

# **ESD10** Technical Data Sheet

### Introduction

The ESD10 is a compact passive 2-way, high output, full-range loudspeaker incorporating a 10" trans-coil woofer and a wide dispersion rotatable horn. The ESD10 provides a smooth hi fidelity response and delivers sound quality and level that is superior to many larger competing products. Ideal as a main system speaker or as an fill-in for larger systems. The ESD10 is an all round affordable passive solution that simply exudes quality.

### Features

- Professional, Baltic birch construction with wear resistant polymer coating
- 125dB sustained output, 128dB peak with very high dynamic range •
- Compact, asymmetrical, trapezoidal cabinet design allows for use in stage monitor or under balcony applications
- Rotatable wide dispersion 100° H x 80° V horn •
- Revolutionary new passive delay line •
- 1.75" (44 mm) diaphragm compression driver with complex geometry phase plug . for higher output, exceptionally low distortion, extended frequency response and neodymium magnetic motor structure
- "10" woofer with Super Acoustic Active Impedance Control (AIC) voice coil technology and neodymium magnetic motor structure dramatically increases force, lowers distortion and provides increased linear frequency response
- Proprietary top handle design for simplified handling and carrying, integrates one M10 suspension point, Omnimount<sup>™</sup> bracket point and four M6 points
- Additional side and bottom M10 points for flexible bracket, rigging and installation options
- "Top-hat" pole mount fitted at the base of the cabinet



## Application

Specifically designed as a passive loudspeaker for high quality, high output portable music playback and live performance in small areas

- Full range stand-alone solution or scalable to larger systems with subwoofers
- Large conference and small to medium • performance venues
- Multi-purpose fixed installations
- Personal monitoring
- In-fill for larger main KV2 Audio systems or third party systems

Low Frequency Section	
Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter / Design	10" / 2.5" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter
Speaker Input	
Speaker Input	2x Neutrik Speakon®, Terminal Block
Cabinet	
Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL
Physical Dimensions	
Height	514 mm (20.32")
Width	310 mm (12.20")
Depth	324 mm (12.76")
Weight	16.5 kg (36.38lbs)

### System Acoustic Perfomance

System Acoustic Periomance	
Max SPL Long-term	125dB
Max SPL Peak	128dB
-3dB Response	65Hz to 20kHz
Recommended Power	500W
Sensitivity	96dB
Impedance	4Ω
Crossover Point	1.8kHz
High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 80°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Titanium
Magnet Type	Neodymium
Protection	RMS Limiter



### **Architectural Specifications**

The Loudspeaker shall be a 2-way design using SLA Technology (Super Live Audio) and shall be driven and controlled by a dedicated matched Amplifier (ESP2000, ESP4000 or alternatively with a third party amplifier of the users choice).

The Loudspeaker enclosure shall consist of one 10" Neodymium magnet structure Bass driver and one 1" Neodymium Titanium Compression driver mounted to a low compression horn assembly.

The cabinet enclosure shall be made from re-enforced Baltic Birch Ply, with toughened impact and wear resistant paint finish.

The Loudspeaker components shall be protected by an acoustically transparent rigid metal grille supported by absorbent rubber seals.

The enclosure shall incorporate one ergonomically designed recessed handle on the top panel, which will incorporate four M6 points to facilitate Omnimount<sup>™</sup> attachment.

The enclosure shall incorporate one M10 fixing point on each side panel to facilitate ESD10 V & H bracket fixing and a single Top Hat Pole mount will be fitted to the base panel.

The enclosure shall incorporate a recessed connection panel and will be fitted with a double input/output Speakon locking connector. A 4 pole barrier strip will be incorporated in the connection panel to allow bare wire connection.

The Loudspeaker shall have a maximum long term sound pressure level of 125dB, a total peak power handling capacity of 500W, with a nominal Horizontal dispersion of 100° and Vertical dispersion of 80° and have a measured on axis frequency response of 65Hz to 20KHz (-3dB). The Enclosure dimensions shall be: 514 mm /20.32" x 310 mm /12.2" x 324 mm /12.76"

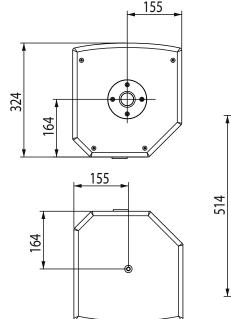
The Enclosure shall not exceed a weight of 16.5 kg /36.38lbs.

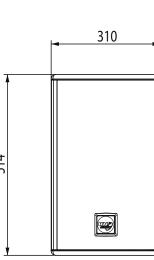
The Loudspeaker shall be the KV2 Audio ESD10.

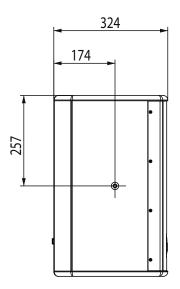
The dedicated Amplifier shall be the KV2 Audio ESP2000/4000 – (Or alternative third party amplifier).

The dedicated fly ware shall be the ESD10 Vertical or Horizontal Bracket.

### **Dimensional Drawings**







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