

XD12 & XD15 HIGH-OUTPUT FIXED-DISPERSION SYSTEMS



#### TOURING AND THEATRE

## MARTIN AUDIO'S NEW XD SERIES DEFINES THE ULTIMATE IN PERFORMANCE AND VERSATILITY FOR PROFESSIONAL, FIXED-DISPERSION, TWO-WAY LOUDSPEAKER SYSTEMS.

The models in the XD Series – the XD12 and XD15 – deliver best-in-class performance, including higher output levels and more extended frequency range than is normally associated with similarly sized systems. They represent new benchmarks for the compact, fixed-dispersion, two-way format.

Designed for touring and theatre applications, as well as fixed installations, both the XD12 and XD15 combine a full, rich sound and an accurate 80° x 50° dispersion pattern in a compact, multi-angle enclosure suited to a wide range of uses – from distributed sound reinforcement and portable AV events, to dance floor and stage monitor use.

With the XD Series, versatility is key. Each multi-angle enclosure can be used in either horizontal (landscape) or vertical (portrait) orientation, with rotation of the high frequency horn easily accomplished by removing the screw-free, protective grille. Comprehensive brackets support a wide variety of mounting options — including surface, ceiling and pole mount. Integral M8 inserts for eyebolt suspension increase the mounting options even further.



#### **FEATURES**

- Versatile, high-output two-way systems
- Compact, multi-angle, polyurea-coated plywood enclosures with screw-free perforated steel grilles
- User-rotatable 80° x 50° constant directivity horns
- Wide range of vertical and horizontal deployment options
- 8 ohms nominal impedance
- Switchable passive/bi-amp operation
- Integral pole mount and M8 rigging inserts

#### **APPLICATIONS**

- Live sound reinforcement
- Theatre sound reinforcement
- Audio-visual events
- Fixed installations
- High-power stage monitoring

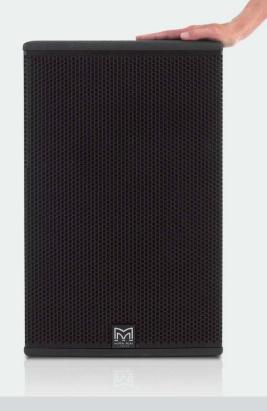


User-rotatable horn

#### **XD12**

The XD12 is a high-power, high-output two-way system designed for professional live sound applications, theatre and fixed installations. It features a high-specification 12" (300mm) LF drive unit and a 1" (25mm) exit compression driver on a user-rotatable 80° x 50° constant directivity horn. The XD12 can be driven passively or bi-amped, depending on user requirements – the internal crossover is switchable between passive and bi-amp operation by means of an external switch.

With the XD12, every design effort has been focused on maximising the output of the drive units. The LF driver has a lightweight 3" (75mm) voice coil and utilises a high gap flux neodymium magnet assembly for maximum sensitivity, whilst the cone is made of a new pulp formulation plus an epoxy treatment to ensure smooth mechanical breakup and a high strength to weight ratio. Flux demodulating rings reduce distortion at high excursions, and advanced cooling reduces power compression to negligible levels. The 1" (25mm) exit compression driver has a 1.7" (44mm) polyimide dome and ultra-high flux neodymium motor system for maximum efficiency, plus a copper cap to extend the HF response.





The XD12's grille is a spring-fit into the sides of the enclosure and requires no retention screws, allowing for easy removal to access the HF horn. The grille arrangement also means that the baffle and long sides of the enclosure form a continuous surface into which the LF driver and HF horn are flush-mounted to reduce diffraction effects.

The tour-grade plywood enclosure is coated in hard-wearing polyurea and its Declon® backed steel grille is pre-curved to resist deformation in the field.

# For applications that demand the highest level of performance



#### **XD15**

The XD15 is a very high-power, two-way system capable of producing 132dB peak SPL at 1 metre and with a usable LF response down to 45Hz. It is ideally suited to professional applications that demand the highest level of performance from a single enclosure, including live sound reinforcement, theatre sound and fixed installations. Its two-way format combines a very powerful 15" (380mm)/4" (100mm) voice coil LF drive unit with a 1.4" (35mm) exit compression driver on a user-rotatable  $80^{\circ}$  x  $50^{\circ}$  horn.

The LF driver utilises a high gap flux neodymium magnet assembly to achieve a very high sensitivity of 100dB @ 1m for 1 watt input. Advanced cooling and flux demodulating rings combine to reduce power compression and reduce distortion at extreme excursions. In the HF section, the 1.4" (35mm) exit compression driver has a 3" (75mm) pure titanium diaphragm and ultra-high flux neodymium magnet structure with a copper cap that extends the HF response.

An internal crossover between the LF and HF sections can be switched between passive and bi-amp operation as required by the user. The enclosure itself is constructed from multi-laminate birch ply and finished with a rugged polyurea coating to withstand conditions on the road. The XD15's Declon® backed steel grille is pre-curved to resist damage and is a spring-fit into the sides of the enclosure – eliminating the necessity for fixing screws, and allowing easy access to the HF horn. Diffraction effects are minimised by flush-mounting the LF driver and HF horn into the front baffle.

#### **UNIVERSAL BRACKETS**

Universal brackets – one for the XD12 and one for the XD15, facilitate a wide range of down-tilt and up-tilt angles in both portrait and landscape orientation. The universal bracket fixes to the top, bottom or side of the enclosure and can be mounted onto a speaker stand using a stand adaptor, or attached to a scaffold clamp for truss mounting. The tilt angle is easily adjustable and locked in place by a spring-loaded pin. Normally the clamp is attached to the centre of the bracket, giving a +/-15° range of adjustment. To increase the down-tilt angle, the clamp can be fixed to one end of the bracket for a down-tilt of up to 30°. For the XD12, a simple rear-mount wall bracket is also available.













#### **MULTI-PURPOSE YOKES**

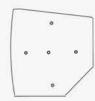
Two multi-purpose yokes are available – one for the XD12 and one for the XD15. Each yoke is designed to mount the enclosure on ceilings, walls, trusses or poles. In vertical (portrait) orientation, the yoke can be fixed directly to a wall or attached to a scaffold clamp for suspension from a truss. When suspended in this way, the enclosure has a natural down-tilt of  $20^{\circ}$ . In horizontal (landscape) orientation, the yoke can be fixed directly to ceilings or attached to a scaffold clamp.

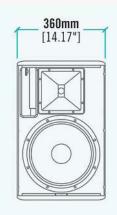
Note: Scaffold clamp not included.

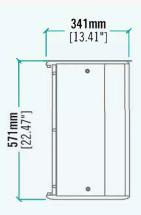
#### **TECHNICAL SPECIFICATIONS**

v	n	4	2
А	IJ		Z

TYPE	Compact, high-output, passive/bi-amp two-way system		
FREQUENCY RESPONSE (1)	65Hz–20kHz ± 3dB		
TREQUENCT RESPONSE (1)	-10dB @ 55Hz		
DRIVERS	12" (300mm)/3" (75mm) voice coil, long-excursion		
DITIVEITS	neodymium magnet LF driver		
	1" (25mm) exit/1.7" (44mm) voice coil, polyimide dome,		
	neodymium magnet HF compression driver		
RATED POWER (2)	LF: 400W AES, 1600W peak		
MILED FOWER (2)	HF: 50W AES, 200W peak		
RECOMMENDED AMPLIFIER	iK81 / VIA2502/5002/5004		
SENSITIVITY (3)	FR: 98dB		
CENTITY (3)	LF: 99dB		
	HF: 108dB		
MAXIMUM SPL (4)	FR: 124dB continuous, 130dB peak		
minumon of E (1)	LF: 125dB continuous, 131dB peak		
	HF: 125dB continuous, 131dB peak		
NOMINAL IMPEDANCE	FR/LF: 8 ohms		
TOTAL TALL DE LA COLOR DE LA C	HF: 16 ohms		
DISPERSION (-6dB)	80° horizontal, 50° vertical, user-rotatable horn		
CROSSOVER	2kHz switchable passive/bi-amp		
ENCLOSURE	38 litre, multi-laminate birch ply		
FINISH	Textured black polyurea coating		
PROTECTIVE GRILLE	Black perforated steel, Declon® backed		
CONNECTORS	2 x Neutrik® NL4		
INPUT CONNECTIONS	FR/LF: 1+, 1-		
	HF: 2+, 2-		
FITTINGS	21 x M8 threaded inserts		
	1 x Pole mount socket		
	1 x Pocket handle		
DIMENSIONS	(W) $360 \text{mm} \times \text{(H)} 571 \text{mm} \times \text{(D)} 341 \text{mm}$		
	(W) $14.2 \text{in} \times \text{(H)} \ 22.5 \text{in} \times \text{(D)} \ 13.4 \text{in}$		
WEIGHT	19.5kg (43lbs)		
ACCESSORIES	ASF20046 Universal Bracket		
	ASF20047 Yoke Assembly		
	HAM02041 35mm Stand Adaptor		
	HTKM20 Wall bracket		



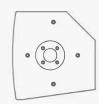








- (1) Measured on-axis in open (4∏) space at 2 metres, then referred to 1 metre. (2) AES Standard ANSI S4.26-1984.
- (3) Measured on-axis in open ( $4\Pi$ ) space at 2 metres with 1 watt
- input using band limited pink noise, then referred to 1 metre. (4) Measured on-axis in open (4П) space at 2 metres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

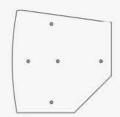


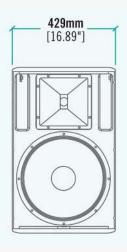
**XD12** 

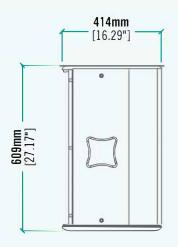
#### **TECHNICAL SPECIFICATIONS**

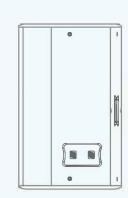
v	n ·	1 =
А	U	ı ə

	VDID		
TYPE	Very high-output, passive/bi-amp two-way system		
FREQUENCY RESPONSE (1)	$55Hz-18kHz \pm 3dB$		
	-10dB @ 45Hz		
DRIVERS	15" (380mm)/4" (100mm) voice coil, long-excursion		
	neodymium magnet LF driver		
	1.4" (35mm) exit/3" (75mm) voice coil, titanium dome		
	neodymium magnet HF compression driver		
RATED POWER (2)	LF: 600W AES, 2400W peak		
	HF: 80W AES, 320W peak		
RECOMMENDED AMPLIFIER	iK81 / VIA5002/5004		
SENSITIVITY (3)	FR: 99dB		
	LF: 100dB		
	HF: 108dB		
MAXIMUM SPL (4)	FR: 126dB continuous, 132dB peak		
	LF: 127dB continuous, 133dB peak		
	HF: 127dB continuous, 133dB peak		
NOMINAL IMPEDANCE	FR/LF: 8 ohms		
	HF: 16 ohms		
DISPERSION (-6dB)	80° horizontal, 50° vertical, user-rotatable horn		
CROSSOVER CROSSOVER	1.75kHz switchable passive/bi-amp		
ENCLOSURE	68 litre, multi-laminate birch ply		
FINISH	Textured black polyurea coating		
PROTECTIVE GRILLE	Black perforated steel, Declon® backed		
CONNECTORS	2 x Neutrik® NL4		
INPUT CONNECTIONS	FR/LF: 1+, 1-		
	HF: 2+, 2-		
FITTINGS	17 x M8 threaded inserts		
	1 x Pole mount socket		
	2 x Pocket handles		
DIMENSIONS	(W) $429 \text{mm} \times \text{(H)} 690 \text{mm} \times \text{(D)} 414 \text{mm}$		
	(W) $16.9 \text{in} \times \text{(H)} \ 27.2 \text{in} \times \text{(D)} \ 16.3 \text{in}$		
	32kg (70.5lbs)		
ACCESSORIES	ASF20048 Universal Bracket		
	ASF20049 Yoke Assembly		
	HAM02041 35mm Stand Adaptor		





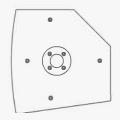




#### Notes

- (1) Measured on-axis in open (4[1) space at 2 metres, then referred to 1 metre.
- (2) AES Standard ANSI S4.26-1984.
- (3) Measured on-axis in open (4II)
- (3) Measured on-axis in open (411) space at 2 metres with 1 watt input using band limited pink noise, then referred to 1 metre.

  (4) Measured on-axis in open (411) space at 2 metres using band limited pink noise, then referred to 1 metre.



**XD15** 

### XD SERIES

#### Martin Audio Limited

**Century Point** 

Halifax Road

**Cressex Business Park** 

**High Wycombe** 

**Buckinghamshire** 

HP12 3SL

**England** 

FOR SALES ENQUIRIES:

UK

Telephone: +44 (0)1494 535312

E-mail: info@martin-audio.com

NORTH AMERICA

Telephone: 818 649 7776

All information is Copyright © 2012 Martin Audio Ltd. Version: 1.1

Martin Audio, the Martin Audio logo and Hybrid are registered trademarks of Martin Audio Ltd. in the United Kingdom, United States and other countries; all other Martin Audio trademarks are the property of Martin Audio Ltd.

www.martin-audio.com

