

# CWP Instruments

## Operating Instructions for the **TDSWand** PPM/EC/CF meter

**Specification:** **TDSWand PPM/EC/CF meter**

Range: 0.0 – 100.0 CF 0.00 – 10.00 EC 0 - 9990 PPM

Resolution: 0.1 CF 0.01EC 10 PPM

Accuracy:  $\pm 2\%$  FS

Operating Temp: 5 - 45°C (ATC)

Calibration: One point 1382ppm / 2.7 EC / 27 CF (Approx. 500 PPM to 1 EC)

Power supply: 9v DC battery

Size: 312mm L x 37mm W x 25mm D

Weight: 5.1 ounces

Waterproof to 1 inch (25 mm) below display only. Avoid splashing on or above display.

Replacement or Repair Warranty: 12 months for defective parts and materials from date of manufacture. Proof of purchase required. Warranty does not cover submersion in liquids, battery corrosion or abuse.



### Operating Manual for the **TDSWand** PPM/EC/CF meter

1. The meter can be turned ON or OFF by pressing “on/off” button. This meter has an auto OFF function to help protect battery life.
2. Select your preferred measuring scale by pressing the “PPM” or “EC/CF” button. The indicator light by the left side of display window will show the selected scale. For example, when pressing the “PPM” button, the light beside the “PPM” indicator will be ON and indicates you are in the PPM mode.
3. Dip the meters electrode into the solution to be tested and make sure it is deep enough to cover the meter’s electrodes. After 5 seconds, the measurement is done. The result is shown on the LCD display. Note: Never dip the meter into a large body of solution as you may drop it in and ruin the meter. Test small samples only.

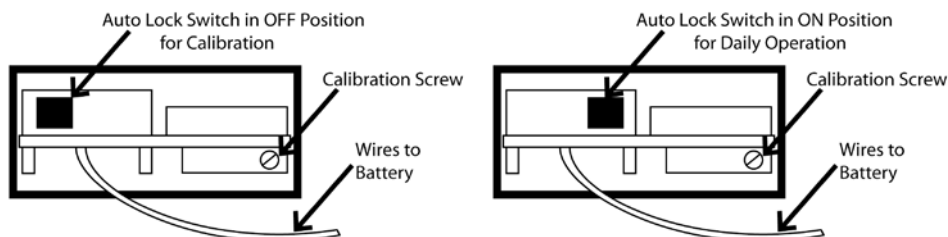


- After taking the meter out of the solution you will notice the display will hold for approximately 5-10 seconds. Then, the meter will reset to zero and wait for the next measurement. **The meter will not make a new measurement until the meter's display resets to zero (000).** Note: For best accuracy between tests, the electrode should be rinsed and blotted dry. Rinse and dry the electrode before storage.
- The meter can be turned OFF by pressing "on/off" button manually. It will also turn OFF automatically after 5 minutes of no use.
- If the unit cannot be switched ON or the display fades replace the old battery with a new battery. When storing the meter for long periods of time, remove the battery.

### Calibration of the **TDSWand** PPM/EC/CF meter

Under normal use, calibration may not be needed for long periods of time. If after using the meter for a while you notice an obvious error in readings, clean the electrode first. If cleaning does not help check the battery as it may need to be replaced. If the battery is good, calibration is needed. To calibrate the meter see the section below.

- Take off the battery cap. Pull out the battery. Looking down and into the body, a calibration trimmer screw and the Auto Lock switch can be seen (See Diagram).



- With the appropriate button located next to the display, turn the meter ON and choose the PPM calibration scale. Once again, locate the Auto Lock switch and move it to the OFF position (See diagram/use the screwdriver to flip the switch). Now immerse the meter's electrodes into the Control Wizard Products 1382 buffer solution. Use enough buffer to completely cover the electrodes. Swish the meter back and forth to dislodge any trapped air. Now use the screwdriver to turn the Calibration trimmer screw and adjust the display to show 138 (1380ppm or 138 x 10). With the display showing 138, pull the meter out of the buffer and flip the Auto Lock switch back to the ON position. The calibration is now complete.
- Put the battery back into the meter and push the battery cap back onto the meter's body in a firm and secure manner.