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User Manual

MINIAMP AMP800

Ultra-Compact 4-Channel Stereo Headphone Amplifier

behringer

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EN Important Safety Instructions

Terminals marked with this symbol carry electrical current of sufficient magnitude to constitute risk of electric shock. Use only high-quality professional speaker cables with ¼" TS or twist-locking plugs pre-installed. All other installation or modification should be performed only by qualified personnel.

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

Caution
To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user serviceable parts inside. Refer servicing to qualified personnel.

Caution
To reduce the risk of fire or electric shock, do not expose this appliance to rain and moisture. The apparatus shall not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the apparatus.

Caution
These service instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operation instructions. Repairs have to be performed by qualified service personnel.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Use only attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

LEGAL DISCLAIMER

TECHNICAL SPECIFICATIONS AND APPEARANCES ARE SUBJECT TO CHANGE WITHOUT NOTICE AND ACCURACY IS NOT GUARANTEED. BEHRINGER, KLARK TEKNIK, MIDAS, BUGERA, AND TURBOSOUND ARE PART OF THE MUSIC GROUP (MUSIC-GROUP.COM). ALL TRADEMARKS ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS. MUSIC GROUP ACCEPTS NO LIABILITY FOR ANY LOSS WHICH MAY BE SUFFERED BY ANY PERSON WHO RELIES EITHER WHOLLY OR IN PART UPON ANY DESCRIPTION, PHOTOGRAPH OR STATEMENT CONTAINED HEREIN. COLORS AND SPECIFICATIONS MAY VARY FROM ACTUAL PRODUCT. MUSIC GROUP PRODUCTS ARE SOLD THROUGH AUTHORIZED FULLFILLERS AND RESELLERS ONLY. FULLFILLERS AND RESELLERS ARE NOT AGENTS OF MUSIC GROUP AND HAVE ABSOLUTELY NO AUTHORITY TO BIND MUSIC GROUP BY ANY EXPRESS OR IMPLIED UNDERTAKING OR REPRESENTATION. THIS MANUAL IS COPYRIGHTED. NO PART OF THIS MANUAL MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING AND RECORDING OF ANY KIND, FOR ANY PURPOSE, WITHOUT THE EXPRESS WRITTEN PERMISSION OF MUSIC GROUP IP LTD.

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LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding MUSIC Group's Limited Warranty, please see complete details online at www.music-group.com/warranty.

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1. Introduction

Thank you very much for expressing your confidence in our products by purchasing one of our headphone amplifier systems. This 4-channel stereo headphone amplifier is designed for use with all types of headphones and therefore provides maximum flexibility. Its high-power stereo amplifiers guarantee the highest sonic quality. The ultra low-noise 4580 operational amplifiers ensure outstanding audio performance.

- **Please read the manual carefully and keep it around for future reference.**

1.1 Before you begin

1.1.1 Shipment

Your AMP800 was carefully packed at the factory, and the packaging was designed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage that may have occurred during transit.

- **If the unit is damaged, please do NOT return it to BEHRINGER. Instead, notify your dealer and the shipping company immediately. Otherwise, claims for damage or replacement may not be honored.**
- **Always use the original packing carton to prevent damage during storage or transport.**
- **Make sure that no children are left unsupervised with the AMP800 or its packaging.**
- **Please ensure proper disposal of all packing materials.**

1.1.2 Initial operation

Do not put the AMP800 on any equipment that generates intense heat, for example an amplifier. Ensure that the ventilation openings that are located on the top panel of the AMP800 are not covered or blocked.

- **To power the AMP800, use only the power supply unit that is delivered with your equipment.**

1.1.3 Online registration

Please register your new BEHRINGER equipment right after your purchase by visiting http://behringer.com and read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, it is our intention to have it repaired as quickly as possible. To arrange for warranty service, please contact the BEHRINGER retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website (http://behringer.com).

Registering your purchase and equipment with us helps us process your repair claims more quickly and efficiently.

Thank you for your cooperation!

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2. Control Elements

The AMP800 is a headphone amplifier that includes 4 Headphone Channels, so you can share the

AMP800 with other musicians. In addition, each musician can choose between 2 audio channels: Input Channel A and Input Channel B.

◊ **Ensure that only qualified personnel set up and operate the AMP800.**

2.1 Front panel

This section describes how to use the front panel of the AMP800, illustrated as follows:

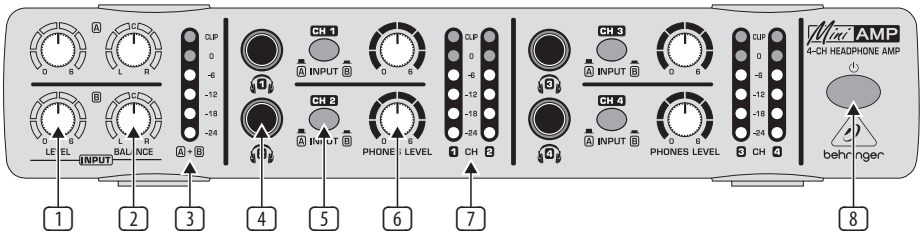

Fig. 2.1: AMP800 front panel

In the previous illustration, each control element is associated with a callout, for example 1. In this section, use these callouts to identify details about each control element. For each Input Channel (A and B), the front panel includes control elements 1 and 2. To manage the signal in each of these Input Channels, use these control elements:

1 **LEVEL control**: To adjust the input level of a signal, turn this control toward **0** (minimum level) or, alternatively **6** (maximum level).

2 **BALANCE control**: To adjust the stereo image of a signal, turn this control toward **L** (left) or, alternatively **R** (right).

3 **A + B meter**: To monitor the combined level of both signals (A and B), use this meter. An LED glows next to the value that identifies the combined level (**-24** dB to **0** dB). If the signal is too strong, the **CLIP** LED glows. Most of the time, the optimal level is 0 dB (a full signal).

For each Headphone Channel (1, 2, 3, and 4), the front panel includes control elements 4 through 7. To manage each Headphone Channel, use these control elements:

4 **(headphone) connector**: To connect a headphone, use this stereo, ¼" TRS connector. For details about TRS plugs, see **4. Audio Connections**.

5 **INPUT button**: To select an Input Channel, push this button. When you listen to:

- Input Channel A, this button is not pushed in and not lit
- Input Channel B, this button is pushed in and lit

6 **PHONES LEVEL control**: To adjust the level of a headphone signal, turn this control toward **0** (minimum volume) or, alternatively **6** (maximum volume).

7 **CH meter**: To monitor the level of a headphone signal, use this meter. An LED glows next to the value that identifies the headphone volume (**-24** dB to **0** dB). If the signal is too strong, the **CLIP** LED glows. Most of the time, the optimal volume is 0 dB (a full signal).

8 **(power) button**: To turn the AMP800 on and off, push this button. When you turn the AMP800:

- on, this button is pushed in and lit
- off, this button is not pushed in and not lit

◊ **When you finish using the AMP800, unplug the power supply unit from the power source. As long as the power supply unit is connected to a power source, the power supply unit consumes energy.**

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2.2 Rear panel

This section describes how to use the rear panel to set up the AMP800.

The following illustrates the rear panel of the AMP800:

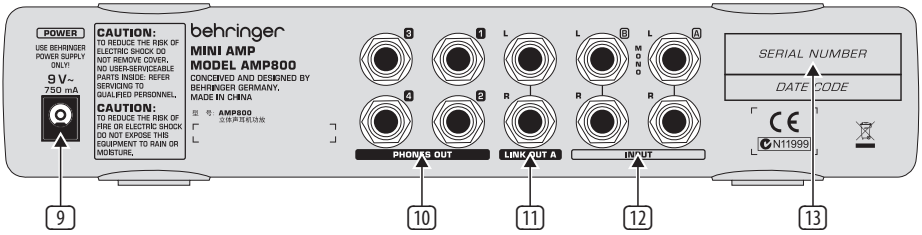

Fig. 2.2: AMP800 rear panel

In the previous illustration, each control element is associated with a callout, for example [1]. In this section, use these callouts to identify details about each control element:

[9] **POWER connector**: To power the AMP800, connect the power supply unit to this connector. This power supply unit is delivered with the AMP800.

[10] **PHONES OUT connectors**: For each Headphone Channel (1, 2, 3, and 4), the rear panel includes an additional headphone connector, which is a stereo, ¼" TRS connector.

[11] **LINK OUT A connectors**: If you need more than the 4 Headphone Channels that a single AMP800 provides, connect these balanced, ¼" TRS connectors (**L**eft and **R**ight) to the inputs of another AMP800. The LINK OUT A connectors send only the signal of Input Channel A, without any LEVEL or BALANCE settings.

[12] **INPUT connectors**: For each Input Channel (A and B), the rear panel includes 2 balanced, ¼" TRS connectors (**L**eft and **R**ight). Connect them to the outputs of a mixer, a CD player, or a soundcard. For mono signals, use only the **L** connector.

◆ **If the output is balanced and you insert unbalanced, ¼" TS plugs in the INPUT connectors, the signal level will decrease 6 dB. To raise the signal level, use the relevant LEVEL control ([1]).**

[13] **SERIAL NUMBER**: To register the AMP800, use this unique serial number.

For details about TS and TRS plugs, see **4. Audio Connections**.

3. Setup Example

The following example illustrates the role of the AMP800 in your audio setups:

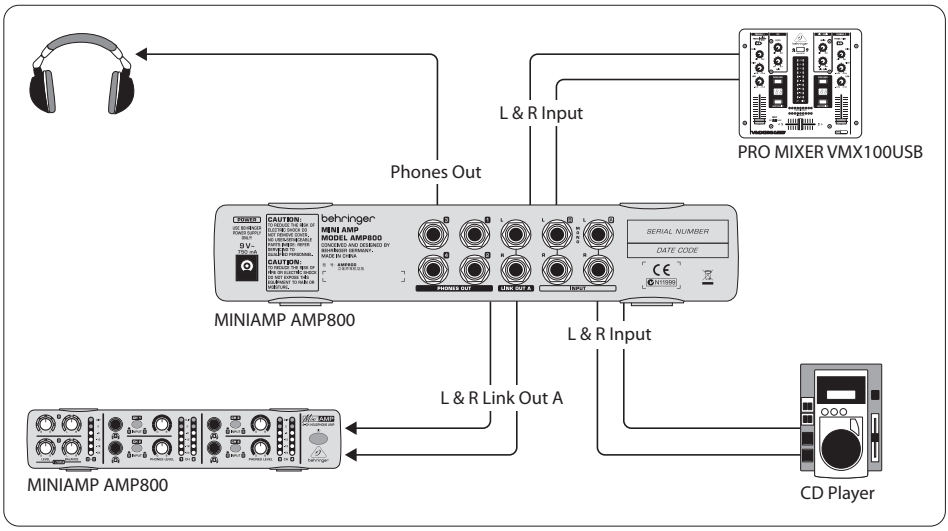

Fig. 3.1: Setup examplen

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About setting up with other MINI products

The AMP800 belongs to the MINI suite of BEHRINGER products. You can set up the AMP800 with these products. For details, see **6. Other Mini Products**.

4. Audio Connections

The following provides illustrations of patch cords that include unbalanced, ¼" TS plugs and balanced, ¼" TRS plugs:

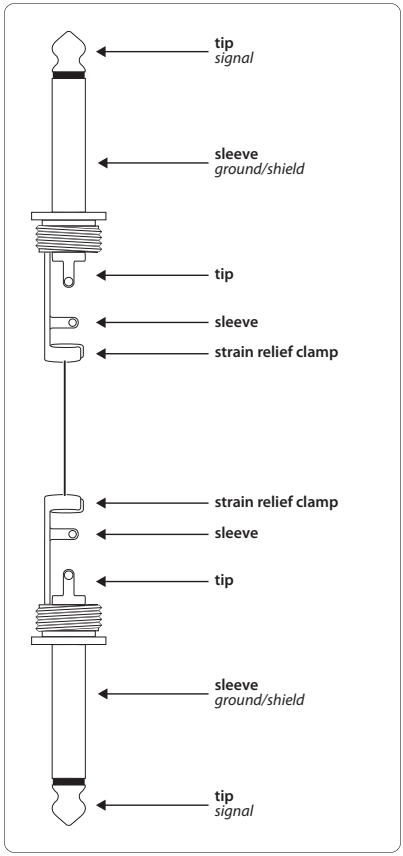

Fig. 4.1: Patch cord with unbalanced, ¼" TS plugs

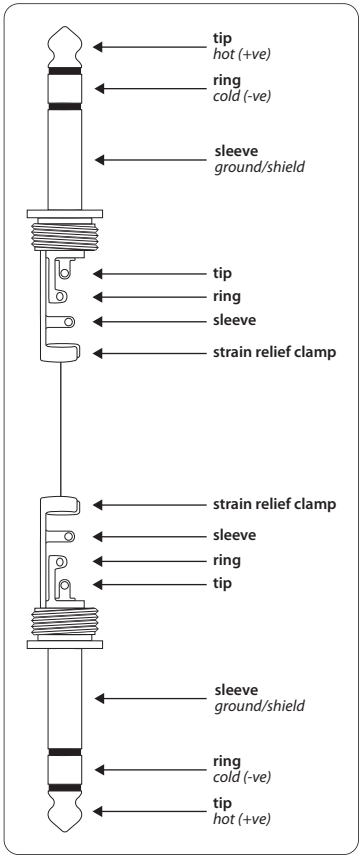

Fig. 4.2: Patch cord with balanced, ¼" TRS plugs

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5. Specifications

INPUT

Type	¼" TRS connector, balanced
Impedance	approx. 20 kΩ, balanced approx. 10 kΩ, unbalanced
CMRR	40 dB typ. @ 1 kHz

PHONES OUT

Type	¼" TRS connector, stereo
Impedance	min. 100 Ω
Max. output level	+13 dBu @ 100 Ω load

LINK OUT A

Type	¼" TRS connector, balanced

SYSTEM SPECIFICATIONS

Frequency response	10 Hz to 120 kHz, -3 dB
Dynamic range	108 dB, 10 Hz to 22 kHz (100 Ω load)
Distortion	0.007 % typ. (100 Ω load)
Crosstalk	< 80 dBu @ 1 kHz
Signal-to-noise ratio	10 Hz to 22 kHz < 95 dB @ 0 dBu, a-weighted

AMPLIFIER

Max. output level	+21 dBm / 124 mW (100 Ω load)
Min. output impedance	47 Ω

POWER SUPPLY

Mains connection	external power supply, 9 V~ / 750 mA
Mains Voltage	
USA/Canada	120 V~, 60 Hz
U.K./Australia	240 V~, 50 Hz
China	220 V~, 50 Hz
Europe	230 V~, 50 Hz
Japan	100 V~, 50 - 60 Hz
Power consumption	11 W

DIMENSIONS/WEIGHT

Dimensions (H x W x D)	approx. 48 x 242.6 x 120 mm (1.89 x 9.55 x 4.72")
Weight	approx. 0.77 kg (1.7 lbs)

BEHRINGER constantly strives to maintain the highest quality standards. Modifications may be made, if necessary, without prior notice. The specifications and appearance of the equipment may therefore differ from those listed or illustrated.

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6. Other Mini Products

The MINIAMP belongs to the MINI suite of BEHRINGER products, which can operate together and are introduced below:

MINIFEX FEX800

Ultra-compact 9.5" stereo multi-effects processor for studio and stage applications

- 16 awesome FX presets in 24-bit/48 kHz resolution including reverb, delay, chorus, flanger, phaser, rotary speaker, pitch shifter and multi-effects
- Intuitive FX Preset control with LED's indicating the selected program

MINIMIC MIC800

Ultra-compact 9.5" microphone modeling preamp for studio and stage applications

- High-end preamplifier for all microphone, instrument and line-level sources. Perfectly complements studio-grade condenser mics
- Ultra-flexible Preamp Modeling allows you to quickly optimize your recordings

MINIMON MON800

Ultra-compact 9.5" monitor matrix mixer for studio and stage applications

- Dedicated input section with 4 selectable and mixable stereo inputs
- Accurate 6-digit LED main stereo output meters for precise level indication

MINIFBQ FBQ800

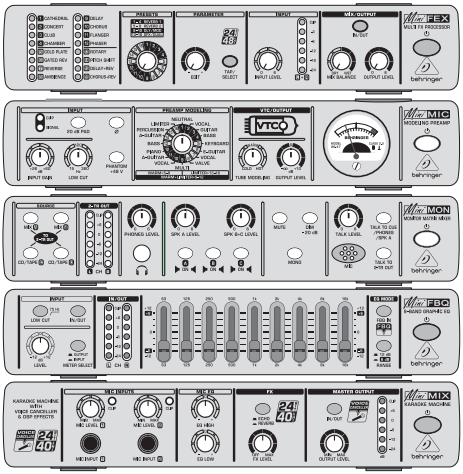
Ultra-compact 9.5" graphic equalizer for studio and stage applications

- Revolutionary FBQ Feedback Detection System instantly reveals critical frequencies and can also be used as Audio Analyzer
- Additional Low Cut filter removes unwanted frequencies, e. g. floor rumble

MINIMIX MIX800

Ultra-compact 9.5" karaoke machine for studio and stage applications

- Revolutionary Voice Canceller—effectively eliminates vocals from any stereo source while retaining most music elements
- Integrated digital echo/reverb processor in 24- bit/40 kHz resolution for ultimate vocal enhancement



MINI products stack on top of each other

We Hear You

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