

# EPAK2500R Technical Data Sheet

## Introduction

Rack mount version of our popular EPAK2500 four-way, active control and amplification unit specifically designed for the ES Series modular loudspeaker system. Two shock mounted fans move air across the heatsinks which seal and protect the electronic components. This minimizes maintenance cycles and improves the components lifespan and reliability. Both the EPAK2500 and EPAK2500R utilize KV2's industry leading 20 MHz sampling for on board time alignment and phase correction of all components in the ES system.

## Features

- 4-way modular, rack mount 2500 W Control and Amplification System for use specifically with ES Series modules
- High Frequency, 100 W, Class AB, push-pull, low intermodulation amplifier with transformer balanced outputs
- Mid Frequency, 200 W, Class AB, push-pull, low intermodulation amplifier with transformer balanced outputs
- Mid Bass, 600 W, high efficiency, current enhancing switching amplifier
- Subwoofer, 1600 W, high efficiency, current enhancing switching amplifier
- Complete, on board speaker management system including equalization, time alignment, crossover filters, amplifier overdrive protection, system set-up and output level controls
- 20 MHz sampling, digital delay alignment system setting new standards for audio performance and dramatically increasing phase response precision
- AC soft start circuitry with ON/OFF AC breaker switch provides thorough power protection Setup provides selection and control of different subwoofer combinations
- External Subwoofer output with independent internal and external Level control +/- 6 dB
- High Frequency control +/- 3 dB for precise adjustment
- Comprehensive front-to-back cooling system features chassis sealed PCB's for improved reliability
- Line Driver ready – rear mounted Input impedance selector provides selection of optimal input impedance when used with a KV2's LD4 Line Driver
- Individual signal inserts for Mid/High, Internal Subwoofer, and External Subwoofer signal paths providing flexibility for insertion of signal processing or feeding from auxiliary sources as required
- Includes cable kit with all speaker cables for a single stack ES system

**Product code: KVV 987 181 (250V)**  
**KVV 987 061 (230V)**  
**KVV 987 062 (115V)**



## Application

**Specifically designed as the amplification and control elements for the ES loudspeaker systems in a full rack mount module**

- Portable PA
- Fixed installations
- Bars and Nightclubs
- Houses of Worship

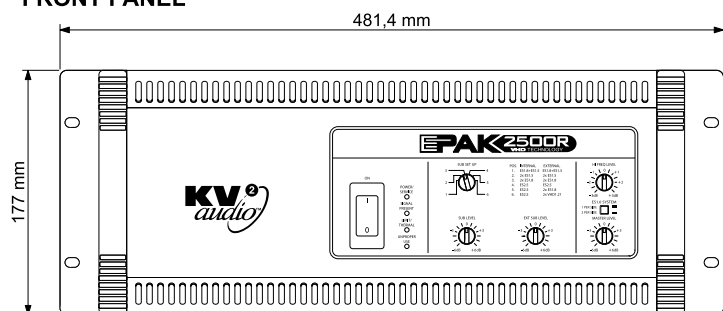
| High Frequency Amplifier Specification     |                                                                                        |
|--------------------------------------------|----------------------------------------------------------------------------------------|
| Type                                       | Class AB Push-Pull low inter-modulation Mosfet design with transformer balanced output |
| Rated Continuous Power                     | 100 W                                                                                  |
| Distortion                                 | <0.05%                                                                                 |
| Operating Bandwidth                        | 2.5 kHz to 28 kHz                                                                      |
| Mid Frequency Amplifier Specification      |                                                                                        |
| Type                                       | Class AB Push-Pull low inter-modulation Mosfet design with transformer balanced output |
| Rated Continuous Power                     | 200 W                                                                                  |
| Distortion                                 | <0.05%                                                                                 |
| Operating Bandwidth                        | 500 Hz to 2.5 kHz                                                                      |
| Mid Bass Frequency Amplifier Specification |                                                                                        |
| Type                                       | High efficiency, Current-Enhancing, Switched-Rail Amplifier                            |
| Rated Continuous Power                     | 600 W                                                                                  |
| Distortion                                 | <0.05%                                                                                 |
| Operating Bandwidth                        | 130 Hz to 500 Hz                                                                       |

| Low Frequency Amplifier Specification |                                                              |
|---------------------------------------|--------------------------------------------------------------|
| Type                                  | High efficiency, Current-Enhancing, Switched-Rail Amplifier  |
| Rated Continuous Power                | 1600 W                                                       |
| Distortion                            | <0.05%                                                       |
| Operating Bandwidth                   | 20 Hz to 130 Hz                                              |
| Signal Input                          |                                                              |
| Input Sensitivity                     | 1.0 V RMS                                                    |
| Input Impedance                       | 20 kΩ or 50 Ω „Line driver ready“ (balanced)                 |
| Speaker Output                        |                                                              |
| Speaker Output                        | AP6 (Mid-Hi), AP4 (Sub)                                      |
| Power                                 |                                                              |
| Power Connector                       | Neutrik PowerCon®                                            |
| Operating Voltage Range               | 100 to 120 V@60 Hz   205 to 240 V@50 Hz   225 to 260 V@50 Hz |
| Recommended Amperage                  | 20 A 115 V   10 A 230 V   10 A 250 V                         |
| Physical Dimensions                   |                                                              |
| Height                                | 177 mm (6.96")                                               |
| Width                                 | 481.4 mm (18.95")                                            |
| Depth                                 | 455.3 mm (17.9")                                             |
| Weight                                | 30 kg (66 lb)                                                |

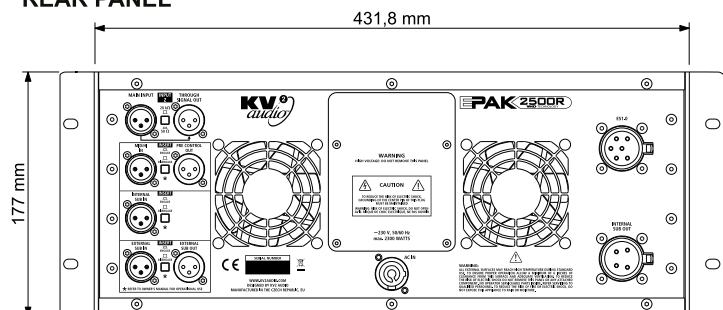
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## Dimensional Drawings

FRONT PANEL



REAR PANEL



SIDE PANEL

