National Capital Radio & Television Museum

Artifact of the Week:

1924 RCA AR-812 Portable

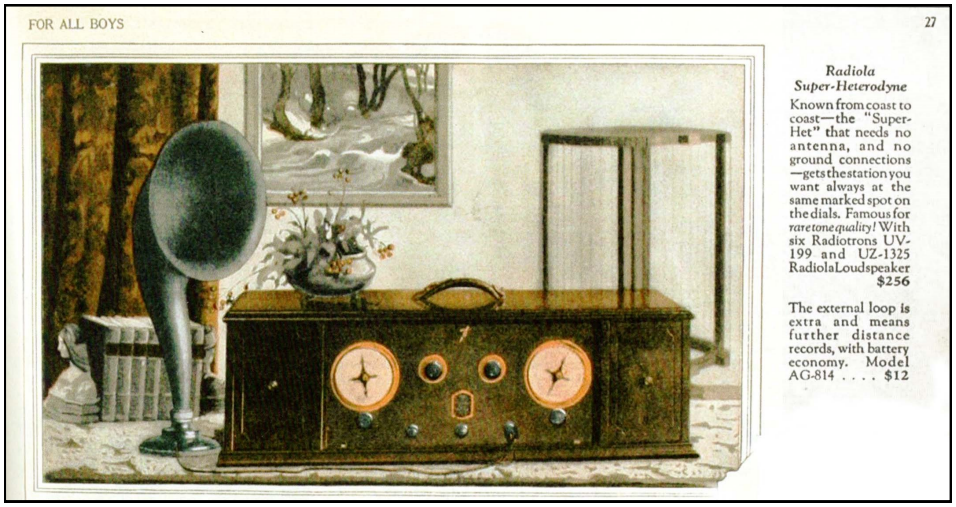


This week's artifact is a "portable" radio. While it does have a carrying handle, this 1924 RCA is nearly three feet long. With its solid wood cabinet, steel chassis, and two end compartments filled with heavy batteries, it weighed about forty pounds!

While it took careful manipulation of the two large dials to tune in stations, this radio dramatically outperformed its predecessors. A revolutionary new circuit design, called the superheterodyne, vastly improved signal strength, so it *could* be heard by picnickers out in the woods like the ones pictured here from a 1924 magazine.

The RCA AR-812 had a loop antenna built into the cabinet, but an external antenna (at extra cost) could further improve signal pickup. The horn speaker had to be carried separately.

RCA controlled the key patents to Howard Armstrong's superheterodyne invention, used the technology in its high-end radios, and refused to license its patents to competitors until the 1930s. Radios use its basic idea even today.



The company could, and did, charge a premium price for this superhet portable, yet sales were brisk. Its price with tubes and speaker was $256. (over $4,000 in today's dollars).

We appreciate your support of the museum so that historical artifacts like this one, and the stories that go with them, can be preserved for future generations. THANKS!

