



## Basic Morse Key and Oscillator

### Greenock and District Scouts and Guides Amateur Radio Club

#### The Key

The key is made from a wooden clothes peg with the minimum of materials. *(List below)*

The contacts are glued to the both parts of the inside of the peg.

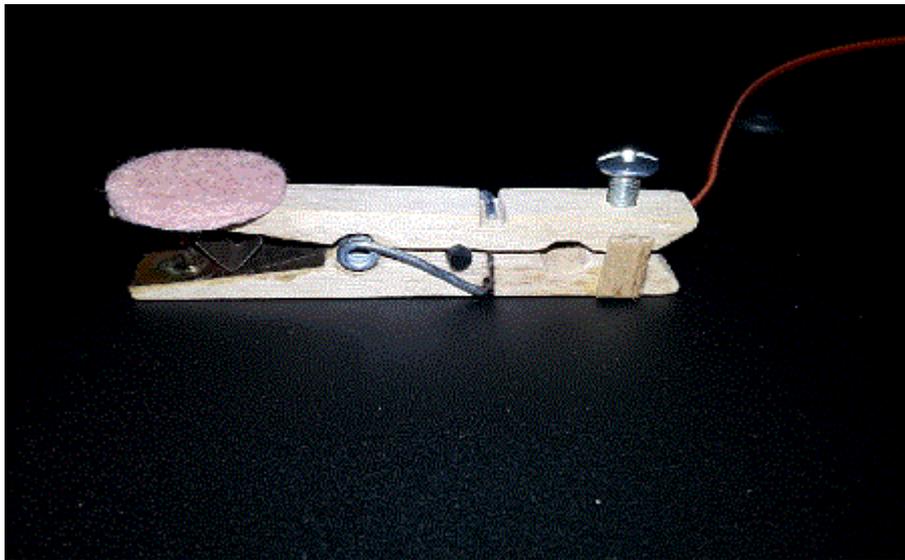
Small wires are attached to the contacts and led out to a small oscillator and supply battery.

A balance rod is inserted in front of the spring to take the pressure of the peg making it easier to work as a key. *(In the photo below the balance rod is a piece of rubber 'o' ring but the shaft of a match would do just as well)*

A small stick-on carpet roundel is placed on the operating leg (to aid keying) and a machine screw is fitted at the other end to enable faster operating though the key will operate perfectly well without this.

Two small guides are glued on each side *(glued to lower limb)* to stop side ways movement when the peg is keyed *(again this is not strictly necessary as the key will operate without it)*

Below is a photograph of the key.



#### Material list

1. One wooden clothes peg.
2. Contacts – this could be a piece of tin, very thin copper or even two small bolts drilled and fitted through the key arms, though a small strip of a tin (can) is easier and you only have to glue it to the wood.
3. Any type of contact adhesive.
4. Light weight cable (low voltage and current used).
5. Stick on carpet roundels. (Used sometimes on the feet of chairs) or a large button would do glued with the contact adhesive to the key arm.



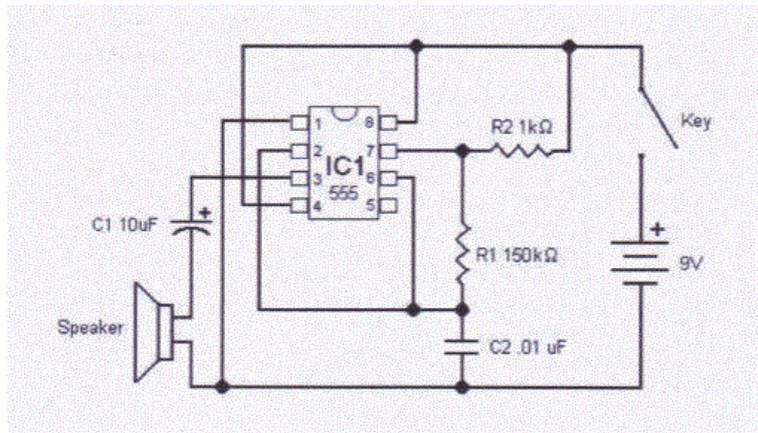
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### The Oscillator

The oscillator is based on the 555 integrated circuit.

The circuit for using it as the basis for a Morse Code Oscillator is well published and we claim no originality.

The complete circuit is shown below.



### Construction

Use a small plastic food container to hold the oscillator circuit (*built on circuit board*), the speaker, the battery and a battery connector.

Drill a pattern of holes through the lid and glue the speaker to the underside.

The circuit board and battery are fitted inside the container and held in place with a sponge.

The Key and battery connector are hard wired to the circuit board.

The components (*as shown in the circuit above*) are readily available.

