

## **CWMorse Scout CPO**



Practice morse code with a straight key and this simple code practice oscillator. Like the old Boy Scout signal training sets of the 1930's, this CPO produces both sound as well as light from the front and back. The CPO has adjustable volume and tone controls from 300-1000Hz along with a headphone jack for private listening. It can also drive a positive keying transmitter up to 30V/500mA with the key jack. SMD parts are pre-soldered, just complete the through hole components.

## **Battery Installation**

*With CWMorse silkscreen logo:* Remove the 4 screws on the bottom panel. Insert 3 AAA batteries observing the polarity as shown on the battery holder. Replace the bottom panel and 4 screws.

*Older versions without the CWMorse silkscreen logo:* Remove the 4 screws on the front panel. Slide assembly and speaker out. Insert 3 AAA batteries observing the polarity as shown on the battery holder. Place speaker on top of batteries, align the PCB and speaker with the slots in the enclosure and slide in place. Replace the 4 screws on the front panel.

## **OPERATION**

Plug your straight key into the KEY jack. This jack is a 3.5mm stereo using the tip and sleeve connections. With the key down Adjust the volume and tone controls as needed. If using the headphone jack (SPKR stereo 3.5mm) ALWAYS turn the volume control fully counter-clockwise BEFORE plugging in. Then with the key down adjust the volume to a comfortable level. Optionally plug a positivie keying transmitter into the KEY jack. The key jack also uses the tip (+) and sleeve (-) for keying the transmitter.

## NOTES

- You may notice the tone drop as the volume is increased. This is normal.
- You can increase the volume further by replacing the 3XAAA batteries with a higher voltage, such as a 9V battery. Up to 14Vmay be used, however the LEDs will become very bright.
- As the batteries become weak the tone will eventually stop functioning although the LEDs will be dimly lit and a transmitter can still be keyed. Likewise the LEDs will extinguish but the transmitter can still be keyed down to less than 1V of power.

