

# MPR-450 Power Amplifier



The Miles Technology MPR-450 proves that all amplifiers are not created equal. Innovation and attention to detail make this unique amplifier highly reliable and sonically accurate.

The MPR-450 is perfectly suited for A/V and multimedia systems, distributed sound, professional surround systems, commercial theater surround, installed home theater, and other multichannel applications where accurate sound, robust performance, and high reliability are desired. It is designed and built for continuous, demanding use.

Six independent channels deliver in excess of 450 watts rms with audiophile fidelity. Each pair is bridgeable with the flip of a switch for higher power with three, four, or five channels.

Separate gain controls for each channel of the MPR-450 allow precise level adjustment of each output. They are located on the back panel to prevent unauthorized changes.

# MPR-450 Features

- Six Channels in Two Rack Spaces
- Excellent Sound Quality
- Bridgeable Outputs in Three Pairs
- Compact and Reliable Design
- Automatic Forced-Air Cooling with Idle Option
- Available with Various Input and Output Connectors

The MPR-450's straight-path design is the essence of simplicity. It yields clean, accurate, and dynamic sound.

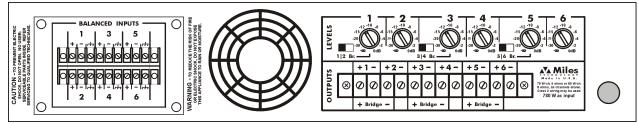
A heavy-duty toroidal power transformer provides high power and high efficiency. The power supply automatically distributes extra power to channels where it's most needed. High-current supply busing provides rock-solid power at each output stage. The discrete circuit topology with high-power metal output transistors ensures maximum reliability and sonic integrity.

Large internal heatsinks, direct-contact transistor mounting, and active SOA protection make the MPR-450 thermally efficient and impervious to short circuits. With prolonged operation at high power, the variablespeed, super-long-life fan maintains cool operation. An internal jumper setting determines the normal status of the fan—either slow or off.

Front-panel indicators show signal presence and clip for each channel, as well as power status and hightemperature operation.

The MPR-450 is designed for convenient installation in a wide range of applications. It is available with various types of input and output connectors.

Made with pride in the U.S.A., the Miles Technology MPR-450 is backed with our comprehensive three-year warranty.



MPR-450SA Back Panel

# **MPR-450** Specifications

**Dynamic Output Power, 8 ohms:** 6 channels - 100 W each

#### **Continuous Output Power, 8 ohms:**

1 channel - 90 W 2 channels - 75 W 6 channels - 60 W each

#### **Continuous Output Power, 4 ohms:**

1 channel - 130 W 6 channels - 75 W each

#### Cont. Output Power, 8 ohms Bridged:

8 ohms bridged 1 pair - 250 W 3 pairs - 150 W each

## Load Impedance

4 ohms minimum. **Frequency Response** 

20 Hz to 20 kHz, +0/-1 dB

#### THD + Noise

>0.05%, 1 kHz, at rated output >0.15%, 20 Hz to 20 kHz, at rated output

#### Signal To Noise Ratio

20 Hz to 20 kHz, unweighted: >100 dB

#### Voltage Gain

32 dB (RCA input), 29 dB (other inputs)

### Input Sensitivity

0.55 V (RCA in./8 Ω), 0.78V (others/8 Ω)

#### AC Power

120 V or 240 V, 50/60 Hz. Idle power: 36 W Typical use max. power: 780 W

#### **Cooling System**

Forced air on demand, intake from front vents. Long-life (rated over 20 years operation at full speed), low-noise fan.

Temperature sensing at each heatsink:

Normal: Fan idles at low speed. By removing an internal shunt (jumper), the fan will be off during normal operation.

Warm: Fan is triggered to high speed by high-level audio output at any channel. Hot Heatsink: Fan operates at full speed, and yellow temperature indicator lights, until heatsinks return to warm threshold.

#### Inputs:

MPR-450R: Gold RCA input connectors, max. level +15 dBu, input imp. 10K ohms.

MPR-450S: Balanced screw terminal connections, max. level +21 dBu, input impedance 15K ohms differential. MPR-450T: Balanced removable terminal block connections, max, level +21 dBu, input impedance 22K ohms differential.

MPR-450X: Balanced XLR connections, max. level +21 dBu, input impedance 22K ohms differential.

#### Outputs:

Output Connectors: A suffix: 6-32 screw-terminals B suffix: heavy-duty binding posts/double banana jacks which accommodate up to 10-gauge wire. Output Impedance: <30 milliohms

#### Controls

Power: Rocker switch on the front panel.

Gain Controls: Controls on the rear panel allow the gain of each channel to be set independently.

Bridging: Three switches on the rear panel allow each pair of channels to be bridged for greater output voltage/power.

#### **Front-Panel Indicators**

Power: Blue light indicates that the unit is powered.

Signal Presence: Green light for each channel indicates output signal.

Peak: Red light (each channel) indicates the onset of clipping (moderate intensity) and audible distortion (bright intensity).

Temperature: Yellow light indicates maximum operation of cooling system.

#### **Dimensions/Weight**

3.5 in. x 19 in. x 12.7 in./ 8.9 cm x 48.3 cm x 32.3 cm 31 lbs/14 kg shipping weight

#### Warranty:

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Three years from date of purchase. Contact Miles Technology for details.

Note: 0 dBu = 0.775 V rms

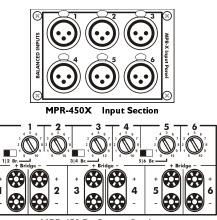
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### MPR-450 Features / Advantages

- Six Amplifier Channels with Individual Gain Controls
- Compact Design
- Signal and Clip Indicator Lights
- Bridgeable in Three Pairs
- Various Input Connector Options
- Heavy-Duty Output Connectors
- Silent Forced-Air Cooling
- **Dynamic Power Sharing**
- **Fully-Protected Circuitry**
- **Complete Load Protection**
- **Discrete Design**
- Low-Field Toroidal Power Transformer
- Each Unit Stringently Tested
- Reliable for 24/7 Operation
- Solid Warranty

#### Models:

#### MPR-450RA, MPR-450SA, MPR-450TA, MPR-450XA, MPR-450RB, MPR-450SB, MPR-450TB, MPR-450XB



MPR-450 B Output Section

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