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# USER MANUAL

## GOLDMUND THA2

### Telos Headphone Amplifier



Thank you for purchasing the Goldmund THA2 Telos Headphone Amplifier.

You have acquired one of the best integrated amplifiers ever made for professional and domestic uses. It incorporates the Goldmund TELOS amplifier technology and will soon become THE MUST HAVE for headphone addicts and music lovers who wish to enjoy their favorite tracks privately. Please take some time to read this manual. It may provide you with useful information to make your pleasure of listening to the THA2 Telos Headphone Amplifier even higher.

## INTRODUCTION

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### GOLDMUND THA2 TELOS HEADPHONE AMPLIFIER

Goldmund was founded in 1978 and has ever since been dedicated to the accurate reproduction of sound and image.

At Goldmund, we strive to lead in the creation, development and manufacture of the industry's most advanced technologies, including audio and video systems.

The guiding principle at Goldmund is to produce a precise sound with the latest possible loss of quality through the different stages. Goldmund will never adopt a technology before it is sufficiently developed to satisfy the high quality standards we set. This is why Goldmund has often rejected mainstream technologies and developed its own.

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## W A R N I N G

This high quality headphone amplifier possesses new technical features such as ultra-high band width and computer linking which are necessary for accurate transcription within today's best audio systems.

Only careful use can provide all the satisfaction you are expecting.

All handling must be performed according to the following instructions to avoid impairing the amplifier's performance.

Nevertheless, if the instructions are perfectly carried out, you will notice that the use of the GOLDMUND THA2 TELOS HEADPHONE is quite simple and convenient.

### **IMPORTANT**

PLEASE DO NOT CONNECT ANY CABLES OR MOVE ANY PARTS BEFORE READING THE FOLLOWING INSTRUCTIONS.

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## 1

# UNPACKING

You will find within the custom packaging:

- The Headphone Amplifier
- The power cord
- This owner's manual

Unpack the above-mentioned parts carefully.

Keep all packaging for future use.

## WARNING

If you need to return the THA2 to the factory or to your local representative for a warranty repair, please note that it must be repacked in the original packaging.

This packaging has been designed specifically to protect your headphone in transit. Use of alternative packaging is likely to result in damage, invalidating warranty cover.

## 2

# CHOICE OF LOCATION & COOLING

The THA2 Amplifier, like all high quality amplifiers, generates heat when driven at high levels and therefore must be vented properly.

It is mandatory to allow proper cooling of the mechanical enclosure

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## CONNECTIONS & LINE VOLTAGE ADJUSTMENTS

Connect the power cord to the back of the headphone amplifier and plug it into the nearest wall plug. For safety reasons, use only a 3 lugs grounded plug.

To get the best sound from the THA2, avoid any multi-way plugs or extension cords.

Connect a computer, CD/DVD or Blu-ray player to the back panel of the Goldmund THA2 Telos Headphone Amplifier, using either the USB Audio, Toslink Optical, RCA Digital or RCA Analog connectors.

A USB driver needs to be installed on your computer before to use it as a source with your THA2.

Mac and Linux operating system do not need driver to be used with the THA2.

Please contact your authorized Goldmund retailer to assist you to set up your computer for use with the THA2.

When the input source is connected, connect your THA2 using one of the two headphone input connectors located on the front plate of your unit.

Select one of the 3 available inputs for listening using the front input switch.

Select the audio mode between STD (standard) or BIN (binaural). Use the binaural mode for a better audio quality (see amplifier controls) for more details.

Only one connection per input can be used at once. The Optical Toslink input has the priority on the RCA Digital input, in case you want to use the Digital input, unplug the Optical cable from the digital input.

### **ATTENTION:**

A residual high frequency noise may remain audible in some circumstances if an analog input is left open and is selected. This disturbance has no effect on the amplifier but may be avoided easily through the application of short-circuit plugs on all unused inputs.

**Note:** A gain selection is available to raise the global gain of your THA2 in case you are using a headphone with a low sensitivity. Please contact your official Goldmund representative to configure your unit.

**LINE VOLTAGE ADJUSTMENT**

The Goldmund THA2 Telos Headphone Amplifier uses an internal power supply developed by Goldmund to provide totally separate voltage between the USB part and the digital/analog circuitry.

Your power supply unit has been set to operate with the mains voltage of your area. Check on the power supply voltage switch on the rear panel if there is any doubt. If you move after purchasing the amplifier to an area using a different AC mains voltage, you can change the voltage yourself or consult your local Goldmund dealer for assistance in doing so.

The voltage selector on the rear panel allows choosing between 220V (234V nominal) and 110V (117V nominal).

Please refer to the Technical Specifications at the end of this manual for the main line voltage range.

In case the nominal line voltage in your country is out of range, please consult your local Goldmund dealer for assistance.

The power supply unit can operate indifferently with both 50 and 60 Hz AC line.

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# AMPLIFIER CONTROLS

The THA2 is powered on using the switch located on the back panel. In regular use this switch should be left ON at all times (see sound quality optimization).

The amplifier is powered OFF by switching the back panel switch to the OFF position. A safety circuit switches the unit to mute to avoid any disturbance reaching the speakers.

### **BINAURAL MODE SWITCH**

The Binaural stereophonic-to-binaural DSP implementation is designed to improve headphone listening of standard stereo audio records.

This method will improve the fidelity of music reproduction and reduce the fatigue of the listener.

For more information about this implementation, contact your official Goldmund representative.

### **VOLUME ADJUSTMENT**

The level control may be adjusted manually using the front panel knob.

### **SELECTOR**

The selector knob selects one of three available inputs (1xUSB, 2xDigital in parallel and 1xAnalog).

An orange locking led is lighted up when an analog or USB input is selected and when a digital source is connected to the digital input.

### **SERIAL PORT**

The THA2 can be controlled via a standard computer serial port, which is used also for future software upgrade, please contact your Goldmund representative for more details.

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# SOUND QUALITY OPTIMIZATION

### **WARM UP SONIC EFFECT**

If the amplifier has been powered off for some time, the optimum sound quality is only reached after some time. It may take 15 minutes for the amplifier to reach optimum operating temperature, as the circuits have to warm up to around +55 degrees Celsius (=131degrees Fahrenheit).

**Note:**

**Binaural records** must be played using the standard mode.



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## MAINTENANCE AND CLEANING

The THA2 usually requires no maintenance. Please contact your Goldmund approved dealer if any maintenance should be required.

Always turn the power OFF before cleaning your THA2. To clean the external metal of the amplifier, always use a clean, soft, damp cloth. Dampen it with water or a mild detergent solution. Avoid abrasive or harsh cleansers (e.g. products containing sodium carbonate). The identification plate is plated with precious metal. Simply clean it with a soft cloth, without any chemical solution.

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## TECHNICAL DATA

### POWER SUPPLY

- Nominal mains voltage: 117 V or 234 V (switchable), 50 to 60 Hz
- Mains voltage range: +/- 10 %
- 1.6A slow-blow fuse
- Separated ground and earth signal
- Connection between earth and ground to cancel all ground loops

### INTERFACE AND FUNCTIONS

- Input selectable through front panel switch
- Binaural mode switch according to the publication "*Improved Headphone Listening*" of Siegfried Linkwitz
- USB device: Audio Class 2.0 (no driver required on Mac OS X as of v.10.6.4 nor on Linux, driver required only for Windows)
- 1 x Toslink Optical or Digital S/PDIF coaxial RCA 75 Ohms
- 1 x Analog RCA (Left & Right): ADC conversion for DSP correction
- RS232 Command connector
- ON/OFF power switch key
- Sample rate up to 384 kHz/Bit depth up to 32
- DSD over PCM capabilities
- Digital volume knob on front panel
- Gain adjustable for low/high sensitivity headphones.

## TECHNICAL DATA (Ctd.)

### AMPLIFIER

- Amplifier dynamic Range: > 100 dB (no weighting)
- Frequency response: +/- 0.55 dB (20 Hz - 20 kHz, unloaded)

### SIZE AND WEIGHT

- 30 W x 35 D x 10 H (cm)
- Weight: 12 kg

### WARRANTY

- 3 years parts and labor

Information and product specifications contained in this manual are subject to change without prior notice. Updated versions of this manual will be posted on our website at [www.goldmund.com](http://www.goldmund.com).

Please visit our support page at <http://www.goldmund.com/support/register> to register your Goldmund product for warranty.

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