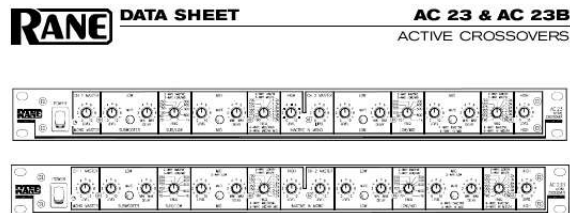




Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for RANE AC 23. You'll find the answers to all your questions on the RANE AC 23 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual RANE AC 23
User guide RANE AC 23
Operating instructions RANE AC 23
Instructions for use RANE AC 23
Instruction manual RANE AC 23



General Description

The Rane AC 23 Active Crossover can be configured as a stereo 2- or 3-way, or a mono 4- or 5-way. It employs 4th-order Linkwitz-Riley filter alignments to minimize phase difficulties in the critical crossover region. The AC 23 uses 1/4" TRS connectors with balanced/unbalanced inputs and unbalanced outputs. The AC 23B uses XLR connectors with active balanced inputs and outputs.

Simply put, a Linkwitz-Riley alignment is two cascaded 2nd-order Butterworth filters exhibiting identical phase characteristics on their low-pass and high-pass outputs. This characteristic guarantees in-phase outputs at all frequencies. In-phase outputs are mandatory for proper acoustic summing of common signals from adjacent drivers in the crossover region. An added benefit of this topology is steep 24 dB per

octave rolloff slopes. A slope of this magnitude guarantees drivers designed to produce a specific range of frequencies, and no more, will not be driven past their limits, thereby minimizing distortion and driver fatigue.

To further guarantee the transparent operation of the AC 23, adjustable Delay circuits appear on the Low & Mid Outputs of each Channel to compensate for any physical misalignment of the drivers. Time correction ensures the mechanical phase alignment of adjacent drivers will be acoustically correct, thus maintaining the integrity of the electrical phase alignment of the crossover's filters. CD horn equalization is now possible with an internal modification. Time Delay can also be internally transplanted to the Mid and High Outputs if desired.

See RaneNote 107 for more information regarding Linkwitz-Riley designs.

Features

- Stereo 2- or 3-Way, Mono 4- or 5-Way
- Linkwitz-Riley Alignment with 24 dB per Octave Slopes
- Adjustable Delays
- Infrasonic, Ultrasonic and RFI Filters
- Low & Mid Output Muting (3-Way)
- Input & Output Level Controls
- UL/CSA/CE and 100/120/230 VAC Remote Power Supplies

AC 23 Features

- 1/4" TRS Inputs & 1/4" TS Outputs
- Active Balanced/Unbalanced Inputs & Unbalanced Outputs

AC 23B Features

- XLR Inputs & Outputs
- Fully Active Balanced Inputs & Outputs

Data Sheet-1



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Manual abstract:

The AC 23B uses XLR connectors with active balanced Inputs and Outputs. Simply put, a Linkwitz-Riley alignment is two cascaded 2nd-order Butterworth filters exhibiting identical phase characteristics on their low-pass and high-pass outputs. This characteristic guarantees in-phase outputs at all frequencies. In-phase outputs are mandatory for proper acoustic summing of common signals from adjacent drivers in the crossover region. An added benefit of this topology is steep 24 dB per octave rolloff slopes. A slope of this magnitude guarantees drivers designed to produce a specific range of frequencies, and no more, will not be driven past their limits, thereby minimizing distortion and driver fatigue. To further guarantee the transparent operation of the AC 23, adjustable Delay circuits appear on the Low & Mid Outputs of each Channel to compensate for any physical misalignment of the drivers. Time correction ensures the mechanical phase alignment of adjacent drivers will be acoustically correct, thus maintaining the integrity of the electrical phase alignment of the crossover's filters. CD horn equalization is now possible with an internal modification. @@@@1, LVD 73/23/EEC File no.

E88261 File no. @@@@ RFI, infrasonic, and ultrasonic filters shall be built-in. @@The output level controls shall afford a level range of from Off to +6 dB (+12 dB AC 23B balanced) with muting capability on the low and mid frequency outputs. The crossover shall supply two independent channels. The unit shall be exempt from agency safety requirements and powered from a UL listed, CSA certified remote power supply (120 VAC) or CE approved (230 VAC) via a rear panel modular plug input.

The unit shall be constructed entirely from cold-rolled steel, and mount into a standard 1U EIA rack. The unit shall be a Rane Corporation AC 23 or AC 23B Active Crossover. Available Accessories · SC 1.7 Security Cover References 1. S.

H. Linkwitz, "Active Crossover Networks for Noncoincident Drivers," J. Audio Eng. Soc., vol. 24, pp. 2-8 (Jan/Feb 1976). 2. D. Bohn, "A Fourth-Order State-Variable Filter for Linkwitz-Riley Active Crossover Designs," presented at the 74th Convention of the Audio Engineering Society, New York, Oct.

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