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All operational, technical and descriptive material in this publication is subject to change at any time without notice. For further product information or queries, please contact your Plinius dealer.

Plinius products are designed and manufactured by Plinius Audio Limited, New Zealand.

Introduction

Congratulations on your decision to become the proud owner of this Plinius Reference M-10 dual mono preamplifier.

This manual has been prepared to help you understand the operation of your preamplifier, and to provide information about its design and the variety of ways it may be used.

We have designed and manufactured this preamplifier to reproduce your favourite music faithfully and accurately. With a little care and a full understanding of the operating recommendations in this manual, your Plinius Reference M-10 dual mono preamplifier will provide years of high-quality, trouble-free performance.

Please take the time to read this manual thoroughly before using your preamplifier.

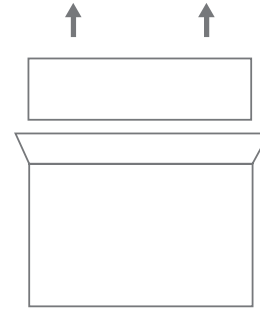
SERIAL NUMBER _____

FINAL TEST CERTIFIED BY _____

Unpacking

Open the box from the top and remove the accessories from the top foam cap. You may now proceed with the removal of the top foam cap. Once you have removed the top foam cap you may now proceed to lift the unit from the box.

Retain the packaging for future transportation of this unit.



Placement & Ventilation

This product may operate at a moderately high temperature, especially during extended listening sessions. With this in mind, we recommend the following guidelines for placement and ventilation.

- The ideal location is upon a rigid stand, away from direct contact with any temperature sensitive materials, furniture or deep pile carpets.
- Ventilation through and around the preamplifier should be kept unimpeded.
- Ensure heat vents (slots in the base and lid) are not covered or restricted in any way.
- Equipment racks should be of an open type with no closed side panels and no closed front or rear panels. Ensure a minimum of 100mm clearance on all sides of your Plinius unit to other equipment and the shelf above.
- If the unit is in an enclosed cabinet, the clearance should be greater than 400mm on all sides. Ensure the space between the chassis and shelf below the unit is unobstructed at all times.
- When stacking separate audio components, ensure a minimum of 400mm clearance above the top unit is maintained for suitable airflow.
- NOTE: This unit has been designed for use in moderate climates only, not for tropical conditions.

The design of this product incorporates a very high level of mechanical decoupling of the input and output. It can however still be influenced by acoustical feedback in the operating environment. The use of acoustic cones or a suitably spiked preamplifier stand or table may further enhance the performance of this preamplifier. Consult your Plinius dealer for further advice if required.

Care & Maintenance

With simple care and maintenance your Plinius product can be kept looking and operating like new for many years to come.

MAINTAINING THE CONNECTORS

Exposed connectors such as the RCA connectors will be subject to environmental factors, and over time the surface may degrade. This can be greatly reduced by fitting readily available 'RCA caps' to reduce the effects of environmental elements on the RCA connectors. These RCA caps or RCA shorting caps can also provide sonic benefits. Connector cleaning products are also available to clean the RCA and cable connectors and frequent checks and cleaning will help maintain a good signal connection.

NOTE: DO NOT use RCA shorting caps on output connectors or preamplifier input connectors. Use RCA shorting caps on unused preamplifier stage input connectors only. Standard RCA shielding caps can be used on any unused input or output connectors.

MAINTAINING THE SWITCHES

Switches should be maintained by using each various switch setting periodically. Even if a switch or a switch setting is not used, it is a good idea to toggle small switches and turn rotary switches through the full range of the switch several times in succession to keep the contacts active. Performing this simple action will promote longevity of the switch contacts.

SURFACE CLEANING

From time to time you may wish to clean the surface of your Plinius equipment to remove dust, or any material build up from the atmosphere or on commonly used controls. Your Plinius product is made up of parts that have a hard anodised or a powder coat finish and will clean easily without being damaged.

Cleaning should be carried out using a soft cleaning cloth, dry or with either a small amount of water or a very mild surface cleaner, while observing the following guidelines:

- As a safety precaution, always switch the equipment off prior to cleaning
- Always use a cloth that is soft and clean
- Never use abrasives or polishing compounds anywhere on the unit
- Never apply liquid directly to the surface of the unit
- Use the cloth dry or with mild surface cleaners of either liquid or foaming type
- Apply only small amounts of cleaner to the cloth
- DO NOT rub the surface but wipe clean only. Excessive rubbing may dull powder coat or wear the screen printed text.

Precautions

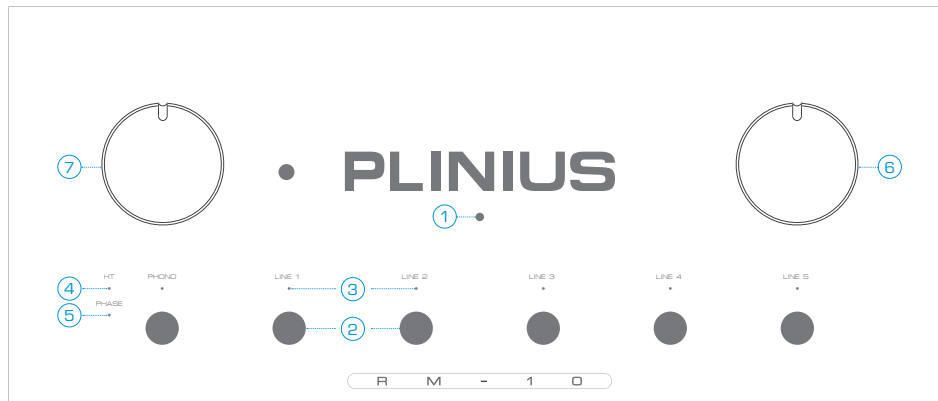


PLEASE TAKE SPECIAL NOTE OF THE FOLLOWING PRECAUTIONS BEFORE OPERATING YOUR NEW PREAMPLIFIER.

- The Plinius Reference M-10 dual mono preamplifier contains electronic circuits that are capable of generating heat that could have an adverse effect on other electronic equipment, furniture, etc.
- DO NOT leave flammable material on the preamplifier whilst running, as this could pose a serious fire risk.
- This preamplifier operates at hazardous voltage levels. We recommend that any work requiring removal of the lid be referred to a suitably qualified and experienced service technician.
- DO NOT attempt to connect any input of this preamplifier to its own outputs.
- DO NOT earth any output terminal or connect any of these terminals together without following the instructions in this manual or seeking qualified assistance.
- DO NOT place this preamplifier in any position where liquids, or any foreign material may accidentally enter it.
- DO NOT connect any voltage source, short circuit, earth/ground or appliance to the preamplifier output terminals.
- DO NOT expose the unit to dripping or splashing.
- DO NOT place objects filled with liquids on the unit, e.g. vases.
- DO NOT place sources of naked flame on the unit, e.g. candles.

Front Panel Functions

The front of the Plinius Reference M-10 dual mono preamplifier incorporates all the facilities you will require on a daily basis.



1. DISPLAY LED

The blue LED on the front panel indicates the mode of operation. When first switched on the unit will go into standby and the display LED will vary in brightness. When the unit is taken out of standby and is ready for use, the LED will remain lit. Whenever mute or a remote volume button is pressed, the LED will dim. When in error mode, the LED will flash.

2. SOURCE SELECTION BUTTONS

The buttons on the front panel allow selection of any of the different inputs available on the rear panel. This selection is fed to the Pre Out and Line Out of the preamplifier.

3. SOURCE DISPLAY LEDS

These small white LEDs communicate the current source selection.

4. HT BYPASS LED

This small white LED is ON when the current source selection is the HT Bypass Input. This input can be selected using the remote control or activated by the trigger input.

5. PHASE LED

This small white LED is ON when the phase of the input signal is inverted 180°. This function can be activated using the remote control.

6. VOLUME CONTROL KNOB

The volume control is a motorised unit that will accurately convey the selected source signal to the line stage of the Plinius Reference M-10 dual mono preamplifier. When using the remote control to alter the volume level, briefly press the button to make small adjustments, or hold the button down to continuously adjust the volume.

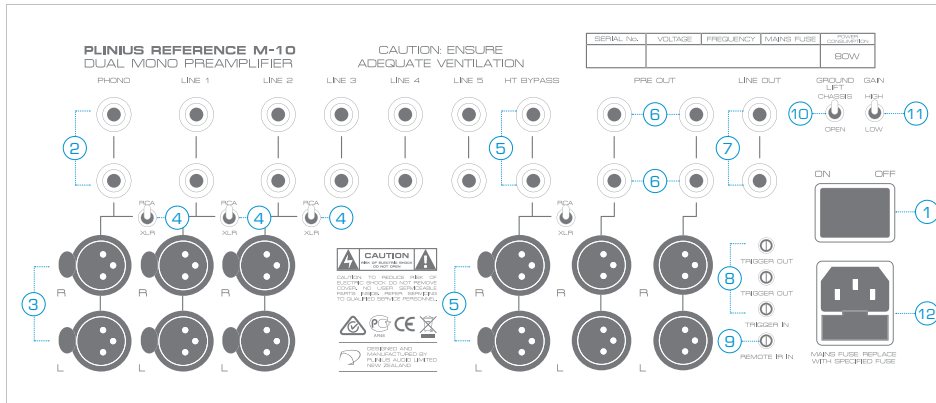
7. BALANCE CONTROL KNOB

The balance control adjusts the volume level between left and right. This can assist with equalising channel balance where a recording or speaker placement is not optimal.

Rear Panel Functions

This panel incorporates all terminals for connecting the input signals from your CD player, tuner, etc and the outputs to the mains supply.

Please remember that your Plinius Reference M-10 dual mono preamplifier is a high quality electronic instrument capable of an exceptional level of performance. Be sure that you understand your system's requirements fully before you make any connection to this preamplifier.



1. MAINS SWITCH

The heavy-duty rocker switch in the centre of the panel turns the Mains/Line Power to the preamplifier ON or OFF. The preamplifier draws a moderately high current when switched on, so it is not good practice to rapidly turn the Mains switch on and off repeatedly.

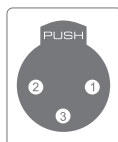
2. INPUT TERMINALS

The input terminals for your Plinius Reference M-10 dual mono preamplifier are easily accessible along the top of the rear panel, with the right channel (red) inputs along the top. All are 'line level' inputs, for use with unbalanced signals from line level source components such as phono preamplifiers, CD players, tuners, etc. Consult your Plinius dealer for further advice if required.

3. XLR INPUT TERMINALS

Below the Phono, Line 1 and Line 2 inputs are an additional set of balanced XLR inputs for use with source components that feature balanced XLR outputs. Balanced XLR signals are carried via a three way cable.

The XLR pin configuration used in all Plinius product is:



PIN 1 to GND
PIN 2 to +Signal
PIN 3 to -Signal

NOTE: Because of the way our XLR and balanced inputs are configured it is not possible to use both XLR and RCA at the same time.

4. INPUT SELECTION SWITCH

This switch directly above the XLR input is used to select the pair of RCA or XLR input sockets UP towards the RCA selects the RCA input connections, while DOWN selects XLR inputs.

5. HT BYPASS INPUT

This input is for use specifically with home theatre processors and AV receivers. In some circumstances you may wish to use the Plinius system as the front two channels of a surround or home theatre environment. The HT Bypass input can be used for this purpose, as any signal connected to these inputs will feed to the outputs, bypassing the volume control. HT Bypass mode is accessed by the remote or the trigger input.

6. PRE OUT

The Pre Out connection is provided to enable the Reference M-10 dual mono preamplifier to be connected to an external power amplifier.

7. LINE OUT

These RCA outputs are situated next to Pre Out and are provided to interface to line level recording devices for archiving, or transferring to portable media. The outputs are always live with the signal of whichever source is selected at the time of recording.

8. REMOTE TRIGGER INPUT/OUTPUT SOCKETS

In order to integrate more effectively into a home theatre system, the Reference M-10 has a remote trigger input socket on the rear panel. By connecting a processor or source component with a remote trigger signal to this socket, the Reference M-10 can be switched between HT Bypass and standby modes. When in standby the preamplifier draws less current and will operate at minimum temperature. This may be of advantage in multi-amplifier and/or remote installations.

The Reference M-10 also features two remote trigger output sockets. By connecting this trigger output to other system components, the entire system can be put in and out of standby by the source component.

9. REMOTE IR INPUT

This socket is for connecting to an external remote control sender. Some companies manufacture these devices to enable multi-room remote control. Please see your Plinius dealer for further advice.

10. GROUND LIFT SWITCH

This switch allows the signal ground to be disconnected from the chassis. In some installations a hum loop may exist due to duplicate ground paths from different equipment. Use this switch to remove the connection from 0V to ground thus allowing some flexibility in your particular set-up.

11. GAIN SWITCH

The gain switch allows adjustment of the Lineamp amplification factor. High gain offers a similar level to most preamplifiers, while low gain allows further improvement in distortion levels and can assist where multiple instances of XLR connections result in too much gain in the complete system.

12. MAINS POWER CORD IEC SOCKET

This connector is where the mains supply cable from your wall connects to the preamplifier. You will notice that a fuse holder is mounted within this connection, and it holds a mains fuse to provide surge and overload protection for your preamplifier.

Remote Control Functions

The Plinius Reference M-10 dual mono preamplifier features a full function remote to control all settings and configurations of the preamplifier.

1. STANDBY

Standby is used to put the unit into a low power mode. This disconnects the outputs of the preamplifier and turns off the white display LED's. It also switches off the power supply to the line amplifier, reducing power consumption to a minimum.

2. DISPLAY

The display button on the remote enables you to adjust the display brightness of the white LED's. Pressing the display button repeatedly will dim the LED in steps until they are off. The next press of the button will cycle the display back to full brightness.

3. VOLUME CONTROL

Use these two buttons to control the volume level of the Integrated Amplifier. The right side button increases volume, while the left side button decreases the volume. Briefly press either button to make fine adjustments to the volume level. Hold down either button to continually adjust the volume level. Adjusting volume UP will also take the preamplifier out of Mute.

4. MUTE

Pressing this button toggles the Reference M-10 preamplifier in and out of mute mode.

5. HT BYPASS

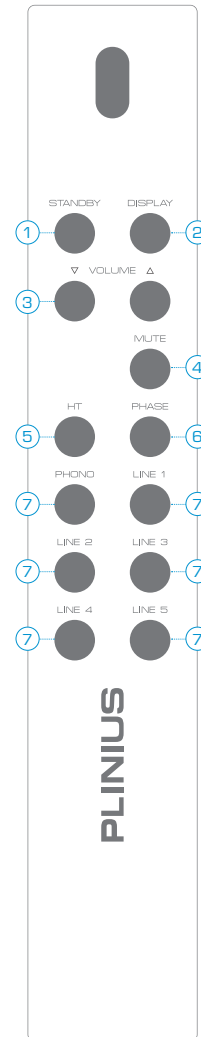
The HT button activates the Plinius Reference M-10 preamplifier home theatre bypass mode. Once activated, the volume control is bypassed and the signal is connected from the HT input to the output. NOTE: In HT Bypass mode the only buttons that continue to function are Standby and Display. More information on HT Bypass can be found in the Installation & Operation section in this manual.

6. PHASE

The phase of the output signal from the preamplifier is toggled from absolute (in-phase) to inverted 180 degrees with each press of this button.

7. SOURCE SELECTION

The input source buttons enable selection of each input for playback from the selected component through the preamplifier. These can also be used to take the unit out of standby or out of HT mode.



Installation & Operation



WARNING: RISK OF ELECTRIC SHOCK. TERMINALS MARKED WITH ⚡ SHOULD BE CONSIDERED HAZARDOUS LIVE AT ALL TIMES.

This preamplifier operates at hazardous voltage levels. We recommend that any work requiring removal of the lid be referred to a suitably qualified and experienced service technician. DO NOT place this preamplifier in any position where liquids or any foreign material may accidentally enter it.



PLEASE READ AND UNDERSTAND THE PRECAUTIONS WITHIN THIS MANUAL FOR PLACEMENT & OPERATION OF THIS PRODUCT.

CONNECTIONS

Connections to your Reference M-10 dual mono preamplifier should be made in the same order as they are listed in this section. DO NOT attempt to connect your Reference M-10 dual mono preamplifier until you have read and fully understood these instructions. Should you require further assistance, please contact your Plinius dealer.



DO NOT POWER UP YOUR PREAMPLIFIER UNTIL YOU HAVE CONNECTED YOUR INPUT/OUTPUTS CORRECTLY FOR YOUR SYSTEM.

SOURCE COMPONENT INPUTS

Connect your Source to the input of the Reference M-10 dual mono preamplifier using suitable single-ended RCA or Balanced XLR interconnect cables only. For RCA, make sure you connect the red coded cable to the red RIGHT RCA input, and the white cable to the white LEFT RCA input. Also make sure the RCA connectors are a snug fit and are inserted all the way in.

For CD XLR input connection, make sure you connect the RIGHT XLR input and LEFT XLR inputs to the right and left outputs from your source respectively. Also make sure the XLR connectors click into place. Use the input selection switch to select RCA if you are using RCA inputs or to select XLR if you are using XLR inputs.

NOTE: DO NOT connect XLR and RCA at the same time, use only one or the other. The phono input should be connected to a suitable source turntable only.

TERMINATION QUALITY

Quality of the connections must be examined to ensure that high-performance, trouble-free operation is enjoyed. Check the connections are inserted fully and are a firm fit. XLR connectors should latch in place securely.

PHASING (OR POLARITY)

It is important to achieve good stereo imaging in your listening room. If you experience poor stereo image and/or a lack of bass, check that the loudspeaker wiring has been connected correctly. If in doubt, consult your Plinius dealer for advice.

Naturally it is also important to make sure all the leads carrying signals for the RIGHT channel loudspeaker are connected to the RIGHT input to the amplifier from your preamplifier or CD player etc. Signals for the LEFT channel should be wired in a similar fashion.

USING HT BYPASS INPUT

The Reference M-10 dual mono preamplifier features a home theatre input to bypass the preamplifier stage when used in home theatre or multimedia installations. When HT Bypass is selected, the signal will pass from the HT Bypass input directly to the Outputs.

This enables the unit to remain in circuit for use with two channel sources (such as CD players and tuners), as well as a link to the amplifier and speakers should you wish to use your normal stereo set-up in a surround or home theatre environment.

To access the HT Bypass input, press the HT button on the remote control. To exit the HT Bypass mode and return to using a source component, press HT again, or use the source buttons to select any desired source component.

NOTE: Only connect a suitable pre out signal to the HT Bypass input. When HT Bypass is selected, remote volume cannot be accessed.

PRE OUT

Dual preamplifier outputs are provided on the back of the Reference M-10 dual mono preamplifier. The signal from this output comes from whatever source is currently selected. All pre out outputs are live at all times except during Mute or Standby.

USING LINE OUT

A line level output is provided on the back of the Reference M-10 Preamplifier for connection to accessories such as recording devices, headphone amplifiers, etc. The level is fixed and carries signal of the selected input, even when the Preamplifier is muted.

CONNECTING THE MAINS SUPPLY

Firstly, check that the mains supply voltage printed on the rear of this preamplifier is similar to the mains supply voltage in your area. If in doubt, please consult your Plinius dealer. Mains supply power connection is via the plug-in lead supplied with your Reference M-10 dual mono preamplifier. Where possible, check the wall outlet is switched OFF, then connect the local mains plug end of the lead to the wall outlet. Check the preamplifier is switched OFF, and connect the IEC end of the cable to the IEC socket at the back of the preamplifier. With the cord fully connected, switch the wall outlet ON.

Now that your Reference M-10 dual mono preamplifier is configured correctly, switch the power switch on the rear panel to ON. The display LED will cycle in brightness for approximately ten seconds as the internal circuitry stabilises, after which time the unit will be in standby mode. Select any input source to exit standby mode. You can now enjoy your new Plinius Reference M-10 dual mono preamplifier.

NOTE: This unit must be connected to a mains socket outlet with a protective earthing

connection. The wall outlet socket or mains switch must be accessible at all times in case of emergency.

WARM-UP PERIOD

You will find that the Reference M-10 dual mono preamplifier will become noticeably 'purer' in sound after being on for a period of time. We usually recommend waiting at least 24 hours before expecting the best quality of sound reproduction from your preamplifier.

Product Features

REMOTE CONTROL

Provided with your Reference M-10 dual mono preamplifier is a 13 function remote control. Two AAA batteries power the remote, and these are replaced by removing the single screw on the base of the remote that holds the battery compartment in place. Replace the two batteries, taking care to refit the new ones with correct polarity.

GROUND LIFT SWITCH

This switch allows the signal ground to be disconnected from the chassis. In some installations a hum loop may exist due to duplicate ground paths from different equipment. Use this switch to break the connection to 0V to ground thus allowing some flexibility in your particular set-up.

GAIN SWITCH

The gain switch allows adjustment of the Lineamp amplification factor. High gain offers a similar level to most preamplifiers, while low gain allows further improvement in distortion levels and can assist where multiple instances of XLR connections result in too much gain in the complete system.

LINE OUT

A Line Level output is provided to interface to headphone amplifiers, line level recording devices for archiving, or other accessories that require a line level signal. The outputs are always live with the signal of whichever source is selected at the time of listening.

REMOTE TRIGGER INPUT/OUTPUT SOCKETS

Remote Trigger Input and Output sockets allow the system components to be connected in a 'daisy chain' arrangement for semi automated operation. This allows a master component to activate and deactivate standby mode of the other components connected. Two trigger output sockets are provided for use with monoblock amplifiers or other additional components.

REMOTE IR INPUT

This socket is for connecting to an external remote control sender. Some companies manufacture these devices to enable multi-room remote control. Please see your Plinius dealer for further advice.

MAINS/LINE FUSE

A Mains/Line fuse is fitted within the IEC socket on the rear of the preamplifier. A small drawer at the bottom of this socket may be removed (after the IEC plug is removed) by levering it out with a flat blade screwdriver. The fuse fitted should be rated as specified on the rear panel.



IMPORTANT: DO NOT FIT A FUSE WITH A HIGHER RATING.

In the unusual event that this fuse should blow, you must first establish the cause of this failure (such as power surges, damaged mains cable, etc) before replacing the fuse with one of the same rating and type. Should the preamplifier continue to suffer mains fuse failure, contact your Plinius dealer.

Troubleshooting

NO SOUND FROM THE UNIT

If the unit is not reproducing audio take the following steps:

- Check the source is correctly connected to an appropriate input on the unit. Refer to the Installation & Operation section.
- Check the source is playing, and not paused or muted. If it has adjustable volume, check this is at the usual output level.
- Check the unit is set to select the correct source input. Adjust the source selector for the correct source component.
- Check the volume. Turn the unit volume up to a point just below the normal listening level. DO NOT turn the volume up to maximum in case the sound begins to come through the speakers.
- Check the unit is not in Mute. If the Display LED is dim, this indicates the unit is in Mute mode. The Display LED should be full brightness for operational mode.

POWER FAILURE

The unit may have suffered mains fuse failure or be in thermal overload protection mode.

- Mains Fuse Failure: Check the mains fuse and replace if needed.

Refer to the Product Features section for further information.

NOTE: If the unit immediately or repeatedly suffers mains fuse failure there may be a major problem and you should contact your Plinius dealer.

ERROR MODE

If the input signal or output signal is too large the error mode will be triggered and the input and output will mute and the power LED will flash. The preamplifier will return to normal operation when the signal is reduced to an appropriate level.

Specifications

FREQUENCY RESPONSE
20Hz to 20kHz +/-0.1dB

DISTORTION
<0.001% THD+N

MAXIMUM INPUT VOLTAGE
7V RMS RCA/Unbalanced
7V RMS XLR/Balanced

INPUT IMPEDANCE
7.5k Ω RCA/Unbalanced
47k Ω XLR/Balanced

OUTPUT IMPEDENCE
10 Ω RCA/Unbalanced
20 Ω XLR/Balanced

MAXIMUM OUTPUT VOLTAGE
7V RMS RCA/Unbalanced
14V RMS XLR/Balanced

POWER/CURRENT CONSUMPTION
80W/0.3A maximum
7W/0.03A standby

DIMENSIONS
Height: 170mm (6.75")
Width: 510mm (20")
Depth: 480mm (19")
Weight: 16kg (35lbs)

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