

PLINIUS M12 PREAMPLIFIER

Thank you for buying a Plinius product. This Preamplifier has been carefully designed and manufactured by hand and under normal circumstances will maintain its present high level of performance for many years to come. Please read this manual fully before you attempt to use the Model 12 as it does require some familiarisation before you add it to your music system.

Serial Number:

Date of Manufacture:

Final Test Certified by:

INTRODUCTION

The Plinius Model 12 Preamplifier is a continuation of the design philosophy embodied in all Plinius Amplifiers and involves the use of asymmetrical circuit topology as opposed to the more normal symmetrical approach. The Model 12 is available in either Phono (M12P) or Line (M12L) variations. The M12L can be upgraded to M12P quite readily by the addition of the M12 Phono Circuit Board.

The Model12 uses an "on board" power supply which consists of a large value toroidal transformer and a tightly regulated initial power supply system. The main power supply occupies a large circuit board located along with the toroidal transformer in a cabinet beneath the main circuit board and is isolated by an aluminium and Custom Wood shelf. This shelf is a sandwich construction 10mm thick and provides a high mass low resonance structure for the main circuit board.

The M12 Chassis is constructed in the main from 10mm aluminium with a 12mm aluminium front fascia. We have designed the chassis to be as resonant free as possible and this has great bearing on the 'sound' of the preamplifier.

Each stage of amplification has its own individual regulator further adding to the ability of the M12 to recreate the full dynamic range possible with today's source material.

The Phono Stage consists of a FET amplifier without overall feedback, in a design similar to a tube circuit, followed by the high frequency equalisation. This in turn is followed by an active feedback low frequency stage.

Although the Model12 was initially designed to provide superb results from Phono source material, the high level circuits have been optimised for CD and other popular sources.

Every component used within the Model12 has been chosen for sonic excellence and all signal cable is by Siltech. All switching is done by high quality silver contact relays and the potentiometers have been selected from Audiophile quality types. The two selector switches on the front panel only activate the relays. They do not carry any audio signals.

CONTROLS.

The volume control is an ALPS type and will accurately convey the source signals to the high level amplification stages.

The M12 has been designed to operate with medium output cartridges ie 1.5mV and above. The Volume Control should be set between 10 o'clock and 2 o'clock for normal listening. If required there is a small jumper located on the Phono Board that can be moved to provide an extra 2db of gain.

The Balance Control when rotated alters the relative gain between the left and right channels. Rotating the control to the left shifts the image left and rotating it to the right shifts it right.

The Source Selector allows any of the inputs chosen to appear at the Main Outputs.

The Record Selector allows recording of any chosen source and will not interfere with any source that is being listened to eg. it is possible to be listening to the CD Input and be masking a recording from the Tuner. Two Tape decks can be fitted and dubbing in either direction is possible.

The Phase Invert switch will change the absolute phase 180 degrees. Some recordings sound better inverted than they do in the normal position due mainly to the recording technique used. Usually this is 'felt' rather than heard and relates to the music being better focused and defined than before. Not all recordings are made the same way and so some experimentation is necessary to find out which is best for you.

As a note of caution, the Model 12 Phono stage is inverting and the switch should be in the "Invert" position for you to hear the phono output in a 'non inverted' way. This switch also changes the Balanced Outputs when operated. The high level inputs are all 'non inverting'.

The Mute Switch allows manual muting of the Model12 Outputs. This switch does not override the automatic mute which is activated when the preamplifier is first switched on or when it is switched off. The Mute Switch should be used when changing discs and provides an instantaneous interruption to answer the 'phone etc. It is wise to leave the preamplifier in the 'Mute' position when not in use. This will prevent any unwanted signals reaching the amplifier.

Do not leave the Volume Control at a high level when the preamplifier is in the 'Mute' mode. Someone may use the system not realising the level is set and a high volume of signal may be sent to the amplifiers.

When the Model12 is in the 'Mute' position the LED on the front will be slightly less bright than when operated.

INSTALLATION

The Plinius Model12 preamplifier should be left switched on at all times. We have purposely fitted the Mains switch on the rear to discourage turning the unit off. If the Model12 is switched off between listening sessions you will never hear just how good it really sounds. In our experience a 48 hour warmup period is required during which the sound quality will change quite dramatically. This change will continue for at least 72 hours after which the preamplifier will be at its optimum. This warmup period is a nuisance but the results are very worth waiting for.

While the Model 12 does not dissipate an inordinate amount of heat, it does require a reasonable amount of space to allow airflow. Do not place anything over the vent holes in the top panel and if placed in a cabinet there should be at least 50mm of clearance above the Preamplifier.

The Model 12 should not be stacked with another amplifier as hum could be induced through the Preamplifiers Phono circuits. If you detect any hum try moving the amplifier around. If the hum level diminishes it has been induced from another source.

REAR PANEL CONNECTIONS

All input connections are clearly marked and apart from the Phono Input have a 50k Ohm impedance.

If fitted with a Phono Board the Model 12 may be 'loaded' at the Phono Input with the supplied Phono Loading Plugs. Without Plugs in place the loading is 47k Ohm and the Plugs supplied will allow the following loading to the Phono Circuit : 10 Ohms, 47 Ohms, 100 Ohms, 470 Ohms, 1k Ohms. The internal capacitance is set at 220pF which will provide immunity from stray RF fields.

TAPE CONNECTIONS AND DUBBING

If two tape decks are fitted to the Model 12 it is possible to dub in either direction. Selecting either Tape Input with the Record Selector automatically sends the tape playback signal to the other tape deck. eg. Select Tape 1 as a record source and its playback output will go to Tape 2. Select Tape 2 as a record source and its output will go to Tape 1.

A 'Tape Lock' feature ensures that the machine playing back and selected as a record source does not get a signal fed to its input sockets , so inadvertently switching it to record mode will not cause feedback howl. While dubbing, the Source Selector allows easy monitoring of either tape deck.

GROUND LIFT SWITCH

The M12 is fitted with a switch on the rear panel adjacent to the Earth Terminal. This is to allow the Signal Ground to be either connected to the Chassis Ground or to 'float' above Chassis Ground.

On some Amplifiers an earth loop or hum can develop if both Signal Grounds are connected to Chassis Ground. Due to the unique Input Selector arrangement, Plinius SA series Amplifiers require the driving preamplifier to have the Signal Ground at Chassis Ground for optimum performance.

SERVICING.

If the Top or bottom covers of the Model 12 Preamplifier are taken off for any reason, remove the mains Supply Plug first. The Voltages present on the circuit board could be harmful.

In the unlikely event that your Model 12 should require any service please take it firstly to your Dealer in its original packaging. He will then determine if the unit should be returned to the factory. Your Plinius Dealer has a good understanding of our Amplifiers and will be able to advise on any further installation requirements.

CLEANING.

A damp cloth is all that is required to remove dust and finger marks from the Model 12's anodised surface.