

# Appendix C: Technical Information

## HD1801 Specifications

### Acoustic Performance

Frequency Response (-10 dB):	35 Hz – 145 Hz
Frequency Response (-3 dB):	44 Hz – 95 Hz
Max peak SPL (calculated) <sup>1</sup> :	133 dB
Max peak SPL (measured) <sup>2</sup> :	129 dB

### Transducer

Diameter:	18.0 in / 457 mm
Voice Coil Diameter:	4.0 in / 102 mm
Diaphragm Material:	Paper
Magnet Material:	Ferrite

### Power Amplifier

Rated Power:	800 watts rms 1600 watts peak
THD:	< 0.03%
Design:	Class D
Cooling:	Active, twin thermally controlled vari-speed fans

### Input/Output

Input Type:	Female XLR Balanced differential (stereo left/right)
Input Impedance:	20 k $\Omega$
Full Range Output:	Male XLR Balanced (parallel with input)
High Pass Output:	Male XLR Balanced
Output Impedance:	300 $\Omega$
Level Control:	-6 dB to +6 dB

### Electronic Crossover

Crossover Type:	24 dB/oct. Symmetrical Linkwitz-Riley
Crossover Frequency:	100 Hz

### Protection Features

Over-excursion Protection:	40 Hz 24 dB/oct. Butterworth High Pass Filter
Thermal Protection:	Amplifier mute, auto reset, twin thermally controlled vari-speed fans
Driver Protection:	Peak/RMS Limiter
Display LEDs:	Power Light ON, Polarity Invert, Thermal, Sig/Limit, Front Power ON

### AC Power Requirements

US:	100-120 VAC, 50-60 Hz, 300 watts
Europe:	220-240 VAC, 50-60 Hz, 300 watts
AC Connector:	3-pin IEC 250 VAC, 15 A male

### Construction Features

Basic Design:	Rectangular
Material:	15 mm exterior grade premium birch plywood
Finish:	High durability black paint
Handles:	One on each side
Grille:	Powder-coated galvanized steel
Fly Points:	Twelve M10 x 1.5 mm

### Physical Properties

Height:	23.0 in / 584 mm
Width:	23.0 in / 584 mm
Depth:	25.8 in / 655 mm
Weight:	106 lb / 48.1 kg

### Mounting Methods

Floor mount or fly via 12 integrated M10 mounting points (using M10 x 1.5 x 37 mm forged shoulder eyebolts). See page 12 for more information.

### Disclaimer

Since we are always striving to make our products better by incorporating new and improved materials, components, and manufacturing methods, we reserve the right to change these specifications at any time without notice.

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<sup>1</sup> Calculated from peak driver sensitivity and amplifier power, half space.

<sup>2</sup> Measured with swept sine at 1 W within operating range, scaled for max power, half space.