SHURE Microflex®

MX200 SERIES



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MX200 Overhead Microphones

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 101mm (4 in.) gooseneck allows them to be easily aimed at the sound source.

Features

- 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:

- $/\mathbf{C}$ Cardioid
- /S Supercardioid
- /N Cartridge not included

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

Ø

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





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

RFI Filtering

Important: Microphones must be used with the RK100PK 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



0 ← 1.8 - 3m → 0 (6 - 9 ft.)

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

Remove plate-mount preamp connection.

- 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).
- 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.



Specifications

Type Condenser (electret bias)

Frequency Response 50–17000 Hz

Polar Pattern

MX202B/C, MX202W/C: Cardioid MX202B/S, MX202W/S: Supercardioid

Output Impedance EIA Rated at 150 Ω (180 Ω actual)

Output Configuration Active balanced

Sensitivity (at 1 kHz, open circuit voltage) Cardioid: -35 dBV/Pa (18 mV) Supercardioid: -34 dBV/Pa (21 mV) 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load) Cardioid: 124 dB Supercardioid: 123 dB

Equivalent Output Noise (A-weighted) Cardioid: 28 dB SPL

Supercardioid: 27 dB SPL

Signal-to-Noise Ratio (referenced at 94 dB SPL at 1 kHz) Cardioid: 66 dB Supercardioid: 68 dB

Dynamic Range (1 k Ω load at 1 kHz) 96 dB

Common Mode Rejection (10 Hz to 100 kHz) 45 dB minimum

Preamplifier Output Clipping Level (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.

Cable

9 m (30 ft)

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 Vdc phantom, 2.0 mA

Replacement Parts

Snap-Fit Windscreen (4 per	RK183WS
package)	(Black)
Preamplifier Kit, Plate Mounted, White (MX202BP and MX202WP)	RK202PK
Stand Adapter (MX202B and MX202W)	65B1752
In-Line Preamplifier (Black)	RK100PK
In-Line Preamplifier (White)	RK100PKW
Omnidirectional Cartridge (Black)	R183B
Omnidirectional Cartridge (White)	R183W
Supercardioid Cartridge (Black)	R184B
Supercardioid Cartridge (White)	R184W
Cardioid Cartridge (Black)	R185B
Cardioid Cartridge (White)	R185W
Strain Relief (MX202BP and MX202WP)	80A479
Clamp (MX202B and MX202WP)	80A476
Hang Clip	80B489

Optional Accessories

Desk Stand

A202BB

CERTIFICATION

Eligible to bear CE Marking. Conforms to European EMC Directive 2004/108/EC. Meets Harmonized Standards EN55103-1:1996 and EN55103-2:1996, for residential (E1) and light industrial (E2) environments.

The Declaration of Conformity can be obtained from:

Authorized European representative: Shure Europe GmbH Headquarters Europe, Middle East & Africa Department: EMEA Approval Wannenacker Str. 28 D-74078 Heilbronn, Germany Phone: +49 7131 72 14 0 Fax: +49 7131 72 14 14 Email: EMEAsupport@shure.de







180°

-20 dB -15 dB -10 dB

-5 dB

0

180°

-20 dB

15 dB

0 dB

-5 dB

180

-5 dB

0

2500 Hz 6400 Hz 10000 Hz



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

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