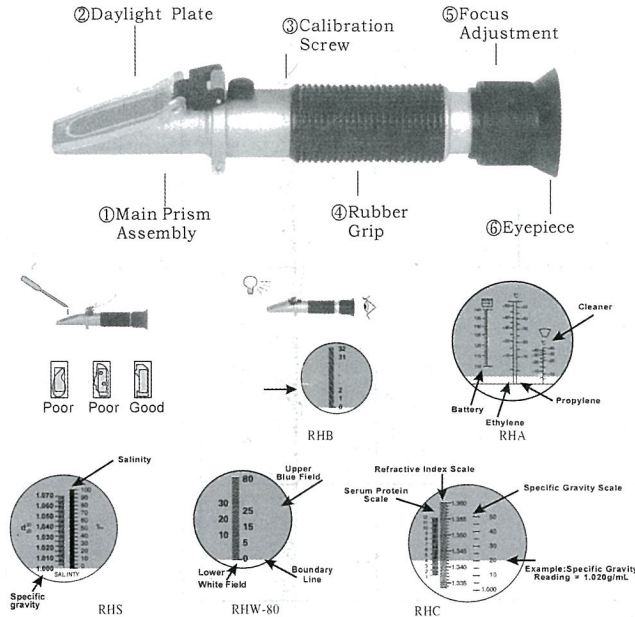


Operation Manual for Hand-held Refractometer

Product application: The hand held refractometers' advantages are the structure very simple, shockproof, clear view, cheap and easy to operation and carry. The brix series (RHB) are used for canned food, fruit juice making, fermentation, drinks, fruit and collecting honey, etc. The salinity series (RHS) are used for aquaculture; aquarium and saline to prepare for the medical series (RHC) are designed to measure the serum proteins and specific gravity of urine. The series of industrial (RHA) are used to measure the car battery fluid, antifreeze fluid, cleaning fluid, lubricating oil of machine and cutting fluid.

**Our all refractometers with Automatic temperature Compensation system



Usage and procedure:

1. Make the prism (1) towards to the direction of the light source and adjust the focus tube of eyepieces (5) till the scale line is clear.
2. Calibration: before test, the standard solution (pure water), instrument and sample must be at the same temperature for accurate results. Open the daylight plate 2 and place 1-2 drops of standard solution on the prism and light press the daylight plate 2 till get a lights and darks boundary. turn the calibration screw 3 make the lights and darks boundary line of the field of view of eyepiece and datum line are coincide. (0%)

Note: Before delivery, we have finished calibration and adjustment. you can direct to use it.

3. Open the daylight plate 2, clean the surface of the prism with the soft lint and place 1-2 drops of sample on the prism, close the daylight plate 2 and light press it, reading the lights and darks boundary's relative graduations, this is the sample's concentration.
4. After finished the measurement, direct to wipe off the deposit builder on the prism and surface of the daylight plate with the damp lint. after dry, proper keep it.

*Notes and Maintenance

1. After used it, don't wash it with the tap water directly. avoid the water entered the body. clean the instrument with the soft, damp cloth and ensure accurate measurement.
2. when use and storage, must be handling with care and careful maintenance. Avoid to scratch or collision damages on the surface of the optical components.
3. The prism and sample must be at the same temperature for accurate results.
4. The instruments should be kept in a dry, no dust, no corrosive gas environment and to avoid going mouldy of the optical parts' surface.

*Packing and accessories: the instrument will be packed in a special case. and the accessories are include: 1. Manual instruction 2. Screwdriver 3 pipette. 4. lint

Model	Range	Div.	Accuracy	Remarks
RHB-10	0-10%Brix	0.1%Brix	±0.10%	
RHB-18	0-18%Brix	0.1%Brix	±0.10%	
RHB-32	0-32%Brix	0.2%Brix	±0.20%	
RHB-62	28-62%Brix	0.2%Brix	±0.20%	
RHB-82	45-82%Brix	0.5%Brix	±0.50%	
RHB-90	58-90%Brix	0.5Brix	±0.50%	
RHS-10	Salinity: 0-100% Specific gravity:1.000-1.070	Salinity: 1% Specific gravity:0.001	Salinity: ±1% Specific gravity:±0.001	
RHS-28	Salinity: 0-28%	Salinity: 0.2%	Salinity: ±0.2%	
RHW-80	W/W:0-80%	W/W:1%	W/W:±1%	
RHA-100	Ethylene Glycol: -84° F -32° F Propylene Glycol: :-60° F- 32° F Battery:1.100-1.400sg	Ethylene Glycol:5° F Propylene Glycol: 5° F Battery: 0.01sg	Ethylene Glycol: ±5° F Propylene Glycol: ±5° F Battery: ±0.01sg	
RHA-200C	Ethylene Glycol: -60° F-0° F Propylene Glycol: :-50° F-0° F Battery: 1.100-1.400sg	Ethylene Glycol:5° F Propylene Glycol: 5° F Battery: 0.01sg	Ethylene Glycol:±5° F Propylene Glycol: ±5° F Battery: ±0.01sg	
RHA-300F	Ethylene Glycol: -60° F-32° F Propylene Glycol:-50° F-32° F Battery: 1.15-1.30sg	Ethylene Glycol: 5° F Propylene Glycol: 5° F Battery: 0.01sg	Ethylene Glycol: ±5° F Propylene Glycol: ±5° F Battery: ±0.01sg	
RHA-503C	Battery: 1.100-1.400sg Ethylene Glycol: -50° C-0° C Propylene Glycol:-50° C-0° C Cleaner: -40° C-0° C	Battery:0.01sg Ethylene Glycol:5° C Propylene Glycol:5° C Cleaner: 5° C	Battery:0.01sg Ethylene Glycol:5° C Propylene Glycol:5° C Cleaner: 5° C	
RHC-200	Serum Protein: 0-12g/dl Specific Gravity: 1.000-1.050sg Refractive Index: 1.330RI-1.360RI	Serum Protein: .2g/dl Specific Gravity: 0.005sg Refractive Index: 0.0005RI	Serum Protein: ±0.2g/dl Specific Gravity: ±0.005sg Refractive Index: ±0.0005RI	