

# LE700A

Bi-amp differential dispersion floor monitor

## features

- ▶ Differential dispersion horn
- ▶ High power 15" (380mm) diameter 4" (100mm) coil bass driver
- ▶ Two-way active system for maximum performance
- ▶ Compact twin angled enclosure
- ▶ 1.4" (35mm) titanium diaphragm compression driver
- ▶ Left and right handed capability

## applications

- ▶ High power stage monitoring



touring and theatre

The Martin Audio LE700A is designed to overcome many of the problems associated with normal stage monitor systems, by utilising differential dispersion horn techniques to define a constant sound pressure level area in which the artist may move. In this area the frequency response and tonal characteristics remain unchanged.

The benefits of this technology are two-fold. Firstly the monitor engineer can plan EQ set ups confident that the performer's movement window will have no problematic frequency changes causing feedback. This allows higher sound pressure levels with less EQ.

Secondly, the performer can move further away from the monitor whilst continuing to receive information from the monitor which will cut through the highest on-stage ambient volume levels.

This differential dispersion technology creates a horn, which progressively varies its horizontal dispersion from wide to narrow the further the performer moves away from the monitor. This narrowing of dispersion effectively changes the forward gain of the horn, this increase in the forward gain enables the monitor to throw further, increasing the effective operating range of the monitor, whilst reducing excess spill.

The LE700A is packaged in a twin angled ported enclosure, designed to provide maximum performance within a small volume. The bass driver is a high power, 15" (380mm) diameter 4" (100mm) coil transducer and the compression driver employed is a 1.4" (35mm) titanium diaphragm proprietary unit. This provides high power handling with extended high frequency reproduction.

The LE700A is an active two-way unit, with optimum performance being achieved when used with the DX1 System Controller configured for the LE700A. Fitted with both EP8 and Speakon connectors it provides high power monitoring for professional applications.

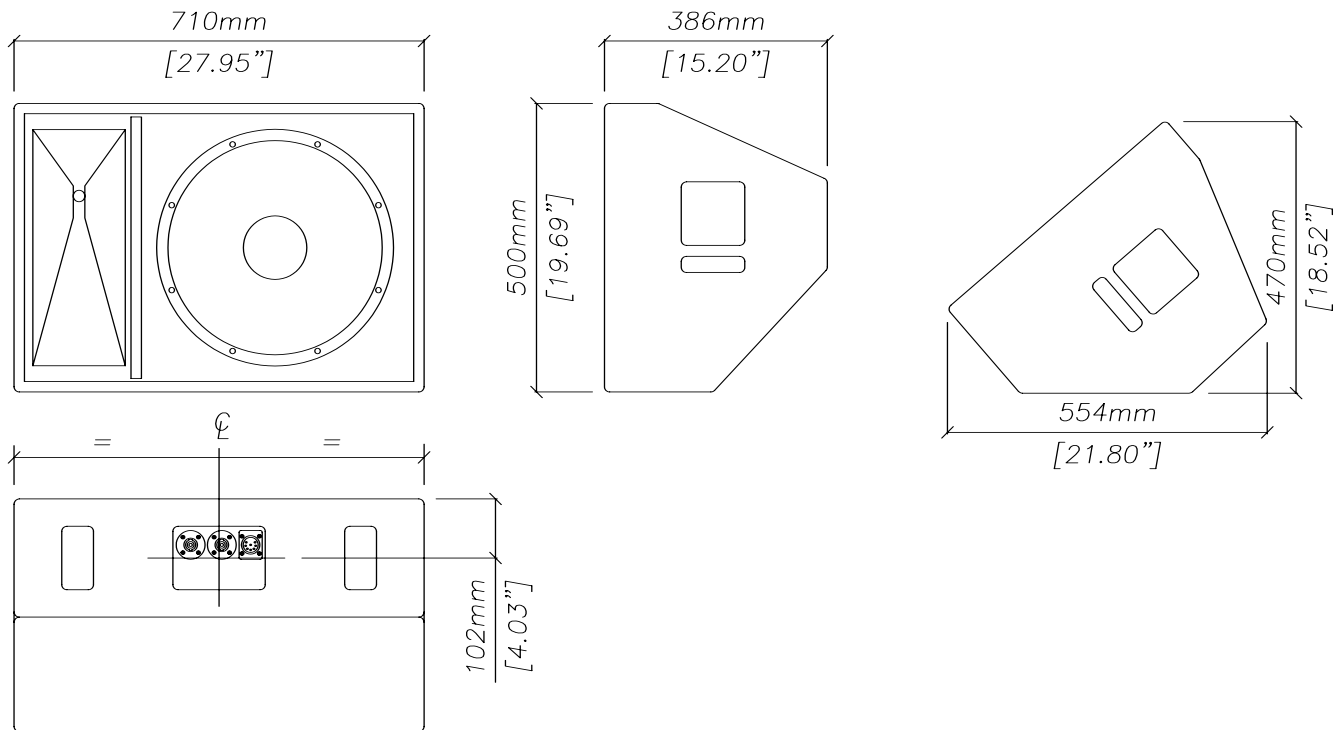
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overall dimensions



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## technical specifications

TYPE	Two-way active stage monitor
FREQUENCY RESPONSE (5)	60Hz-18kHz $\pm$ 3dB
DRIVERS	15" (380mm)/4" (100mm) voice coil 1.4" (35mm) exit HF compression driver
RATED POWER (2)	LF: 400W AES, 1600W peak HF: 75W AES, 300W peak
RECOMMENDED AMPLIFIER	550-800W into 4 ohms
SENSITIVITY (6)	LF: 98dB HF: 106dB
MAXIMUM SPL (7)	LF: 123dB continuous, 129dB peak HF: 125dB continuous, 131dB peak
NOMINAL IMPEDANCE	LF: 8 ohms HF: 16 ohms
DISPERSION (-6dB)	50°-100° horizontal (differential dispersion), 70° vertical
CROSSOVER	1kHz active
ENCLOSURE	80 litres
FINISH	Textured black paint
PROTECTIVE GRILLE	Black perforated steel
CONNECTORS	2 x Neutrik NL4
DIMENSIONS	(W) 710mm x (H) 470mm x (D) 554mm (W) 27.9ins x (H) 18.5ins x (D) 21.8ins
WEIGHT	44kg (97lbs)

### Notes

- (1) Measured on-axis in half space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open ( $4\pi$ ) space at 2 metres, then referred to 1 metre.
- (6) Measured in open ( $4\pi$ ) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open ( $4\pi$ ) space at 2 metres using band limited pink noise, then referred to 1 metre.

### Trade Descriptions Act

Due to Martin Audio's policy of continuing improvement, we reserve the right to alter these specifications without prior notice. Martin Audio is committed to refining state of the art sound reinforcement, combining in-depth product and field applications research with advanced manufacturing techniques. Every Martin Audio product is built to the highest manufacturing standards and rigorously tested to ensure that it meets the performance criteria specified in the design.

## architectural and engineering specifications

The loudspeaker system shall be a low profile wedge monitor for on-stage foldback. It shall be operated in conjunction with a separate electronic system controller and bi-amped. The loudspeaker system shall consist of one 15" (380mm) direct radiating reflex loaded low frequency transducer and one 1.4" (35mm) exit HF compression driver mounted on a differential dispersion, low edge diffraction horn flare. The high frequency transducer shall be protected by an internally mounted high pass filter. The horn flare and cone transducer shall be mounted on a rotatable baffle to facilitate left and right handed operation and protected by a perforated steel grille.

Performance of the loudspeaker system with its electronic controller shall meet or exceed the following criteria:

Frequency response measured 1 metre on axis shall be 60Hz-18kHz  $\pm$  3dB.

High frequency dispersion at -6dB points shall be 50°-100°H x 70°V.

Power handling shall be 400W AES, 1600W peak LF, 75W AES, 300W peak HF.

Rated impedance shall be 8 ohms LF, 16 ohms HF.

Maximum SPL measured at 1 metre on axis shall be 124dB continuous, 130dB peak.

Dimensions (W) 710mm x (H) 470mm x (D) 554mm (27.9ins x 18.5ins x 21.8ins).

Weight 44kg (97lbs).

The loudspeaker system shall be the Martin Audio LE700A.

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