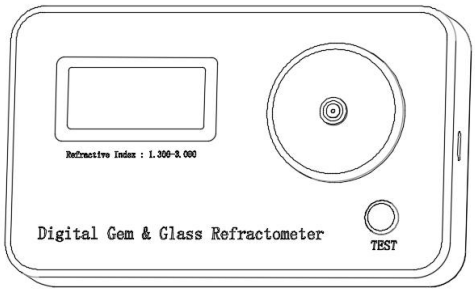
GEM Digital Refractometer Instruction Manual

Introduction:

SISCO digital gem refractometer is for measuring the gem refractive index of an unknown gem stones, covering full range from 1.400 to 3.000. It gives a quick and reliable differentiation of diamonds and imitations colored stones from their many imitations.



Main parameter

1. Measuring range: refractive index 1.300-3.000
2. Resolution: 0.001
3. Measurement Accuracy: ±0.005
4. Dimensions: 13.5cmx7.8cmx2.4cm
5. Weight: 0.25KG
6. Power supply: 700mA Lithium Battery; Battery life: 10,000 times

Operation instruction

1. Before use it, please clean the measuring table. the small round table in the center of the black table in the upper right, any dirty points and pollution will have a greater impact on the measured value.

2. Press the TEST button once to turn on the power supply, the window displays the value of 1.000, and put the sample in the center of the measuring hole on the table surface. Note: Please wipe the measuring surface of the sample with the cloth provided at random, and the measuring surface must be tight to the measuring table without tilt.

3. Press the TEST button once, and the window display value is the refractive index of the sample. In order to ensure the accuracy of measurement, it is necessary to measure 5 times continuously. Measurement process: pick up the sample and put it in the center of the table, press the TEST button once, and record the value displayed in the window. Remove the sample and put it back in the center of the table, press the TEST button, record the value displayed in the window again, and operate for 5 consecutive times. the most common value is the refractive index of the sample.

4. If it is a birefringence gem, after measuring the refractive index in one direction, the sample should be rotated 180 degrees and then measured, and then averaged.

5. The equipment has been calibrated before the factory, can be used directly, the instrument after a long time of transportation and use, there will be deviation, so it needs to be calibrated again, calibration process: Long press the TEST key, the window starts to read, after the value

5 is displayed, release the TEST button, the value 1.487 appears in the window, put the randomly provided calibration block (labeled with 1.478) in the center of the measurement platform, without facing down, press the TEST button once, the value 1.806 appears in the window, and remove the calibration block (labeled with 1.478). Put another calibration block (labeled 1.806), no word down, press the TEST button again, the window displays 0.000, calibration is complete.

Before measurement, first measure the calibration block. If the displayed value is different from the value of the calibration block, we should clean the measuring platform and calibration block, and then re-calibrate until the value is the same (Accuracy: ±0.005), then normal measurement can be performed

6. The instrument will automatically shut down after one minute without any operation.

Cautions

1, when the power is insufficient, to charge in time, for charging port Type-C, you can use the mobile phone charger.
2, can not be placed at high temperature, can not be washed with water, special attention should be used when not in use to cover the measuring table tightly, so as not to pollute the measuring table with dust and dirt, affecting the accuracy of the next measurement results.

Accessory

1. One instrument host
2. Two calibration blocks, one is refractive index1.487 ,the other is refractive index 1.806.
3. A tweezers
4. One lens cap
5. Cloth
6. A copy of instruction manual