

# IBF-Akustik e.K.

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## Acoustic Measurement Kit MP-B-**USB**



MP-B-USB\_datasheet\_r00.sxw

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### USB/SoundCard + Preamp MP-B USB Features

- Max. 40dB stepped gain + 1 variable gain setting
- bias supply for calibrated EMM-8cal
- input RF filter
- clipping indicator (bipolar detection)
- power good / low battery status LED
- single 9V battery operation
- mic and amp matching
- gold plated RCA (Cinch) input and output
- connector for plug in power supply
- **built-in USB adapter** (plug and play, no drivers needed – Microsoft Windows 2000 as well as Windows XP come with the necessary drivers)

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### EMM- 8 Microphone Features

- dimension (inches) 12 3/8 X 5/16 pickup dia
- dimension (mm) 314 X 8 pickup dia
- Up to 120 dB SPL acoustic SPL
- Individually calibrated with Bruel & Kjaer model B & K 4133 1/2 inch freefield mic.
- RF Phono Connector
- S/N > 58 dB
- Sensitivity: 6 mV per Pa +/- 4 dB (1 Khz / 2.5 V Biase)

### Preamplifier Specification

**Number of preamplifier channels** - 1 Mic . Left sound card channel internally looped for reference

**Connectors** - RF phono jacks for both inputs and outputs

**Mic Input** - unbalanced, capacitor coupled,

**Mic Output** - unbalanced, capacitor coupled, short circuit protected, output level without clipping 0,775Vrms

**USB Input** - internally connected with microphone output.

**USB Output** - Buffered right channel analog output from built-in USB soundcard adapter

**DAC section** - 32 – 44.1 – 48kHz / A-weighted S/N typ 96dB @1kHz

**ADC section** - 8 – 11.025 – 16 – 22.05 – 32 – 44.1 – 48kHz / A-weighted S/N typ 89dB @1kHz

**Gain Range** - up to 40 dB input to output (phase error <20deg)

**Frequency Response** - 20 Hz ... 20 kHz, +/-0.4 dB (relative to 1 kHz)

**Max. Output Level** before clipping – typ. 3Vpp

**Clipping indicator LED** - Red indicates clipping short

attack, long release time. Bipolar detection (typ. 2.5Vpp)  
**THD 0.02% typical, THD 0.04% max, THD & Noise < 0.06% typical**

**Bias Supply** - typ. 4V coupled via 6.8kOhm resistor (low-pass-filtered for better noise performance)

**Power** - 1x 9V batterie or plug-in power supply connector or 5V-USB power

**Power LED** - Green indicates power ON, flashing LED indicates low batt. (Vbatt < 5.5V)

**Polarity** - Mic input to Mic output is non-inverting.

**Operating Temperature Range**

0 to 40 degrees Celsius (32 to 104 degrees F)

**Power up delay** – approx. 10 sec

**Dimensions**

34 mm x 68 mm x 120 mm (h x w x d) (1 11/32" x 2 11/16" x 4 23/32")

**Weight (unit only)**

120 grams (4 1/8 oz.) *battery removed*

**Certification**

*CE Conformity statement, RoHS category 9 compliant*

