

## OPERATION.

1. The "STEREO 20" may be fed from the "POINT ONE STEREO" or "VARISLOPE STEREO" pre-amplifier or from any other suitable source. The Leak pre-amplifier is supplied with a brown multiple cable terminating in an octal plug which fits the socket on the "STEREO 20" marked "PRE-AMP" and automatically makes the input connections.
2. When the "POINT ONE STEREO" or "VARISLOPE STEREO" pre-amplifier is not used the input connections should be taken via two screened co-axial cables to the plugs fitting the sockets marked "INPUT L" and "INPUT R". Source impedances higher than 25,000 ohms will tend to raise the hum level above the advertised figure of 80db below 11 watts. An input of 125mV r.m.s. will give a power output of 11 watts.

## INSTALLATION.

3. Check that all valves (tubes) are correctly seated in their holders and that the markings on the valves correspond with those on the chassis adjacent to the holders. The amplifier will work equally well with any of the alternative valves.
4. The amplifier should stand on its base in a well-ventilated position. If placed in a case or cabinet, ventilation must be provided. Four fixing feet are fitted to the amplifier, and these raise the bottom of the amplifier and allow air to circulate freely.
5. On the British model the mains transformer is tapped for voltages of 205, 225 and 245 and the voltage selector plug on top of the mains transformer (see "TOP CHASSIS" drawing) should be set appropriately. On the U.S.A. model the mains transformer is tapped for voltages of 110, 117 and 124 and the voltage selector plug should be set appropriately. The A.C. power supply should be connected to the two terminals nearest the guide key on the removable plug portion of the mains connector marked "A.C. POWER". In order that the amplifier may be remotely controlled we have provided two terminals marked "SWITCH" underneath the mains transformer (see "UNDER CHASSIS" drawing). The amplifiers leave our factory with a wire link joining the terminals. A remote switch may be run from the switch terminals, the switch flex being passed through the adjacent grommet marked "SWITCH CABLE". This flex should be knotted behind the grommet and the wire ends connected to the switch terminals—after removing the wire link. Most users will wish to employ the switch incorporated in the volume control of the "POINT ONE STEREO" or "VARISLOPE STEREO" pre-amplifier, which is supplied with a plug and twin flex for this purpose. Full details are given on the installation sheets which accompany every pre-amplifier.
6. A double socket marked "A.C. OUTLETS" is fitted as a convenient source of power supply for gramophone motors, self-powered radio tuners etc. The power taken from this socket should be limited to 100 watts or thereabouts. This socket is not controlled by the amplifier switch or fuse.
7. A connection to earth (ground) should be taken from the third terminal on the removable plug portion of the "A.C. POWER" connector. This terminal is the one furthest away from the guide key and its corresponding terminal on the fixed portion of the connector is marked on the chassis by the symbol  $\perp$ . 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, providing that these systems themselves are properly grounded. To ensure freedom from hum (caused by 'earth loops') no other earth connection should be made.
8. The loudspeakers should be connected by twisted pairs of wires to the terminals marked "LOUDSPEAKER L" and "LOUDSPEAKER R". It will be seen from the circuit drawing that one side of the loudspeaker winding is connected to the chassis, and no part of the loudspeaker wiring should be earthed elsewhere. The D.C. resistance of the connecting wires should be as low as possible, and not more than one-tenth the D.C. resistance of the loudspeaker. It is a bad practice to operate any power amplifier without a loudspeaker, and if it is desired to mute either loudspeaker by switching it out of circuit this should be accomplished by use of a change-over switch which replaces it with a resistor of corresponding value and rating. If for any reason only one loudspeaker is to be used then a similar resistor should be connected across the loudspeaker terminals of the amplifier channel not in use. The selector plugs on top of the output transformers (see "TOP CHASSIS" drawing) should be adjusted for the nearest match to the advertised impedance of the loudspeakers.
9. Some users may wish to connect (as a temporary measure) a single channel Leak pre-amplifier to the "STEREO 20". Under these circumstances, the standard black multiple cable (supplied with the pre-amplifier) should be connected to the "PRE-AMP" socket. The left-hand channel will be driven by this pre-amplifier and the right-hand channel should have a resistor of approximately 16 ohms ( $\frac{1}{4}$  watt) connected across its loudspeaker terminals.