

Quaker Oats Crystal Radio

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A crystal radio is a simple device. Its two principal components are:

1. A crystal of galena mineral (lead-sulfide) with a “cat’s whisker” (a fine wire that you poke around on the surface of the crystal until you find a good spot). The crystal detector separates the audio signal from the carrier wave.
2. A long coil of wire with a slider along its length (for tuning) that selects the station.

Oatmeal came in cylindrical cardboard boxes, the diameter of which was about the right size for the tuning coil. Instructions for building a crystal set often suggested using an oatmeal box, with the coil wound on the outside of the box or slipped inside it.

A crystal set required no batteries. For good reception, you needed to install a long and high outside wire antenna as well as have a good ground connection. You also needed a very sensitive pair of earphones. The only advantage of a crystal set was that they were cheap. Many families started with a homemade crystal set, and after discovering that radio listening was so much fun, saved up money to purchase a factory-built vacuum tube radio.