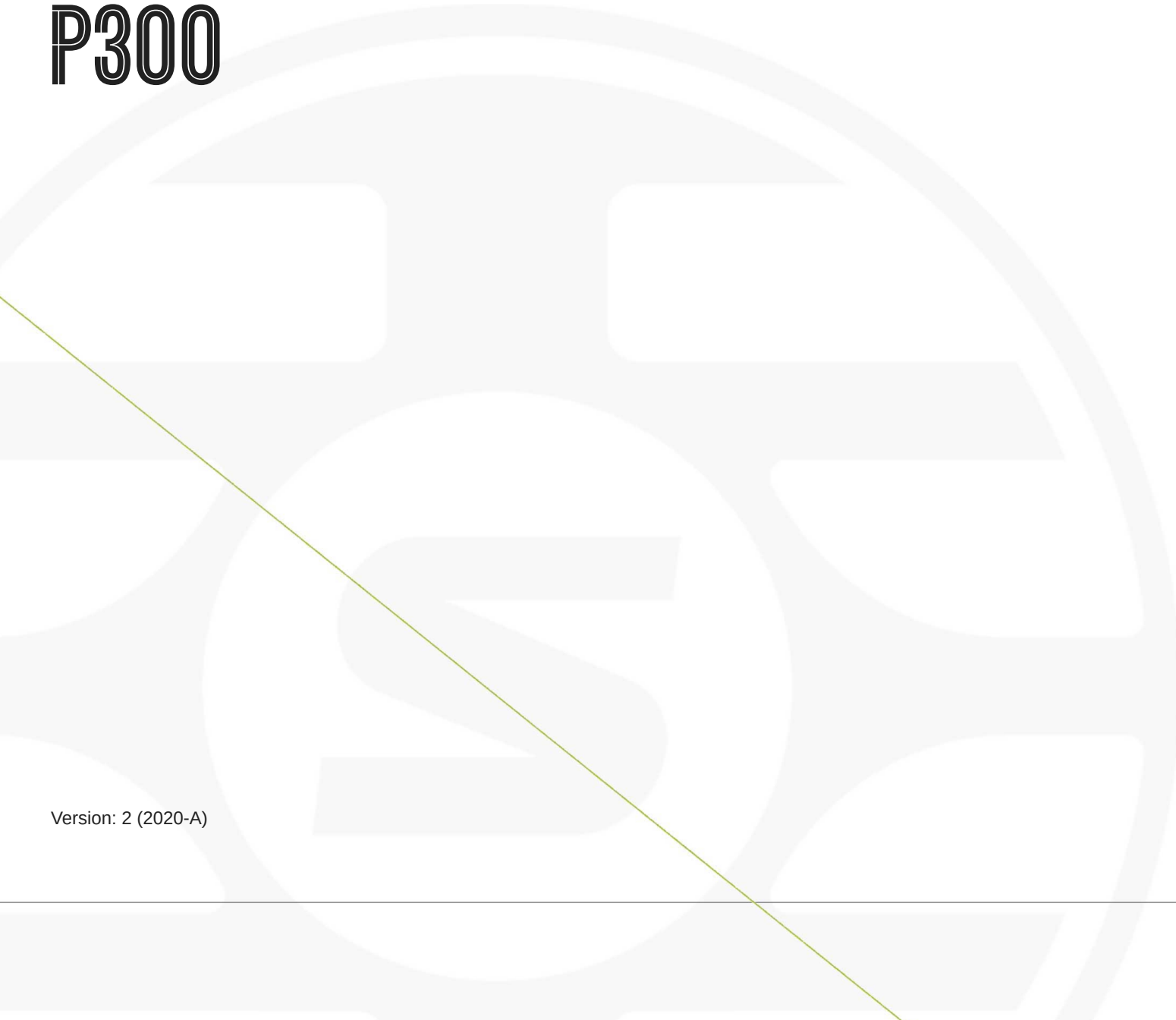




# P300

Version: 2 (2020-A)



# Table of Contents

P300	3	Specifications	3
------	---	----------------	---

# P300

## Specifications

### General

<b>Input</b>	(2) 3-pin block connector (Active Balanced)
<b>Output</b>	(2) 3-pin block connector (Impedance Balanced)
<b>Mobile</b>	(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

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

## Audio

## Frequency Response

+1, -1.5 dB

20 to 20,000 Hz

## Dante Digital Audio

<b>Sampling Rate</b>	48 kHz
<b>Bit Depth</b>	24

## USB Audio

<b>Sampling Rate</b>	48 kHz
<b>Bit Depth</b>	16, 24

## Latency

*Does not include Dante latency*

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

## Analog Connections (Block Connectors)

## Dynamic Range

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

<b>Analog-to-Dante</b>	113 dB
<b>Dante-to-Analog</b>	117 dB

## Equivalent Input Noise

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

<b>Line</b>	-86 dBV
<b>Aux</b>	-98 dBV

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

&lt;0.05%

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

&gt;50 dB

**Input Impedance**

9.6 kΩ

**Input Clipping Level**

<b>Line</b>	+27 dBV
<b>Aux</b>	+15 dBV

**Output Impedance**

80 Ω

**Output Clipping Level**

<b>Line</b>	+20 dBV
<b>Aux</b>	+0 dBV
<b>Mic</b>	-26 dBV

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

<b>Tip</b>	Audio Input (Left)
<b>Ring 1</b>	Audio Input (Right )
<b>Ring 2</b>	Ground
<b>Sleeve</b>	Audio Output (To Phone)

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

<b>Analog-to-Dante</b>	99 dB
<b>Dante-to-Analog</b>	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*

&lt;0.05%

Input Impedance

3.7 k $\Omega$

Input Clipping Level

+4 dBV

Output Impedance

1.4 k $\Omega$

Output Clipping Level

*Output terminated with 2.2 k $\Omega$*

-20 dBV

## Networking

### Cable Requirements

Cat 5e or higher (shielded cable recommended)