

EOI315 Portable Self-Powered 15", Two-Way, Bass-Reflex Design

Professional Series

Applications:

- ▶ Live sound reinforcement, speech and vocals, music playback in entertainment, A/V, and institutional venues especially when ease of use and portability are important factors.
- Amplification and monitoring for electronic musical instruments.
- Everywhere you need to be heard.

Features:

- ▶ 280 watt Powered Speaker System
- Light Weight. True portability weighing only 15.9 kg (35 lb)
- ► Multiple handles for easy transport
- ▶ 15" JBL low-frequency driver
- ▶ 1" throat diameter next generation JBL neodymium compression driver
- ► Efficient Class-D digital amplifier technology
- ▶ 100° H x 60° V asymmetrical wave guide for uniform audience coverage
- Line level and direct microphone input capability
- ► Selectable Pre-engineered EQ settings
- ▶ Loop thru signal flow for extended system application and easy "daisy-chain" connections
- ▶ Integrated M10 suspension points for easy
- Multi angle enclosure for main or monitor applications
- ▶ Integrated 36 mm pole mount socket with stabilizing securing screw
- ▶ Highly designed composite enclosures for durability, lightweight, and acoustic performance

The EON315 is a 15-inch, two-way, powered, portable speaker system. It is a complete self contained sound reinforcement system, capable of full-bandwidth reproduction at high levels with the added benefit of a microphone pre-amp enabling the direct connection of a dynamic microphone. The EON315 is comprised of a 380 mm (15 in) JBL woofer, a 25.4 mm (1 in) neodymium high frequency compression driver coupled to a 100° H by 60° V waveguide. Both components are driven by the discrete channels of a 280 watt Class-D integrated power amplifier. The input section contains all cross-over functions, protection, and system EQ functionality.

The input panel offers XLR or ¼-inch TRS phone jack compatibility. Selectable input sensitivities allow a broad range of devices to be properly matched, from the output of a mixer to an mp3 player or a dynamic microphone. A balanced XLR loop through output connector enables the simple 'daisy chaining' of additional EON systems if more coverage and level is required. Pre-engineered system EQs allow for matching the settings to the actual source material. In the "cut" position maximum level can be achieved for speech reproduction by reducing need to reinforce the lower frequencies. This is also a typical setting when using the system as a floor monitor, reducing low frequency build-up which occurs naturally when placed on a floor. The "flat" setting is ideal for live music and the "boost"



for reproducing low level pre-recorded music, delivering extra low and high frequency energy. The signal present and limit lights indicate performance status.

In addition to acoustic performance the EON315 features three full size deep-well handles, light weight, and balanced ergonomics. The new generation of EON products offers true portability and ease of handling. Five standard M10 rigging points and integrated pole mount socket increase the system's utility. The extremely rugged copolymer enclosure has been designed for main and 45° monitor orientation in the left and right hand configuration. A full screen-backed steel grille offers additional protection for both the woofer and compression driver components.

Specifications:

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System Type:	Self powered 15", two-way, bass-reflex design
Frequency Range (-10 dB):	38 Hz - 20 kHz (EQ in 'Flat' position)
Frequency Response (±3 dB):	50 Hz - 18 kHz (EQ in 'Flat' position)
Coverage Pattern:	100° H x 60° V nominal
Directivity Index (DI):	9 dB
Directivity Factor (Q):	8
Crossover Frequency:	1.8 kHz
System Power Rating:	280 W continuous, 560 W peak
LF Power amp:	220 W continuous at driver impedance
HF Power amp:	60 W continuous at driver impedance
Distortion:	Less than 0.1% at rated power
Maximum SPL:	127 dB
Signal indicators:	Limit: Red LED indicates input overload condition Signal: Green LED indicates signal present Mic/Line: Red LED indicator
Input Gain:	Mic position: -Infinity to +40 dB Line position: -Infinity to +4 dB (+20 dBu Max signal input)
Input Impedance:	64 K Ohms (balanced), 32 K Ohms (unbalanced)
Boost EQ:	LF +3 dB Shelving Filter @ 150 Hz HF +2.5 dB Shelving Filter @ 4 kHz
Low Cut Filter:	Preset high pass @ 120 Hz
LF Driver:	1 x M115-2 380 mm (15 in)
HF Driver:	1 x JBL 2414H-1 25.4 mm (1 in) polymer diaphragm, neodymium compression driver
Input connector:	Balanced XLR / ¼ inch TRS combo jack.
Output connector:	Balanced male XLR, +20 dBu (peak) o/p level
XLR Pin Assignments:	Pin 2 (+), Pin 3 (-), Pin 1 (GND)
Limiting/Protection:	Dynamic Limiter
Enclosure:	PP impact copolymer, multi-purpose main & monitor orientation.
Handles:	One left/right side, one on top
Suspension / Mounting:	36 mm pole socket with stabilizing screw, 4 x M10 suspension points, 1 x M10 pull-back point.
Grille:	Powder coated perforated steel with acoustically transparent black screen backing.
AC input:	120 – 240 V, 50/60 Hz
Dimensions (H x W x D):	685 mm x 438 mm x 366 mm (27 in x 17.3 in x 14.4 in)
Net Weight:	15.9 kg (35 lb)

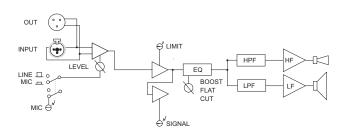
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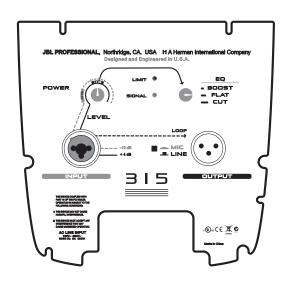
On Axis Frequency Response

100 90 80 70 60 20 100 Frequency (Hz)

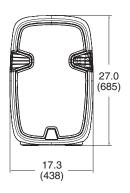
Block Diagram



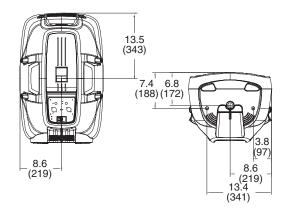
Input Panel

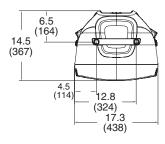


Dimensions









Dimensions in inches (mm)



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