



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)