

SA8 Eight Channel Power Amplifier



SA8 Overview

The SA8 is an eight-channel power amplifier that delivers up to 1.5 watts of power per speaker to up to eight speakers. The unit features high channel separation with low cross talk combined with low noise and distortion. The gain for all eight channels can be set to 0, -6, -10 or -13 dB.

Power

The SA8 Power Amp is powered via the System 3 zBus (ZB1PS). No PC interface is required.

SA8 Features

Inputs





There are eight available inputs located on the DB9 connector on the front panel of the SA8.

Outputs

The eight output channels are accessible via the DB25 connector and are arranged for optional direct connection to a PP16 Patch Panel. For easy wiring and connection to a wide variety of transducers, the eight outputs are duplicated on the DB25 and sufficient ground pins are provided to allow for connections requiring a single ground for all channels or paired grounds for each channel. See “Mapping SA8 Output to PP16 Connectors” on page 16-34, for more information on easy access to SA8 output channels via the patch panel.

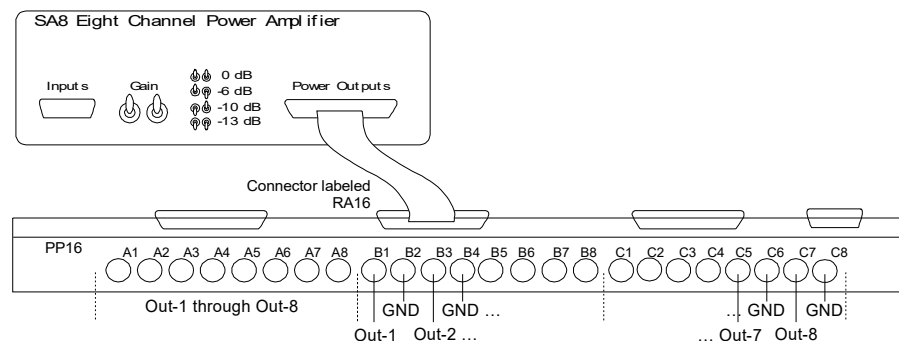
Gain

The gain is controlled by two toggle switches on the front panel of the SA8. The following table describes the selectable gain values.

Front Panel Diagram	Left Toggle	Right Toggle	dB Gain
	Up	Up	0
	Up	Down	-6
	Down	Up	-10
	Down	Down	-13

Mapping SA8 Output to PP16 Connectors

The picture below maps the SA8 signal out connection to the PP16.

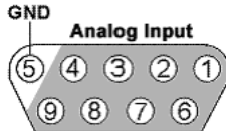


SA8 Technical Specifications

Input Signal Range	± 10 V peak
Power Output	5 W total into 5.5 ohm loads, split across all connected channels
Spectral Variation	< 0.1 dB from 50 Hz to 200 kHz
Signal/Noise	116 dB (20 Hz to 80 kHz)
THD	< 0.02% at 1 Watt from 50 Hz to 100kHz

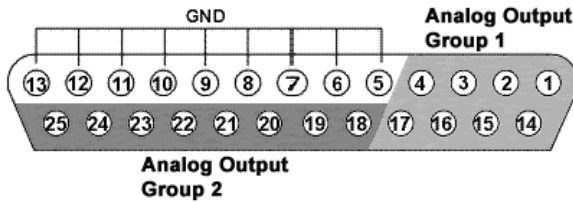
Noise Floor	10.5 μ V rms
Input Impedance	10 kOhm
Output Impedance	2 ohms
Cross Talk	< -60 dB

Analog Input Pinout Diagram



Pin	Name	Description	Pin	Name	Description
1	A1	Analog Input Channels	6	A2	Analog Input Channels
2	A3		7	A4	
3	A5		8	A6	
4	A7		9	A8	
5	GND	Ground			

Analog Output Pinout Diagram



Pin	Name	Description	Pin	Name	Description
1	A1	Analog Output Channels Group 1	14	A2	Analog Output Channels Group 1
2	A3		15	A4	
3	A5		16	A6	
4	A7		17	A8	
5	GND	GND	18	A1	Analog Output Channels Group 2
6			19	A2	
7			20	A3	
8			21	A4	
9			22	A5	
10			23	A6	
11			24	A7	
12			25	A8	
13					