

KEY FEATURES

- Dual 15 inch Two-way High-output Stage System.
- 600 watt continuous
- RMD™ for Improved Clarity and Presence

General Product Description

The Electro-Voice® Eliminator ii™ is a high-peak output, high-efficiency two-way stage system. The dual 15 in. low-frequency/horn-loaded constant-directivity high-frequency system incorporates elements of Ring-Mode Decoupling (RMD™). RMD techniques substantially improve vocal fundamental intelligibility and produce an “up front” tonality capable of cutting through even the most difficult acoustic environments.

The Eliminator ii™ enclosure has a unique design that presents a very minimal frontal cross section while still maintaining substantial internal volume. A newly developed handle concept allows for extremely comfortable transportation from any orientation. The design is lightweight, but very rugged and features a heavy metal grille and highly stylized corner protection.

The heart of the Eliminator ii™'s high performance design is the combination of a high-excursion low-frequency suspension system with Electro-Voice's unique Ring-Mode Decoupling. All loudspeaker drivers exhibit mechanical resonance modes that add their own time-domain or ringing-mode colorations. These colorations limit and reduce overall system intelligibility. The Eliminator ii™ uses RMD to control several fundamental ringing modes. The result is substantially improved vocal range intelligibility and system “openness”.

Two 15 inch drivers provide very high output at the lower frequencies. When extended high output low-frequency operation is required, performance can be further enhanced by biamping the Eliminator ii™ with the Eliminator i™ Sub. Vented enclosures offer excellent power handling and low distortion in the lowest octave of rate operation. However, it is always advisable to filter material below enclosure tuning to further improve system output and headroom. The Eliminator ii™ should be high-pass filtered to reduce subsonic material below 40 Hz.

Specifications:

Frequency Response, Measured at 10 feet on axis
(normalized to 1 watt/ 1 meter):

..... 50 - 20,000 Hz ± 3 dB

Long-Term Average Power Handling, EIA Standard RS-426-A:

..... 600 watts

Sound Pressure Level, 1 W/1 m: 100 dB

Dispersion Angle Included by 6-dB Down Points:

Horizontal: 60°

Vertical: 40°

Transducer Complement:

High Frequency:

DH2010A

HP64M constant directivity

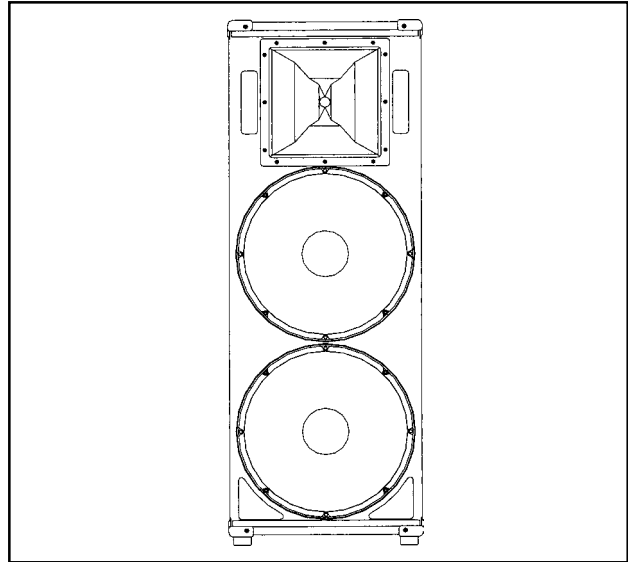
Low Frequency:

2x DL15BFH

Enclosure Tuning: 46 Hz

Eliminator ii™

Two-way High-output Stage System



Architects' and Engineers' Specifications

The loudspeaker system shall consist of two 38.1-cm (15 inch) low-frequency transducers in a vented enclosure. The high-frequency section shall be a compression driver with a pure titanium diaphragm coupled to a 1-inch throat diameter to a constant-directivity horn having a horizontal included angle (referenced to -6 dB) of 60° and a vertical included angle of 40° nominal. The loudspeaker shall have a rated frequency response of 50 Hz to 20 Hz ± 3 dB and a long-term rated average power handling of 600 watts (EIA RS-426-A). The system sensitivity shall be 100 dB when measured in an anechoic environment with a 1-watt input with a calibrated measurement microphone located 1 meter from the system axis. The nominal impedance shall be 4 ohms. The system shall have parallel Neutrik® NL4MP connectors.

Crossover frequency LF/HF: 1600 Hz

Impedance:

Nominal 4 ohms

Minimum 3.3 ohms

Input connectors:

Parallel Neutrik® model NL4MP

Enclosure Finish: Black carpeted

Dimensions,

Height: 46 in. (116.84 cm)

Wide: 17.4 in. (44.20 cm)

Depth: 24.25 in. (61.6 cm)

Net Weight: 119 lbs (53.98 kg)

Shipping Weight: 129 lbs (58.51 kg)

Supporting Products

Eliminator i™ Sub

Eliminator i™ Amplifier

Power-Handling Capacity

To our knowledge, Electro-Voice was the first U.S. manufacturer to develop and publish a power test closely related to real-life conditions. First, we use a random-noise input signal because it contains many frequencies simultaneously, just like real voice or instrument program. Second, our signal contains more energy at extremely high and low frequencies than typical actual program, adding an extra measure of reliability. Third, the test signal includes not only the overall "long term average" or "continuous" level – which our ears interpret as loudness – but also short-duration peaks which are many times higher than the average, just like actual program. The long-term average level stresses the speaker thermally (heat). The instantaneous peaks test mechanical reliability (cone and diaphragm excursion). Note that the sine-wave test signals sometimes used have a much less demanding peak value relative to their average level. In actual use, long-term average levels exist from several seconds on up, but we apply the long-term average for several hours, adding another extra measure of reliability.

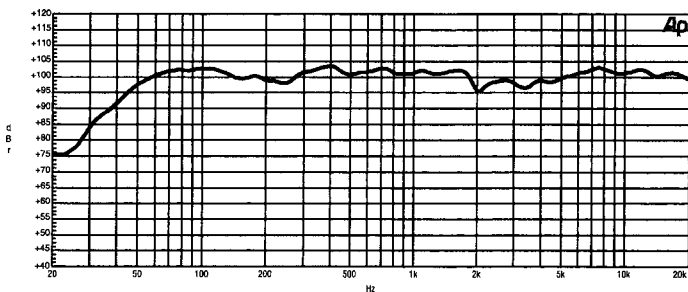


Figure 1. Frequency Response

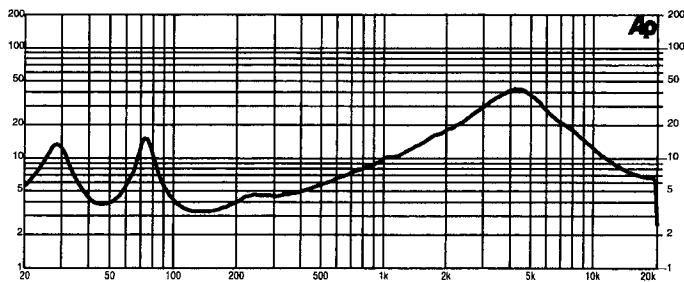


Figure 2. Impedance

Specifically, the Eliminator ii™ is designed to withstand the power test described in the ANSI/EIA RS-426-A 1980. The EIA test spectrum is applied for eight hours. To obtain the spectrum, the output of a white-noise generator (white noise is a particular type of random noise with equal energy per bandwidth in Hz) is fed to a shaping filter with 6-dB-per-octave slopes below 40 Hz and above 318 Hz. When measured with the usual constant-percentage bandwidth analyzer (one-third-octave), this shaping filter produces a spectrum whose 3-dB-down points are at 100 Hz and 1,200 Hz with a 3-dB-per-octave slope above 1,200 Hz.

Amplifier Recommendations

The power-handling rating of the Eliminator ii™ is 600-watts continuous. The specific tests used employ a crest factor (ratio of peak energy to continuous energy) of at least 6 dB. During extended testing, the Eliminator ii™ is routinely subjected to peak levels far in excess of its continuous rating of 600 watts. Many amplifier designs are capable of producing peak power levels in excess of their ratings as well, so exact "pairing" of loudspeaker rating and amplifier ratings is not necessary. Amplifier continuous ratings of 300 watts to 600 watts into 4 ohms are suggested.

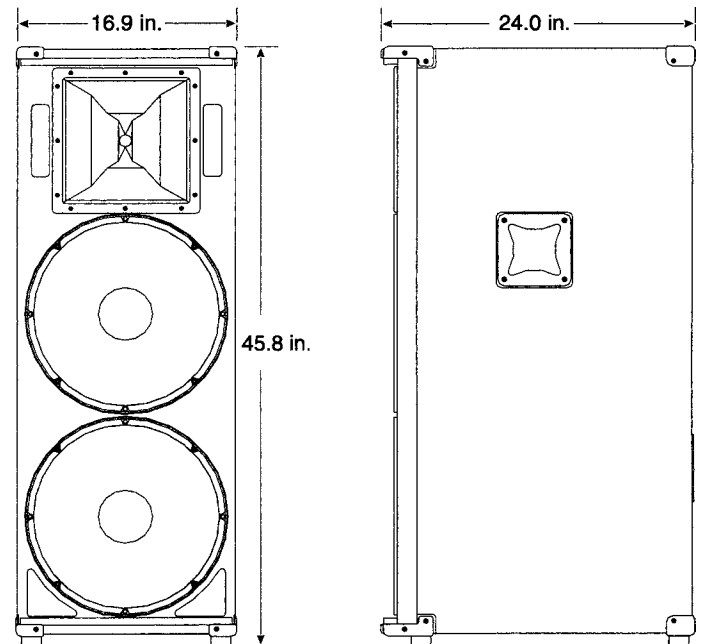


Figure 3. Dimension Drawing

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 800/392-3497 Fax: 800/955-6831
 For warranty repair or service information, contact the Service
 Repair department at 800/685-2606
 For technical assistance, contact Technical Support at 866/78AUDIO
 Please refer to the Engineering Data Sheet for warranty information.
 Specifications subject to change without notice.