

**GOLDMUND MIMESIS 22
ANALOGUE PREAMPLIFIER**

USER MANUAL

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Warning !

This high quality analogue preamplifier possesses new technical features like ultra-high bandwidth, digital output and computer linking which are becoming necessary for an accurate transcription of the today's best analogue messages in complete systems with video, computer and audio associated components.

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

All handling must be performed according to the following instructions to avoid the preamplifier deterioration.

Nevertheless, if the instructions are perfectly carried out, you will notice that the use of the Goldmund Mimesis 22 is quite simple and convenient.

Important : Please do not connect any wire or move any part before reading the following instructions.

1. PRELIMINARIES

Please read very carefully the following instructions. This high-precision preamplifier will provide the best analog signal possible thanks to its unique circuitry.

For exacting technicians, musicians, and all amateurs who demand the very best in recording transcription, we strongly recommend the use of a top quality D/A converter to decode the today's high definition digital signals. For a perfect Analogue and Digital source system, Goldmund recommends to link the Mimesis 22 with the Goldmund Mimesis 20 top D/A converter.

The connections between the analogue sources and the preamplifier are also critical. Ultra low reflection cables are absolutely mandatory. In all typical cases Goldmund recommends using the special Goldmund Interconnect cables.

Note :

The Goldmund Mimesis 22 is available on option with a Digital output to be linked with the Mimesis 20. With this option, the Mimesis 22 may record an analogue source to a digital tape recorder, CD recordable or DVD recordable unit. If you have this option built in your Mimesis 22, please refer to its separate instructions delivered with the option to find how to use it.

2 - UNPACKING

You will find in the Goldmund Mimesis 22 box :

- The preamplifier
- The power cord
- This manual

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

3 - CHOICE OF THE PREAMPLIFIER LOCATION

The Goldmund Mimesis 22 preamplifier generates a significant amount of heat. It is necessary to allow a proper cooling of the heat sinks. Avoid any location which is not properly ventilated and avoid to put on top any equipment sensitive to temperature.

The MIMESIS 22 uses four adjustable conical feet.

These are used to insure proper vibration transmission to the preamplifier support in order to evacuate all detrimental vibrations inside the unit, following the famous Goldmund "Mechanical Grounding" principle.

Depending on the flatness of the surface where the preamplifier will be located, you will have to adjust slightly one or more of these feet.

The two left feet being evacuating the transformer vibration, it is better to act (if possible) on the right feet and to leave the left feet fully screwed in.

4 - LINE VOLTAGE ADJUSTMENT

A voltage selector is provided on the back plate of the preamplifier. Adjust it with a screwdriver if the line voltage provided is not appropriate.

ATTENTION : On the 220V position, the Goldmund Mimesis 22 preamplifier will function properly for main line voltage in between 200V and 240V. On the 110V position, the main line must deliver between 105 and 125V. If your main line is usually out of these tolerances, please consult your Goldmund dealer.

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

Use a 1A slow-blow fuse for 220V and 110V.

5 - CONNECTIONS

Connect the power cord to the back of the preamplifier and plug it into the nearest wall plug. Use only a 3 lugs grounded plug, for safety and noise reasons. To get the best sound of the preamplifier, avoid any multiple plugs or an extension cord.

Connect the interconnects between the preamp analog outputs and the power amp. You will plug the cables to the RCA female sockets noted analog outputs. Connect the interconnects from the source devices to the line inputs number 1 to 7. Connect the tape machines to any inputs and to the Tape output RCA plugs.

Note 1 :

If you have purchased the special Balanced output option, you can also connect the XLR marked analog output to the balanced input of a power amplifier. However, you have to know this mode of connection is not providing you with the ultimate sonic quality that a Mimesis 22 is built for providing.

Note 2 :

Do not use the input marked "Direct" if you are not using a linked configuration with a Mimesis 20.

If you are equipped with the special software modules which allow the connection of several units together, use the DB9 terminated cable provided with this option to connect the Mimesis 22 to these units and follow the instructions delivered with the software.

In that case only, use only the input marked "Direct" to connect the analog output of the Mimesis 20 to the Mimesis 22 analog input module.

Note 3 :

If you purchased the Digital output option for the Mimesis 22, the digital output module is activated. Without the option, this module is disactivated.

6 - CONTROLS AND UTILIZATION

- POWER

On the back panel of the Goldmund Mimesis 22 preamplifier the POWER switch is used to power on the preamplifier. In regular use, this switch is left ON and the circuits of the preamplifier are activated or deactivated using the standby ON/OFF.

When the POWER switch is switched ON, the preamp will become operative only after few seconds of warm up, to insure proper stabilization of all the circuitry and avoid any unwanted noises. After this delay, the output of the preamplifier is connected to the power amplifier.

The preamp can be powered off by switching the POWER switch to the OFF position. A special safety circuit switches the preamp to muting, to avoid any disturbance to reach the power amplifier and the speakers, even if the preamplifier is disconnected from the AC plug by accident.

However, to optimize the sound quality of the preamplifier and insure the best reliability, Goldmund recommends that the unit is left powered ON continuously and is only deactivated by the Standby function.

- MUTING

This switch turns off the output of the preamplifier, without disconnecting the power supply. It can be used to turn temporarily the volume down without touching the volume control.

- VOLUME

Each of the left and right level adjustment knob is acting on its separated channel. However, in order to make the use easier, when only one potentiometer is turned by hand, the second one is turning of the same dB quantity, insuring a perfect maintenance of the balance much more precise than with usual stereo potentiometer.

- BALANCE

By pressing the balance key, the electronic lock of the two potentiometers is disengaged. One potentiometer can be turned without effect on the second one by pressing the

- INPUT SELECTION

The 7 channel selection switches

- TAPE

In the center position of this switch, all tape inputs and outputs are disconnected and the MONITOR switch is deactivated to provide the best sound accuracy. The other positions, controlled by red Led's on the front panel are :

- PB 1 :
Connects the TAPE1 machine. To play the machine or monitor the recording, use the MONITOR ON position. The recording can be made simultaneously on the TAPE2 machine.
- PB 2 :
Same for the TAPE2 machine.
- COPY 1-2 :
The TAPE2 machine can record directly the playback of the TAPE1 machine. The MONITOR switch allow to listen to, either the TAPE1 source machine in OFF position or the recording made by TAPE2 in ON position.
- COPY 2-1 :
Same with both machine exchanged.

- *MONITOR*

Allows the control after recording or during a recording session with three heads machines.
(see above TAPE)

- *ABSOLUTE PHASE*

This switch reverses the polarity of the signal simultaneously on both channels. See paragraph 8 below. To indicate that the unit is playing in opposite phase, the "180" led is glowing.

7 - INTERNAL ADJUSTMENTS

The Goldmund Mimesis 22 preamplifier main unit provides on its main board separate impedance and level adjustments for each input.

Those internal adjustments are provided for special source connections and can be left for conventional use at the factory-adjusted OFF position .

8 - SOUND QUALITY OPTIMIZATION

- Warm-up sonic effect.

If the preamplifier has been left unpowered for a few days, the optimum sound quality is only reached after many hours. The critical circuits have to warm up to around +55 degrees Celsius (+131 degrees Fahrenheit) before achieving their optimal performances. This is why Goldmund recommends to leave the MIMESIS 22 powered on.

- Absolute phase.

Your preamplifier has an absolute phase inverter switch. For each source, one of the two position is optimum. Most of the record are recorded without care for the absolute phase. Different LP's can have different optimum positions. The absolute phase optimization is less critical and can be difficult to achieve with CD's since, at the current state of the technology, the phase coherency of this source is not sufficient to allow a sufficient difference between the two positions.

- The GOLDMUND exclusive "Mechanical grounding".

In the Goldmund Mimesis 22 preamplifier, Goldmund implemented the same special construction used in most of its other products : an optimized vibration evacuation path.

To get all the benefits of this improvement, the MIMESIS 22 must be located on a very rigid support, directly coupled to the building. Try various location until you find the most rigid one. Avoid any decoupling material, carpet especially, even between the furniture and the floor. Or use pin-point supports to couple the furniture to the floor. Or better, use one of the Goldmund table elements which are made to provide

the best Mechanical Grounding to several Audio Components assembled in a single structure.

With a very top system, the sonic improvement when the proper grounding is found is obvious and worth the try.

9 - SAFETY FEATURES

The Goldmund Mimesis 22 preamplifier uses a special protection circuit to protect the power amplifier and the speakers against a power supply failure or an AC shut-down of the preamplifier.

10 - MAINTENANCE

The Goldmund Mimesis 22 preamplifier usually requires no maintenance. For the audio purists who want to keep their preamp sounding as new, we only recommend that after a year or two, you have a technician or an official Goldmund representative readjust the DC offset. This very simple operation takes only two minutes and will give you the safety of long years of unmatched sound quality.

To clean your Mimesis use only a soft, slightly wet cloth. Always turn the power off before cleaning your preamplifier.

TECHNICAL DATA

OUTPUT LEVEL

- Nominal level : 1.55 V RMS.
- Maximum output level : 40 V RMS.
- Output stage output impedance : < 10 Ohms.
- Corrected output impedance : 600 Ohms.

FREQUENCY RESPONSE

These values for any level to 35 V RMS.

- +/- 0.1 dB, 0 - 150 kHz.
- +/- 1 dB, 0 - 500 kHz.

- +/- 3 dB, 0 - 0.85 MHz.

INPUT SENSITIVITY

- Nominal level : 100 mV.
- Saturation level : 40 V RMS.
- Nominal input impedance : 50 kOhms.
- Input impedance adjustment separated for each of the 5 line inputs : 50 k, 5k, and 600 Ohms.
- Input impedance adjustment for the two tape inputs : 50 k and 600 Ohms.
- Separated input level adjustment for each of the 5 line inputs : 0 dB, -3 dB, -6 dB, and -10 dB.

GROUP DELAY

- Propagation delay < 300 ns stable with frequency from DC to 200 kHz.

DISTORTION

Figures valid for all levels from 0 to 25 V.

- Dynamic : TID < 0.01 % (- 80 dB).
- Static : THD < 0.01 % (- 80 dB).

SPEED

- Slew rate of the amplification stages : > 500 V/us
- Rise time : < 500 ns.

CROSSTALK

- Separation : > 90 dB between channels.

NOISE

- Signal-to noise ratio on line input : > 95 dB (0.01 Hz - 10 Mhz).
- Weighted ASA A : > 100 dB.

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 : +/- 10 %.
- Maximum power consumption : 70 W.

GROUNDING

- Separated ground and earth signal.
- Connection optional between earth and ground to cancel all ground loops.
- Chassis connected to signal grounding.

SAFETY FEATURES

- Automatic switching to MUTING if the AC line drops or is interrupted.
- Automatic protection against tape loops.

FRONT PANEL CONTROLS

- POWER switch with Led control.
- MUTING switch with Led control.
- VOLUME control.
- MODE switch.
- BALANCE control.
- TAPE recording and playback switch
- SELECTOR switch.
- MONITOR switch (with Led control).
- ABSOLUTE PHASE switch (with Led control).

REAR PANEL CONNECTORS AND CONTROLS

- Power cord socket 3 lugs.
- Mains fuse (1A slow-blow).
- Voltage selector 110/220 V.
- Earthing post (yellow-green).
- Output connector RCA (right and left).
- Output connectors RCA (right and left) for Tape 1 and Tape 2.
- Signal grounding post (black).
- Input connectors RCA (right and left) for Tape and line inputs.

SIZE AND WEIGHT

- 48.3 cm (19") W x 39.5 cm (15.5") D (+ 3.4 cm (1.34") for handles) x 4.4 cm (1.75") H.
- Weight : 8 Kg.

WARRANTY

- 3 years parts and labor.