

DO IT CLEAN

Mackie HD1221 loudspeaker and HD1501 subwoofer



* BY CHRIS GILL

LIVE SOUND reinforcement system design used to be more about brute force than refinement. Most loudspeaker systems featured large, unwieldy boxes designed primarily to pump out as much volume as possible. Sound quality, while important, came in a distant second, except in extremely expensive systems.

Mackie's new HD Series High-Definition Powered loudspeakers and subwoofers provide a significant upgrade in sound quality without a substantial increase in price. Mackie's own innovations in powered studio monitor technology have greatly improved the quality of its loudspeakers for live sound

reinforcement applications, as have the company's associations with EAW and Martin Audio, which LOUD (Mackie's parent company) acquired in 2000 and 2007, respectively. The HD Series brings together outstanding sound quality comparable to Mackie's acclaimed studio monitors with the live sound reinforcement expertise of EAW and Martin Audio, at a price that longtime Mackie fans will appreciate.

FEATURES

THE HD1221 HIGH-DEFINITION Powered Loudspeaker is a compact two-way, powered loudspeaker that provides 1,200 watts peak power of Class D Fast-Recovery amplification, built-in digital processing, and a custom 12-inch woofer and 1.75-inch compression driver mounted to a 90° x 50° rotatable horn. The cabinet is designed for multiple installation configurations, including as a floor monitor, mounted on a pole, or flown with horizontal or vertical rigging. The HD1501 High-Definition Powered Subwoofer is a great companion to the HD1221. It also delivers 1,200 watts of peak power, and features a 15-inch high-output woofer in a compact enclosure designed and tuned by EAW.

The HD1221's processing includes a precision two-way crossover, transducer time alignment, phase correction and patented acoustic correction, all of which, together, provide studio-quality, high-definition sound. The 12-inch woofer's neodymium magnet keeps the speaker's weight down, and its three-inch voice coil dissipates heat quickly and efficiently to preserve sound quality and prevent distortion. Integrated limiting and protection circuitry protects the woofer and compression driver from damage in adverse conditions. The HD1501 subwoofer features a lightweight switch-mode power supply that keeps the unit's overall weight manageable. Its circuitry includes a symmetrical Linkwitz-Riley crossover, precision tuning filters, and high-pass outputs for using a single

SPECS

LIST PRICES HD1221, \$999.99; HD1501, \$1,099.99
MANUFACTURER Mackie, mackie.com
POWER RATINGS HD1221: low-frequency power amplifier, 1,000 watts peak; high-frequency power amplifier, 200 watts peak; HD1501: 1,200 watts peak
RATED THD <0.03% (both)
DESIGN Class D (both)
FREQUENCY RESPONSE HD1221: 55Hz to 20kHz (-10dB); HD1501: 36Hz to 145Hz (-10dB)
SPEAKERS HD1221: 12-inch woofer with three-inch voice coil and 1 3/4-inch high-frequency compression-driver; HD1501: 15-inch woofer with three-inch voice coil
CROSSOVER POINT (HD1221) 1.5kHz
CROSSOVER FREQUENCY (HD1501) 100Hz

subwoofer cabinet in stereo setups. Both speaker cabinets are made from light but sturdy 15mm birch plywood. A standard mounting pole fits into a pole-cup in the top of the HD1501 to suspend the HD1221 about six feet above the floor, providing a compact but highly efficient sound system that's loud enough for most small-to-medium clubs.

PERFORMANCE

THE SYSTEM IS easy to set up in minutes using standard XLR cables. Each HD1221 weighs about 50 pounds, which makes it easier to hoist onto a mounting pole. The HD1501 weighs in at a more substantial 80 pounds, but it's still easier to move around than the average 4x12 guitar cabinet.

The sound quality, especially when the HD1221 is paired with an HD1501, is first-class and exceptionally clean at high output levels. The frequency response of the HD1221 is relatively flat between the 100Hz-to-10kHz range, which is where most instruments in a rock band reside. Three voicing modes—Contour, Normal and Monitor—allow you to adapt the frequency response according to your application, but I found the Normal setting best overall for most applications other than floor monitor. Indicators for the thermal protection circuit and the limiter light up when these functions are activated, but they are on the rear of the HD1221 and HD1501's cabinets, where your sound engineer likely won't see them.

THE BOTTOM LINE

MACKIE'S HD SERIES HD1221 loudspeaker and HD1501 subwoofer are perfect for musicians who perform in clubs who need a professional-quality live sound system that isn't going to bankrupt them. **SC**

+PRO	-CON
<ul style="list-style-type: none"> • CLEAN AND LOUD SOUND QUALITY • PORTABLE • AFFORDABLE 	<ul style="list-style-type: none"> • PROTECTION CIRCUIT LEDS ARE ON THE BACK OF THE CABINETS