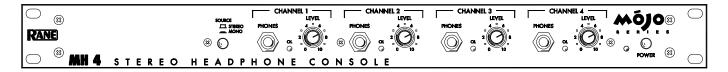


Mojo Cans Amp



General Description

Very simple. You and up to three other friends want to listen to the same mix under headphones. Just take the MH 4, plug in, turn on, adjust your individual volumes, and groove.

The MH 4 provides master stereo Inputs which can be used to drive the four stereo headphone amplifiers. A Mono switch is provided on the front panel to drive both channels of all four amplifiers from a common mono source.

The MH 4 is capable of delivering up to 200 milliwatts into headphones with rated impedances between 32-600 ohms. The precise amount of power depends on the exact impedance of the headphone in use and the number of

headphones connected to the unit. Under most conditions, the MH 4 produces sound pressure levels in excess of 120 dB. This level is above the threshold of pain and is suitable for most listeners. See the RaneNote, "Understanding Headphone Power Requirements" for further information (available from the Rane web site).

The Rane Mojo Series maintains sonic and construction quality not found (until now) in this price range. Designed for the working musician...simple operation...reduced features...without compromise in audio quality or dependability.

Features

- Four Stereo Amplifiers
- Balanced ¼" Stereo Master Inputs
- Extremely Low Noise
- Stereo/Mono Switchable
- Master Balanced/Unbalanced ¼" TRS Stereo Inputs

- Individual Level Controls and Overload Indicators
- Drives 32-600 ohm Headphones
- Drives Most Phones to 120 dB SPL
- UL/CSA Remote Power Supply (120 VAC)
- CE (Low Voltage & EMC) Remote Power Supply (230 VAC)



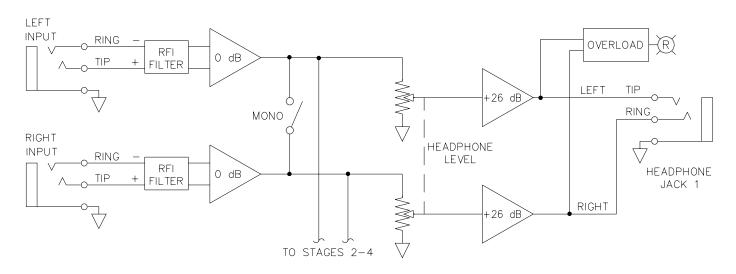


MH 4 Stereo Headphone Amplifier Features and Specifications

| Parameter | Specification | Limit | Units | Conditions/Comments |
|--|--|-------|-------|----------------------------------|
| Headphone Impedance Range | 32-600 | 10% | ohms | For best performance |
| Inputs: Type | Active Balanced/Unbalanced | | | |
| Connectors | 1/4" TRS | | | |
| Impedance | 20k | 1% | ohms | |
| Maximum Level | +20 | 1 | dBu | |
| Outputs: Type | (4) Stereo Amplifiers | | | |
| Connectors | ¹ / ₄ " Tip = Left, Ring = Right | | | |
| Impedance | 1 | max. | ohm | |
| Power | 200 | min. | mw | 32 to 150 ohms |
| Overall Gain Range | Off to +26 | ±0.5 | dB | |
| LED Overload | 3 | min. | dB | Before clipping |
| Frequency Response | 10-45 kHz | +0/-3 | dB | |
| Common Mode Rejection Ratio | 40 | min. | dB | 20 Hz-20 kHz |
| THD+Noise | 0.1 | max. | % | re 200 mW/150 ohms |
| Crosstalk, Left to Right | -50 | max. | dB | re 200 mW/150 ohms, 20 Hz-20 kHz |
| Signal-to-Noise Ratio | 94 | min. | dBr | re 200 mW/150 ohms, 20 kHz BW |
| Unit: Agency Listing | | | | |
| 120 VAC model | Class 2 Equipment | | | National Electrical Code |
| | UL | | | Exempt Class 2 equipment |
| | CSA | | | Exempt Class 2 equipment |
| 230 VAC model | CE-EMC EN55020, EN55013 | | | EMC Directive 89/336/EEC |
| | CE-Safety EN60065 | | | LV directive 73/23/EEC |
| Power Supply: Agency Listing | | | | |
| 120 VAC model | UL | | | File no. E88261 |
| | CSA | | | File no. LR58948 |
| 230 VAC model | CE-EMC | | | EMC Directive 89/336/EEC |
| | CE-Safety | | | LV directive 73/23/EEC |
| 100 VAC model | Built to JIS | | | Japan only |
| Requirement | 18 VAC with Center Tap | 10% | Vrms | Rane RS 1 Supplied |
| Maximum Current | 750 | | mA | RMS Current From Remote Supply |
| Unit: Construction | All Steel | | | |
| Size | 1.75"H x 19"W x 5.3"D (1U) | | | (4.4 cm x 48.3 cm x 13.5 cm) |
| Weight | 6 lb | | | (2.7 kg) |
| Shipping: Size | 4.5" x 20.3" x 13.75" | | | (11.4 cm x 52 cm x 35 cm) |
| Weight | 12 lb | | | (5.4 kg) |
| Note: $0 \text{ dBu} = 0.775 \text{ Vrms}$ | | | | |



MH 4 Block Diagram



Application Information

Two balanced Inputs provide a master stereo signal to four stereo headphone amplifiers, with individual stereo Level controls and Overload indicators. The Master Level control allows adjustment of the main stereo Input level for proper matching to any source. In addition, a Stereo/Mono switch converts the stereo Inputs to mono operation when required.

The MH 4 makes a valuable tool for any band wanting to practice anywhere, anytime, at any volume, without disturbing a soul. By connecting the MH 4 directly to the mixer outputs and using headphones instead of amps and speakers,

the entire band can perform at ear shattering levels, with no feedback, with amazingly cleaner, clearer sound. The MH 4 is a very cost-effective alternative to renting a practice studio for every rehearsal.

And finally, everyone wants to know how much power the MH 4 puts out. The output power depends on the impedance of the headphones; but, how much *power* the MH 4 puts out is the wrong question. How *loud* will the MH 4 make my headphones is the right question. See the RaneNote "Understanding Headphone Power Requirements" for the answer.





MH 4 Rear Panel



Architectural Specifications

The headphone console shall have two (2) master inputs driving four (4) stereo amplifiers wired to four (4) outputs on the front panel. Sufficient output power shall be provided to drive most stereo headphones to levels of 120 dB SPL.

Input level controls shall be provided on all inputs with a gain range from off to +26 dB. A stereo/mono switch shall be located on the front panel.

The master inputs shall be active balanced/unbalanced designs terminated with ½" TRS (tip-ring-sleeve) connectors.

The outputs shall be 1/4" TRS connectors wired tip-left, ringright, sleeve-common.

LEDs shall be provided to indicate overload conditions on each amplifier input.

The unit shall be powered from a U.L. Listed, C.S.A. Certified, (120 VAC) external power supply, or a (230 VAC) supply meeting CE requirements. This external supply shall be provided with each unit.

The unit shall be a Rane Corporation Model MH 4.