SHURE Microflex®

MX100 SERIES



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MX100 Lavalier Microphones

Shure Microflex[®] 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

Interchangeable Cartridges

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

360

R184 Supercardioid



R183 Omnidirectional

115°

R185 Cardioid

Preamp Gain

If necessary, the preamplifier gain can be reduced by 12 dB. Contact an authorized Shure service center Ø for information. R6 and R4 C10 ÖEEE Ħ Q2 \bigcirc Q8 8 Q3 5 Q1 8 \bigcirc \bigcirc C11 R13 and R16

GAIN SETTING		
	12 dB	0 dB
R6	10k	0Ω
R4	10k	20k
R16	0Ω	10M
R13	DNP	301 Ω

Windscreen

Foam Screen

130°

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.



RFI Filtering

Important: Microphones must be used with the RK100PK preamp to optimize RF immunity.



General Rules for Lavalier Microphone



- 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.

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

Cartridge Type

Electret Condenser

Frequency Response

50–17000 Hz

Polar Pattern

MX183:	Omnidirectional
MX185:	Cardioid
MX184:	Supercardioid

Output Impedance

EIA rated at150 Ω (180 Ωactual

Output Configuration

Active Balanced

Sensitivity

@ 1 kHz, open circuit voltage

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

1 Pa=94 dB SPL

Maximum SPL 1 kHz at 1% THD, 1 kΩ load

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Cardioid	124 dB
Omnidirectional	117 dB
Supercardioid	123 dB

Equivalent Output Noise

A-weighted

Cardioid	28 dB SPL
Omnidirectional	21 dB SPL
Supercardioid	27 dB

Signal-to-Noise Ratio

Ref. 94 dB SPL at 1 kHz

Cardioid	66 dB
Omnidirectional	74 dB
Supercardioid	68 dB

Dynamic Range

1 kΩ load@ 1 kHz

96 dB

Common Mode Rejection

10 Hz to 100 kHz

45 dBminimum

Preamplifier Output 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

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

Power Requirements

11-52 V DC, 2.0 mA

Cable

1.2 m (4 ft)













United States, Canada, Latin America, Caribbean: Shure Incorporated 5800 West Touhy Avenue Niles, IL 60714-4608 USA

Phone: +1-847-600-2000 Fax: +1-847-600-1212 (USA) Fax: +1-847-600-6446 Email: info@shure.com

Europe, Middle East, Africa:

Shure Europe GmbH Jakob-Dieffenbacher-Str. 12, 75031 Eppingen, Germany

Phone: +49-7262-92490 Fax: +49-7262-9249114 Email: info@shure.de Asia, Pacific:

Shure Asia Limited 22/F, 625 King's Road North Point, Island East Hong Kong

Phone: 852-2893-4290 Fax: 852-2893-4055 Email: info@shure.com.hk