

5202S, 5252S

TWO CHANNEL AMPLIFIER CARDS WITH SWITCH

DESCRIPTION

The 5202S subgroup of the 5000 Series Audio Processing System consists of four cards as described in Table 1 below. Each card has two balanced inputs, and two balanced, floating outputs.

Cards having line level inputs use Model 100L Active Input Modules for input signal processing. Cards having microphone level inputs use Model 150M Active Input Modules for input signal processing. All other cards use Model 200L Active Output Modules, with balanced floating outputs, as drivers for the external loads.

Each input includes a digital switch to allow the input to be enabled and disabled remotely. Each card has a red LED switch status indicator for each input. When the input is ON the indicator is lit. The LEDs are mounted on the front edge of the card so that they may be observed while the system is operating. The upper LED is associated with input 1, and the lower with input 2.

MODEL	NUMBER OF INPUTS	INPUT LEVEL	SWITCH DRIVE	NUMBER OF OUTPUTS	OUTPUT LEVEL
5202S	2	Line	Ground = ON	2	Line
5252S	2	Microphone	Ground = ON	2	Line

Table 1 - Model Descriptions

SPECIFICATIONS

ELECTRICAL

1. Maximum Gain
 - 5202S 24 dB
 - 5252S 57 dB
2. Input Gain Range
 - 5202S -2 dB - +18 dB
 - 5252S +26 dB - +51 dB
3. Maximum Input Level
 - At Minimum Input Gain
 - 5202S +20 dBu
 - 5252S -7 dBu
 - At Maximum Input Gain
 - 5202S 0 dBu
 - 5252S -33 dBu
4. Input Impedance (20 Hz - 20 kHz, balanced)
 - 5202S 10 M in parallel with 1000 pF
 - 5252S 12 kΩ, ±5%



5. Maximum Output Level	+24 dBu , min $R_L \geq 600 \Omega$
6. Output Impedance	<0.5 Ω 20 Hz - 20 kHz, Balanced and Floating
7. Frequency Response	± 0.5 dB 20 Hz - 20 kHz
8. Total Harmonic Distortion, THD	<.02% 20 Hz - 20 kHz, +24 dBu
9. Intermodulation Distortion, IMD	<.01% +24 dBu, 60 Hz/7 kHz
10. Signal-to Noise Ratio, S/N	
5202S	>95 dB +4 dB Gain, referred to +4 dBu, 22 Hz - 22 kHz filters
5252S	>76 dB 54 dB Gain, referred to +4 dBu, 22 Hz - 22 kHz filters
11. Common Mode Rejection Ratio, CMRR	
5202S	>60 dB 20 Hz - 20 kHz
5252S	>80 dB 20 Hz - 20 kHz
12. Switch Control Characteristics	
5202S, 5252S	
Switch Control Terminal Open	Channel OFF
Switch Control Terminal Grounded	Channel ON
13. Power Requirements	
Supply Voltage	± 15 V
Typical Current Drain	
5202S	48 mA
5252S	52 mA
14. DC Voltage Short Circuit Protection	Thermistor (Self Resetting)

MECHANICAL

1. Size (maximum Overall Dimensions)	
Height	(7.11 cm) 2.8"
Width	(3.18 cm) 1.25"
Depth	(21.3 cm) 8.4"
2. Weight	
5202S	(232 gm) 0.51lb
5252S	(232 gm) 0.51lb

ENVIRONMENTAL

1. Operating Temperature Range	(+32 °F - +131 °F) 0 °C - +55 °C
2. Storage Temperature Range.	(-40 °F - +158 °F) -40 °C - +70 °C

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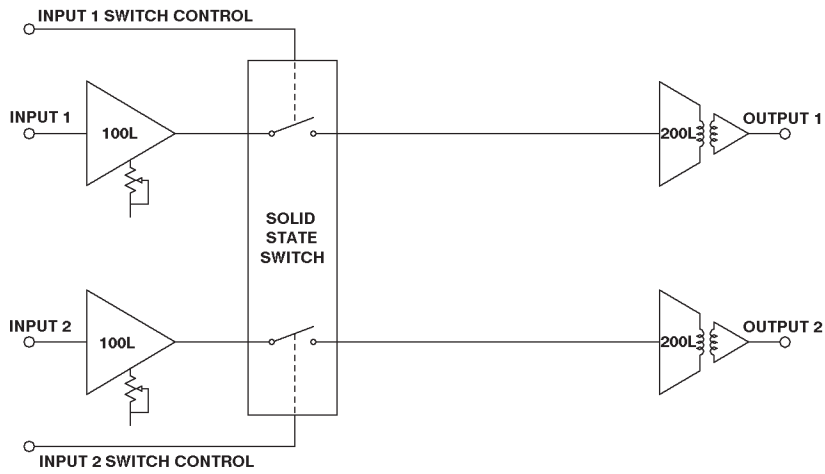


Figure 1 - 5202S Block Diagram

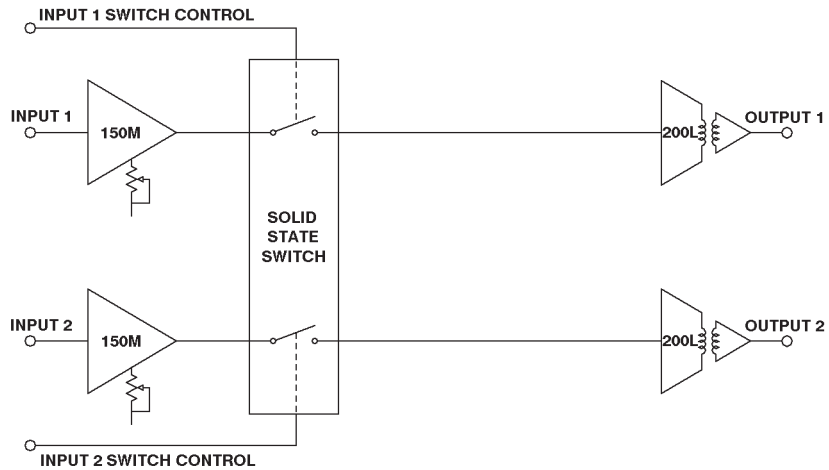


Figure 2 - 5252S Block Diagrams



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