

Professional Series

Model 6010

Power Amplifier

100 watts @ less than 1.0%
THD 40-12 kHz

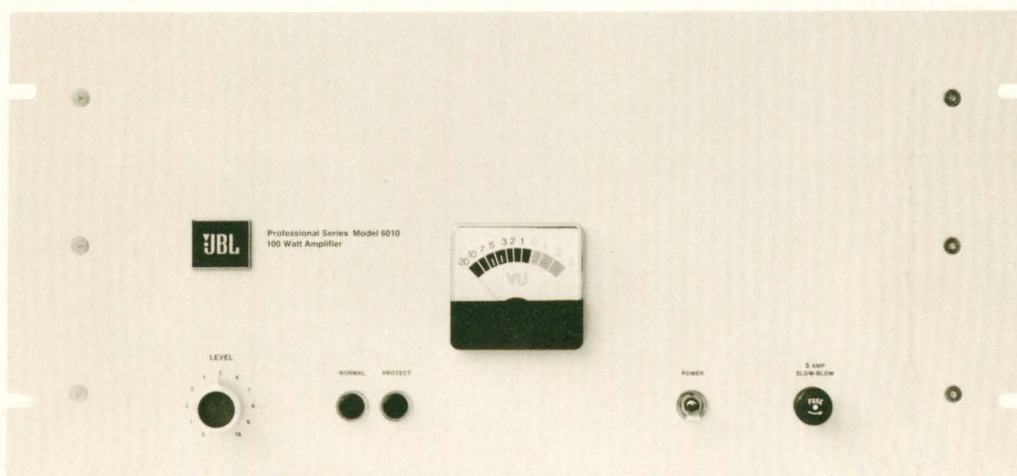
150 watts @ less than 4% THD

VU meter standard

Forced air cooled

Superior signal to noise characteristics

Professional audio consultants and engineers are invited to compare the JBL 6010 with comparable electronics on the basis of features, electronic measurements and extended listening tests.



The JBL 6010 is a highly reliable, conservatively rated amplifier, designed for professional sound engineering applications where a high degree of performance is required.

The circuitry has been carefully designed to reduce the possibility of failure within the specified environmental and electrical conditions. A protective circuit is utilized in this amplifier which makes it virtually impossible to damage it under any conditions of overload, including shorted or grossly mismatched load, inductive load at low frequencies, capacitive load at high frequencies, excessive input signal, white noise or installation errors.

The JBL 6010 can be overdriven by at least ten times normal input voltage, from 40-15 kHz, and eventually produces square waves increasing in RMS value up to about 160W at which point the output actually begins to decrease.

The DC fuse is intended as a protective device for the power supply in the event of output stage malfunction. It is not intended to protect the output transistors which are guarded by the special circuitry provided. As an indication of high-frequency stability, the JBL 6010 draws only 30% more power from the AC line at 15 kHz, 100W, than at 1 kHz for at least one hour without malfunction or entering the "protect" mode.

In the event of fan failure, the thermal switch will activate if the heat sink temperature exceeds 200°F. The hum and noise level is extremely low — at least 100 dB below maximum output.

The 6010 amplifier is designed for maximum flexibility in varying input and output arrangements. A standard unbalanced 50K input is provided which can be converted to balanced line bridging or matching with the installation of the accessory 5195 transformer. A low cut filter switch reduces the possibility of damaging horns. All the power outputs are balanced and the bridging output unbalanced.

The excellent engineering of this unit is accompanied by an equally excellent layout with serviceability in mind at all times. All components are accessible and easily replaced with particular emphasis on output and driver device removal and installation.

Model 6010 — Power Amplifier

Architectural Specifications

The amplifier shall be capable of delivering an output of 100W RMS with less than 1.0% THD, 50-12,000 Hz, 35-20,000 Hz -2dB, 150W RMS @ 1000 Hz with less than 4% THD.

The high impedance program input shall be provided with a socket to accommodate a balanced line with isolation. Matching and bridging inputs shall be available. Screw type terminal board shall be provided for the balanced line inputs as well as for the high impedance unbalanced input. In addition, a phono plug shall be provided for the high impedance input. A low frequency filter switch shall be provided.

The amplifier shall have balanced 8 ohms, 25 volt and 70.7 volt outputs on a screw type terminal board listed by Underwriters' Laboratories, Inc. for class 2 wiring.

The amplifier shall be equipped with a protective circuit which will prevent damage due to overload. A VU meter shall be standard equipment.

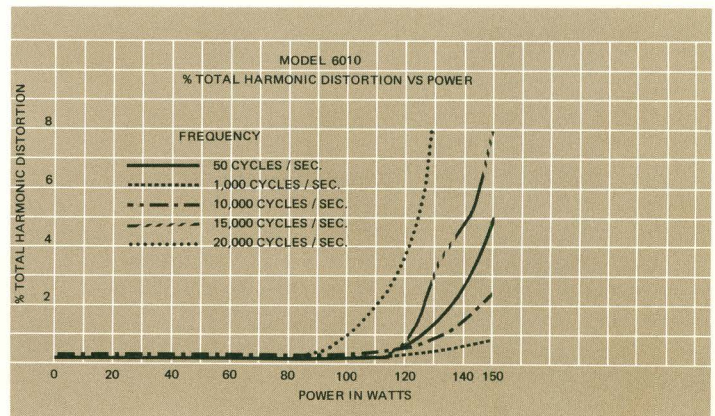
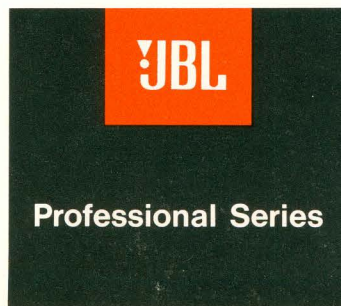
The amplifier shall operate on 120V AC, 50/60 Hz power source.

The performance specifications shall be as listed under SPECIFICATIONS and shall be met or exceeded.

The amplifier shall be listed by the Underwriters' Laboratories, Inc.

Specifications

Gain	Power: 69dB Bridging: 52dB (unbalanced 50K ohms) 55dB (balanced 15K ohms w/5195)
Power Output	Matching: 61dB (balanced 600 ohms w/5195) 150W RMS @ less than 4% THD at 1000 Hz 100W RMS @ less than 1.0% THD at 40-12,000 Hz 35-20,000 Hz -2dB
Frequency Response	50-15,000 \pm 1dB 20-20,000 \pm 2dB (measured at 1W and 10W)
Low Frequency	-8dB @ 100 Hz, -3dB @ 240 Hz
IM Distortion (SMPTE)	Less than 2% at 100W Less than 1% at 10W Less than 1% at 150W
Output Regulation	Less than 2dB
S/N Ratio	-85dB min. below 100W -66dB min. below 1W
Input Program Line	Unbalanced Hi Z (50K ohms) (.8 volts) Balanced 600 ohms matching w/plug-in 5195 transformer Balanced bridging 15K w/plug-in 5195 transformer
Outputs	Balanced 8 ohms Balanced 25 volts (6.25 ohms) Balanced 70.7 volts (50 ohms) Class 2 wiring on all outlets
Controls	Program Power on-off switch
Indicators	Green — power on, safe operation Red — amplifier in protected mode VU meter — power level
Power Supply	120V AC, 50/60 Hz, 225W, fused
Operating Temperature	Full performance to 65°C (150°F)
Dimensions	Standard rack mount: 19" x 8 3/4" (5 panel spaces) x 10" deep
Finish	Non-glare baked enamel, light gray
Special Features	Special overload protection circuit Forced air cooling Auxiliary AC outlet
Accessories	5195 Matching/Bridging transformer, plug-in
Shipping Weight	46 1/2 lbs
Warranty	Two years
Listing	Underwriters' Laboratories, Inc.



PPB-6010 9/70 Printed in U.S.A.