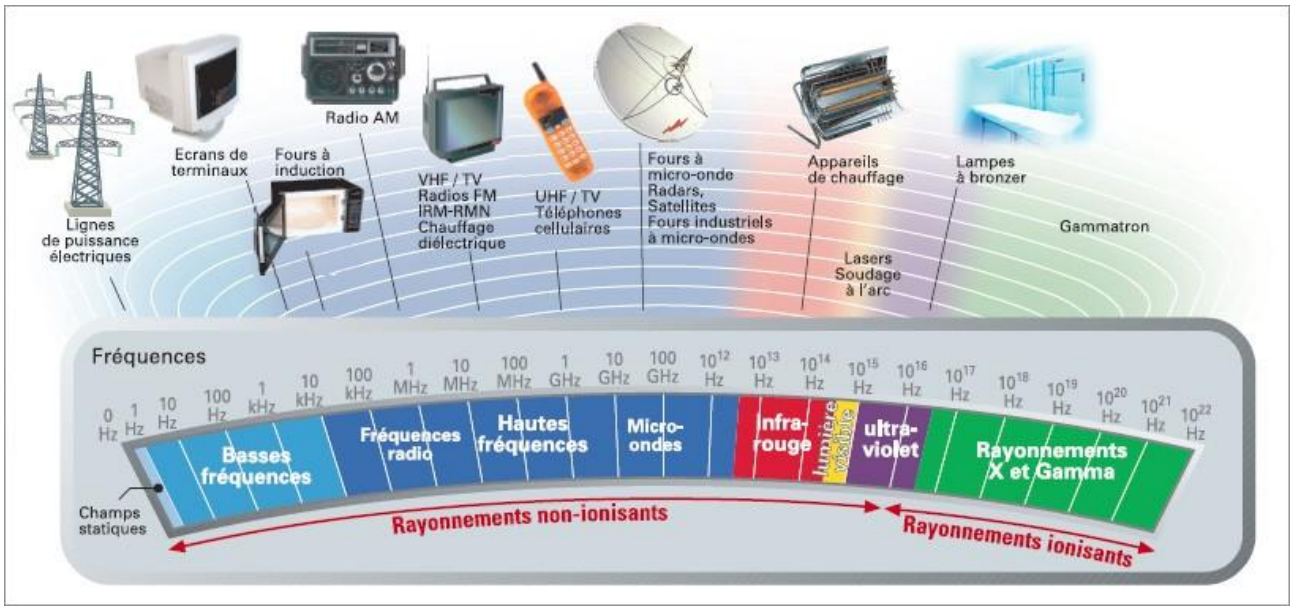
MANUAL EMF ANTENNA

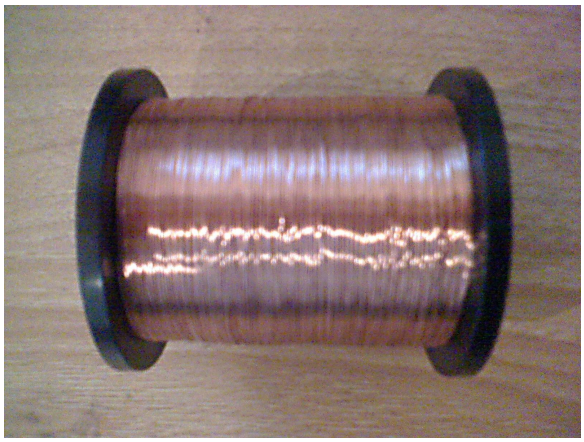
Everywhere around us are unseen waves



We are going to make an **electromagnetic coil** (or simply a "coil"). A coil is formed when a conductor (usually a solid copper wire) is wound around a core or form to create an inductor or electromagnet. One loop of wire is usually referred to as a *turn*, and a coil consists of one or more turns. For use in an electronic circuit, electrical connection terminals called taps are often connected to a coil. Coils are often coated with varnish and/or wrapped with insulating tape to provide additional insulation and secure them in place. A completed coil assembly with taps etc. is often called a *winding*.
(wikipedia entry on electromagnetic coil) This coil will be used as an antenna.

How to construct an antenna

1. Find coated copper, the thickness is about 0,25 mm (you can reuse this from various electrical motors, and other electronic devices)



2. Look for an object around which you can wind the copper thread. The object should preferably have a diameter of more or less 40 cm. Make sure that afterwards you can remove the loop from the object. Take care not to lose the beginning of the wire.

3. Wind it a 100 times as tightly as possible. The tighter you are winding the better the reception of the antenna will be.

4. Once the loop is finished, you should have a beginning and an end.

5. Find a technique to keep the separate threads of the loop together. (Tape, tube, hot glue, ...)

6. Burn off the varnish coating of the copper wire and use a knife to scratch of the burned residue.

7. Now that the copper is clear, you can solder it to an audio connector, for example jack 3.5 / 6.5 mm.

8. Plug in the jack into an audio amplifier to test. If you move the antenna towards an electr(on)ical device, for example a computer, you should here a variety of sounds. One of the apparent sounds is a 50hz buzz: the hum of electrical current; the sound that concert halls and recording studio's try to avoid.

9. Arm yourself with a portable audio amplifier and start your drift (dérive) in your neighbourhood hunting down inaudible sounds.