figure on the left.) If the AMP-8125 is mounted into an equipment rack, attach the two metal rack mount brackets to the left and right sides of the amplifier using the included T-10 Torx key. (See figure on the right.)





Feet Installation

Rack Installation

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