



# **THA SERIES**

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## **USER'S MANUAL**

### **THA-6 6-CHANNEL HEADPHONE AMPLIFIER**

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**TOPP PRO MUSIC GEAR**  
[www.topppro.com](http://www.topppro.com)



# **THA SERIES**

## SAFETY RELATED SYMBOLS



This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.



This symbol, wherever used, alerts you to important operating and maintenance instructions.

Please read.



Protective Ground Terminal



AC mains (Alternating Current)



AC mains (Alternating Current)

**ON:**

Denotes the product is turned on.

**OFF:**

Denotes the product is turned off.

### WARNING

Describes precautions that should be observed to prevent the possibility of death or injury to the user.

### CAUTION

Describes precautions that should be observed to prevent damage to the product.

Disposing of this product should not be placed in municipal waste but rather in a separate collection.

### WARNING

#### Power Supply

Ensure that the mains source voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

#### External Connection

Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

#### Do Not Remove Any Covers

Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

#### Fuse

To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

#### Protective Ground

Before turning the unit ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock.

Never cut internal or external Ground wires. Likewise, never remove Ground wiring from the Protective Ground Terminal.

#### Operating Conditions

Always install in accordance with the manufacturer's instructions.

To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture.

Do not use this product when in close proximity to water.

Do not install this product near any direct heat source.

Do not block areas of ventilation. Failure to do so could result in fire.

Keep product away from naked flames.

### IMPORTANT SAFETY INSTRUCTIONS

Read these instructions

Follow all instructions

Keep these instructions. Do not discard.

Heed all warnings.

Only use attachments / accessories specified by the manufacturer.

#### Power Cord and Plug

Do not tamper with the power cord or plug. These are designed for your safety.

Do not remove Ground connections!

If the plug does not fit your AC outlet seek advice from a qualified electrician.

Protect the power cord and plug from any physical stress to avoid risk of electric shock.

Do not place heavy objects on the power cord. This could cause electric shock or fire.

#### Cleaning

When required, either blow off dust from the product or use a dry cloth.

Do not use any solvents such as Benzol or Alcohol. For safety, keep product clean and free from dust.

#### Servicing

Refer all servicing to qualified service personnel only.

Do not perform any servicing other than those instructions contained within the User's Manual.

### PORTABLE CART WARNING



Carts and stands - The component should be used only with a cart or stand that is recommended by the manufacturer.

A component and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the component and cart combination to overturn.



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**INTRODUCTION**

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Thank you for purchasing the THA-6 6-channel headphone amplifier. THA-6 is really ideal for applications such as recording, broadcast and Live events. It is a very flexible tool allowing personal headphone mix for up to six musicians. Please read this manual carefully so you can take advantages of all features of THA-6 headphone amplifier. Thank you again for making the right choice in purchasing the TOPP PRO MUSIC GEAR.

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**FEATURES**

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- \*Mountable in a 19" Rack Unit
- \*6 individual headphone channels
- \*Input gain control, and individual output gain control
- \*Up to 3 headphone outputs per channel for a total of 18 headphones
- \*Direct In and Headphone Output on the front panel for easy operation, when mounted in a rack
- \*Input and Output Level Led Meter
- \*Balance Control to mix up the Main In and the Aux In signal
- \*Main Outputs for linking additional THA-6 headphone amplifiers
- \*High-end quality even at high volume levels
- \*Exceptionally rugged construction ensures long life and durability
- \*Universal and professional headphone amplification system for studio and stage application
- \*Manufactured under QS9000 certified quality system

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**USEFUL DATA**

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Please write your serial number here for future reference.

**Serial Number:**

**Data of Purchase:**

**Purchased at:**

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**GUARANTEE**

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**Topp Pro** guarantees the normal operation of the product against any defect of manufacture and/or vice of material, by the term of (12) months, counted as of the date of purchase on the part of the user, committing itself to repair or to change, to its election, without position some, any piece or component that will fail in normal conditions of use within the mentioned period. This guarantee is valid if the original buyer will have to present /display this certificate properly sealed and signed by the selling house, accompanied by the corresponding invoice of purchase where it consisted the model and serial number of the acquired equipment.

The guarantee does not cover:

- Damages caused by the illegal use of the product, repair and/or nonauthorized modification conducted by people by **Topp Pro**.
- Damages caused by the connection of the equipment to other equipment different from the specified ones in the manual of use, or by bad connection to these last ones.
- Damages caused by electrical storms, blows and / or incorrect transport.
- Damages caused by excesses or falls of tension in the network or by connection to networks with a tension different from the required one by the unit.
- Damages caused by the presence of sand, acid of batteries, water, or any strange element inside the equipment.
- Deteriorations produced by the course of the time, use and/or normal wear of the unit.
- Alteration or absence of the serial number of factory of the equipment.

The repairs could only be carried out the authorized technical service by **Topp Pro**, that will inform about the term and other details into the repairs to take place according to this guarantee.

**Topp pro**, will repair this unit in counted a term nongreater to 30 days as of the date of entrance of the unit to the Technical Service. In those cases in that due to the particularity of the spare part, outside necessary their import, the repair time and the viability of the same one will be subject to the effective norms for the import of parts, in which case one will inquire to the user about the term and possibility into repair.

With the object of its correct operation, and of the validity of this one guarantee, this product will have to be installed and to be used according to the instructions that are detailed in the manual associate or the package of the product.

This unit will be able to appear for its repair, next to the invoice of purchase (or any other comprobante where the date of purchase consists), to its authorized distributor **Topp Pro** or an authorized technical center on watch by **Topp Pro**.

**Exclusion of damages:**

THE RESPONSIBILITY OF TOPP PRO BY ANY DEFECTIVE PRODUCT IS LIMITED THE REPAIR OR THE REPLACEMENT OF HE HIMSELF, TO TOPP OPTION PRO. IF WE CHOSE TO REPLACE THE PRODUCT, THE REPLACEMENT CAN BE A RECONDITIONATED UNIT. TOPP PRO WILL NOT BE RESPONSIBLE BY THE DAMAGES BASED ON THE LOST, INCONVENIENCE, LOSS OF USE, BENEFITS, LOST SAVINGS, BY THE DAMAGE TO OTHER EQUIPMENT OR OTHER ARTICLES IN THE USE SITE, OR BY ANY OTHER DAMAGE IF HE IS FORTUITOUS, CONSEQUENT OR OF ANOTHER TYPE, ALTHOUGH TOPP PRO HAS BEEN NOTICED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow to exclusion or the limitation to the fortuitous or consequent damages, so the aforesaid limitation can not be applied to you.

This guarantee gives specific legal rights him, you can also have other right that varies of state to state.

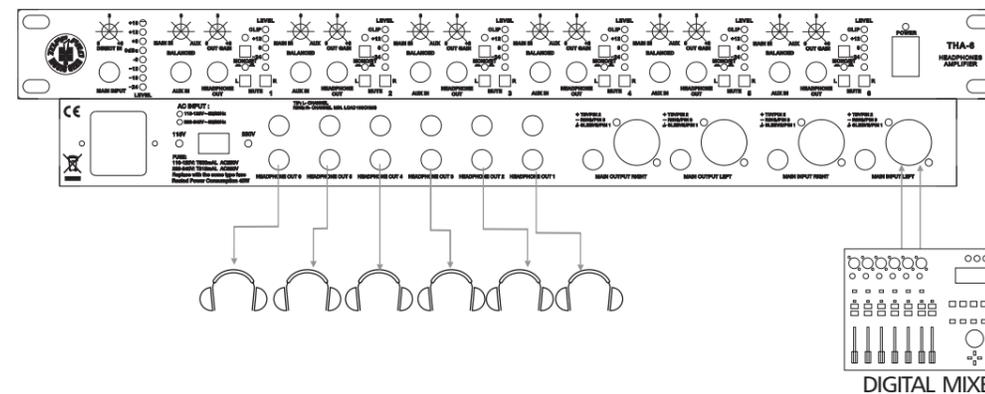
TECHNICAL SPECIFICATION

Main Input	Connectors	XLR and 1/4" jack
	Type	HF filtered, servo balanced input
	Impedance	50 kOhms balanced, 25 kOhms unbalanced
	Max.input level	+21 dBu balanced and unbalanced
	CMRR	typ.40 dB, >55 dB @ 1kHz
AUX IN and DIRECT IN input	Connectors	1/4" TRS (tip=left, ring=right, sleeve=ground)
	Type	Unbalanced
	Impedance	25 kOhms Unbalanced
	Max.input level	+21 dBu unbalanced
	CMRR	typ.40 dB, >55 dB @ 1 kHz
OUTPUT	Connectors	XLR and 1/4" Jack
	Type	Balanced /Unbalanced
	Impedance	Dependent on the input impedance
	Max. output level	+21 dBu Balanced and Unbalanced
	SYSTEM SPECIFICATIONS	Frequency response
	Noise	>90 dB, Unweighted, 22 Hz to 22 kHz(>95 dB@+4 dBu)
	THD	0.005% typ.@+4 dBu, 1kHz, Gain 1
POWER AMPLIFIER	Max.output power	+21 dBm
	Min.output impedance	100 Ohms
	MAX. Gain	+20dB
FUNCTION CONTROLS	Input level	Variable
	Balanced per channel	Mix between aux and main signal
	Output level per channel	Variable
FUNCTION SWITCHES	Left mute	Mute left signal of the respective channel
	Right mute	Mute right signal of the respective channel
	Mode	Switch channel to mono
INDICATORS	Input level	8-digit LED display:-24/-18/-12/-6/0/+6/+12/+18dBu
	Output level	4-digit LED display:-24/0/+12/CLIP
POWER SUPPLY	Mains voltage	USA/Canada: 120V~, 60Hz UK/Australia: 240V~,50Hz Europe: 230V~,50Hz
	Power consumption	40 W
	Mains connection	Standard IEC receptacle
	Fuse	95-120V~: T500mA L/210-240V~: T315mA L
	PHYSICAL	Dimension(WxDxH)
	Net weight	2.9kg/6.39 lbs

HOOKUP DIAGRAM

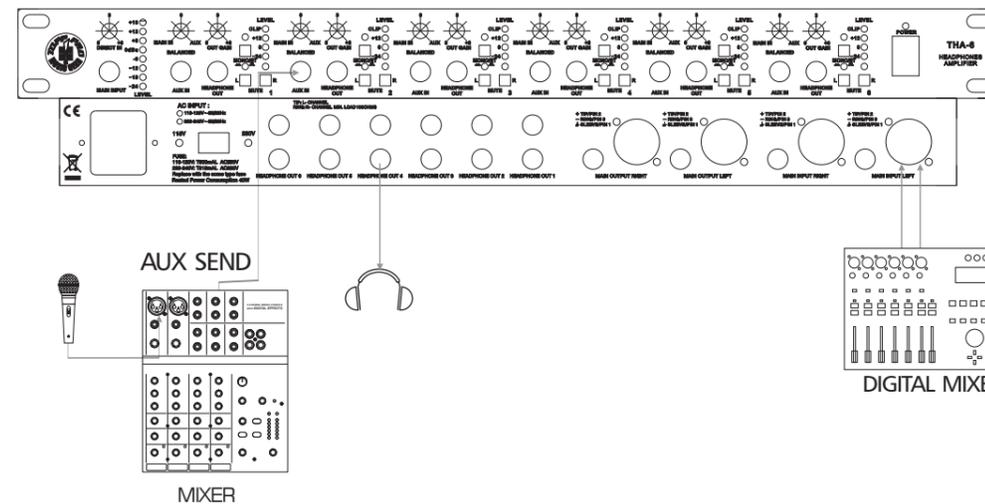
USING THE MAIN IN CONNECTORS

First, connect a signal source to the MAIN IN connectors on the rear panel of your THA-6. Set the Input Gain (Main section) and the Balance control (Channel section) on centre position. Output gain of each channel must be turned down at this stage. Check the input level Meter for optimal operation as described earlier in this Manual. Connect the headphones you want to use and start to raise the output gain of each channel for the desired listening volume. Adjust Bass and treble control as you wish.



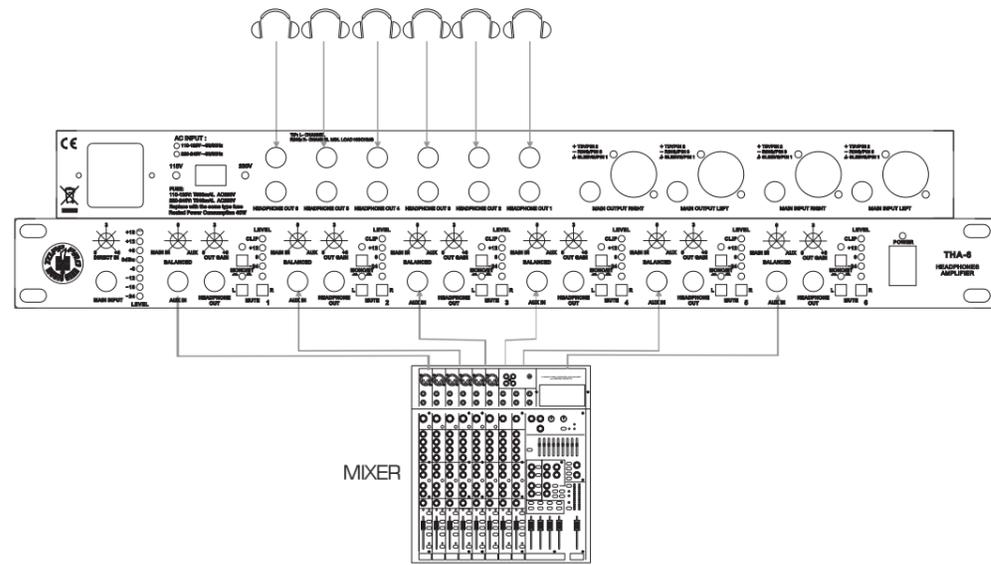
USING THE AUX IN INPUTS

You can playback a signal and feed in additional vocals through a microphone and mixer/ preamplifier connected into the AUX IN socket. Use the balance control to give the vocalist the desired mix in between his voice and the playback signal. Use the OUTPUT GAIN control to regulate the overall desired volume.





Through the AUX IN inputs you can also use the 6 channels of your THA-6 independently to give individual mixers to 6 different musicians. Connect the Aux Sends or Subgroups outputs directly to the AUX IN input of your THA-6. You need a mixer with 6 Aux sends output or with 6 subgroups. Now rotate the BALANCE control on your THA-6 fully to the left. In this way you will exclude the MAIN signal and only the AUX IN signal will be sent to the headphones.



SOME FINIAL NOTES

1. RACK MOUNTING

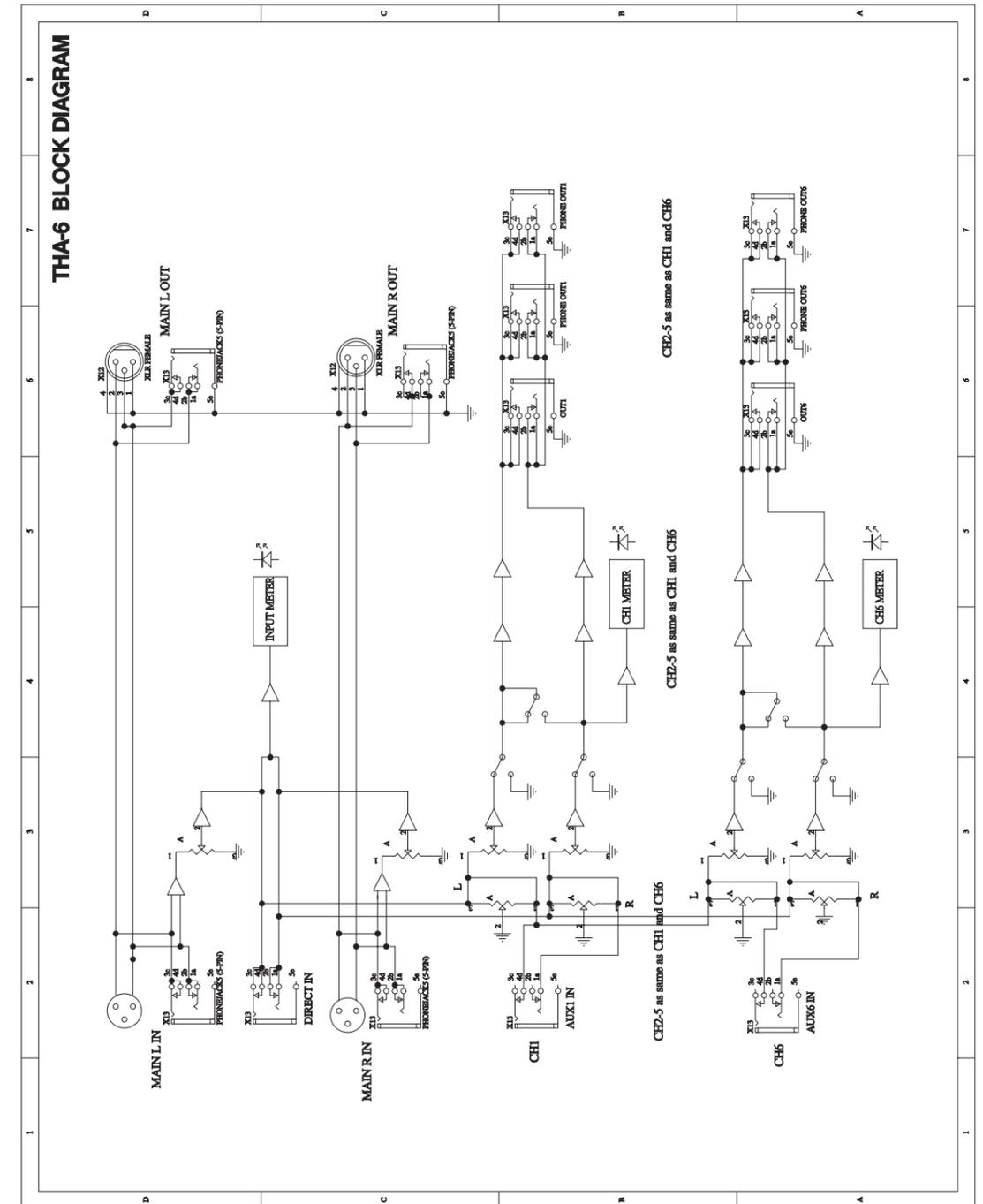
The most secure mounting is on a universal 19" rack available from various rack manufacturers or your Dealer. The THA-6 6-Channel Headphone Amplifier fits into one standard 19" rack unit of space. Please allow at least an additional 4" depth for the connectors on the rear panel. Be sure that there is enough air space around the unit for sufficient ventilation and please do not place your THA-6 the 6-Channel Headphone Amplifier close to high temperature devices such as power amplifiers etc. to avoid overheating.

2. USING MULTIPLE HEADPHONES ON THE SAME CHANNEL

Each channel provides 3 Headphone Outputs. These jacks are all parallel connected. For best results getting from the THA-6, please note the impedance information as following:

1. For each channel connecting with 1 headphone, the minimum impedance of the headphone should be 100 ohms.
2. For each channel connecting with 2 headphones, the minimum impedance of each headphone should be 200 ohms.
3. For each channel connecting with 3 headphones, the minimum impedance of each headphone should be 300 ohms.

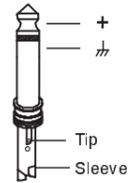
BLOCK DIAGRAM



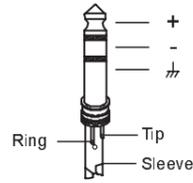
WIRE CONNECTIONS

Either the 1/4" TRS phone jack or XLR connector can be wired in balanced and unbalanced modes, which will be determined by the actual application status, please wire your system as the following wiring examples:

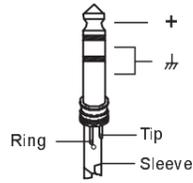
- For 1/4" Phone jack



TS Type Unbalanced

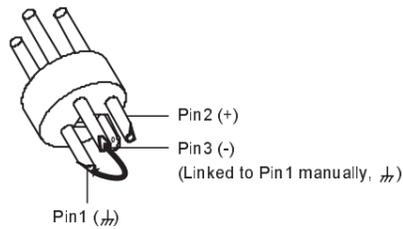


TRS Type Balanced

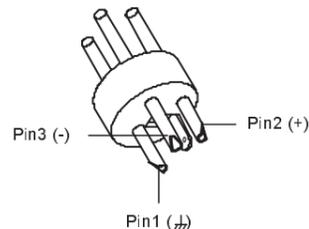


TRS Type Unbalanced

- For XLR Connector



XLR Type Unbalanced

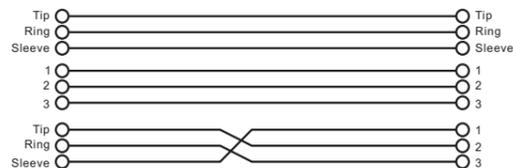
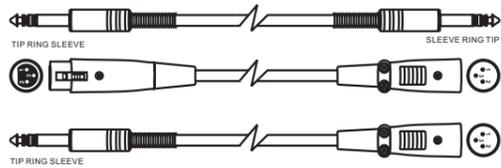


XLR Type Balanced

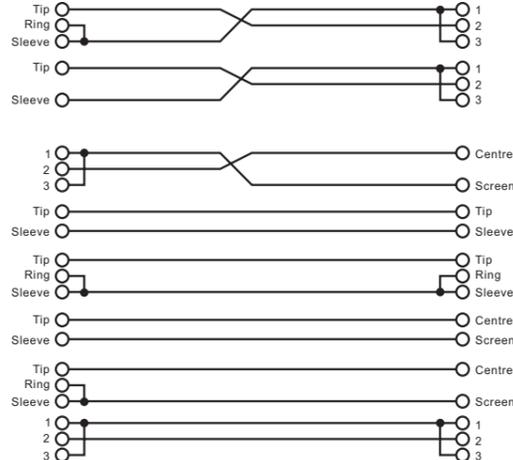
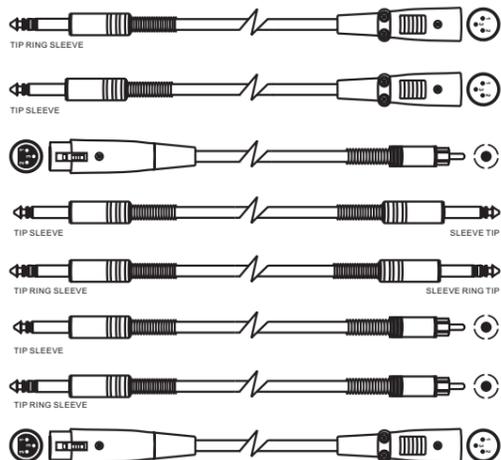
In-line Connection

For these applications the unit provides 1/4" TRS and XLR connectors to easily interface with most professional audio devices. Follow the configuration examples below for your particular connection.

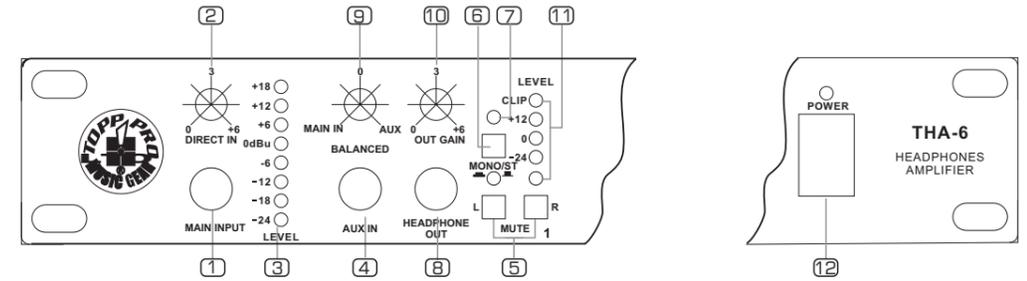
- Balanced



- Unbalanced



CONTROL ELEMENTS



MAIN SECTION:

1- MAIN INPUT

You can use this socket to feed an additional stereo signal into your THA-6. This socket is in "priority". It means that when you insert the jack, the signal fed into the MAIN input on the rear panel will be disconnected.

2- DIRECT IN GAIN

This knob controls the level of the signal applied to the MAIN or DIRECT IN inputs.

3- INPUT LEVEL

This Led Meter informs you about the level of the input signal. The range goes from -24 dBu to +18 dBu. For the best quality of input signal the operating leds should be those from +6 to +18 dBu. The CLIP led should light up only occasionally. If CLIP led is always on, you must reduce the input level through the input gain control. If only -18 and -12 dBu leds are operating, you will experience a bad S/N ratio and increase the input level.

CHANNEL SECTION

There are 6 identical channels on your THA-6 with identical functions and performance.

4- AUX IN

This stereo input is useful when you want to feed an additional signal with the signals applied to MAIN or DIRECT IN inputs. If you have a stereo signal depress the MONO switch. If you have a mono signal, press the MONO switch if you want such signal to appear on both ears.

5- L&R MUTE SWITCHES

Through these switches you can mute the respective input signals one at a time or both at the same time.

6- MODE SWITCH

Depress the switch if you want to hear a stereo signal. Press it again if you want to hear a mono signal.

7- MONO Led:

When the MODE switch is engaged this Led will light up.

8- HEADPHONE OUT

This connector is wired in parallel with the correspondent output connector on the rear panel. It is useful to connect headphones when your THA-6 is installed into a rack.

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## CONTROL ELEMENTS

### 9- BALANCE CONTROL

This knob has a double function. When the AUX IN input is not in use it will regulate the stereo imaging of the input signal. When a signal is fed into the AUX IN input, the balance control will regulate the ratio of MAIN IN (or DIRECT IN) and AUX IN input signals.

### 10- OUTPUT GAIN

This knob controls the output volume of the channel. Both right and left signals are regulated at the same time.

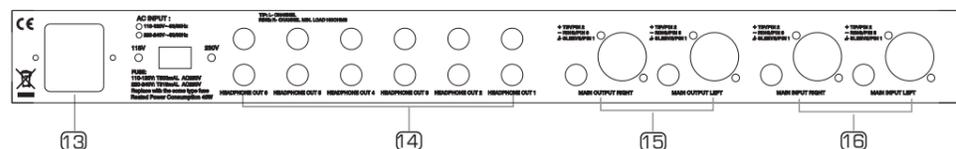
### 11- OUTPUT LEVEL

This 4-digit led meter tells you about the level of the output signal, and the Range goes from -24 dBu to +12 dBu. When the Clip LED lights up, please turn down the Output Gain Control to avoid any distortion.

### 12- POWER SWITCH & LED

This switch is used to power on/off the unit. When the unit is powered on, the LED will light up.

### Rear Panel



### 13- AC Inlet and Fuse Holder

This connector is used to connect the supplied power cord. Please check the Voltage accepted by the unit and the Voltage available from your AC sockets before connecting the unit to the Mains. If the fuse blows, replaced with a fuse of the correct type only.

### 14- HEADPHONE OUT (1 to 12)

These are 12 additional outputs for headphone (two for every channel) wired in parallel with the output available on the front channel.

### 15- Main Output Connectors

These connectors are used to output the stereo signal via the balanced 1/4" TRS phone jack or XLR connector. You can also use these connectors to link as many additional THA-6 as you wish if you need to use many headphones channels.

### 16- MAIN INPUT LEFT & RIGHT

These connectors are used to input the stereo signal. You can input the main signal Via the balanced 1/4" TRS phone jack or XLR connector.

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## INSTALLATION TIPS

- 1- Speakers should be placed in a position that allows for unobstructed sound projection. In many instances is beneficial for speakers to be elevated on tripod stands to achieve maximum dispersion and reach.
- 2- Use professional advice or service when hanging and installing speakers. Please take precautions to secure them to prevent them from falling and hurting someone. Care should be taken as to not damage the cabinet or its components. Please comply with all pertinent Regulations.
- 3- Use quality cables. Using quality cables will ensure the best possible sound.
- 4- For best results match the speakers to a good amplifier that matches the wattage and impedance of your speakers. Proper amplification power results in good quality audio and longer component life. Check out the power requirement for your cabinet.
- 5- Avoid pointing a microphone directly at an amplified speaker doing so, could cause feedback possibly damaging speaker components and your hearing.

Enjoy the sound!