



P300

Version: 2 (2020-A)

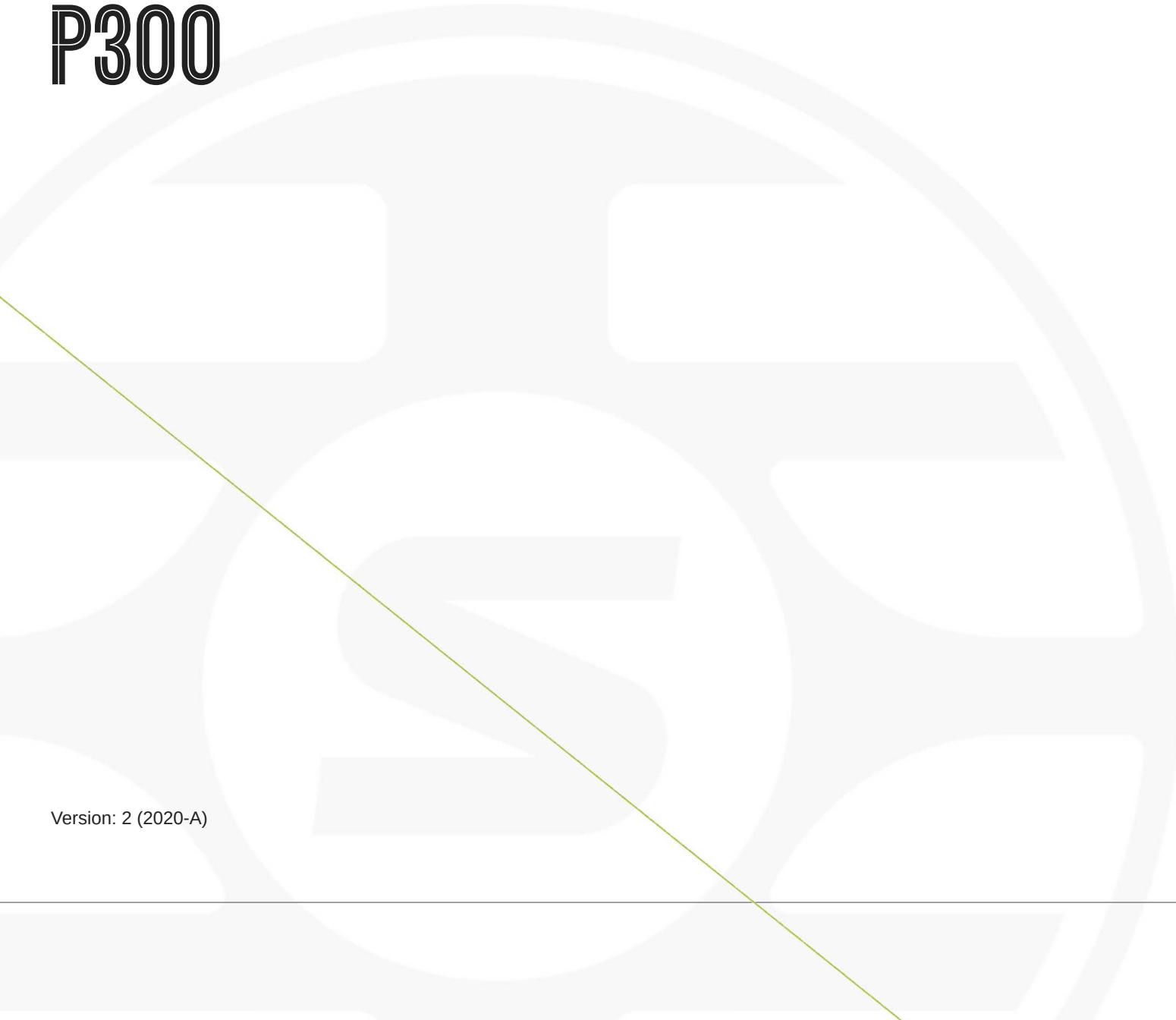


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P300

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)