

JBL Professional Series

**Model 6007/6008  
60-watt Power Amplifiers**



Professional Series  
Model 6007  
60-watt Power Amplifier



Professional Series  
Model 6008  
60-watt Power Amplifier

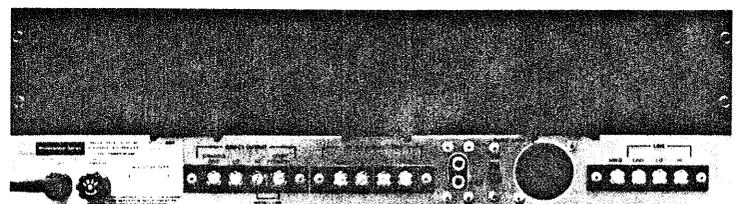
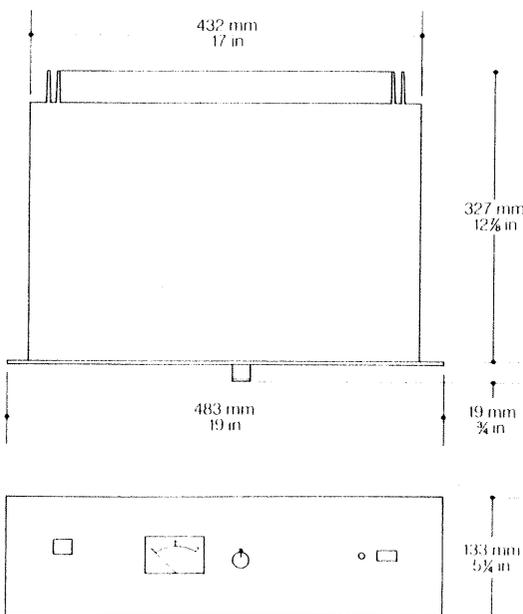


### Minimum Specifications

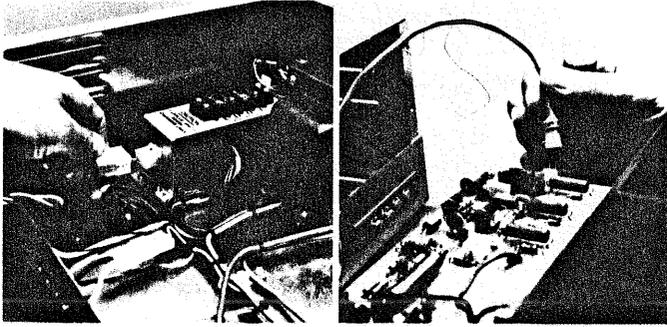
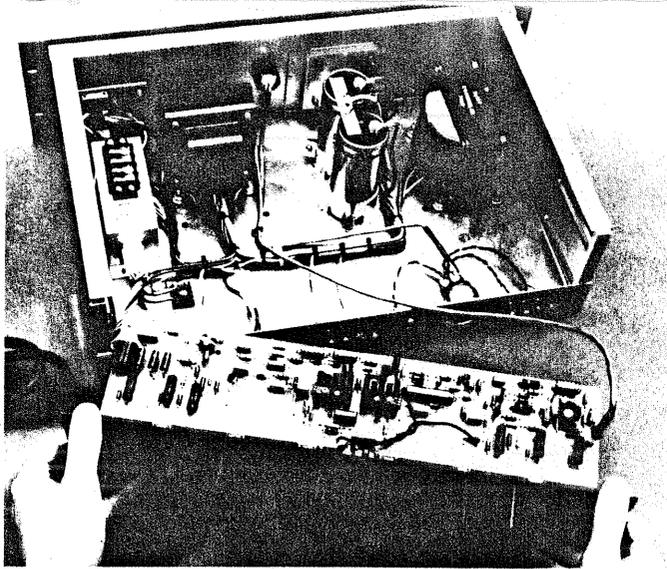
<b>Power Output, Continuous Sine Wave</b>	
Direct output, 4 Ω load	60 W
Transformer output (6007 only)	60 W
<b>Power Bandwidth</b>	
Direct output	20 Hz - 20 kHz, ±0.5 dB, less than 0.2% total harmonic distortion
Transformer output, 60 W (6007 only)	35 Hz - 20 kHz, ±1 dB, less than 0.2% total harmonic distortion
<b>Frequency Response, 1 W</b>	
Direct output	20 Hz - 20 kHz, ±0.5 dB
Transformer output (6007 only)	35 Hz - 20 kHz, ±1 dB
<b>Total Harmonic Distortion, rated power</b>	
Direct output	Less than 0.2%, 20 Hz - 20 kHz
Transformer output (6007 only)	Less than 0.2%, 35 Hz - 20 kHz
<b>Intermodulation Distortion, SMPTE standard</b>	
60 W	Less than 0.2%
10 W	Less than 0.2%
0.15 W	Less than 0.2%
<b>Load Impedance</b>	
Direct output	4 Ω
Transformer output (6007 only)	8 Ω, 16 Ω, or 83 Ω
<b>Load Voltage, 60 W</b>	
Direct output	15.5 V
Transformer output (6007 only)	
8-Ω tap	21.9 V
16-Ω tap	31 V
70.7-V tap	70.7 V
<b>Output Regulation</b>	
Direct output	2.5%
Transformer output (6007 only)	15%
<b>Power Gain</b>	72 dB

<b>Input Sensitivity</b>	
Unbalanced high impedance (50 kΩ)	0.4 V
Balanced 15 kΩ, with 5195 transformer	0.4 V
Balanced 600 Ω matching, with 5195 transformer	0.27 V
Balanced 600 Ω matching, with transformer, 14-dB step-up configuration *	0.07 V
<b>Signal-to-Noise-Ratio</b>	- 90 dB, ref. rated power, 20 Hz - 20 kHz equivalent bandwidth
<b>Low Cut Filter</b>	6 dB/octave below 250 Hz, switchable
<b>Front Panel Controls</b>	
	Power switch
	Level control
	Pilot lamp
	Level meter, dB
	120/240 V AC, 50/60 Hz
<b>Indicators</b>	
<b>Power Requirement</b>	
<b>Power Consumption</b>	
Load on direct output	
Quiescent	20 W
1/3 power	105 W
Full power	165 W
Load on transformer output	
Quiescent	20 W
1/3 power	105 W
Full power	170 W
<b>Fuse</b>	2 A, 3AG (120 V)
	1 A, 3AG (240 V)
<b>Maximum Ambient Operating Temperature</b>	60°C (140°F)
<b>Front Panel Finish</b>	Semi-gloss baked enamel, dark gray
<b>Mounting</b>	3 EIA standard rack spaces
<b>Dimensions</b>	
Front panel	483 mm x 133 mm 19 in x 5 1/4 in
Depth of controls	19 mm 3/4 in
Depth behind panel	327 mm 12 7/8 in
<b>Net Weight</b>	
6007	12.7 kg 28 lb
6008	10.3 kg 22 3/4 lb
<b>Shipping Weight</b>	
6007	15.8 kg 34 3/4 lb
6008	13.5 kg 29 3/4 lb
<b>Accessory</b>	JBL Model 5195 Matching/Bridging Transformer

\*Requires internal modification.



Rear View of Unit



**Less than 0.2% THD**  
**Wide bandwidth**  
**Modular construction**

The JBL Models 6007 and 6008 Power Amplifiers set new standards of performance, reliability, and serviceability in commercial power amplification.

The wide bandwidth capability of these models, combined with their exceptional square wave response, ensures accurate reproduction of complex musical waveforms with considerably less distortion than most comparable commercial amplifiers. Modular construction affords ease of servicing heretofore unknown. The entire amplifier circuit, except for the power supply and output transformer, is mounted on a single circuit board assembly, which can be removed from the rear of the unit with the main frame still mounted in the rack. The PC assembly can remain connected to the main frame after removal, for troubleshooting; or, it can be disconnected for bench service simply by separating two plugs.

Conservative circuit design ensures reliability. The series-parallel power circuit configuration ensures the optimum safe operating area for the output devices, and an advanced protection circuit senses the true power dissipation of the output devices under any conditions of load impedance and line voltage. Cooling is accomplished by convection over a generous heat sink area. No audible transients are produced by turning the unit off or on.

The 6007 provides a direct output terminal for a 4  $\Omega$  load; it also incorporates a high quality output transformer for full power bandwidth operation into 8  $\Omega$  or 16  $\Omega$  loads, or for driving 70.7 V line. The 6008, identical except for the absence of the output transformer, is supplied with a direct output only. An output transformer can be added easily at any time. Either amplifier will accommodate a 50 k $\Omega$  unbalanced line input by means of a terminal strip or a pair of phono jacks connected in parallel; the second phono jack allows bussing the input signal to additional amplifiers, or mixing of signals. For a balanced 15 k $\Omega$  input, an optional input transformer plugs into a socket on the rear panel, and no wiring, additional clearance, or other modification is necessary.

The 6007 and 6008 are adaptable for 120 V or 240 V operation.

**Architectural Specifications**

The amplifier shall be single-channel with an input gain control and an output level meter on the front panel. The amplifier shall accommodate an unbalanced high impedance input, or a balanced low impedance input with an optional plug-in accessory transformer.

The amplifier shall be capable of delivering a minimum of 60 W, continuous sine wave, 20 Hz - 20 kHz, into a 4  $\Omega$  load. (6007: The amplifier shall incorporate an output transformer allowing full-power operation, 35 Hz - 20 kHz, into an 8  $\Omega$  or 16  $\Omega$  load or 70.7 V line, as well as the direct output terminal for a 4  $\Omega$  load.) (6008: No output transformer and only the direct output terminal shall be provided; it shall be possible to install an output transformer easily at any time.)

The amplifier shall have less than 0.2% THD, 20 Hz - 20 kHz, at 60 W, direct output. (6007: The amplifier shall have less than 0.2% THD, 35 Hz - 20 kHz, at 60 W, transformer output.) Frequency response shall be  $\pm 0.5$  dB, 20 Hz - 20 kHz, at 1 W. (6007: Frequency response shall be  $\pm 1$  dB, 35 Hz - 20 kHz, at 1 watt, transformer output.)

Construction of the amplifier shall be modular. The entire amplifier circuit, except for the power supply (6007: and output transformer) shall be mounted on a single circuit board attached to the heat sink, which assembly shall be removable from the rear of the unit with the main frame still mounted in a rack. Cables connecting the circuit board to the main frame shall be of length sufficient to allow removal of the board without disconnecting, and shall disconnect easily with the use of two plugs.

The amplifier shall occupy three standard EIA rack spaces and shall operate on 120/240 V AC, 50/60 Hz.

The amplifier shall be the JBL Model 6007 (6008).