

# MXA910

Version: 1 (2019-G)

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## MXA910

### Specifications

All specifications measured from narrow lobe width. Values for all widths are within ± 3 dB of these specifications unless otherwise noted.

#### Lobe Width

	Narrow	35 degrees
Adjustable	Medium	45 degrees
	Wide	55 degrees

Connector Type RJ45

### Power Requirements

Power over Ethernet (PoE), Class 0

### Power Consumption

9W, maximum

#### Weight

MXA910	5.1 kg (11.3 lbs)	
Product Dimensions		
MXA910xx	603.8 x 603.8 x 56.63 mm (23.77 x 23.77 x 2.23 in.) H x W x D	
MXA910xx-60CM	593.8 x 593.8 x 56.63 mm (23.38 x 23.38 x 2.23 in.) H x W x D	
<b>A910-25MM</b> 619.7 x 619.7 mm (24.4 x 24.4 in.)		

#### control application

HTML5 Browser-based

Plenum Rating Requires Fyrewrap<sup>®</sup> fire protective wrap system (Included)

UL2043 (Suitable for Air Handling Spaces)

Dust Protection IEC 60529 IP5X Dust Protected

Operating Temperature Range -6.7°C (20°F) to 40°C (104°F) Storage Temperature Range -29°C (-20°F) to 74°C (165°F)

Audio

Frequency Response 180 to 17,000 Hz

#### AES67 or Dante Digital Output

Channel Count	10 total channels (8 independent transmit channels, 1 Automatic mixing transmit channel, 1 AEC reference in channel)
Sampling Rate	48 kHz
Bit Depth	24

Sensitivity at 1 kHz

0.75 dBFS/Pa

#### Maximum SPL

Relative to 0 dBFS overload

93.25 dB SPL

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

83 dB A-weighted

Latency Not including Dante latency

6 ms

Self Noise 11 dB SPL-A

Dynamic Range 82.25 dB

#### Built-in Digital Signal Processing

MXA910 firmware	Automatic mixing, Acoustic Echo Cancellation (AEC), Noise Reduction, Automatic Gain Control,
4.x or newer	Compressor, Delay, Equalizer (4-band Parametric), Mute, Gain (140 dB range)
MXA910 firmware 3.x or older	Automatic mixing, Echo Reduction, Equalizer (4-band Parametric), Mute, Gain (140 dB range)

#### Intelligibility Scale

Equivalent acoustic performance, compared to a cardioid gooseneck microphone (environment dependent)

Cardioid distance multiplied by 1.6

Networking

Cable Requirements Cat 5e or higher (shielded cable recommended)

### Lobe Sensitivity

The edge of the blue coverage area for each channel in the web application represents where the sensitivity reaches -6 dB. Understanding how lobe sensitivity is displayed helps to:

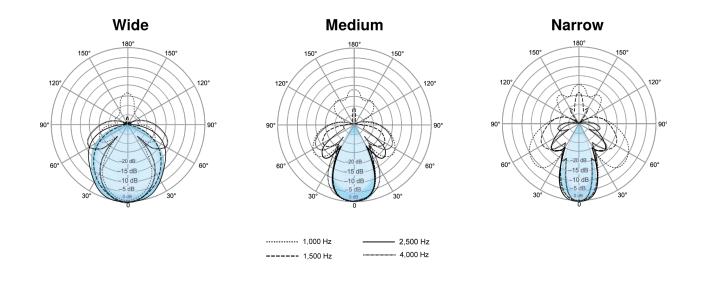
- Provide complete coverage in a space, either by adding lobes or changing the lobe width. This ensures the sensitivity is within 6 dB in all areas. It is acceptable for lobes to slightly overlap.
- Ensure that spacing and isolation are adequate to reduce noise and maximize automatic mixing performance.

Measured at 1 kHz, on-axis

Celling h	eight = 9 ft (2.7	m) —					
Talker h	neight= 4 ft (1.2	m) —					
		/		/			
Narrow	/		/ /			/	
Narrow Centimeters	55	44	30	0	30	44	55
Narrow Centimeters	55 22	44	30 12	0	30 12	44	55 22
Centimeters							
Centimeters Inches dB	22	17	12	0	12	17	22
Centimeters	22	17	12	0	12	17	22
Centimeters Inches dB	22 -12	17 -6	12 -3	0	12 -3	17 -6	22 -12
Centimeters Inches B Medium Centimeters	22 -12 69	17 -6 47	12 -3 38	0 0 0	12 -3 38	17 -6 47	22 -12 69
Centimeters Inches dB Medium Centimeters Inches dB	22 -12 69 27	17 -6 47 18	12 -3 38 15	0 0 0 0	12 -3 38 15	17 -6 47 18	22 -12 69 27
Centimeters Inches dB Medium Centimeters Inches	22 -12 69 27	17 -6 47 18	12 -3 38 15	0 0 0 0	12 -3 38 15	17 -6 47 18	22 -12 69 27
Centimeters Inches dB Centimeters Inches dB Centimeters Inches dB Centimeters dB Centimeters dB Centimeters dB Centimeters dB Centimeters centimeters dB Centimeters dB Centimeters centimeters dB Centimeters cen	22 -12 69 27 -12	17 -6 47 18 -6	12 -3 38 15 -3	0 0 0 0 0	12 -3 38 15 -3	17 -6 47 18 -6	22 -12 69 27 -12

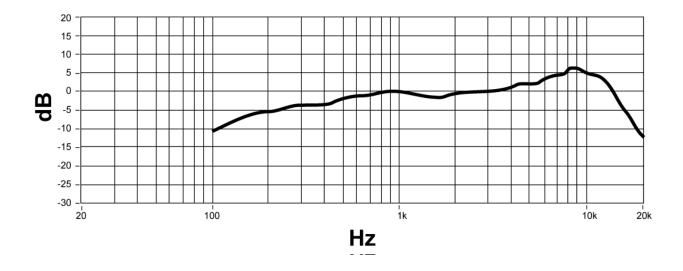
# Polar Response

Polar response measured directly on-axis from a distance of 6 feet (1.83 m).



### Frequency Response

Frequency response measured directly on-axis from a distance of 6 feet (1.83 m).



## IP Ports and Protocols

Shure Control

Port	TCP/UDP	Protocol	Description	Factory De- fault
21	tcp	FTP	Required for firmware updates (otherwise closed)	Closed
22	tcp	SSH	Not supported	Closed

Port	TCP/UDP	Protocol	Description	Factory De- fault
23	tcp	Telnet	Standard console interface	Closed
68	udp	DHCP	Dynamic Host Configuration Protocol	Open
80*	tcp	HTTP	Required to launch embedded web server	Open
427	tcp/udp	SLP <sup>†</sup>	Required for inter-device communication	Open
443	tcp	HTTPS	Not supported	Closed
161	tcp	SNMP	Not supported	Closed
162	tcp	SNMP	Not supported	Closed
2202	tcp	ASCII	Required for 3rd party control strings	Open
5353	udp	mDNS <sup>†</sup>	Required for device discovery	Open
5568	udp	SDT <sup>†</sup>	Required for inter-device communication	Open
8023	tcp	Telnet	Debug console interface	Password
8180*	tcp	HTML	Required for web application	Open
8427	udp	Multcast SLP <sup>†</sup>	Required for inter-device communication	Open
64000	tcp	Telnet	Required for Shure firmware update	Open

### Dante Audio & Controller

Port	TCP/UDP	Protocol	Description
162	udp	SNMP	Used by Dante
[319-320]*	udp	$PTP^{\dagger}$	Dante clocking
2203	udp	Custom	Required for packet bridge
4321, 14336-14600	udp	Dante	Dante audio
[4440, 4444, 4455]*	udp	Dante	Dante audio routing
5353	udp	mDNS <sup>†</sup>	Used by Dante
[8700-8706, 8800]*	udp	Dante	Dante Control and Monitoring
8751	udp	Dante	Dante Controller
16000-65536	udp	Dante	Used by Dante

\*These ports must be open on the PC or control system to access the device through a firewall.

<sup>†</sup>These protocols require multicast. Ensure multicast has been correctly configured for your network.