

MX200 Series Overhead Microphones

Online user guide for Shure Microflex MX200 Series overhead microphones. Version: 6 (2020-B)

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MX200 Series Overhead Microphones

General Description

Shure Microflex[®] MX200 Series microphones are miniature electret condenser microphones designed for miking choirs and performance groups. They are typically suspended over the heads of the performers. Their high sensitivity and wide frequency range make them suitable for recording, as well as sound reinforcement applications. An attached 101 mm (4 in.) gooseneck allows them to be easily aimed at the sound source.

- · Wide dynamic range and frequency response for accurate sound reproduction
- · Interchangeable cartridges that provide a choice of polar pattern for each application
- · White or black finish that blends unobtrusively with most surroundings
- RF filtering

Model Variations

Microflex MX202 microphones are available in black or white with a choice of in-line preamplifier or plate-mount preamplifier.

The polar pattern of the included cartridge is indicated by a model number suffix:

IC Cardioid IS Supercardioid IMS Mini-shotgun

Interchangeable Cartridges



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





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.



Preamp Gain

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

RFI Filtering

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

Microphone Placement

The microphone is most stable when the gooseneck is bent into a "lazy S" shape. Use the supplied hanging clip and heavy thread or monofilament fishing line to suspend the microphone at a specific location.

- For choir installations, hang a microphone 0.6 to 0.9m (2 to 3 ft.) in front of the first row, and 0.6 to 0.9m (2 to 3 ft.) over the heads of the singers in the last row. Aim the microphone at the back row.
- When miking groups that move or vary in size, use a boom stand and the supplied stand adapter.

• If four or more microphones will be open at once, an automatic mixer, such as the Shure SCM810 or SCM410, is recommended. Set up the automatic mixer so that all overhead microphones gate on simultaneously.





Permanent Installation Installing the In-Line Preamp



Use the two supplied mounting clamps to hold the preamp in place on a wall or ceiling.

Ceiling Tile Installation

- 1. Drill a 1/2 in. hole into the ceiling tile. CAUTION: To avoid tile damage, use a 1/2 in. augur bit and drill very slowly.
- 2. Unplug the mini 4-pin connector from the preamp and feed the cable through the hole.
- 3. Place the rubber grommet, tip down, over the cable and position it to suspend the microphone at the appropriate height.
- 4. Fit the grommet securely into the hole. For 5/8 in. ceiling tile, use the suppled washer.
- 5. Reconnect the preamp.



Plate Mount Preamp Installation

The plate-mounted preamp allows you to mount the preamp in an electical box and use conduit to run cable through ceilings and walls.

- 1. Remove preamp housing by removing two phillips head screws.
- 2. Remove knock-out from the hole in the center of the cover plate (if present).
- 3. Cut cable to desired hanging length, allowing for a 76 to 101 mm (3 to 4 in.) service loop.
- 4. Clamp strain relief around cable and insert strain relief into hole in plate.
- 5. Connect cable leads to input terminal block (B = Black, R = Red, S = Shield).
- 6. Using professional-quality, two-conductor, shielded microphone cable, thread output cable from outside of preamp through hole with black bushing.
- 7. Connect cable to output terminal block (Pin 2 = +, Pin 3 = -, Shield = S).
- 8. Reattach the preamplifier housing.









Type Electret Condenser

Frequency Response 50–17000 Hz

Polar Pattern		
MX202B/C	Cardioid	
MX202B/S	Supercardioid	
MX202B/MS	Mini-shotgun	

Output Impedance 180 Ω

Output Configuration

Active Balanced

Sensitivity

@ 1 kHz, open circuit voltage

Cardioid	-35 dBV/Pa (18 mV)
Supercardioid	-34 dBV/Pa (21 mV)
Mini-shotgun	-33 dBV/Pa (22 mV)

1 Pa=94 dB SPL

Maximum SPL

1 kHz at 1% THD, 1 k Ω load

Cardioid	124 dB
Supercardioid	123 dB
Mini-shotgun	121 dB

Self Noise

A-weighted		
Cardioid	28 dB SPL	
Supercardioid	27 dB SPL	
Mini-shotgun	26 dB SPL	

Signal-to-Noise Ratio Ref. 94 dB SPL at 1 kHz

Cardioid	66 dB	
Supercardioid	68 dB	
Mini-shotgun	68 dB	

Dynamic Range 1 kΩ 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

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

Environmental Conditions

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

Power Requirements Phantom Power

11-52 V DC, 2.0 mA

Note: Yellowing of any plastic material can be caused from cigarette smoke, ultra violet rays, and other chemical interactions. Once plastic has yellowed, there typically is no cleaning method that will restore the whiteness.

Furnished Accessories

Black Snap-Fit Foam Windscreens (4) for BETA98, BETA98A, BETA98/S, BETA98D/ S, BETA98H/C, MX183, MX184, MX185, MX202, WH30, WL183, WL184 and WL185	RK183WS
White Snap-Fit Windscreen	95B2064
Preamplifier Kit, Plate Mounted, White (MX202BP and MX202WP)	RK202PK
Stand Adaptor (MX202B and MX202W)	65B1752

Replacement Parts

Strain Relief (MX202BP and MX202WP)	80A479
Clamp (MX202B and MX202WP)	80A476
Hang Clip	80B489

Wiring Diagram







Cardioid



Supercardioid



Mini-shotgun



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Certifications

This product meets the Essential Requirements of all relevant European directives and is eligible for CE marking.

The CE Declaration of Conformity can be obtained from: <u>www.shure.com/europe/compliance</u>

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