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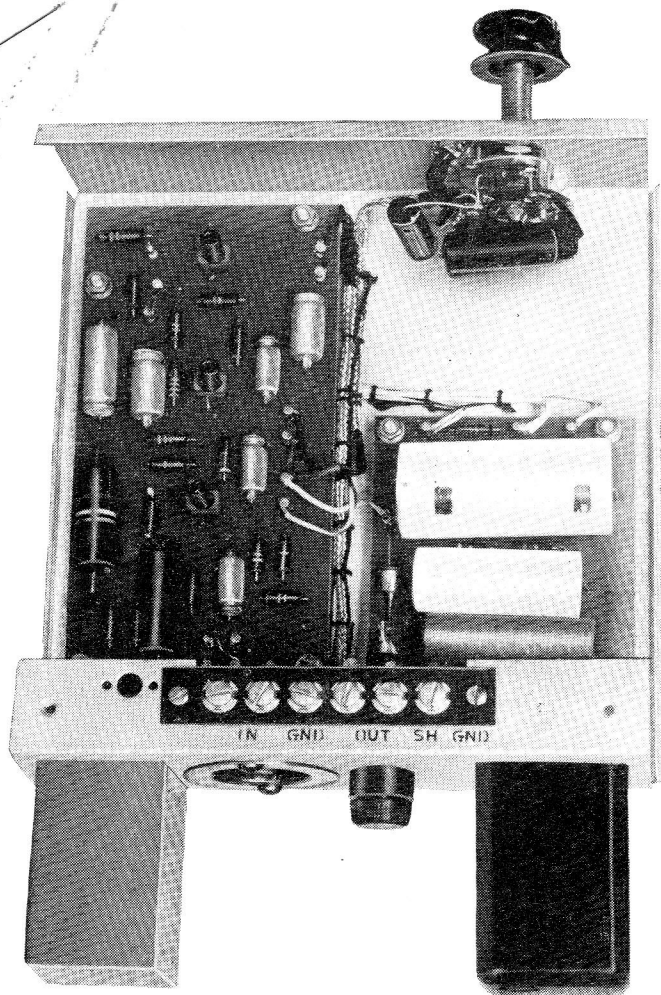


Fig. 1: Preamplifier with the cover removed

The design of a preamplifier equalizer for a magnetic pickup requires consideration of the normal recording level, pickup characteristics, and output level requirements. These design considerations are described in an easy to follow manner.

For Magnetic Pickups . . .

Transistorized Preamplifier Design

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A TRANSISTOR preamplifier equalizer for magnetic pickups has been designed for use in broadcast studios. It can be used with low impedance magnetic or high impedance variable reluctance type cartridges.

The design of a preamplifier equalizer for a magnetic pickup requires consideration of the normal recording level, the characteristics of the pickup, and finally the output signal level required. The preamplifier is designed for the low impedance magnetic and the variable reluctance pickup similar to the "postage stamp" and G.E. RPX147 respectively.

The input level to the preamplifier is dependent upon the recording level and the transducer efficiency of the particular pickup. A 45 RPM test record RCA #12-5-51 has a normal recording level of 6.3 cm/sec at 1 KC. This level has found general acceptance and is used in this preamplifier design. Using the normal level test band of this record, the "postage stamp"

Fig. 2: Data was plotted using 1000 cps as the reference voltage point

