

KSJ®

60° GLOSS
ISO 2813
RoHS
CE

GLOSSMETER

USER's MANUAL

Please read this manual seriously before using !
Since it is upgraded at any time, some differences
may exist, please refer to this product!

Model: WGG60-EJ
(full scale range)

Made in China

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PRECAUTIONS

- ⚠ The meter must be used under the temperature between 5°C ~ 45°C and relative humidity less than 85% with no moisture condensation.
- ⚠ Don't stick any foreign objects to the plane of the Measurement Aperture.
- ⚠ While measuring, it is necessary to keep away from a strong EMI.
- ⚠ If there is a large temperature difference between the meter and an environment, please wait for a temperature balance, and then recalibrate the meter for a measurement.
- ⚠ Use a battery properly to prevent from fluid leakage causing the meter damaged. Please dispose wasted batteries in accordance with Local and National Disposal Regulations.
- ⚠ The whole set of the meter should be kept in a dry, non-corrosive environment and under the temperature between -10°C to +60°C.
- ⚠ When stored remove a battery from the meter.
- ⚠ The limited warranty period is two years commencing on the date of purchase. We reserve the rights not to guarantee those breakdowns free in repair that are caused by inappropriate use or being taken down.

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BRIEF INSTRUCTION

Thank you for using KSJ products!

WGG60-EJ is designed and manufactured according to ISO2813 and GB/T 9754. The meters are also compatible with the standards of ASTM D2457, ASTM D523, GB/T13891, and GB/T 8807. The technical parameters conform to JJG 696-2002. Besides this the measurement range is extended by the gloss definition to the full scale range.

The gloss values can be traced to the those of the National Primary Standards in SIMT in the PRC.

■ Main Applications

This meter is specially designed for very-high-gloss surface of metal products as below:

- ◆ Polishing and finishing metal surfaces, such as metallic foils, metal plating, etc.
- ◆ Evaporating and coating products, such as laser film, reflective film and so on.
- ◆ The other kinds of decorative materials and objects.

SPECIFICATIONS

Specifications	Unit	WGG60-EJ	
		Standard	Extended
Measuring Range	GU	0 ~ 199	200 ~ 999
Resolution	GU	1	
Deviation	GU	± 2	$\pm 1.5\%$
Zero-point Deviation	GU	1	
Stability	GU	1	
Measuring Spot	mm ²	36 × 18	
Incidence Angle	Deg.	60°	

Note: GU is short for Gloss Unit.

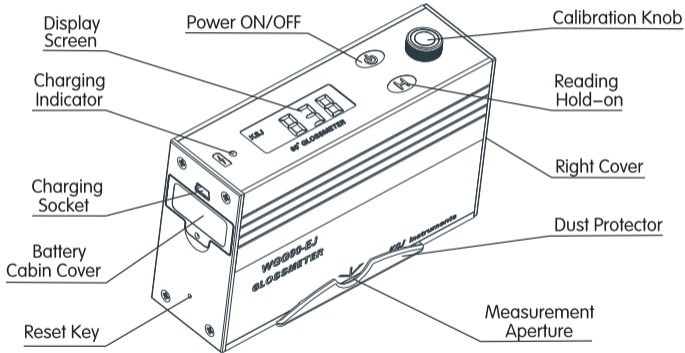
to be continued

SPECIFICATIONS

Specifications	Unit	WGG60-EJ
Measurement Aperture	mm ²	50 × 20
Rechargeable Power		Lithium battery 3.7V, 800mAh
Consumption		A full-scale charged battery may support operation to last more than 70 hours.
Charger Input		AC:100v~250v, 50/60Hz
Main Volume	mm ³	130 × 40 × 80(L × W × H)
Main Weight	g	300

STRUCTURE

■ Main Device



★ For the reasons of security and environmental protection a professional is needed to replace the battery.

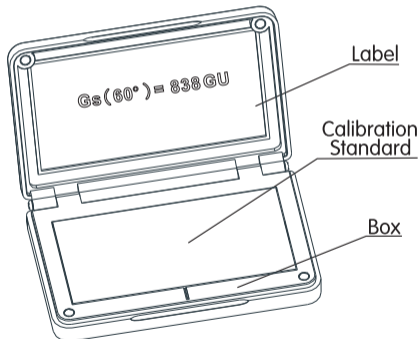
STRUCTURE

■ Working Standards:

There are two Working Standards coming with the meter:

Calibration Standard (Mirror Tile)
Checking Standard (Black Tile)

★ Note: Before using, make sure the surface is clean!



STRUCTURE

■ Charger

Input:

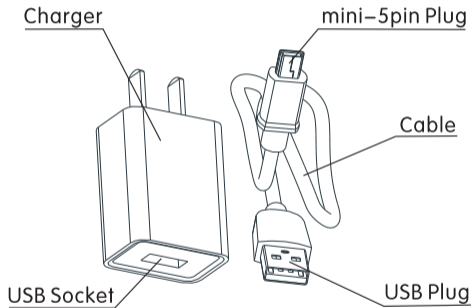
AC: 100v-240v

Frequency: 50/60Hz

Max Current: 0.2A

Output:

DC: 5.0V 1.0A



★ Note: After using, take it off the socket!

OPERATION PROCEDURE

■ Power ON / OFF

Touch ON/OFF key to turn on or turn off the meter.

■ Calibration

Turn on the meter and remove the Dust Protector, then lay the Measurement Aperture of the meter on the higher-gloss (mirror tile) Calibration Standard. Then turn Calibration Knob to adjust the reading shown on the Display Screen to the right value labeled in the box.

★ Note:

1. The readout will be valid only when the Measurement Aperture is laid just against the surface of the Calibration Standard.
2. During a long time working, e.g. 30min or longer, the meter should be re-calibrated to keep getting accurate measurements.
3. The meter must be calibrated each time starting up and do not turn off the meter until your measuring work is over.

OPERATION PROCEDURE

■ Measurement

Lay the Measurement Aperture just against the position which you want to measure. And then the gloss value of the position is instantly shown on the Display Screen.

- ★ Note: Hold on the key of Reading Hold-on to keep the display and easily to get a reading.


■ Checking

After calibrating, set the Measurement Aperture on the lower-gloss (black tile) Checking Standard. The deviation between the shown and the labeled values should be less than or equal to 2GU. If the deviation goes beyond the scope, it tells us that the labeled gloss value of the Calibration Standard may be changed and so the two standards should be sent for a verification.

- ★ Note: The checking should be performed only when a meter is used for a long time interval, or values measured are doubtful. It is not necessary to check for each operation.

OPERATION PROCEDURE


■ Important Notes

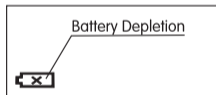
- ◆ The surfaces of standards and specimens should be kept clean. Any dust, steam, filth should be cleaned lightly with a piece of lens paper or soft cloth dipped in absolute ethanol (it is better in a mixture of absolute ethanol and aether by 1:1).
- ◆ Calibrating, measuring and checking must be carried out at a same ambient temperature. A large temperature difference and moisture condensation may cause large deviation.
- ◆ Keep the Measurement Aperture clean! Any foreign matter sticked will make an extra deviation.
- ◆ When battery depletion symbol, "  " appears on the Display Screen, the battery should be charged in time. If keeping on using, the meter may show "1" or "-1" only.
- ◆ While measuring, please make sure that environment light will not irradiate into the Measurement Aperture.

BATTERY CHARGING

The meter uses a lithium battery (Model BL-5C, 3.7V 800mAh) as its power supply. The battery will be consumed in using or storing, and it is necessary to recharge it timely.

★ Note: For the reasons of security and environmental protection a professional is needed to replace the battery.

When the energy of the battery is getting to use up, a symbol of "  " will be shown on the lower left corner of the Display Screen as the figure.



In this case the battery needs to recharge at once. Please operate as follows to recharge the battery:

BATTERY CHARGING

■ Recharging

Turn off the meter, connect the charger to the Charging Socket on the meter, then insert the charger into an AC socket (AC100v~240v). When the Charging Indicator lights red, the charging begins, and when it lights green, the charging is over.

★ Note:

- ☆ When charging is finished, take the charger off from the AC socket!
- ☆ To avoid damage or causing any danger, please be sure to use the special charger coming with the meter.

■ Emergency Supply

When the battery is used up and meanwhile there are some measurements to be done, you can started to recharge the meter and make the measurements at the same time.

- ★ You can certainly recharge the meter with a power bank.

WARRANTY

- ◆ The limited warranty period is two years commencing on the date of purchase.
- ◆ If your meter needs service, carry it to the local reseller or contact us at www.ksj.cn or sales@ksj.cn for repair.
- ◆ We provide spare parts anytime for distributors and customers to repair.
- ◆ The inquiries on the gloss measurement may be directed to support@ksj.cn
- ◆ We also provide glossmeter customizing or ODM for special applications.

★ Notes

- ☆ The meter should not be taken down at will in order to avoid precision destroying and maintaining difficulty.
- ☆ If the breakdown is caused by taking-down or inappropriate use, we reserve the rights not to guarantee it free in repair.

PACKING LIST

◆ Main Device: Model : WGG60-EJ	1 unit
◆ (Mirror Tile) Calibration Standard	1 piece
◆ (Black Tile) Checking Standard	1 piece
◆ Carrying Bag	1 piece
◆ Battery Charger	1 set
◆ User's Manual	1 piece
◆ Inspection Certificate	1 piece
◆ Warranty Card	1 piece

★ Purchase Date:

