

10 things in the Radio & TV Hall

Look out for Morse Mouse to find each stop:



1. Amateur radio antenna

Our first object is actually just outside: take a few steps back out the door and look to your left. The museum's radio volunteers use this antenna to exchange messages with people from all around the world. These messages are carried wirelessly, by radio wave.

The word 'amateur' is used to describe people who do things for the love of it, rather than to make money. Amateurs have been responsible for many radio inventions that have gone on to be used in broadcasting and civilian & military telecommunications.

2. Electrical spark transmitters

The earliest radio transmitters were developed by Guglielmo Marconi just before 1900 and used until the end of World War One. Sparks produced by this equipment could only carry short bursts of information, communicated using Morse Code.

One disadvantage was that the bursts could interrupt each other. This caused a problem for the SS Titanic in 1912, when the radio operator was so busy sending passengers' messages that he didn't hear the warning sent from another ship about thick sea ice!

3. Accumulators

Accumulators were an early form of battery, ideal for powering home radios. They were made of electrodes suspended in lead acid. In the days before people had electricity in their homes, they had to take their accumulators to a hardware shop or garage to be recharged.

On our older buses you might spot a notice warning people not to rest their accumulators on the seats. This is because they often leaked acid!

4. World War Two secret radio equipment

During World War Two, secret agents parachuting into occupied Europe carried radios with them, to communicate with spying headquarters back in the UK. Many women and men lost their lives doing this very dangerous work.

Radio equipment in the cabinet is disguised as a suitcase and a biscuit tin.

5. Crystals

A thin sheet of quartz crystal can be used to translate a radio signal into sound. It's a cheap, simple way to make a radio receiver, and doesn't even need a power source! In the 1920s and 1950s, there were crazes for making your own radio sets at home.

There are many crystal radios on display in this exhibition including the next item...

6. Barbara Dunn's homemade crystal radio set

Barbara Dunn was the first Englishwoman to be granted a radio licence, in 1929. Born in Essex, she taught herself Morse Code in order to pass the test.

Barbara intercepted enemy communications during World War II, while in peacetime, her call sign was G6YL (YL standing for 'Young Lady').

7. Gerald Marcuse's radio shack

In the 1920s, Gerald Marcuse experimented with transmitting news bulletins and concerts from the UK to the USA and across the British Empire. His efforts paved the way for the BBC's World Service, which continues to serve 180 million people worldwide.

This is a reconstruction of Marcuse's radio shack, using his equipment and possessions.

8. Aldis lamp

These lamps were used to communicate between friendly aircraft in wartime. While radio signals could be easily intercepted by enemy planes, flashes of Morse Code could only be seen by someone directly in front of the lamp.

Ask a volunteer to demonstrate this for you.

9. Do-it-yourself television receiver

Here is the inside of an old post-World War Two television, which was sold in kit form for £17 17s 0d (£17.85). The tube behind the lamp affected the picture size. Longer tubes were placed upright then a mirror was used to reflect the picture towards the viewer.

Some of the TVs in this room also have magnifying glasses placed over the front to make the picture even bigger.

10. Braille wireless

You'll have heard about 'listening to the wireless' being a favourite pastime in the early 20th century, but for people with visual impairments it would have been a lifeline to the outside world. From 1928 to the present day, the British Wireless for the Blind Fund has provided free or subsidised radio sets to blind listeners.

This is an early example of an adapted radio with a Braille dial.



*Please return your sheet to the box for the next person to use.
Thank you.*