



CUT SHEET



DV12-MK3

Single 12"
Powered Loudspeaker

Overview

The clear choice for mobile professionals who care about quality and performance, the DV12-MK3 uses a line-array derived 1.4" throat isophasic wave guide instead of a conventional horn to work its magic. Coupled to the wave-guide is a 3" diaphragm, Neodymium motor compression driver. This combination provides effortlessly high SPL over a wide and consistent horizontal coverage of 120° with a tight vertical pattern of 20°. This extends high frequency intelligibility farther than a conventional horn and allows for two arrayed cabinets to provide coherent, line-array style performance.

The lower frequencies are produced by a 12" woofer that features a Neodymium magnet for light weight and high efficiency, a 4" voice coil for high power handling, and a symmetrical, long-excursion suspension for accurate and extended bass response – so much bass response it could easily serve as a sub driver.

Power is supplied by an amplifier that can deliver output peaks of 163V, to provide amazing dynamic resolution and impact. The fully integrated and comprehensive digital processing ensures smooth response and reliable operation thanks to meticulous filter alignments and five- stage limiters that protect the drivers from excessive peaks, and also from thermal overload, by monitoring real power output over time. The amplifier features a large heat sink and two temperature-controlled fans to ensure consistent operation under even the most extreme conditions.

The DV12-MK3 is the ultimate in plug and play, with universal voltage compatibility and no need for any outboard gear other than a sound source. The processing features presets that allow it to run in multiple configurations. The full-range mode, Preset 1, provides

response down to 40Hz (-3dB). Each successive preset filters the lows out at higher frequencies, allowing the DV12-MK3 extend the output available and be perfectly integrated with all BASSBOSS subwoofers.

Each preset has a specific high-pass filter frequency and alignment filters that ensure it's always phase coherent with any BASSBOSS sub. As low-frequency demand is reduced, higher sound levels can be achieved. In the higher presets, this allows each DV12 to provide enough mid-high power for multiple subwoofers. The DV12-MK3 can be combined with any BASSBOSS subwoofer because all the presets are programmed to align with all the subs. Each preset offers advantages that suit certain applications and preferences. No matter which preset you choose, your BASSBOSS subs and tops will always play in harmony.

The cabinet is made from 15mm Birch and features extensive bracing for additional rigidity. The design incorporates a 4-degree down-angle, ensuring the even distribution of high-frequency energy from the front to the back of a venue when the DV12-MK3 is placed at the appropriate height on a tripod or support pole. Additional features include a 35mm (1-3/8") steel pole socket, eight fly points and six handles. The amplifier is recessed from the back of the cabinet to protect it in transit. A perforated steel grille protects the woofer, and its progressive perforation pattern serves to broaden midrange dispersion. The high-frequency lens and port are left clear of the grille to minimize reflections and air flow noise that could compromise sound quality.

If greater output is needed the DV12-MK3 has an invertible array feature that allows the perfect summing of two speakers, which provides a big increase in output and projection without compromising the crystal clarity. This is an additional benefit of the line-array wave guides. When two DV12-MK3s are vertically stacked with the HF lenses adjacent (top cabinet inverted) the high-frequency sections of the two boxes sum perfectly, as they would in a line-array, while the low-frequency sections sum in a column for improved low-frequency directivity and greatly increased output. Compared to conventionally arrayed boxes, this results in 3dB more SPL and much smoother response in the high-frequency ranges.

The MK3 features an all-new DSP. The comprehensive suite of processing includes high-pass and low-pass filters as well as multiple protection systems and limiters to prevent driver overload in as many ways as possible, including thermal, excursion and clipping. The five levels of protection actively prevent overheating of the voice coil, minimize long-term thermal compression and limit excursion. Because they operate in 5 different modes, the limiters are sophisticated enough to have a largely unnoticeable effect on the transient response and allow the subwoofer to deliver peak output safely.

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

Within the software, multiple cabinets can be grouped together, allowing them to respond to commands simultaneously. This permits the levels of multiple loudspeakers to be adjusted together and yet independently from the levels of other groups of loudspeakers. In addition to individual and grouped level controls, presets can be loaded and signal levels and temperatures can be monitored. Each cabinet includes a two-port switch so multiple cabinets can be chained on the same data cable.

The MK3 DSP features storage capacity of up to 100 presets, eight of which can be accessed at the touch of a button with no need for a connected computer. The eight directly accessible presets are compatible with all the presets in the MK3 Top Boxes and are also compatible with previous generation tops and subs.

Specifications

Acoustical

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| Loudspeaker Description | 2-Way Active Single 12" Self Powered, Vented, Direct-radiating Full-range |
| Frequency Response (± 3 dB) | 45 - 19,000Hz |
| Maximum Sustained Output | 128 dB 1m (full-space) |
| Max SPL (Peak) | 134 dB 1m (full-space) |
| Nominal Dispersion (H° x V°) | 120 x 20 |

Electrical

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| Amplification | 3200 W Class D, 2 channel; 2400W LF - 800W HF |
| 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) |

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| Voltage Operating Range | 100-240V AC, 50-60Hz (Auto-sensing, auto switching universal supply) |
| Current Draw, Nominal | 120V 4.6A (nominal); 240V 2.3A (nominal) |
| Display | LEDs for Power on/ready, Signal, -12dB, -6dB, limiter active, Thermal, Protect and LAN link active. Eight LEDs indicating selected preset |
| Signal Input Connector | XLR-F |
| Signal Output Connector | XLR-M pass-through |
| LAN Connectors | EtherCON RJ45 (x2) with 2-port Ethernet switch |

Physical

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| Enclosure Type | Self-powered, bi-amplified, 2-way full-range. Direct radiating vented LF section, wave-guide-loaded HF section |
| Transducer, LF | 1 x 12" diameter (300mm) neodymium motor woofer with 4" (100mm) voice coil |
| Transducer, HF | 1 x 3 in. (76mm) diameter diaphragm compression driver with 1.4" (35mm) exit mounted to isophasic wave guide |
| Cabinet Construction | CNC machined 15mm Birch plywood with internal bracing and dado joinery. 8 M10 fly points. 1 x 35mm steel pole socket |
| Suspension Points | 8 x internally braced M10 threaded mounting points |
| Dimensions (HxWxD) | 24.63" x 14.5" x 19.1" (62.6 cm x 36 cm x 48.5 cm) |
| Net Weight | 63 lbs. (28 kg) |
| Shipping Weight | 74 lbs. (33 kg) |
| Exterior Finish | High-pressure, bonded polyurea coating. Rugged, waterproof. Textured black |

Optional

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| Hardware | Stacking Bracket mounts second cabinet inverted for near-perfect summed response and line-array style performance. Provides splay-angle adjustment from 0 to 8 degrees. Flying Bracket Two DV12s can be arrayed together and flown from the DV12 array flying bracket. M10 Shoulder Eye Bolts, M10 Side-Pull anchors |
| Grille | Perforated, powder-coated steel |
| What's Included | Loudspeaker, 15' (5m) Power Cable, Manual, Warranty Card |
| Side-pull anchors | Use when connecting to the side anchor points |
| Cover | Heavy-duty padded nylon transport cover |
| Loop-through PowerCON TOP | Power jumper for chaining power between stacked cabinets |
| Online Information | bassboss.com/dv12 |

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.*

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| 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!

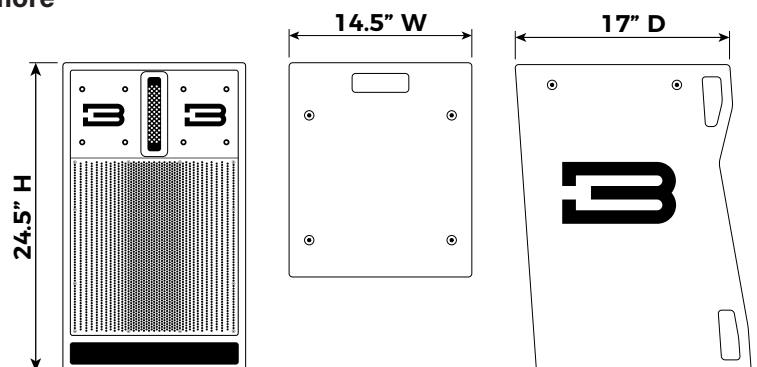
Major new updates are available.

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!

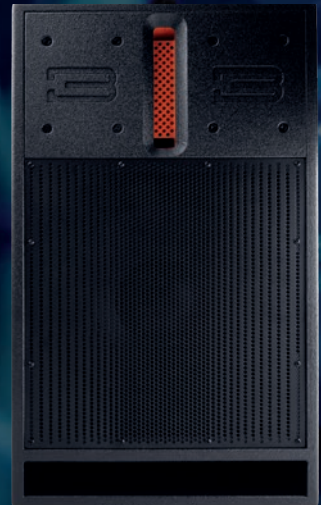
Register your gear bassboss.com/support

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