

HMTM SERIES HEADPHONE AMPLIFIERS

OWNER'S MANUAL



Important Safety Instructions

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 a dry cloth.
7. Do not block any ventilation openings. Minimum distance (5 cm) around the apparatus for sufficient ventilation. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc. 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. No naked flame sources, such as lighted candles, should be placed on the apparatus.
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. Only use attachments/accessories specified by the manufacturer.
12. Use only with a 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. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or beer glasses, shall be placed on the apparatus.
16. Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
17. **Warning:** This apparatus has been designed with Class I construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding prong).
18. This apparatus has been equipped with a rocker-style AC mains power switch. This switch is located on the rear panel and should remain readily accessible to the user.



CAUTION
 RISK OF ELECTRIC SHOCK! DO NOT OPEN!

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of significant magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintaining (servicing) instructions in the literature accompanying the appliance.

WARNING — To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

19. The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device shall remain readily operable.
20. Max. specified ambient temperature 45°C. Altitude up to 2000m.
21. **NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and the receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this device not expressly approved by LOUD Audio, LLC could void the user's authority to operate the equipment under FCC rules.

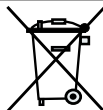
22. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

ATTENTION — *Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le règlement sur le brouillage radioélectrique édicté par les ministères des communications du Canada.*

23. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart.

According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

Duration, per day in hours	Sound Level dBA, Slow Response	Typical Example
8	90	Duo in small club
6	92	
4	95	Subway Train
3	97	
2	100	Very loud classical music
1.5	102	
1	105	Ty screaming at Troy about deadlines
0.5	110	
0.25 or less	115	Loudest parts at a rock concert



Correct disposal of this product: This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE directive (2012/19/EU) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

Contents

Important Safety Instructions	2
Contents	3
Features	3
Introduction	3
How To Use This Manual	3
Getting Started	4
Things To Remember	4
Hookup Diagrams	5

HM Series Headphone Amps: Rear Panel Features	7
1. Power Connector and Fuse	7
2. Voltage Selector Switch	7
3. 1/4" Headphone Output Jacks	7
4. Main Input Jacks	8
5. Main Output Jacks	8
6. Aux Input Jacks [HM-800]	8

HM Series Headphone Amps: Front Panel Features	9
7. Power Switch and LED	9
8. Genre Knob	9
9. Meters	9
10. Main Level Knobs	9
11. 1/4" Headphone Output Jacks	9
12. 1/4" Aux Input Jacks	9
13. Phones Output Knobs	9
14. St. / 2-Ch Switches [HM-400] Stereo / Mono Switches [HM-800]	10
15. In 1/2 Switches [HM-800]	10
16. Balance Knobs [HM-400]	10
17. L/R Mute Switches [HM-400]	10
18. Bass Knobs [HM-400]	10
19. Treble Knobs [HM-400]	10

Appendix A: Service Information	11
Appendix B: Technical Information	12
HM Series Headphone Amps Dimensions	13
HM Series Headphone Amps Block Diagrams	14
Limited Warranty	16

Features

HM-400 Headphone Amplifier

- L/R Main stereo inputs plus L/R stereo outputs
- 7-segment LED metering per channel plus main
- Three headphone outputs per channel
- Aux input on each channel with balance control to mix main and aux signal
- Mute and stereo/2-ch mode switches per channel
- 12 total headphone outputs
- Built-Like-A-Tank™ construction

HM-800 Headphone Amplifier

- Two discrete main stereo inputs with separate level control plus stereo outputs
- 7-segment LED metering per channel plus main
- Two headphone outputs per channel
- Eight independent aux inputs for up to eight individual stereo mixes
- Input Select and Stereo/Mono switches per channel
- 16 total headphone outputs
- Built-Like-A-Tank™ construction

Introduction

HM-400 Headphone Amplifier

The 19" rackmount HM-400 4-Channel Headphone Amplifier offers an incredible amount of versatility and excellent sound quality in a single rack space.

Perfect for professional applications including studios, Houses of Worship, practice spaces, and more. The HM-400 features a main input with level control plus stereo outs, aux inputs and EQ per channel with 12 total headphone outputs.

HM-800 Headphone Amplifier

The 19" rackmount HM-800 8-Channel Headphone Amplifier offers up to 10 available mixes with a total of 16 headphone outputs.

Perfect for professional applications including studios, Houses of Worship, practice spaces, and more. Featuring two discrete main inputs with level control plus stereo outs, aux inputs per channel.

How to Use This Manual

After this introduction, a getting started guide will help you set things up fast. The hookup diagrams show typical setups.



This icon marks information that is critically important or unique to the HM Series Headphone Amplifier. For your own good, read and remember them.



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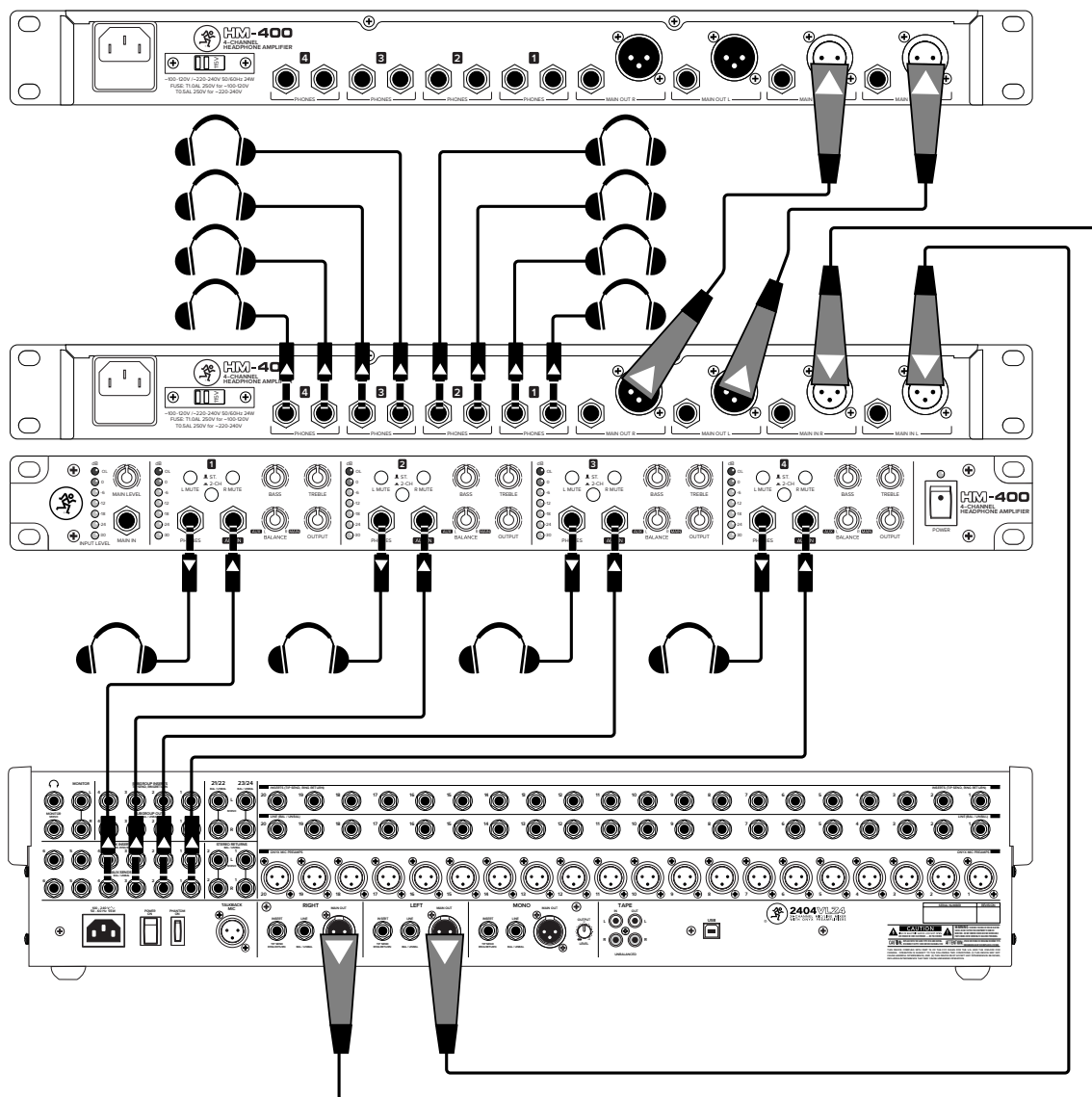
Getting Started

The following steps will help you set up the HM Series Headphone Amplifier quickly.

1. Make sure the power switch is off on all connected gear.
2. Turn down all level knobs on all connected gear.
3. Set all channel EQ and Balance knobs at their center detent [HM-400].
4. Disengage all switches.
5. Connect cables from the output jacks of a mixer, computer or other audio device to the input jacks of the HM Series Headphone Amplifier.
6. Connect stereo headphones to the headphone output jack(s) of the HM Series Headphone Amplifier.
7. Push the line cord securely into the IEC connector and plug the other end into a grounded AC outlet. The headphone amp may accept the appropriate voltage as indicated near the connector.
8. Turn the mixer, computer or audio device's power switch on.
9. Turn the HM-400 / HM-800 power switch on.
10. Be sure that the volume of the input is the same as it would be during normal use.
11. Slowly raise the phones knob(s) to a comfortable listening level.
12. Adjust the EQ knobs to taste [HM-400].

Things to Remember

- Never listen to loud music for prolonged periods. Please see the Safety Instructions on page 2 for information on hearing protection.
- Save the shipping boxes and packing materials! You may need them someday. Besides, your pet hamsters will love playing in them and jumping out at you unexpectedly. Remember to pretend like you are surprised!
- Save your sales receipt in a safe place.



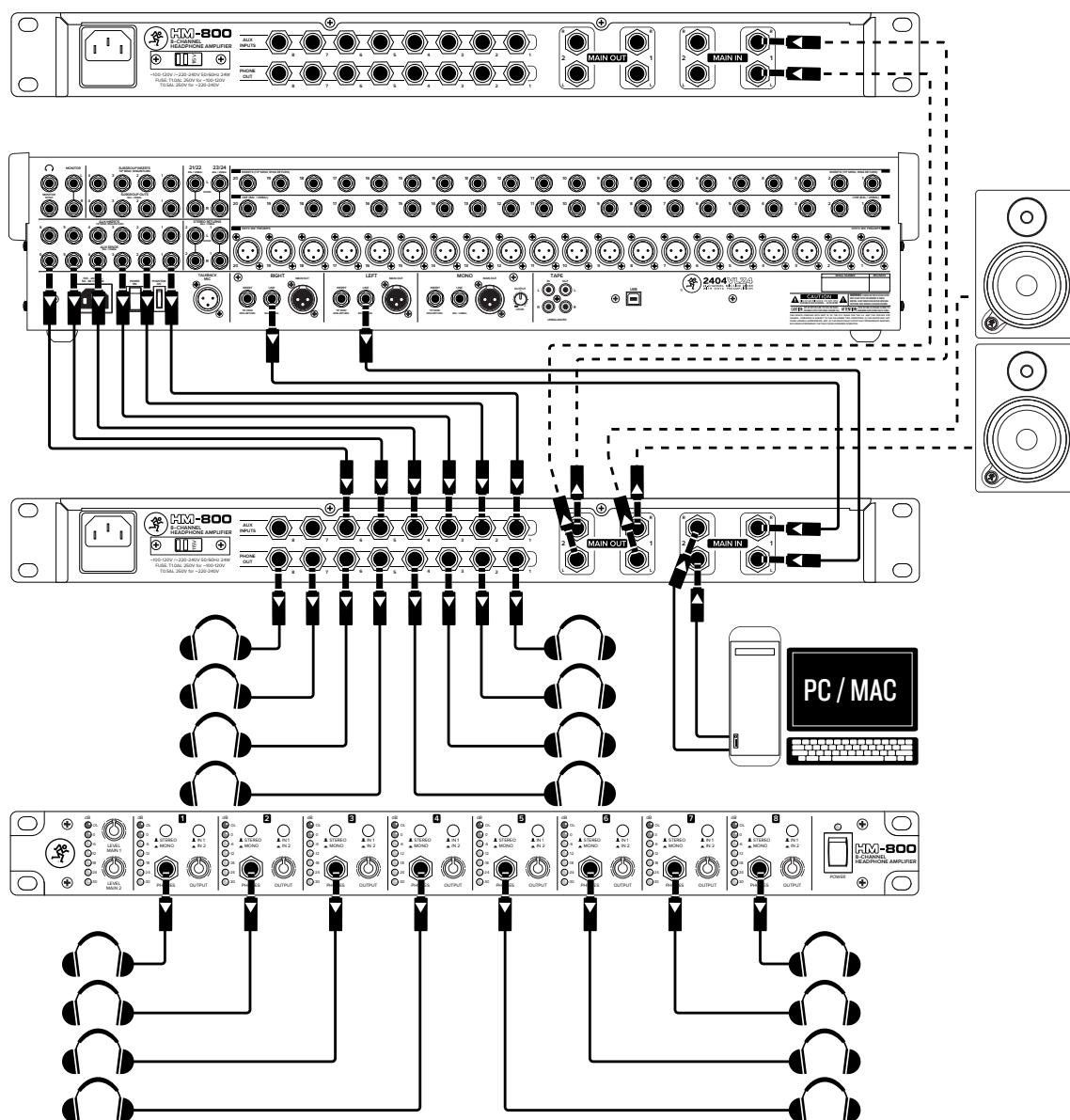
Let's take a look at a typical hookup diagram for the HM-400, starting with the front panel connections. There are four channels, so connect a pair of stereo headphones to each headphone out jack. Next, connect cables between the mixer's aux out jacks to each HM-400's 1/4" aux input jacks. There is also a 1/4" main input jack on the far left of the HM-400. Feel free to feed a computer or other audio source into this input.

Now let's look at the rear panel from left to right. There are eight 1/4" headphone jacks, two for each channel. Connect as many stereo headphones as necessary to these jacks. Next up are the main output L/R jacks. These outputs may be connected to the main inputs of an additional HM-400 or to speakers in a live room. On the far right are the main input jacks. These are typically connected to the main outputs of a mixer, although a computer or other audio source also works. For convenience, both the main inputs and outputs of the HM-400 contain XLR and 1/4" jacks. You can choose between the XLR or 1/4" inputs, but not both simultaneously. We appreciate your ability to multi-task, but it's getting out of hand!

Once the connections are made and the music playing, set the input and output levels as desired, along with EQ settings, balance and/or main / aux level, stereo / 2-channel switch position, etc.

Typical HM-400 Setup

Hookup Diagrams Continued...



The front panel of the HM-800 has eight headphone output jacks, so connect a pair of stereo headphones to each channel that will be utilized. Like the front panel, the rear panel of the HM-800 also has eight headphone output jacks, one for each channel. Again, connect as many headphones as needed to each jack.

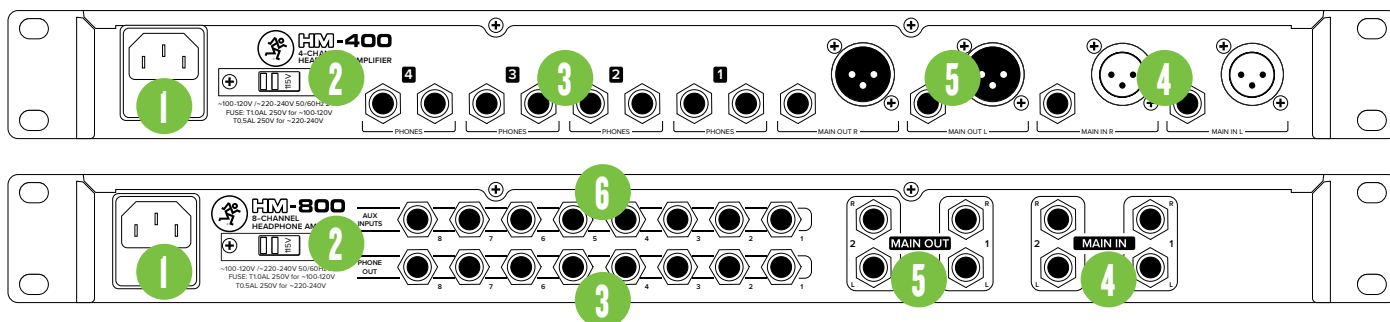
Let's look at the rest of the rear panel from left to right. Above each headphone output jack is an aux input jack. These are connected to each aux output jack of the mixer. To the right of the headphone out and aux in jacks are two pairs of 1/4" main output jacks and two pairs of 1/4" main input jacks.

Here we have L/R output 1 connected to a pair of studio monitors located in a live room, while L/R output 2 is connected to the main inputs of an additional HM-800. The main input jacks are typically connected to the main outputs of a mixer (as seen in this illustration), but with an additional pair of input jacks available, we're able to connect it to a computer or other audio source's output jacks.

Once the connections are made and the music playing, set the input and output levels as desired, along with your choice to hear source input 1 or 2 and listen in stereo or mono. Once an aux source is plugged in, though, it overrides BOTH main inputs and will be the only available source until the aux cable is removed.

Typical HM-800 Setup

HM Series Headphone Amplifiers: Rear Panel Features



1. Power Connector and Fuse

Just in case you lose the cord provided with the HM Series Headphone Amplifier, its power jack accepts a standard 3-prong IEC cord like those found on most professional recorders, musical instruments, and computers.



WARNING: Before you plug the AC power cord into the HM Series Headphone Amplifier, you must make sure that the voltage selector slide switch is set to the same voltage as the local AC mains supply.

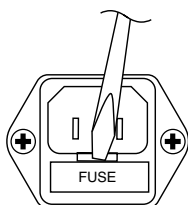


WARNING: Disconnecting the plug's ground pin can be dangerous. Don't do it.

The fuse is located behind the fuse cover, at the bottom of the IEC socket.

To remove and replace the fuse:

1. Disconnect the power cord from the IEC socket.
2. Remove the fuse drawer by prying it open with a small screwdriver. It will slide all the way out.



3. Remove the fuse and replace it with an equivalent-type fuse:

TI.0AL 250 V [~100–120V]
TO.5AL 250 V [~220–240V]

4. Replace the fuse drawer by pushing it all the way back into the IEC socket.

If two fuses blow in a row, then something is very wrong. Try a different outlet in a totally different location. If fuses continue to blow, see the “Repair” section on page II to find out what to do.

2. Voltage Selector Switch

Make sure the switch is in the correct position for your local AC mains voltage before connecting the AC power cord. Use a small flat screwdriver to slide the switch, if required.

The switch allows you to use the HM Series Headphone Amplifier in different countries and voltages, meet interesting people from other cultures, and entertain them.



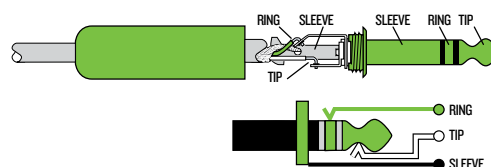
Only slide the voltage switch with the power cord unplugged.

3. 1/4" Headphone Output Jacks

These 1/4" TRS connectors supply the output for stereo headphones. The volume is controlled with the phones level knobs on the front panel.

The phones output follows standard conventions:

Tip = Left channel
Ring = Right channel
Sleeve = Common ground



WARNING: The headphone amp is loud, and can cause permanent hearing damage. Even intermediate levels may be painfully loud with some headphones. **BE CAREFUL!** Always turn the phones level controls all the way down before connecting headphones or doing anything new that may affect the headphone volume. Then turn it up slowly as you listen carefully.

HM Series Headphone Amplifiers: Rear Panel Features Continued...

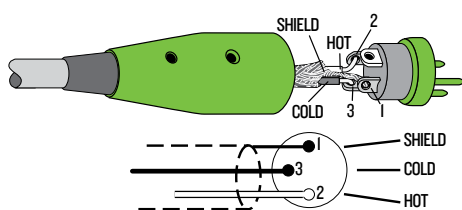
4. Main Input Jacks

These connectors provide a balanced mic level signal using an XLR cable or line-level signal using a 1/4" cable. These input jacks are designed to connect to the outputs of your favorite DAW and/or mixer.

The balanced XLR jacks, are wired as follows, according to standards specified by the AES (Audio Engineering Society):

Balanced XLR Input Connector

- Pin 1 – Shield (ground)
- Pin 2 – Positive (+ or hot)
- Pin 3 – Negative (– or cold)

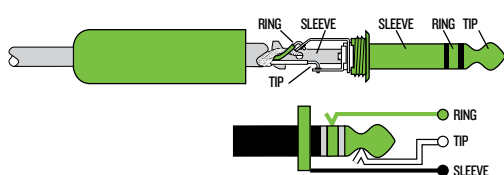


Balanced XLR Connector

The 1/4" TRS and TS jacks, on the other hand, are wired as follows, according to standards specified by the AES (Audio Engineering Society):

Balanced 1/4" TRS Input Connector

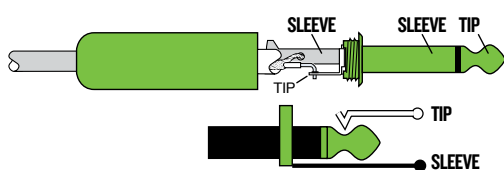
- Tip = Positive (+ or hot)
- Ring = Negative (– or cold)
- Sleeve = Shield or ground



Balanced 1/4" Connector

Unbalanced 1/4" TS Input Connector

- Tip = Positive (+ or hot)
- Sleeve = Shield or ground



Unbalanced 1/4" Connector



NEVER connect the output of an amplifier directly to the HM Series Headphone Amplifier's input jack.

This could damage the input circuitry!

5. Main Output Jacks

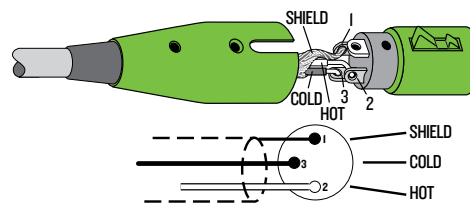
These connectors provide a balanced mic level signal using an XLR cable or line-level signal using a 1/4" cable. These output jacks are designed to connect to the input jacks of an additional headphone amplifier and/or powered live room studio monitors or loudspeakers.

The output connectors and cables are wired the same as the input connectors and cables as described and illustrated to the left, except for the XLR output. The XLR connector on the HM-400 is male and the cable will be female.

It is wired as follows, according to standards specified by the AES (Audio Engineering Society):

Balanced XLR Output Connector

- Pin 1 – Shield (ground)
- Pin 2 – Positive (+ or hot)
- Pin 3 – Negative (– or cold)



Balanced XLR Connector

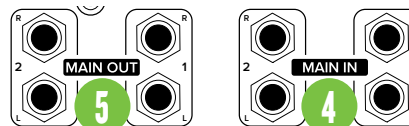
HM-400 I/O:

- One Main In L/R (XLR and 1/4")
- One Main Out L/R (XLR and 1/4")



HM-800 I/O:

- Two Main Ins L/R (1/4" Only)
- Two Main Outs L/R (1/4" Only)

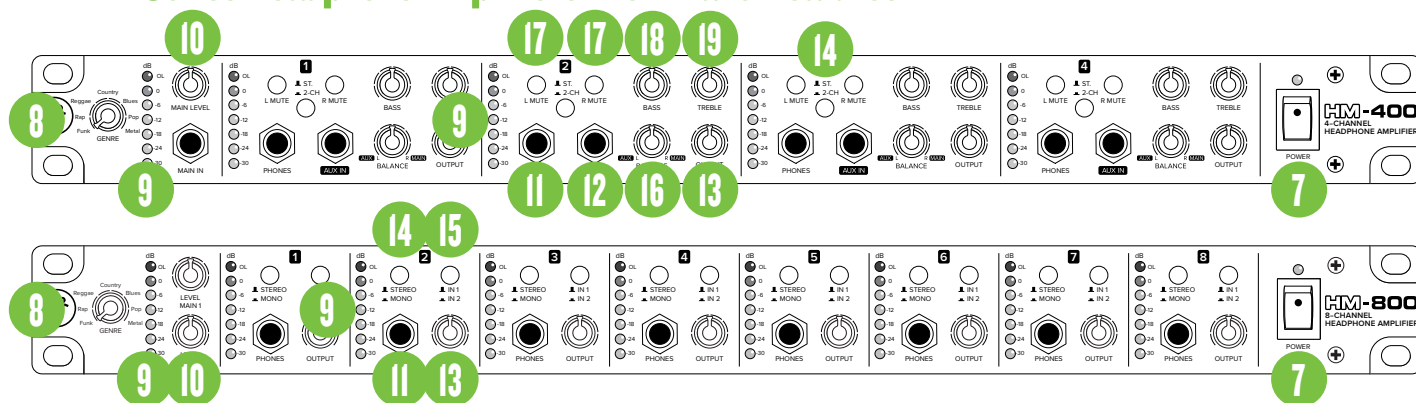


6. Aux Input Jacks [HM-800]

The aux input jacks on the rear panel of the HM-800 work exactly the same as the aux input jacks on the front panel of the HM-400. Please see call-out #12 on the following page for a description.



HM Series Headphone Amplifiers: Front Panel Features



7. Power Switch and LED

Press the top of this rocker switch inwards to turn on the HM Series Headphone Amplifier. The power LED right above the switch will glow with happiness, or at least it will if you have the headphone amp plugged in to a suitable live AC mains supply.

Press the bottom of this switch in to turn the HM Series Headphone Amplifier off. If the amp will not be used for some time, we suggest unplugging the amp from the AC outlet, too.

8. Genre Knob

Both the HM-400 and HM-800 have a genre knob on the far left of the front panel. It streams music through the headphone outputs based on the chosen genre and is typically used during breaks in the session. A really cool feature about this is setting the knob between two of the listed genres to hear a crossover of both... that reggae-country sure is weird.

9. Meters

These seven-segment meters display the input and output signal levels.

These meters should remain green with the occasional bump into the yellow zone. If there is too much yellow (or any red clipping), lower the input and/or output knob(s) until it's gone. You might check the EQ settings, as well [HM-400].

Input and output meters (starting at the top):

0L, 0 dB, -6 dB, -12 dB, -18 dB, -24 dB and -30 dB

Both models have one input level meter. The HM-400 has four output level meters and the HM-800 has eight.

10. Main Level Knobs

The main knobs control the level of the signal fed into the main input(s). This allows signals from the outside world to be adjusted at optimal internal operating levels.

The main input jacks on both models are on the rear panel, although the HM-400 has an additional 1/4" main input jack on the front panel. There is one main level knob on the HM-400 and two on the HM-800.

11. 1/4" Headphone Output Jacks

The headphone output jacks on the front panel work exactly the same as the headphone output jacks on the rear panel. Please see call-out #3 on page 7 for a description.

12. 1/4" Aux Input Jacks

Each aux input jack of the HM Series Headphone Amplifier may be fed additional input stereo signals from the aux outputs – also know as aux sends – from an external mixer. The HM-400 has four of these aux input jacks (on the front panel) while the HM-800 possesses eight of them (on the rear panel, see call-out #6 on the previous page).

NOTE: On the HM-400, each channel's aux input can be blended with the main input. On the HM-800, connecting an aux input will override the main input for that channel.

13. Phones Output Knobs

These knobs are used to adjust the volumes at the phones outputs from minimum to maximum gain. The HM-400 has four of these output knobs while the HM-800 possesses eight of them.



WARNING: Yes, we just mentioned this exact same warning a couple pages back, but that is how important this is...the headphone amp is loud, and can cause permanent hearing damage. Even intermediate levels may be painfully loud with some headphones. **BE CAREFUL!** Always turn this control all the way down before connecting headphones or doing anything new that may affect the headphone volume. Then turn it up slowly as you listen carefully.

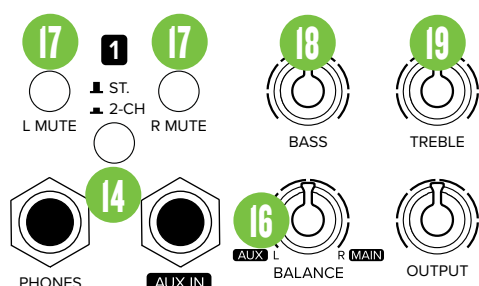
HM Series Headphone Amplifiers: Front Panel Features Continued...

14. St. / 2-Ch Switches [HM-400] Stereo / Mono Switches [HM-800]

When this switch is engaged, the stereo signal (of that channel) becomes monophonic. The HM-400 has four of these switches while the HM-800 has eight. Engaged switches will illuminate orange.

15. In 1/2 Switches [HM-800]

Each of the eight channels on the HM-800 have an in(put) 1/2 switch. Here you are able to choose whether to listen to input 1 (switch disengaged) or input 2 (switch engaged). Engaged switches will illuminate red.



HM-400 Front Panel

16. Balance Knobs [HM-400]

The HM-400 has a stereo balance knob on each of the four channels and it serves a dual-purpose.

If an aux input IS NOT in use...

...it is a standard balance knob. They allow you to adjust how much of the left or right output signals are heard in the headphones. Turn the knobs left or right to make adjustments. Center it to hear the output equally from the left and right sides.

The balance control employs a design called "Constant Loudness." If a channel is panned hard left (or right) and then centered, the signal is attenuated 3 dB to maintain the same apparent loudness. Otherwise, the sound would appear much louder when centered.

If an aux input IS in use...

...it becomes a mix / ratio knob. They allow you to adjust how much of the aux (left) or main (right) input signals are heard in the headphones. Turn the knobs left or right to make adjustments. Center it to hear the aux and main inputs equally.

17. L/R Mute Switches [HM-400]

Mute switches do just what they sound like they do. They turn off the signal by "routing" it into oblivion. Instead of muting the entire signal, though, you're able to mute just the left signal or just the right signal... or we suppose you *could* mute both if you're so inclined, but we're not sure why you would do that! Simply push a switch in to mute. Engaged switches will illuminate red.

18. Bass Knobs [HM-400]

Each of the four channels on the HM-400 have a bass knob. Here you're able to boost (to the right) or cut (to the left) the low frequencies to enhance the sound of each channel.

We've designed a lot of boost and cut into the equalizer circuit because we know everyone will occasionally need that. But if you max the EQs, you'll likely get mix mush. Equalize subtly and use the left sides of the EQ (cut), as well as the right (boost).

19. Treble Knobs [HM-400]

Each of the four channels on the HM-400 also have a treble knob. Here you're able to boost (to the right) or cut (to the left) the high frequencies to enhance the sound of each channel.

We've designed a lot of boost and cut into the equalizer circuit because we know everyone will occasionally need that. But if you max the EQs, you'll likely get mix mush. Equalize subtly and use the left sides of the EQ (cut), as well as the right (boost).

Appendix A: Service Information

If you think your HM Series Headphone Amplifier has a problem, please check out the following troubleshooting tips and do your best to confirm the problem. Visit the Support section of our website (www.mackie.com/support) where you will find lots of useful information such as FAQs and other documentation. You may find the answer to the problem without having to part with your HM Series Headphone Amplifier.

Troubleshooting

No power

- Our favorite question: Is it plugged in? Make sure the AC outlet is live [check with a tester or lamp].
- Our next favorite question: Is the power switch on? If not, try turning it on.
- Make sure the line cord is securely seated in the line cord socket and plugged all the way into the AC outlet.
- Is the power LED on the front panel illuminated? If not, make sure the AC outlet is live. If so, refer to "No sound" below.
- The fuse may have blown. If you suspect a blown fuse, please see the fuse replacement instructions on page 7.

No sound

- Are the input and/or output level knobs turned all the way down? Verify that all the volume controls in the system are properly adjusted. Look at the meters to ensure that the headphone amp is receiving a signal.
- Is the signal source working? Make sure the connecting cables are in good repair and securely connected at both ends. Make sure the output level control on the mixing console is turned up sufficiently.
- Make sure the mixer does not have a mute on or a processor loop engaged. If you find something like this, make sure the level is turned down before disengaging the offending switch.

Poor sound

- Is it loud and distorted? Make sure that you're not overdriving a stage in the signal chain. Verify that all level controls are set properly.
- Be sure all connections are secure.

Hum

- Use balanced connections throughout your system for the best noise rejection.
- Whenever possible, plug all the audio equipment's line cords into outlets which share a common ground. The distance between the outlets and the common ground should be as short as possible.

Repair

For warranty service, refer to the warranty information on page 16.

Non-warranty service is available at a factory-authorized service center. To locate the nearest service center, visit www.mackie.com/support/service-locator. Service for HM Series Headphone Amplifiers living outside the United States may be obtained through local dealers or distributors.

Please write the serial numbers here for future reference (i.e., insurance claims, tech support, return authorization, make dad proud, etc.)

Purchased at:

Date of purchase:

Appendix B: Technical Information

HM Series Headphone Amplifiers Specifications

Audio Performance

Frequency Response	20 Hz – 20 kHz, ±1 dB
Noise	–66 dB [HM-400] –70 dB [HM-800]
Distortion (THD)	
+4 dBu, 1 kHz, unity gain	<0.01% [HM-400] <0.005% [HM-800]
Maximum Levels	
Main Input	+15 dBu balanced / unbalanced [HM-400] +19 dBu balanced / unbalanced [HM-800]
Aux Input	+20 dBu unbalanced
Headphone Output	550 mW / channel @ 47 Ω (+21 dBu)
CMRR (Main Input)	>42 dB @1 kHz [HM-400] >52 dB @1 kHz [HM-800]
Gain Range (Main Input)	–66 to 18 dBu [HM-400] –67 to 19 dBu [HM-800]

Input / Output

Input Type	Female XLR Balanced Female 1/4" Balanced – Unbalanced
Main Input Impedance	20 kΩ balanced, 10 kΩ unbalanced [HM-400] 40 kΩ balanced, 20 kΩ unbalanced [HM-800]
Aux Input Impedance	10 kΩ unbalanced [HM-400] 13 kΩ unbalanced [HM-800]
Output Type	Male XLR Balanced Female 1/4" Balanced – Unbalanced
Headphone Output Impedance	3 Ω unbalanced

Power Requirements

Detachable line cord	~100 – 120V, 50/60 Hz, 24 W ~220 – 240V, 50/60 Hz, 24 W
AC Connector	3-pin IEC 250 VAC, 10 A male

Display LEDs

Front power on/off,
Front input level meter
Front output level meters
L/R mute switches [HM-400]
St. / 2-Ch switches [HM-400]
Stereo / Mono switches [HM-800]
In 1/2 switches [HM-800]

Physical Properties

Height	1.8 in / 46 mm
Width	19.0 in / 483 mm
Depth	8.8 in / 224 mm
Weight	8.0 lb / 3.6 kg

Disclaimer

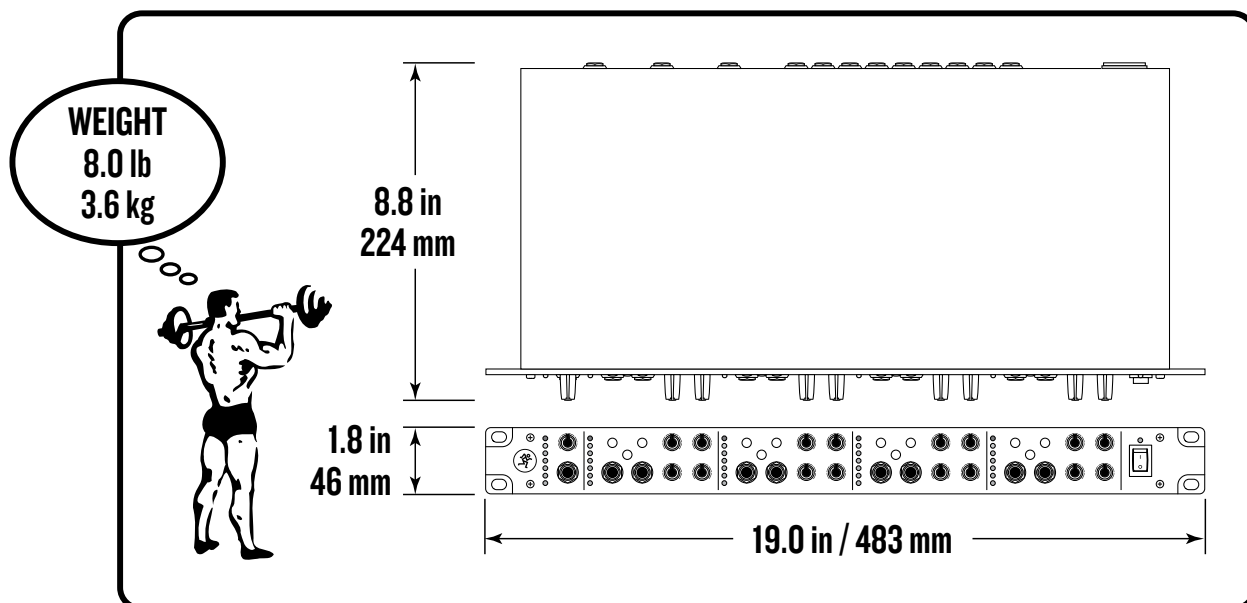
Since we are always striving to make our products better by incorporating new and improved materials, components, and manufacturing methods, we reserve the right to change these specifications at any time without notice.

The “Running Man” figure is a registered trademark of LOUD Audio, LLC.

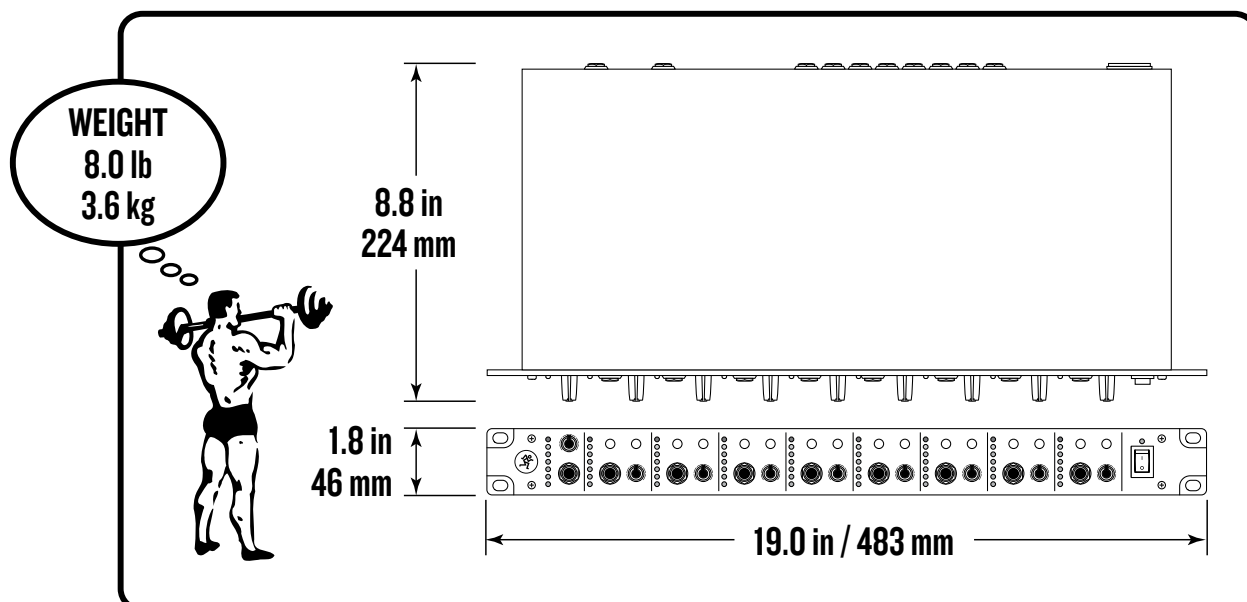
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HM-400 Dimensions

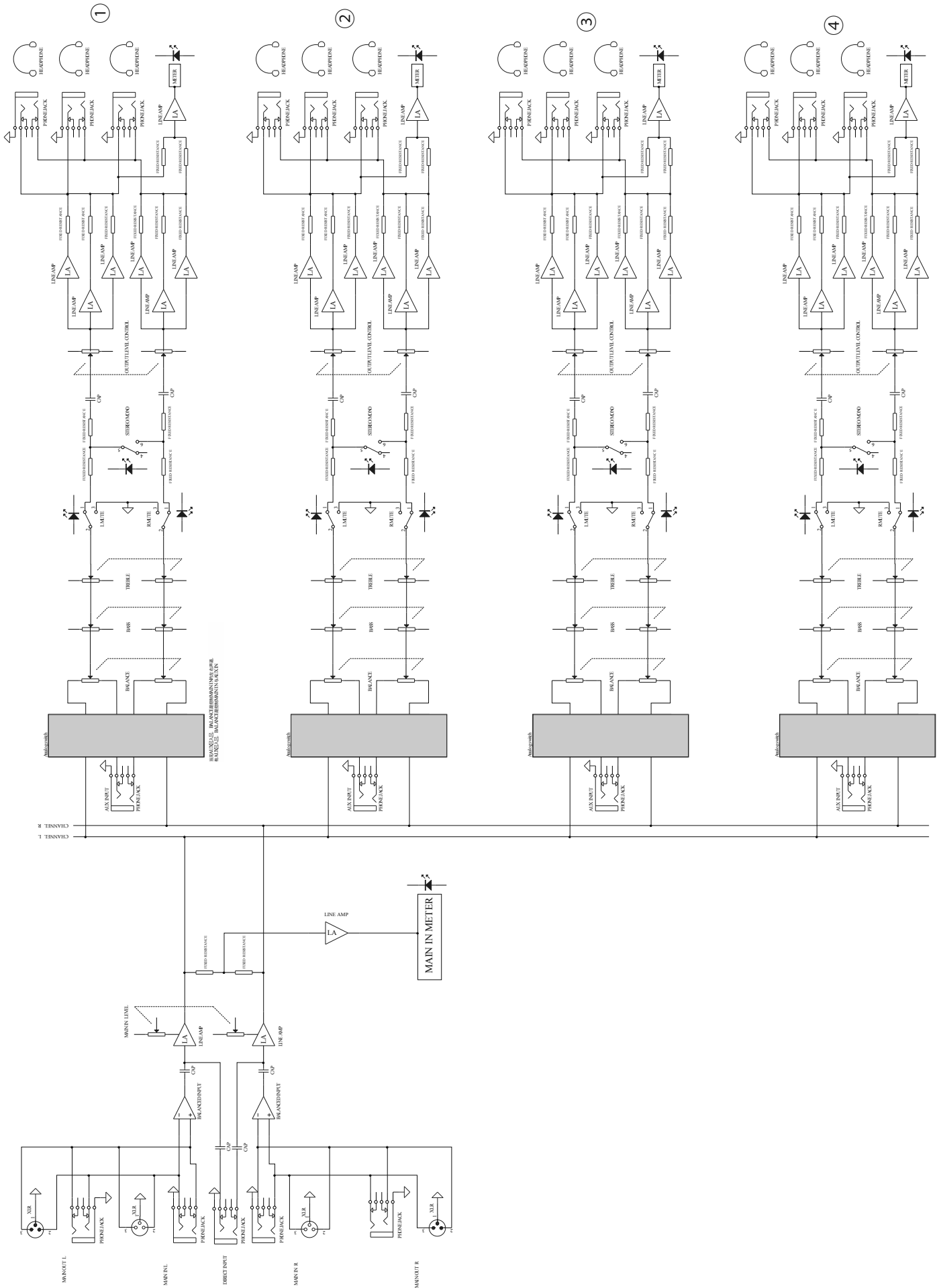


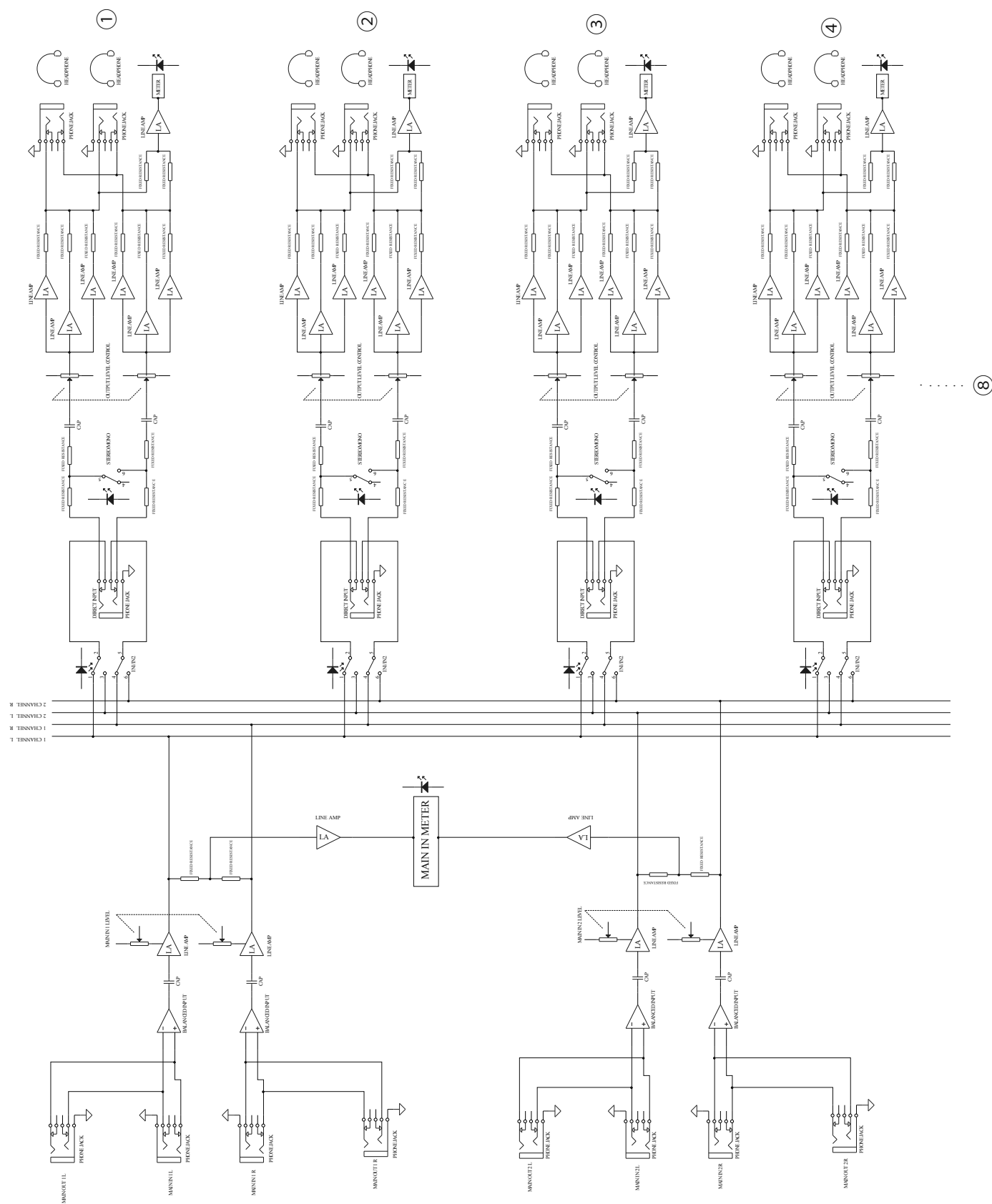
HM-800 Dimensions



HM Series Headphone Amplifiers

HM-400 Block Diagram





Limited Warranty

Please keep your sales receipt in a safe place.

This Limited Product Warranty ("Product Warranty") is provided by LOUD Audio, LLC ("LOUD") and is applicable to products purchased in the United States or Canada through a LOUD-authorized reseller or dealer. The Product Warranty will not extend to anyone other than the original purchaser of the product (hereinafter, "Customer," "you" or "your").

For products purchased outside the U.S. or Canada, please visit www.mackie.com to find contact information for your local distributor, and information on any warranty coverage provided by the distributor in your local market.

LOUD warrants to Customer that the product will be free from defects in materials and workmanship under normal use during the Warranty Period. If the product fails to conform to the warranty then LOUD or its authorized service representative will at its option, either repair or replace any such nonconforming product, provided that Customer gives notice of the noncompliance within the Warranty Period to the Company at: www.mackie.com or by calling LOUD technical support at 1.800.898.3211 (toll-free in the U.S. and Canada) during normal business hours Pacific Time, excluding weekends or LOUD holidays. Please retain the original dated sales receipt as evidence of the date of purchase. You will need it to obtain any warranty service.

For full terms and conditions, as well as the specific duration of the Warranty for this product, please visit www.mackie.com.

The Product Warranty, together with your invoice or receipt, and the terms and conditions located at www.mackie.com constitutes the entire agreement, and supersedes any and all prior agreements between LOUD and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Product Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.

Need help with the HM Series Headphone Amplifier?

- Visit www.mackie.com/support to find: FAQs, manuals, addendums, and other documents.
- Email us at: www.mackie.com/support-contact



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