

FX10



Compact, high-output, Coaxial Differential Dispersion passive two-way system

Features

- Versatile, passive, two-way systems
- Coaxial 'point source' performance
- Differential Dispersion™ technology for consistent coverage
- Sleek UPM Formi composite enclosures
- User-rotatable coaxial drive units
- Vertical and horizontal mounting options
- Screw-free perforated steel grilles
- 8Ω nominal impedance
- Discreet mounting accessories
- Integral inserts for eyebolt suspension

Applications

- Small-medium live music clubs
- Music bars
- Nightclubs
- Premium KTV
- Infills in larger installations



Martin Audio brings engineering innovation to installed bar and nightclub sound with the all-new Blackline3 Series — combining distinctive curved enclosures with unique Coaxial Differential Dispersion™ technology to deliver class-leading performance, fidelity and coverage consistency to venues that demand the ultimate in cutting-edge technology and style.

Coaxial Differential Dispersion technology delivers more consistent audience coverage than systems with fixed dispersion X° x Y° horns — projecting more output to the rear of the audience to distribute sound evenly front-to-back, while having wide horizontal coverage close-up. This increased coverage area can reduce the speaker count in larger installations.

Visually-appealing industrial design is a distinctive feature of the Blackline 3 Series. The full-range enclosures can be used in either horizontal (landscape) or vertical (portrait) orientation, with rotation of the coaxial driver easily accomplished by removing the screw-free, protective grille. The curved shape of each full-range enclosure allows it to be bracket-mounted closer to a wall, for more discreet positioning, and integral M8 inserts are provided for eyebolt suspension.

The FX10 is a very compact two-way passive loudspeaker system which utilises a 10" (250mm) LF/1" (25mm) exit HF Coaxial Differential Dispersion driver. It is uniquely placed to meet the foreground requirements of music bars and clubs, as well as the varied architectural applications that require upfront sound levels from a very compact enclosure.

Use with a B218 subwoofer will enable the FX10 to operate as small dancefloor system that is remarkably powerful for its size.

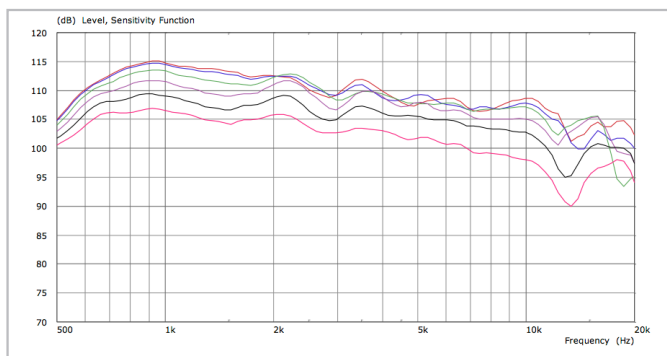
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Coaxial Differential Dispersion™: The Best Of Both Worlds

Blackline3 combines the 'point-source' benefits of coaxial designs with the consistent coverage of Differential Dispersion technology. All Blackline3 Series full-range models feature Martin Audio's unique, patent-pending Coaxial Differential Dispersion™ technology to deliver perfect sound to every member of the audience.



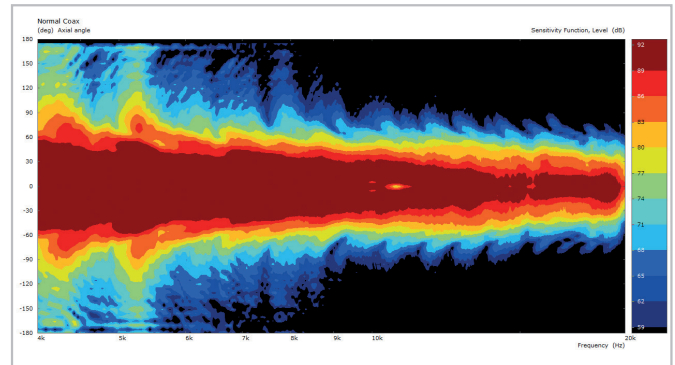
- 0/10/20/30/40/50 degree off-axis measurements of Blackline3 FX15 (wide-axis). Constant beamwidth maintained up to 20kHz.

The Coaxial Advantage

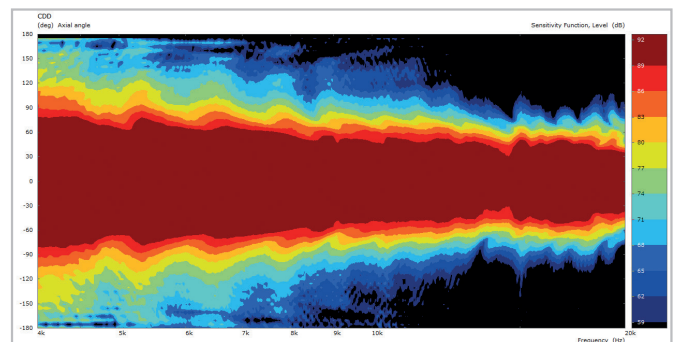
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Non-coaxial systems can suffer from uneven frequency response in the crossover region because the outputs of the LF and HF sections interfere with each other, causing variations off-axis, depending on the listening position. This is especially true close to the loudspeaker.

In contrast, coaxial systems can achieve 'point-source' summation of the LF and HF sections at all positions off-axis, even close-up. This is one reason that coaxial devices are often used for nearfield applications such as studio monitoring.



- Conventional coaxial beamwidth



- Blackline3 beamwidth (horizontal)

Significantly, until now one disadvantage of conventional coaxial devices has been high frequency beaming, where the high frequency dispersion reduces as the frequency increases. This is primarily because conventional coaxial devices channel high frequencies through a narrow tube in the pole-piece of the magnet system. Blackline3 Series coaxial devices overcome this by incorporating an innovative static waveguide that merges seamlessly with the unique cone shape — maintaining the dispersion pattern out to very high frequencies.



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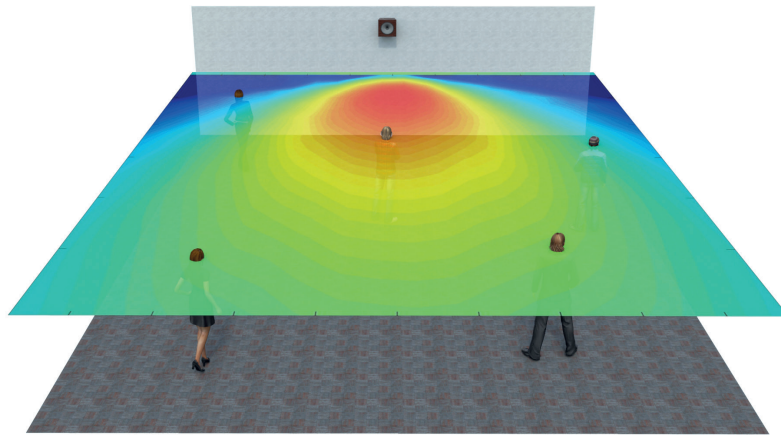
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The Differential Dispersion™ Advantage

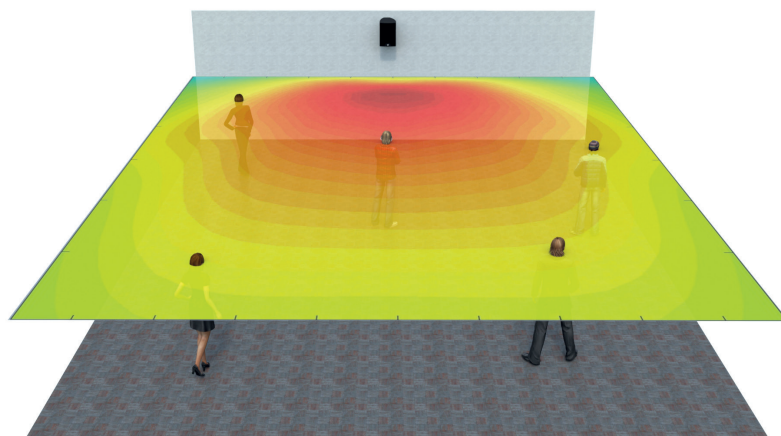
A Differential Dispersion horn has a 3D trapezoid dispersion pattern which covers a room more evenly than a system with a conventional, fixed-dispersion $X^\circ \times Y^\circ$ type horn.

With a conventional $X^\circ \times Y^\circ$ horn, the speaker is usually placed above head height and aimed towards the centre of the audience. This produces an imperfect coverage pattern which misses out some areas — particularly side areas close to the loudspeaker.

In contrast, a Blackline3 Coaxial Differential Dispersion system produces a rectangular coverage pattern to reach all corners of the audience, and wide horizontal coverage is achieved very close to the loudspeaker. Walking the room, the consistency in frequency response and SPL — both close to the loudspeaker and further back — is exceptional. The improved coverage close-up also means that Blackline3 speakers can be spaced further apart in some instances, reducing overall speaker count.



• Conventional $X^\circ \times Y^\circ$ coverage



• Blackline3 coverage

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Technical Specifications

Acoustical

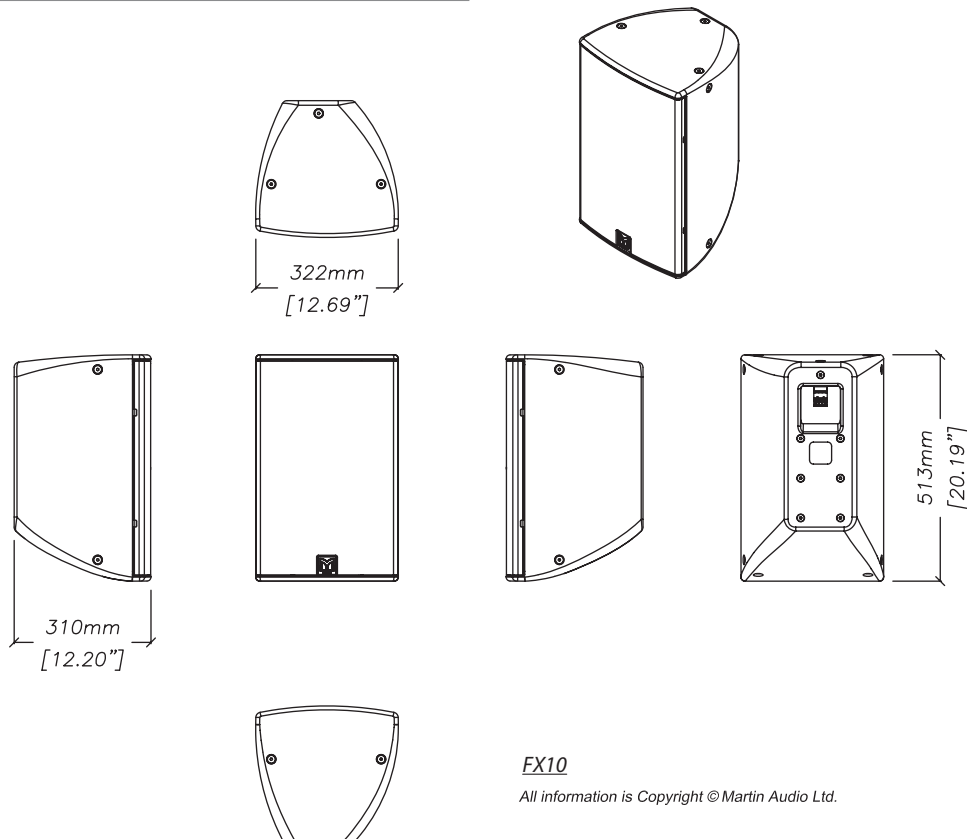
TYPE	Compact, Coaxial Differential Dispersion passive two-way system
FREQUENCY RESPONSE (1)	65Hz-20kHz \pm 3dB, -10dB @ 55Hz
DRIVER	LF: 10" (250mm)/2.5" (63.5mm) voice coil, long excursion, shared ferrite motor system with HF HF: 1" (25mm) exit/1.4" (38mm) voice coil, polyimide dome compression driver
RATED POWER (2)	250W AES, 1000W peak
RECOMMENDED AMPLIFIER	VIA2502/2004
SENSITIVITY (3)	96dB
MAXIMUM SPL (4)	120dB continuous, 126dB peak
NOMINAL IMPEDANCE	8 ohms
DISPERSION (-6dB) (5)	110°-75° horizontal, 60° vertical (user-rotatable)
CROSSOVER	2kHz passive
ENCLOSURE	28 litre, composite material
FINISH	Black or white textured paint
PROTECTIVE GRILLE	Black or white perforated steel with scrim cloth backing
CONNECTORS	Low profile 20A push-lock
PIN CONNECTIONS	Left to right: Input+, Input -, Link -, Link+
FITTINGS	6 x M8 inserts for wall bracket 10 x M8 fly points
DIMENSIONS	(W) 323mm x (H) 515mm x (D) 311mm (W) 12.7ins x (H) 20.3ins x (D) 12.2ins
WEIGHT	15.3kg (33.7lbs)

Notes

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

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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