

**REFRACTÓMETRO MANUAL
FOR HAND HELD REFRACTOMETER
RÉFRACTOMÈTRE Á MAIN**

REF. - CODE - RÉF. HPM002, HPM005, HPH002, HPH003, HPD013, HPD014

Zuzi



Este manual es parte inseparable del aparato por lo que debe estar disponible a todos los usuarios del equipo. Le recomendamos leer atentamente el presente manual y seguir rigurosamente los procedimientos de uso para obtener las máximas prestaciones y una mayor duración del mismo.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

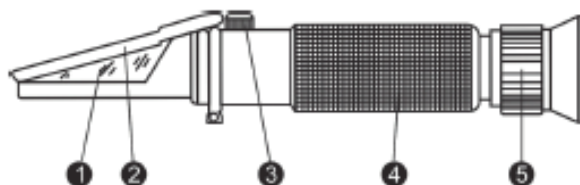
Ce manuel est une partie indissociable de l'appareil et doit être mis à la disposition de tous les utilisateurs de l'équipement. Nous vous recommandons de lire attentivement ce manuel et de suivre scrupuleusement les procédures d'utilisation afin d'obtenir des performances maximales et une plus longue durée de vie de l'appareil.

LANGUAGE INDEX

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1. DESCRIPTION

1. Prism
2. Cover plate
3. Calibration screw
4. Rubber grip
5. Eyepiece with focus adjustment

2. FEATURES

1. Easy to focus and calibrate.
2. High quality body construction.
3. Uses ambient light only which means battery or power source is not required.
4. Cushioned with soft & comfortable non-slip rubber.
5. With ATC function (ATC Compensation Range: 10°C~30°C (50°F~86°F)).
6. Durable and built to last long.

3. CALIBRATION PROCEDURE

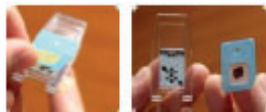
1. Begin the calibration of your refractometer by lifting up the cover plate and placing 2-3 drops of distilled water on top of the prism assembly. Close the cover plate so the water spreads across the entire surface of the prism without any air bubbles or dry spots.
2. Hold the refractometer in the direction of a natural light source and look into the eyepiece. You will see a circular field with graduations down the center. You may have to focus the eyepiece to clearly see the graduations.
3. Remove cap from adjustment screw, adjust the line between blue (top) and white (bottom) until the dividing line is even with the zero line at the bottom of the scale.
4. Replace protective cap on adjustment screw.

4. USAGE INSTRUCTIONS

1. Hold refractometer in the direction of a light source, look into the eyepiece and focus the eyepiece to see the graduations clearly.
2. Open cover plate, clean the instrument using a soft, damp cloth.
3. Place 2-3 drops of sample water on the main prism, close the cover plate and press gently so that it spreads across the entire surface of the prism without air bubbles.
4. Hold device horizontally in the direction of a light source. Look into the eyepiece and read out the value where the blue and white cross the graduated scale.
5. Wipe off and dry the prism.

4. LED REFRACTOMETER BATTERY REPLACEMENT PROCEDURE

Step 1. Take off the button sticker with care.



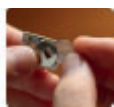
Step 2. Take out the chip by using the screwdriver



Step 3. Remove the old battery



Step 4. Install the new battery



Step 5. Put back the chip to the plate



Step 6. Re-paste the sticker. Done



5. PACKAGE LIST



1. 1x Protective carrying case
2. 1x Pipette
3. 1x ATC refractometer
4. 1x Mini-screw driver
5. 1x Cleaning cloth

6. WARNINGS

1. Accurate measurement depends on careful calibration. The prism and sample must be at the same temperature for accurate results.
2. Do not expose the instrument to damp working conditions, and do not immerse the instrument in water. If the instrument becomes foggy, water has entered the body. Call a qualified service technician or contact your dealer.
3. Do not measure abrasive or corrosive chemicals with this instrument.
4. Clean the instrument between each measurement using a soft, damp cloth. Failure to clean the prism on a regular basis will lead to inaccurate results and damage to the prism's coating.
5. This is an optical instrument. It requires careful handling and storage. Failure to do so can result in damage to the optical components and its basic structure.