

## Crystal Detector Materials Available Radio Receiver Set Technology Article

OddMix.com - Crystal Radio Note - CRN0801 - by Karl Nagy



**Picture 1.** Vintage Crystal Detector

On **Picture 1** is a basic crystal detector from the 1920s. This advertisement originally appeared in the [The Wireless Age](#) monthly published in 1921. At the beginning of the radio era, construction of crystal detector radios used to be a popular pastime. They were made most often by beginners, because of its inherent simplicity, modest parts requirement and ease of construction.

Crystal radio sets perform well almost anywhere if a high-strung long wire antenna is available, or if strong stations are nearby. Short-wave crystal detector sets work great almost everywhere when wave propagation is good to exceptional.

At the beginning of the **Radio Age** the crystal material for this radio wave detectors were the subjects of intense search. Many thousands of radio amateurs tested numerous materials in different circuits and configurations. It was found that even two uninsulated copper wire inserted into a small fresh potato, functioned well as a passable working detector! So did a double-edged "Gillette" razorblade when touched by a lead removed from a short stub of a number two pencil. The resultant data of (then) known minerals shown below is the summary of that intense search.

This table was published by **E.T. Wherry**, *American Mineralogist*, Issue 10, part 2, page 28, **1925**.

---

### TABLE OF RADIO DETECTOR MATERIALS

#### GOOD DETECTORS:

Pyrite, impure.	Enargite
Tennantite	Galena impure.

#### FAIR DETECTORS:

Grahpite	Linneite	Hessite
Octahedrite	Glaucodite	Sylvanite
Brookite	Rammelsbergite	Calaverite
Molybdenite	Chalcocite	Zincite

Pyrolusite	Boegerite	Tiemannite
Lollingite	Berzelianite	Coloradorite
Hematite	Famatinite	Clausthalite
Tasnite	Stromeyerite	Chiviatite
Chalcopyrite	Aquilarite	Guitermanite
Tetrahedrite	Naumannite	

---

The first item in the **Good Detectors** column - **Pyrite** - is available from **OddMix**. A pocket of three small crystals is **\$6 shipping included** within the continental United States. [Click here to order the crystals.](#)

Not only crystal detector set building provides many happy hours, but it is still the best way to learn about radio, antennas, waves propagation, construction techniques and other important matters that can lead to a valuable and excellent hobby. Many current radio amateurs have started out building a crystal detector receiver as the first ever radio set they made.

[Previous Page](#)



Web [www.oddmix.com](http://www.oddmix.com)

 Hosted by 1&1

Copyright © 2008 K Nagy - <http://www.OddMix.com> - All Rights Reserved

Page Revised: - 081204 - [Privacy Policy](#) - [Site Map](#) - [Support](#)