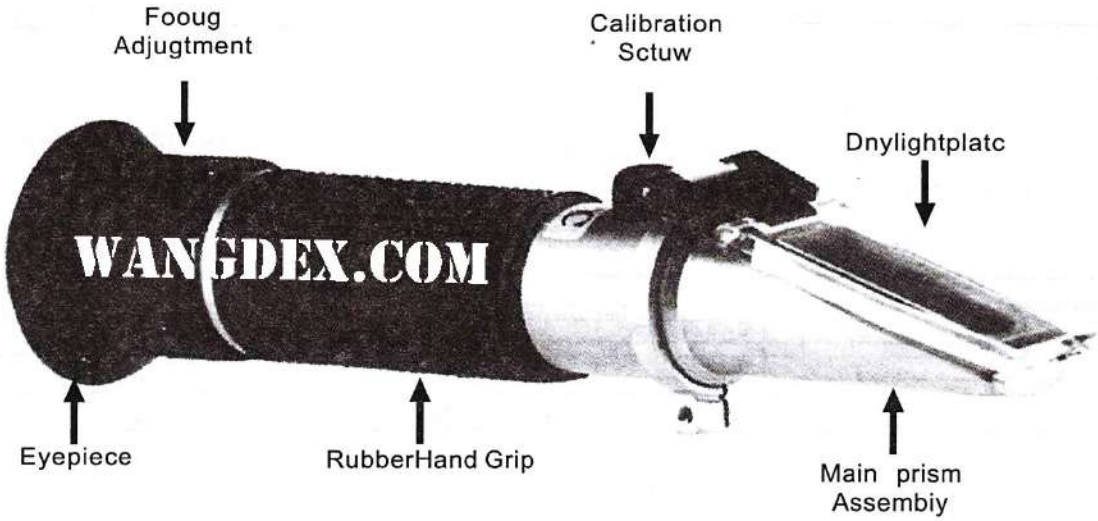
Operation Manual

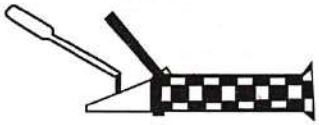
For Hand Held Refractometer

Product Layout



Calibration:

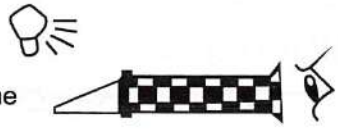
Calibration should be made in an ambient environment of 68 °F/20℃:



Step 1.

- Open Cover Plate and place few drops of calibration fluid (or distilled water) on the main prism.
- Close the Cover Plate. Ensure the water is spread across the entire surface of the Prism without air bubbles or dry spots on it.
- Wait for 30 seconds to allow the Automatic Temperature Compensation (ATC) before going Step 2.

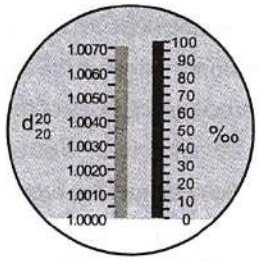
Step 2. Read the Scale



- Hold the refractometer in the direction of light source and look into the Eyepiece. You will see a circular field with a scale. Take thereading from the scale on the line where the blue at upper site and white area at lower site meets (As the picture shown here).

Step 3. Adjust Calibration Screw

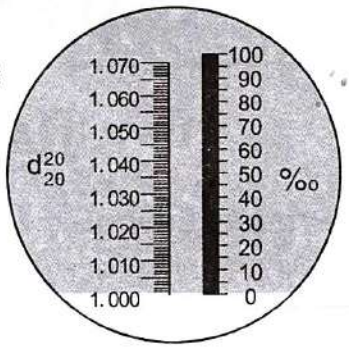
- Turn the Calibration Screw until the line meet exactly on the 0 scale (As the picture shown). This is the end of calibration procedure.



Calibrate to"0"

* *With equipment of ATC system, the ambient working temperature should be at 68F/20 ℃. Once done calibration, the shifts in ambient temperature within the acceptable range 10 ℃ to 30 ℃ should not affect the accuracy.

* *Please wipe dry the Cover Plate and Prism with a soft lint-free cloth after each and every test and before storing. It is important to maintain the cover plate and prism dust and stain free in order to have good repeatability measurement.



Reading of Sample

Start the Test:

Place few drops of the sample onto the main prism. Close the cover plate and check the reading. Take the reading where the boundary line of blue and white cross the scale. The scale will provide the direct reading of the sample concentration.

Index and Specifications

Refractometer w/ ATC Accuracy ± 0.5 %			
Model	Range	Resolution	Size
Brix [sugar]	0 - 32% Brix	0.20%	6.9 In
Salinity	0 - 28%	0.20%	6.9 In
Seawater Salinity	0 - 100% D20/20: 1.00 - 1.070	1 ‰ (0.001) 1 ‰ (0.001)	7.9 In
Beer Brewing	SG Wort: 1.000 - 1.120 0 - 32% Brix	0.001 0.20%	6.9 In
Liquor and Spirits Alcohol	0 - 80%	1%	7.9 In
WineBrix/Alcohol	0 - 25% Alcohol 0 - 40% Brix	0.20% 0.20%	6.5 In
Antifreeze/Coolant/Battery Fiuid	Ethylene Glycol: 32 °F to -84 °F Propylene Glycol: 32 °F to - 60 °F Battery Fluid: 1.1 - 1.4 kg/L	5°F 5°F 0.01KG/L	6.9 In
Soy Bean Juice	0 -25% 0 - 32% Brix	0.50% 0.20%	6.9 In
Honey	38 - 43 Be 58 - 90 % Brix 10 - 33% Water	0.5 1% 1%	5.9 In

Warning & Maintenance

* *Clean the instrument between each measurement and before storage with a soft cloth. Any residue of samples stained on the prism could damage the coating on the prism.

* *Do not measure with abrasive or corrosive chemicals. They can damage the prism's coating.

* *Donot immerse the instrument in water. If the view inside the Eyepiece becomes foggy, the water has entered into the body of the instrument. Call a qualified service technician or contact your dealer.

* *Do not store the instrument in a damp environment. Store only in a cool and dry area.

* *Do not clean the prism with thinner as this will remove the coating on the prism and cause the unit damage.

* *This is an optical instrument and requires careful handling and storage with care. This instrument will provide years of reliable service.

AdolfR refractometer has 1-year warranty against product manufactory defects from the date of purchase.