



# LEAK

## TL/50 PLUS POWER AMPLIFIER

### INSTALLATION, OPERATION & MAINTENANCE

1. The TL/50 Plus may be fed from Leak "Varislope III" and "Point One Plus" pre-amplifiers, or from any other suitable source. An input of 125mV r.m.s. will give a power output of 50 watts.

Leak pre-amplifiers are supplied with a multiple connecting cable terminating in an octal plug which fits the socket on the TL/50 Plus marked "PRE-AMP" and automatically makes the input connection. In this case the input "GAIN" control should be turned fully clockwise.

When a Leak pre-amplifier is not used the input connections should be taken via a screened co-axial cable to the plug fitting the socket marked "INPUT" and the "GAIN" control adjusted to suit the signal level.

2. Check that all tubes are correctly seated in their holders and that the markings on the tubes correspond with those on the chassis adjacent to the holders. The amplifier will work equally well with any of the alternative tubes listed on the chassis.

3. The amplifier should stand on its base in a well-ventilated position. If placed in a case or cabinet, ventilation must be provided. Four separate fixing feet, with screws, are provided. These feet raise the chassis from the mounting surface and assist ventilation.

4. The mains transformer is tapped for voltages of 100, 108, 116 and 124 and the voltage selector plug on top of the mains transformer should be set appropriately.

5. There is a female receptacle supplied with an AC power cord attached. This should be plugged into the rear of the amplifier marked "AC POWER".

6. 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 amplifier will not work unless these terminals are electrically joined. When the amplifier leaves our factory a twin cord is joined to these terminals; the cord passes through the grommet marked "SWITCH CABLE" and is terminated in a flat female receptacle which normally is plugged into the rear of the Leak pre-amplifier marked "SWITCH". This enables you to switch the TL/50 Plus

Power Amplifier by using the switch incorporated in the volume control of the Leak pre-amplifier. If a Leak pre-amplifier is not used, you may replace the flat female receptacle with a switch.

7. A double socket marked "AC OUTLETS" is fitted as a convenient source of power supply for phonograph 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.

8. The amplifier can be grounded by use of the third terminal on the removable plug portion of the "AC POWER" connector. This terminal is the one furthest away from the guide key and its corresponding terminal on the connector on the amplifier is marked on the chassis by the symbol  $\sphericalangle$ . The ground can be made to the water system or the steel conduit casing the house wiring. No other ground connections should be made elsewhere, particularly when a pre-amplifier is used.

9. The loudspeaker should be connected by a twisted pair of wires to the terminals marked "LOUDSPEAKER". The loudspeaker should not be grounded.

Do not operate the amplifier without a loudspeaker attached.

The selector plug on the top of the output transformer should be placed in the sockets to give the nearest match to the advertised impedance of the loudspeaker being used.

#### GENERAL NOTES ON MAINTENANCE

The circuit diagram provides a qualified engineer with all information required for servicing. However, the following points may be of interest:

(a) The TL/50 Plus does not depend upon the output tubes being a matched pair to give the stated performance, and if one output tube fails it is not necessary to replace both.

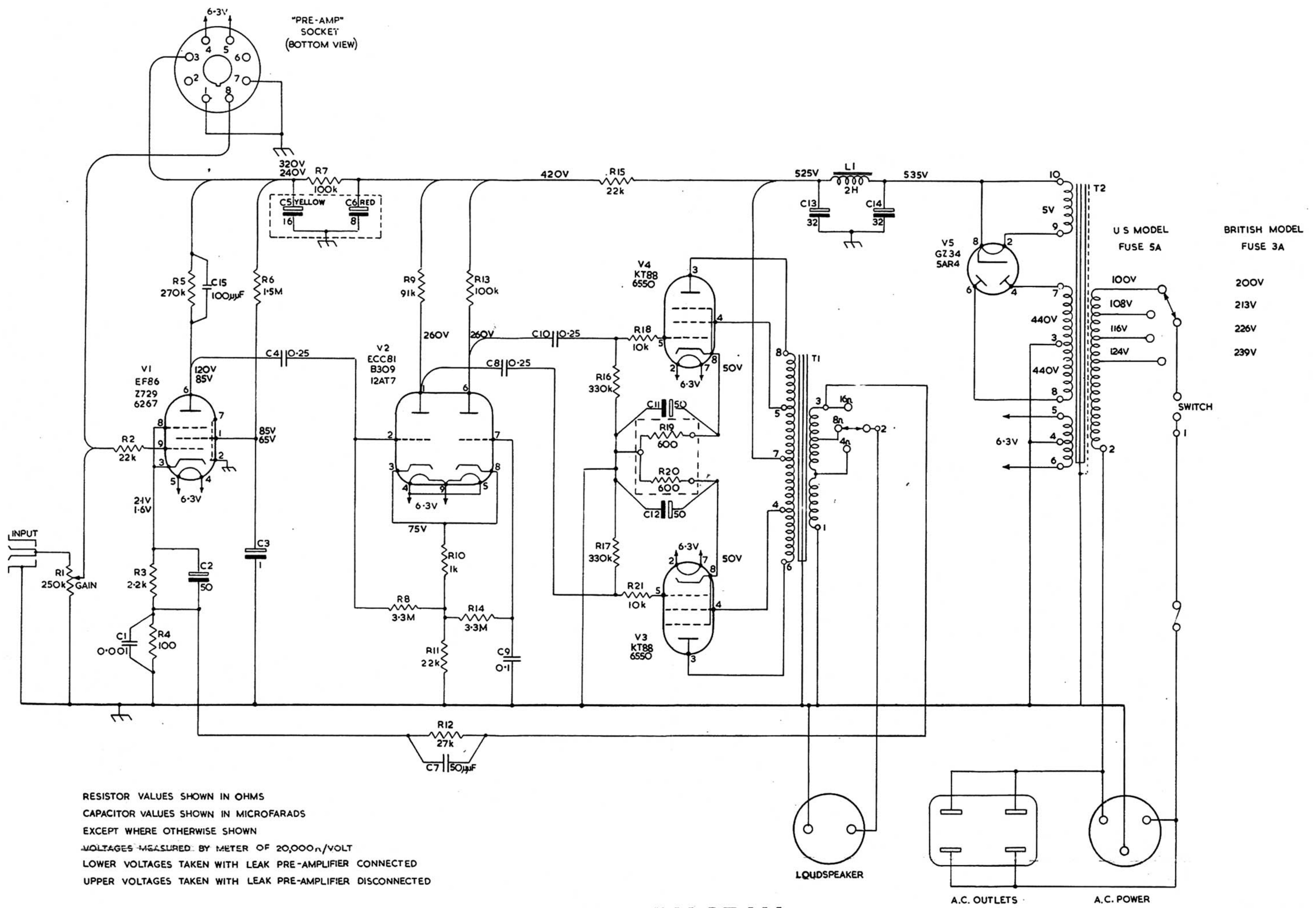
(b) Should it ever be necessary to replace the reservoir capacitor C14 note that it must be of a type capable of handling at least 200mA ripple current. The C14 fitted has a high margin of safety, being capable of handling 240mA.

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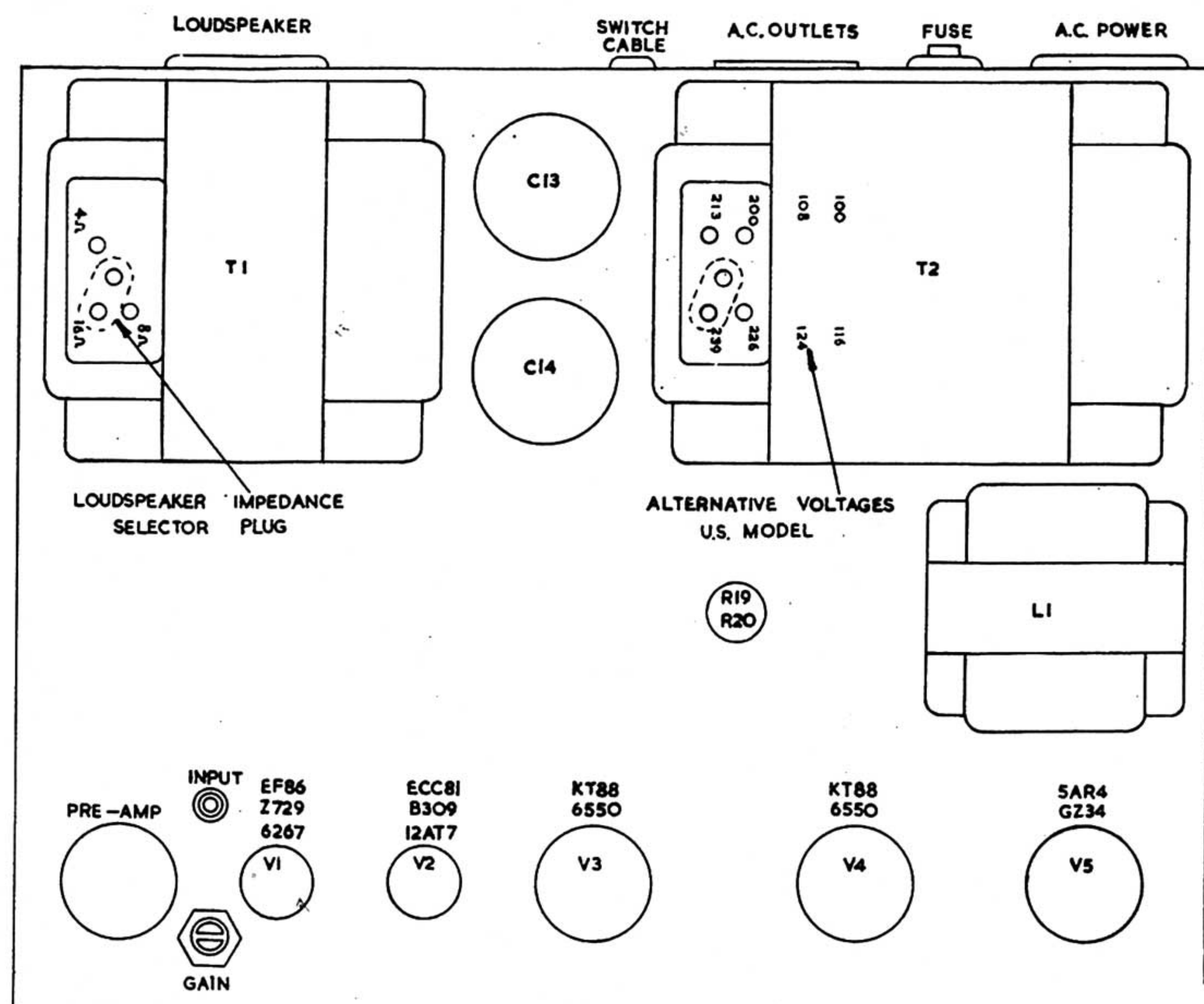
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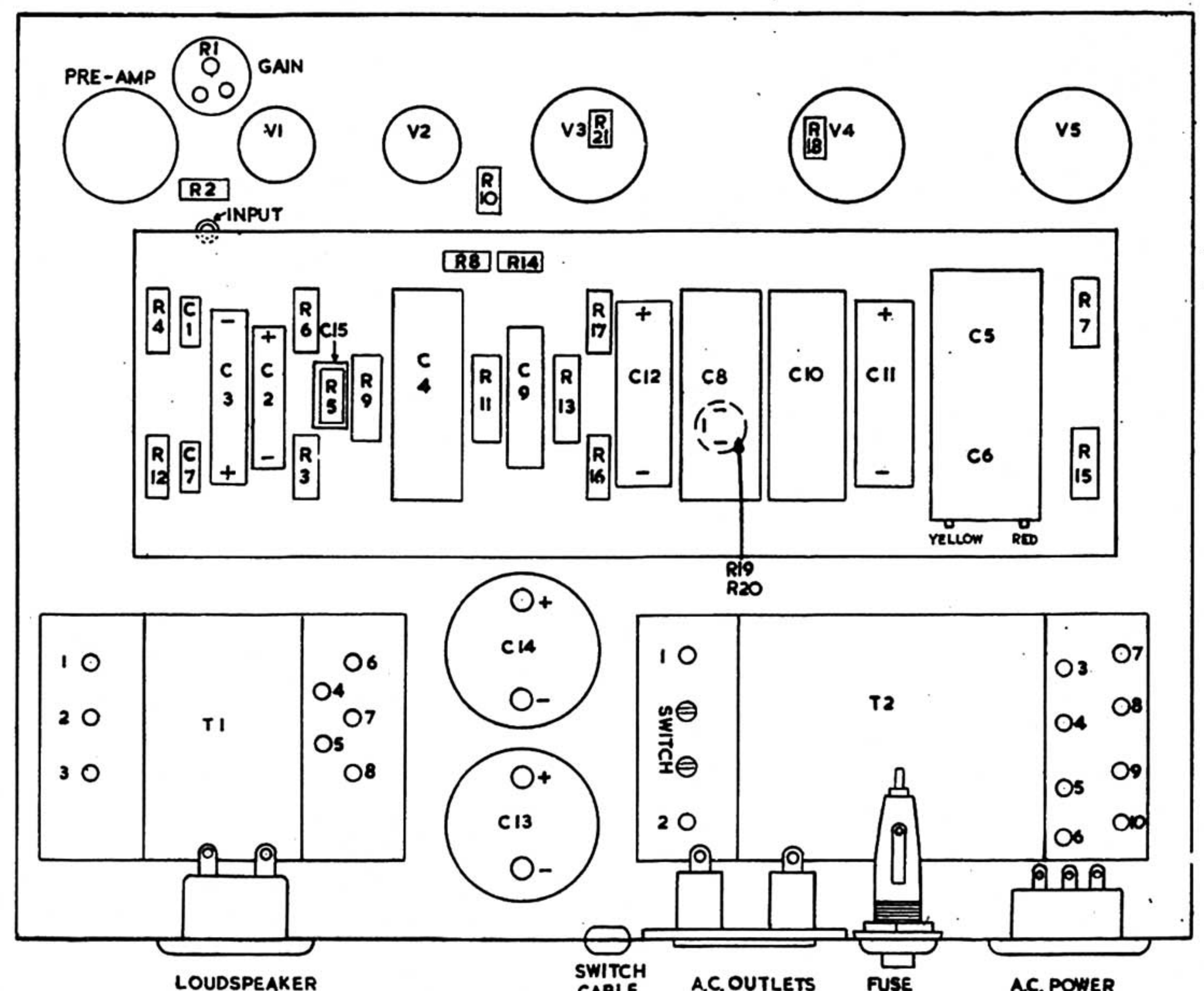
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**CIRCUIT DIAGRAM**



**TOP CHASSIS VIEW**



**UNDER CHASSIS VIEW**