

## OVERVIEW

Models MX183BP, MX184BP, and MX185BP are wired lavalier electret condenser microphones designed for speech and vocal pickup. They can be clipped to neckties, lapels, and other articles of clothing. Interchangeable cartridges make it possible to easily recon-

## FEATURES

- Wide dynamic range and frequency response for accurate sound reproduction across the audio spectrum
- Interchangeable cartridges that provide an optimal choice for each application
- Rotatable tie-clip that pivots in 90° increments for placement flexibility
- Supplied snap-fit foam windscreen that controls breath noise and

## SPECIFICATIONS

These specifications apply only to MX180 series microphones when used with the supplied MX1BP preamplifier.

### Type

Condenser (electret bias)

### Frequency Response (Figure 1)

50 to 17,000 Hz

### Polar Pattern (Figure 2)

MX183BP: Omnidirectional

MX184BP: Supercardioid

MX185BP: Cardioid

### Polarity

Positive sound pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output XLR connector.

### Environmental Conditions

Operating Temperature Range: -18° to 57° C (0° to 135° F)

Storage Temperature Range: -29° to 74° C (-20° to 165° F)

### Microphone Cable

Shielded 1.2 m (4 ft.) cable terminated with a 4-pin female mini connector (TA4F).

### Output Impedance (at 1kHz)

EIA rated at 150 Ω (115 Ω actual)

### Open Circuit Sensitivity (at 1 kHz, ref. 1V/pascal\*)

MX183BP: -46.5 dB (4.7 mV)

MX184BP: -52.5 dB (2.4 mV)

MX185BP: -54 dB (2.0 mV)

\*1 pascal = 94 dB SPL

### Maximum Sound Pressure Level (1kHz at 1% THD, 1 kΩ load)

MX183BP: 132.8 dB

MX184BP: 138.8 dB

MX185BP: 140.3 dB

### Equivalent Output Noise (A-weighted, with 1 kΩ load)

MX183BP: 23.7 dB SPL

MX184BP: 29.7 dB SPL

MX185BP: 31.2 dB SPL

### Signal to Noise Ratio (ref. at 94 dB SPL at 1 kHz, with 1 kΩ load)

MX183BP: 70.3 dB

MX184BP: 64.3 dB

MX185BP: 62.8 dB

### Dynamic Range (with 1 kΩ load, at 1 kHz)

109.1 dB

### Common Mode Rejection

45.0 dB minimum, 10 Hz to 100 kHz

### Selectable Rolloff Frequency

100 Hz, with a 12 dB per octave rolloff below this corner frequency.

figure microphone coverage as the need arises. The supplied MX1BP battery-powered preamplifier allows use of these microphones in situations where phantom power is not available.

- stays on securely
- Balanced transformer output for increased immunity to noise over long cable runs
- Supplied dual tie clip holds two microphones for dual miking applications
- MX1BP preamplifier with Mic Mute/On switch and Power LED. It will operate with either a 9 V battery or phantom power

(Factory Setting: 25 Hz with a 6 dB per octave rolloff.)

### MX1BP Net Weight

255 g (9 oz) with attached cabling.

### MX1BP Dimensions (Figure 3)

84.3 mm H x 65.2 mm W x 25.7 mm D (3.32" x 2.57" x 1.01")

### MX1BP Cable

One 3.6 m (12 ft) 2 conductor shielded output cable with 3-pin male XLR connector.

### Power Requirements

9 V alkaline battery (Duracell® MN1604 recommended); 8.4 V NiCd rechargeable battery or 9 V Ultralife® lithium battery optional; or, from phantom power source, 10 to 52 Vdc

### Battery Life (nominal)

600 continuous hours with 9 V alkaline battery

Battery Current (nominal): 0.8 mA

MX1BP Input Connector Type: 4-pin Male Mini Connector (TB4M)

MX1BP Input Configuration: Unbalanced

### MX1BP Output Connector Type

3-pin Male XLR

### MX1BP Output Configuration

Transformer balanced

## CERTIFICATION

Eligible to bear CE Marking. Conforms to European EMC Directive 89/336/EEC. Meets applicable tests and performance criteria in European Standard EN55103 (1996) parts 1 and 2, for residential (E1) and light industrial (E2) environments.

## FURNISHED ACCESSORIES

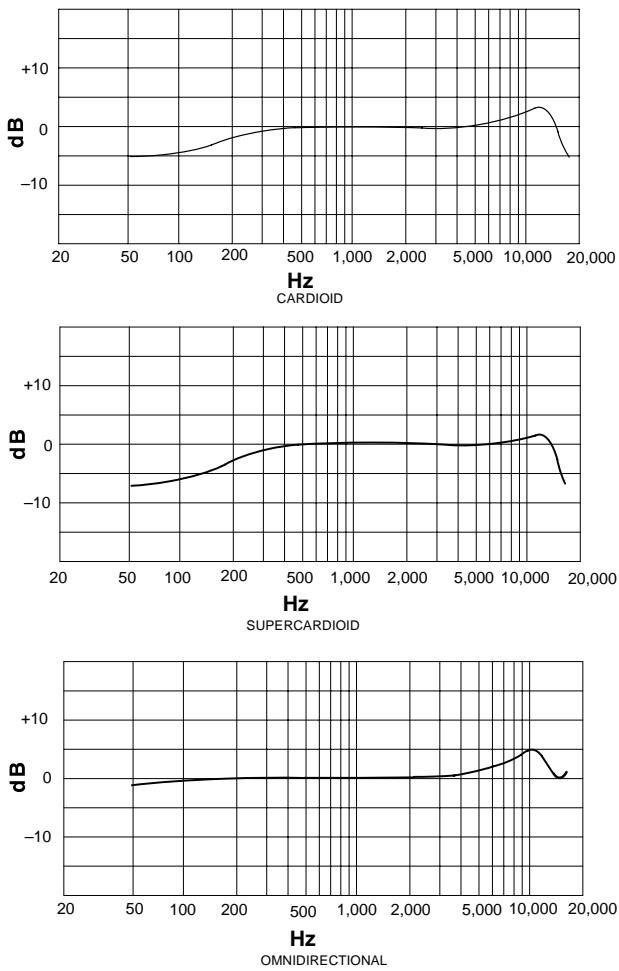
Snap-Fit Windscreens (4)	RK183WS
Tie Clips (2)	RK183T1

## REPLACEMENT PARTS

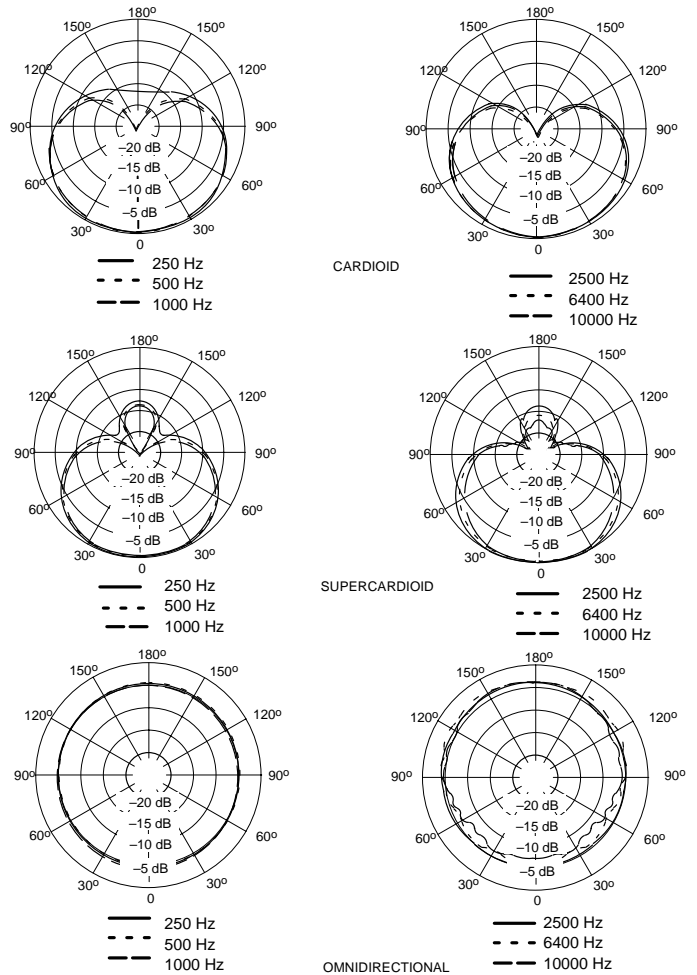
Omnidirectional Cartridge	R183B
Supercardioid Cartridge	R184B
Cardioid Cartridge	R185B
4-Pin Female Miniature Connector (TA4F)	WA330
Output Cable (MX1BP preamplifier)	95A2115
Belt Clip	53A8247B
Input Connector	95A8188
Mute/On Switch	55C8048

## OPTIONAL ACCESSORIES

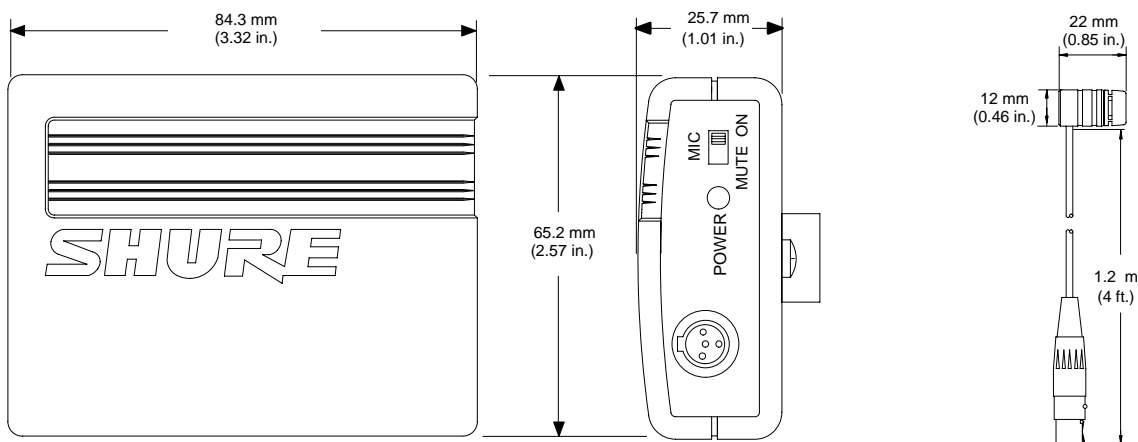
Inline Preamp Kit (phantom power only)	RK183PK
Small Foam Windscreens (4 per pkg.)	RK261WS
Dual Tie Clip	RK183T2



TYPICAL FREQUENCY RESPONSE (factory setting)  
**Figure 1**



TYPICAL POLAR PATTERNS  
**Figure 2**



DIMENSIONS  
**Figure 3**