

EX28 Technical Data Sheet

Product code: KVV 987 462 - 250V, KVV 987 461 - 230V, KVV 987 460 - 115V

Introduction

The EX28 is a 2.5-way full-range active loudspeaker system that builds on the success of the EX26 whilst adding further low frequency extension. Its compact profile makes it ideal for a multitude of FOH and infill applications in Theatres, Leisure venues, Houses of Worship and Concert Halls, where the ultimate quality from a discreet loudspeaker solution is required. Two individually designed 8" neodymium mid - bass woofers are utilised for extended low frequency performance, whilst one unit incorporates KV2 Audio SLA Transcoil technology for improved vocal performance, along with a neodymium compression driver mounted on a 100° by 80° horn.

Features

- Professional, Baltic birch construction with wear resistant polymer coating
- 126 dB sustained output, 132 dB peak with very high dynamic range and low noise floor
- 500 W of total power with complete on-board speaker management system
- 450 W high efficiency, current enhancing, switching low frequency amplifier
- Very high quality 50 W, low IM distortion, Class AB, high frequency amplifier with transformer balanced output
- Compact low profile cabinet design allows for use as a front fill or in under balcony applications with high pass filter to adjust equalization and phase response
- Wide dispersion 100° H x 80° V rotatable horn
- SLA Technology 1.75" (44 mm) Titanium diaphragm compression driver with complex geometry phase plug for higher output, exceptionally low distortion, extended frequency response and neodymium magnet structure
- Two 8" woofers feature neodymium magnetic motor structures that dramatically increase force and lower distortion with an additional AIC Trans coil operating on one of the woofers for improved dynamics and definition
- Revolutionary new Krampera filtering creates a 2.5-way system for exceptional vocal clarity
- Proprietary top and side handle design for simplified handling and carrying, each integrates one M10 suspension point
- Additional side and bottom M10 points for flexible brackets, rigging and installation
- "Top-hat" pole mount fitted at the base of the cabinet
- LED indicators for signal present and Power ON status



Application

Purposely designed as a stand-alone unit for extremely high quality vocal reproduction and output

- Theatres, Churches and houses of worship
- Conference and presentations
- Front of stage and balcony infill
- Full range portable PA when used with subwoofers for larger Multi-Media applications and small live music applications

System Acoustic Performance

Max SPL Long-term	126 dB
Max SPL Peak	132 dB
-3dB Response	62 Hz to 20 kHz
-10dB Response	52 Hz to 28 kHz
Crossover Point	2 kHz

High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	100° x 80°
Rotatable Horn	YES
Throat Exit Diameter / Diaphragm Size	1" / 1.75"
Diaphragm Material	Titanium
Magnet Type	Neodymium

High Frequency Amplifier Specification

Type	Class AB Push-Pull
Rated Continuous Power	50 W
Distortion	<0.05%
Operating Bandwidth	2.0 kHz to 28 kHz

Low Frequency Section

Acoustic Design	Front Loaded, Bass Reflex
Woofer Size / Voice Coil Diameter	8" / 2" (one feat. Trans coil)
Magnet Type	Neodymium
Diaphragm Material	Epoxy Reinforced Cellulose

Low Frequency Amplifier Specification

Type	High efficiency, Current-Enhancing, Switched-Rail Amplifier
Rated Continuous Power	450 W
Distortion	<0.05%
Operating Bandwidth	62 Hz to 2.0 kHz

Signal Input

Input Sensitivity	0.775 V RMS
Input Impedance	20 kΩ

Power

Power Connector	Neutrik PowerCon®
Operating Voltage Range	100 to 120 V @ 60 Hz 230 to 250 V @ 50 Hz
Recommended Amperage	6 A 115 V / 3 A 230 V

Cabinet

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

Physical Dimensions

Height	668 mm (26.29")
Width	260 mm (10.23")
Depth	320 mm (12.59")
Weight	23 kg (50.7 lb)

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Architectural Specifications

The Loudspeaker shall be a 2.5-way full-range Active driven design, using SLA Technology - (Super Live Audio). Amplifier power, electronic crossovers, phase alignment, equalisation and speaker protection are integrated into the EX28's amplifier module.

The Loudspeaker enclosure shall consist of two 8" Neodymium magnet structure Mid Bass woofers, (one unit incorporates bespoke KV2 Transcoil Technology) and one 1" Titanium Compression high frequency driver mounted to a low compression, constant directivity horn assembly. The very compact cabinet enclosure shall be made from re-enforced Baltic Birch Ply, with toughened impact and wear resistant paint finish. The Loudspeaker woofer components shall be protected by an acoustically full size transparent rigid metal grille.

The enclosure shall incorporate one ergonomically designed recessed handle on the top of the cabinet and one on the side of the enclosure. The top handle provides a single M10 hang point as well as four additional M6 bracket points and repeated M10 point on the bottom of the enclosure when utilising a EX28 Horizontal bracket (KVV987533). There are two side mounted M10 hang points, (one in the side handle) that can be used with the EX28 Vertical bracket (KVV987532) or eyebolts.

The EX28 Amplifier provides a 450W high efficiency -current enhancing switching design amplifier for low-mid and a 50 W low distortion Class AB Push-Pull amplifier for high frequency.

The EX28 Amplifier features a control a panel featuring AC power in, XLR connector audio input and output, level control potentiometer ± 6 dB, LED status light (power, limit/thermal signal input indicator) and a 90 Hz high pass filter switch.

The EX28 Amplifier shall have an input Impedance of 20 k Ω . The input sensitivity shall be 0.775 V RMS.

The EX28 Amplifier shall have a Neutrik PowerCon connector for mains supply, with an operating voltage range of 100 to 120 V @ 60 Hz or 230 to 250 V @ 50 Hz.

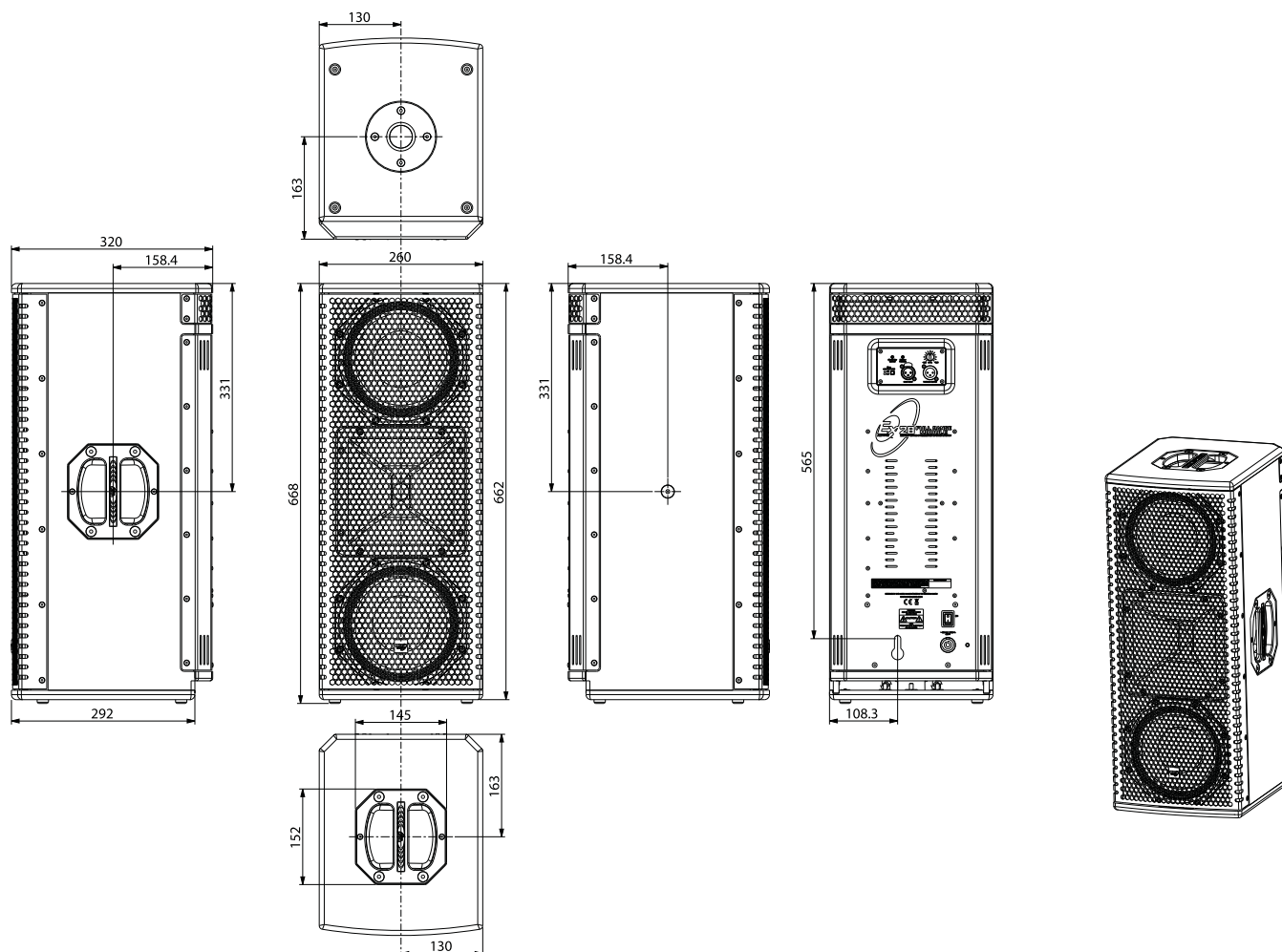
The Power Amplifier shall have recommended amperage of 6 A @115 V, 3 A @230 V.

Temperature controlled variable speed fan will assist internal convection cooling systems.

The System acoustic performance shall be -3 dB 62 Hz -20 kHz. The system maximal long term SPL shall be 126 dB.

The Speaker shall have dimensions of: Height 668 mm / 26.29", Width 260 mm / 10.23", Depth 320 mm / 12.59", The weight shall not exceed 23 kg (50.7 lb).

Dimensional Drawings



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