

USER MANUAL

GOLDMUND MIMESIS 22 HISTORY Analog Preamplifier



Thank you for purchasing the Goldmund MIMESIS 22H ANALOG PREAMPLIFIER.

Please take some time to read this manual. It will provide you with useful information to make your pleasure of listening to the MIMESIS 22H even higher.

INTRODUCTION

GOLDMUND MIMESIS 22 HISTORY Analog Preamplifier

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.

Table of Contents

1	SETTING UP THE MIMESIS 22H	5
2	POWER SUPPLY	9
3	CONTROLS & UTILIZATION	10
4	SOUND QUALITY OPTIMIZATION	15
5	SAFETY FEATURES & MAINTENANCE	16
6	TECHNICAL SPECIFICATIONS	17

W A R N I N G !

No connection or manipulation may be made before reading these instructions and observing all safety warnings.

This extremely high quality preamplifier possesses new technical features which are or will become necessary for accurate power amplification of high quality analog sources.

Observe general electrical safety precautions particularly with regard to avoiding water, moisture and heat. To reduce the risks of electric shock do not remove the covers and refer servicing to qualified personnel.

The installation instructions must be carried out in full and the mentioned precautions taken to provide the satisfaction the MIMESIS 22H is designed to provide and to avoid jeopardizing personal and equipment safety or impairing performance.

Nevertheless, in the MIMESIS 22H Preamplifier, Goldmund engineering excellence delivers extreme performance in a simple and convenient format that we hope you will enjoy for many years to come.

1 SETTING UP THE MIMESIS 22H

1.1 PRELIMINARIES

For exacting technicians, musicians, and all high-fidelity music purists who demand the very best in reproduction, we strongly recommend the use of top quality power amplifiers, since most of the analog signal integrity delivered by the preamplifier can be destroyed by using lower quality amplifiers.

For perfect analog amplification, Goldmund recommends the Goldmund Telos series of power amplifiers.

The connection between the analog sources and the preamplifier as well as between the preamplifier and the power amplifiers are also critical. Ultra low reflection interconnect cables are absolutely mandatory to retain the time integrity that the preamplifier is designed to provide. In all typical cases Goldmund recommends using the special Goldmund Lineal interconnect cables.

1.2 UNPACKING

You will find within the two GOLDMUND MIMESIS 22H transit boxes:

- The Analog Preamplifier.
- The Power Supply Unit.
- Preamplifier to Power Supply cable.
- The mains powercord.
- The remote control and batteries.
- This manual.

Please keep the packaging in case you need to transport the MIMESIS 22H any time in the future.

This packaging has been designed specifically to protect the MIMESIS 22H in transit. Use of alternative packaging is likely to result in damage, invalidating warranty cover.

1

SETTING UP THE MIMESIS 22H (Ctd.)

1.3

CHOICE OF PREAMPLIFIER LOCATION

The Goldmund MIMESIS 22H preamplifier generates a significant amount of heat. It is necessary to allow adequate ventilation for proper cooling of the heat sinks. Avoid any location which is not properly ventilated. Avoid stacking equipment and do not locate the preamplifier close to equipment that is sensitive to temperature.

The power unit has been especially designed to minimize transformer vibration effects on the audio circuits. One consequence of this strategy is that the power supply unit is physically separate, connected by only the 150mm cabling. The power supply and preamplifier should be located as far apart as the cabling allows. The preamplifier should ideally not be located above the power supply. The power supply most certainly should never be located above the preamplifier as this would force transformer vibration evacuation through the audio circuits on its way to ground.

The power supply also generates a significant amount of heat and the ventilation requirements noted above also apply.

The preamplifier has been designed with four adjustable conical feet. These are used to ensure 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 chosen location, you may have to adjust one or more of these feet.

1 SETTING UP THE MIMESIS 22H (Ctd.)

1.4 LINE VOLTAGE ADJUSTMENT

Warning! If the line voltage provided is not appropriate as supplied, please consult your dealer.

ATTENTION: At the 220V position, the Goldmund MIMESIS 22H preamplifier will function properly for main line voltages between 200V and 240V. At the 110V position, the main line must deliver between 105 and 125V. If your main supply operates out of these tolerances, please consult your Goldmund dealer.

This fuse is located on the power cord receptacle and can be accessed by raising the cover using a small screwdriver when the powercord has been removed (ensuring power is disconnected before handling). Use a 2.5A slow-blow fuse.

Warning! Always ensure that the fuse cover is fitted. Fuses are for fire prevention and do not protect against risk of electric shock.

1.5 CONNECTIONS

Warning! Always remember that a plug with bared connectors is dangerous if in contact with a live socket. This appliance must be earthed.

Connect the non-rewirable power cord supplied to the back of the power supply and plug it into the nearest wall plug. Use only a 3 lugs grounded plug, for safety and noise reasons. Replacement mains leads can be obtained from your Goldmund retailer.

To get the best sound of the preamplifier, avoid any multiple plugs or extension cords.

1

SETTING UP THE MIMESIS 22H [Ctd.]

1.5

CONNECTIONS [Ctd.]

Warning! Take care to always handle the cable by the connectors. Never twist the cable excessively or attempt to connect or disconnect the connector by handling the cable body in place of the connector.

Connect the cabling from the power supply output to the preamplifier input point labeled "Power".

Warning! The next stage in setting up your MIMESIS 22H is to connect your sources, power amplifiers and other peripheral devices. All devices should be disconnected from mains power until safe.

Connect the preamp analog output interconnects to the power amp using the RCA female sockets labeled "analog outputs".

Connect the interconnect cables from source devices to the line inputs numbered 1 to 7 labeled 'IN1' to 'IN7'.

Connect tape machines to any inputs and to the Tape output RCA plugs.

Note:

Do not use the direct input labeled "SSP Input" if you are not using a linked configuration with a Goldmund Mimesis 20. If your configuration includes 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 22H to these units and follow the instructions delivered with the software.

In that case only, use only the direct input marked "SSP Input" to connect the analog output of the Mimesis 20 to the MIMESIS 22H analog input module.

2 POWER SUPPLY

2.1 POWER SUPPLY

The main POWER switch is located on the back panel of the Goldmund MIMESIS 22H power supply. In regular use, this switch should be left permanently ON and the circuits of the preamplifier activated or deactivated using the STANDBY ON/OFF.

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

The preamplifier can be powered off by switching the POWER switch to the OFF position. A special safety circuit switches the preamp to MUTE to avoid any disturbance reaching the power amplifier and the speakers, even if the preamplifier is disconnected from the mains supply by accident. However, to optimize the sound quality of the preamplifier and ensure the reliability, the M22S should remain powered ON continuously and is only deactivated using the Standby function.

3 CONTROLS & UTILIZATION

The Goldmund MIMESIS 22H is designed to capture, control, shape and nurture the fragile source inputs, supporting adjustment of volume and balance to deliver your desired output signal. The primary control functions supporting these processes are outlined below.

3.1 STANDBY

To activate the preamplifier (set to ON) put it into STANDBY ON mode by pressing the SET/PWR (①) and the MUTE/PWR (③) buttons simultaneously.

To deactivate the Preamplifier (set to OFF) press these same SET/PWR (①) and MUTE/PWR (③) buttons simultaneously once more.

In standby mode, the two red leds near the PWR button will be illuminated intermittently (approximately every five seconds).

3.2 INPUT SELECTION

To select the source you want to listen to, use buttons 'IN1' to 'IN7' (②) to activate each of the 7 input options. When the input is activated, the Led on the button corresponding to the selected input will be illuminated.

3.3 VOLUME ADJUSTMENT

The right-hand volume level adjustment knob (⑦) is used to adjust VOLUME. If volume is set to a value of zero, outputs will be muted.

3 CONTROLS & UTILIZATION (Ctd.)

3.4 BALANCE ADJUSTMENT

The left-hand rotary switch (⑥) is used to adjust BALANCE.

If the volume value is set to zero, balance modification is not visible: Left and right volume will be displayed at zero.

The left and right output volumes can be re-equalized after balance adjustment by using the “Center” selector on the Remote Control.

3.5 MUTE

Press the MUTE/PWR button (③) to mute output.

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

Volume and balance adjustment are still possible when the preamplifier is muted.

3.6 ABSOLUTE PHASE

The PHASE/EDIT switch (④) reverses the polarity of the signal (180° out of phase) simultaneously on both channels. A red Led is illuminated to indicate the activation of the phase modification.

3.7 RECORD

To select the RECORD INPUT function press the REC/MENU button (⑤). The display will read ‘SELECT REC INPUT’. Then press the input button (②) to select RECORD INPUT.

3 CONTROLS & UTILIZATION (Ctd.)

3.7 RECORD (Ctd.)

If you do not want to select “NO RECORD INPUT”, press the MUTE/PWR button (③). If an input is already selected as record input, the corresponding green Led will be illuminated intermittently.

Note: If an input is already selected as ‘Tape In’, it cannot be selected for record input (green Led off).

3.8 PARAMETERS MENU

To access to this menu, press the SET/PWR (①) and the REC/MENU (⑤) buttons simultaneously. Press REC/MENU button (⑤) to move on to the next menu ‘page’.

To exit the menu press the SET/PWR (①) and the REC/MENU (⑤) buttons simultaneously once more.

1. Display brightness

The MIMESIS 22H supports seven display brightness levels.

Press PHASE/EDIT button (④) to increase display brightness

Press MUTE/PWR button (③) to decrease brightness

2. Display timing

The MIMESIS 22H supports four time out values are available.

These are:

- 10 seconds of display time,
- 20 seconds,
- 30 seconds or
- Permanent display

Press PHASE/EDIT button (④) to increase the value

Press MUTE/PWR button (③) to decrease the value

3

CONTROLS & UTILIZATION [Ctd.]

3.8 PARAMETERS MENU [Ctd.]

3. **Balanced input**

The MIMESIS 22H supports the option of either unbalanced or balanced inputs on inputs 5, 6 and 7.

The default setting is for the inputs to be unbalanced. Select balanced input functions using the 'IN5' to 'IN7' buttons (②).

Use these input selectors in conjunction with the PHASE/EDIT button (④) to change input properties.

4. **Tape in**

Select input with 'IN1' to 'IN7' button (②)

To select no Tape In, press the MUTE/PWR button (③)

5. **SSP input**

The SSP input function supports a direct link from input to output bypassing preamplifier circuits. Select input using the 'IN1' to 'IN7' buttons (②)

To select 'SSP INPUT = NONE' (for example to avoid lopping a Tape Out monitor, select MUTE/PWR (③)

3.9 EDIT MENU

To access to this menu, select the SET/PWR (①) and the PHASE/EDIT (④) buttons simultaneously.

Press PHASE/EDIT button (④) to pass to the next menu 'page'

To exit the menu, select the SET/PWR (①) and the PHASE/EDIT (④) buttons simultaneously again.

3

CONTROLS & UTILIZATION (Ctd.)

3.9 EDIT MENU (Ctd.)

1. **Global gain**

Global input gain limits can be modified to between +12 to -12dB.

Use the right rotary switch VOLUME (⌚) to change preamplifier global gain. The new limit set will be displayed. The input gain value can then be modified if outside the new limits.

Global Gain should always be set before adjusting Input Gain. If this rule is not followed the global adjustment may conflict with the individual input gain adjustment. The Input Gain should therefore be re-checked and re-adjusted.

2. **Input gain**

Select input using the 'IN1' to 'IN7' button (Ⓜ)

Use the right rotary switch VOLUME (⌚) to change input gain
Input gain limits are fixed by the global gain.
The maximum gain difference between inputs is 24dB.

3. **Input name**

The default Input Channels can be reassigned using up to 14 characters.

Select input with 'IN1' to 'IN7' button (Ⓜ)

Use the left rotary switch BALANCE (Ⓢ) to select the character to be changed.

Use the left rotary switch VOLUME (⌚) to change the character.

4 SOUND QUALITY OPTIMIZATION

4.1 WARM-UP SONIC EFFECT

If the preamplifier has been left un-powered for some time, the optimum sound quality may only be attained 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 that the MIMESIS 22H is always powered on.

4.2 ABSOLUTE PHASE

Your MIMESIS 22H preamplifier has an absolute phase inverter switch.

Absolute phase optimization 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 an adequate difference between the two positions.

Many vinyl recordings are made without care for the absolute phase and different LP's can have different optimum positions. Trial and error is therefore often necessary.

4.3 GOLDMUND "MECHANICAL GROUNDING"

In the Goldmund Mimesis 22 Signature edition preamplifier, Goldmund has implemented its renowned construction method to provide an optimized vibration evacuation path.

To get all the benefits of this improvement, the MIMESIS 22H must be located on a very rigid support, directly coupled to the building. Avoid any decoupling material. If carpet decouples the preamplifier and ground, use pin-point supports to couple the furniture to the floor.

5 SAFETY FEATURES & MAINTENANCE

5.1 PROTECTION CIRCUIT

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

5.2 MAINTENANCE

To clean your Mimesis use only a soft, clean, dry or slightly damp cloth. Avoid using domestic cleaning products.

Warning! Always turn the power off before cleaning your preamplifier.

There are no user serviceable parts inside the Mimesis 22S. Unauthorized servicing or alteration invalidates the manufacturer's warranty.

All inquiries relating to product servicing and operation should be referred to the local authorized retailer supplying and supporting your Goldmund equipment.

6

TECHNICAL SPECIFICATIONS

OUTPUT LEVEL

- Nominal level: 1.55 V RMS.
- Maximum output level (balanced) : 9.6 V RMS.
- Maximum output level (unbalanced): 4.8 V RMS.
- Output impedance: 50 Ohms.

FREQUENCY RESPONSE

These values for any level to 10 V RMS:

- +/- 0 dB, 20 - 20 kHz.
- +/- 3 dB, 0.2 – 1.2 MHz.

INPUT SENSITIVITY

- Nominal level: 100 mV.
- Saturation level: 5 V RMS.
- Nominal input impedance: 39 kOhms.
- Separated input level adjustment for each of the 7 line inputs:
-12 to 12 dB.

INPUT LEVEL

- Maximum input level (balanced) : 9.6 V RMS.
- Maximum input level (unbalanced): 4.8 V RMS.

GROUP DELAY

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

DISTORTION

- 1 V rms output level, 80 KHz measurement bandwidth
- 600 ohms termination impedance
- THD unbalanced in to unbalanced out 0.0002% flat with frequency
- THD balanced in to balanced out 0.0001% flat with frequency
- IMD unbalanced in to unbalanced out 0.0002%
- IMD balanced in to balanced out 0.0001%

SPEED

- Slew rate of the amplification stages : 2500V/us
- Rise time: < 400 ns.

CROSSTALK

- Separation: > 105 dB between channels.
- (20Hz – 20kHz)

NOISE

- Signal-to noise ratio on line input: > 120 dB (0.01 Hz - 10 MHz).
- Weighted ASA A: > 130 dB.

OPERATING TEMPERATURE

- Room temperature: -30 to +40 degrees Celsius.
- Internal temperature: +45 to +70 degrees Celsius.

POWER

- 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.

SAFETY FEATURES

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

Note:

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.

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

FRONT PANEL CONTROLS

- MUTING/POWER switch with Led control.
- VOLUME control.
- BALANCE control.
- RECORD/MENU switch.
- PHASE/EDIT switch.
- 7 INPUT CONTROL switches (with Led control).

REAR PANEL CONNECTORS AND CONTROLS

- Power connector.
- Earthing post (yellow-green).
- Output connectors XLR (right and left) balanced.
- Output connectors RCA (right and left) for Tape and line outputs.
- Signal grounding post (black).
- Input connectors XLR (right and left) balanced.
- Input connectors RCA (right and left) for Tape and line inputs.
- Link float.
- RS232 Connector.

POWER SUPPLY CONTROLS

- POWER cord socket (3 lugs).
- MAINS FUSE (2.5A slow-blow).
- VOLTAGE SELECTOR 110/115 V and 220/230 V.

SIZE AND WEIGHT**Preamplifier**

- 440 W x 375 D x 140 H (mm).

Power Supply

- 440 W x 360 D x 110 H (mm).
Total Weight: 17 kg.

WARRANTY

- 3 years, parts and labor.