

**PULTEC®**  
MICROPHONE AND BOOSTER  
**AMPLIFIER**

**MODEL MB - 1**

The PULTEC Model MB - 1 is a three stage, high gain, low noise pre-amplifier or booster amplifier designed for use in radio and television broadcast systems, recording studios, sound systems and laboratories.

The maximum gain of 48 db is continuously adjustable to a minimum of 28 db by connecting the appropriate resistor across a pair of terminals in the feedback circuit. At maximum gain there is 22 db of loop negative feedback. At minimum gain the negative feedback is 42 db. The instruction book includes a chart showing gain versus resistor value.

The input transformer is designed so that its secondary can be operated loaded or unloaded. In the unloaded condition, the transformer presents substantially an open circuit at its input terminals. This is desirable with certain types of microphones, because it increases the signal level at the input terminals of the amplifier, thereby improving the signal to noise ratio.

Tubes are shock mounted to reduce microphonics. Workmanship is of the highest quality, and all components are operated well below their normal ratings to assure long trouble free service.



- **Gain 48 db — Adjustable By Feedback**
- **Noise — 120 dbm Equivalent Input**
- **Distortion 0.5% at +20 dbm**
- **20 cps to 20 kcs  $\pm 0.5$  db**
- **Power Supply Self Contained**
- **Rack Mount 3½ x 19 Inch Panel**

**Specifications**

**TRANSFORMERS:**

Peerless audio and Chicago power.

**TUBES:**

1 each 12AX7, 12AU7, 6X4 included.

**POWER REQUIRED:**

117 Volts, 50/60 cps, 25 watts.

**DIMENSIONS:**

Standard Rack Panel 3½ x 19 inches.  
Depth behind panel 7¾ inches.

**PANEL FINISH:**

Pultec blue-gray baked enamel. Engraved.

**NET WEIGHT:**

10 Pounds.

**GAIN:**

48 db from 600 ohm input to 600 ohm output. Gain is continuously adjustable to 28 db by connecting proper resistor in feedback circuit. Additional 6 db of gain with input transformer unloaded for microphone use.

**OUTPUT LEVEL:**

+20 dbm into 600 ohms with less than 0.5% total harmonic distortion from 50 cps to 20 kcs, and less than 1% at 30 cps.

**OUTPUT NOISE:**

Equivalent to an input noise of -120 dbm or lower. Noise at output with 28 db gain is -92 dbm. Noise at output with 48 db gain is -72 dbm.

**FREQUENCY RESPONSE:**

20 cps to 20 kcs  $\left\{ \begin{array}{l} \frac{1}{2} \text{db} \text{ — input transformer loaded.} \\ 1 \text{ db — input transformer unloaded.} \end{array} \right.$

**INPUT TRANSFORMER:**

50/150/300/600 ohms. Center tap available on 150 and 600 ohms. 90 db of magnetic shielding. Primary balanced to attenuate longitudinal currents more than 50 db. Electrostatic Shield.

**OUTPUT TRANSFORMER:**

For use into loads of 50/150/300/600 ohms.

**PULSE TECHNIQUES, INC.**

1411 PALISADE AVE., WEST ENGLEWOOD, NEW JERSEY

TEANECK 7-2575