



MXA920

Specifications

Specifications for Shure MXA920-S and MXA920-R ceiling array microphones.
Version: 0.1 (2022-D)

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MXA920

Specifications

General

Coverage Type

Automatic or steerable

Power Requirements

Power over Ethernet (PoE), Class 0

Power Consumption

10.1 W maximum

Control Software

Designer or web application

Plenum Rating

MXA920-S	UL2043 (Suitable for Air Handling Spaces)
MXA920-R	Not rated

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)

Networking

Cable Requirements

Cat5e or higher (shielded cable recommended)

Connector Type

RJ45

Audio

AES67 or Dante Digital Output

Channel Count	Automatic coverage on	2 total channels (1 output, 1 AEC reference in channel)
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	Automatic coverage off	10 total channels (8 independent transmit channels, 1 automix output, 1 AEC reference in channel)
Sampling Rate		48 kHz
Bit Depth		24

Sensitivity

at 1 kHz

-1.74 dBFS/Pa

Maximum SPL

Relative to 0 dBFS overload

95.74 dB SPL

Signal-to-Noise Ratio

Ref. 94 dB SPL at 1 kHz

75.76 dB A-weighted

Latency

Does not include Dante latency

Direct outputs (Automatic coverage off)	15.9 ms
Automix output (Includes IntelliMix processing)	26.6 ms

Self Noise

18.24 dB SPL-A

Dynamic Range

77.5 dB

Digital Signal Processing

Automatic mixing, acoustic echo cancellation (AEC), noise reduction, automatic gain control, compressor, delay, equalizer (4-band parametric), mute, gain (140 dB range)

Acoustic Echo Cancellation Tail Length

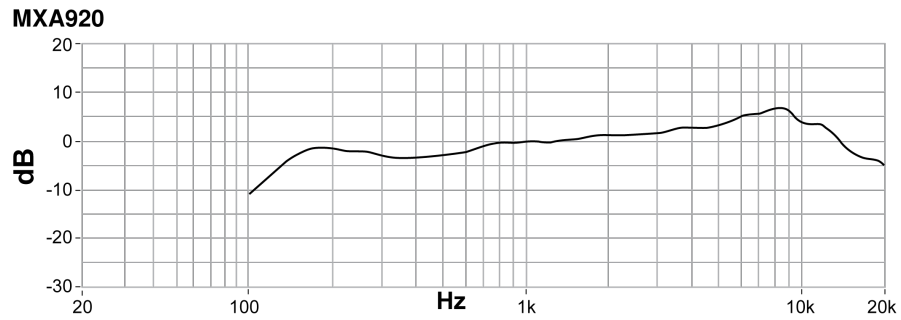
Up to 250 ms

Frequency Response

125 Hz to 20,000 Hz

MXA920 Frequency Response

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



Dimensions

Weight

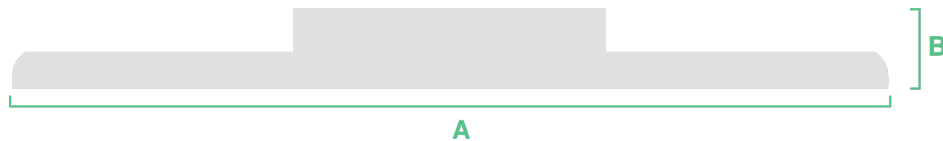
- MXA920-S: 11.8 lbs (5.4 kg)
- MXA920-R: 12.7 lbs (5.8 kg)

MXA920-S



- A (Microphone flange): 0.41 in. (10.5 mm)
- B (Edge to edge): 23.77 in. (603.8 mm)
- C (Height): 2.15 in. (54.69 mm)

MXA920-S-60CM



- A (Edge to edge): 23.38 in. (593.8 mm)
- B (Height): 2.15 in. (54.69 mm)

MXA920-R



- A (Height to top of eyelets): 2.4 in. (61.3 mm)
- B (Outer diameter): 25 in. (635.4 mm)



P300

Version: 2 (2020-A)

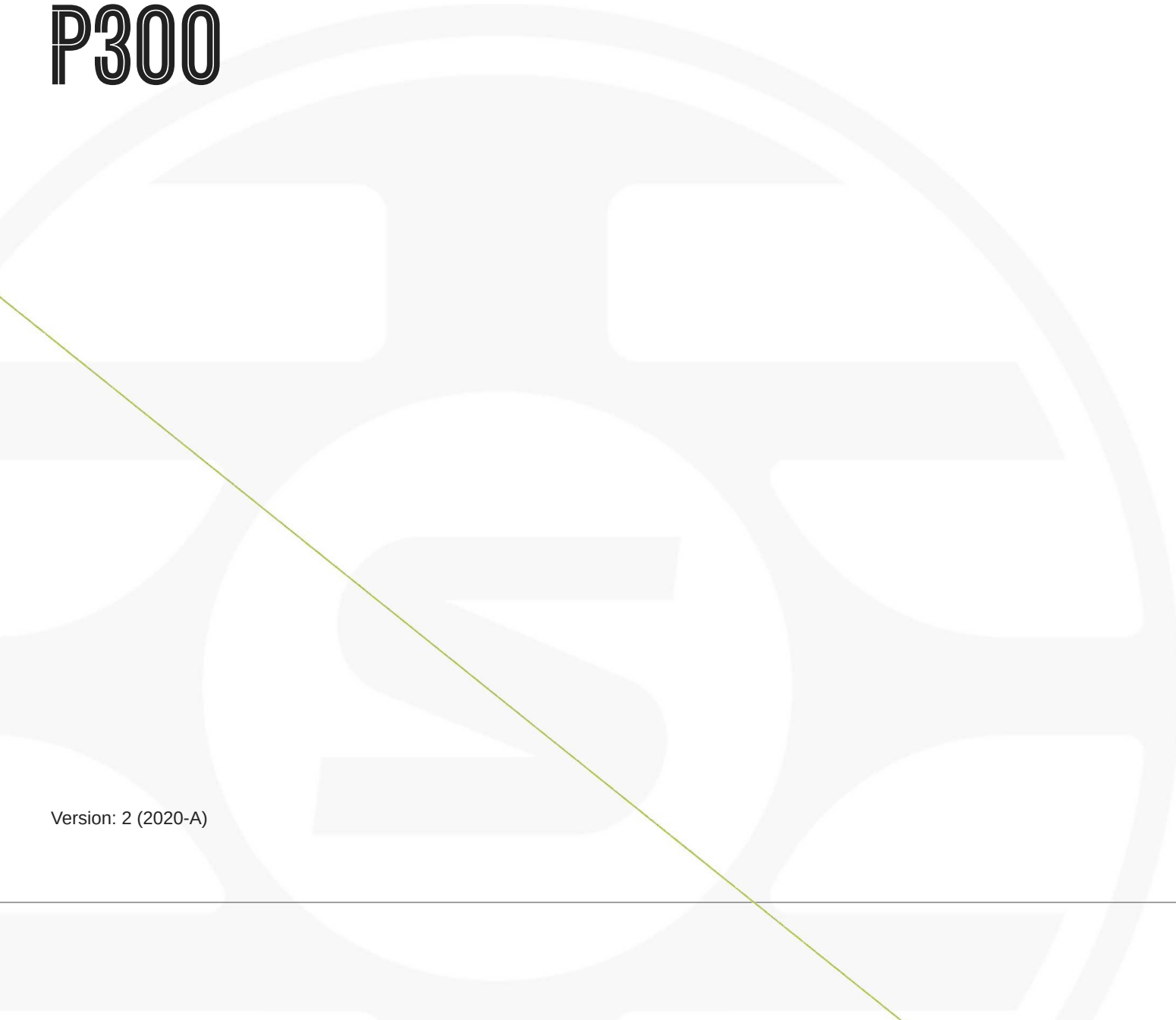


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P300

Specifications

General

Input	(2) 3-pin block connector (Active Balanced)
Output	(2) 3-pin block connector (Impedance Balanced)
Mobile	(1) TRRS 3.5 mm (1/8")

USB Connections

(1) USB 2.0, Type B

Single port carries 2 input and 2 output channels (Summed mono)

Network Connections (Dante Digital Audio)

(1) RJ45

10 Dante Inputs , 8 Dante Outputs

Polarity

Non-inverting, any input to any output

Power Requirements

802.3 at Type 2 (PoE Plus), Class 4

Power Consumption

17.5 W, maximum

Weight

1710 g (3.8 lbs)

Dimensions

H x W x D

4 x 21 x 22.6 cm (1.6 x 8.3 x 8.9 in.)

Control Software

Shure Designer

Operating Temperature Range

-6.7°C (20°F) to 50°C (122°F)

Storage Temperature Range

-29°C (-20°F) to 74°C (165°F)

Thermal Power Dissipation

Maximum	17.5 W (60 BTU/hr)
typical	14.6 W (50 BTU/hr)

Audio

Frequency Response

+1, -1.5 dB

20 to 20,000 Hz

Dante Digital Audio

Sampling Rate	48 kHz
Bit Depth	24

USB Audio

Sampling Rate	48 kHz
Bit Depth	16, 24

Latency

Does not include Dante latency

Firmware 4.1 and newer	Dante 1-8 in to Dante out (AEC enabled)	15.4 ms
	Dante 1-8 in to Dante out (AEC disabled)	8.7 ms
	Dante 9-10 in to Dante out	3.4 ms
	Analog in to Analog out	3.8 ms
Firmware 3.1 and older	Dante 1-8 in to Dante out (AEC enabled)	12.5 ms
	Dante 1-8 in to Dante out (AEC disabled)	5.8 ms
	Dante 9-10 in to Dante out	1.8 ms
	Analog in to Analog out	2.2 ms

Analog Connections (Block Connectors)

Dynamic Range

20 Hz to 20 kHz, A-weighted, typical

Analog-to-Dante	113 dB
Dante-to-Analog	117 dB

Equivalent Input Noise

20 Hz to 20 kHz, A-weighted, input terminated with 150Ω

Line	-86 dBV
Aux	-98 dBV

Total Harmonic Distortion*@ 1 kHz, 0 dBV Input, 0 dB analog gain*

<0.05%

Common Mode Rejection Ratio*150Ω balanced source @ 1 kHz*

>50 dB

Input Impedance

9.6 kΩ

Input Clipping Level

Line	+27 dBV
Aux	+15 dBV

Output Impedance

80 Ω

Output Clipping Level

Line	+20 dBV
Aux	+0 dBV
Mic	-26 dBV

Mobile Connection (3.5 mm Connector)**Pin Assignments**

Tip	Audio Input (Left)
Ring 1	Audio Input (Right)
Ring 2	Ground
Sleeve	Audio Output (To Phone)

Dynamic Range*20 Hz to 20 kHz, A-weighted, typical*

Analog-to-Dante	99 dB
Dante-to-Analog	90 dB

Equivalent Input Noise*20 Hz to 20 kHz, A-weighted, input terminated with 20Ω*

-95 dBV

Total Harmonic Distortion*@ 1 kHz, 0 dBV Input, 0 dB analog gain*

<0.05%

Input Impedance

3.7 k Ω

Input Clipping Level

+4 dBV

Output Impedance

1.4 k Ω

Output Clipping Level

Output terminated with 2.2 k Ω

-20 dBV

Networking

Cable Requirements

Cat 5e or higher (shielded cable recommended)