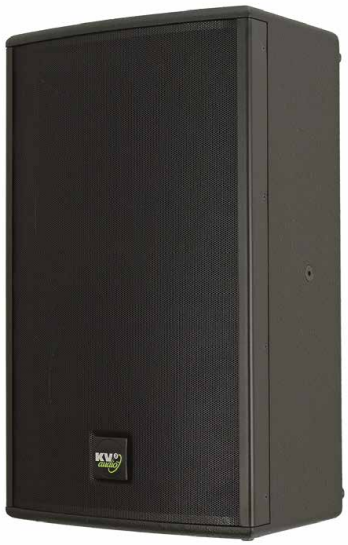
ESD12 Technical Data Sheet

Introduction

Product code: KVV 987 199

The ESD12 is a high quality 2-way, passive full range loudspeaker that provides unmatched clarity and definition in a simple elegant package. The ESD12 utilizes a 12" Trans Coil woofer and the same 3" NVPD large format compression driver found in our flagship VHD products, which has one of the lowest distortion ratings on the planet. Combined with our unique delay line technology the ESD12 delivers a beautifully balanced, phase coherent and accurate compact, 2-way passive solution that is adaptable to a wide range of applications.



Features

- Professional, Baltic birch construction with wear resistant polymer coating
- 127 dB sustained output, 133 dB peak with very high dynamic range
- Compact, asymmetrical, trapezoidal cabinet design allows for use in stage monitor and under balcony applications
- Rotatable wide dispersion 80° H x 40° V horn
- Revolutionary passive delay line
- State of the art 3" (76 mm) Nitride Titanium diaphragm compression driver with complex geometry phase plug and neodymium magnetic structure for higher output, exceptionally low distortion and extended frequency response
- 12" woofer with Super Acoustic Active Impedance Control (AIC) voice coil technology and neodymium magnetic motor structure dramatically increases force, lowers distortion and provides increased frequency response linearity
- Proprietary top handle design for simplified handling and carrying, integrates one M10 suspension point, Omnimount™ bracket point and four M6 points
- Additional side and bottom M10 points for flexible rigging and installation options
- "Top-hat" for pole mounting applications

Application

Designed as a passive loudspeaker for the highest quality vocal and full range live performance in medium areas

- Suitable for medium to large conference, Theatre and small to medium scale concerts
- Scalable from stand alone to full range large systems by adding subwoofers
- Fixed installations
- Houses of worship
- Stage monitoring

System Acoustic Perfomance	
Max SPL Long-term	127 dB
Max SPL Peak	133 dB
-3 dB Response	55 Hz to 22 kHz
-10 dB Response	50 Hz to 30 kHz
Recommended Power	500 W
Sensitivity	98 dB
Impedance	4 Ω
Crossover Point	1.2 kHz

High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	80° x 40°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1.4" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium
Protection	RMS Limiter

Low Frequency Section	
Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter / Design	12" / 2.5" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	Thermal breaker - autoreset

Speaker Input	
Speaker Input	2× Neutrik Speakon®, Terminal Block

Cabinet	
Cabinet Material	Baltic birch
Handles	1
Pole Mount	35 mm
Color	"Orange peeled" Matt Black or any RAL

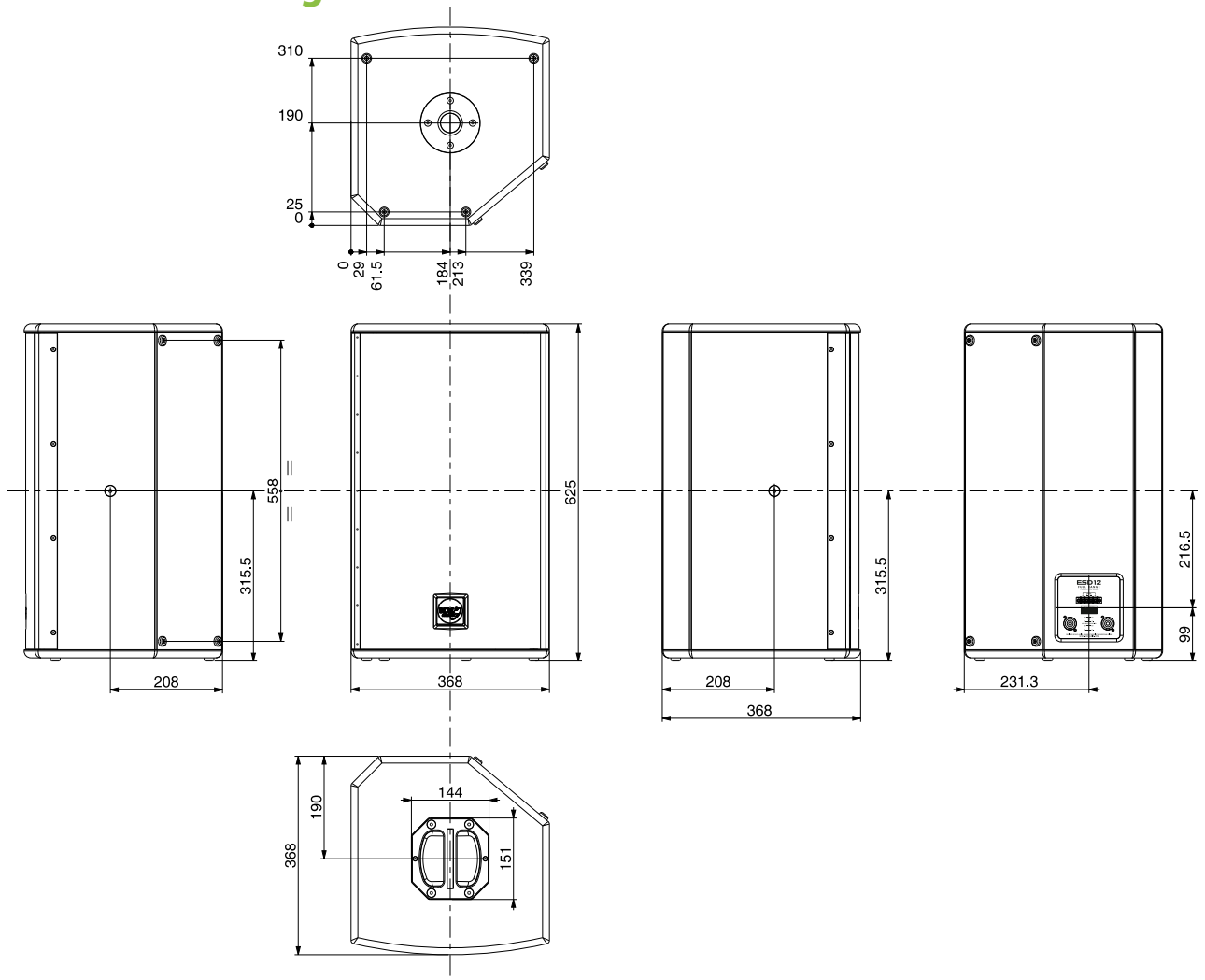
Physical Dimensions	
Height	625 mm (24.61")
Width	368 mm (14.48")
Depth	368 mm (14.48")
Weight	23 kg (50.7 lb)

ESD12 Technical Data Sheet

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 Front loaded 12" Neodymium magnet structure Bass driver and one 3" Nitride 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™ attachment.
The enclosure shall incorporate one M10 fixing point on each side panel to facilitate ESD12 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 pressure level of 127 dB, a total peak power handling capacity of 500 W with a nominal Horizontal dispersion of 80° and a Vertical dispersion of 40° and have a measured on axis frequency response of 55 Hz to 22 kHz (-3 dB).
The Enclosure dimensions shall be: 625 mm /24.61" x 368 mm /14.48" x 368 mm /14.48"
The Enclosure shall not exceed a weight of 23 kg /50.7 lb.
The Loudspeaker shall be the KV2 Audio ESD12.
The dedicated Amplifier shall be the KV2 Audio ESP2000/4000 – (Or alternative third party amplifier).
The dedicated fly ware shall be the ESD12 Vertical or Horizontal Bracket.

Dimensional Drawings



KV2 Audio International, Nádražní 936, Milevsko 399 01, Czech Republic
Tel.: +420 383 809 320
Email: info@kv2audio.com | Web: www.kv2audio.com