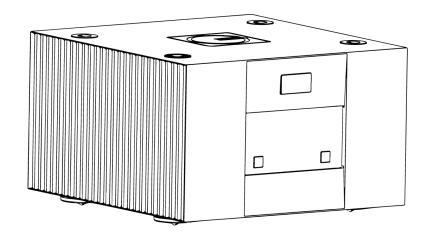
# **USER MANUAL**

TELOS 1800 Mono Power Amplifier



Thank you for purchasing the Goldmund TELOS 1800.

You have acquired one of the finest Universal Power Amplifier ever crafted for professional and domestic use.

Please allocate some time to peruse this manual and you shall discover invaluable insights to elevate your auditory enjoyment of the TELOS 1800 to unprecedented heights.

## INTRODUCTION

### TELOS 1800 Mono Power Amplifier

Since 1978, Goldmund has been dedicated to developing audio equipment of the highest quality and accuracy to immerse you in the most realistic audio experience possible.

At Goldmund, we are committed to being at the forefront of the creation, development, and manufacture of the industry's most advanced technologies, including audio systems and music distribution.

Our aim is to provide the most accurate sound possible, with the least possible loss of quality during the various stages. With a team of rigorous engineers, Goldmund is constantly pushing back the boundaries of the exceptional to keep developing its own ever more innovative technology.

### WARNING

Absolutely no connections or manipulations should be attempted prior to thoroughly reviewing these instructions. Failure to adhere to the subsequent instructions may lead to damage to the amplifier.

These exceptionally high-quality amplifiers incorporate novel technical advancements that are imperative for achieving precise sound reproduction within top-tier audio systems.

### Only careful installation and use can provide the satisfaction you are expecting from this product.

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

#### IMPORTANT

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

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## PRELIMINARIES

The connection between the analogue and digital sources, the acoustic processor, as well as between pre-amplifiers and power amplifiers, holds paramount importance. Ultra-low reflection interconnect cables are absolutely mandatory to retain the time integrity that the amplifier is designed to provide.

## UNPACKING

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You will find the following items within the custom packaging:

- The amplifier
- The power cord
- This manual

Please unpack the components with care.

### CAUTION

Should you need to return the TELOS 1800 to the factory or your local representative for warranty repair, please be aware that it must be repacked using the original packaging.

This packaging has been designed to specifically safeguard your TELOS 1800 during transit. Utilizing alternative packaging is likely to result in damage and invalidate warranty coverage.

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## CHOICE OF LOCATION & COOLING

The TELOS 1800 amplifier, as all high quality amplifiers, generates a substantial amount of heat when operating at high levels and necessitates adequate ventilation. Proper cooling of the heat sinks is mandatory. Placing temperature-sensitive equipment atop the amplifier is strongly discouraged.

Given its weight and to maximize the impact of the integrated "Mechanical Grounding" structure, it is advisable to place the TELOS 1800 on the floor. Alternatively, robust supports with rigid floor transmission may be employed.

The TELOS 1800 is equipped with four extremely rigid conical feet designed to ensure optimal vibration transfer to the amplifier's base. This facilitates the elimination of adverse vibrations within the amplifier, adhering to the renowned GOLDMUND "Mechanical Grounding" principle. Depending on the levelness of the chosen installation surface, it may be necessary to adjust one or more of these feet to ensure complete contact points with the supporting surface and amplifier alignment.

## LINE VOLTAGE ADJUSTMENTS

Goldmund atelier configures the internal voltage wiring. If your line voltage does not match the voltage specified on the amplifier's serial label, kindly contact your local GOLDMUND dealer for internal adjustments.

# 4 LINE VOLTAGE ADJUSTMENTS (Ctd.)

### ATTENTION

For the 230V version, the TELOS 1800 amplifier operates correctly within a main line voltage of 230V  $\pm$ 15%. On the 115V version, the main line should be maintained at 115V  $\pm$ 15%. Should your main line deviate from these tolerance levels, we recommend contacting your GOLDMUND dealer for guidance.

Kindly verify the value of the main line fuse, which can be found on the rear panel of the amplifier.

## CONNECTIONS

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Connect the power cord to the amplifier's rear panel and plug it into the nearest wall outlet. Use a three-prong grounded plug for safety. For optimal amplifier performance, abstain from using multiple plugs or extension cords.

If used with an analogue signal, connect the interconnect between the preamp and each power amp and set the TELOS 1800 in analogue mode. You may either use the RCA female socket or the XLR. The XLR socket, especially useful in professional installations, is wired as follows:

- 1. Grounding, Shielding
- 2. Hot
- 3. Cold

## CONNECTIONS (Ctd.)

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When used with a digital input signal, connect the digital input cable to the digital input and switch the amplifier into the digital mode. Since a digital S/DPIF cable carries 2 channels, you may link the digital output to the next amplifier to transfer the S/PDIF input channel.

Connect the speaker cables to the Left & Right red and black binding post terminals at the rear of the amplifier, or to the Left & Right 4B type connectors using Goldmund high-definition speaker cables.

The 2 separate binding post 5-way output and Goldmund 4B type output connectors are connected internally in parallel. They are provided to facilitate the connection in bi-amping systems.

### IMPORTANT NOTE

- To avoid any significant damage the TELOS 1800 amplifier cannot be bridged.
- Make sure the amplifier is turned off before connecting or disconnecting any cable.
- Do not disconnect the amplifiers power cord before the amplifier's power-down sequence is completed (see next page "Powering Off Process").

### Power On Process

- Progressive charge of high power capacitors to limit peak current on AC line.
- Switch on high power supply on output stage.
- Wait stabilization of high power supply.

### **Power Off Process**

- Push both buttons simultaneously in order to turn off the amplifier.
- As soon as the amplifier is in Standby mode, the yellow indicator will blink briefly every 3 seconds.

## CONTROLS & USE

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### 6.1 Manual Operation

- On the front plate of the GOLDMUND TELOS 1800 amplifier you will find only two POWER keys.
- The two POWER keys have to be activated simultaneously to power the amplifier on. This security feature is provided to avoid accidental POWER ON or POWER OFF.
- As soon as the amplifier is connected to mains power, the orange indicator on the front panel will blink briefly every 3 seconds.
- Push both buttons of the front panel simultaneously in order to turn on the amplifier.
- As soon as the amplifier is fully powered the green indicator will light steadily and the menu will be displayed.
- If the digital input is not used, the orange LED is off, showing there is no lock and the amplifier remains muted until a lock is found. The LED will turn on as soon as the TELOS 1800 receives a digital input.
- In analogue mode (XLR & RCA) the orange LED is always on.
- By pressing the right key once, the amplifier is put in Operate mode UNMUTE, by pressing the right key once again, the amplifier returns to the menu MUTED state.
- The amp may be POWERED OFF by pressing the two POWER keys simultaneously at any time.

## CONTROLS & USE (Ctd.)

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### 6.2 Input Selection

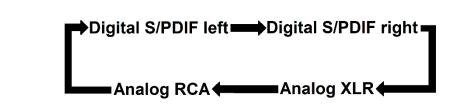
- The menu is only available from the main screen when the amplifier is muted.
- Use the left button to enter the menu and cycle through the menu items (INPUT and DISPLAY).
- Once the wanted menu item is shown on the screen, push the right button to cycle through the available settings of the given item.
- Once the wanted setting is chosen, push the left button to confirm your choice.
- Push the left button again to continue to the next menu item or get back to the main screen.
- Left button: to navigate into the menu to select the input, and screen brightness adjustment.
- Right button: to select the digital left/right input, analogue input (RCA & XLR) and mute/unmute the amplifier.



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### 6.2 Input Selection (Ctd.)

On the input selection menu, one press on the right button moves the Input selection to the right as follow:



# SOUND QUALITY OPTIMIZATION

### WARM-UP SONIC EFFECT

When the amplifier has not been used recently it will take 10 to 15 minutes for the amplifier to reach optimum operating temperature.

## MAINTENANCE & CLEANING

The GOLDMUND TELOS 1800 amplifier usually requires no maintenance.

Use a clean, soft, damp cloth to clean the amplifier surface. Dampen the cloth with water or a mild detergent solution.

Avoid abrasive or harsh cleansers (e.g. products containing sodium carbonate).

### WARNING

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Always turn the power off before cleaning your preamplifier.

There are no user serviceable parts inside the TELOS 1800. Unauthorized servicing or alteration invalidates the manufacturer's warranty.

## **TECHNICAL SPECIFICATIONS**

### POWER SUPPLY

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- Nominal line voltage: 115 V or 230 V
- Input voltage range: +/- 15 %
- 2500 VA Toroidal Power Transformer
- Capacitor bank: 78'400 µF

### RATED POWER CONSUMPTION

• IEC 60065, 1/8 Output Power at 8 Ω: 250 W

### **REAR PANEL**

- 1 x Power cord: universal socket 3 lugs
- 1 x Main fuse (4 A slow-blow for 230 V) ; (8 A slow-blow for 115 V)
- 1 x Green-yellow AC earth binding post (with bridge connection)
- 1 x Ground lift switch
- 2 x output binding posts (red & black)
- 1 x output Goldmund speaker 4B type connector
- 1 x Analogue RCA input (unbalanced connector)
- 1 x Analogue XLR input (balanced connector)
- 1 x Digital input and output RCA connectors
- 1 x RS232 command connector

### INPUT

- Max level before clipping, Analogue input: 1 Vrms
- Max level before clipping, Digital input: -6 dBFS

### OUTPUT

• Max level before clipping, 1 % THD, unloaded: 170 Vpp

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### DISTORTION

**OUTPUT POWER** 

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• IMD (SMPTE), unloaded: < 0.05 %

**TECHNICAL SPECIFICATIONS (Ctd.)** 

• THD+N, unloaded: < 0.05 % from 20 Hz to 20 kHz at 30 Vrms output

• Maximum power (IEC60065): 420 Wrms on 8  $\Omega$  / 1 % THD

### OUTPUT NOISE FLOOR

- Analogue input terminated with RCA Shorting Caps, unloaded: < 3  $\mu V$  from 20 Hz to 20 kHz

### GAIN

• 35 dB

### DYNAMIC RANGE

• 22 kHz measurement bandwidth (flat), true RMS unloaded: 110 dB

### DAMPING FACTOR

• 600 at 1 kHz / 8 Ω

### SIZE & WEIGHT

- 44 W x 28 H x 46 D (cm) 17.4 W x 11.1 H x 18.2 D (inch)
- 51 kg

Information and product specifications contained in this manual are subject to change without prior notice.

Visit our website at www.goldmund.com