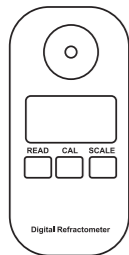


Digital Refractometer



Operational Manual

Catalogue

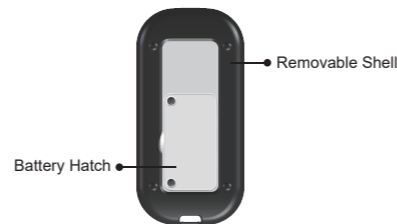
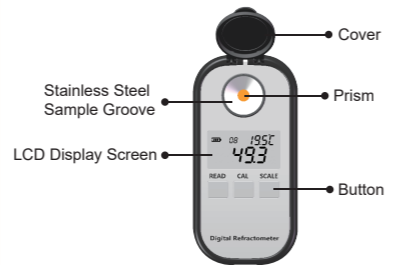
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Before operating your instrument, please read this manual properly.

1. Introduction

Panel Descriptions

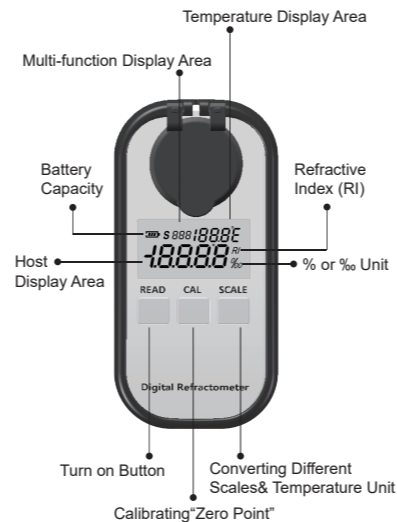


The Packing Accessories:
Packaging x1 The Instructions x1 AAA Batteries x1 Dropper x1 Square Cover x1 Digital Refractometer x1

1

2. Display and Buttons

Display Areas and Buttons

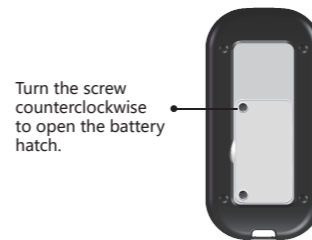


Note: Please replace the battery when the is displayed.

2

3. Preparations before Operation

3.1 Install the Battery



Put 1 piece of 1.5V battery into the cabin in the right way and recover the cabin again.

3

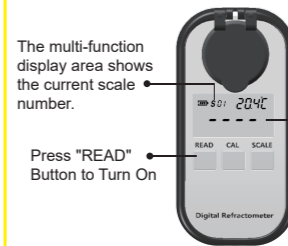
3.2 Install the Wrist Strap



Properly Install the wrist strap into the hole at the bottom of the instrument.

4. Booting and Measurement

4.1 Booting



The multi-function display area shows the current scale number.

Press "READ" Button to Turn On

If there is no sample on the drip, it will display "dash"

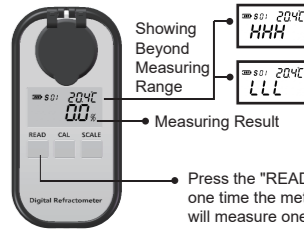
4

Note :

- When used outdoors, please avoid strong light so as not to affect the measurement accuracy.
- Please keep the instrument in a stable and still statement and position.
- Please keep the instrument in a stable status to measure.

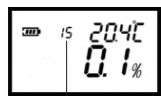
4.2 Measurement

After turn on, clear the distilled water and dry the sample plate, drip 0.2~0.3ml sample then close the cover to measure.



5

If press the "Read" button for 2 seconds, the instrument would make the automatic measurements upon programmed times (default 15times), the final value is the average of 15 times' measurements. After measurements, the multi-functions display area would return back to scale showing status.



The multi-function area would show remaining times during the automatic measurement.

5.Zero Calibration

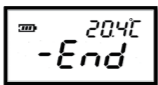
The meter only supports pure water calibration. The calibration method is as following drop 0.2-0.3ml pure water then close the cover to measure.



LCD Flashing Display

Press 'CAL' button for 2 seconds to enter the calibration status Press "CAL" button for 2-3 seconds till see the 'CAL' flashing

Press "CAL" button once again during the 'CAL' flashing to start to calibrate. When the calibration is completed showing as following. If no any operations for 10seconds the instrument would return back to booting status.



If fail to complete the calibration, multi-function display area would show an error code.



Temperature exceed the limitations, other error codes could be checked in the appendix error code page.

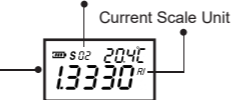
6.Switch the Scales and Temperature Units

6.1 Scales Converting

The instrument could support 10 scales maximally.



Current Scale Number



Press to convert the scales and the values.

6.2 Temperature System Converting

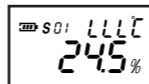
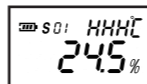


Temperature Unit



Press button for 2 seconds, temperature unit would be converted.

If exceed the temperature limitations, the signs "HHH" or "LLL" would show.



7.Turn Off

If without any operations for 1 minute, the instrument would be automatically turned off.

8.Maintenance and Preservation

1. Please clean and wash the sample plate with distilled water and dry it with soft cleaning cloth or paper towel after finishing the measuring one kind sample.
2. Never left the remains and residuals of samples in the sample plate for long time.
3. After finishing measurements of the corrosive liquid, please clean the sample plate as quick as possible to avoid the irreparable damage of the prism and metal surface of the plate.
4. Please use soft cleaning cloth or paper towel to clean the sample plate to avoid scribing the prism's glass.
5. When the dropper and dust-free cloth are not used, please clean it with clean water and put it in the packing box after drying.
6. If no using the instrument for a long time, please remove the battery, and preserved in a cool and dry environment.

Appendix:

Performance:

	Range	Accuracy	Resolution
Brix	0.0%~50.0%	±0.2%	0.1%
	0.0%~90.0%	±0.2%	0.1%
R.I.	1.3330~1.4200	±0.0003	0.0001
	1.3330~1.5177	±0.0003	0.0001
Temperature	0.0~40.0°C	±0.5°C	0.1°C
	32.0~104.0°F	±0.9°F	0.1°F
Dimension	121*58*25mm		
Net weight	90g (excluding battery)		

The Error Codes Table:

code	Instructions
A01	Beyond the scope of calibration temperature. (0.0°C~40.0°C)
A02	During calibration, no solution or solution wrong.
A03	This instrument has a hardware failure.

Description of Scales Numbering:

