

# ESD312 Technical Data Sheet

## Introduction

The ESD312 is a very high output full-range 3-way, passive solution with two bass reflex loaded 12" woofers, a single horn loaded 6" mid range and a 1" compression driver. Housed in a professional robust Baltic Birch cabinet, with a protective polymer paint coating and heavy-duty grille, the ESD312 can be a dedicated close-field DJ Monitor system when used in conjunction with the VHD2.18J Subwoofer and monitor bracket. It can also be applied as a PA system, as an individual full range speaker or as a fill speaker to accompany larger format VHD systems. For added versatility in installation, the ESD312 is supported by dedicated accessories including a vertical bracket enabling a wide range of mounting and deployment options for hanging.

## Features

- Professional, Baltic Birch construction with wear resistant polymer paint coating
- 133dB sustained output, 139dB peak
- Very high dynamic range
- Compact, slim design cabinet
- Requires one single amplifier channel
- Revolutionary passive delay line technology
- 90° H x 40° V horn
- State of the art 1" compression driver with complex geometry phase plug and neodymium magnetic structure for higher output, exceptionally low distortion and extended frequency response
- 2x12" neodymium woofers providing low distortion and very high output
- Gradual RMS speaker protection

Product code: KVV 987 544



## Application

Specifically designed as an extremely high power passive 3-way solution

- Live performance
- Portable PA and fill
- Dj booth monitoring
- Fixed Installations

System Acoustic Perfomance	
Max SPL Long-term	133dB
Max SPL Peak	139dB
-3dB Response	57Hz to 20kHz
-10dB Response	40Hz to 20kHz
Recommended Power	1000W
Sensitivity	100dB
Impedance	4Ω
Crossover Point	400Hz; 2kHz
High Frequency Section	
Acoustic Design	Horn Loaded
Horn Coverage Horizontal / Vertical	90° x 40°
Throat Exit Diameter / Diaphragm Size	1" / 1,75"
Diaphragm Material	Titanium
Magnet Type	Neodymium
Protection	RMS limiter
Mid Range Section	
Acoustic Design	Horn Loaded
Horn Coverage Horizontal / Vertical	90° x 40°

Mid Range Section	
Woofer Size / Voice Coil Diameter	6" / 1,75"
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium
Protection	RMS Limiter
Low Frequency Section	
Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	12" / 3"
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	RMS Limiter
Speaker Input	
Speaker Input	2x Neutrik Speakon® 2x Terminal Block
Cabinet	
Cabinet Material	Baltic birch
Handles	2
Color	Polymer paint coating
Physical Dimensions	
Height	779 mm / 30.67"
Width	700 mm / 27.56"
Depth	394 mm / 15.51"
Weight	44 kg (97 lbs)

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## Architectural Specifications

The Loudspeaker shall be a 3-way design, using SLA Technology (Super Live Audio) and shall be driven and controlled by a full range Amplifier, (ESP Series or alternatively with a third party amplifier of the users choice).

The Loudspeaker enclosure shall consist of two front bass reflex loaded 12" Neodymium magnet structure Bass woofers, one horn loaded 6" mid range and one 1" Compression driver mounted to a low compression horn assembly.

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

The Loudspeaker components shall be protected by an acoustically transparent rigid metal grille.

The enclosure shall have one ergonomically designed recessed handle on each side panel.

A double input/output Speakon locking connector will be on the rear panel.

The enclosure shall incorporate two M10 fixing points on each top side panel to accommodate the ESD312 Vertical Bracket (KVV 987 556), one additional M10 fixing points on each bottom side panel to allow use of the ESD312 Monitor Bracket (KVV 987 559) for mounting on the VHD2.18J subwoofer (KVV 987 373).

The enclosure shall also incorporate one additional M10 fixing point on bottom side panel, one M10 fixing point on each side sloping and one on the back side for alternative bracket solutions.

The enclosure will be fitted with four rubber feet.

The Loudspeaker shall have a maximum long term pressure level of 133dB, a continuous power handling value of 1000W and 4000W Peak, with a nominal Horizontal dispersion of 90 deg and a Vertical of 40 deg and have a measured on axis frequency response of 57Hz to 20KHz (-3dB). The Enclosure dimensions shall be: 779 mm / 30.67" H x 700 mm / 27.56" W x 394 mm / 15.51" D

The Enclosure shall not exceed a weight of 44 kg / 97 lbs.

The Loudspeaker shall be the KV2 Audio ESD312.

The dedicated Amplifier shall be the KV2 Audio ESP Series/ – (Or alternative third party amplifier)

## Dimensional Drawings

