

USER MANUAL

GOLDMUND TELOS 150
Analog Power Amplifier



Congratulations.

Thank you for purchasing the Goldmund Telos 150.

You have acquired one of the best Analog Power Amplifier ever made for professional and domestic uses. Please take some time to read this manual. It will provide you with useful information to make your pleasure of listening to the Telos 150 even higher.

INTRODUCTION

GOLDMUND TELOS 150 Analog Power 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, 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. This is why Goldmund has often rejected mainstream technologies and developed its own.

W A R N I N G



No connection or manipulation must be done before reading those instructions. Damage of the amplifier may result if the following instructions are not consciously understood and applied.

This extremely high quality amplifier possesses new technical features which are a necessity for accurate sound reproduction in the best audio systems.

Only careful installation and use can provide the satisfaction you are expecting.

The installation instructions must be carried out in full and the mentioned precautions taken to get the expected result and to avoid impairing the amplifier's performance.

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ATTENTION: If you need to return the Telos 150 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 Telos 150 in transit. Use of alternative packaging is likely to result in damage, **invalidating warranty cover.**

UNPACKING

You will find in the Goldmund Telos 150 box:

- The amplifier
- The power cord
- This manual and the warranty card
- Accessories and spare fuses.

Unpack the above-mentioned parts carefully.

Please keep the packaging in case you need to transport the amplifier at a later date or if you have to send it for maintenance.

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CHOICE OF AMPLIFIER LOCATION AND COOLING

The Goldmund Telos 150 Amplifier, as all the high quality amplifiers, may generate a large amount of heat if driven at high power.

It is mandatory to allow a proper cooling of the heat sink.

Avoid any location which is not properly ventilated and avoid putting other equipment on top of the amplifier.

ATTENTION: On the 220 V position, the Goldmund Telos 150 amplifier will function properly for AC voltages between 200 V and 245 V. On the 110 V position, the AC line must deliver between 95 V and 125 V. If your AC line is usually out of these tolerances, please consult your local Goldmund dealer.

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LINE VOLTAGE ADJUSTMENT

An AC line voltage selection is possible on the rear panel. Please choose the setting corresponding to your voltage.

Please check the value of the mains line fuse. This fuse is located in the power cord receptacle. The lid can be removed with a small screwdriver when the cord is removed.

Use a 8 A slow-blow fuse.

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CONNECTIONS

Check if volume control is down to zero on the preamplifier.

Connect the analog outputs of your analog preamplifier to the analog inputs of the Telos 150.

Connect the speaker cables to the red and black terminals accessible at the back of the amplifiers.

You may notice that the ground of the input and the black speaker terminal are of the same polarity. The amplifier is non-inverting in phase.

Then, connect the power cords to the back of the amplifier and plug it in the nearest wall plug. Use a 3 lugs grounded plug, for safety reasons. To get the best sound of the amplifier, avoid any multiple plug or extension cord.

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AMPLIFIER CONTROLS

On the front plate of the Goldmund Telos 150 Amplifier you will find only one switch: the "POWER" key, used to power the amplifier ON and one power LED.

When turned ON the 2 channels are immediately connected and the front panel "POWER" LED lights up.

The amplifier may be powered OFF by turning off the "POWER" switch at any time. The LED will fade very slowly, indicating discharge of the filter capacitors. The speakers will be disconnected after a few seconds.

It is absolutely normal that a slight sound is heard from the speakers when the amplifier is turned ON or OFF. The sound heard is corresponding to the charging and discharging of the capacitors.

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SOUND QUALITY OPTIMIZATION

WARM-UP SONIC EFFECT

If the power amplifier has not been powered on for a few days, the optimum sound quality is reached after 15 minutes. This delay has been optimized to be minimal and the sonic quality when just powered on is much higher than other quality power amplifiers.

SPEAKER POLARITY

Even if you have an absolute phase inverter on your preamplifier (Mimesis 22M), and even if you have carefully selected the proper line phase (see in next section), there is a possibility to again increase the sonic quality of your speakers by reverting the polarity of each speaker cable at amplifier termination. But since the line phase and the speaker polarity interfere to each other, you have to experiment carefully with all the combinations before picking the right one.

If your preamplifier has an absolute phase inverter, this will interfere too. If it has not, don't forget the result will depend on the source, as most records and CDs have been recorded without care for the absolute phase. Be patient...

MAINS LINE PHASE INVERSION

The sonic quality of your Goldmund Telos 150 can be greatly improved if the mains AC line is properly connected. Try to invert the AC plugs of both your amplifiers, using special adapters.

We recommend that you try this carefully. You must do it in combination with the speaker polarity and/or with absolute phase switching to be sure of the best result.

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ATTENTION: the Goldmund Telos 150 is an extremely high speed amplifier.

Any bad ground connection can generate high frequency oscillation which is dangerous for tweeters.

It is also generally dangerous to run analog input cables and speaker cables in parallel for a long distance. If these cables are not of high quality or badly shielded, an "Antenna-Effect" can generate dangerous high-frequency oscillations.

SAFETY AND PRECAUTIONS

PROTECTION AGAINST DC

The Goldmund Telos 150 is a DC-coupled amplifier without protection. If it is associated with a badly designed or defective analog preamplifier (often true for tube preamplifiers and some 5 channel processors), the speakers could easily be damaged by the DC.

The Telos 150 doesn't amplify DC but DC applied at the input is passed to the output.

This protection circuit is totally transparent and has no sonic effect.

PROTECTION AGAINST SHORT-CIRCUITS

If one output is short-circuited by accident, the amplifier will source too much current.

Such accident should be limited over time to avoid excessive heat. Build-up occurring.

This is not covered by the warranty.

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MAINTENANCE

The Goldmund Telos 150 amplifier usually requires no maintenance.

To clean your Telos 150 use a very soft, clean, damp cloth to avoid scratching the surface. Dampen with water or a mild detergent solution. Avoid abrasive or harsh cleansers (e.g. products containing sodium carbonate).

Always turn the power OFF before cleaning your amplifier.

POWER

- Maximum power: > 300 W RMS (3 Ω).
- Maximum voltage: 55 V peak.

These values are for both driven channels.

FREQUENCY RESPONSE

These figures are valid for the amplifier operating with a 200 mV RMS input and a 8 Ω resistive load.

- +/- 0.05 dB, 10 Hz-20 kHz.
- +/- 0.5 dB, 10 Hz-200 kHz.

ANALOGUE INPUT SENSITIVITY

- Nominal level: 0.75 V (for 55 W RMS out, 8 Ω load).
- Input impedance: 50 k Ω .
- Voltage gain: 29 dB.

DISTORTION

Measured with a 22 Hz-22 kHz bandwidth and 1 kHz signal.

- Static: THD + N ratio < 0.006 % (65 W RMS, 8 Ω load).

NOISE

- Output noise: < 70 μ V RMS unweighted (inputs shorted).

OPERATING TEMPERATURE

- Room temperature: -30 to +40 degrees Celsius (-22 to +104 degrees Fahrenheit).
- Internal temperature: +45 to +65 degrees Celsius (+113 to +149 degrees Fahrenheit).

POWER SUPPLY

- Nominal line voltage: 117 or 234 V.
- Input voltage range: +/- 15 %.
- Maximum power consumption: 600 W RMS.

SIZE AND WEIGHT

- 44 cm W \times 33 cm D \times 9 cm H.
- 13 kg net.

WARRANTY

- 3 years parts and labor.