June 4, 2023, Chuck Olson, Jackson Harbor Press

Keyer enclosure kit manual

Assembly:

- 1) first, build the keyer kit per the kit manual.
- 2) the 9V battery snap, 100 k ohm speed pot, switch and jacks from the enclosure kit can then be wired to the board per the hookup diagram.
- 3) attach the included cable tie to the 9V battery loosely as shown here:



Don't cinch the cable tie tightly to the battery holder, make it snug enough to hold but loose enough to allow the battery holder to be removed easily. A second cable tie is included just in case.

Then clip the cable tie end flush as shown here:

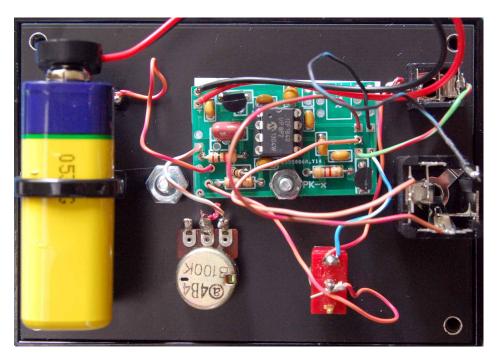


5) solder the piezo to the front panel including a wire on the inboard pin as shown here:



Note that the pin closest to the edge is connected to the ground plane, no ground wire connection to the board may be needed but can be added if desired.

4) Attach the cable tie, circuit board and jacks as shown here:



Use the $6-32 \times 1/2$ " screw and nut to attach the cable tie.

Use the 4-40 x 5/16" screws and nuts to attach the circuit board (first attach the screw and nut to the front panel and then use the second nut to attach the circuit board).

Fasten the two jacks, switch and pot to the front panel as shown. Add the knob and switch cap.

Finally connect the 9V battery (an FB should be sent) and then insert it into the cable tie as shown.

5) Now place the front panel on the case and use the four remaining 4-40 screws to secure the top as shown:



6) modification ideas:

- a) use a dynamic speaker in place of the piezo for better sound although higher active power. Possibly use a large (470 uF or ?) coupling capacitor to block any possible DC current from flowing (although this shouldn't be a problem, add the cap for insurance).
- b) change the connectors, especially the output if high voltage keying is anticipated.
- c) change the battery holder to something appropriate like 2 AAA cells especially if a PK-Basic is being used since it doesn't have a voltage regulator.
- d) add a red LED in series with the positive red lead of the 9V snap this will give a visual indication of whether the keyer is sleeping or active

Keyer enclosure kit stocklist:

Quantity	description
1	4 x 3 x 1.5" phenolic box (NOS)
1	top plate, silk screened, pre-drilled
4	4-40 screws to mount the top to the box
1	9V snap
2	black cable tie with mounting hole (used for holding the battery)
1	6-32 x 1/2" machine screw for mounting the cable tie/battery holder
1	6-32 nut
1	4-40 x 5/16" machine screws for mounting the circuit board
2	4-40 nuts for mounting the circuit board
1	3.5 mm mono output jack small black
1	3.5 mm stereo input jack large black

items NOT included with enclosure kit: wire, solder, battery