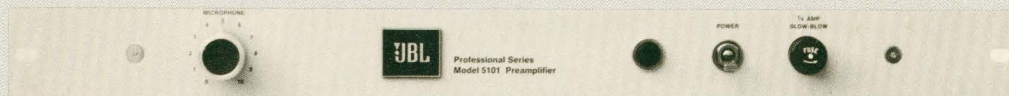


# Professional Series Model 5101 Preamplifier

**1 channel microphone preamplifier**  
**+10dBm output @ less than**  
**.25% THD**  
**Less than 1% IM distortion**  
**-122dBm equivalent input noise**  
**600 ohm output (balanced**  
**or unbalanced)**

*Professional audio consultants and engineers are invited to compare the JBL 5101 with comparable electronics on the basis of features, electronic measurements and extended listening tests.*



The JBL 5101 is a compact solid state microphone preamplifier with excellent signal to noise and low distortion characteristics. This unit is designed for professional sound engineering applications where a high degree performance is required. An AC power supply is built into the unit to facilitate installation.

The input is Hi Z unbalanced (1 megohm) with self-contained RFI filter. An XLR-type connector together with a three screw terminal strip are provided for making the microphone connection.

The output load impedance is rated at 600 ohms unbalanced, convertible to 600 ohms balanced by installing the accessory 5195 matching or bridging transformer in the socket provided. (A slight modification changes the output to 15K or 50K balanced.) When the 5195 transformer is used at the output, the 600 ohm unbalanced output becomes a 600 ohm unbalanced bridging output.





# Model 5101 - Preamplifier

## Architectural Specifications

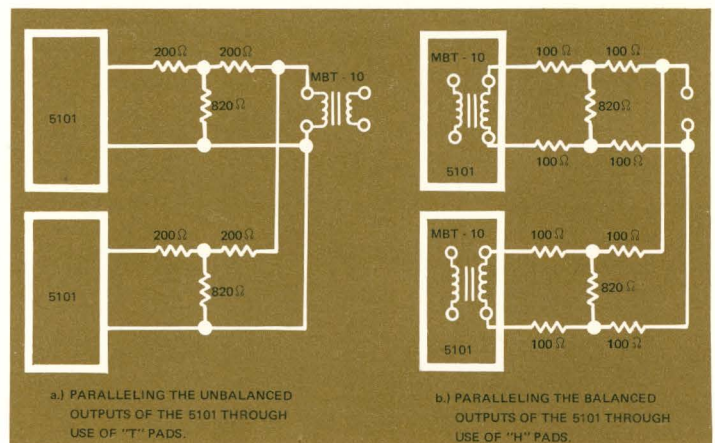
The preamplifier shall have an output of +10 dBm with less than .25% THD and a frequency response of 20-20,000 Hz  $\pm$ 1 dB. The microphone input shall be provided with a socket to accommodate a plug-in transformer to permit the use of high or low impedance microphones. An XLR-type connector, in addition to a three screw terminal strip, shall be provided for the connection of the input.

The preamplifier shall have an unbalanced 600 ohm output (+10dBm) on a phono jack and provide a socket for accommodating an output plug-in transformer. Three screw terminals shall be provided to accommodate the balanced output and ground connections when the output transformer is installed. With the output transformer installed, the unbalanced output shall automatically and without use of the accessories become an unbalanced output of +10dBm with a minimum recommended load impedance of 10K.

The preamplifier shall operate on 120V AC, 50/60 Hz power source. All the performance specifications shall be as listed under SPECIFICATIONS and shall be met or exceeded.

## Specifications

Gain	75dB max.
Output Level	+10dBm @ 600 ohms unbalanced +10dBm @ 600 ohms balanced w/plug-in 5195 +10dBm @ 15K ohms balanced w/plug-in 5195 +10dBm @ 50K ohms unbalanced w/plug-in 5195
Frequency Response	20-20,000 $\pm$ 1dB
THD (any frequency, any level)	Less than .25%
IM Distortion (any level)	Less than 1%
Output Regulation (full load to no load)	.5dB max.
Microphone Overloading	-30dBm for 5% THD
Noise	Equivalent input noise figure -122dBm Output noise -80dBm w/control counter-clockwise
Inputs	Unbalanced: 1 megohm Balanced: 600 ohms w/plug-in 5195
Controls	Gain Power on-off switch
Indicators	On-off neon pilot light
Power Supply	120V AC, 50/60 Hz, 10W, fused
Semiconductors	All silicon, 1 FET, 3 transistors, 2 diodes
Dimensions	Standard rack mount: 19" x 1 3/4" (1 panel space) x 5 1/2" deep
Finish	Non-glare baked enamel, light gray
Accessories	5195 Matching or bridging transformer, plug-in 5904 Converts microphone input to unbalanced 50K program input, plug-in 5901 Universal microphone matching transformer, plug-in
Shipping Weight	6 1/2 lbs
Warranty	Two years
Listing	Underwriters' Laboratories, Inc.



PPB-5101 9/70 Printed in U.S.A.

