ESR3000MkII Technical Data Sheet

Introduction

The ESR3000MkII is three-way, active control and amplification system specially designed for the KV2 Audio ESR full range series loudspeaker systems. It houses all signal processing, amplification and subwoofer crossover function if required, utilising an external subwoofer amplifier. The ESR3000MkII powers the ESR215MkII. Each unit incorporates six amplifiers consisting of two 100-watt, Class AB, push pull, low intermodulation amplifier for high frequencies, two 200-watt, Class AB, push pull, low intermodulation design for mids and two a 1000-watt, high-efficiency, current- enhancing switch mode technology amplifier for bass. The ESR3000MkII stereo configuration powers two ESR cabinets accordingly.

Features

The amplifier compliment inside the ESR3000MkII Amplifier is as follows:

- High Frequency 2× 100-watt, Class AB, push pull, low intermodulation design
- Mid Frequency 2× 200-watt, Class AB, push pull, low intermodulation design
- Low Frequency 2× 1000-watt, high-efficiency, current-enhancing switch mode

Product code: KVV 987 277 (250V)

KVV 987 276 (230V) KVV 987 275 (115V)



Application

Custom designed as an aesthetically – easily integratable high performance unit for multi-tasking installation projects of recorded and live music performance

- Fixed installation
- Nightclubs
- Multi-use venues
- Large bars

Output Channels		
Number of Channels	2 (stereo)	
Total Output Power	2× 1300 W	
High Frequency Amplifier Specification		
Туре	Class AB - Push Pull - Low IM Design, Transformer balanced output	
Rated Continuous Power	100 W	
Distortion	<0.02%	
Operating Bandwidth	2.5 kHz to 40 kHz	
Mid Frequency Amplifier Specification		
Туре	Class AB - Push Pull - Low IM Design, Transformer balanced output	
Rated Continuous Power	200 W	
Distortion	<0.02%	
Operating Bandwidth	400 Hz to 2.5 kHz	
Low Frequency Amplifier Specification		
Туре	High efficiency, Current-Enhancing, Switched-Rail Amplifier	
Rated Continuous Power	1000 W	
Distortion	<0.02%	
Operating Bandwidth	20 Hz to 400 Hz	

Signal Input	
Input Sensitivity	2.2V RMS
Input Impedance	20 kΩ (balanced)
Speaker Output	
Speaker Output	2× AP6 female
Power	
Power Connector	2× Neutrik PowerCon®
Operating Voltage	115 V / 230 V / 250 V
Operating Voltage Range	100 to 120 V @ 60 Hz 205 to 240 V @ 50 Hz 225 to 260 V @ 50 Hz
Recommended Amperage	2×10 A 115 V 2× 5 A 230 V 2× 5 A 250 V
Physical Dimensions	
Height	177 mm (6.97"), 4RU
Width	481.4 mm (18.95")
Depth	455.3 mm (17.93")
Weight	39 kg (86 lb)

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Architectural Specifications

The Stereo Power Amplifier-Controller shall provide three individual application specific electronic channels of amplification for one ESR215, with internal loudspeaker protection, filter networks and equalization using SLA Technology (Super Live Audio). The output Topology shall be Multi-disciplined for each individual output channel, consisting of Class AB Push-Pull low Intermodulation Mosfet design, High Efficiency High Power bandwidth and Current-Enhancing switch mode.

The input sensitivity shall be 3.0 V RMS, the input Impedance shall be 20 KΩ. Power Outputs of the three channels shall be 100 W RMS High Frequency section, 200 W RMS Mid high frequency section, 1000 W RMS Low bass frequency section. The Power Amplifier- Controller shall have an operating bandwidth of 20 Hz to 40 kHz and an operating distortion factor of less than <0.02% across all output channels. The Power Amplifier-Controller shall have rear panel electronically balanced XLR input connectors, with XLR thru connectors as well as XLR Subwoofer outputs fed from a fixed 70 Hz crossover frequency. Output connectors shall be 6 pin Amphenol AP6. The amplifier will have a +/- 6 dB Subwoofer Gain control and a pushbutton switch to activate Full range or Crossover mode. The Power Amplifier-Controller shall have front panel indicators for Power, Limit/Thermal and Signal present. Two Thermal Breaker switches shall be used for switch on/off of each channel. The Power Amplifier-Controller shall have two Neutrik PowerCon connectors for mains supply, with an operating voltage range of 100 to 120 V @ 60 Hz, 205 to 240 V @ 50 Hz and 225 to 260 V @ 50 Hz. A soft start circuit will limit inrush power. The Power Amplifier-Controller shall have recommended Amperage of 20 A @115 V, 10 A @ 230 V, 10 A @ 250 V. 2× Temperature controlled variable speed fans will assist internal convection cooling systems. The Amplifier chassis and enclosure shall have dimensions of 177 mm / 7.0" x 481.4 mm / 18.9" x 455.3 mm / 17.9". The total weight will not exceed 39 kg /86 lb.

The Power Amplifier-Controller shall be the KV2 Audio ESR3000. The Power Amplifier-Controller shall be specifically for the ESR215.

Dimensional Drawings



