SPECIFICATION TL/10 AMPLIFIER

CIRCUITRY :

A Leak 3-stage triple loop feedback circuit, the main loop applying 26 db of negative voltage feedback over the complete amplifier from input to output terminals.

The output stage uses two high slope tetrode valves, the screens being fed from two tappings on the output transformer primary.

Power Output : Maximum power output, 10 watts.

Harmonic Distortion : Approximately 0.1% for 7.5 watts output at 1,000 c/s.

Hum and Noise : −80 db referred to 10 watts, ±4 db.

Sensitivity : An input of 125mV at 1,000 c/s gives 10 watts output.

Input Impedance : 1 megohm, plus approximately 5 mmfd.

Frequency Response : ±1 db, 30 c/s to 20 kc/s.

Damping Factor : 25, measured at 1,000 c/s.

Stability Margins : Gain, 10db ±3db.
Phase, 20° ±10°.

Loudspeaker Impedances : Three tappings are available, and loudspeakers of any impedance between 3 ohms and 20 ohms may be used.

Valves : 1-EF86* (Z729), 1-6SN7* (ECC33 or B65); 2-KT61* (6AG6G), 1-5Z4*.

*Preferred type, supplied with amplifier.

Power Supply : 200-250V 50-100 c/s.
or (alternative model)
117V 50-100 c/s.

Consumption : 70 watts (75 watts with "Point One" pre-amplifier).

Spare Supplies : When the "Point One" pre-amplifier is also used, the following supplies are available for a tuner unit.

Heater : 6.3V., 1.5A A.C.

H.T. : 330V., 20mA D.C. (2V r.m.s. ripple).

The centre tap of the heater winding and the negative of the H.T. supply are internally connected to the chassis of the amplifier.

A socket marked "MOTOR" is fitted on the chassis as a convenient source of power supply for a gramophone motor.

Dimensions : $10\frac{7}{8}$" × $8\frac{1}{2}$" × 6" high (27.7 × 21.5 × 15.25 cms.).

Weight : 14.5 lbs. (6.58 kgs.).

Price : £17 17 0d.

The TL/10 amplifier when used with the best available complementary equipment gives to the music-lover a quality of reproduction unsurpassed by *any* equipment at *any* price. Even when the complementary equipment falls below that of the best obtainable, the use of our amplifiers will enable you to obtain very marked improvements in reproduction.

It is appropriate here to mention one of the basic principles of LEAK design. From long experience and by extreme attention to design details during development work on the pre-production models, we enable our labour force to achieve a high output per man-hour. The labour costs thus saved offset the increased costs incurred for high-grade materials, components and finishes, and this together with quantity production (made possible only by a world-wide market) explains how quality products may be sold at reasonable prices.

The difference in price between the TL/10 and the TL/12 is accounted for by :—

(1) The saving effected by designing the TL/10 with a lower output than that of the TL/12. It should be pointed out that the output of the TL/10 is ample for high quality home music systems and that the quality of reproduction obtained is equal in every respect to that of the TL/12.

(2) The saving effected by the TL/10 being built for use only in temperate climates. The TL/12 is suitable for tropical use.

(3) The saving effected by our being enabled to manufacture in much larger quantities because of the increased demand. The TL/10 amplifier and "Point One" pre-amplifier received such an excellent reception when they were first exhibited at the Audio Fair in New York in October, 1953 that we received an initial order for one thousand sets.