

FIREDRAGON Field Notes©

#100 Refractometer

Open the cover plate and expose the prism lens, **Figure 1**. Make sure it is clean by wiping gently with a moistened cloth. Draw a sample of clean water with a pipette to calibrate and focus the instrument. Drop a sample of water onto the prism and close the cover plate. Focus the instrument while looking through the eyepiece by rotating the focus adjustment. Turn the calibration screw until the instrument is set for the maximum setting, 32°F and rotate the larger ring to lock in the calibration. Repeat the procedure using a sample of the fluid being tested and verify the freeze point of the fluid, **Figure 2**. Clean the instrument's prism before storage.



Figure 1

#104 pH Tester

Please follow these simple instructions for proper use, and to ensure a long life for your Firedragon pH Tester. Remove the outer protective cap, **Figure 3**, and rinse the tester in clean water. Gently dry the water from the sensor end with a clean cloth or paper towel. Place the fluid to be tested in a clean container, small paper cups work very well. Turn the tester on by pressing the ON key. Insert the tester into the fluid up to the edge where the protective cap would end. Observe the pH reading and wait one minute for temperature compensation. Observe the reading. Always rinse and dry the tester after using.

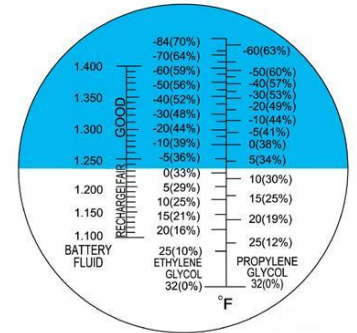


Figure 2

Calibration is recommended once a month with everyday use. To calibrate, pour the buffer solution supplied into a container and follow the procedure for normal use. Using the supplied screwdriver adjust the trimmer, **Figure 4**, until the reading matches the buffer solution. Wait one minute for temperature compensation. The buffer solution can be reused many times so save it after use by pouring back into its supplied container.

If erratic or no readings are obtained with your tester, replace the batteries, **Figure 5**, with four new batteries following the supplied directions.



Figure 3

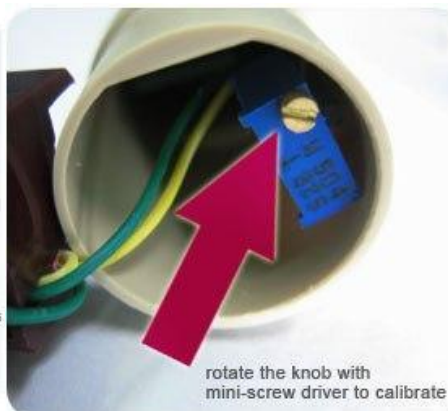


Figure 4



Figure 5