GIORGIO·BORMAC s.r.l.

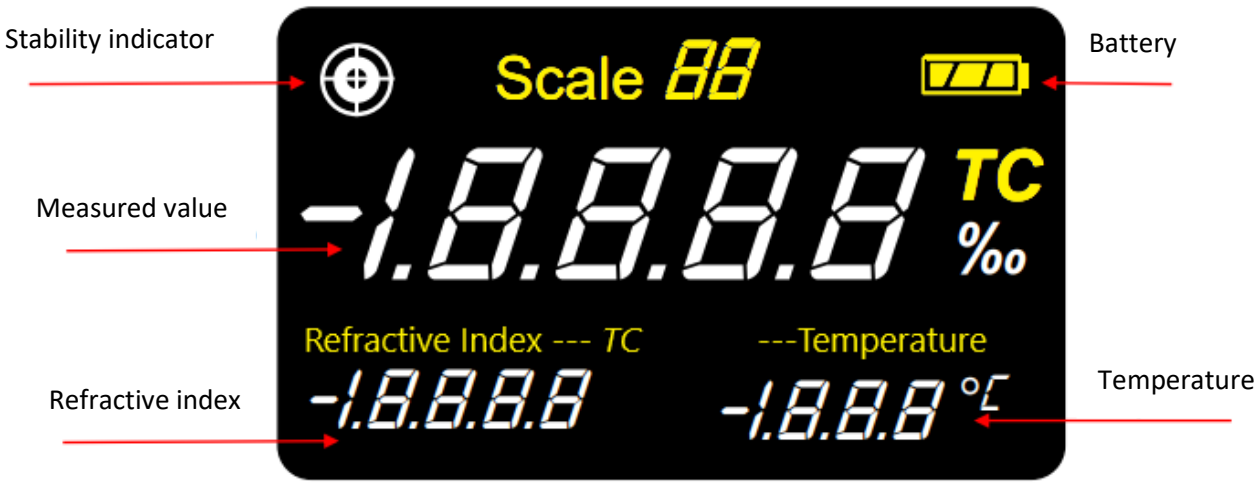
Instructions for DBR95 digital refractometer

Introduction

The portable digital refractometer is a tool for the rapid and accurate measurement of the refractive index (RI) concentration and many other parameters for various types of liquids. Thanks to an intuitive operation and a large display, they are much more practical, reliable and faster than normal rifle refractometers.



LCD display



Keyboard



Accensione e spegnimento



Conversion from ° C to ° F



Zero point calibration



Reading of the measures

Battery installation

The battery compartment is located on the lower side of the instrument.
Unscrew the two screws and insert the rechargeable battery supplied with the instrument.
To recharge the battery, use the external power supply with USB socket, supplied with the instrument.

Calibration

The instrument can be calibrated only on the 0% point, and to do this it is necessary to use bidistilled water, as pure as possible.

- Place a few drops of distilled water on the reading prism, and close the plastic cap.
- Press and hold the CAL key for 3 seconds, until CAL appears on the display. While CAL is flashing, press the CAL key again.
- At the end of the calibration the writing –End appears.

Measure

Place the instrument on a stable table, and protected from any strong direct light sources. (example neon light)

- Switch on the instrument by pressing the On / Off button.
- Place the sample inside the optical chamber, filling at least 1/3 of the container (approx. 0.4 ml).
- Press the Read key to read. The value shown is subject to automatic temperature compensation, performed by the instrument.

Sampling

- In measurement mode, keep the "Read" key pressed for 2 seconds. The instrument measures the sample n times consecutively (default: 15).
- The countdown of the measures in progress appears in the upper part of the display.
- At the end of the countdown the instrument returns the average of the individual measurements as a result.

Automatic compensation

To activate or deactivate automatic temperature compensation (reference T = 20 ° C), press the "CAL" key.

- 1st press = ATC deactivated for the refractive index
- 2nd pressure = ATC deactivated for the% Brix concentration value
- 3rd pressure = ATC active If the word TC appears next to the value, it means that compensation is active for that parameter.

Error

- - - -	Make sure you have placed enough sample on the prism
H H H H	Concentration value too high
L L L L	Concentration value too low
E R R	Error in measure or concentration. Contact support

Data sheet

	Measuring range	Accuracy	Resolution
Brix	0,0% - 95,0%	±0,3%	0,10%
RI	1,3330 – 1,5318	±0,0002	0,0001
Temperature	0,0 – 40,0 °C 32,0 – 104,0 °F	±0,3 °C ±0,3 °F	0,1 °C 0,1 °F
Dimension	180 x 100 x 55 mm		
Weight	365 g (without batteries)		

Disposal of electronic devices



Electrical and electronic equipment marked with this symbol cannot be disposed of in public landfills. In accordance with WEEE directive 2012/19/EU, European users of electrical and electronic equipment have the option of returning the used equipment to the Distributor or Manufacturer when purchasing a new one. Abusive disposal of electrical and electronic equipment is punished with a pecuniary administrative sanction.