

Crystal Radio Sets are Alive and Kicking

By Ned Norris

I was brought up under strict conditions. Bedtime was at a certain rigid time every night. Lights out meant no reading; it meant sleep. It certainly did not include listening to radio broadcasts.

But as a child of thirteen, I discovered the delights of the crystal set. It was a frustrating affair. The workings of it have remained a complete mystery. How, I wondered then, could a lump of gray mineral possibly capture radio waves and do so without a battery?

Now, several decades later, the answers are easy to find on the Internet – where I quickly discover that crystal sets, and the parts to make them, are readily available today – even though they look vastly different from the crude thing I had. In comparison, today's look...well...positively modern.

To my amazement, according to Google there are 81,200 pages that contain the phrase “crystal set”.

There is even The Xtal Set Society (www.midnightscience.com), which says it is “dedicated to once again building and experimenting with radio electronics.” It advertises books, parts and kits. One kit is called the Quaker Oat Box Radio Pack. It contains one roll of 24-gauge hook-up wire (100 feet), one germanium diode, one 47,000-ohm resistor, one alligator clip, and one crystal earplug. Sounds just about as basic as my old set...but I don't remember the other instructions that come with this kit: “You will need to provide your own antenna wire and oatmeal box.”

The advertised price is \$8.95. Do some reverse inflation calculations and you will know better than I now remember roughly how much I paid for my set back in 1947. Any money I had in those days was ‘earned’ by not spending my lunch money at school, so I know the set I had was dirt-cheap.

Radio Shack sells starter kits too. Describing a project for “beginning experimenters” at <http://www.thebest.net/wuggy/rs99fun.htm>, one reviewer said “the Radio Shack crystal radio kit Cat. No. 28-178 is a pretty fair starter set. It does work, and some simple modifications will enhance its performance.” When he wrote four years ago, the price was \$9.99. After some modifications, which he describes, he was able to listen to New York, Netherlands Antilles, Cuba, Charlotte NC, Chicago, “and a few others”. What a difference a coil of wire for an antenna makes!

For some fascinating photographs, you might want to take a look at <http://www.schmarder.com/radios/crystal>. With their knobs and dials for tuning in a favorite station they make me positively envious!

There was no simple method for tuning my set. I remember there was a contact of some sort, and that by moving this minuscule distances across the crystal you could, with much patience, tune in a radio station. Usually, it was faint. Fiddle with the

contact and the signal would be lost and found again many times before a signal strong enough to enjoy came in. And it would often disappear in the middle of a show for no obvious reason.

“He aims and fires, but he misses...and that was his last bullet. The killer reaches for him, the axe raised in his other hand, and ...” fizzle, crackle, silence. Mutter, mutter (the latter being me)!

Now I understand I needed to pay much more attention to installing a good antenna – a 50-foot piece of wire outside the house and as high as possible – and that I needed a good ground. But as a 13-year-old, I simply wanted to listen under the bed covers in the dark to my favorite radio thriller.

It almost didn't matter what the program was. Each had the compelling signature music, sometimes just single musical notes, the voices with their sense of urgency, the suspense, the climax, the scripting formula. I also remember the screech of car tires in chase scenes. It was pretty gripping stuff for a small boy.

Remember how shoes were always soled in hard leather? Rubber didn't make enough noise. Doors always squeaked; silent ones would not have been much use on radio. And do I remember correctly that detectives were always men and that secretaries were always women?

Today, when I recall those days long ago, I remember the crystal radio set with its finicky connection that would fade to almost nothing at the crucial point in the story. Then it would come back just as the announcer was saying something like: “So long! See you next week.”

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Ned Norris is webmaster of www.rusc.com a site specializing in downloadable old time radio where you can have instant access to thousands of classic old time radio shows from the 1930s, 40s and 50s. <http://www.rusc.com>
