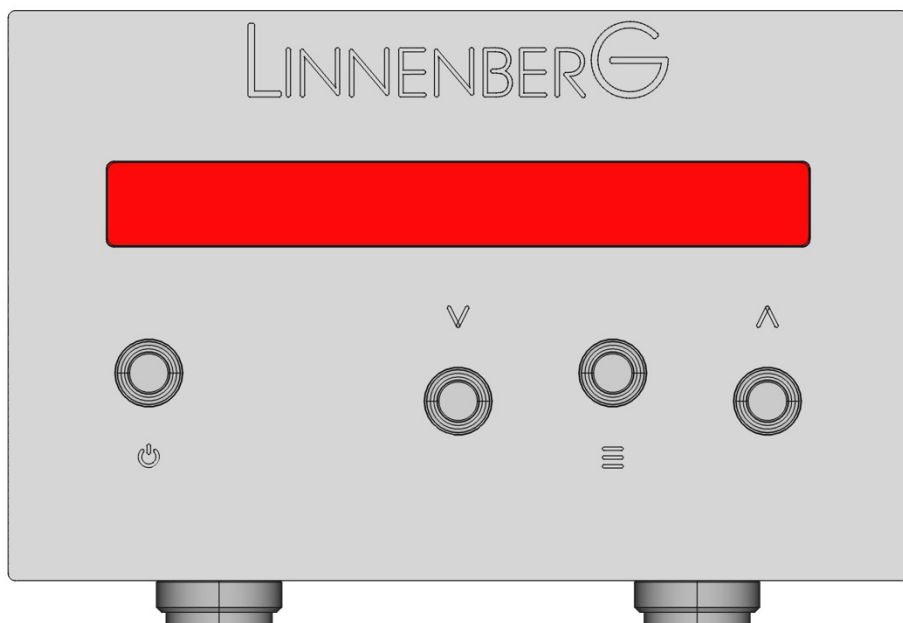


LINNENBERG

PS 30

PHONO STAGE

Owner's Manual



For many music lovers, the playback of vinyl records is the most important medium in their music collection. This is supported by the unmistakable character of the analogue sound, as well as the fact that the playback quality has improved considerably in recent times.

The PS30 phono stage achieves the perfect analog sound through the use of a fully symmetrical circuit that suppresses noise and leaves the sensitive signal of a phono cartridge in the symmetrical mode.

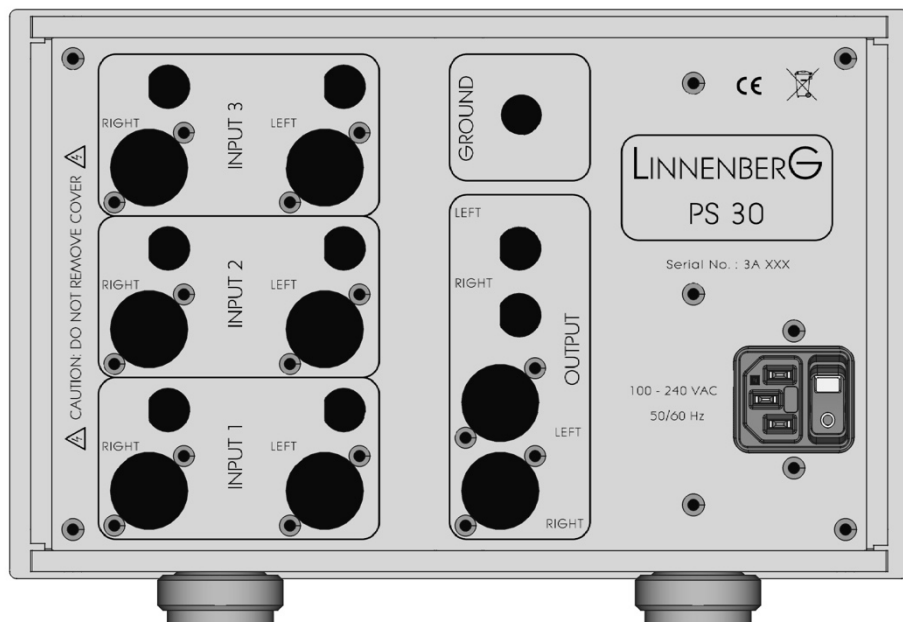
Basic operation

Room temperatures over 30 degrees Celsius (86 degrees Fahrenheit) and / or extreme humidity should be avoided.

Place the unit on a solid, flat level surface such as a shelf where it is convenient to operate. Choose a location where the connecting cable to the tonearm is short (less than 1.5m). Furthermore, make sure that no other devices with powerful mains supplies (power amplifier) are in the immediate vicinity, as the risk of picking up hum is likely.

As it is common practice, disconnect PS30 from the mains during a thunderstorm or when going on vacation.

Connections



Connecting the Analog Output

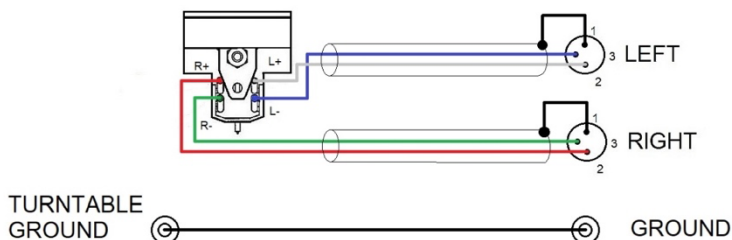
Connect the left and right interconnect cables from the PS30's outputs to your preamplifier left and right inputs. To maintain best sound quality, it is strongly recommended that balanced audio connections to be used. The RCA outputs are completely decoupled from the XLR outputs and can therefore be used simultaneously. The gain between the XLR and RCA is constant; this means that the displayed gain value applies to both the XLR and the RCA connection.

Connecting a Turntable

PS30 has three (3) independent inputs for use with three separate tonearms / turntables. These inputs are labelled Input 1... 3.

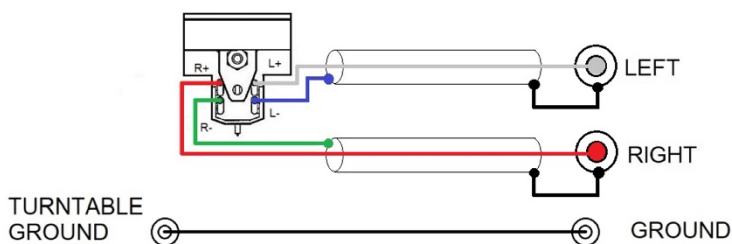
Turntable Connection Types

For start listening, you only need to connect a turntable to the PS30 as you would do to any other phono preamplifier. Nevertheless, please take note of the following: PS30 can be connected to many different types of turntables. To fully realize the sonic potential, use balanced cable connections with XLR terminations whenever possible. Balanced XLR cables minimize interference from magnetic, hum, and RF sources.



Wiring #1

A phono cartridge is actually a true balanced source, a balanced input is provided. Connect the output cables from your turntable to the left and right channel XLR input. Do not short pin 1 (chassis/ground) to either pin 2 or 3 of the XLR connector at any point in the cable, turntable chassis, or tonearm. This will cause hum in the system. Pins 2 and 3 must only be connected directly to the cartridge pins. If your turntable does not have XLR connections, use the Cinch (RCA) input instead.



Wiring #2

The Cinch (RCA) is mainly there for convenience reasons. It will work very fine for Moving Coil cartridges as the source impedance of such transducers is very low. Please note that in this case you swap the cable shield with the function of the second signal conductor. Due to the high common mode rejection of the balanced inputs, hum pick up will not occur, as long as the cable

shields of the left and right channels are not connected to each other, or to the chassis ground.

Since there are numerous tonearm configurations on the market – mainly intended for unbalanced standard phono amplifiers – LINNENBERG AUDIO cannot guarantee that a configuration will automatically work properly. Sometimes experimenting with different ground schemes is inevitable. Your dealer will help you if a problem arises.

Select + UP / DOWN

Press the <Select> button to navigate through the various submenus. Top-Level (= Input-Select) -> Gain -> Mode -> Load-Resistance -> Load-Capacitance -> Phase -> Top-Level

Important: if no button is pressed for 3 seconds, the PS30 returns to the top level, engaging the last chosen option. It is very convenient to use this feature for selection any possible option and not pressing <SELECT> again and again to reach the top level.

The PS30 phono stage has an automatic mute function. When settings are changed, the output of the PS30 is muted for the necessary time. The display shows "MUTE". However, scrolling through the menu items without changing anything does not lead to a muted output.

Input select (= Top-Level)

PS30 has three independent inputs. You can switch over from one to the other on the fly by pressing the UP / DOWN push buttons.

Submenu **Gain**

Each input has 3 gain settings. 50dB, 60dB or 70dB. The 50dB setting is intended for MM-cartridges or step-up transformers, whereas the 60dB/70dB gain is used for MC-cartridges. When changing inputs, the chosen gain, as well as all other settings will be stored.

Submenu **Mode**

In order to further increase flexibility, the PS30 inputs can be switched from symmetrical to asymmetrical mode. **Changing the mode has no effect on the outputs! The XLR output still delivers a symmetric signal, even when the mode is set to unbalanced (ASYM) operation.** In general, when using a balanced phono cable (wiring #1), the mode setting should remain in the "SYMM" position. When using the RCA input jacks (wired to #2 or similar) the "ASYM" mode can help to eliminate a hum problem, especially when using an MM cartridge. In either case, please try "SYMM" operation first.

Submenu [Load Resistance](#)

Set the resistive load to 30Ω , 60Ω , 80Ω , 90Ω , 100Ω , 130Ω , 150Ω , 180Ω , 220Ω , 320Ω , 470Ω , $1k\Omega$ or $47k\Omega$ depending on the cartridge manufacturer's recommendations or by listening. The $47k\Omega$ setting is for MM-cartridges mainly. Thus, a $47k\Omega$ setting plus a gain selection of 50dB results in an "MM" readout on the display.

Submenu [Load Capacitance](#)

Set the capacitive load to 50pF, 100pF, 150pF, 200pF, 270pF, 320pF, 370pF or 420pF depending on the MM-cartridge manufacturer's recommendations or by listening. Please note, that the chosen capacity is adding to the intrinsic capacity of the input circuitry ($\approx 100\text{pF}$) and plus the cable capacitance. This setting only makes sense for MM cartridges, since MC systems react little to hardly at all to the load capacity.

Submenu [Phase](#)

Usually, this setting should remain in the standard = "NORM" position. Since there are records that are recorded with inverted phase, you can reverse the overall phase to correct this.

Specifications

Gain: (sym. input -> sym. output)	50 – 60 – 70dB
Signal to noise ratio:	Gain = 50dB, @ $U_{in} = 5\text{mV}$: 96dB(A) Gain = 60dB, @ $U_{in} = 500\mu\text{V}$: 78dB(A) Gain = 70dB, @ $U_{in} = 500\mu\text{V}$: 77dB(A)
Equivalent Input Noise:	64nV = -144dBV
Frequency response: RIAA equalization curve (75 μs / 318 μs / 3180 μs)	+/- 0.2dB max.
Low cut filter:	5Hz, 12dB / octave
Distortion and Noise:	< 0.004% @ 0dBV (Gain = 50dB) < 0.015% @ 0dBV (Gain = 70dB)
Max. output level:	19V rms balanced, 10V rms unbalanced
Output impedance:	10 Ω per phase

General:

Dimensions (W x H x D) :	260 x 180 x 310 mm
Weight:	8kg

Measurements taken in accordance to
"stereophile" magazine, John Atkinson

CE declaration of conformity

Product Type: Phono preamplifier

Model: PS30

Linnenberg-Elektronik declares that this product complies with the Low Voltage Directive 2014/35/EU and the Electromagnetic Compatibility Directive 2014/30/EU as well as the Ecodesign Directive 2009/125/EC.

The unit meets all currently valid regulations only in its original condition. The original, unaltered factory serial number must be present on the outside of the unit and must be clearly legible! The serial number is an essential part of our conformity declaration and therefore of the approval for operation of the PS30. The serial numbers on the unit and in manual, must not be removed or modified, and must correspond.

Furthermore, the unit has been found to comply with the limits for a Class B digital device, pursuant to Part 15, subpart B (unintentional radiators) of the FCC rules.

LINNENBERG – ELEKTRONIK

Germany

Phone: +49/178/7672984

Mail: info @ linnenberg-audio.de

© Linnenberg Elektronik 2025