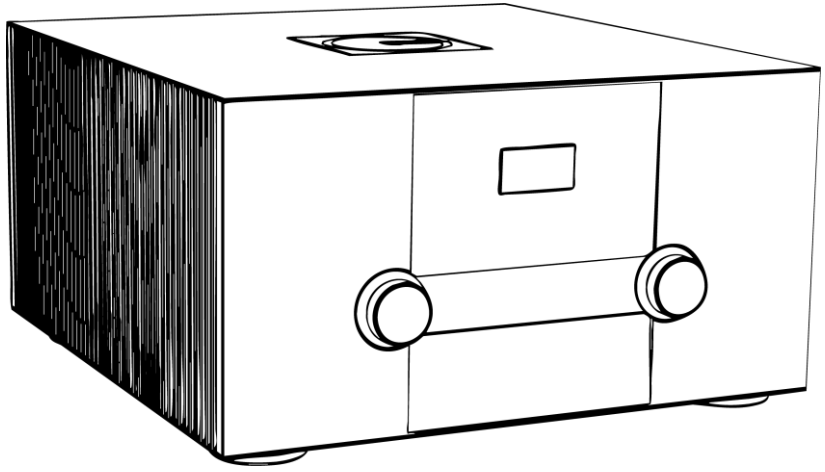
USER MANUAL

TELOS 790
Integrated Stereo Amplifier



Thank you for purchasing the GOLDMUND TELOS 790.

Please take some time to read this manual. It will provide you with useful information to make your pleasure of listening to the TELOS 790 even higher.

INTRODUCTION

TELOS 790
Integrated Stereo Amplifier

Goldmund 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, home - networking and music distribution.

The guiding principle at Goldmund is to produce a precise sound with the least 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. Therefore, Goldmund has often rejected mainstream technologies and developed its own.

! W A R N I N G !

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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1 PRELIMINARIES

Please read the following instructions very carefully. This high-precision unit will provide the best signal possible to your speaker thanks to its unique technology.

For exacting technicians, musicians, and all high-fidelity music purists who demand the very best in musical reproduction, we strongly recommend the use of top-quality audio source.

The connection between the analogue and digital sources and the Telos 790 as well as between the Telos 790 and the speakers are critical. Ultra low reflection interconnect cables are mandatory in analogue and precise impedance S/PDIF cables in digital to keep the time integrity that the Telos 790 is designed to provide.

2 UNPACKING

You will find in the GOLDMUND TELOS 790 box:

- Amplifier
- Remote Control
- Power Cord
- Owner's Manual

Unpack the above-mentioned parts carefully and keep all packaging for future use.

WARNING

If you need to return the TELOS 790 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 specifically designed to protect your TELOS 790 in transit. Use of alternative packaging is likely to result in damage, invalidating warranty coverage.

3 CHOICE OF LOCATION & COOLING

The TELOS 790 amplifier, as all high-quality amplifiers, can generate a significant amount of heat when driven at high levels and must be vented properly. It is mandatory to allow a proper cooling of the heat sinks. Do not put temperature sensitive equipment on top of the amplifier.

The TELOS 790 is built on four very hard conical feet to ensure proper vibration transmission to the amplifier support. This evacuates all detrimental vibrations inside the amplifier, following the famous GOLDMUND "Mechanical Grounding" principle.

Due to its weight, and to maximize the effect of the built-in "Mechanical Grounding" construction, the TELOS 790 requires a very rigid support such as the floor. Other very strong supports can be used if they offer rigid transmission to the floor.

Depending on the flatness of the surface where the amplifier will be located, you can adjust the conic feet to allow full contact of the points with the support.

4 LINE VOLTAGE ADJUSTMENTS

The Telos 790 features a proprietary Goldmund power supply that provides completely isolated voltage between the USB section and the digital/analogue circuitry. The internal voltage is factory-set to match your region's mains power. If unsure, check the voltage selector switch on the rear panel. If you relocate to a region with a different mains voltage, you may adjust the switch accordingly or contact your local GOLDMUND dealer for internal modification.

ATTENTION

On the 230V version, the GOLDMUND TELOS 790 amplifier will function properly for main line voltage at 230V ±10%. On the 115V version, the main line must be 115V ±10%. If your main line is usually out of these tolerances, please consult your GOLDMUND dealer.

5 1st INSTALLATION & CONNECTIONS

Connect the power cord to the rear of the integrated amplifier and plug it into the nearest wall plug. Use only a 3 lugs grounded plug, for safety reasons. To get the best sound from the amplifier, avoid any multiple plug or extension cord.

Connect a computer, music streamer, CD/DVD or Blu-ray player to the rear panel of the Telos 790 integrated amplifier using either the USB Audio (input 1), the Toslink Optical connector (input 2), RCA Digital (input 3), RCA Analogue (inputs 4 to 7) or XLR Balanced (inputs 8 & 9).

Once the input source is connected, connect the speakers to your Telos 790 using the two speaker output connectors located on the rear panel of your unit.

Select one of the 8 available inputs for listening using the front input knob or the remote. Only one connection per input can be used at once.

WARNING

For safety reasons connect all cable between your sources and speaker to your Telos 790 before turning it on.

ATTENTION

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

6 FRONT PANEL FUNCTIONS

INPUT SELECTOR

Rear panel inputs are selected using the input selector knob on the front panel.
When a digital input is selected, the orange LED on the front panel will illuminate only if the digital source has successfully locked onto the source frequency.
For analogue inputs, the orange LED remains constantly on.

VOLUME ADJUSTMENT

The volume level can be adjusted manually, using the front panel knob. Volume adjustment affects all channels simultaneously.

7 REMOTE CONTROL

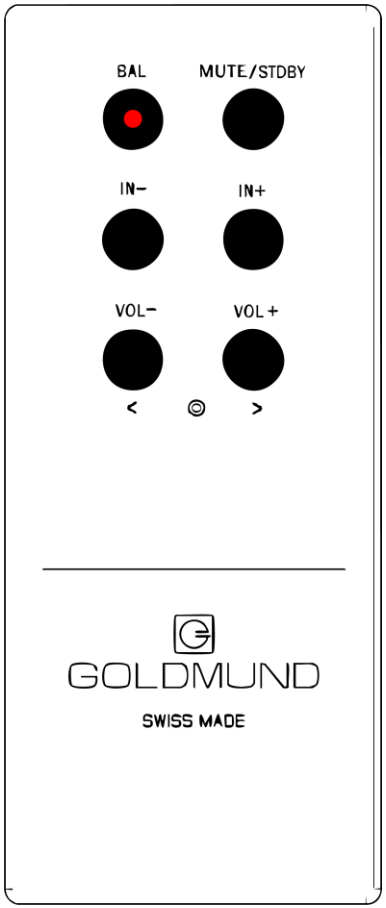
VOLUME ADJUSTMENT

Use the "VOL–" and "VOL+" buttons to adjust the global volume.

VOLUME MEMORY / RESET

You can store a preferred volume setting for easy recall.

- To memorize volume:
  Press "VOL–" and "VOL+" simultaneously for 3 seconds.
  The BAL LED will blink for 2 seconds to confirm memory.
  (Note: Volume cannot be memorized at zero.)
- To recall memorized volume:
  Press "VOL–" and "VOL+" briefly at the same time.
  The system will automatically return to the saved volume level.



7 REMOTE CONTROL (Ctd.)

INPUT SELECTOR

The center left and right buttons “In-“ & “In+” are selecting the source to listen. Left button decreases the input, right button increases the input.

MUTING / STANDBY

The mute circuit is controlled using the remote. To mute or un-mute the Telos 790 with the remote, press the “MUTE/STDBY” key briefly. When activated, the screen will show two dashes (“–”) in place of both the volume and input displays.

BALANCE ADJUSTMENTS

To activate the balance control, first, press the “BAL” key on the remote control. Then, adjust the balance using the “<” for left side or “>” for right side.

Adjustment can be done when the Led on the “BAL” key is lit. To center the balance, press simultaneous “<” & “>”, the BAL led will blink twice indicating the confirmation of the command.

8 SOUND QUALITY OPTIMIZATION

WARM-UP SONIC EFFECT

When the amplifier has been powered off for an extended period, the optimal sound quality is attained gradually. It may require around 15 minutes for the amplifier to reach its optimal operating temperature, as the circuits need to warm up to approximately +55 degrees Celsius (equivalent to 131 degrees Fahrenheit).

9 MAINTENANCE & CLEANING

The TELOS 790 amplifier typically requires minimal maintenance. There are no user serviceable parts inside the TELOS 790. Unauthorized servicing or alteration invalidates the product's warranty. Should maintenance ever become necessary, please get in touch with your authorized Goldmund dealer.

Prior to cleaning your amplifier, always ensure that the power is switched OFF.

When cleaning the external metal surfaces of the amplifier, make use of a clean, soft, damp cloth. You can lightly moisten the cloth with water or a mild detergent solution. Refrain from using abrasive or harsh cleaning agents (such as products containing sodium carbonate).

The identification plate is coated with a precious metal. Simply clean it using a soft cloth, without the need for any chemical solutions.

10 TECHNICAL SPECIFICATIONS

POWER SUPPLY

- Nominal line voltage: 115 V or 223 V
- Input voltage range: +/- 10 %
- 2 x 1000 VA Toroidal Power Transformer
- Capacitor bank: 93'600 µF

RATED POWER CONSUMPTION

- IEC 62368-1, 1/8 Output Power at 8 Ω: 320 W

REAR PANEL

- 2 x output binding posts (left & right)
- On/Off power switch key
- Voltage input selector
- RS232 Command connector
- 1 x 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, contact your Goldmund
- representative):
    - Sample rate up to 384 kHz/Bit depth up to 32
    - DSD64, DSD128 over PCM capabilities
- 1 x Toslink Optical
- 1 x Digital S/PDIF coaxial RCA 75 Ohms
- 4 x Analogue RCA unbalaced (left & right)
- 2 x Analogue XLR balanced input (left & right)

10 TECHNICAL SPECIFICATIONS (Ctd.)

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

OUTPUT POWER

- Maximum power (IEC 62368-1):
  - 2 x 300 Wrms on 8 Ω / 1 % THD
  - 2 x 400 Wrms on 4 Ω / 1 % THD

DISTORTION

- IMD (SMPTE), unloaded: < 0.02 %
- THD+N, unloaded: < 0.08 % from 20 Hz to 20 kHz at 30 Vrms output

OUTPUT NOISE FLOOR

- Analogue input terminated with RCA Shorting Caps, unloaded: < 10 µV from 20 Hz to 20 kHz

GAIN

- 35 dB

DYNAMIC RANGE

- 22 kHz measurement bandwidth (flat), true RMS unloaded: 100 dB

10 TECHNICAL SPECIFICATIONS (Ctd.)

DAMPING FACTOR

- 600 at 1 kHz / 8 Ω

SIZE & WEIGHT

- 47.8 W x 26.6 H x 54.7 D (cm)
- 18.82 W x 10.47 H x 21.54 D (in)
- 37 Kg

GOLDMUND
SWISS MADE

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

Visit our website at www.goldmund.com