

HD1801

The Mackie HD1801 18-inch powered subwoofer provides intense low-frequency extension and punch to any Mackie full-range system.

The HD1801 High-Definition Powered Subwoofer delivers 1600W of peak system power via Class-D Fast Recovery™ amplification. Class-D amp design delivers up to 95% efficiency and, along with the lightweight switch-mode power supply, drastically reduces this subwoofer's weight.

EAW custom-designed HD Series transducers maximize efficiency and performance when matched with the system's internal amp. The 18-inch woofer uses a ferrite magnet with a 4-inch voice coil.

Premium circuitry includes a symmetrical Linkwitz-Riley crossover, precision tuning filters and user-friendly features such as high pass outputs for stereo operation with a single sub.

The lightweight and portable 15mm birch plywood enclosures feature a ported, direct-radiating design. It is rugged and ready for install using the 12 integral fly points. Standard M10 eyebolts allow the HD1801 to be flown both vertically and horizontally. The professional look of the HD1801 may be further enhanced by defeating the front panel LED. The integrated pole-cup accommodates a standard mounting pole. Pair the HD1801 with any Mackie HD-Series full-range loudspeaker for an extremely powerful and fully high-definition PA solution.

APPLICATIONS

Small to mid-size club/band PA systems, houses of worship, DJs, rehearsal spaces, gymnasiums, banquet halls, A/V rentals and many, many more.



FEATURES:

- 18" High-Definition Powered Subwoofer System
- 800W RMS / 1600W peak of efficient Class-D Fast Recovery™ amplification
- 18" woofer with 4" voice coil custom designed by EAW
- High-definition audio processing includes:
 - Symmetrical Linkwitz-Riley crossover (100 Hz, 24 dB/octave)
 - Precision tuning filters for accurate bass reproduction
 - Phase alignment to perfectly complement Mackie full-range loudspeakers
- Ported, direct-radiating design for maximum punch and low-frequency extension
- Dual XLR inputs, full-range and high-pass outputs for mono or stereo setups
- Integrated limiting and protection circuitry
- Compact and lightweight (106 lb / 48.1 kg)
- Rugged all wood cabinet (15mm birch plywood)
- Pole mount receptacle for mounting full-range loudspeaker
- Optional caster kit
- 12 integrated M10 flypoints

HD1801 SPECIFICATIONS

Acoustic Performance

Frequency Response (-10 dB)	35 Hz - 145 Hz
Frequency Response (-3 dB)	44 Hz - 95 Hz
Max SPL peak (calculated) ¹	133 dB
Max SPL peak (measured) ²	129 dB

¹ Calculated from peak driver sensitivity and amplifier power, half space.

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

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
Rated THD	< 0.03%
Cooling	Active, twin thermally controlled vari-speed fans
Design	Class D

Input / Output

Input Type	Female XLR Balanced differential (stereo left / right)
Input Impedance	20 kΩ balanced
Full Range Output	Male XLR Balanced (parallel with input)
High Pass Output	Male XLR Balanced
Output Impedance	300 Ω
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
Operating Temperature	0° - 40°C 32° - 104°F

AC Power Requirements

US	100 - 120 VAC, 50 - 60 Hz 300 watts
EU, CN	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 (packaged product)

Height	24.4 in / 620 mm
Width	27.9 in / 709 mm
Depth	30.7 in / 780 mm
Shipping Weight	115.0 lb / 52.2 kg

Physical Properties (product)

Height	23.0 in / 584 mm
Width	23.0 in / 584 mm
Depth	25.8 in / 655 mm
Weight	106 lb / 48.2 kg

Mounting Methods

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

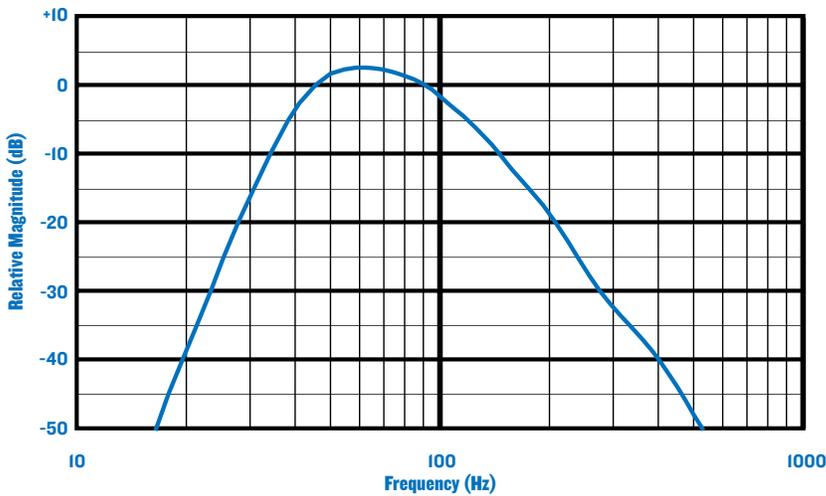
Options

SPM200 Loudspeaker Pole Mount	P/N 2035170-01
PA-A2 Forged Shoulder Eyebolt Kit (4 x M10 x 1.5 mm x 37 mm)	P/N 0028272
ACC-CK100 Caster Kit	P/N 2035618-01
ACC-R180S Rigging Kit	P/N 2035661-00

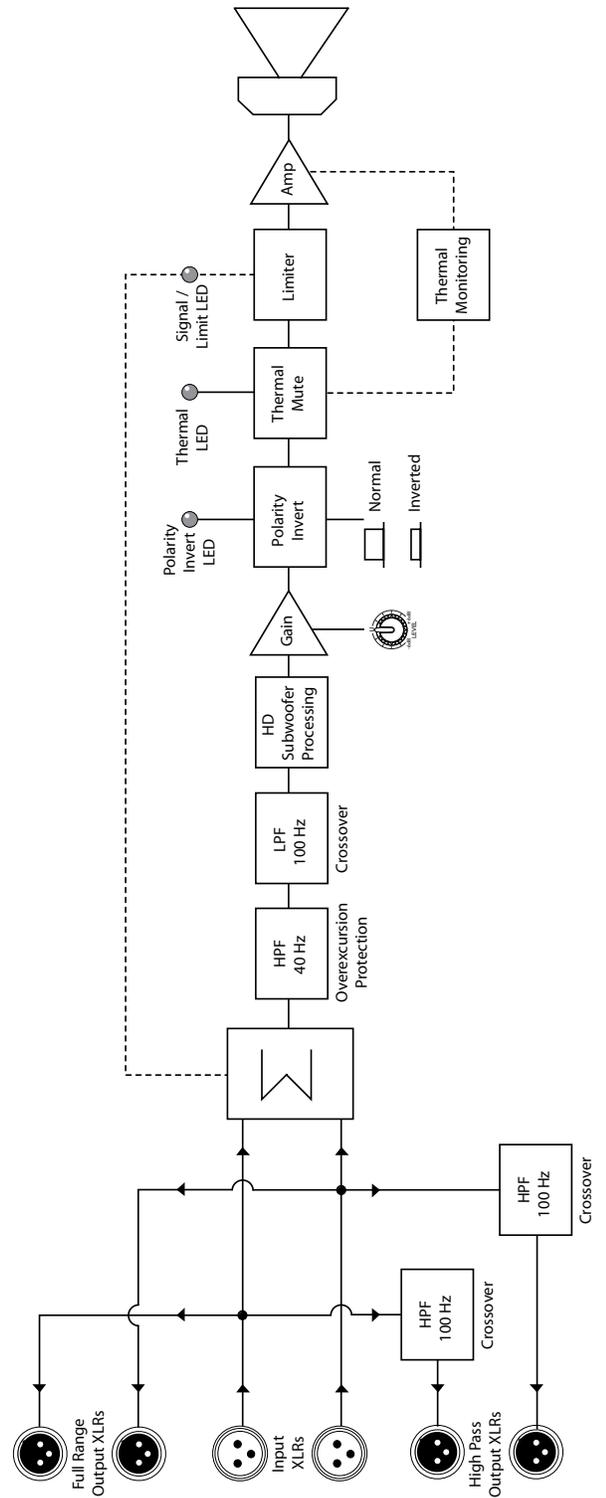
Ordering Information

HD1801 18" High Definition Powered Subwoofer, US	P/N 0033250-00
HD1801 18" High Definition Powered Subwoofer, EU	P/N 0033250-01
HD1801 18" High Definition Powered Subwoofer, CN	P/N 0033250-05

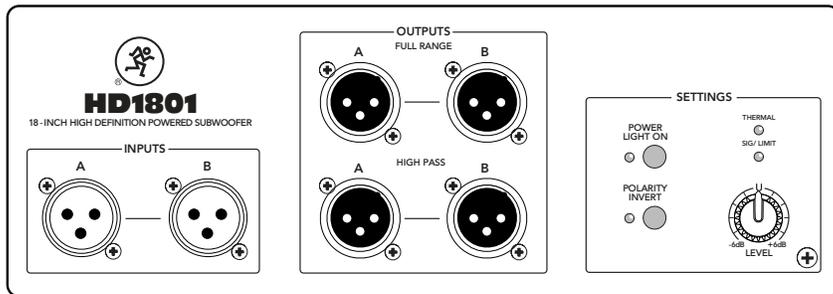
HD1801 FREQUENCY RESPONSE



HD1801 BLOCK DIAGRAM

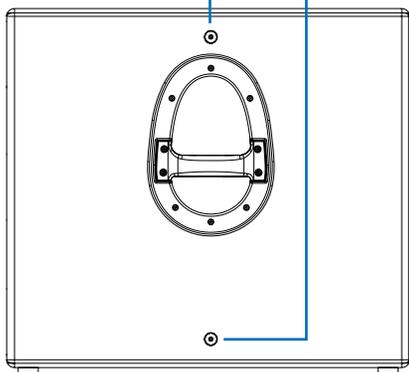


HD1801 INPUT PANEL

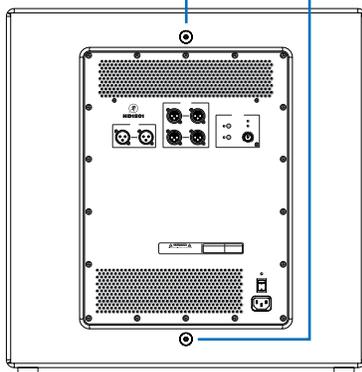


HDI801 FLY POINTS (12)

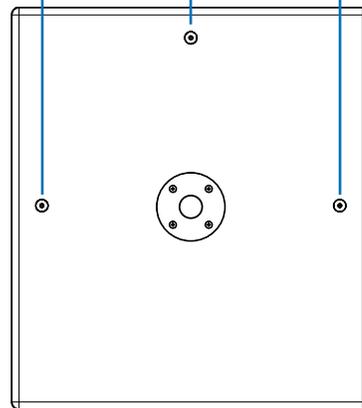
Two per side



Two on the rear

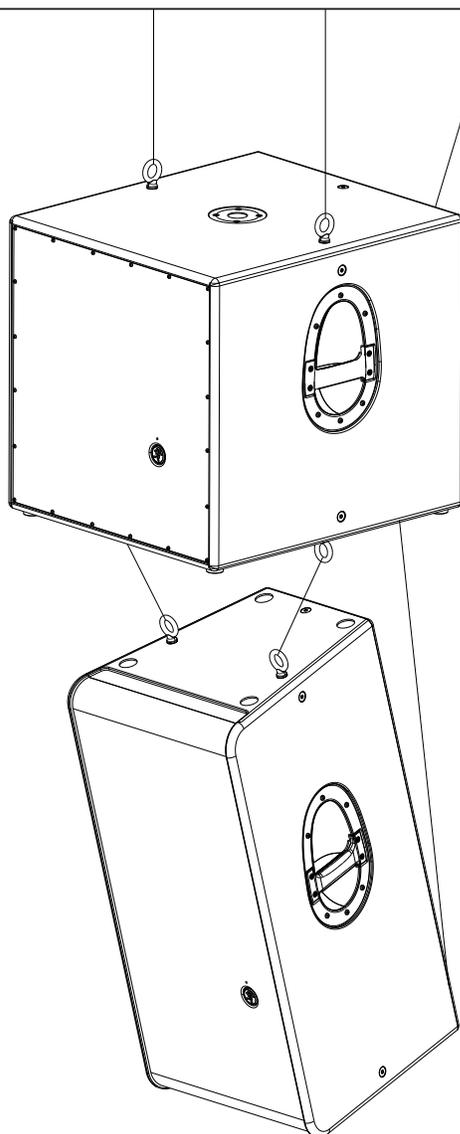
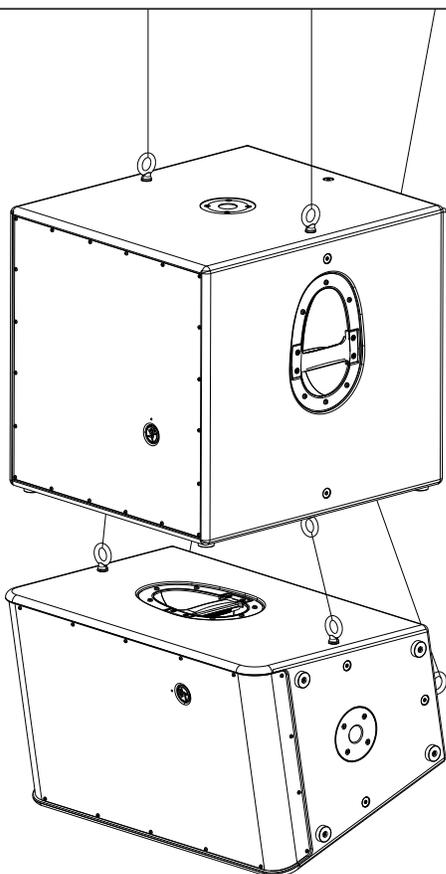


Three each on the top and bottom

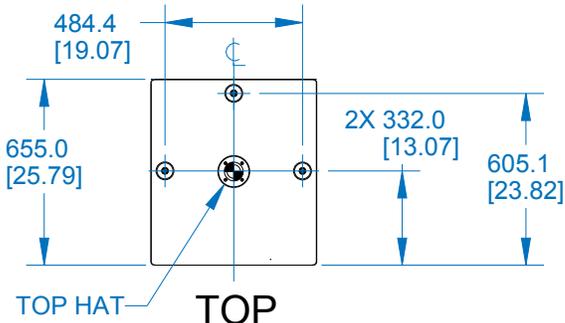


HDI801 with a Mackie HDI521 Flown Horizontally

HDI801 with a Mackie HDI531 Flown Vertically

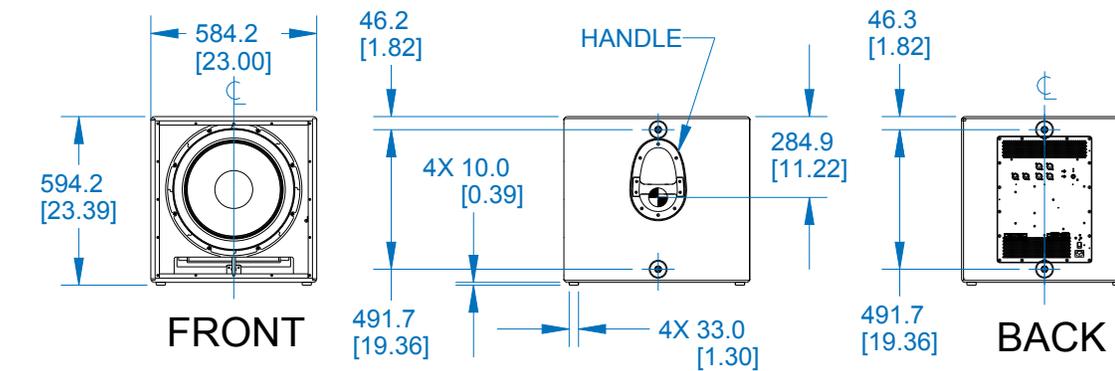


HD1801 DIMENSIONS

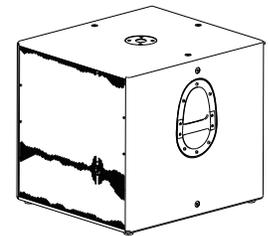


NOTES:

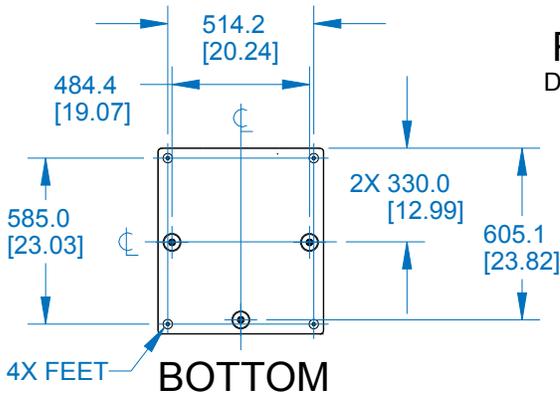
1. SYMBOL INDICATES CENTER OF BALANCE.
2. SYMBOL INDICATES PI ANGLE M10.
3. WEIGHT APPROX. 48.2 kg [106 lb]
4. SHIPPING WEIGHT APPROX. 52.2 kg [115 lb]



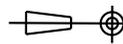
RIGHT SIDE
DIMENSIONS APPLY
TO BOTH SIDES



HD1801



THIRD ANGLE PROJECTION



UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN MILLIMETERS. DUAL [INCHES] DIMENSIONS FOR REF ONLY.

TOLERANCES
LINEAR ± 3.3 mm / ± 0.13 in; ANGLES $\pm 1^\circ$

(X.XX) = REF DIMS
NO TOLERANCE IMPLIED

TSC=THEORETICAL SHARP CORNER
DIMENSIONS ACROSS CENTERLINES
TO BE SYMMETRICAL

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Part No. SW0847 Rev. A 06/10

Electronic files for this product are available at:

www.mackie.com

Specification Sheet

HD1801_SS.PDF

Owner's Manual

HD1801_OM.PDF

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