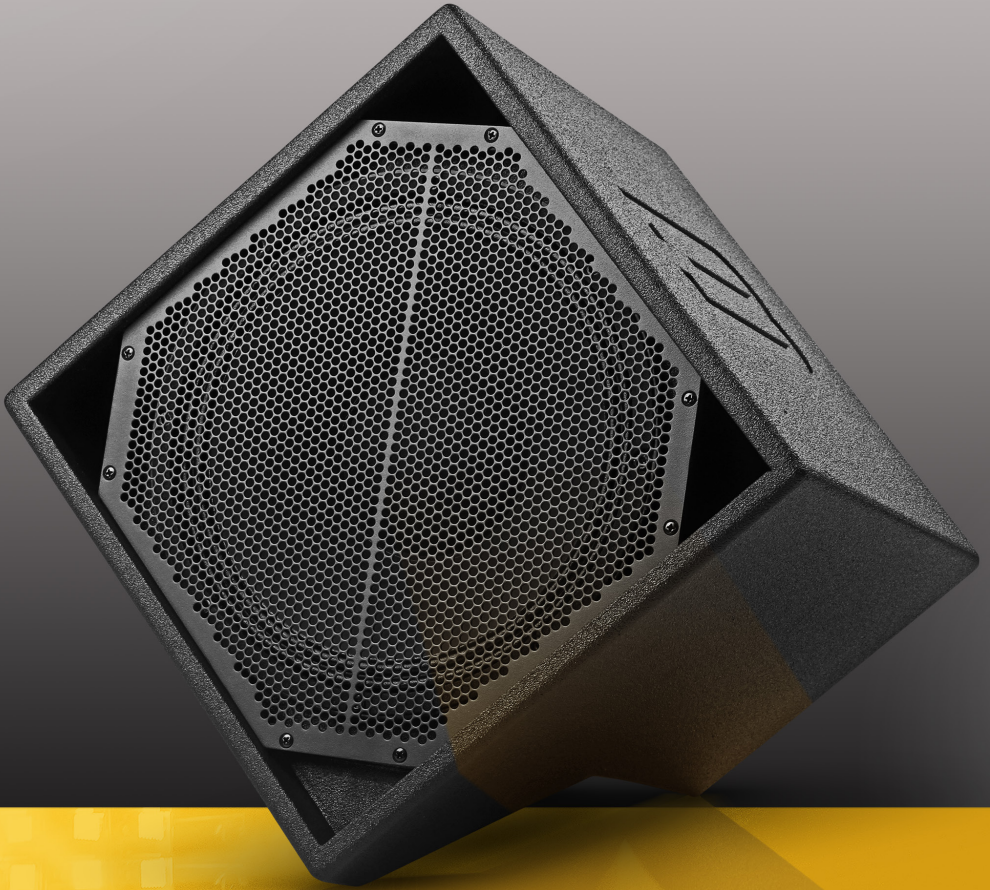




DIAMON-MK3

Single 12"
Powered
Loudspeaker



CUTSHEET



DIAMON-MK3

Single 12"
Powered
Loudspeaker

OVERVIEW

The DiaMon-MK3 is a high-output, point-source loudspeaker that can make your life easier thanks to its remarkably small size. This very compact and portable system provides impressive output without ever having to lift a large, heavy cabinet.

In terms of output SPL relative to size, the DiaMon-MK3 has virtually no competitors. The compact, high fidelity and high output DiaMon-MK3 continues the BASSBOSS tradition of delivering remarkable output capability and outstanding sound quality. Achieving this level of performance from such a small enclosure is made possible by making decidedly different design and component choices.

The cabinet is made from Birch plywood, which is strong and solid, and the small size makes it very easily portable. The small size is made possible by the use of a co-axial driver in a sealed enclosure. With the high-frequencies exiting co-axially through the center of the woofer, no extra space is required for the addition of a high-frequency horn.

The low and midrange frequencies are produced by a high-sensitivity 12" cone woofer with a 3" voice coil and a neodymium magnet. The same magnet is used for the 3" diaphragm high-frequency compression driver, the 1.4" output of which passes through the woofer's pole-piece. The inner surface of the pole-piece is machined into the shape of a horn. The woofer cone is the continuation of that horn, making it possible to generate very high output from a very small total surface area.

The resulting coverage pattern is 80 degrees conical, permitting a large coverage area and a great deal of placement options. A significant advantage of co-axial loudspeakers is the consistency of their off-axis response. Aside from delivering a more consistent and intelligible sound field, this also makes them much more resistant to feedback.

The amplifier features a Class D SMPS with PFC, providing two channels, 900W LF and 300W HF. Eight on-board presets allow for a variety of configurations at the touch of a button, and LAN connectivity allows access to virtually unlimited preset combinations.

On-board presets provide a variety of high-pass filters to suit full-range operation through a variety of settings that maximize SPL when used with a subwoofer. The sealed enclosure provides the flexibility to choose between low-frequency extension or high-SPL operation from the same compact loudspeaker.

When used with subs in high-SPL presets, remarkably large events and venues can be covered with these tops that measure just 14" x 14" x 11" and weigh less than 30 pounds.

The proprietary BASSBOSS processing ensures exceptional sound quality thanks to its premium quality, high-fidelity electronics. Its ultra-low noise CODECS, 96kHz sampling rate processor and high-resolution amplification are some of the finest in the industry.

BASSBOSS loudspeakers are protected for safe, high-power operation. Optimized signal processing, premium quality drivers, power-matched amplification and comprehensive protections ensure that no matter the demand, they keep their cool, keep their character and keep on working.

The Birch wood cabinet features a 35mm steel pole socket and is finished in durable, high-pressure polyurea coating. Power, signal and data connectors are hidden on the bottom panel, providing a clean, tidy look that maintains the compact aesthetic.

Specifications

Acoustical

Loudspeaker Description:	2-way active monitor. Self-powered and internally processed with presets for full-range and mid-high operation
Frequency Response (± 3 dB):	50Hz - 19kHz (Full Range - Preset 1)
Maximum Sustained Output:	123dB SPL, 1m, 2pi, half-space
Max SPL (Peak)*	126 dB
Nominal Dispersion ($H^\circ \times V^\circ$):	80 x 80 (Conical)

Electrical

Amplification:	Class D, 1200 W, 2 Channels
Processing:	Integrated comprehensive DSP provides all necessary high-pass and low pass filters, equalization, phase alignment and limiting
Electrical Connectors, Amp:	Neutrik powerCON True 1 TOP input and pass-through
Electrical Connector, Mains:	NEMA 5-15 (Edison) standard 3-pin grounded plug
Voltage Operating Range:	100 - 240V Auto-sensing, auto switching
Current Draw, Nominal:	1.4A @ 120V - 0.7A @ 240V (average, with music)
Signal Input Connector:	XLR-F
Signal Output Connector:	XLR-M (pass-through only)

Physical

Enclosure Type:	Birch wood enclosure - Sealed direct radiating low-frequency section and co-axially horn-loaded high-frequency section
Transducer (Low Frequency):	1 x 12 in. diameter (300 mm) neodymium motor woofer with 3 in. (76mm) copper voice coil
Transducer (High Frequency):	3 in. (76mm) diaphragm compression driver on 1.4 in. throat 80-degree conical horn
Cabinet Construction:	18mm and 15 mm Birch plywood. Dado joinery. Equipped with a 35mm steel pole socket
Dimensions (HxWxD):	14 in. (35.5cm) x 14 in. (35.5cm) x 11 in. (28cm)
Net Weight:	29.76 lbs (13.5kg)
Shipping Weight:	35 lbs (15.9kg)
Exterior Finish:	Black weatherproof bonded high-pressure polyurea
Grill:	Perforated, powder-coated Steel
Pole Socket:	35mm, Steel

Optional

Cover:	Heavy-duty padded nylon transport cover and carrying bag
Online Information:	bassboss.com/diamon

Our proactive philosophy causes specifications to be subject to change whenever improvements are made.

Pre-Installed Onboard Presets

All presets include phase compensation for integration with BASSBOSS subwoofers.

Each preset moves the operational range of the speaker up by 10Hz, starting with the lowest frequency of 50Hz in Preset 1. Higher SPL is available from higher presets.*

Preset 1: 50Hz (Maximum LF extension)

Preset 2: 60Hz

Preset 3: 70Hz

Preset 4: 80Hz

Preset 5: 90Hz

Preset 6: 100Hz

Preset 7: 110Hz

Preset 8: 120Hz (Maximum SPL Capability)

With their levels matched, when the low-pass filter frequency selected on the subwoofer is matched with the high-pass filter frequency selected on the Top cabinet, the smoothest frequency response should be achieved.

Information and setup tips about how to get the best and most out of your system:

bassboss.com/edu



DIAMON-MK3

Single 12"
Powered
Loudspeaker

