## **Kit Contents**

THDA-500T Headphone Amplifier 1EA USB Cable 1EA Power Cord 1EA Instruction Manual 1EA

# **Specifications**

| Power Output:               | 2 x 500mW @ 100 Ohm load,<br>Pure Class A single ended design with no negative feedback<br>Discrete MOSFET output |
|-----------------------------|---|
| DAC Resolution:             | 24bit / 192kHz<br>Cirrus Logic CM6631A+CS4344 chip  |
| Vacuum Tubes:               | 1 x 12AX7   |
| THD:                        | Less or equal 0.1% @ 100 Ohm (1kHz, 300mW)  |
| Signal/Noise ratio:         | 88dB  |
| Input Sensitivity:          | 750mV   |
| Inputs:                     | RCA stereo AUX, USB (for computer)  |
| Outputs:                    | Pre-Out stereo RCA  |
| Headphone Impedance:        | 30 to 300 Ohm (1/4")  |
| AC Power, Power Consumption | 220V-240V 50/60Hz, 10W  |

We reserve the right to change the technical data and the design of the product without notice as a result of further development.



Your product is marked with the symbol as showed on the left.

For EU (European Union) member users:

This product has been tested and found in compliance with requirements of the European Community 2004/108/EC directive.



## **IMPORTANT!**

Your product is marked with the symbol as showed on the left .

For EU ( European Union ) member users :

According to the WEEE( Waste electrical and electronic equipment )
Directive, do not dispose of this product as household waste or commercial
waste.

Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact you local authorities, your household waste disposal service or the shop where you purchased the product.

#### EU DISTRIBUTOR / IMPORTER:

POLPAK POLAND Sp. z o.o. AL.JEROZOLIMSKIE 333A 05-816 REGUŁY k/WARSZAWY, POLAND Email: <u>sales@taga-audio.com</u>

#### WORLDWIDE & CHINA DISTRIBUTOR:

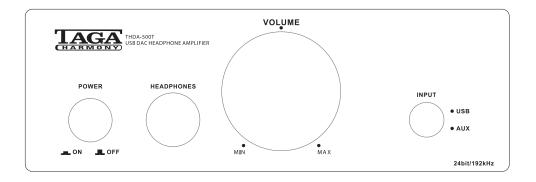
TAGA Audio Technology Company LTD. 3F, Building C4, Shizhou Street Section, Baichen Road, Shunde District, Foshan City, Guangdong Province, China, 528313

Email: sales@taga-audio.com.cn



# THDA-500T

## VACUUM TUBE HEADPHONE DAC / AMPLIFIER



Instruction Manual

www.taga-audio.com

## Introduction

Thank you for purchasing this TAGA Harmony amplifier.

This midi Class A vacuum tube headphone amplifier provides a clear, rich and powerful sound.

The true high-end sound has never been so affordable before!

The THDA-500T is a hybrid vacuum tube/solid state headphone amplifier which utilizes discrete MOSFET outputs and a 12AX7 vacuum tube.

**Pure Class A**, single ended design with no negative feedback offers the best sound performance and powerful sound.

The THDA-500T uses only fully discrete circuits with audiophile-grade **Wima** coupling and **Rubycon** power supply capacitors.

Thanks to a **3.5V stereo preamp output** you can connect your THDA-500T directly to a power amplifier or powered speakers.

A precisely made, extremely quiet and stable, **linear internal power supply** supports ultra-high-end sound performance.

The **removable IEC power** cable gives you an option to upgrade your system with a premium audiophile power cable in any time.

You can connect it directly to your computer through a USB input and thanks to the built-in high-resolution premium **USB-DAC 24bit/192kHz** (Cirrus Logic CS4344) you are able to change your digital music to a thrilling music experience.

Stunning sound embedded in a very rigid, non-resonant and luxurious **steel-aluminum casing** (10mm front and 6mm rear aluminum panels).

This instruction manual provides all of the information that you need to know about your TAGA Harmony Amplifier. Please read it carefully before you start using the unit.

## Cleaning

Do not use strong or abrasive cleaners. Use a damp, soft cloth for cleaning.

## **Specifications**

Full technical specifications are available on the www.taga-audio.com website.

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# **Safety Instructions**

## **IMPORTANT**

#### READ THIS SECTION CAREFULLY BEFORE PROCEEDING!



## WARNING

# RISK OF ELECTRIC SHOCK DO NOT OPEN



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



The lightning flash with arrowpoint within an equilateral triangle warns of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle warns users of the presence of important operating and maintenance (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, AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES. SHOULD NOT BE PLACED ON THIS APPARATUS.

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

**CAUTION:** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE THE FUSE ONLY WITH THE SAME AMPERAGE AND VOLTAGE TYPE. REFER REPLACEMENT TO QUALIFIED SERVICE PERSONNEL.

**WARNING:** UNIT MAY BECOME HOT. ALWAYS PROVIDE ADEQUATE VENTILATION TO ALLOW FOR COOLING. DO NOT PLACE NEAR A HEAT SOURCE, OR IN SPACES THAT CAN RESTRICT VENTILATION.

# **Safety Instructions**

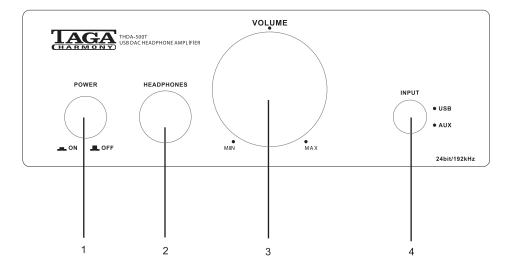
- Read Instructions All the safety and operating instructions should be read before the product is operated.
- Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. **Heed Warnings** All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed
- Cleaning Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp, soft cloth for cleaning.
- 6. Water and Moisture Do not use this product near water for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 7. Accessories Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacture, or sold with the product. Any mounting of the product should follow manufacture's instructions and should use a mounting accessory recommended by the manufacture.
- 8. Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacture's instructions have been adhered to.
- 9. Power Sources This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 10. Grounding and Polarization This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 11.Power-Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

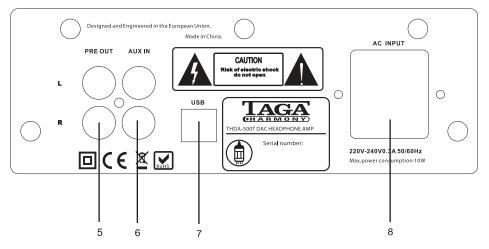
- 12.Lightning For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable systems. This will prevent damage to the product due to lightning and power-line surges
- 13.Overloading Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock
- 14. Object and Liquid Entry Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Do not expose this apparatus to dripping or splashing, and ensure that no objects filled with water, such as vases, are placed on the apparatus.
- 15.Servicing Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- 16.Damage Requiring Service Unplug this product from wall outlet and refer servicing to qualified personnel under the following

#### conditions:

- When power supply cord or plug is damaged;
- If liquid has been spilled, or objects have fallen into product;
- If the product has been exposed to rain or water;
- If the product does not operate normally by following
  the operating instructions. Adjust only those controls
  that are covered by the operating instructions as an
  improper adjustment of other controls may result in
  damage and will require extensive work by a qualified
  technician to restore the product to its normal operation;
- If the product has been dropped or damaged in any way:
- If the product exhibits a distinct change in performance
   this indicates a need for service.
- 17. Replacement Parts When replacement parts are required, be sure the technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 18.Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- Wall or Ceiling Mounting The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 20.Heat The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## **Front and Rear Panel**

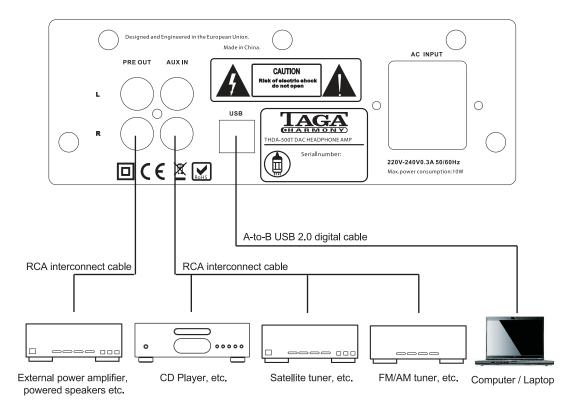




- 1. Power Switch
- 3. Volume Control
- 5. Preamplifier Output (PRE OUT)
- 7. USB Input Port

- 2. Headphones Output
- 4. Input Selector
- 6. AUX Input
- 8. AC Input

# **Connecting Audio Sources and External Powered Equipment**



# **Installation and Operation**

There are two options for connecting source devices.

## **OPTION 1**

(Connecting your computer via a digital USB input)

## Computers with Windows®

- 1. Plug the power cord into the electrical outlet. Make sure the amplifier is switched off (Power Switch to OFF).
- 2. Set the input selector which is located on the front panel to USB.
- 3. Using a USB cable (supplied with this amplifier), connect your computer the USB Input Port.
- 4. Install the CMEDIA USB2.0 Audio Device driver applies only for the Windows® operating system. (See pictures 1 and 2)
- \* The driver package as a compressed zip file is available for download on <a href="www.taga-audio.com">www.taga-audio.com</a> on page of this product.
- \* After downloading extract the files from the zip file.
- \* Run the **Setup** file located in the unzipped folder and follow the installation instructions on the screen.
- \* Make sure to reset computer after the installation is completed.
- 5. Set Playback in your computer to "Speakers USB2.0 High-Speed True HD Audio" (See picture 3)
- a) Choose Control Panel->Hardware and Sound->Sound->Manage Audio Devices;
- b) Locate a device: "Speakers USB2.0 High-Speed True HD Audio" and highlight it;
- c) Click "Set Default"

To enjoy the best sound quality, we suggest to change a default format of your audio device to "24 bit, 192000 Hz (Studio Quality)" – right-click on the "Speakers USB2.0 High-Speed True HD Audio" device, choose Properties and then Advanced tab and change Default Format.

Windows® XP: Set the Amplifier built-in "Audio Card" (USB 2.0 High-Speed True HD Audio) as "Default Audio Device" and the Computer Default Audio Device as "Desktop Speaker" (NOT "headphone"). Set the "Audio device" as the Amplifier built-in "Audio Card" (USB 2.0 High-Speed True HD Audio) in your Player software.

- 6. Connect your headphones to the Headphones Output.
- 7. Set the Volume Control to MIN.
- 8. Switch on the amplifier (Power Switch to ON).
- 9. Start playing your music on the computer and control the output volume of the amplifier by regulating the Volume Control.

**Note!** High volume levels can damage your ears and/or headphones or amplifier. This may void your warranty.

Note! Operation and user interface may vary depending on your Windows® version.

#### Trademark notice:

Windows® is a registered trademark of Microsoft Corporation in the United States and/or other countries.

# **Installation and Operation**



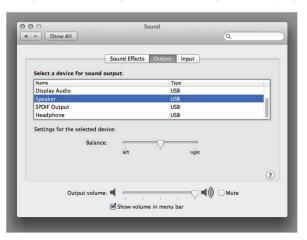


Picture 3

## MAC® computers (no driver required)

Picture 2

- 1. Plug the power cord into the electrical outlet. Make sure the amplifier is switched off (Power Switch to OFF).
- 2. Set the input selector which is located on the front panel to USB.
- 3. Using a USB cable (supplied with this amplifier), connect your MAC® computer the USB Input Port.
- 4. Go to System Preferences, click on Sound and set Speaker to USB. Set the volume control to Maximum. Note! You may also need to adjust the volume in your music player software.



# **Installation and Operation**

- 5. Connect your headphones to the Headphones Output.
- 6. Set the Volume Control to MIN.
- 7. Switch on the amplifier (Power Switch to ON).
- 8. Start playing your music on the MAC® computer and control the output volume of the amplifier by regulating the Volume Control.

**Note!** High volume levels can damage your ears and/or headphones or amplifier. This may void your warranty.

## **Trademark notice:**

MAC® is a trademark of Apple Inc., registered in the U.S. and other countries.

## **OPTION 2**

(Connecting an analog audio source - CD Player, Game Console, Satellite Tuner etc.)

- 1. Plug the power cord into the electrical outlet. Make sure the amplifier is switched off (Power Switch to OFF).
- 2. Set the input selector which is located on the front panel to AUX.
- 3. Using an RCA stereo interconnect cable (not supplied with this amplifier), connect your analog audio source (CD Player etc.) to the AUX Input.
- 5. Connect your headphones to the Headphones Output.
- 6. Set the Volume Control to MIN.
- 7. Switch on the amplifier (Power Switch to ON).
- 8. Start playing your music from the audio source and control the output volume of the amplifier by regulating the Volume Control.

Note! High volume levels can damage your ears and/or headphones or amplifier. This may void

# **Preamplifier Output (PRE OUT)**

This amplifier is equipped with a preamplifier output (PRE OUT). You can connect to it external equipment (power amplifier, powered speakers, active subwoofer etc.) using an RCA interconnect cable (not supplied with this amplifier). The PRE OUT is variable according to the Volume Control. Before connecting an external equipment make sure that your amplifier is switched off (Power Switch to OFF) and the Volume Control is set to MIN.

# **Troubleshooting**

If the unit fails to operate normally please check the following points to determine if the fault can be corrected. If the fault cannot be corrected then please disconnect the power cord and contact the authorised dealer.

| SYSTEM                | POSSIBLE PROBLEM   | SOLUTION  |
|-----------------------|--|---|
| No Power              | Power cord is not plugged in or is not completely inserted | Plug in the power cord firmly   |
| No sound T            | Input select is not correct                                | Please set the Input Selector correctly according to the input source being used  |
|                       | Input source is low  | Increase the volume level on the audio source device  |
|                       | No volume or low volume                                    | Turn the volume control clockwise to increase the system volume level   |
|                       | The headphones are not properly connected to the amplifier | Connect the headphones correctly  |
|                       | There could be a problem with your audio source            | Change your audio source  |
|                       | Application software not properly configured               | Make sure that the application software<br>(eg. Winamp,iTunes)has been properly<br>configured to use USB audio device as<br>its audio   |
| Sound is<br>distorted | Volume level of the system is set too high                 | Decrease the volume level   |
|                       | Sound source is distorted                                  | WAV and MIDI files are often of poor quality; Therefore distortion and noise are easily noticed with high powered speakers. Try a different audio source, (e.g., a CD player) |