

ESR106 Technical Data Sheet

Product code: KVV 987 511

Introduction

The ESR106 is an active driven 3 way system employing a unique column array of multiple 6" woofers for unparalleled high quality vocal and music reproduction in challenging acoustical spaces and ambient environments. Utilising 8 x 6" woofers, 2 x 6" mid bass woofers and a single 1" high frequency driver mounted on a wide dispersion horn, the ESR106 is constructed to represent one large point source, with each part of the system positioned so that it is proportional in size to the wavelength it produces, thus the radiated power of each band remains consistent and balanced throughout the system's overall frequency range. The ESR106 has a controlled coverage at low and mid frequencies to reduce indoor reflections. The ESR106 is controlled and driven by a dedicated ESR2600D amplifier, using KV2 Audio proprietary SLA technology.

Features

- Full range 3 way system incorporating state of the art multiple transducers.
- Multi point fixings for external brackets and flyware.
- True musical solution for speech, vocals and music playback in difficult acoustical environments.

Application

- Fixed Installations
- Theatres & Auditoriums
- Concert Halls
- Houses of Worship
- **ALWAYS used in a vertical orientation**

System Acoustic Performance	
Max SPL Long-term	131dB
Max SPL Peak	137dB
-3dB Response	60Hz to 20kHz
-10dB Response	52Hz to 28kHz
Crossover Point	450Hz; 2.4kHz

High Frequency Section	
Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 80°
Power Handling	100W from ESR2600D Amplifier
Rotatable Horn	NO
Throat Exit Diameter / Diaphragm Size	1" / 1,75"
Diaphragm Material	Titanium
Magnet Type	Neodymium

Mid Range Section	
Acoustic Design	Sealed enclosure
Woofer Size / Voice Coil Diameter	2x 6" / 1,75"
Power Handling	200W from ESR2600D Amplifier
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium

Low Frequency Section	
Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	8x 6" / 1,75"
Power Handling	1000W from ESR2600D Amplifier
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose

Speaker Input	
Speaker Input	1x AMPHENOL 6

Cabinet	
Cabinet Material	Baltic birch
Handles	4
Color	"Orange peeled" Matt Black or any RAL

Physical Dimensions	
Height	2048 mm (80.629")
Width	250 mm (9.842")
Depth	268 mm (10.551")
Weight	42,5 kg (93.7lbs)



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Architectural Specifications

The three-way loudspeaker system shall incorporate eight 6-inch low frequency (LF) transducers, two 6-inch mid-range (MR) transducers and a 1-inch exit compression driver high frequency (HF) transducer. The LF drivers shall be mounted above and below the mid-high horn tuned for optimum mid-bass response and dispersion. The HF transducer shall be loaded on an integrated, constant directivity horn assembly. The loudspeaker enclosure shall have a rectangular shape and shall incorporate two handles on each vertical side.

The Enclosure incorporates sixteen M10 suspension points, three M10 suspension points on each vertical side, four M10 suspension points on the top and bottom and two on the rear panel side. The speaker cabinet shall be finished with an ultra wear resistant black polymer coating and fitted with a weather resistant perforated steel grill.

The system shall receive power from a separate ESR2600D Amplifier.

ESR2600D Stereo (two channel) Amplifier/Controller Module consists of separate power amplifiers for high, midrange and mid bass transducers as well as signal processing including electronic band pass crossover filters, phase alignment, time correction, equalization and speaker protection. The speaker system shall connect to the Amplifier/Controller Module via proprietary cables terminated in Amphenol AP-6 connectors.

The three-way loudspeaker system shall be the KV2 Audio ESR106.

Dimensional Drawings

