## MX391, MX392, MX393 BOUNDARY MICROPHONES

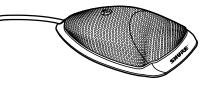
With slim design and superior audio reproduction, Microflex Boundary Microphones are the ideal conference room solution. Equipped with features like programmable, silent membrane switches, interchangeable cartridges, logic inputs and outputs, and LED indicators, Microflex Boundary microphones provide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

## **Specifications**

Туре	Condenser (electret bias)		
Frequency Response	50 Hz – 17 kHz		
Polar Pattern	MX391/C, MX392/C, MX393/C: Cardioid MX391/S, MX392/S, MX393/S: Supercardioid MX391/O, MX392/O, MX393/O: Omnidirectional		
Output Impedance	EIA rated at 150 Ω (180 Ω actual)		
<b>Logic Connections</b> (MX392 Only)	LED IN: Active low (<1.0 V), TTL compatible. Absolute maximum voltage: $-0.7$ V to 50 V. SWITCH OUT: Active low (<0.5 V), sinks up to 20 mA, TTL compatible. Absolute maximum voltage: $-0.7$ V to 50 V (up to 50 V through 3 k $\Omega$ ).		
Environmental Conditions	Operating temperature range: –18° C – 57° C Relative Humidity: 0 – 95%		
Power Requirements	11 - 52 Vdc phantom, 2.0 mA		
	MX391	MX392/MX393	
Sensitivity (at 1 kHz, open circuit voltage; 1 Pascal = 94 dB SPL); All settings -12 dB at 0 gain (internal modification)	Cardioid -29.5 dB (33.5 mV) Supercardioid -28.3 dB (38.5 mV) Omnidirectional -21.8 dB (81.4 mV)	Cardioid: -27.5 dBV/Pa (42.2 mV) Supercardioid: -26.5 dBV/Pa (47.3 mV) Omnidirectional: -22.0 dBV/Pa (79.4 mV)	
Maximum SPL  1 kHz at 1% THD, 1 kΩ load; All settings +6 dB at 0 gain (internal modification)	Cardioid: 118.8 dB Supercardioid: 117.5 dB Omnidirectional: 110.7 dB	Cardioid: 117.0 dB Supercardioid: 116.0 dB Omnidirectional: 111.5 dB	
Equivalent Output Noise A-weighted	Cardioid: 22.6 dB SPL Supercardioid: 21.3 dB SPL Omnidirectional: 14.5 dB SPL	Cardioid: 23.0 dB Supercardioid: 22.0 dB Omnidirectional: 17.5 dB	
Signal-to-Noise Ratio referenced at 94 dB SPL at 1 kHz	Cardioid: 71.4 dB Supercardioid: 72.7 dB Omnidirectional: 79.5 dB	Cardioid: 71.0 dB Supercardioid: 72.0 dB Omnidirectional: 76.5 dB	
Dynamic Range 1 $k\Omega$ load at 1 $kHz$	96.2 dB	94.0 dB	
Common Mode Rejection 10 Hz to 100 kHz	45 dB minimum, 10 Hz to 100 kHz	45 dB minimum, 10 Hz to 100 kHz	
Preamplifier Output Clipping Level 1% THD	-6 dBV (0.5 V)	-6 dBV (0.5 V)	
Polarity	Positive sound pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of the preamplifier XLR output	Positive sound pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of output connector (MX393) or red wire relative to black wire (MX392).	



MX391 Boundary microphone



MX392/MX393 Boundary microphone

## **Available Models**

The polar pattern of the cartridge is indicated by the model number suffix. C = Cardioid, O = Omnidirectional, S = Supercardioid

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MX391/C, MX391/S, MX391/0	Black surface-mount microphone, attached 3.7 m cable terminated, 4-pin mini connector, separate preamplifier	
MX391W-A/C, /S, /0	Bright white surface-mount microphone, attached 3.7 m cable terminated, 4-pin mini connector, separate preamplifier	
MX392/C, MX392/S, MX392/0	Surface-mount microphone, programmable membrane on/off switch, logic input/output terminals, on/off indicator LED, screw terminal connections, attached 3.7 m unterminated cable	
MX393/C, MX393/S, MX393/O	Surface-mount microphone, programmable membrane on/off switch, on/off indicator LED, miniature three pin connector, and detachable 3.7 m cable.	

