Mini Gloss*Tector* 60°
Operations Manual

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1 Product description

The mini GlossTector 60° is one of the smallest gloss measurement gauges available on the market delivering precise results. It's the product of choice for determining the gloss level of paints, coatings, plastics, ceramics and metal surfaces.

2 Safety

⚠ If used properly there are no hazards to fear.

⚠ Don't let children come in contact with the instrument to prevent it being damaged.

⚠ Do not perform any repairs on the units, neither mechanical nor electrical yourself. The unit must be opened by trained professionals only. Please contact our customer service department in such cases. They will be happy to assist you as quickly as possible.

⚠ Please take out the battery if you do not use the instrument for a longer period of time.

3 General information

- Before using the mini **Gloss**Tector 60° we strongly advice you to read the instructions' manual.

- After receiving a delivery, we ask you to check whether everything is included and not damaged.

- The instrument consists of sensitive optical and electronic precision part. Prevent it from being dropped.

- Do not let any object to get into the aperture.

- Do not expose the instrument to direct sunlight for a longer period of time. Do not store in a hot or dusty environment.

- Avoid high levels of humidity and do not let the instrument get in contact with water or other fluids.

- Protect the instrument from moisture, chemicals and corrosive vapors.

- The calibration board and the housing are resistant to many solvents. However, we cannot guarantee resistance to all chemicals. You should therefore use a soft, moist cloth for cleaning. For cleaning excessive dirt and dust, use ethanol or cleaning alcohol. Do not use any acetone.

- Please note that batteries are special waste and should therefore not be disposed with regular trash but should be brought to special collection points.
- Keep the cailbration board clean! Any dust, dirt or oil may lead to false measurement results.

4 Power Supply

The instrument gets supplied with one 1.5V AAA (LR03) alkaline battery. Normally one battery should last for about 10000 measurements. When the battery voltage approaches the required minimum level a notification will appear on the display.
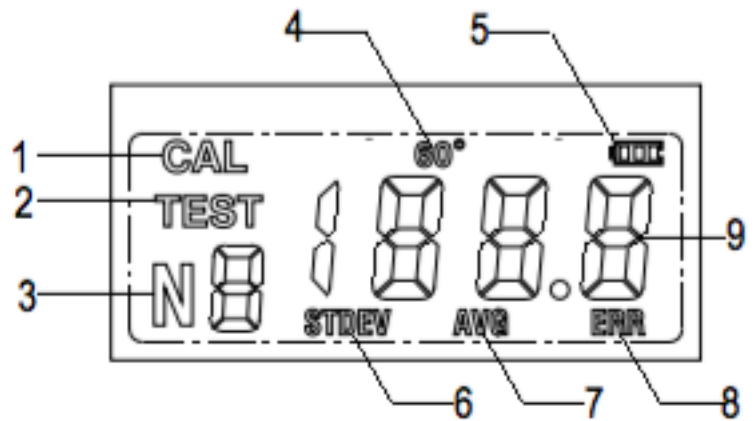
Changing Battery: Open the battery cover on the back of the instrument. Insert a new battery into the battery box paying attention to the positive and negative pole. Close the battery cover and the gauge is ready for use.
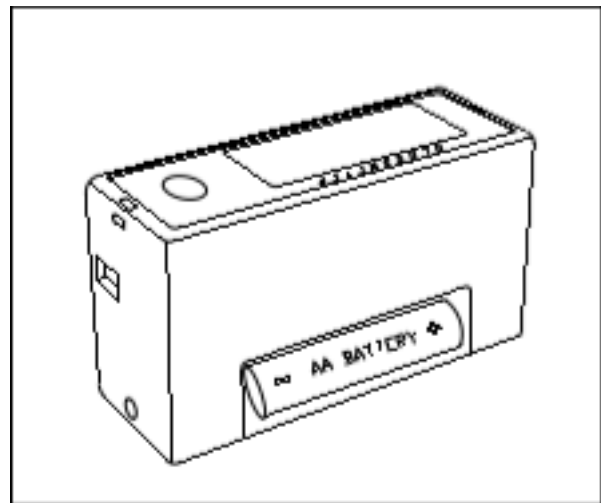
5 Overview
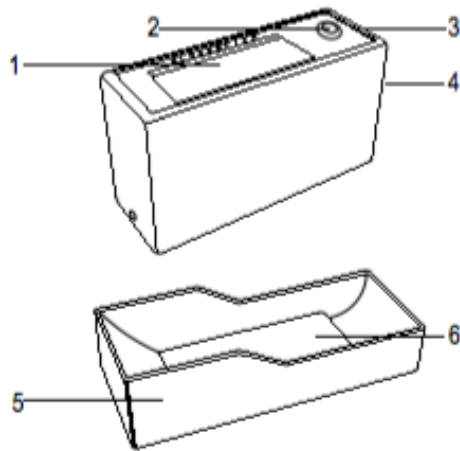
1 Display
2 Main button
3 String position
4 USB input
5 Holder
6 Calibration board

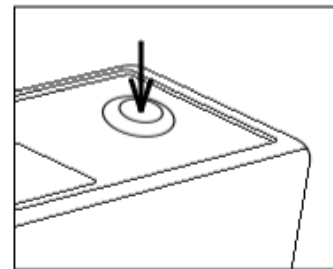1 Calibration
2 Test
3 Statistic
4 Geometry
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6 Standard Deviation

7 Average
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9 Result

6 Getting started

6.1 Turn on

Turn on the mini **Gloss***Tector* 60° by shortly pressing the *main button*.

6.2 Calibration

When the instrument is placed in the *holder* it automatically enters calibration mode.

The display shows *CAL*. When the *main button* gets pressed the instrument calibrates to 97.0 Gu. Its advisable to calibrate the instrument every time it gets turned on or after a long series of measurements to ensure optimal
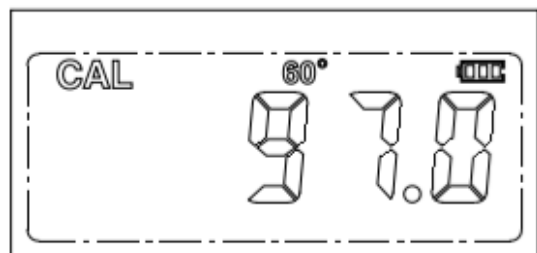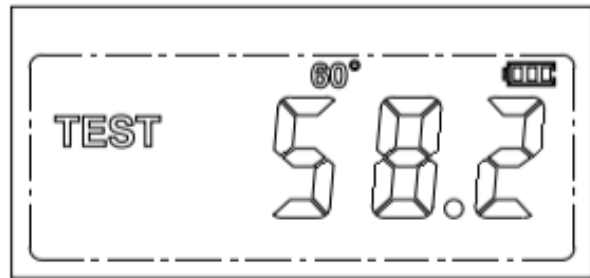

precision. Note that on the gauge and on the holder one can see an arrow. When placing the gauge in the holder make sure both arrows stand in line to each other.

6.3 Testing

When the instrument is not placed in the *holder* it is automatically ready for testing.

The display shows *TEST*. Please make sure that the instrument is calibrated (see 6.2). Place the mini **Gloss***Tector* 60° on the working piece flat and stable. It is important that the aperture is completely covered by the working piece. Press the *main button* and the instrument will display the result.

6.4 Turn off

The instrument shut downs automatically if it is not used for 2 minutes. To turn if off manually put the instrument in the *holder* and hold the *main button* pressed for about 2 seconds. Note that if the instrument is not placed in the *holder* it can't be turned off manually. Instead it will enter statistics mode if the main button is pressed for 2 seconds.

7 Statistics

To enter the statistics mode press and hold the *main button* for about 2 seconds while its not placed in the *holder*. The instrument will display *N0*. In statistics mode is possible to take up to 10 samples and the instrument will show the average and standard deviation of those data points. Simply place the instrument at the points one wants to measure and press the *main button*. The gauge will count the measurements [N1, N2, N3, …, NA (NA = N10)]. To see the statistical values simply wait for about 2 seconds after taking at least 2 samples. The display will then start showing the average (*AVG*) switch to the standard deviation (*STDEV*), back to the average and so on. If one takes 11 samples the gauge will start taking new samples from the beginning so taking 11 samples is equivalent to 1 sample (the last one). Press and hold the *main button* for about 2 seconds to leave statistics mode.
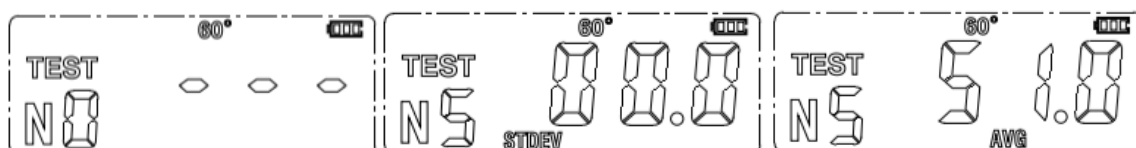
9 Data transfer

One can transfer the measurement results to the PC using an USB cable. Install the software "MyGloss" and follow the instructions. The software can be found on the CD which is included in the delivery or alternatively downloaded from our website: www.salutron.eu/downloads/.
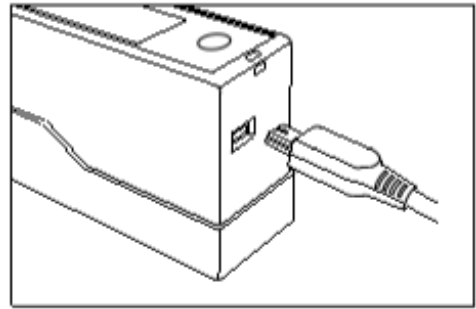
10 Error notifications

Calibration error: Clean the calibration standard and the lens (carefully!) using ethanol or cleaning alcohol. If the calibration should still not work contact Salutron Messtechnik GmbH, our technical assistance is happy to help.

Wrong results: If the gauge should display wrong results calibrate it and try again. If the results should still be wrong contact Salutron Messtechnik GmbH, our technical assistance is happy to help.

11 Technical Data

Geometry	60°
Size of measurement spot	10×20mm （ellipse）
Measurement spot	9×18mm
Light source	D65
statistic	Most 10 data
Interface	RS232 or USB
Software	My Gloss
Power	1.5vAAA(LR03)
Battery operation	About 10,000 measurements
Dimensions	83×46×30mm
Weight	100g （no battery）
Temperature	-10℃~~60℃
Rel. Humidity	85% （non-condensing）
Measurement range	0~99.9 100~1999Gu
Repeatability	0.2Gu （0~99.9Gu） 0.2% （100~1999Gu）
Reproducibility	0.5Gu （0~99.9Gu） 0.5% （100~1999Gu）

12 Standards

ISO2813   Paints and varnishes -- Determination of secular gloss of non-metallic paint films at 20 degrees, 60 degrees and 85 degrees.

ASTM D 523 Standard test method for secular gloss.

DIN 67530   The reflect meter as an aid in evaluating gloss on level paint and plastic surfaces.

ISO7668   Anodized aluminum and aluminum alloys-measurement of secular reflectance and secular gloss at angles of 20°,60°and 85°.

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