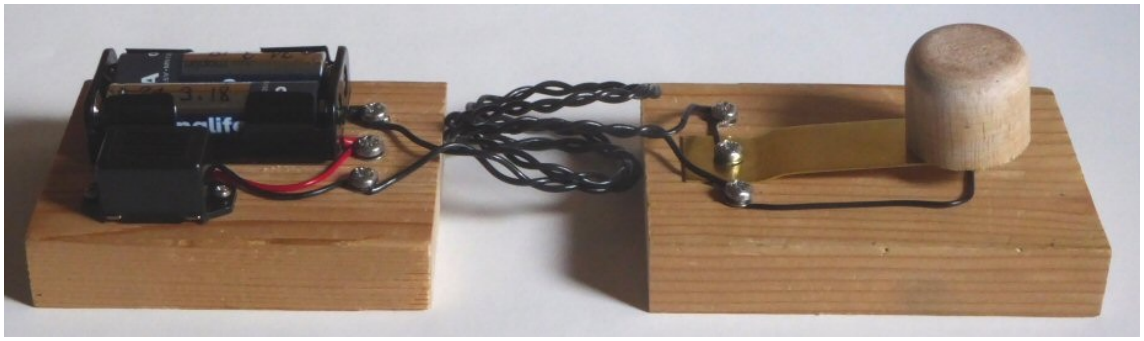
Morse key and buzzer

This design only requires parts that one may already have or are easy to find on the web. There is nothing critical except that the contacts must meet when the key is depressed.



This photograph should be enough to encourage constructors to utilise what they have to hand. However, here are the design decisions when making this one.

Base boards

I happened to have a piece of wood 68 × 18 mm which I cut to separate the key from the buzzer & battery. I had been using a conventional practice key & oscillator on a single board with a Cub pack and was asked where “the wires” went. This arrangement would have made it easy for me to point to “the wires” between the sender and the receiver and have added that there might be a radio link here.

Key

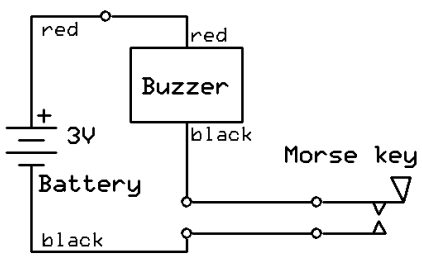
The brass strip is 0.025" × 0.75" (0.64 × 19 mm) [1]. The thickness can be increased to 0.032" but the key is stiffer to press. The knob is a short piece of 1" (25mm) wooden dowel with the edge sandpapered round. The large knob is easy to grasp and discourages people from just tapping the key.

Buzzer & battery

The buzzer is specified for 3V and its leads are colour coded because it does not work with the polarity reversed. Placing both parts on the same board reduces the chance of the buzzer being connected incorrectly or given too high a voltage.

Circuit diagram

The connections are clearly visible to show that all the components are connected in series. While the key is ‘up’ no current can flow but when it is pressed down, the circuit is completed and current can flow from the battery through the buzzer which then makes a noise.



Materials

Small sounder or buzzer
Battery with correct voltage for sounder and a holder for it.
Strip of springy brass ~3" (75mm) long
Knob
A piece of wood or MDF of a suitable size for the components assembled.
Pan or round head screws & washers
Connecting wire.

[1] K&S Precision Metals #8238 Brass Strip 0.025 × 3/4 (0.64 × 19.05 mm)