

Simple instruction sheets for beginners.

I The Crystal Set.

The crystal set is the simplest form of Radio Set used. It has four parts: a coil which is connected between aerial and earth; a variable condenser which is connected across the coil; a crystal one end of which is connected to the aerial; and a pair of headphones which are connected between the other end of the crystal and earth.

The signals from the aerial are all at different frequencies, the coil and condenser select the one you want to listen to and the crystal rectifies it so that you can hear it in the headphones.

The set should be built on a board about 4" by 3" with a hardboard front panel of about the same size.

All the parts can be obtained from either the Government Surplus stall in John Street Market or Passingham's in Dale Street, or any officer of the Radio Society will obtain them for you.

The diagrams show the layout. The red end of the crystal should go to the aerial and the other to the headphones. The coil consists of sixty turns of enamelled copper wire on an old toilet roll and the condenser is a 500 picofarad air spaced variable.

The crystal will cost about 1/3, the coil wire 6d. and the condenser 1/6 to 2/-. The headphones are the most expensive item at 12/6 but you will find that they are very useful and can be used in all sorts of other sets.

You should use an outdoor aerial which should be as long as possible and the earth should be a metal object buried in the ground or a water pipe.

This set should pick up the Home Service and the Light Programme, although if your aerial is long enough you will hear many others.

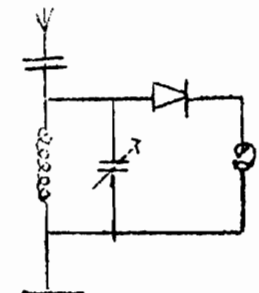


Fig. 1 - Circuit Diagram

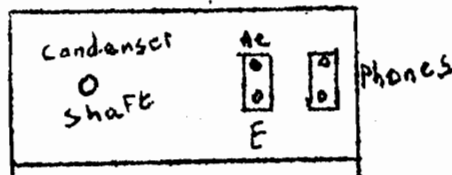


Fig. 2 - Front View.

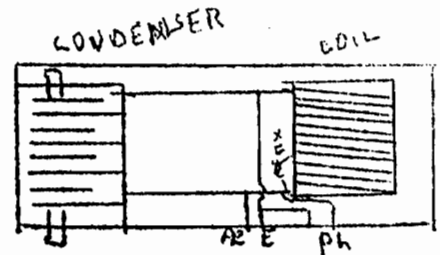


Fig. 3 - Top View.

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Further sheets in this series can be obtained from the Radio Room in the Physics corridor.