Description
The MP-1 from Sound Devices is a portable, battery-powered microphone preamplifier with phantom power. Designed for high-definition field production, this studio-quality mic pre is ideal for critical radio, television and film-production applications. With its rugged mechanical and electrical construction, compact size and high-quality components, the MP-1 is extremely durable and easy to use. This highly reliable mic preamp will provide years of superb audio performance under the most punishing field conditions.

Features
Audio performance
• Maximum of 66 dB of gain, adjustable in eleven steps for accurate, repeatable gain settings.
• Dynamic range exceeding 120 dB.
• 20 Hz to 50 kHz audio bandwidth.
• High immunity to RF interference due to transformers, RF filtering, and all-metal construction.
• High current line output driver capable of driving very long cable runs.

Transformer balanced
• Premium Lundahl input transformer provides superior sonic quality and freedom from interference problems.
• Custom-designed output transformer provides line driving ability with freedom from interference problems.

Limiter
• Extended range peak limiter via dual opto-isolators makes unit virtually “unclippable”.

Battery power
• Internal battery power (two AA) for convenient, low cost power.
• Battery life greater than 24 hours (phantom power off).

Durable Mechanical Construction
• High strength extruded aluminum chassis with protective metal end rails to withstand punishing field conditions.
• Easy access battery compartment for quick battery changes.

Phantom power
• Selectable 48-volt and 12-volt phantom power.

High pass filter
• Two selectable corner frequencies, 80 and 160 Hz, 6 dB per octave.
Specifications

Gain: 
0 dB to 66 dB input to output, switch selectable

Gain Accuracy: 
+0.6, -0.1 dB with reference to front panel gain markings 
(150 ohm source, 100 k ohm load impedances)

Frequency Response:
20 Hz to 22 kHz, +0.1, -0.5 dB, 1 dB at 50 kHz 
(relative to 1 kHz level, 150 ohm source impedance)

Equivalent Input Noise:
-126 dBu (-128 dBV) maximum (150 ohm source, no weighting, 
22 - 22 kHz bandwidth, gain setting 36 dB or greater)

Output Clipping Level:
+22 dBu minimum with 100 k ohm load +20 dBu minimum 
with 600 ohm load

Input Clipping Level: 
+4 dBu minimum at the 0 or +18 dB gain setting

Dynamic Range: 
122 dB minimum at the +18 dB gain setting

THD + Noise: 0.05% Maximum (from 50 Hz to 22 kHz @ +4 dBu 
output level (22 - 22 kHz bandwidth, +46 dB gain setting)

Common Mode Rejection Ratio: 
100 dB minimum at 80 Hz, 
60 dB minimum at 10 kHz

Input: 
Transformer-balanced, 2000 ohm input impedance

Output: 
Transformer-balanced, 130 ohm output impedance

Low-Cut: 
80 Hz or 160 Hz (switch selectable), 6 dB per octave

Phantom Power: 
12V or 48V (switch selectable) per DIN 45 596 specification

Limiter: 
Limits to +17 dBu output level, 
10:1 limiting ratio, 
5 mS attack time constant, 
100 mS release time constant, 
Amber/Red LED indicates limiting/clipping

Internal Voltage Rails: 
+15V and -15V, regulated

Power: 
Two AA batteries, 24-hour life typical @ +4 dBu signal into 600 
ohms, no phantom power

Power LED: 
Green indicates power and good battery, 
Red indicates power and low battery, 
LED turns red when approximately 4 hours remain

Polarity: 
Mic input to line output is non-inverting

Operating Temperature Range: 
0 to 70 degrees C 
32 to 150 degrees F

Dimensions: 
43 mm x 94 mm x 140 mm (h x w x d) 
(1.7” x 3.7” x 5.5”)

Weight (unit only): 
0.56 kg 
1.24 lbs.

Certification: 
Meets FCC Part 15 Class B, Eligible to bear CE mark

Chassis: 
Powder coated aluminum extrusion and panels, steel protective brackets, stainless steel screws

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