

ESM12 Technical Data Sheet

Product code: ESM12L - KVV 987 216
ESM12R - KVV 987 218

Introduction

The ESM12 is a full-range low profile 2-way, passive monitoring solution with a 12" trans-coil neo woofer and the same 3" NVPD large format compression driver found in our flagship VHD products. The ESM12 also features our revolutionary passive delay line, which dramatically reduces feedback. Housed in a professional Baltic Birch cabinet, with a protective Polymer coating and heavy-duty grill, the ESM12 can be utilized for FOH applications with the inclusion of a pole mount. Truly one of the most impressive monitoring solutions on the market today, the ESM12 is available in left and right configurations.



Features

- Professional, Baltic birch construction with wear resistant polymer coating
- 127dB sustained output, 130dB peak with very high dynamic range
- Compact, wedge shaped cabinet design specifically developed for use in stage monitor applications or low profile ceiling monitoring
- Rotatable wide dispersion 40° H x 80° 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
- Specially designed acoustic fabric covering and protecting the compression driver against liquid spillage
- "Top-hat" pole mount allows the ESD12M to be used as a conventional loudspeaker

Application

Specifically designed as an extremely high output, full range-low profile passive vocal and music floor monitor

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

System Acoustic Performance	
Max SPL Long-term	127dB
Max SPL Peak	133dB
-3dB Response	55Hz to 22kHz
-10dB Response	41Hz to 30kHz (half space)
Recommended Power	500W
Sensitivity	98dB
Impedance	4Ω
Crossover Point	1.2kHz

High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	40° x 80°
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
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose
Protection	Thermal breaker - autoreset

Speaker Input	
Speaker Input	2x Neutrik Speakon®

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

Physical Dimensions	
Height	368 mm (14.48")
Width	606 mm (23.86")
Depth	368 mm (14.48")
Weight	23 kg (50.7lbs)

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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 grill supported by absorbent rubber seals.

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

The enclosure shall have one ergonomically designed recessed handle on the side panel, which will incorporate a double input/output Speakon locking connector and one M10 fixing point.

The enclosure shall incorporate one M10 fixing point (using special plate adaptor) on the opposite side panel to the recessed handle.

The enclosure will be fitted with four Ergonomic designed feet on the base panel to allow easy movement.

The Loudspeaker shall have a maximum long term pressure level of 127dB, a total peak power handling capacity of 500W with a nominal Horizontal dispersion of 40 deg and a Vertical of 80 deg and have a measured on axis frequency response of 55Hz to 22KHz (-3dB).

The Enclosure dimensions shall be: 368 mm /14.48" x 606 mm /23.86" x 368 mm /14.48"

The Enclosure shall not exceed a weight of 23 kg /50.7lbs.

The Loudspeaker shall be the KV2 Audio ESM12.

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

Dimensional Drawings

