

ELEVATE YOUR EXPERIENCE

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MACKIE®



Introducing HD™ Series High-Definition Powered Loudspeakers. Experience the power and clarity of a completely optimized and perfectly tuned system.

Class-leading power, precision crossovers, phase and driver time alignment and patented acoustic correction processing work in harmony to create high-definition sound that was previously only found in high-end stadium touring systems. Clean, smooth lines and understated beauty define the robust enclosure that fits seamlessly into any environment.

HD Series High-Definition Powered Loudspeakers — Elevate Your Experience.



HD 1531



HD 1521



1800 WATTS

HD1531

- Class-D Fast Recovery™ amplification
 - LF 700W RMS / 1400W Peak
 - MF 100W RMS / 200W Peak
 - HF 100W RMS / 200W Peak
- High-Definition Audio Processing
 - Patented acoustic correction
 - Driver time alignment
 - Precision 3-way crossover
- Custom designed transducers by EAW
 - 15" neodymium woofer
 - 6" high-output mid-range driver
 - 1.75" compression driver
- User-adjustable 3-band contour EQ
- Ultra-compact and lightweight (96 lbs)
- Rugged all-wood cabinet (15 mm birch)
- 12 integrated M10 fly points
- Pole-mountable
- Optimized WaveFront™ wide-dispersion high/mid horn system



1600 WATTS

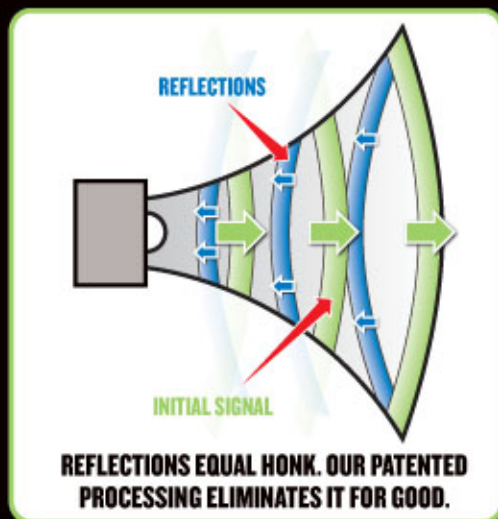
HD1521

- Class-D Fast Recovery™ amplification
 - LF 700W RMS / 1400W Peak
 - HF 100W RMS / 200W Peak
- High-Definition Audio Processing
 - Patented acoustic correction
 - Driver time alignment
 - Precision 2-way crossover
- Custom designed transducers by EAW
 - 15" neodymium woofer
 - 1.75" compression driver
- User-adjustable 3-band contour EQ
- Ultra-compact and lightweight (80 lbs)
- Rugged all-wood cabinet (15 mm birch)
- 12 integrated M10 fly points
- Pole-mountable

DEFINE THE EXPERIENCE

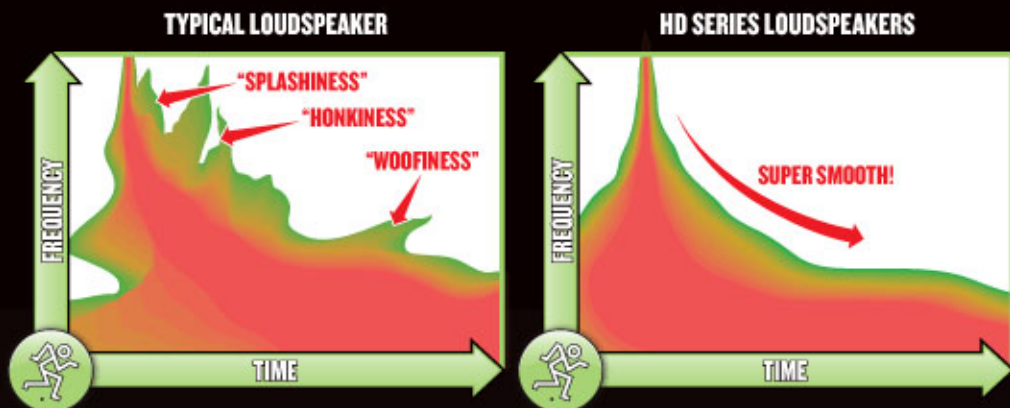
Mackie created the "Active" electronics game long ago, incorporating precision crossovers and transducer time/phase alignment processing into the loudspeaker. This instantly took the guesswork out of setting up a perfectly tuned system and the world of loudspeakers irreversibly changed. HD Series High-Definition Powered Loudspeakers not only advance Active technology, they take it to an entirely new level, marking the next major advancement for powered loudspeakers: High-Definition Live Sound.

Every audio professional is all too familiar with the "horn sound" — a megaphone-like "honkiness" that is unmistakable. If you've forgotten, cup your hands in front of your mouth and speak loudly. This prominent resonance, caused by reflections between the compression driver diaphragm and the horn mouth is responsible for the characteristic horn "honk." Likewise, cone drivers have resonances in their upper frequency range that result in "muddiness" in the middle of the vocal range. But what can a loudspeaker designer do to counter these inherent physical characteristics? Can Mackie defy the very laws of physics?



Introducing Mackie High-Definition Audio Processing. The key to high-definition live sound is the detailed measurement and analysis of the inherent problems of horns and woofers. The experts at EAW developed proprietary measurement tools and software for acoustical analysis. These extremely innovative and NASA-esque tools were used to investigate the unprocessed responses of transducers.

The team developed custom (and rather radical) DSP algorithms specifically engineered to correct loudspeaker anomalies. The graphs below detail the traditionally problematic loudspeaker issues and the improvement that HD provides. Now you and your audience can enjoy clarity and accuracy that was previously available only in ridiculously high-end, expensive line array systems. HD Series — defining high-definition live sound...and elevating the experience for anyone within earshot.



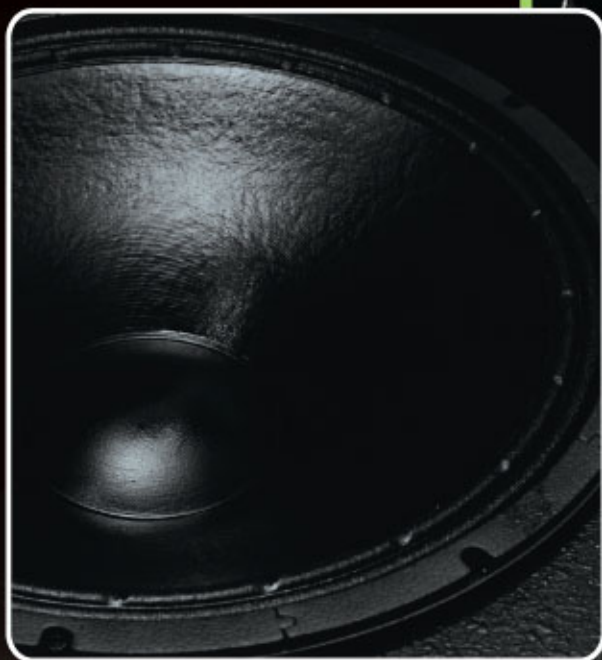
MAXIMIZE YOUR OUTPUT

Like computer technology, amplifier technology is rapidly and continuously evolving. If you are not ahead of the curve, you might as well stay home. HD Series loudspeakers represent the pinnacle of Class-D amplifier technology and pack more power than any other speaker in their class. Delivering up to 1800W of combined peak system power, our Class-D Fast Recovery™ amplifiers are lighter and more powerful, with less distortion, even when pushed to clipping. And all-new, ultra-efficient switch-mode power supplies ensure the amplifiers are always well fed and ready to perform. Get the most wattage for your money with HD Series loudspeakers.



EAW INSIDE

Our custom-designed transducers are specified by the award-winning EAW design team to ensure the highest possible quality and efficiency when integrated into an HD system. A high-end 15" neodymium woofer with a 3" voice coil is built to handle the massive power delivered by the Class-D Fast Recovery™ amplifier. A 1.75" diaphragm compression driver is made using heat-treated titanium, ensuring years of brilliant high-frequency reproduction. The 3-way HD1531 incorporates a 6" midrange transducer. Improving on traditional hi/mid horn designs, Mackie's optimized wide-dispersion WaveFront™ system focuses energy directly at your audience, ensuring optimum intelligibility for every seat in the house. Once the transducers are selected, all aspects of the system are custom-tuned to achieve the most output and best possible sound from every single component.



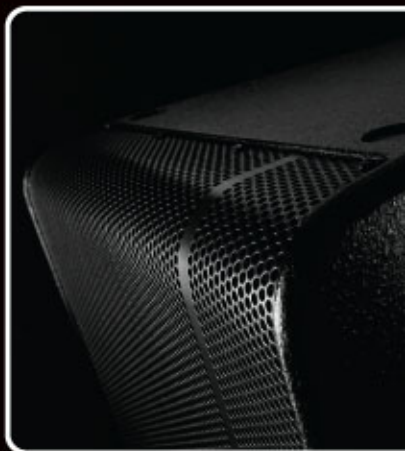
TAILOR YOUR TONE

A proper loudspeaker system needs to be extremely flexible to fit your application. HD Series Powered Loudspeakers feature an integrated 3-band contour EQ right on the rear panel, allowing the user to gently and flexibly EQ the system for the task at hand. High shelving, low shelving and a sweepable mid allow you to correct room anomalies, emphasize vocals, add some low-end when a subwoofer is absent or bump highs and lows for low volume applications. This indispensable tool allows you to refine the system at will, making for a great-sounding show each and every time.



FIT AND FINISH

HD Series Powered Loudspeakers are ridiculously compact and lightweight but they don't resort to less professional attributes to achieve these goals. The premium components are housed within 15 mm thick birch plywood that's coated with a durable, textured black paint. Fronted by a black, powder-coated, cold-rolled steel grill, the HD Series are tough enough for even the most abusive touring performers and sound companies. They feature a classy, unimposing look that's designed to blend into the environment (the front panel power LED can be turned off for maximum stealth) and with 12 integrated M10 fly points, they make a great choice for fixed installations as well. Ergonomic handles make pole-mounting and transporting the HD Series a breeze. HD loudspeakers are long lasting, great looking and completely professional.



HD 1531

Frequency Response (-10dB): 38Hz – 20kHz
Coverage Pattern: 90° x 40°
Max Peak SPL (calculated): 135 dB¹
Max Peak SPL (measured): 126 dB²
Crossover Points: 400Hz, 1500Hz

HF Driver: 1.75" (44.5 mm) heat-treated titanium compression driver
MF Driver: 6" (152.4 mm) mid-range driver
LF Driver: 15" (381 mm) neodymium woofer with 3" (76.2 mm) voice coil

Power

Total System Power: 900W RMS / 1800W Peak
Low Frequency: 700W RMS / 1400W Peak
Mid Frequency: 100W RMS / 200W Peak
High Frequency: 100W RMS / 200W Peak
Amplifier THD: < 0.03%
Amplifier Design: Class-D

Construction Features

Basic Design: Trapezoidal, 20 degree included angle
Material: 15 mm exterior grade premium birch plywood
Finish: High durability black textured paint
Handles: One on each side
Grill: Powder-coated galvanized steel
Fly Points: Twelve M10 x 1.5 mm

Physical Properties

Height: 35.40 in / 900.0 mm
Front Width: 18.25 in / 463.5 mm
Rear Width: 11.82 in / 300.2 mm
Depth: 18.81 in / 477.8 mm
Weight: 96 lb / 44 kg

AC Input: 120 VAC/60Hz, 9 amps (US model), 230 VAC/50Hz, 5 amps (EU model)



HD 1521

Frequency Response (-10dB): 40Hz – 20kHz
Coverage Pattern: 80° x 50°
Max Peak SPL (calculated): 135 dB¹
Max Peak SPL (measured): 125 dB²
Crossover Point: 1200Hz

HF Driver: 1.75" (44.5 mm) heat-treated titanium compression driver
LF Driver: 15" (381 mm) neodymium woofer with 3" (76.2 mm) voice coil

Power

Total System Power: 800W RMS / 1600W Peak
Low Frequency: 700W RMS / 1400W Peak
High Frequency: 100W RMS / 200W Peak
Amplifier THD: < 0.03%
Amplifier Design: Class-D

Construction Features

Basic Design: Trapezoidal, 20 degree included angle
Material: 15 mm exterior grade premium birch plywood
Finish: High durability black textured paint
Handles: One on each side
Grill: Powder-coated galvanized steel
Fly Points: Twelve M10 x 1.5 mm

Physical Properties

Height: 30.00 in / 762.0 mm
Front Width: 18.25 in / 463.5 mm
Rear Width: 11.82 in / 300.2 mm
Depth: 18.81 in / 477.8 mm
Weight: 80 lb / 36 kg

AC Input: 120 VAC/60Hz, 9 amps (US model), 230 VAC/50Hz, 5 amps (EU model)



¹ Calculated from driver sensitivity and amplifier power.

² Measured with pink noise, free field at 1 meter, before limiting.