

### INSTRUCTIONS

Thank you for purchasing Phasemation P-3, MC phono pick up cartridge.

For the best performance and product durability, please read the following instructions carefully to follow for the proper use of P-3 before setting up.

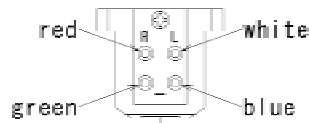
#### Features

- All the parts of P-3 are manufactured with precise processing without using any molds in order to keep the accuracy and get rid of the vibration other than generation of electric power.
- The base which build the mechanical grounding uses duralumin materials with DLC (Diamond Like Carbon) treatment and elevated its surface hardness to more than Hv= 3000, which is equivalent to the diamond.  
The high rigidity and the body with the superior vibration dumping characteristics are successfully materialized.  
The generic term of the carbon thin film with high rigidity and electric insulation, whose hardness is equivalent to the hardness of diamond synthesized by the gas phase synthetic method.
- Materials with established reputation for the high quality sound, such as cantilever using light and highly rigid pure boron materials, an electric generator with 6N oxide free copper wires and pure iron coil bobbin with high saturation magnetic flux density, are used for P-3.

#### Connection

Magnet poles of each terminal are shown right, as holding the needle rim face down

- |                           |                           |
|---------------------------|---------------------------|
| The left upper terminal : | Right channel + ( red )   |
| The right upper terminal: | Left channel + ( white )  |
| The left lower terminal:  | Right channel - ( green ) |
| The right lower terminal: | Left channel - ( blue )   |



#### Installation

- The mounting hole of P-3 is a through-type and it can be pinched with the shell and the screw.  
The recommended length of the screw (M2.5mm, P0.45mm) is 10mm.
- P-3 is required to use with a MC low impedance transformer such as Phase Tech T-3, or a head amplifier.

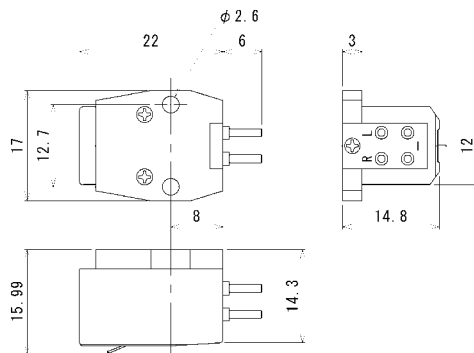
#### Attention

- Please do not touch the coil and the wire when you clean the stylus chip with a brush.  
Be sure to avoid to use the cleaners such as alcohols solvent.
- Room temperature : 20 to 26 .  
Before using P-3, please make sure to take enough warm-up time until the room temperature fits in the range especially in winter.  
P-3 will hardly perform well as it is designed when it is used under the temperature out of the range.
- When you clean P-3, please use clean cloth instead of benzene and thinner.

#### Specifications

- Electric Generation : Moving coil
- Stylus chip : Diamond  
(line contact / bending rate 0.03 x 0.003 mm)
- Compliance :  $7.3 \times 10^{-6}$  cm / dyne ( 100 Hz )
- Output Voltage : Above 0.27 mV  
(horizontally 1 kHz 50 mm / s )
- Impedance : 4 ohm
- Appropriate Needle Pressure : 1.7 to 2.0 g
- Frequency Range at play : 10 Hz to 30 kHz
- Separation : above 30 dB ( 1 kHz )
- Channel Balance : within 1 dB ( 1 kHz )
- Applicable Temperature Range : 20 to 26
- Self weight : 10.9 g
- Dimensions : See the figure
- Cantilever : pure boron
- Magnet : NeoDeltaMagnet
- Base : Duralumin  
(with DLC treatment)

Figure (unit:mm)



#### Needle exchange

In the event P-3's needle is worn off, the body has to be replaced with the exchange price, since the needle can not be separated from the body.

#### Manufacturer