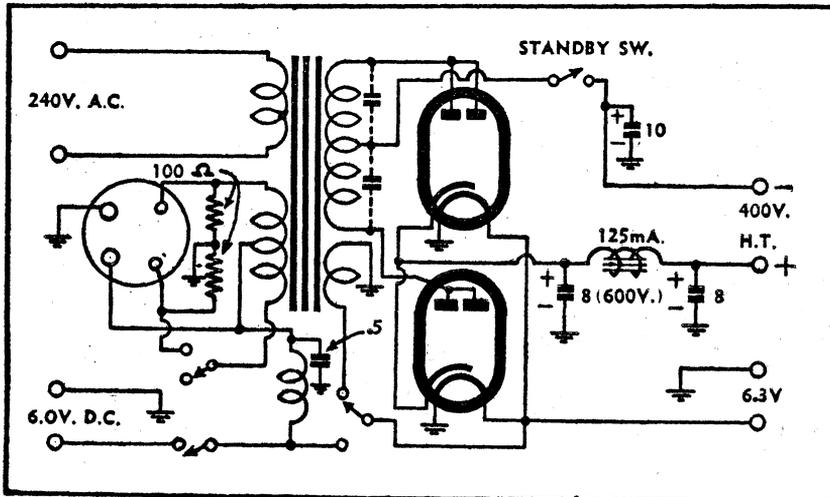




A READER BUILT IT!

Gadgets and circuits which we have not actually tried out, but published for the general interest of beginners and experimenters.

H.T. SUPPLY FROM MAINS OR BATTERY



Prompted by an earlier reference in these columns to vibrator power supplies, a reader from Gladesville, NSW, sends in this circuit for a power supply operating from either the 240 volt a-c mains or from a 6-volt accumulator.

switching operation may be arranged to make the primary circuit to the 6-volt source, and to break any possible connection with the a-c power mains. This would naturally entail the choice of a suitable switch.

In the d-c position, the heaters are connected straight through to the batteries, while the circuit is also completed through the vibrator cartridge and the 6-volt primary winding. Buffer condensers are desirable across the secondary winding, typical condensers being .01mfd. high voltage mica units.

The RF choke consists of 40 turns of No. 14 gauge wire wound in two layers on a 5-8in. diameter former.

The buffer condensers should ideally be selected with the aid of a cathode ray oscillograph, the values being chosen which give a wave-form as free as possible from transient peaks. The condensers will not normally affect the operation on a-c power mains.

Mr. Jones suggests using a vibrator type 825 or 294.

THE reader is Mr. C. Jones, of 24 Wharf-road, Gladesville, who has the unit in service and finds it very satisfactory.

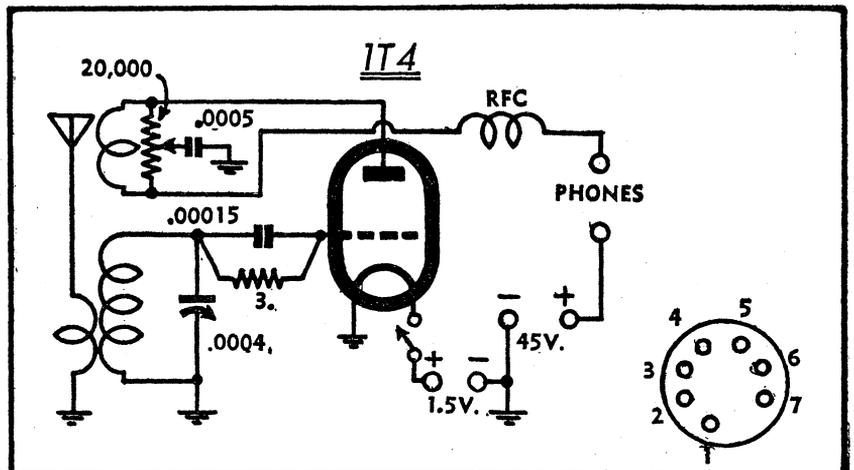
A special power transformer is required with the usual 240-volt primary and another centre-tapped primary intended for use with vibrator input from a 6-volt accumulator. The high tension secondary can conveniently be rated at 385 volts per side, 125 milliamps, and one 6.3 volt filament winding is also required.

Two 6X5-GT rectifiers are desirable to handle the full high tension, and a single section condenser input filter smooths out the a-c ripple.

Switching is necessary to change from mains to battery operation, and this can be arranged in any convenient fashion. For mains operation, the 240-volt a-c input is connected to the appropriate primary winding. With the switch in the a-c position, the vibrator should be disconnected from the 6-volt primary and the heater supply from the amplifier transferred to the 6.3 volt secondary winding on the power transformer. The circuit then operates as a conventional a-c power supply.

For vibrator operation, the switch is thrown in the opposite direction and the amplifier connected to a 6-volt heavy duty accumulator. As a protection for the equipment, the same

MINIATURE 1-VALVE SET



Mr. W. R. Woolven, of 6 Bronte-road, Bondi Junction, NSW, built up this one-valve receiver using the 1T4 midget RF pentode. It tunes the local stations with good volume and may be of interest to other readers. By using an unshielded "Reinartz" coil and one section of the new midget 2-gang condenser, very small overall size could be achieved. The valve socket is of the button type, and reaction is controlled by a 20,000 ohm carbon potentiometer. Filament supply can be from a single 1.5 volt cell, with a 45 volt or 67.5 volt Minimax B-battery for the high tension.