

NAGRA PL-P

Battery operated tube preamplifier with phono stage



The ultimate design
for the ultimate performance

NAGRA

soundnessneutrality



Class A

Each channel of the PL-P features two triode sections, biased for pure class A operation. As in all vacuum tube circuits within the PL-P, precise DC filament voltage regulation from the power supply ensures low-noise, high-resolution performance and a long lifetime.

Extensive tube's selection

In order to get the best performance out of the PL-P, the tubes go through an extensive selection process. It includes a 12 hour burning-in, as well as a computer matching program on a Nagra custom benchmark.

Uncompromised design

To further reduce the microphonic effects, the main circuit board is mounted on elastomer dampers. The board itself as well as the internal jumpers are gold-plated to further improve sound quality.

Pure and clean power

In any preamplifier, the power supply is a sensitive and significant component, especially when dealing with phono levels.

The PL-P is powered through an external AC/DC converter that provides 12V DC to charge the battery avoiding any mains' disturbance.

The battery is a reserve of power that allows smoothing of mains ripples and consumption spikes. Following the battery another converter generates all the operating voltages.

This design eliminates all disruptive effects of AC powering from wall outlets and may solve persistent hum problems.

transparencymusicality

- 1 Main rotary switch**
This 4-position rotary switch allows selection of all input sources as well as power ON and OFF
- 2 Input level**
Independent left and right level potentiometers allow a precise adaption to source's level as well as balance settings. The potentiometers can be mechanically ganged with a clever geared clutch
- 3 Output level attenuator**
The unique architecture of the PL-P offers an output attenuator for fine level settings



A reference in the high-end world

The PL-P was the first Hi-Fi product designed by Nagra after more than four decades of continuous success in the professional recording market. Since its introduction, the PL-P has set new standards for phono preamplifiers and become a reference; it has received an "A" recommendation from Stereophile magazine (USA) as well as the COTY (Component Of The Year) award from Stereo Sound (Japan) among many others. From a technical point of view, Nagra's equipment is highly sophisticated and innovative. Yet, fundamentally it claims to deliver the original message recorded on your discs. To us, musicality means respect of the original sound. While purity is a notion that is not spectacular, we believe that it is the only thing you will never grow weary of.

Excellence as an heritage

The PL-P was developed by audio experts. Nagra's staff have designed equipment used all over the world to make the best recordings. So the PL-P offers you the chance to serve your music by taking benefit of these qualities at your home.

Unique preamplifier

Designed to achieve the best sonic performance and years of listening pleasure, the PL-P features:

- Fully adjustable phono amplifier (MM/MC)
- Nagra Modulometer
- 100% battery operation
- Custom Nagra made transformers
- Superior quality tubes
- Tape loop
- Headphone amplifier

4 Phono stage
Phono stage tubes

5 Nagra Modulometer
This fine piece of equipment is a powerful tool to enjoy the true essence of the PL-P



4



5

Unique design phono stage

The phono stage uses the best tubes out of our stringent selection process as well as custom designed Nagra transformers for impressive noise figures, dynamic range and high performances.

Variable capacitive and resistive loading is provided to allow ideal matching with all cartridges. Those settings are placed inside the PL-P to avoid any undesirable outside interference and maintain the signal's integrity.

The internal moving-coil phono transformers can be bypassed to allow the use of an external transformer or no transformer at all.

With respect to an RIAA specification, an EQ is available to switch-in a 3 dB rumble filter at 30 Hz.

Nagra Modulometer

The Modulometer is an accurate level indicator developed by Nagra to equip its professional recorders. The Modulometer provides a multitude of functions through two coaxial pointers representing the left and right channels.

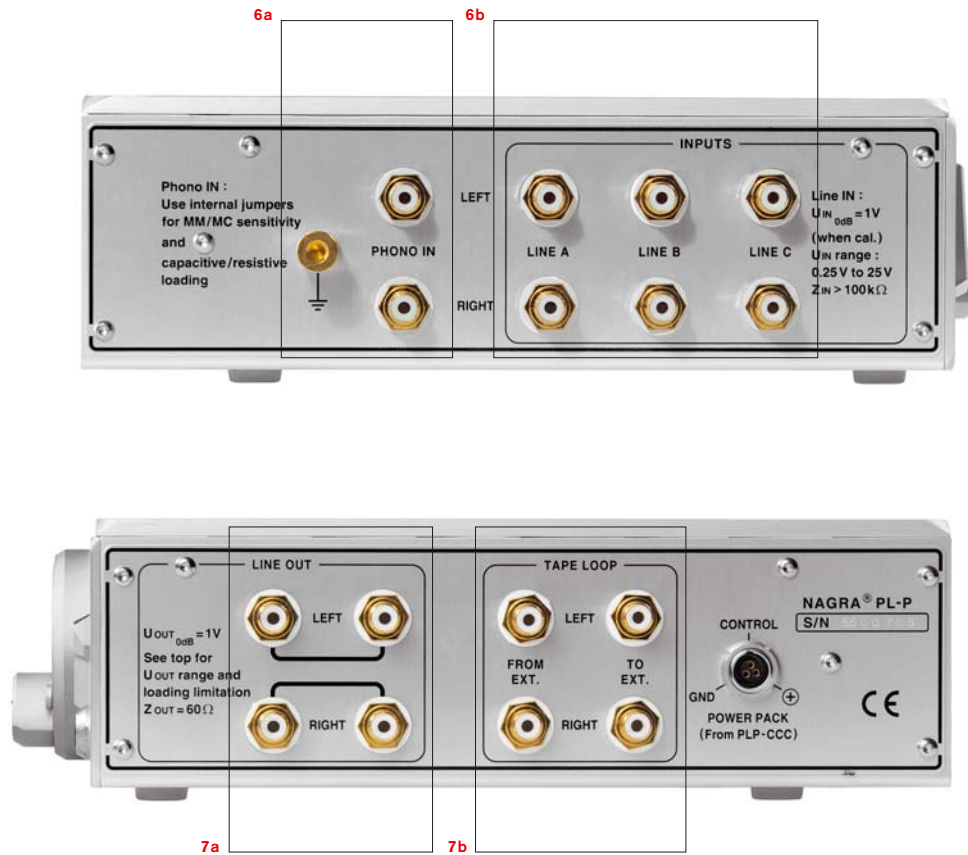
The Modulometer allows you to adjust the input level, thus optimizing signal-to-noise ratio of your system and avoid distortion.

In addition, it will allow:

- Reaching a proper balance between left and right channels
- Compensating the level differences between various recordings
- Checking the battery level
- Verifying the output level of the amplifier

6 Input panel
 phono input with
 ground connection (6a);
 3 line inputs (6b)

7 Output panel
 The main outputs is
 made in parallel
 through two pairs of
 RCA connectors (7a);
 Tape loop, inputs and
 outputs (7b)



Connectivity

The PL-P offers one phono and three line inputs. All inputs and outputs are single ended. They use high quality gold-plated RCA connectors.

Output is made in parallel through two pairs of RCA connectors, for bi-amplification for instance.

Superior grade power connector

A special Lemo plug is used to connect the PL-P to the external DC power supply. The Lemo company is specialized in high quality connectors designed for extreme applications in military and medical fields.

Mono / stereo switch

A convenient mono / stereo switch is provided on the front panel. It facilitates system alignment as well as mono record playback.

Output

The PL-P's outputs are transformer free. With respect to the most demanding professional applications, they can accommodate loads as low as 600 Ohm with only 1 dB drop in signal level.

Tape loop

A full tape loop is provided; it may also be used as an additional input.

Phones

A high quality headphone output is provided to take full advantage of the PL-P's quality any time, night or day. The headphones are connected to the output through high quality Nagra transformers.

technical specifications

Phono stage

Vacuum tubes	1 ECC 81 / 12AT7 1 ECC 83 / 12AX7
For Moving Coil cartridges	
Sensitivity	0.1 mV
Loading	47 to 837 pF and 30 to 330 Ohm
Signal-to-noise ratio	74 dB
For Moving Magnet cartridges	
Sensitivity	0.5 mV
Impedance	50 kOhm
Signal-to-noise ratio	80 dB
Reference	Input potentiometers at maximum position Output potentiometers at 0 dB position

Line stage

Vacuum tubes	2 ECC 81 / 12AT7 4 ECC 83 / 12AX7
Input impedance	> 100 kOhm
Output impedance	60 Ohm
Signal-to-noise	100 dB (A-weighted) at 12 dBV
Bandwidth	22 Hz – 60 kHz (+ 0 / – 1 dB)
Distortion	< 0.02 % 1 V out, no load at 1 kHz < 0.03 % 1 V out, 600 Ohm load < 0.1 % 5 V out, 3 kOhm load
Reference	All potentiometers at 0 dB position

Physical

Size	31 x 7.6 x 25.4 cm (12.2 x 3 x 10 inches)
Weight	4.45 kg (9 lbs 13 oz)

Power supply

Batteries	Nickel-Cadmium rechargeable batteries
AC supply voltage	94-132 and 188-264 V / 44-66 Hz

Subject to change without prior notice

NAGRA

Nagra is a division of the Kudelski Group
1033 Cheseaux - Switzerland
www.nagraaudio.com



Nagra Hi-Fi range of products includes a miniature recorder, a digital to analog converter, preamplifiers, vacuum and solid-state power amplifiers.