

# ESM312 Technical Data Sheet

Product code: KVV 987 467

## Introduction

The ESM312 is a very high output full-range low profile 3-way, passive monitoring solution with two bass reflex loaded 12" neo woofers, a single horn loaded 6" mid range woofer and a 1" compression driver. Housed in a professional robust Baltic Birch cabinet, with a protective Polymer paint coating and heavy-duty grille, the ESM312 can be utilized for all large scale stage monitoring applications, where quick and easy set up is required. The ESM312 is truly one of the most impressive monitoring solutions on the market today.



## Features

- Professional, Baltic Birch construction with wear resistant polymer paint coating
- 133dB sustained output, 139dB peak with very high dynamic range
- Compact, wedge shaped cabinet design specifically developed for use in stage monitor applications
- 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
- Specially designed acoustic fabric covering inside the grille for protection against liquid spillage
- Rear mounted flip-out stands to allow 35 or 45 deg angles

## Application

Specifically designed as an extremely compact-low profile passive-vocal floor monitor

- Live performance
- Concert venues
- Portable PA
- Fixed installations

System Acoustic Performance	
Max SPL Long-term	133dB
Max SPL Peak	139dB
-3dB Response	40Hz to 20kHz
-10dB Response	35Hz to 20kHz (half space)
Power Handling	1000W continuous / 4000W peak
Sensitivity	100dB
Impedance	4Ω
Crossover Point	400Hz; 2kHz

High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	90° x 40°
Rotatable Horn	NO
Throat Exit Diameter / Diaphragm Size	1" / 1,75"
Diaphragm Material	Titanium
Magnet Type	Neodymium
Protection	RMS excursion limit

Mid Range Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	90° x 40°
Rotatable Horn	NO

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®

Cabinet	
Cabinet Material	Baltic birch
Handles	2 + 2
Color	Polymer paint coating

Physical Dimensions	
Height	398 mm /15.669"
Width	585 mm /23.032"
Depth	553 mm /21.76"
Weight	42 kg (92.59lbs)

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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 dedicated - matched Amplifier, (ESP2000D 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 woofer 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 supported by absorbent rubber seals.

An internal Acoustic fabric shall be incorporated to protect the speakers from fluid spillage damage.

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 with amplifier channel 1,2 selector.

The enclosure will be fitted with four rubber feet on the base panel to allow easy movement and will have two flip out stands to facilitate a 35 or 45 degree angle.

The Loudspeaker shall have a maximum long term pressure level of 133dB, a continuous power handling value of 1000W and 4000 Peak, with a nominal Horizontal dispersion of 90 deg and a Vertical of 40 deg and have a measured on axis frequency response of 40Hz to 20KHz (-3dB).

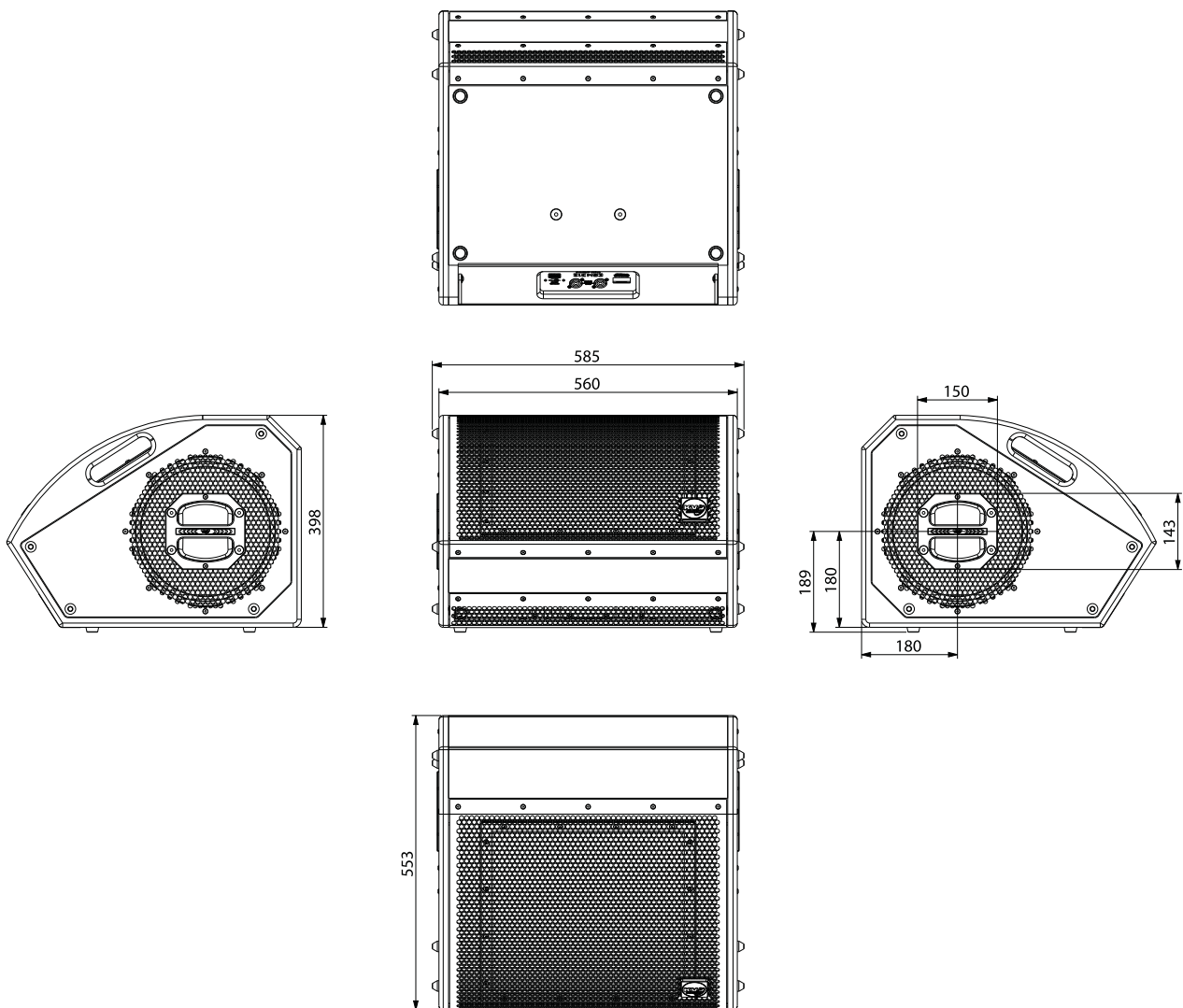
The Enclosure dimensions shall be: 398mm /15.669"H x 585mm /23.032"W x 553mm /21.76"D

The Enclosure shall not exceed a weight of 42 kg / 92.59 lbs.

The Loudspeaker shall be the KV2 Audio ESM312.

The dedicated Amplifier shall be the KV2 Audio ESP2000D/ - (Or alternative third party amplifier)

## Dimensional Drawings



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