TL/10 FEEDBACK AMPLIFIER

AND

"POINT ONE" PRE-AMPLIFIER

—o—

INSTALLATION, OPERATION and MAINTENANCE

—o—

You now possess a complex scientific instrument. The performance of this instrument can be checked by measurements, and these will show that the amplifiers are as near perfection as present day knowledge can make them. *But*, the potentialities of the amplifiers will be realised only by proper installation and operation. Proper installation means careful choice of the devices which precede the amplifiers (pickups, radio tuners, tape recorders), and careful choice of the loudspeaker (and its mounting) which follows the amplifiers. Proper installation also means connecting these input and output devices in such a way as to introduce the minimum of distortions. To ensure that these amplifiers will be used properly their designer has prepared these notes and data and he hopes that reference to them will lead to many years of pleasure. Thank you, and good listening !

H. J. Leak.

H. J. LEAK, M.BRIT.I.R.E.

CONNECTING THE TL/10 AMPLIFIER

1. Check that all valves (tubes) are correctly seated in their holders.

2. The amplifier should stand on its base in a well-ventilated position. If it is placed in the bottom of a cabinet the back should be ventilated.
   The amplifier should be kept at least 2 ft. (60 cms.) away from pickups, because some designs of pickup are very susceptible to induced hum from power transformers.

3. On the U.S. model the power transformer primary is wound for the standard voltage of 117.
   On the British model the mains transformer primary is wound for voltages between 200 and 250. The voltage selector plug on the side of the mains transformer T2 (pictured on page 7) should be set appropriately.
   Both models are suitable for supplies of 50 to 60 c/s.
   Twin leads from the A.C. mains (power) supply should be taken through the rubber grommet marked " A.C. POWER," knotted behind the grommet, and connected to the terminals inside the amplifier marked " 117V " (in the case of the U.S. model) or " 200/250V " (in the case of the British model).
   On the same bakelite strip are two more terminals marked " A.C. SWITCH," which must be short-circuited in order to operate the amplifier. A remote switch may be run from these terminals, the twin flex being passed through the adjacent grommet marked " A.C. SWITCH." The flex should be knotted behind the grommet.
   Most users will wish to make use of the mains switch incorporated with the volume control in the pre-amplifier, and a plug and twin flex is supplied for this purpose. The bare ends of the flex should be taken through the grommet marked " A.C. SWITCH," knotted, and connected to the " A.C. SWITCH " terminals inside the TL/10 amplifier, and the plug inserted in the socket marked " A.C. SWITCH " on the rear of the pre-amplifier.

4. The socket marked " MOTOR " is fitted as a convenient source of supply for a gramophone (phono) motor. The power taken from this source should be limited to 60 watts or thereabouts. This socket is not controlled by the amplifier switch or fuse.

5. To ensure safety and freedom from hum a connection to earth (ground) must be taken from the terminal marked on the chassis with the symbol ⏚. *It is very bad practice to omit this connection*, which may be made to the water system or to the steel conduit encasing the house wiring provided that these are themselves properly grounded. No other earth connections should be made elsewhere, particularly when a pre-amplifier is also used, if freedom from " earth loops " and hum is desired.