

# MP-1 Microphone Preamplifier



## 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

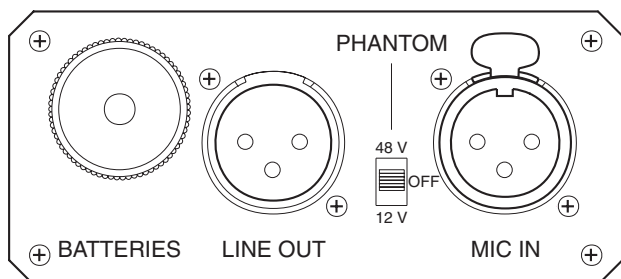
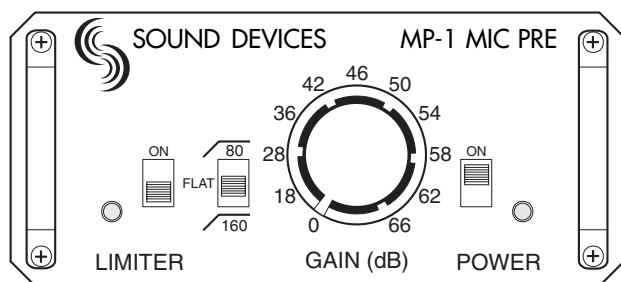
- High strength extruded aluminum chassis with protective metal end rails to withstand punishing field conditions.
- Easy access battery compartment for quick battery changes.

### 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, 100k 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 100k 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 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



# SOUND DEVICES

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