Button LED Kit

Picture by Ron Polityka de WB3AAL

This kit is for the Elecraft K2 and K1 radios. The kit contains the following parts.

Quantity			Component
1	[	]	Yellow Water Clear LED SMD, Super Bright
1	[	]	Pre-drilled Elecraft Keycap
1	[	]	6 inches of two conductor ribbon wire
2	[	]	3.3k ohm Resistors SMD

The 3.3k is a good value for the keycap LED, and should be mounted instead of the 0 ohm. The IC current rating for that output is 5 ma., so assuming a 1.5 volt drop for the LED, the lowest resistor value should be 700 ohms - 1000 ohms (or higher) would add a bit of a safety factor. It's recommend the 3.3k resistor be used in place of the 0 ohm resistor used in the standard kit. That will provide a sufficiently bright display for most purposes. If the LED should be brighter, stack the 2nd 3.3k resistor above the first one and solder

The wire to the LED cathode connects to pin 5 of the CW indicator board. The anode lead connects either to pin 1 of the indicator board (in addition to the wire which normally connects to pin 1) or may be connected to any source of +5 volts in the radio

I have found by using needle nose pliers and a rubber band you can solder the wires onto the LED SMD quite easily. Be sure to tin the wire before you solder and Do Not hold the soldering iron onto the LED SMD too long or you will destroy the LED.

Picture by
Ron Polityka
WB3AAL
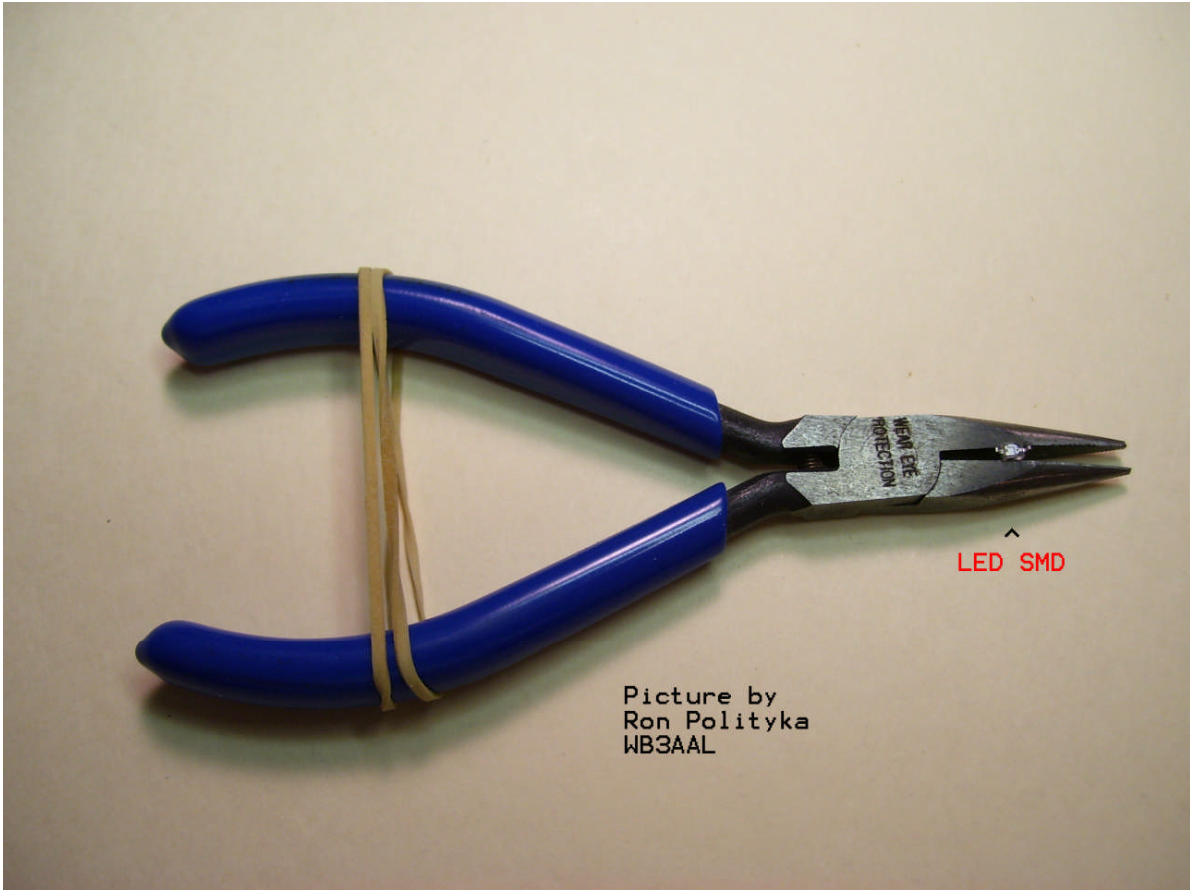
The LED SMD should look like the following picture.

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Gently insert the LED SMD into the Keycap with the toothpick supplied in the CW Indicator kit. Route the wires for the LED through the opening or the optical encoder (K2) or the 10 turn potentiometer (K1) to the pushbutton to be used for the LED. Make certain the wires will not become pinched or interfere with any other components. Check to be certain the pushbutton with the LED mounted moves as freely as the other pushbuttons.

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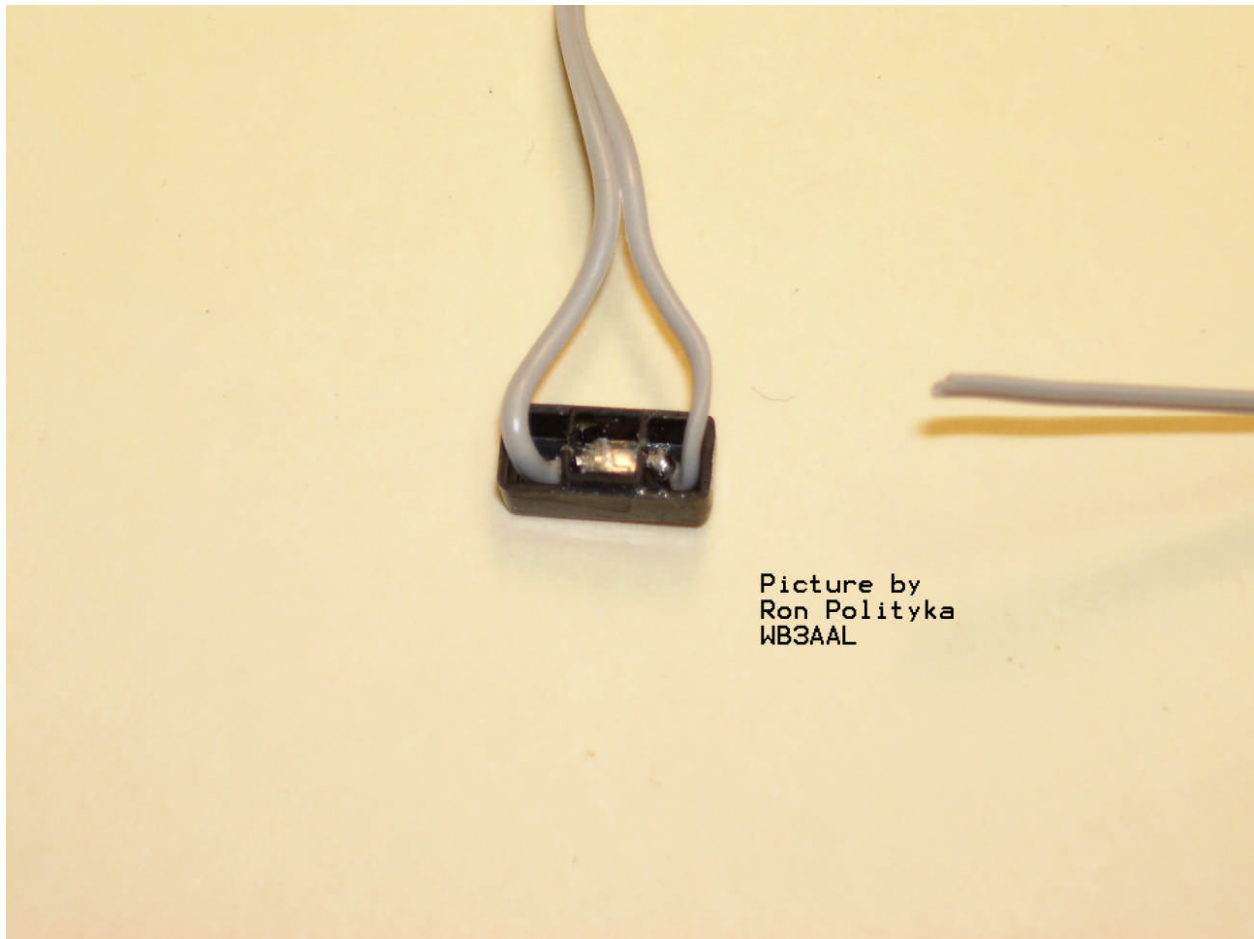
Enjoy using your K6XX CW Indicator Kit with the Button LED Kit. Hope you work many stations on the CW mode.

73
Ron Polityka
WB3AAL