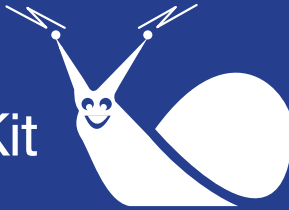




The Snail

Morse Practice Key Kit

By Trevor Hughes, G4WKJ



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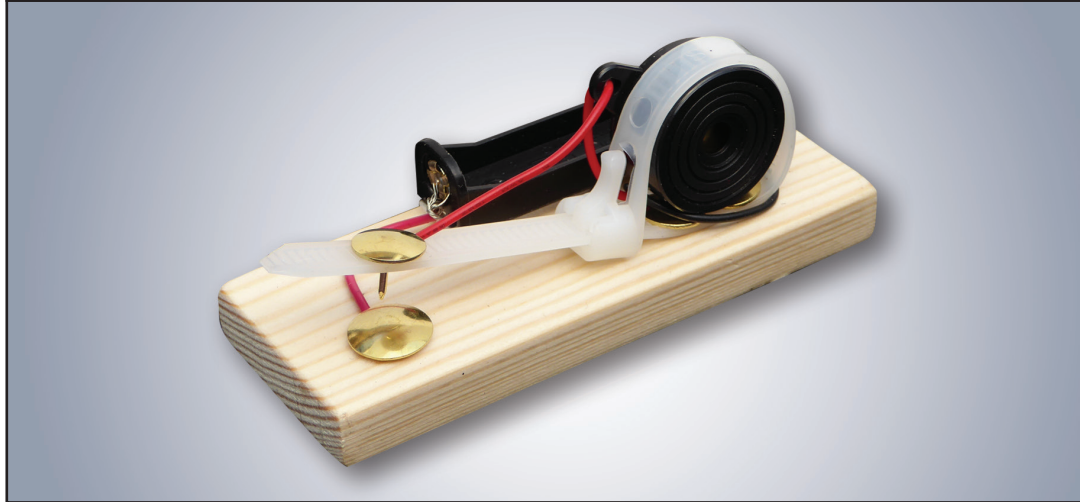
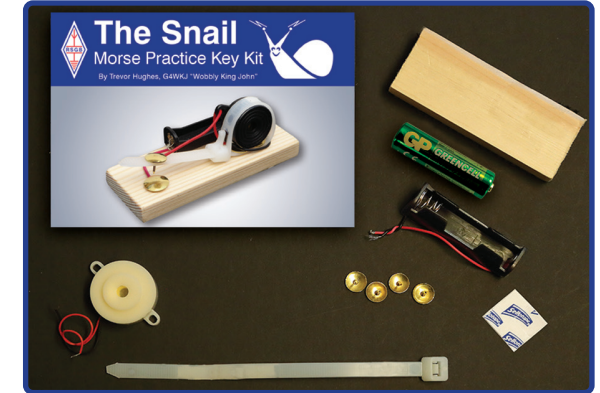
Preparation:

- The following items are included in the kit:
- 1 x block of wood (approx. 100 x 45mm)
 - 4 x brass drawing pins
 - 1 x cable tie (approx. 200 x 7mm)
 - 1 x AA battery holder
 - 1 x AA battery
 - 1 x 32mm 3v drum shaped Piezo buzzer
 - 2 x double sided sticky pads

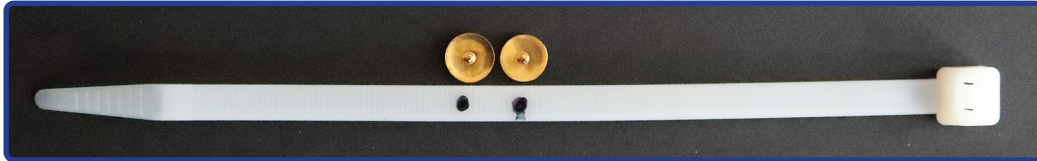
Other items required:

- 1 x fine point permanent marker
- 1 x 300mm ruler
- 1 x small piece of insulating tape
- 1 x pair side cutters
- 1 x pair wire strippers
- 1 x pair safety glasses

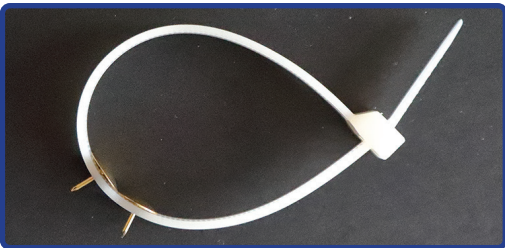
STEP 1: At a clear workspace, open the bag and check all parts are there. It is recommended safety glasses are worn whilst assembling the kit.



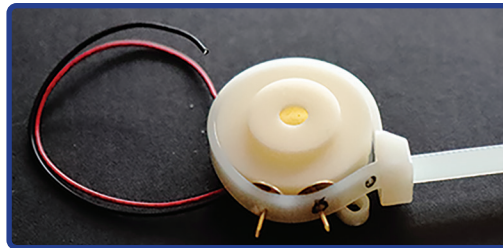
STEP 2: Mark out and fit the cable tie



Using the ruler measure from the cable tie socket approximately 80 & 90mm and mark two spots on the bottom of the cable tie to show where the drawing pins will secure the buzzer to the wooden block. Please Note: If you are using a 23mm buzzer the measurements will be 50 & 60mm.

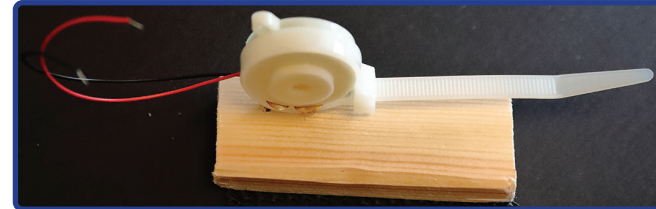


Push the two drawing pins through the cable tie marks you have made and loosely pull up the cable tie. Be careful as the cable tie is hard and small holes may have to be made first.

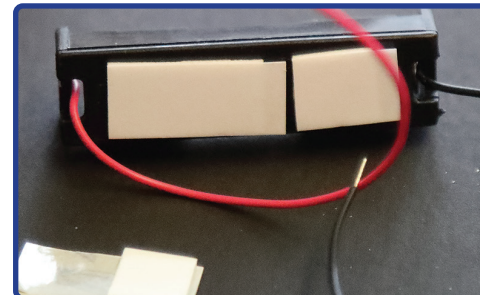


Place the cable tie around the Piezo buzzer with the locking mechanism end going over the top of the buzzer and pull the cable tie tight.

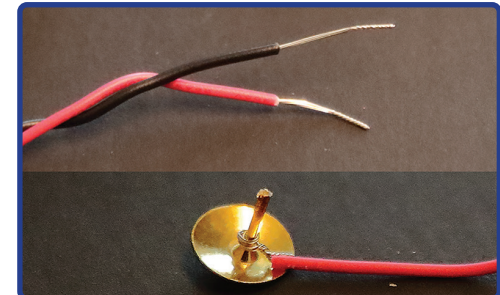
STEP 3: Fitting the buzzer



Squarely position the buzzer lengthways onto the wooden block and secure firmly until the drawing pins are fully in.

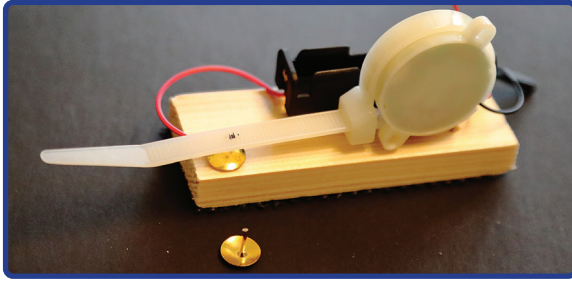


Fit the double-sided pads to the underside of the battery holder and peel off the surface paper when ready to mount it on the block of wood.



Using the wire strippers, bare the red wires by 10mm and twist one around each of the legs of the remaining two drawing pins.

STEP 4: Final adjustment and testing



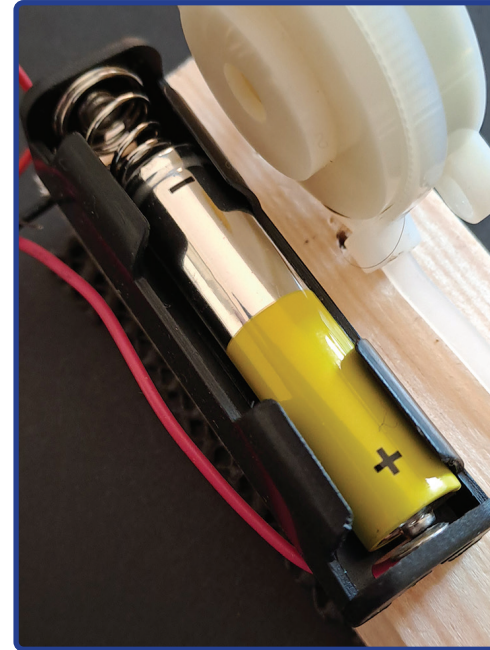
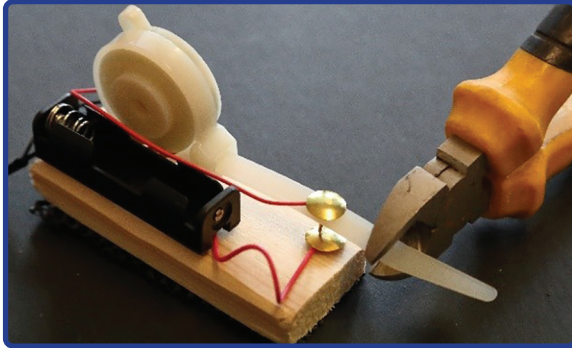
Place the battery holder next to the buzzer and press firmly to secure. Twist the bare end of the black wire on the battery holder onto the bare end of the black wire on the buzzer and wrap with a small piece of insulating tape.

Mark the cable tie where the second pin will fit above the first and attach the wire to the drawing pin as before.

Push the first drawing pin, wired from the battery holder, into the wood as shown.

Carefully fit the remaining drawing pin through the cable tie, with the pin facing down and the red buzzer wire attached. Ensure it is aligned with the lower pin head.

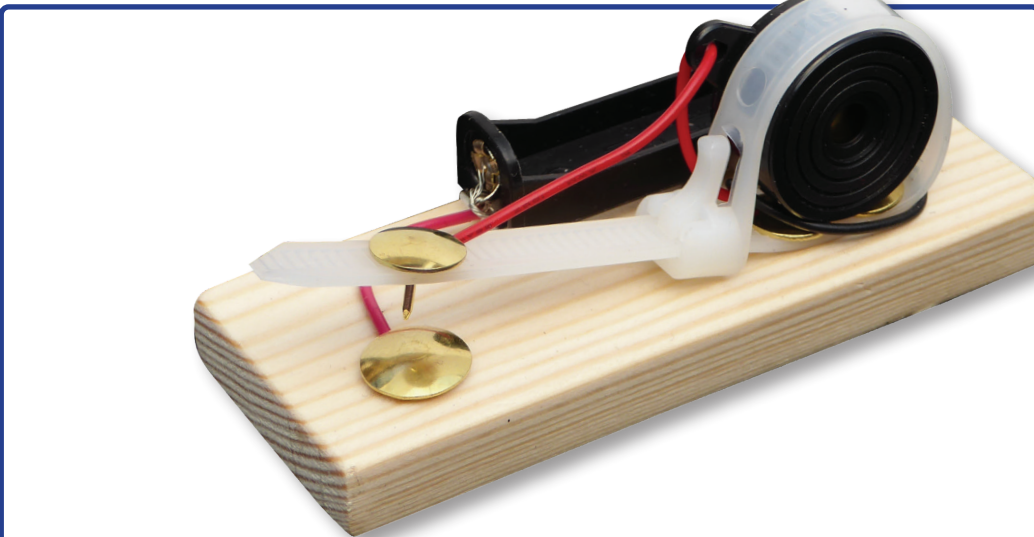
Using the side cutters, trim the cable tie to length.



Fit the battery and ensure the polarity is correct. The black negative flat end should be towards the spring and the positive end to the red wire.

When you press the cable tie down it will make contact with the drawing pin in the wood beneath it, completing an electrical circuit and sounding the buzzer, which creates the Morse tone.

Releasing the cable tie will break the circuit causing the buzzer to stop sounding. You can now use this to sound out characters in Morse code.



RSGB CW transmissions

CW, known otherwise as Morse code, is a very efficient way of sending and receiving plain text messages over a long distance using low power radio equipment.

The RSGB transmits CW to enable you to learn Morse Code and improve your skills. Find out more at rsgb.org/morse

MORSE CODE (ALPHABETICAL)

A	• —	N	— •
B	— •••	O	— — —
C	— • — •	P	• — — •
D	— ••	Q	— — • —
E	•	R	• — •
F	•• — •	S	•••
G	— — •	T	—
H	••••	U	•• —
I	••	V	••• —
J	• — — —	W	• — —
K	— • —	X	— •• —
L	• — ••	Y	• — — —
M	— —	Z	— — ••
1	• — — — —	6	— ••••
2	•• — — —	7	— — •••
3	••• — —	8	— — — ••
4	•••• —	9	— — — — •
5	•••••	0	— — — — —

MORSE CODE (CODE ORDER)

E	•	T	—
I	••	M	— —
S	•••	O	— — —
H	••••	N	— •
A	• —	G	— — •
U	•• —	Z	— — ••
V	••• —	Q	— — • —
W	• — —	D	— ••
J	• — — —	B	— •••
R	• — •	K	— • —
L	• — ••	C	— • — •
F	•• — •	Y	— — — —
P	• — — •	X	— •• —
1	• — — — —	6	— ••••
2	•• — — —	7	— — •••
3	••• — —	8	— — — ••
4	•••• —	9	— — — — •
5	•••••	0	— — — — —