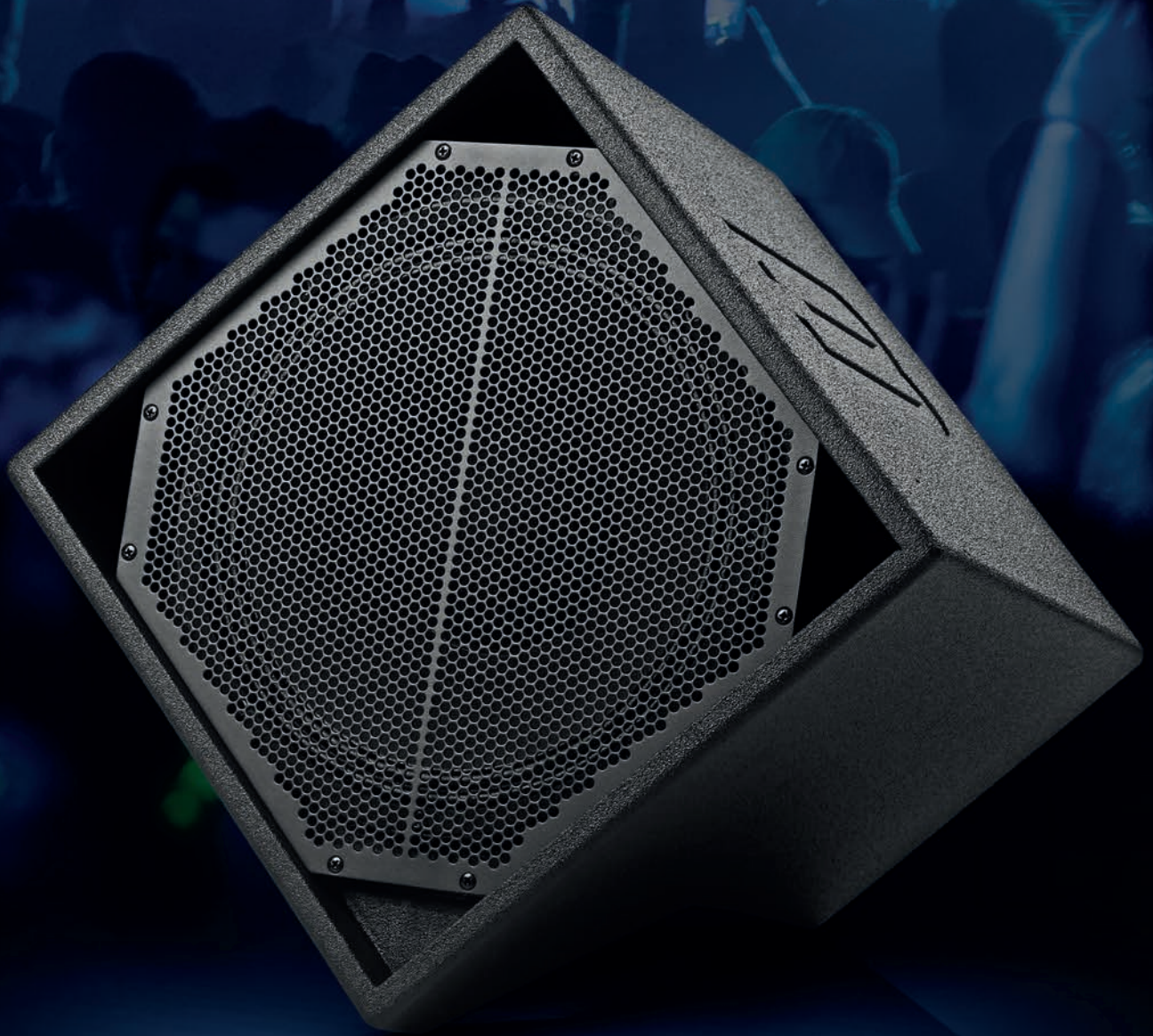




CUT SHEET



DIAMON-MK3

Single 12"
Powered Top

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 new DSP features an Ethernet interface. This can be used to control the cabinets from a computer or to load the ControlBASS software settings updates. The Ethernet connectivity in conjunction with the DSP board allows signal to be sent via Milan AVB. Future settings updates will provide access to this feature.

The Birch wood cabinet features a 35mm steel pole socket and is finished in durable, high-pressure poly urea 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 Single 12" Self-Powered Direct Radiating Co-axial Point Source Mid-High
Frequency Response (± 3 dB)	50Hz - 19kHz (Full Range - Preset 1)
Maximum Sustained Output	123 dB 1m (half-space)
Max SPL (Peak)	126 dB 1m (full-space) (Limited in full-range)
Nominal Dispersion ($H^\circ \times V^\circ$)	80 x 80 (Conical)

Electrical

Amplification	1200 W Class D, 2 Channel
Processing	Integrated comprehensive DSP. 96kHz sampling rate with 8 pushbutton presets. All presets include high pass filters, low pass filters, phase alignment, equalization and multi-stage limiting. Storage capacity for up to 100 presets.
Electrical Input Connector, Amp	Neutrik powerCON True 1 TOP IP65 rated waterproof connectors with pass-through outlet to connect additional loudspeakers. Inlet capacity limited to 15A or 1800W @ 120V total. Do not exceed the inlet capacity.

Electrical Connector Mains	Standard US 3-pin grounding 120V electrical plug: NEMA 5-15 (Edison)
Voltage Operating Range	100-240V AC, 50-60Hz (Auto-sensing, auto switching universal supply)
Current Draw, Nominal	120V 1.4A (nominal); 240V 0.7A (nominal)
Signal Input Connector	XLR-F
Signal Output Connector	XLR-M (pass-through only)
LAN Connectors	EtherCON RJ45 (x2) with 2-port Ethernet switch

Physical

Enclosure Type	2-way active mid-high. Direct radiating sealed 12" LF, co-axial horn-loaded HF
Transducer, LF	1 x 12 in. diameter (300mm) neodymium motor woofer with 3 in. (76 mm) copper winding voice coil
Transducer, HF	1 x 3 in. (76mm) diameter diaphragm compression driver with 1.4" (35mm) exit through 80 degree conical wave guide machined from aluminum pole piece in the center of the midrange driver
Cabinet Construction	CNC machined 18 and 15mm Birch plywood with dado joinery. 1 x 35mm steel pole socket
Dimensions (HxWxD)	14 in. (35.5cm) x 14 in. (35.5cm) x 11 in. (28cm)
Net Weight	30 lbs (13.5kg)
Shipping Weight	35 lbs (16kg)
Exterior Finish	Rugged, waterproof, high-pressure bonded polyurea coating textured black
Grill	Perforated, powder-coated steel
Pole Socket	35mm, Steel

Optional

Cover	Heavy-duty padded nylon transport cover
Hardware	Ceiling Mounts, Wall Mounts
GLL/Ease File	help.bassboss.com/portal/en/kb/articles/bassboss-ease-gll-files

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)

In order to achieve the flattest and smoothest frequency response, you should match the levels of your BASSBOSS subs and tops, and the low-pass filter frequency selected on the Subwoofer(s) should be closely matched to the high-pass filter frequency selected on the Top(s).

On the other hand, if you like your system to be bass-heavy, and you plan to turn your subs up louder than your tops, you may want to choose a preset on the tops with a high-pass frequency that's slightly above the frequency chosen on the subs. This will reduce the chance of an output peak in the crossover/overlap range and will allow slightly more output SPL from the tops.

ControlBASS + Settings

For improved performance and stability, update the product settings immediately after opening your new gear!

Major new updates are available.

Download new settings updates and the ControlBASS app at bassboss.com/software

Instructions on using the software, linking to your computer for remote monitoring and control and updating the settings files will be provided when you sign up!

Register your gear

bassboss.com/support

For more information and setup tips on how to get the best and most out of your system check out the Knowledge BASS help.bassboss.com

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**Need more assistance?
We're here to help.**

help.bassboss.com