

THERE'S NEVER BEEN A MORE FLEXIBLE CHOICE.



Microflex® Installed Sound Microphones

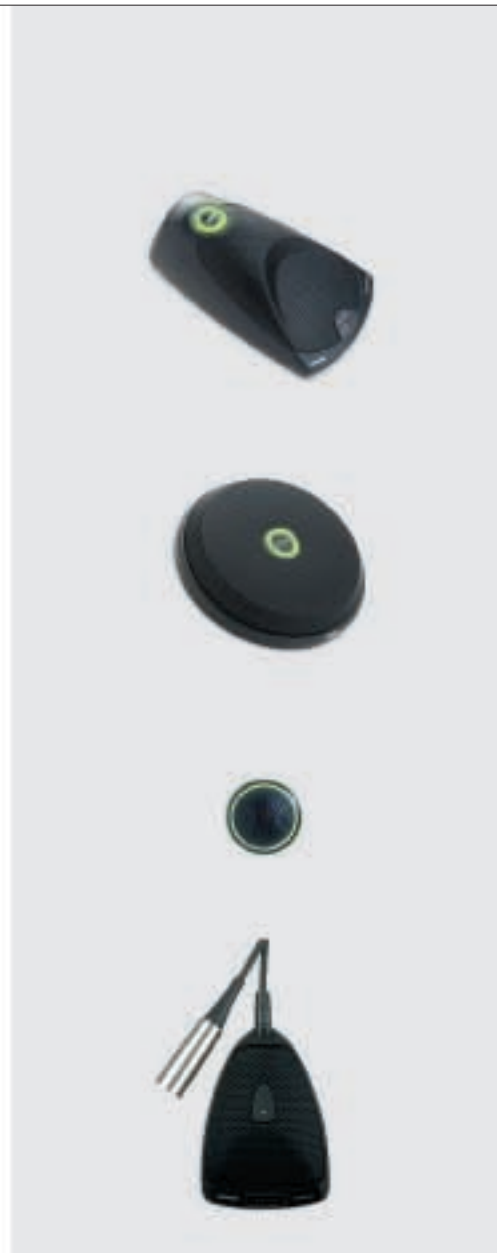
WORK A ROOM IN MORE WAYS THAN EVER WITH SHURE MICROFLEX® MICROPHONES.

Combining sleek, low profile aesthetics and a complete selection of microphones and mounting options, Microflex microphones include the highest standard of quality and efficiency for installed audio applications. All models offer Shure CommShield™ Technology, which guards against unwanted radio interference from consumer wireless devices such as cell phones and PDA's.

Get the exact fit for your professional installation; knowing it's backed by the superior sound quality, reliability, and durability you only get from Shure.

For more information visit www.shure.com/microflex

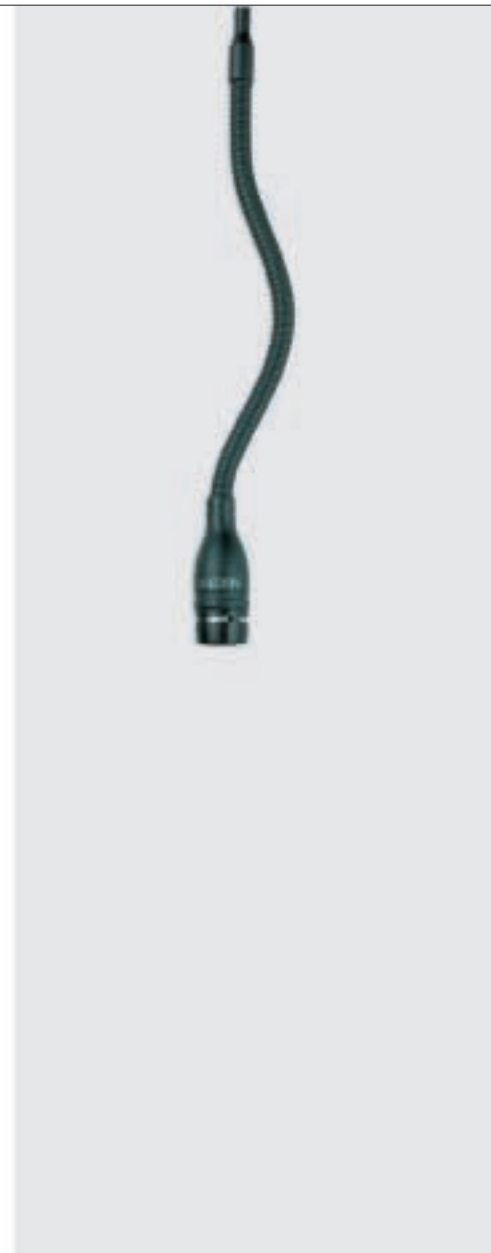
Boundary



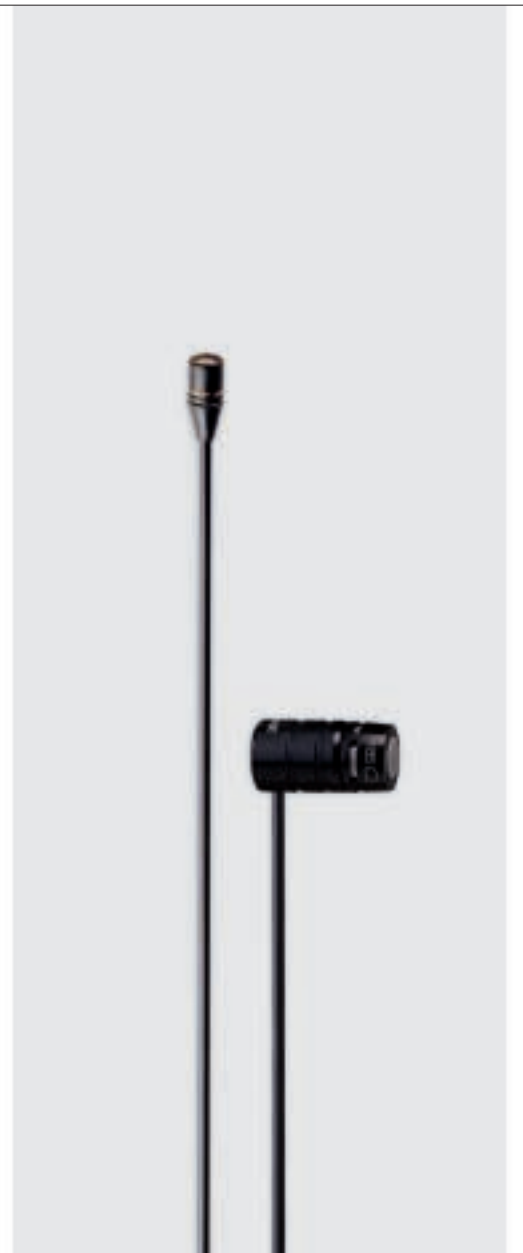
Gooseneck



Overhead



Lavalier



Microflex® Boundary Microphones

INCONSPICUOUSLY IMPRESSIVE.

MX395 - Low Profile Boundary Microphone

The Microflex Low Profile Boundary microphone is an ideal table microphone when minimal presence is of high priority. Perfect for meeting rooms, these microphones deliver exceptional sound pickup while barely being noticed. Choose from a selection of colors and pickup patterns for customized table and ceiling installations.

- Only 1 inch (2.5 cm) in diameter
- Cardioid, omni and bidirectional polar patterns
- Wide dynamic range and smooth frequency response
- Available in black, white and aluminum
- Bi-color status indicator
- Logic input for remote LED and mute control



AVAILABLE MODELS

- MX395B C/O/BI
Black
- MX395AL C/O/BI
Aluminum
- MX395W O
White
- MX395B C/O/BI-LED
Black, with bi-color status indicator

C = Cardioid, O = Omni,
BI = Bidirectional



Side view

ONE MICROPHONE THAT PERFORMS LIKE MANY.

MX396 - Multi Element Boundary Microphone

Microflex Multi-Element Boundary microphones, delivers a unique and versatile tool for conference room installations. Clean and simple in appearance, Multi-Element Boundary mics come in two or three element configurations, combining the coverage of multiple microphones into one small, compact package.

- End of table (240°), center of table (360°), or cross table (bidirectional) coverage patterns
- Individual control of each element
- Bi-color status indicator ring
- Programmable mute switch
- Logic input for remote LED and mute control

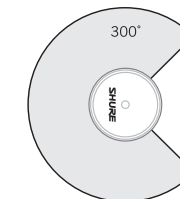
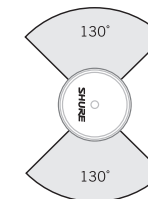
AVAILABLE MODELS

- MX396 C-DUAL
Dual-Element Configuration
- MX396 C-TRI
Tri-Element Configuration

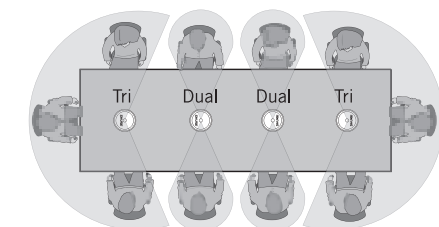


Side view

Cross-Table Coverage (Dual) End-Of-Table Coverage (Tri) Center-Of-Table Coverage (Tri)



Example of Boardroom Table Mic Placement Coverage



Microflex® Boundary Microphones

WIRELESS. LIMITLESS.

MX690 - Wireless Boundary Microphone

The Microflex Wireless Boundary microphone offers total freedom of placement with no holes to drill or cables to run for installation. The Wireless Boundary Microphone is the perfect solution for conference and meeting spaces where users demand flexibility and high performance. Compatible with Shure SLX® wireless systems, including the SLX4L receiver with logic output for applications requiring logic functionality.

- Sleek, low profile design
- Frequency agile, microprocessor controlled transmitter
- IR link to SLX receiver for automatic frequency synchronization
- Programmable mute function
- Operates on two AA batteries



AVAILABLE MODELS

MX690
Wireless Boundary Mic,
Cardioid

COMPACT, CLEAR, AND CONNECTED.

MX391/MX392/MX393 - Wired Boundary Microphones

With slim design and superior audio reproduction, Microflex Boundary microphones are the ideal conference room solution. Equipped with features like programmable, silent membrane switches, interchangeable cartridges, logic inputs and outputs, and LED indicators, Microflex Boundary microphones provide high-quality sound for a wide range of applications.

- Cardioid, supercardioid and omnidirectional polar patterns
- Select models available in black or white
- Programmable, silent membrane switch
- Logic input and output terminals
- LED indicator

AVAILABLE MODELS

MX412 C/S/O
Black
Attached cable w/ 4-pin mini connector, Preampfier

MX391W C/S/O
White
Attached cable w/ 4-pin mini connector, Preampfier

MX391LP C/S/O
Black
For use with wireless body-pack transmitter

MX391WLP C/S/O
White
For use with wireless body-pack transmitter

MX392 C/S/O
Surface-mount microphone, Attached unterminated cable

MX393 C/S/O
Surface-mount microphone, Mini 3-pin connector cable

C = Cardioid, S = Supercardioid, O = Omni



MX393



MX392



MX391



front view



Side view



SLX4L

Wireless receiver with logic output.

Microflex® Gooseneck Microphones

THE NEW HEIGHT OF FLEXIBILITY.

MX405/MX410 - Miniature Gooseneck Microphones

Flexible in more ways than one, Microflex Miniature Gooseneck microphones deliver unsurpassed style and performance for conference rooms and similar applications. Offering desktop or mounted bases, wired or wireless options, and even interchangeable cartridges, it's easy to get the perfect fit for your conferencing installation. Fully compatible with SLX wireless systems, including the SLX4L wireless receiver with logic output for applications requiring logic functionality.

- Available in 5 inch (12.7cm) and 10 inch (25.4cm) lengths
- Cardioid and supercardioid polar patterns
- Bi-color status indicator or single color light ring
- Programmable mute switch (desktop models only)
- Logic input for remote LED and mute control
- Surface-mount and wired or wireless desktop base options

AVAILABLE MODELS

- MX405 C/S**
5 inch (12.7cm), includes surface mount preamp
- MX405R N**
5 inch (12.7cm), includes surface mount preamp
- MX410 C/S**
10 inch (25.4cm), includes surface mount preamp, light ring
- MX410R N**
10 inch (25.4cm), includes surface mount preamp
- MX405LP C/S**
5 inch (12.7cm), less preamp
- MX405RLP N**
5 inch (12.7cm), light ring, less preamp
- MX410LP C/S**
10 inch (25.4cm), less preamp
- MX410RLP N**
10 inch (25.4cm), light ring, less preamp

MOUNTING OPTIONS

- MX400DP**
Desktop Base
- MX890**
Wireless Desktop Base
- MX400SMP**
Surface-mount Preamp

C = Cardioid, S = Supercardioid, N = No Cartridge



SLX4L

Wireless receiver with logic output.

UNMATCHED FLEXIBILITY. UNBENDING PERFORMANCE.

MX412/MX418 - Standard Gooseneck Microphones

Microflex Standard Gooseneck microphones provide the added length and flexibility needed for speakers in environments like lecterns, pulpits, and courtrooms. Available in four models with a variety of heights and mounting styles to choose from, Microflex Gooseneck microphones feature high sensitivity and balanced, transformerless output for maximum resistance to electromagnetic hum and RF interference, even over long cable runs.

- Available in 12 inch (30.5cm) and 18 inch (45.7cm) lengths
- Interchangeable cartridges provide the right polar pattern for every application
- Locking flange mount for permanently securing microphone to surfaces
- Snap-fit foam windscreen
- Shock mount provides over 20 dB isolation from surface vibration noise

AVAILABLE MODELS

- MX412 C/S/N**
12 inch (30.5cm), Attached Preamp
- MX418 C/S/N**
18 inch (45.7cm), Attached Preamp
- MX412S C/S/N**
12 inch (30.5cm), Attached Preamp, Mute Switch
- MX418S C/S/N**
18 inch (45.7cm), Attached Preamp, Mute Switch
- MX412SE C/S/N**
12 inch (30.5cm), In-line Preamp, 10-ft Side-Exit Cable
- MX418SE C/S/N**
18 inch (45.7cm), In-line Preamp, 10-ft Side-Exit Cable
- MX412D C/S/N**
12 inch (30.5cm), Desktop Base with 10 foot Cable
- MX418D C/S/N**
18 inch (45.7cm), Desktop Base with 10 foot CableSwitch

C = Cardioid, S = Supercardioid, N = No Cartridge



MX412D MX412 & MX418 without desktop base



MX405 & MX410 without desktop base

Microflex® Overhead Microphones

Microflex® Lavalier Microphones

A MICROPHONE THAT GOES ABOVE AND BEYOND.

MX202 - Overhead Microphones

With easy installation in ceilings, Microflex Overhead microphones capture sound from speakers, choirs, stages, and more conveniently and unobtrusively from above. Compact and flexible, Overhead microphones each feature a four-inch gooseneck and versatile condenser cartridges for accurate sound reproduction in any setting. The available preamp options offer easy installation in ceilings or microphone stands, and provide accurate, reliable sound reproduction.

- Cardioid and supercardioid polar patterns
- Available in black and white finishes
- Interchangeable condenser cartridges
- Multiple preamp options available

AVAILABLE MODELS

MX202B C/S/O Black In-line preamplifier, stand adapter	MX202BP C/S/O Black Plate-mounted preamplifier
MX202W C/S/O White In-line preamplifier, stand adapter	MX202WP C/S/O White Plate-mounted preamplifier

C = Cardioid, S = Supercardioid, O = Omni



FREEDOM TO MOVE, FREEDOM TO HEAR.

MX185/MX184/MX183/MC51/MC50 - Lavalier Microphones

Attached to a tie or lapel, Microflex Lavalier microphones offer freedom of movement to any situation involving voice reproduction. As stylish as they are convenient, Lavaliers are available in a wide array of sizes, including two subminiature microphone models, and are compatible with all Shure wireless platforms.

- Cardioid, supercardioid and omnidirectional polar patterns
- Battery or phantom-powered preamp
- Audio mute switch
- Power LED
- Tie clip included

AVAILABLE MODELS

MX183 Omnidirectional	MC50 Subminiature Omnidirectional
MX184 Supercardioid	MC51 Subminiature Cardioid
MX185 Cardioid	



Microflex® Installed Sound Microphones

THE SOUND HEARD AROUND THE WORLD

Shure has long been the global leader in providing audio solutions for all types of commercial installations. Whether in churches, schools, boardrooms, or courtrooms, you'll find Microflex microphones providing superior audio and Shure's world-class service and support.

Houses of Worship



Proven reliable in installations worldwide, Microflex microphones are well suited to meet the diverse audio requirements of any House of Worship. Ideal for choirs, lecterns, and altars, all Microflex products are both attractive and inconspicuous and deliver the superior sound quality you can expect from Shure.

Education



Utilized for everything from auditoriums to band rooms, Microflex microphones have delivered exceptional audio quality to the hallowed halls of academia for years. By providing the educational institutions of the world with exceptional quality products, Shure tirelessly commits themselves to delivering unparalleled service and support.

Corporate



Microflex microphones provide solutions for meeting rooms, video conferences, large presentations or any other situation the business world throws at you. Gooseneck mics meet the needs of any sized conference table while low-profile boundary mics are discreet and unobtrusive yet provide crystal clear audio. CommShield™ technology guards against unwanted interference.

Government

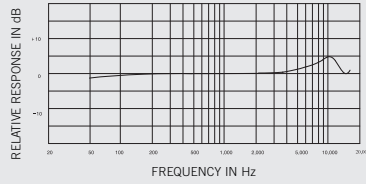


For ages Microflex microphones have adorned the podiums and committee rooms of government institutions around the world. From lavaliers to overheads to goosenecks, Shure's audio products deliver exceptional sound and afford maximum flexibility in even the most acoustically challenging environments.

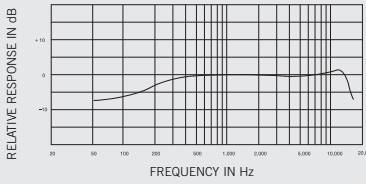
ACOUSTIC SPECIFICATIONS



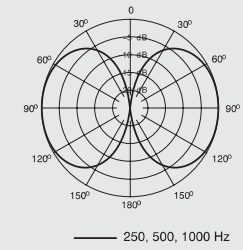
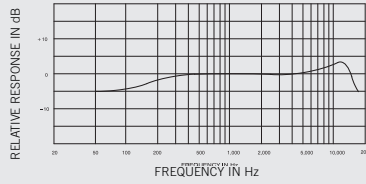
Omnidirectional R183B



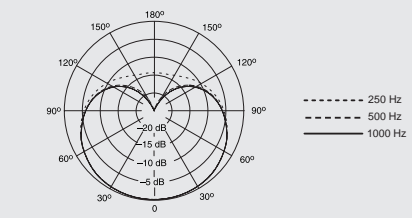
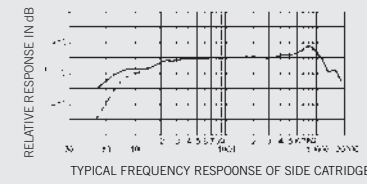
Supercardioid R184B



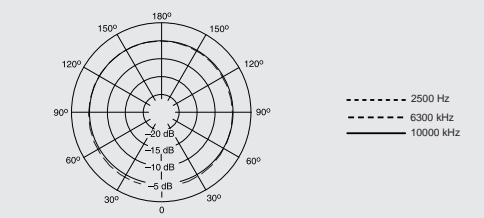
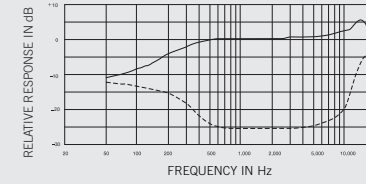
Cardioid R185B



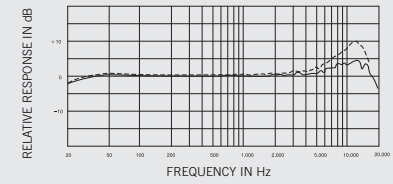
Bidirectional MX395



Cardioid MC51



Omnidirectional MC50



Specifications are preliminary and subject to change.

GOOSENECK, LAVALIER, AND OVERHEAD MICROPHONES

Type.....Condenser (electret bias)
Frequency Response.....50–17000 Hz
Output ImpedanceEIA Rated at 180 Ω (150 Ω actual)

Sensitivity
 (at 1Khz , open circuit voltage)
 Cardioid: -36 dBV/Pa (15 mV)
 Supercardioid: -35 dBV/Pa (18 mV)
 Omnidirectional: -29 dBV/Pa (37 mV)
 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load)
 Cardioid: 124 dB
 Supercardioid: 123 dB
 Omnidirectional: 117 dB

Equivalent Output Noise (A-weighted)
 Cardioid: 28 dB SPL
 Supercardioid: 27 dB SPL
 Omnidirectional: 21 dB SPL

Signal-to-Noise Ratio
 (referenced at 94 dB SPL at 1 kHz)
 Cardioid: 66 dB
 Supercardioid: 68 dB
 Omnidirectional: 74 dB

Dynamic Range (1 kΩ load at 1 kHz) 94.0 dB
Power Requirements.....11–52 Vdc phantom, 2.0 mA

BOUNDARY MICROPHONES

Type.....Condenser (electret bias)
Frequency Response.....50–17000 Hz
Output ImpedanceEIA Rated at 180 Ω (150 Ω actual)

Sensitivity
 (at 1Khz , open circuit voltage)
 Cardioid: -31 dBV/Pa (29 mV)
 Supercardioid: -30 dBV/Pa (33 mV)
 Omnidirectional: -23 dBV/Pa (73 mV)
 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load)
 Cardioid: 117 dB
 Supercardioid: 116 dB
 Omnidirectional: 112 dB

Equivalent Output Noise (A-weighted)
 Cardioid: 23 dB SPL
 Supercardioid: 22 dB SPL
Omnidirectional: 18 dB SPL

Signal-to-Noise Ratio
 (referenced at 94 dB SPL at 1 kHz)
 Cardioid: 71 dB
 Supercardioid: 72 dB
 Omnidirectional: 77 dB

Dynamic Range (1 kΩ load at 1 kHz).....94 dB
Power Requirements.....11–52 Vdc phantom, 2.0 mA

SUBMINIATURE MICROPHONES

MC50

Type.....Condenser (electret bias)
Frequency Response.....20–20,000 Hz
Output ImpedanceEIA Rated at 136 Ω (150 Ω actual)

Sensitivity
 (at 1Khz , open circuit voltage)
 -41 dBV/Pa (? mV)
 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load)
 138 dB
Equivalent Output Noise (A-weighted)
 30 dB SPL

Signal-to-Noise Ratio
 (referenced at 94 dB SPL at 1 kHz)
 64 dB

Dynamic Range (1 kΩ load at 1 kHz)..108 dB
Power Requirements.....11–52 Vdc phantom, 4.6 mA

MC51

Type.....Condenser (electret bias)
Frequency Response.....20–20,000 Hz
Output ImpedanceEIA Rated at 136 Ω (150 Ω actual)

Sensitivity
 (at 1Khz , open circuit voltage)
 -46 dBV/Pa (? mV)
 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load)
 143 dB
Equivalent Output Noise (A-weighted)
 35 dB SPL

Signal-to-Noise Ratio
 (referenced at 94 dB SPL at 1 kHz)
 59 dB

Dynamic Range (1 kΩ load at 1 kHz)..108 dB
Power Requirements.....11–52 Vdc phantom, 4.6 mA

LOW PROFILE BOUNDARY

MX395

Type.....Condenser (electret bias)
Frequency Response50-15000 Hz
Output ImpedanceEIA Rated at 170 Ω (150 Ω actual)

Sensitivity
 (at 1Khz , open circuit voltage)
 Cardioid: -35 dBV/Pa (18 mV)
 Omnidirectional: -28 dBV/Pa (42 mV)
 Bidirectional: -40 dBV/Pa (10 mV)
 1 Pascal=94 dB SPL

Maximum SPL (1 kHz at 1% THD, 1 kΩ load)
 Cardioid: 124 dB
 Omnidirectional: 117
 Bidirectional: 118 dB

Equivalent Output Noise (A-weighted)
 Cardioid: 28 dB SPL
 Omnidirectional: 21 dB SPL
 Bidirectional: 23 dB

Signal-to-Noise Ratio
 (referenced at 94 dB SPL at 1 kHz)
 Cardioid: 68 dB
 Omnidirectional: 74 dB
 Bidirectional: 80 dB

Dynamic Range (1 kΩ load at 1 kHz)
 Cardioid: 103 dB
 Omnidirectional: 103 dB
 Bidirectional: 89 dB

Power Requirements.....11–52 Vdc phantom, 2.0 mA

LOGIC

For microphones and desktop bases equipped with logic LED input and switch output.

Logic Connections
 LED IN: Active low (≤1.0V), TTL compatible. Absolute maximum voltage: -0.7V to 50V.
 LOGIC OUT: Active low (≤1.0V), sinks up to 20mA, TTL compatible. Absolute maximum voltage: -0.7V to 50V (up to 50V through 3kΩ).

WIRELESS SPECIFICATIONS

For MX690 microphone and MX890 desktop base.

Operating Range30 m (100 ft.)
 Note: Actual range depends on RF signal absorption, reflection, and interference
Frequency Stability±10 ppm
Maximum Frequency Deviation45 Hz
Oscillator TypePhase-locked loop (PLL)controlled synthesizer
Power Requirements3V (2 AA alkaline orrechargeable batteries)
Battery Life≥8 hours (alkaline)
Power Consumption130 mA, 15 mA