

## Crystal radio

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My first ever radio: a crystal radio kit for my 6'th birthday. This arrived in a plastic packet containing a three-way terminal block, 3mm headphone socket, Crystal earpiece, variable capacitor, glass germanium diode, a small capacitor, 3-inch ferrite rod and a certain amount of enamelled wire. A few yards of lighting cable from the local hardware shop was needed for the aerial. Miraculously I still have part of this radio, as photographed above, minus the coil and earpiece. The circuit diagram for this crystal radio is shown below. The coil was made by winding about 80 turns or so of the enamelled wire onto the ferrite rod. It is very important to use a high impedance crystal earpiece (or headphones), not the modern low impedance moving coil types. With several yards of wire as the aerial, it was possible to hear some MW radio stations clearly! Crystal radios make a fantastic introduction to electronics and radio.

{gallery}crystal{/gallery}