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TYPE WRN/2 PICKUP

APPLICATION

The type WRN/2 pickup is a magnetic unit designed to provide a high quality playback from modern lateral disc recordings of either the microgroove or standard groove type.

FEATURES

The pickup is of the wide gap variable reluctance type with cantilever stylus. An exclusive design feature permits the stylus to be changed instantly by removing the front plate complete with stylus, armature and suspension as a unit, thus eliminating the need for small electrical contacts or pins between the pickup head and tone arm. The plate is held in place magnetically and located by two dowel pins. The tone arm is of the low mass tubular counterbalanced type, of neat appearance and fully adjustable for height.

Special attention has been paid to the tone arm pivot which is of simple construction and offers extremely low friction to lateral movement of the arm.

A small handle is provided at the side of the head to facilitate lowering the stylus into the groove.

Special attention has been paid to the design of the stylus guard to provide adequate mechanical protection, whilst leaving the stylus completely visible from above the pickup to allow easy spotting of the record grooves.

SPECIFICATION:

(a) Mechanical.

Stylus Pressure

Approximately 6 grams. Operation is satisfactory down to 3 grams, but the above figure has been selected as the best compromise.

Lateral Compliance at Stylus Tip

Not less than  $5 \times 10^{-6}$  cm/dyne.

Vertical Compliance

Not less than  $2 \times 10^{-6}$  cm/dyne.

Effective Mass to Lateral Movement

Approx. 2.5Mg.

Effective Mass to Vertical Movement.

Approx. 1.5Mg.

Stylus Radius.

.001" for microgroove records.

.0025" for standard records.

Stylus Change

Removeable front plate assembly.

Suspension

Bonded neoprene.

Tracking error

Less than  $4^\circ$

Tone-arm Mounting Centres

12" Model -  $7\frac{5}{8}"$  - 16" Model -  $10\frac{3}{4}"$ .

Counterweight Overhang

12" Model -  $2\frac{1}{2}"$  - 16" Model - 3"

(b) Electrical.

Frequency Response

Microgroove or standard stylus -

Within + or - 2db, 20-14000 cps.

Intermodulation

Less than 2% measured at 100 cps. and 7000 cps. (Cook record).

Tone Arm Resonance

20 cps + or - 5cps.

Output Voltage

Approx. 10/MV/CM in 150,000 chms.

Load Impedance

Transformers

Available in 50, 200, 500 or 150k ohms balanced.

**NOTE:** The Plywood plate on which the pickup is mounted may be used as a mounting template by passing the turntable centre pin through the hole provided ( $9/32"$ ) and marking the position of the pickup base through the appropriate holes. The height adjustment on the base of the pickup should be set to give approx.  $5/16"$  clearance between the edge of a 12" record and the underside of the tone arm. When connecting the pickup and transformer the following precautions should be taken.

- (a) Twist leads between pickup and transformer
- (b) Keep high impedance leads between transformer and amplifier short. Screening of these leads may be necessary.
- (c) Earth one side of pickup leads and earth tone arm by means of metal thread screw passed through pickup base and motor board.
- (d) Keep transformer clear of power transformer if possible.
- (e) Mount turntable and pickup so that pickup does not pass directly over turntable drive motor.