DD6
ULTRA-COMPACT DIFFERENTIAL DISPERSION™ SYSTEM

The DD6 adopts advanced Differential Dispersion™ technology to deliver more consistent frequency response and SPL’s over the audience than possible from conventional X° × Y° type systems. It combines a full, rich sound and a unique three-dimensional dispersion pattern in an ultra-compact, ultra-versatile enclosure suited to a vast range of professional applications – from distributed sound reinforcement and portable AV events, to front-fill, under-balcony and stage monitor use.

‘ON-THE-FLY’ FLEXIBILITY

Designed for ‘on-the-fly’ flexibility, the DD6’s multi-angle enclosure can be used in either horizontal (landscape) or vertical (portrait) orientation. Rotation of the DD6’s high frequency horn for horizontal or vertical use is a quick, tool-free operation. Comprehensive brackets support a wide variety of mounting options – including surface, ceiling and pole mount. The five-sided enclosure also makes the DD6 ideal as a small-footprint stage monitor. Bi-Path™ input switching and input connectors at both the side and rear of the enclosure enhance its flexibility even further.

FEATURES & BENEFITS

• Ultra-compact, ultra-versatile, passive 2-way system
• Differential Dispersion™ rotatable horn, configurable without tools, provides more throw to the rear for more consistent audience coverage
• Wide range of deployment options include vertical/horizontal surface mount, ceiling or pole mount, under-balcony and stage monitor use
• High-linearity 6.5" (165mm) bass/mid driver + 0.5" (12.5mm) exit HF driver complement
• Multi-angle, polyurethane-coated plywood enclosure with magnetically-retained, quick-release perforated steel grille
• 16Ω impedance and Bi-Path™ switchable Neutrik® NL4 inputs for daisy-chaining of 8 or more enclosures via a single 4-core cable
• Side and rear input connectors
• Comprehensive brackets and M8 inserts for adaptable mounting options

APPLICATIONS

• Theatre sound reinforcement
• Distributed sound reinforcement
• Audio-visual events
• Fixed installations
• Houses of worship
• Frontfill and under-balcony
• Unobtrusive stage monitoring
DIFFERENTIAL DISPERSION™ TECHNOLOGY

The second-generation, Differential Dispersion technology employed in the DD6 is key to achieving a consistent frequency response and SPL over the audience. Designed using in-house, proprietary BEM (Boundary Element Method) tools, the HF horn has a 3D dispersion pattern which covers the audience in a much more consistent manner than conventional X° × Y° type horns which produce maximum output close-up and decrease over distance.

The DD6’s Differential Dispersion horn has a short-throw horizontal coverage of 120°, narrowing to 90° as throw increases. Vertically the horn covers 60°, with greater output above the horizontal central plane. The combination of narrower horizontal dispersion and greater output above the horizontal centre plane creates progressively more HF output as the throw distance increases. The resultant 3D dispersion pattern is ideally suited to covering audiences on flat or gradually sloping planes. Walking the floor, the consistency in frequency response and SPL – both side-to-side and front-to-back – is remarkable.

TOOL-FREE ROTATABLE HORN

The DD6’s Differential Dispersion horn can be quickly and easily rotated without the use of tools. The hinged speaker grille is magnetically retained to permit quick access to the horn, which is held in place by four thumbscrews. Unscrewing these by hand, the horn can be quickly rotated through 90° for either horizontal or vertical orientation, depending on the application.
SYSTEM & COMPONENTS

The DD6 is a passive 2-way system. With its largest dimension only 359mm (14”) and weighing only 6.2kg/13.7lbs, the DD6 is surprisingly small and light – yet capable of producing 117dB peak SPL at 1 metre. The low/mid section utilises a high-linearity 6.5” (165mm) driver with a powerful neodymium magnet and 1.75” (44mm) voice coil, whilst the HF section features a 0.5” (12.5mm) exit neodymium magnet compression driver mounted on a Differential Dispersion horn with unique 3D dispersion pattern. The tour-grade plywood enclosure is coated in hard-wearing polyurethane and is fitted with a quick-release steel grille, which is magnetically retained for easy access to the DD6’s rotatable horn.

BI-PATH™ INPUT SWITCHING

Of particular benefit where the DD6 is used as a stage monitor, Bi-Path™ input switching enables each DD6 to select its drive from one of two separate sources. One pair of a four-core cable can carry the output of one amplifier channel with one mix e.g. vocal, whilst the other pair can carry the output of another e.g. guitar. A switch at the rear of the DD6 selects which cable pair drives the speaker. With this arrangement, 8 or more DD6’s can be daisy-chained from a two channel amplifier, with the source selected at the individual speaker.

FLEXIBLE MOUNTING OPTIONS

Three comprehensive brackets facilitate a wide variety of mounting options for precision sound coverage. The DD6 enclosure itself has 6 x M8 threaded inserts for simple eyebolt suspension.
MULTI-PURPOSE YOKE

The DD6 yoke is a versatile U-bracket designed to mount the DD6 on ceilings, walls, trusses or poles. In horizontal orientation, it can be fixed directly to ceilings or under balconies, attached to a scaffold clamp and suspended from a truss, or attached to an external pole-mount stand top. In vertical orientation, it can be fixed directly to walls for distributed fill and surround applications, or attached to the DD6 wall bracket for a wide range of pan and tilt options.

UNIVERSAL BRACKET

The universal bracket fixes to either the top or bottom of the DD6 and can be attached to a scaffold clamp for truss mounting or directly onto the pole of a speaker stand. The up/down tilt angle is easily adjustable and lockable in place.

WALL BRACKET

The DD6 wall bracket attaches to the rear of the DD6 to mount the enclosure as close to the wall as possible. It swivels and tilts and features a positive locking mechanism.
DD6
TECHNICAL SPECIFICATIONS

TYPE: Differential Dispersion™, ultra-compact, multi-angled, two-way passive

FREQUENCY RESPONSE (5): 70Hz–20kHz ± 3dB
-10dB @ 55Hz

DRIVERS: 6.5" (165mm)/1.75" (44mm) voice coil neodymium magnet LF driver
0.5" (12.5mm) exit neodymium magnet HF compression driver

RATED POWER (2): 150W AES, 600W peak

RECOMMENDED AMPLIFIER: iK81 / VIA2502/2004

SENSITIVITY (6): 91dB

MAXIMUM SPL (7): 111dB continuous, 117dB peak

NOMINAL IMPEDANCE: 16 ohms

DISPERSION (-6dB): 90°–120° horizontal, 60° vertical

CROSSOVER: 3.7kHz passive

ENCLOSURE: 7 litre, multi-laminate birch ply

FINISH: Textured black polyurethane coating

PROTECTIVE GRILLE: Black perforated steel

CONNECTORS: 4 × Neutrik® NL4, connected in parallel

INPUT CONNECTIONS: 1+,1- or 2+, 2-, selected via rear-mount Bi-Path™ switch

FITTINGS: 8 × M8 threaded inserts
4 × M6 threaded inserts
Pocket handle

DIMENSIONS: (W) 190mm × (H) 359mm × (D) 207mm
(W) 7.5ins × (H) 14.1ins × (D) 8.1ins

WEIGHT: 6.2kg (13.7lbs)

Accessories

ASF20034: Universal Bracket
ASF20035: Yoke Assembly
ASF20036: Wall Bracket
HAM02041: 35mm Stand Adaptor

Notes:
(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.