

Bring *NEW LIFE* into your portable audio!

- 12V DC Powered
- Phantom Power
- Soft Turn-on
- Discrete Power Amp
- Peak Indicators
- Input Noise Filter
- Multiple Protection Circuits
- 3-Band "Musical" EQ
- INSERT and LINKing Options
- Lightweight Construction
- Fan Cooled
- 2-Year Warranty

New Life Electronics presents the PM202, a two-channel, 200-watt, mono, DC-Powered Mixer. The PM202 packs the performance and durability of a low-noise, high-gain mixer, along with a fully discrete power amplifier, into a lightweight aluminum chassis. The compact design and performance make it ideal for outdoor sound reinforcement such as concerts, weddings, marching bands, parades, and more.

From input to output, we've engineered the PM202 for hassle-free operation. Large clamp terminals make good contact with the battery source through a 14-foot red/black cable. Power input filters take out any alternator/distributor noise when connected to a running vehicle. Two types of inputs (per channel) allow flexibility of input sources, from microphones to CD players. The XLR inputs provide phantom power, so you can use virtually any type of microphone. The separate GAIN and VOLUME controls give plenty of gain and headroom for your inputs. The three-band EQualization controls allow tailoring the input sounds to your liking, without boosting energy-wasting sub-audible frequencies.

The PM202 is the perfect choice for parades, marching bands, boating events, rallies, missions, outdoor concerts, crowd control, and other activities.



NLE

Two inputs not enough? The LINK connector can be used to connect up to two additional PM202s together, for four more inputs and two more outputs. LINK can also be connected to a sub-mixer or other controlled line-level source. Need an output for recording to tape? LINK doubles as an output too!

For even more flexibility, the PM202 can connect to an external equalizer and/or effects unit via the INSERT connector. This connector can also be used to drive the power amplifier section directly, bypassing the mixer section.

Protection circuits on all inputs and outputs keep failures outside the PM202. All NLE audio products carry a full 2-year warranty covering parts and labor.

PM-202 DC-POWERED MIXER

Specifications

POWER AMPLIFIER SECTION

Power Rating (± 1 dB, $<0.15\%$ THD, 20Hz–20kHz, Average

Continuous Power):

4 ohms: 200W RMS

8 ohms: 150W RMS

SCTB Power (1kHz single cycle burst, $<0.5\%$ THD):

4 ohms: 400W RMS

8 ohms: 225W RMS

Total Harmonic Distortion (1kHz, $\frac{1}{2}$ rated power):

$<0.1\%$, INSERT to SPEAKER

Inter-Modulation Distortion ($\frac{1}{2}$ rated power):

$<0.1\%$, INSERT to SPEAKER

Damping Factor (20Hz – 20kHz into 8 ohms): >100

Slew Rate: $>5V/\mu s$

Frequency Response (20Hz – 20kHz): $+0, -1$ dB

Output Hum & Noise (20Hz – 20kHz, A weighted): 100dB below full output

Output Protection: Instantaneous current limiting for short-circuit protection.

Load Protection: Turn-on delay prevents load from transients. Internal fault-detection circuit removes power under excessive current or failure conditions.

Cooling: Fan cooled

Indicators: Both channel CLIP lights illuminate when amplifier is clipping.

Connectors:

Input: $\frac{1}{4}$ " TRS phone jack used as INSERT between mixer section and amplifier. Tip = Return.

Output: Two $\frac{1}{4}$ " phone jacks

Voltage Gain (INSERT to SPEAKER OUT): $+32$ dB

(NOTE: all power and distortion measurements made with 13.8V power source.)

MIXER SECTION

Frequency Response (20Hz – 20kHz): $+1, -3$ dB

Total Harmonic Distortion: $<0.15\%$ at full output

Inter-Modulation Distortion: $<0.15\%$ at full output

Equivalent Input Noise (150 ohm source, 20Hz – 20kHz): -129 dB

Channel Equalization:

Low: ± 12 dB at 80Hz, peaking

Mid: ± 12 dB at 2kHz, peaking

High: ± 12 dB at 14kHz, shelving

Phantom Power: $+38$ V applied to all microphone inputs. Gradual power-up and down.

Indicators: Green LED indicates POWER. Red LED indicates channel is 3dB (or less) from clip point.

Input Connectors:

Microphone: Two female XLRs, balanced, 50–600 ohms

Line Level: Two $\frac{1}{4}$ " phone jacks, unbalanced, <600 ohms

Maximum Input Signal Level:

Microphone: $+11$ dB (2.74V)

Line Level: $+29$ dB (21.8V)

Maximum Voltage Gain:

Microphone: $+69$ dB (GAIN and VOLUME set full CW)

Line Level: $+49$ dB (GAIN and VOLUME set full CW)

Microphone to Speaker: $+101$ dB (GAIN and VOLUME set full CW)

Output Connectors:

Link: $\frac{1}{4}$ " phone jack used to link with other PM202 mixers, as third input, or as tape output.

Insert: $\frac{1}{4}$ " phone jack used to patch in an equalizer or effects device.

Residual Output Noise (both channels at unity):

-94 dB (A Weighted), GAINS at minimum

-80 dB (A Weighted), GAINS at maximum

(NOTES: 0dB = .775V. Unless otherwise noted, all measurements taken with VOLUME set to nominal, and EQ set flat.)

GENERAL SPECIFICATIONS

Power Requirements:

Input Voltage: Nominal 12V, 10V–15V range.

Maximum Current: 35 Amps (200 watts continuous into 4 ohms)

Idle Current: 1 Amp nominal

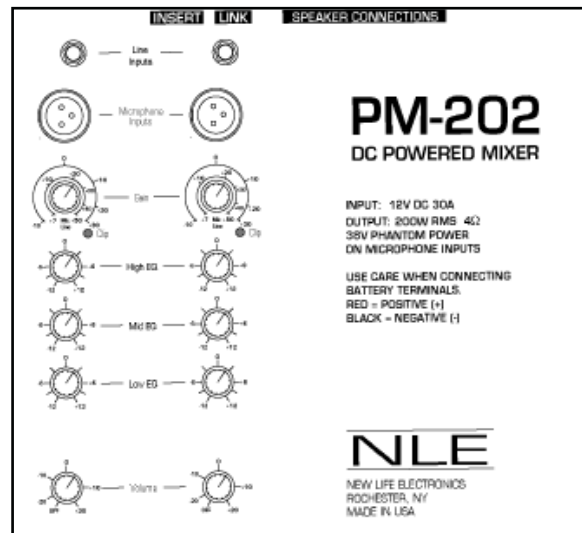
Power Connector: 14-foot fused 12 AWG cable with clamp terminals.

30-Amp ATC type in-line fuse.

Protection: Fused power cable, reverse polarity protection, under-voltage protection.

Dimensions: 10.7" wide x 3.8" high x 10.5" deep.

Shipping Weight: 8 lbs (3.6 kg)



Technical Notes

The PM202 uses an efficient DC-DC converter circuit to convert the 12-volt input into the voltages necessary for the mixer and power amplifier sections. In fact, the no-load rail voltages are set higher than normal to give extra power for musical peaks (as seen in the SCTB power rating). The result is less distortion at higher output.

Careful notice of the distortion specifications will reveal that they are lower at the rated output than typical commercial-powered mixers of the same power rating. Even these numbers are conservative, as we manufacture each PM202 to meet *and exceed* specifications.

Contact us for a full line of Professional Audio products.

DEALER IMPRINT

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