

# XE500

## Stage Monitor – Two-way, bi-amp, Coaxial Differential Dispersion

### Features

- Very high-SPL, compact two-way stage monitor
- Coaxial 'point source' performance
- Differential Dispersion™ technology for consistent coverage
- Defined, rectangular coverage plane at head-height
- Complete system with iK42 for consistent high performance
- Visually-appealing, low-profile plywood enclosures
- Built-in risers for steeper monitor angle when required
- Side panel rubber feet for extra protection when up-ended
- Easy to carry and manoeuvre
- M8 rigging inserts

### Applications

- Stage monitor

Combining very high output capability with exceptional sonic performance, coverage control and consistency, the XE500 is the ultimate, high SPL stage monitor. Its Coaxial Differential Dispersion drive unit comprises a powerful 15" (380mm) LF driver with a 3.5" (89mm) voice coil, and a 1.4" (35mm) exit HF compression driver with a 3" (75mm) pure titanium diaphragm. Both drivers feature powerful neodymium magnet structures to maximise performance and reduce weight.

Utilising Coaxial Differential Dispersion technology, the XE500's horizontal coverage varies from 60° directly over the monitor, narrowing to 30° further back. This not only maintains the sound level and balance independent of distance from the monitor, it produces a well-contained coverage 'corridor' at head-height. A patent-pending, contour-moulded static third waveguide greatly increases the effective size of the horn mouth to extend pattern control down to 500Hz, reducing sound spill outside the 'corridor'.

The XE500 enclosure is constructed from multi-laminate birch ply, with integral ergonomic handles and finished with a hard-wearing paint. A strong, perforated steel grille with an acoustically transparent cloth backing provides protection for the Coaxial Differential Dispersion driver, while moulded feet on

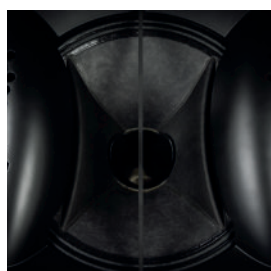


the base prevent movement onstage with additional rubber feet on the side panels providing added protection if the monitor is upended when carrying.

Frontal reflex ports couple with the floor to increase LF output and inbuilt risers can be used to increase the monitoring angle.

Easy to manoeuvre, its exceptional performance and 'corridor' coverage make the XE500 the new definitive, high SPL stage monitor.

XE Series monitors are designed as a complete system with the iK42 4-channel Class D Amplifier, offering a unique combination of power and audio performance seamlessly combined with advanced DSP, proprietary VU-NET™ software control and Dante™ digital audio networking. State of the art components and a finely optimised design results in generous power reserves that ensures pristine sound quality is maintained even under the most extreme conditions. As well as maximising the capability of the monitor, this ensures that the monitor engineer and artist can be confident that they will experience this same high level of consistent performance from an XE monitor anywhere in the world.

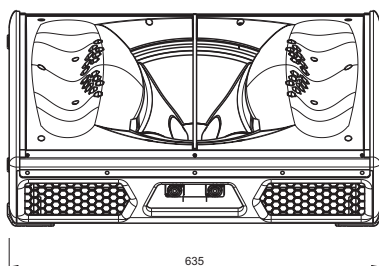
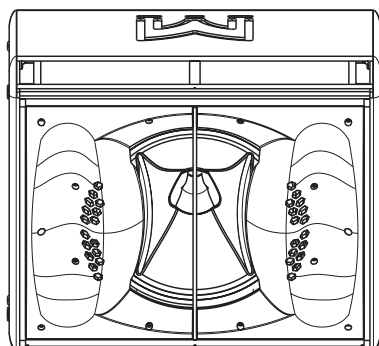


# XE500

## Stage Monitor – Two-way, bi-amp, Coaxial Differential Dispersion

### Technical Specifications

TYPE	Two-way, bi-amp, Coaxial Differential Dispersion stage monitor
FREQUENCY RESPONSE (3)	62Hz-18kHz $\pm$ 3dB -10dB @ 45Hz
DRIVERS	LF: 15" (380mm)/3.5" (89mm) voice coil, dual-gap neodymium motor system HF: 1.4" (35mm) exit/3" (75mm) voice coil, titanium dome compression driver
RATED POWER (2)	LF: 550W AES, 2200W peak HF: 80W AES, 320W peak
SYSTEM AMPLIFIER	iKON® iK42
MAXIMUM SPL (9)	143dB peak
NOMINAL IMPEDANCE	LF: 4 ohms, HF: 8ohms
DISPERSION (-6dB)	60-30° horizontal, 70° vertical
CROSSOVER	1.1kHz active
ENCLOSURE	Birch/beech ply and hardwood
FINISH	Textured black paint
PROTECTIVE GRILLE	Black perforated steel with scrim cloth backing
BAFFLE ANGLE	30° (40° with risers)
CONNECTORS	4 x NL4 type
PIN CONNECTIONS	LF: 1+/-, HF: 2+/-
FITTINGS	2 x bar handles Protective rubber feet on base and sides Built-in risers 4 x M8 inserts
DIMENSIONS	(W) 635mm x (H) 364mm x (D) 583mm
DIMENSIONS INCL FEET	(W) 25.0ins x (H) 14.3ins x (D) 22.9ins (W) 641mm x (H) 367mm x (D) 583mm (W) 25.2ins x (H) 14.4ins x (D) 22.9ins
WEIGHT	29kg (63.9lbs)
ACCESSORIES	Eyebolts

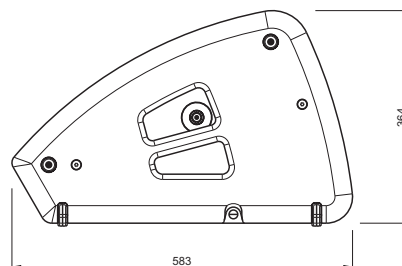


### iK42 Amplifier

<b>General</b>	
TYPE	Four-channel Class D amplifier
TOTAL OUTPUT POWER	20,000 Watts RMS, all channels driven
DIGITAL SIGNAL PROCESSING	96kHz DSP on all inputs and outputs
COOLING	Dual vari-speed fans, front-to-back airflow
MAXIMUM AMBIENT TEMPERATURE	40°C (104°F)
<b>Audio Inputs/Outputs</b>	
ANALOGUE IN/LINK (4 CHANNELS)	4 x female, 4 x male Neutrik™ XLR
ANALOGUE INPUT IMPEDANCE	20k $\Omega$ balanced to ground
MAXIMUM ANALOGUE INPUT LEVEL	+20dBu
NOMINAL SYSTEM GAIN	32dB
AES3 IN/LINK (2 CHANNELS)	1 x female, 1 x male Neutrik™ XLR, balanced
DANTE™ (4 CHANNELS)	2 x shielded RJ45, primary and secondary
AMPLIFIER OUTPUTS	4 x Neutrik Speakon™ NL4
<b>Control and Monitoring Network</b>	
PROTOCOL	Ethernet
CONTROL APPLICATION	Martin Audio VU-NET™
<b>Power Supply</b>	
TYPE	High performance Series Resonant
AC INPUT OPERATING RANGE	85 – 240V ~ AC, 47 - 63Hz
MAINS INRUSH CURRENT	6A at 115V, 12A at 230V (max for <10ms)
MAINS CONNECTOR	Neutrik 32A Powercon™
<b>Physical</b>	
DIMENSIONS	(W) 483 x (H) 2U/89mm x (D) 357mm (W) 19in x (H) 2U/3.5in x (D) 14.1in incl handles and optional rear support
WEIGHT	12.5kg (27.5lbs)

#### Notes

- (1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.
- (6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
- (7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
- (8) Measured in open (4pi) space at 2 metres with 2.83v input, using band limited pink noise, then referred to 1 metre.
- (9) Calculated at 1 metre.
- (10) Measured in half (2pi) space at 2 metres with 2.83V input, 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.

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