M8 PREAMPLIFIER INSTRUCTION MANUAL





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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.

www.pliniusaudio.com

INTRODUCTION

CONGRATULATIONS on your decision to become the proud owner of this PLINIUS M8 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.

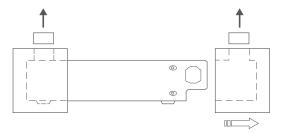
We have designed and manufactured this preamplifier to reproduce your favourite music faithfully and accurately. With a little care and a full understanding of the operating recommendations in this manual, your PLINIUS M8 Preamplifier will provide years of high-quality, trouble-free performance.

SERIAL NUMBER	
FINAL TEST CERTIFIED BY	

IMPORTANT: PLEASE TAKE THE TIME TO READ THIS MANUAL THOROUGHLY BEFORE USING YOUR PREAMPLIFIER.

UNPACKING

Open the box from the top and remove the accessories from the foam end caps. You may now proceed to lift the unit from the box, Once the unit is removed you can proceed with the removal of the foam end caps. These caps are designed to fit on the front and back of the unit for maximum protection. Retain the packaging for future transportation of the M8.



DESIGN PHILOSOPHY

From a distance you can see that the design of the Plinius products is more than an applied styling exercise to the front panel. We have started from the ground up to produce a casing for our electronics that is unrivalled in its physical strength and visual simplicity.

Wherever possible we have reduced the number of parts needed and then invested massively in refining and producing the remaining parts to the highest quality achievable with state of the art computer controlled machines allied with expert craftsman. Examples of this approach include the hydraulically formed corners on the amplifiers giving much greater strength and the one piece housing for the remote control that looks, feels and genuinely is robust.

As with music that you are not familiar with, truly innovative new designs can take time to understand and enjoy. How often have you heard music that you were first unsure of, that over repeated listening, has become a firm favourite.

Our designs are fundamentally different to many other companies, and we hope that you will take the time to explore their unique character and qualities because we have not made them different simply to be different. We genuinely believe that their visual and tactile qualities do improve the experience of listening to music and that is our design goal!

RC55.5

Ross Stevens
DESIGN DIRECTOR.

PLACEMENT & VENTILATION

Your PLINIUS M8 may operate at a moderately high temperature, especially during extended listening sessions. 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 amplifier should also be kept unimpeded. Please ensure that the heat vents (slots in the base and lid) are not covered or restricted in any way.

The PLINIUS M8 design 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 amplifier stand or table may further enhance the performance of this preamplifier. Consult your Plinius dealer for further advice if required.

PRECAUTIONS



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

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 (other than suitable audio power amplifiers) to the preamplifier output terminals.

DO NOT connect any voltage source, short circuit, earth/ground or appliance (other than suitable audio source components) to the preamplifier input terminals.

PREAMPLIFIER FEATURES - FRONT PANEL

POWER LED

An LED on the front panel indicates when the preamplifier is in standby mode. This LED also lights to show whenever the remote control is being used to change the volume level.

VACUUM FLUORESCENT DISPLAY

The main display window shows settings and options while the M8 is in use.

VOLUME CONTROL KNOB

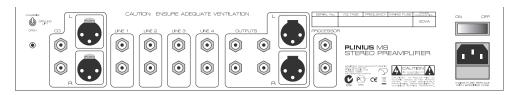
The volume control is a motorised unit that will accurately convey the selected source signal to the line stage of the PLINIUS M8.



ABOVE: M8 front panel layout

PREAMPLIFIER FEATURES – REAR PANEL

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



ABOVE: M8 rear panel layout

INPUT TERMINALS

The input terminals of your PLINIUS M8 Preamplifier are easily accessible along the rear panel.

RCA INPUTS LEFT & RIGHT: These standard RCA terminals are for use with unbalanced signals from any line level audio component such as a Compact Disc player, tuner, surround processor, VCR, etc.

XLR BALANCED INPUTS LEFT & RIGHT: Also included is one pair of balanced XLR inputs for use with any Line Level component that features Balanced XLR outputs. Balanced signals are carried via a three way cable that connects all three pins at each end of the interconnect cable.

The XLR input pin configuration used in all Plinius products is as follows:



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

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

OUTPUT TERMINALS

Connections for power amplifiers are provided in the centre of the rear panel.

Connections are available for both single ended RCA and balanced XLR cables. Note that the only time the outputs aren't 'live' is when the preamplifier is in mute or standby.

The XLR output pin configuration used in all Plinius products is:



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

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

PROCESSOR INPUT

This input is for use specifically with home theatre processors. In some circumstances you may wish to use the power amplifier and speakers that the M8 is connected to as the front two channels of a surround or home theatre environment. The processor input can be used for this purpose, as any signal connected to the processor inputs can be sent directly to the power amplifier bypassing the M8 entirely.

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.

MAINS SWITCH

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

MAINS POWER CORD IEC SOCKET

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

EARTH POST

This is a chassis connected gold-plated earth post for use with most vinyl turntables.

PREAMPLIFIER FEATURES - REMOTE

The M8 features a full function remote to control all settings and configurations. This section details the buttons of the M8 remote and how they are used.



ABOVE: M8 remote control layout

STANDBY

Standby is used to put the unit into a low power mode. This disconnects the outputs of the preamplifier and turns off the display.

DISPLAY

The display button on the remote enables you to quickly adjust the display brightness to either off or the user set brightness level. This user level is set using the menu buttons on the remote as described later in the 'Settings Menu Structure' section. Note that if the brightness is set to zero, any button press will bring the brightness back to the current user setting so the screen can be read.

MENU ACCESS BUTTONS

The two buttons labelled Menu and Enter are used to set the M8 menu items. Use the Enter button to access the menu, then the Up and Down buttons in conjunction with Enter to change settings as desired (see the 'Settings Menu Structure' section on page 13).

PHASE

The phase of the input signal to the preamplifier is toggle from absolute to inverted 180 degrees with each press of this button.

SOURCE SELECTION

The source selection buttons enable changing from one input to another when needed – either CD, Line 1, Line 2, Line 3, or Line 4.

PROCESSOR INPUT SELECTION

The Processor button activates the M8 Processor bypass mode. After pressing this button there is a short delay before the M8 is bypassed and the signal is direct from the Processor input to the RCA outputs.

NOTE: Because the M8 is bypassed in Processor mode the only buttons that continue to function are standby and display. For more information refer to 'Using the Processor Input' in the 'Installation and Operation' section.

VOLUME CONTROL

Use these two buttons to control the volume level of the preamplifier. 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.

MUTE

Pressing this button toggles the PLINIUS M8 in and out of mute.

INSTALLATION & OPERATION



WARNING: RISK OF ELECTRIC SHOCK

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 amplifier in any position where liquids or any foreign material may accidentally enter it.



CAUTION!

PLEASE READ AND UNDERSTAND THE PRECAUTIONS IN THE INSTRUCTION MANUAL FOR THE POSITION AND OPERATION OF YOUR PLINIUS PREAMPLIFIER



CONNECTIONS

Connections to your PLINIUS M8 should be made in the same order as they are listed in this section. DO NOT attempt to connect your PLINIUS M8 until you have read and fully understood these instructions.

Although these instructions refer to the connection of the M8 to line level source components, the M8 can also be safely installed into multimedia systems by following the same installation guidelines. Should you require further assistance, please contact your Plinius dealer.



SOURCE COMPONENT INPUTS

Connect your Source to the input of the PLINIUS M8 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 black (or white) cable to the black 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.

NOTE: DO NOT connect XLR and RCA at the same time, use only one or the other. To select between the two, use the menu setting 'CD MODE' Then select 'Balanced' for the XLR input or 'Single Ended' for the RCA input.



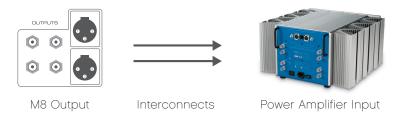


OUTPUT TERMINALS

The connection of the outputs of the PLINIUS M8 must be made by an 'instructed person' or by suitable ready made interconnect cables only. Connections for power amplifiers are provided at the rear of the unit. If using single-ended RCA outputs, connect your M8 to the RCA inputs on the back of the power amplifier. Make sure you connect the red coded cable to the red RIGHT RCA output, and the black (or white) cable to the black LEFT RCA output. Also make sure the RCA connectors are a snug fit and are inserted all the way in.

For XLR output connection, make sure you connect the RIGHT XLR output and LEFT XLR output to the right and left inputs of your Power Amplifier respectively. Also make sure the XLR connectors click into place.

NOTE: DO NOT connect XLR and RCA at the same time, use only one or the other. The only time the outputs are not 'live' is when the Preamplifier is in mute or standby.



TERMINATION QUALITY

Quality of the connections must be examined to ensure that high-performance, trouble-free operation is enjoyed. Check that all interconnection cables are snug fitting and inserted all the way in. In the case of balanced XLR sockets, ensure that they click in positively.

PHASING (OR POLARITY)

It is important to achieve good stereo imaging in your listening room. By observing the wiring instructions above, each preamplifier/power amplifier/loudspeaker combination should be in phase. If you experience poor stereo image and/or a lack of bass, check that all interconnection cables and loudspeaker wires have 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 THE PROCESSOR INPUT

The M8 Preamplifier features a processor input to bypass the M8 when used in home theatre or multimedia installations. When 'Processor' is selected on the M8, the signal will pass from the M8 Processor input directly to the M8 RCA outputs. This enables the M8 to remain in circuit for use with two channel sources (such as CD players and tuners), as well as a link to the power amp and speakers should you wish to use your normal stereo set-up in a surround or home theatre environment.

To access the processor input, press the Processor button on the remote control. To exit the processor input and return to using a source component, press the remote button that corresponds to that source component.

NOTE: When processor is selected, no buttons or menu settings can be accessed except standby and display. A signal connected to the Processor input will go the the RCA outputs only. No signal will be present at the XLR outputs in Processor mode.



CONNECTING THE MAINS SUPPLY

Firstly, check that the mains supply voltage printed on the rear of this amplifier 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 PLINIUS M8. Check the wall outlet is switched OFF, then connect the local mains plug end of the lead to the wall outlet. Check the M8 is switched OFF, and connect the IEC end of the cable to the IEC socket at the back of the M8. With the cord fully connected, switch the wall outlet ON.

Now that your PLINIUS M8 Preamplifier is configured correctly, switch the power switch on the rear panel to ON. The display will now show 'Plinius', 'M8', 'SERIAL NO XXXX', while the internal circuitry stabilises. Use the remote control to take the unit out of MUTE and you can now enjoy your new PLINIUS M8 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 PLINIUS M8 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. Also, as the PLINIUS M8 uses very little power while on, we suggest leaving the unit turned on (but in standby mode while not being used) so that it will always be at it's sonic best.

SETTINGS MENU STRUCTURE

A major feature of your PLINIUS M8 Preamplifier is the settings menu. Options such as balance, display brightness and CD input type are all configured via this menu.

USING THE SETTINGS MENU

After pressing the Menu button on the remote, the settings menu can be accessed.

The Down and Up buttons can then be used to scroll through the following sub-menus:

Balance Bypass Display CD Mode

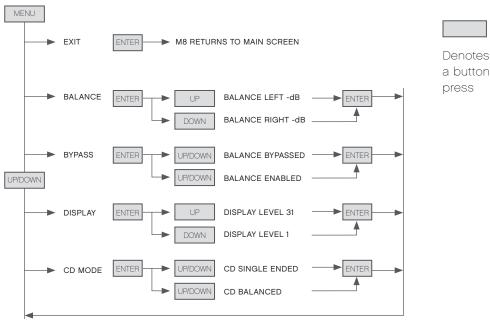
To enter any sub-menu listed above, press the Enter button. Adjust the settings of the sub-menu chosen using the Down and Up buttons and when finished press Enter to return to the main display. The diagram following is a visual reference of this system, and each sub-menu is described in detail below.

MEMORY STORAGE OF SETTINGS

The settings that you access below are all stored in the memory of the M8 microcontroller. Next time you turn on the preamplifier, any settings you have changed (balance level, CD input type, display brightness etc.) will be enabled in that same configuration.

NOTE: UP or DOWN can be held down to perform repetitive key presses. Press and hold UP and DOWN together within Balance sub-menu to return to centre position.

After 15 seconds of inactivity in any sub-menu the preamplifier will return to the Main Screen. If the preamplifier does auto exit the menu system, your settings are not saved.



EXIT SUB-MENU

When 'Exit' appears on the display, press Enter to return the preamplifier to the main screen from the settings menu.

BALANCE SUB-MENU

Press Enter and you can now use the Down and Up buttons to vary the signal between the right and left channels. Note that if you depress the Up button the signal to the left channel is reduced as denoted by the screen message. The opposite applies when using the Down button.

Pressing and holding both Down and Up buttons will return the balance level to centre. Holding either Down or Up will enable fast scrolling through the balance levels. Use Enter to exit this sub-menu. You can also remove the balance control circuitry from the signal path by using the Bypass sub-menu explained below.

BYPASS SUB-MENU

To remove the balance control press Enter and use Down or Up to toggle the balance circuitry on or off. Press Enter once your selection has been made to exit the sub-menu.

DISPLAY SUB-MENU

Press Enter and the display sub-menu will allow you to vary the display brightness to suit the lighting in your room. Use Down or Up to vary the brightness from 1 to 31 (31 being the brightest). Once a suitable brightness level has been achieved, press Enter to return to the main display. Note that as with the balance control you may hold Up or Down to quickly scroll through the brightness levels.

Should you choose a brightness level below 5 and turn off the M8, the preamplifier will power up again at 5 to ensure you can always restart your preamplifier and change settings, should you accidentally set the brightness too low to read.

CD MODE SUB-MENU

If you wish to change CD input from single ended RCA to balanced XLR, press Enter to access the CD mode sub-menu, then Down or Up to toggle between the two options. Press Enter once your selection has been made to exit the sub-menu.

M8 FEATURES

REMOTE CONTROL

Provided with your PLINIUS M8 is a 15 function remote control. Two AAA batteries power the remote, and these are replaced by removing the two screws on the base of the remote that hold the battery compartment in place. The bottom end of the remote is now free to slide out for access to the batteries. Replace the two batteries, taking care to refit the new ones with correct polarity.

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 at no greater than that specified on the rear panel.

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

NOTE: Fuse failure may indicate a severe problem. Should the preamplifier continue to exhibit mains fuse failure contact your Plinius dealer.

SPECIFICATIONS

FREQUENCY RESPONSE

20Hz to 20kHz +/-0.2dB

DISTORTION

Typically <0.05% THD at rated input level

HUM AND NOISE

-80dB at rated input level. A Weighted

INPUT SENSITIVITY FOR RATED OUTPUT

125mV RMS unbalanced. 62mV RMS balanced

INPUT IMPEDANCE

50k

RATED OUTPUT LEVEL

500mV RMS into 10k or higher

OUTPUT SOURCE IMPEDANCE

Typically 100R

HEIGHT	90mm	(3 1/2")
WIDTH	450mm	(17 3/4")
DEPTH	400mm	(15 3/4")
WEIGHT	5.5kg	(12lbs)

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