

User's Guide
for the
CRATE PRO AUDIO
SM5-HP
**Studio
Module**

Five Channel Headphone Amplifier





SM5-HP Five Channel Headphone Amplifier

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ATTENTION	CAUTION	VORSICHT
RISQUE D'ELECTROCUTION NE PAS OUVRIR	 RISK OF ELECTRIC SHOCK DO NOT OPEN	 ELEKTRISCHE SCHLAGGEFAHR NICHT OFFENEN
ATTENTION: POUR REDUIRE D'ELECTROCUTION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERNE N'EST REPARABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN QUALIFIE.	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	VORSICHT: ZUR MINIMIERUNG ELEKTRISCHER SCHLAGGEFAHR NICHT DEN DECKEL ABENHMEN. INTERNE TEILE KÖNNEN NICHT VOM BENUTZER GEWARTET WERDEN. DIE WARTUNG IS QUALIFIZIERTEM WARTUNGSPERSONAL ZU ÜBERLASSEN.
THIS EQUIPMENT HAS BEEN DESIGNED AND ENGINEERED TO PROVIDE SAFE AND RELIABLE OPERATION. IN ORDER TO PROLONG THE LIFE OF THE UNIT AND PREVENT ACCIDENTAL DAMAGES OR INJURY, PLEASE FOLLOW THESE PRECAUTIONARY GUIDELINES: CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT OPEN CHASSIS. WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. WARNING: AVOID PROLONGED EXPOSURE OF THE EQUIPMENT TO EXTREME HEAT. CAUTION: NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		
EXPLANATION OF GRAPHICAL SYMBOLS:  = "DANGEROUS VOLTAGE" "DANGER HAUTE TENSION" "GEFAHLICHE SPANNUNG"		
 = "IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL" "REFERREZ-VOUS AU MANUAL D'UTILISATION" "UNBEDINGT IN DER BETRIEBUNGSANLEITUNG NACHSCHLAGEN"		



SM5-HP Five Channel Headphone Amplifier

Introduction:

Thank you for selecting the Crate SM5-HP five channel headphones amplifier. This compact device has been designed with the audio professional in mind, providing accuracy, quality, ease of use and straight-forward design. Manufactured in the United States, using only the finest components, the SM5-HP takes up only one-third of a single rack space!

In order to achieve maximum performance from your SM5-HP and to better understand its applications, please read this user's guide prior to its use.

And "Thank You" from



A Description of the SM5-HP:

The SM5-HP allows you to distribute a single source – the headphones output of a mixer, the line outs of a recorder, the monitor output of a sound board, etc. – to up to five separate pairs of stereo headphones, each with its independent level control, without degradation of signal quality or interference between phones.





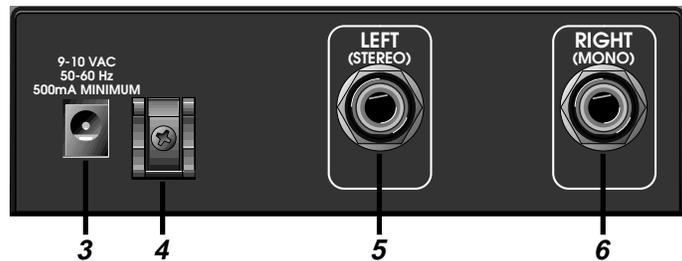
SM5-HP Five Channel Headphone Amplifier

The Front Panel:



- 1. Headphone Output Jack:** Each channel of the SM5-HP has a stereo (T/R/S) 1/4" jack for connecting to a pair of stereo headphones. The signal level at each jack is determined by the setting of that channel's output level control (#2), as well as the level of the input signal.
- 2. Output Level Control:** Each channel of the SM5-HP has its own output level control. Each channel operates independently from the others – an adjustment to the level on one channel will not alter the level of any of the other channels. *Please see "Muting Feature Note" on page 5.*

The Rear Panel:

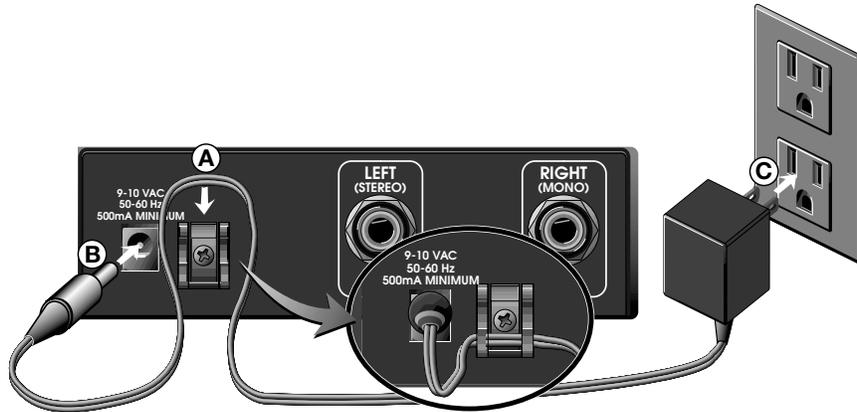


- 3. Power Supply Jack:** Plug the small metal barrel connector of the AC power adapter here.
- 4. Cord Cinch:** Use this clip to secure the cable of the power pack to the chassis of the SM5-HP.
- 5. Left (Stereo) Jack:** This stereo (T/R/S) 1/4" jack feeds a stereo signal (such as from a Headphones Output jack) or the left channel of a stereo signal (such as from a tape deck line out) into the SM5-HP (see page 6).
- 6. Right (Mono) Jack:** This mono (T/S) 1/4" jack feeds a mono signal (such as from a Monitor Output jack) or the right channel of a stereo signal (such as from a tape deck line out) into the SM5-HP (See page 6, 7).



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Connecting the AC Power Supply:



- A) Slide the power adapter cable into the cord cinch as shown above, leaving a few inches of cable between the cinch and the cable's small metal barrel connector.
- B) Plug the barrel connector into the power supply jack.
- C) After all other connections are made, plug the power pack into a suitable source of AC line voltage. (See the sticker on the power adapter for voltage requirements.)

NOTE: Since the SM5-HP is "always on" when the power pack is plugged in to a live outlet, it is advised that you unplug the power pack (or turn off the AC source) when not using the unit for extended time periods.

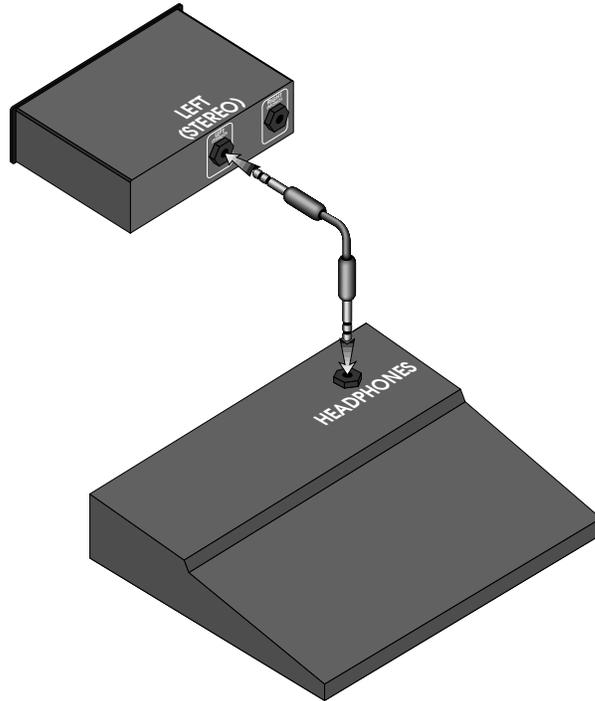
Muting Feature Note: The SM5-HP incorporates a muting circuit which can silence an output jack whenever its level control is at or very near the fully counter clockwise position. A soft "click" will be heard through the headphones when the muting circuit is engaged.



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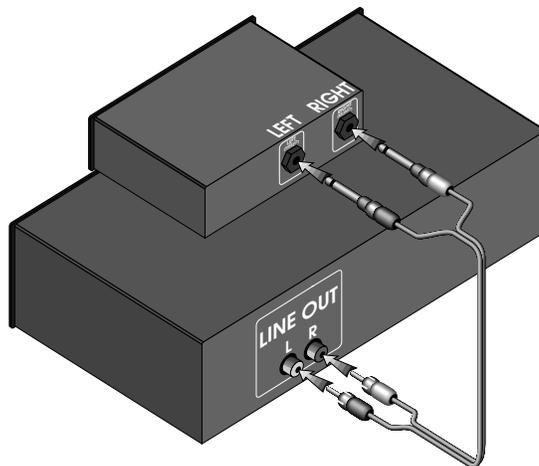
Applications: Connecting to a Stereo Headphone Jack

Connect the Headphones output jack of a mixing board (or other source) to the **Left/Stereo** jack of the SM5-HP using a shielded stereo (T/R/S) 1/4" signal cable.



Applications: Connecting to the Stereo Outputs of a Recorder

Connect the left and right Line Out jacks of a recorder (or other source) to the **Left** and **Right** jacks of the SM5-HP using shielded RCA cables and RCA-to-1/4" (mono) adapters.

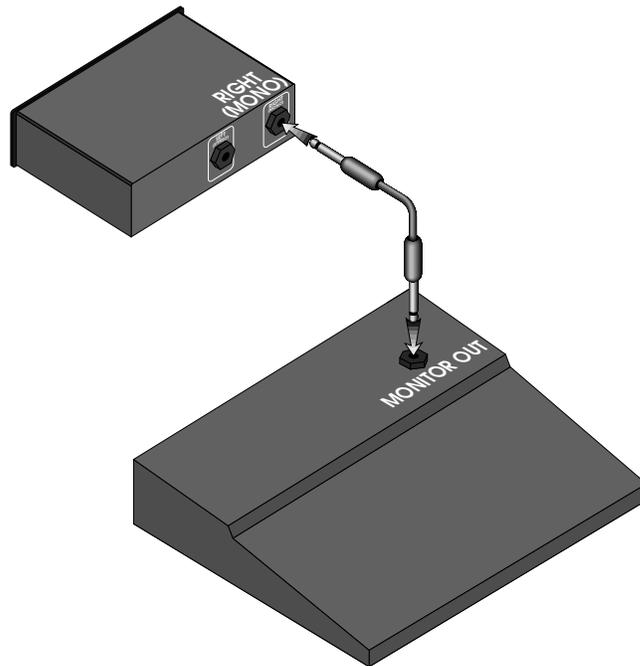




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Applications: Connecting to a Mono Monitor Jack:

Connect the Monitor output jack of a mixing board (or other source) to the **Right/Mono** jack of the SM5-HP using a shielded mono (T/S) 1/4" signal cable. The signal at the headphones will be mono, with the same signal on both sides of the phones.





SM5-HP Five Channel Headphone Amplifier

Technical Specifications:

Power Output, 1–5 channels driven

32 ohms	570mW
50 ohms	400mW
100 ohms	200mW
200 ohms	100mW
300 ohms	67mW
600 ohms	34mW

Maximum Gain 12dB

Frequency Response 8Hz – 50kHz

THD + Noise .09% @ 200 ohms (100mW)

Signal to Noise Ratio -90dB @ 200 ohms (100mW, 1kHz)

Power Supply Requirements 9–10VAC, 500mA

Size and Weight 1.6" H x 5.6" W x 5.5" D; 1.5 lbs (without power adapter)

Specifications subject to change without notice.

Studio Module



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