



# MXA910

Version: 2.1 (2020-J)

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# MXA910

## Specifications

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

### General

#### Lobe Width

<b>Adjustable</b>	Narrow	35 degrees
	Medium	45 degrees
	Wide	55 degrees

#### Connector Type

RJ45

#### Power Requirements

Power over Ethernet (PoE), Class 0

#### Power Consumption

9W, maximum

#### Weight

5.3 kg (11.75 lbs)

#### Product Dimensions

<b>MXA910xx</b>	603.8 x 603.8 x 54.69 mm (23.77 x 23.77 x 2.15 in.) H x W x D
<b>MXA910xx-60CM</b>	593.8 x 593.8 x 54.69 mm (23.38 x 23.38 x 2.15 in.) H x W x D
<b>MXA910W-A</b>	603.8 x 603.8 x 54.69 mm (23.77 x 23.77 x 2.15 in.) H x W x D
<b>MXA910W-US</b>	603.8 x 603.8 x 54.69 mm (23.77 x 23.77 x 2.15 in.) H x W x D

#### control application

HTML5 Browser-based or Shure Designer

#### Plenum Rating

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

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

<b>Direct outputs</b>	7 ms
<b>Automix output (Includes IntelliMix processing)</b>	18 ms

### Self Noise

11 dB SPL-A

### Dynamic Range

82.25 dB

### Built-in Digital Signal Processing

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

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## Acoustic Echo Cancellation Tail Length

Up to 250 ms

## Networking

### Cable Requirements

Cat 5e or higher (shielded cable recommended)

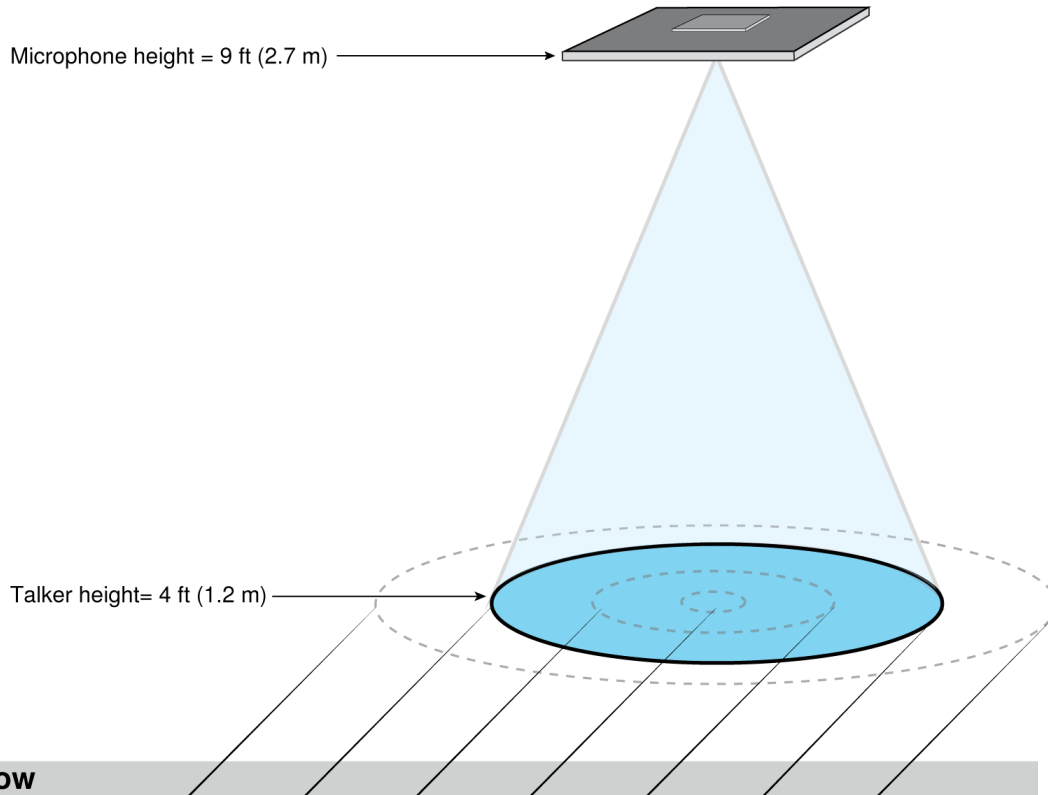
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# Lobe Sensitivity

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.

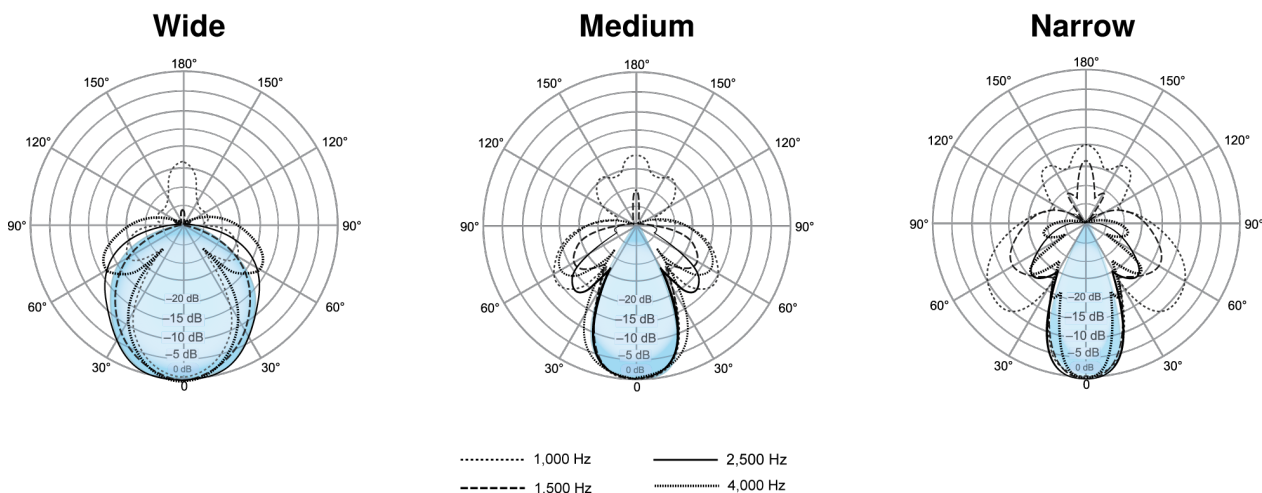
*Measured at 1 kHz, on-axis*



<b>Narrow</b>							
Centimeters	55	44	30	0	30	44	55
Inches	22	17	12	0	12	17	22
<b>dB</b>	-12	<b>-6</b>	-3	0	-3	<b>-6</b>	-12
<b>Medium</b>							
Centimeters	69	47	38	0	38	47	69
Inches	27	18	15	0	15	18	27
<b>dB</b>	-12	<b>-6</b>	-3	0	-3	<b>-6</b>	-12
<b>Wide</b>							
Centimeters	92	62	44	0	44	62	92
Inches	36	24	17	0	17	24	36
<b>dB</b>	-12	<b>-6</b>	-3	0	-3	<b>-6</b>	-12

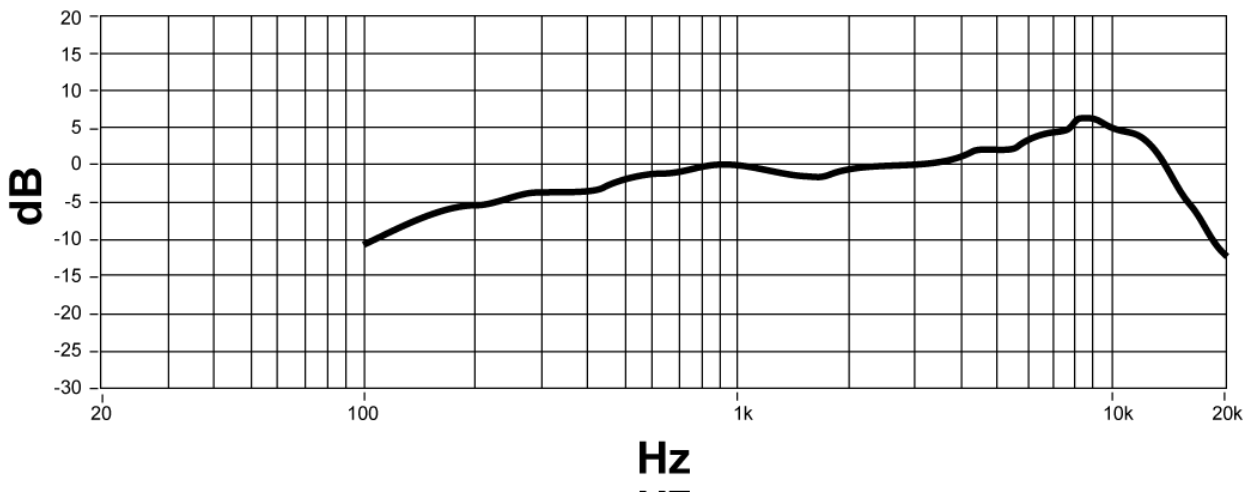
## Polar Response

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 Default
21	tcp	FTP	Required for firmware updates (otherwise closed)	Closed
22	tcp	SSH	Not supported	Closed

Port	TCP/UDP	Protocol	Description	Factory Default
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	Multicast 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 <sup>†</sup>	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.



†These protocols require multicast. Ensure multicast has been correctly configured for your network.