



# MX100 Series

## Lavalier Microphones

Online user guide for Shure Microflex MX100 Series lavalier microphones.  
Version: 3 (2019-J)

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# MX100 Series Lavalier Microphones

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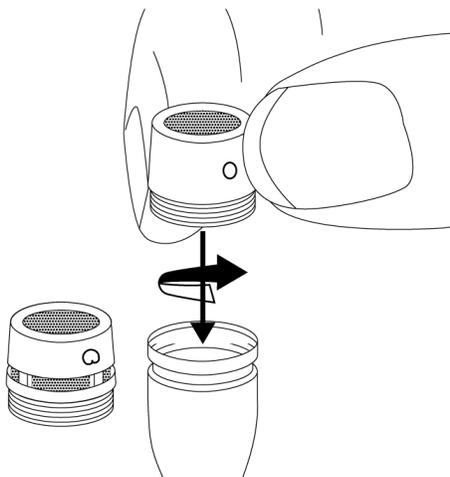
## General Description

Shure Microflex<sup>®</sup> MX100 Series microphones are wired lavalier electret condenser microphones designed for speech and vocal pickup, general purpose sound reinforcement, recording, and remote monitoring applications. They can be clipped to neckties, lapels, and other articles of clothing. Interchangeable cartridges make it possible to easily reconfigure microphone coverage as the need arises.

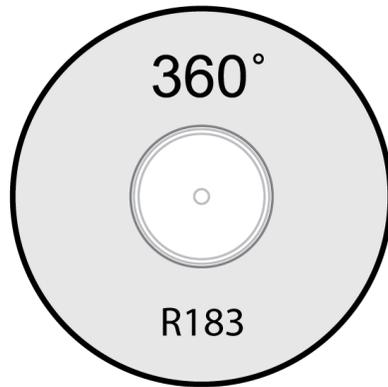
- Wide dynamic range and frequency response for accurate sound reproduction
- Interchangeable cartridges that provide a choice of polar pattern for each application
- Rotatable tie-clip that pivots in 90° increments for placement flexibility
- Dual tie-clip and belt-clip preamp
- Supplied with snap-fit foam windscreen that controls breath noise
- Balanced, transformerless output for increased immunity to noise over long cable runs
- RF filtering

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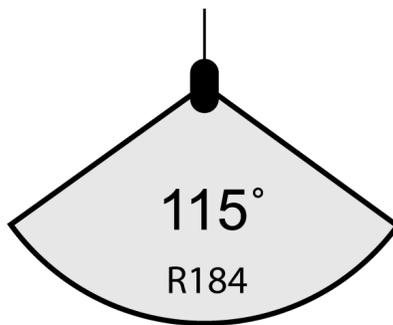
## Interchangeable Cartridges



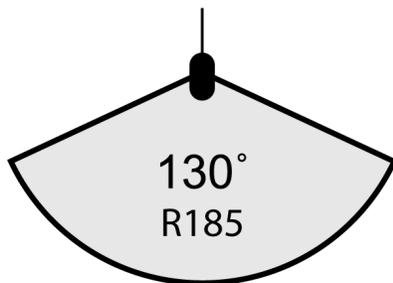
Microflex microphones use interchangeable cartridges that allow you to choose the polar pattern for different installations.



Omnidirectional



Supercardioid



Cardioid



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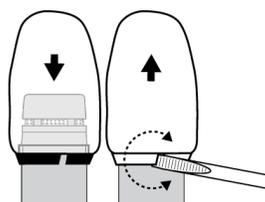
## Windscreen

### Foam Screen

Slip the windscreen over the top of microphone so it covers side slots. The foam windscreen provides 5 to 10 dB of "pop" protection.

### Snap-Fit Windscreen

- Snap into the groove below the cartridge.
- To remove, spread the gap with a screwdriver or thumbnail.
- Provides 30 dB of "pop" protection.



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## Preamp Gain

If necessary, the preamplifier gain can be reduced by 12 dB. Contact an authorized Shure service center for information.

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## RFI Filtering

**Important:** Microphones must be used with the RK100PK or RK202PK plate-mounted preamp to optimize RF immunity.

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## General Rules for Lavalier Microphone Use

- Attach the microphone approximately 76 mm to 152 mm (3 to 6 in.) below the neckline for the best sound.
- Do not cover the microphone with your hand or clothing.
- Use one of the supplied windscreens to minimize wind and breath noise.
- If four or more microphones will be active at any given time, use of an automatic mixer, such as the Shure SCM810 or SCM410, is recommended.

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## Tie Clip

Insert the top of the microphone through tie clip loop from below until tie clip loop snaps into place over the lower groove on the microphone.

# Specifications

## Type

Electret Condenser

## Frequency Response

50–17000 Hz

## Polar Pattern

<b>MX183</b>	Omnidirectional
<b>MX185</b>	Cardioid
<b>MX184</b>	Supercardioid

## Output Impedance

180  $\Omega$

## Output Configuration

Active Balanced

## Sensitivity

@ 1 kHz, open circuit voltage

<b>Cardioid</b>	-35 dBV/Pa(18 mV)
<b>Supercardioid</b>	-34 dBV/Pa(21 mV)
<b>Omnidirectional</b>	-28 dBV/Pa(42 mV)

1 Pa=94 dB SPL

## Maximum SPL

1 kHz at 1% THD, 1 k $\Omega$  load

<b>Cardioid</b>	124 dB
<b>Supercardioid</b>	123 dB
<b>Omnidirectional</b>	117 dB

## Self Noise

A-weighted

<b>Cardioid</b>	28 dB SPL
<b>Supercardioid</b>	27 dB
<b>Omnidirectional</b>	21 dB SPL

## Signal-to-Noise Ratio

Ref. 94 dB SPL at 1 kHz

<b>Cardioid</b>	66 dB
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<b>Supercardioid</b>	68 dB
<b>Omnidirectional</b>	74 dB

### Dynamic Range

1 k $\Omega$  load, @ 1 kHz

96 dB

### Common Mode Rejection

10 Hz to 100 kHz

45 dB, minimum

### Clipping Level

at 1% THD

-6 dBV (0.5 V)

### Polarity

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

### Environmental Conditions

<b>Operating Temperature</b>	-18–57°C (0–135°F)
<b>Storage Temperature</b>	-29–74°C (-20–165°F)
<b>Relative Humidity</b>	0–95%

### Power Requirements

11–52 V DC, 2.0 mA

### Cable

1.2 m (4 ft)

## Certifications

Meets essential requirements of all applicable European Directives.

Eligible for CE marking.

**Note:** Testing is based on the use of supplied and recommended cable types. The use of other than shielded (screened) cable types may degrade EMC performance.

The CE Declaration of Conformity can be obtained from Shure Incorporated or any of its European representatives. For contact information please visit [www.shure.com](http://www.shure.com)

The CE Declaration of Conformity can be obtained from: [www.shure.com/europe/compliance](http://www.shure.com/europe/compliance)

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