

5202S, 5252S**TWO CHANNEL AMPLIFIER CARDS WITH SWITCH****GENERAL PROCEDURE**

- **BEFORE REMOVING OR INSERTING CIRCUIT CARDS, TURN OFF THE POWER, EITHER BY TURNING OFF THE AC POWER TO THE MAINFRAME, BY TURNING OFF THE SWITCH ON THE 5030/5030P POWER SUPPLY, OR BY TURNING OFF THE SWITCH ON THE 5002 EXTERNAL POWER SUPPLY INTERFACE CARD. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE CARDS AND WILL VOID THE WARRANTY.**

Installation of the cards consists of the following steps:

1. Locate a proper slot in the mainframe. Mainframe slots are set up on the rear panel of the mother board according to the card type to be used. Slots are dedicated by installing the proper trimpots. Trimpots **MUST** be installed as indicated in Figure 2 and 3 for inputs and outputs to function. Microphone level inputs require 200 Ω trimpots. All others require 10 k Ω trimpots. Slots labels are applied at the factory above each slot position.
2. Start the card in the slot with the components to the right and the card ejector on top. Raise the card ejector to the horizontal position and slide the card in until it contacts the connector. Release the card ejector. See that the upper tip enters the groove in the bottom edge of the horizontal bar. Complete the insertion by pressing the card inward while pressing down on the card ejector. When the card is properly seated the card ejector lever should be in a vertical position with the upper tip still in the groove in the horizontal bar.

Card removal:

1. Grasp the lower end of the card ejector lever and swing it outward and upward to free the card from the card edge connector.
2. Slide the card outward until it is free of the slot.

EXPANSION

The 5202S Group has no provision for input or output expansion.

GAIN STRUCTURE

The gain structure diagrams in Figures 2 - 3 show the signal levels and gains or losses at key points in the cards. Since all outputs on a card behave identically, only one output is shown in the diagrams. In the examples the Input Gain Adjust pots were set for minimum



gain (fully counterclockwise). The levels and gains shown are those required to produce an output level of 0 dBu.

NOTE: The numbers below represent levels or gains/losses at the points in the circuit directly below them. Numbers In Parentheses Are Gains Or Losses.

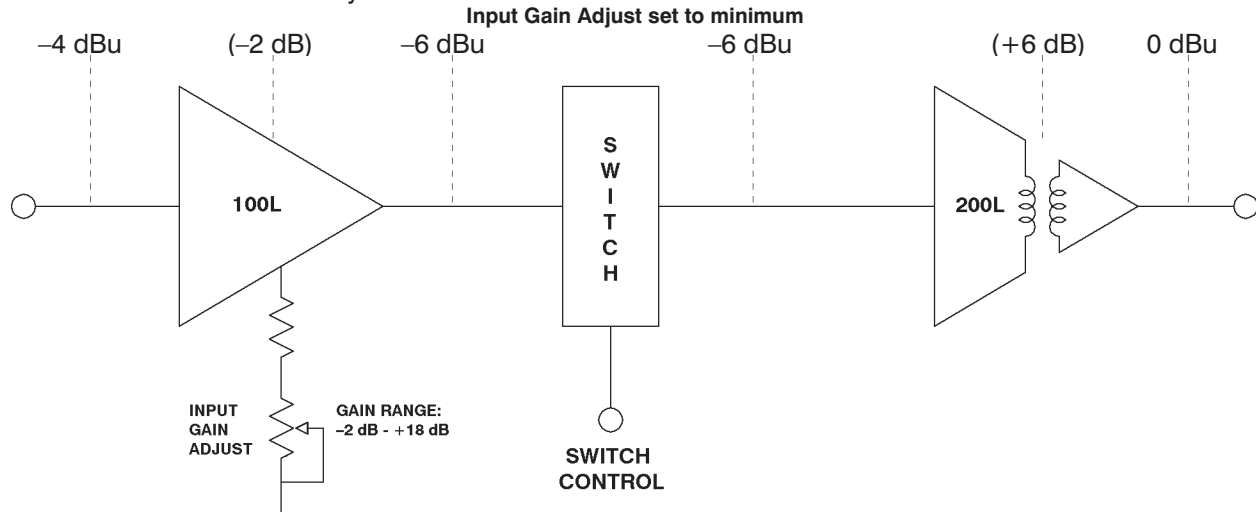


Figure 1 - Gain Structure
5202S

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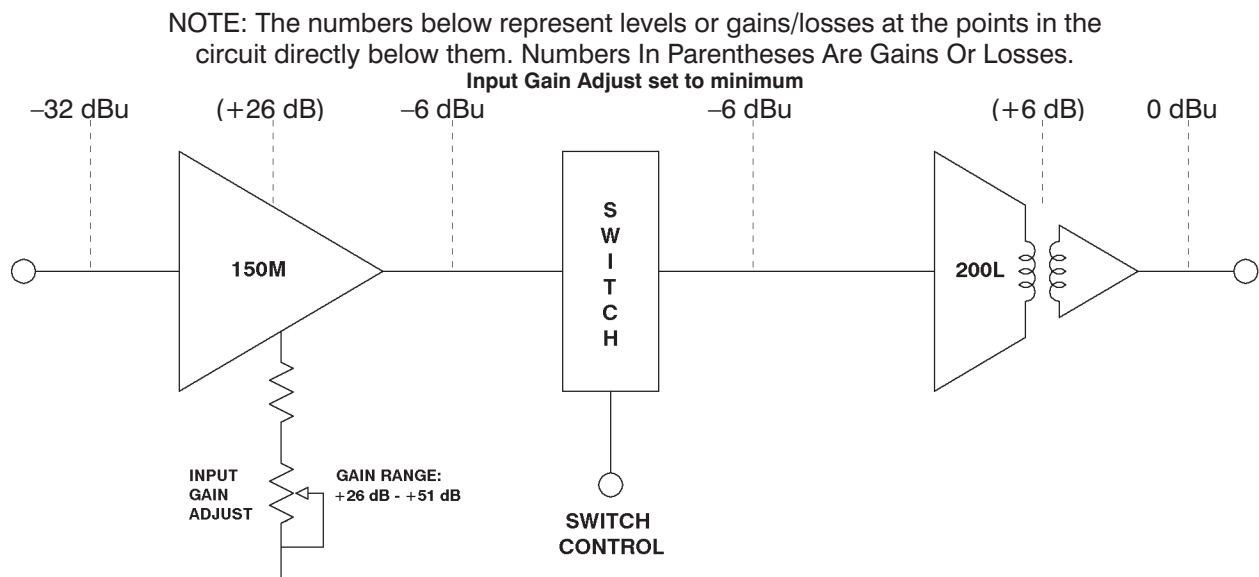


Figure 2 - Gain Structure
5252S



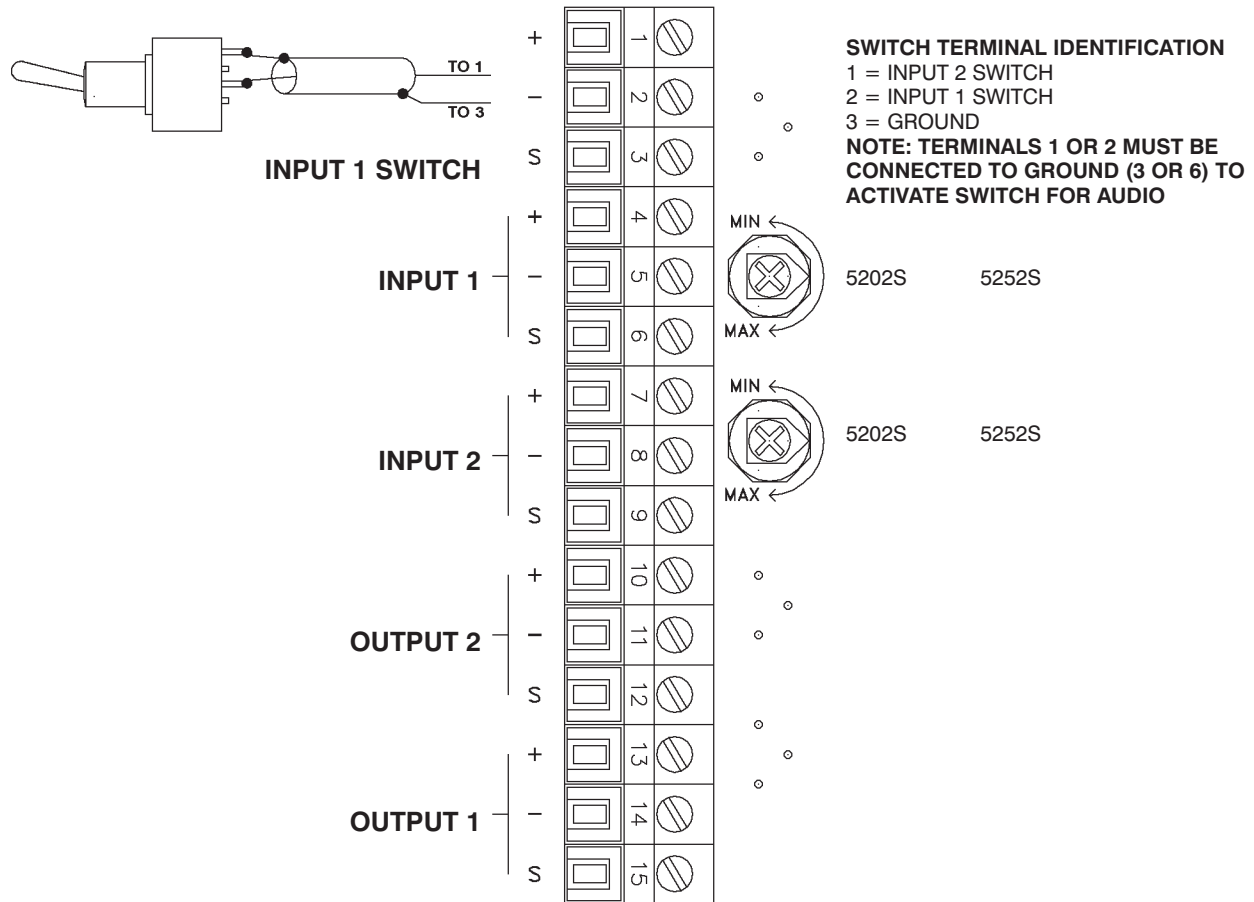


Figure 3 - 5032 Rear Panel Terminal Connections
5202S, 5252S

NOTES:

1. Input trim pots for microphone level inputs (5252S) are 200 Ω . All other trim pots are 10 k Ω
2. High sides of inputs or outputs are marked '+'. Low sides are marked '-'. Shield terminals are marked 'S', and are grounded on the mother board.
3. When connecting to the compression-type screw terminal connectors, use tinned stranded wire between 14 and 22 AWG. Be sure that all strands enter the terminal, so that there is no possibility of their shorting to an adjacent terminal. **DO NOT APPLY EXTRA TINNING!** Extra tinning can result in long term loosening of the connections, resulting in erratic operation and failure.

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SOLDER SIDE			COMPONENT SIDE		
PIN ¹	TRM ²	FUNCTION	PIN ¹	TRM ²	FUNCTION
1.		+15 VDC Regulated	2.		+15 VDC Regulated
3.		Not used	4.		Not used
5.		Not used	6.		Not used
7.		Not used	8.		Ground ³
9.	1	Input 1 Switch Control	10.	2	Input 2 Switch Control
11.		Input 1 Trimpot Counterclockwise End	12.		Input 1 Trimpot Wiper
13.		Input 1 Trimpot Clockwise End	14.		Ground ³
15.	4	Input 1 +	16.	5	Input 1 -
17.		Ground ³	18.		Ground ³
19.		Input 2 Trimpot Counterclockwise End	20.		Input 2 Trimpot Wiper
21.		Input 2 Trimpot Clockwise End	22.		Ground ³
23.	7	Input 2 +	24.	8	Input 2 -
25.		Ground ³	26.		Ground ³
27.		Not used	28.		Not used
29.		Not used	30.		Ground ³
31.	10	Output 2 +	32.	11	Output 2 -
33.		Ground ³	34.		Ground ³
35.		Not used	36.		Not used
37.		Not used	38.		Ground ³
39.	13	Output 1 +	40.	14	Output 1 -
41.		Phantom Powering Voltage +15 VDC or +48 VDC, Maximum	42.		Phantom Powering Voltage +15 VDC or +48 VDC, Maximum
43.		-15 VDC Regulated	44.		-15 VDC Regulated
NOTE 1 - PIN = Card edge connector terminal NOTE 2 - TRM = Rear panel screw terminal NOTE 3 - All ground connections are common on the card and on the 5032 motherboard ground plane.					
Table 1 - Card Edge Connector Pin Assignments					



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