

Pearl

Built-in phono preamplifier in turntable Drive



Scope of Delivery

The phono preamp Pearl is an integral part of Genuin Audio's turntable Drive. It allows the use of cartridge systems based on the principles Moving Magnet (MM) and Moving Coil (MC), also in the variant "High Output".

Connection

Please follow the instructions in the Drive's operation manual to start it with the phono preamp Pearl. The Pearl can be connected to any Cinch / RCA line input of a commercially available pre-amplifier or integrated amplifier.

Cables up to 4 meters long can be connected to the output sockets of Pearl (in Drive). Since the low output resistance is less than 50 Ohm, significant interactions between cable capacitance and output resistance are negligible. Nevertheless, the cable capacitance should be below 150 pF/m.

No additional ground wire is required.

Settings

Comprehensive settings can be configured via the DIP switches on the left side on the back of the drive. By changing input impedance, amplification and capacitance (MM only), it is possible to tailor Pearl perfectly to the selected cartridge systems and the individual preferences of the listener.

You can adjust all switches during operation - with one important exception: the MM/MC switch!

Attention!

Do not use the MM/MC switch during operation, as long as the adjacent volume control is not set to zero (= no signal at the output of the connected preamplifier stage)! The resulting impulsive, very loud pops can destroy connected speakers or power amplifiers!



Always wait approx. 30 seconds after switching from MM to MC or from MC to MM. During this time, the internal servo amplifiers will set the output DC voltage to 0 volts. Only then can the volume control be turned on again.

MM/MC

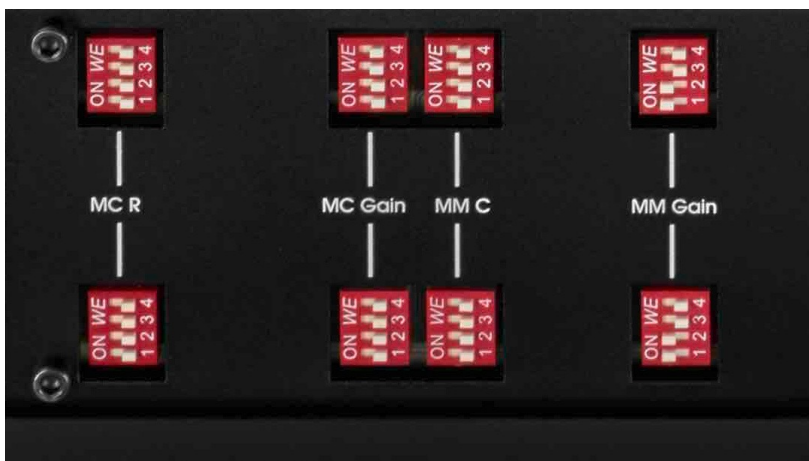
The phono preamp Pearl always works in the symmetrical (balanced) amplification mode when using MC systems, or the asymmetric (unbalanced) amplification mode when using MM systems. The changeover is done via switch MM/MC.

Subsonic-Filter

The subsonic switch next to the MM/MC switch turns on the subsonic filter at a roll-off of 18 dB / octave and a cut-off frequency of 16 Hz.

Function On/Off

Rule of thumb: If the DIP switches are inactive, the rest position is always at the right or bottom depending on the installation of the switch. This means the active position is at the left or top.



Input impedance MC

In the case of MC R DIP switches, you can set the input impedance of the MC input stage between 2000 Ohm and 125 Ohm.

For inactive DIP switches, the input impedance is 2000 Ohm.

| | |
|-----------------|----------|
| Switch 1 active | 1000 Ohm |
| Switch 2 active | 500 Ohm |
| Switch 3 active | 250 Ohm |
| Switch 4 active | 125 Ohm |

Amplification MC

The MC Gain DIP switches change the amplification of the MC stage. The overall amplification of the phono preamp Pearl is always the sum of MC and MM amplification.

For inactive switches, the MC gain is 20 dB.

| | |
|-----------------|-------|
| Switch 1 active | 22 dB |
| Switch 2 active | 24 dB |
| Switch 3 active | 26 dB |
| Switch 4 active | 28 dB |

If a high input impedance and a low amplification are selected, High-Output MC systems can also operate in the MC position.

Capacitance MC

The DIP switches MM C enable the capacitive adaptation of MM systems by self-adding capacitances. When the Genuin Point tonearm is used, the capacitance from the start of the tonearm (cartridge connectors) to the Lemo plug is approx. 50 pF. This value is added to the input capacitance of the subsequent MC amplifier.

Please note: When using MC cartridges, the position of these switches is insignificant.

The fixed input capacitance of the phono preamp Pearl is 47 pF.

| | |
|-----------------|--------|
| Switch 1 active | +47 pF |
| Switch 2 active | +47 pF |
| Switch 3 active | +47 pF |
| Switch 4 active | +47 pF |

The maximum load capacitance when using the above-mentioned tonearm is therefore 285 pF (5 x 47 pF + 50 pF).

Amplification MM

The MM Gain DIP switches allow an amplification adjustment of the MM amplifier section. For inactive switches, the amplification is 37 dB.

| | |
|-----------------|-------|
| Switch 1 active | 39 dB |
| Switch 2 active | 41 dB |
| Switch 3 active | 43 dB |
| Switch 4 active | 45 dB |

By appropriate selection of MC and MM amplification factors, a suitable amplification for any existing electrodynamic cartridge system should be found.

The maximum total amplification is therefore 73 dB (switch 4 MC + switch 4 MM). Typical values for MC are 60 dB and 40 dB for MM.

In the case of a complete mismatch and potential resulting overload, the transparent ring around the stop button of the Genuin Drive record player will flash red at high speed. This will also happen if the distortion limit of 0.1% THD & Noise is exceeded (which is not audible yet).

The overload limits for MM and MC at 1 kHz are + 20 dB above nominal level. The nominal levels for MC and MM are 0.5 mV and 5 mV, respectively.

Information

Technical Specifications

Further technical specifications are available on the website www.genuin-audio.de/en/.

Safety Instructions

Do not operate the unit in places where it is exposed to extreme heat or moisture.
This will avoid the risk of electric shock or fire.
Check the local mains voltage before operation.
Do not remove the cover.

Service

There are no user-serviceable parts inside the unit.
Always leave repairs to trained professionals. Warranty will be void if the product has been handled by unauthorized persons. In case of repair, please contact Genuin Audio or your authorized dealer.

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Contact

Genuin Audio
Byhlener Straße 1 - 03044 Cottbus - Germany
Phone +49 (0) 355 38377808 - Fax +49 (0) 355 38377809 - Email: info@genuin-audio.de

