

Graigar LS201

LS201 Digital Glass Thickness Meter User Manual

Model: LS201 | Brand: Graigar

1. INTRODUCTION

The Graigar LS201 Digital Glass Thickness Meter is a precision instrument designed for non-destructive measurement of glass thickness. It is capable of measuring single-layer glass, double-glazing, triple-glazing, and laminated glass. With a high-definition backlit display and switchable English/Chinese language modes, it provides accurate and convenient measurements for various applications.

Key features include:

- Non-destructive measurement of glass thickness.
- High precision with an accuracy of ± 0.1 mm.
- Large, high-definition display with backlight.
- Switchable display modes between Chinese and English.
- Capable of measuring multiple layers of glass and air gaps.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the device. Failure to follow these instructions may result in damage to the device or personal injury.

- **Do not** attempt to disassemble or modify the device.
- Keep the device away from water and excessive humidity.
- Avoid dropping the device or subjecting it to strong impacts.
- Use only the specified battery type (if applicable) and ensure correct polarity during installation.
- Store the device in a clean, dry environment when not in use.
- Keep out of reach of children.

3. PRODUCT COMPONENTS

The standard package for the LS201 Digital Glass Thickness Meter includes the following items:

- LS201 Digital Glass Thickness Meter
- Protective Carrying Case
- User Manual
- Small adjustment tool (as seen in case)



Figure 3.1: LS201 Meter, user manual, and small tool inside the protective carrying case.



Figure 3.2: Top view of the LS201 meter, showing the display and control buttons, placed within its custom-fit case.

4. SETUP

4.1 Battery Installation

The LS201 meter operates on batteries. To install or replace batteries:

1. Locate the battery compartment cover on the back of the device.
2. Use a small screwdriver or coin to gently open the battery compartment.
3. Insert the required batteries (e.g., AAA batteries, check specifications for exact type) ensuring correct polarity (+/-) as indicated inside the compartment.
4. Close the battery compartment cover securely.



Figure 4.1: Rear view of the LS201 meter with the battery cover removed, revealing the battery slots for installation.



Figure 4.2: A composite view illustrating the open battery compartment, the meter within its case, and the closed carrying case.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

To power on the device, press and hold the **Power** button located at the bottom of the control panel. To power off, press and hold the **Power** button again until the display turns off.

5.2 Language Selection

The LS201 supports both Chinese and English display modes. Refer to the user manual or on-screen prompts for instructions on how to switch between languages, typically by navigating through the settings menu using the **Select** button.

5.3 Basic Measurement Procedure

To measure glass thickness:

1. Ensure the meter is powered on.
2. Place the meter flat against the glass surface you wish to measure. Ensure the measurement sensor is in full contact with the glass.
3. Press the **Measure** button. The device will automatically detect the glass layers and air gaps.
4. Read the thickness values displayed on the screen. The display will typically show "Glass1", "Air1", "Glass2", etc., indicating the thickness of each glass layer and the air gap between them.



Figure 5.1: The LS201 meter in use, displaying the measured thickness of glass layers and air gaps on its screen.



Figure 5.2: Detailed view of the LS201 display, showing measurements for multiple glass layers (Glass1, Glass2, Glass3) and the air gaps (Air1, Air2) between them.



Figure 5.3: An illustrative diagram explaining the identification of the first glass layer thickness, air layer thickness, and second glass layer thickness as displayed by the meter.

5.4 Measurement Modes: Auto and Manual

The LS201 offers both automatic and manual measurement modes. In Auto mode, the device attempts to detect all layers. In Manual mode, you can specify the number of layers or type of glass for more controlled measurements.

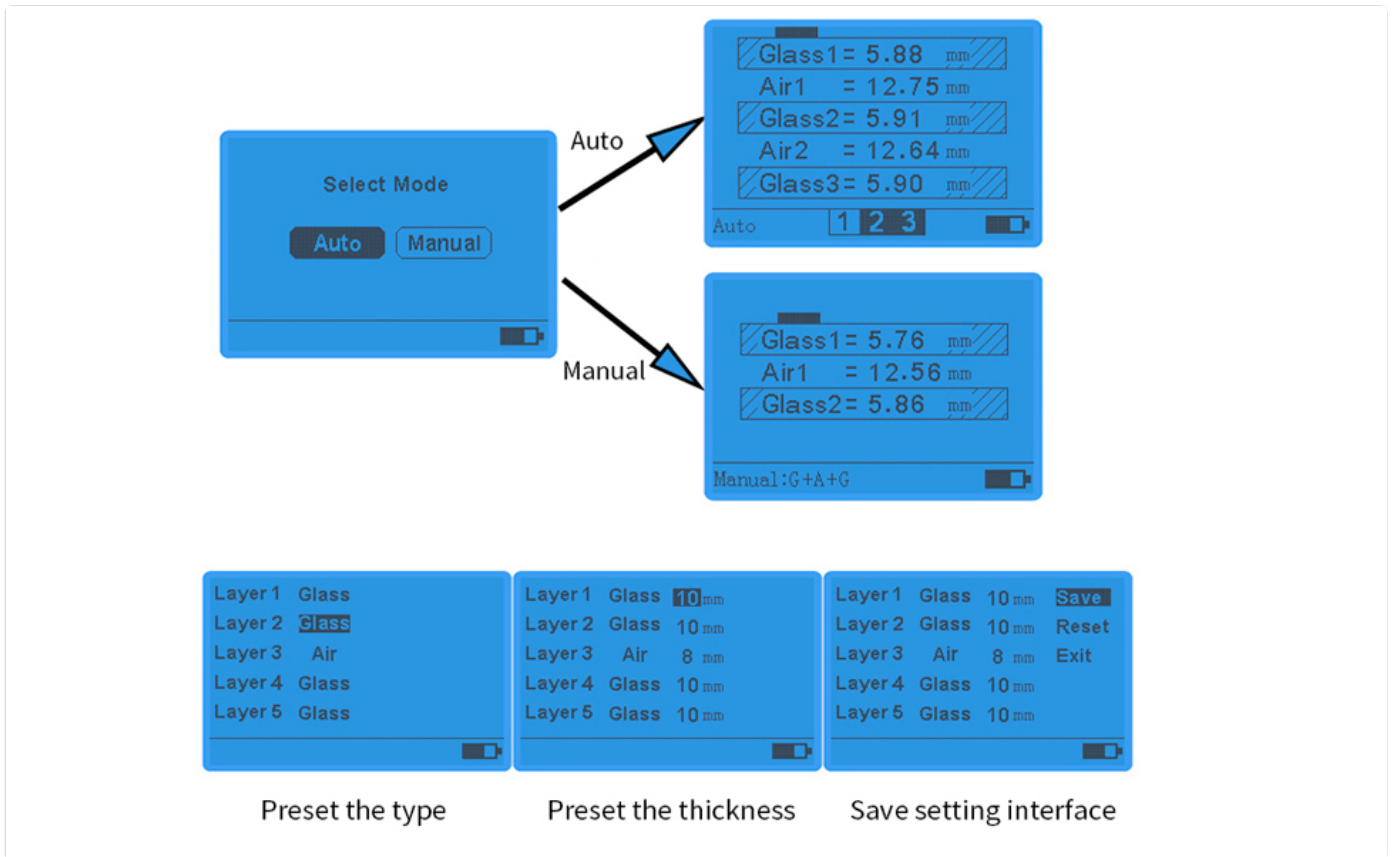


Figure 5.4: Flowchart illustrating the selection between Auto and Manual measurement modes, and how to preset glass types and thicknesses in Manual mode.

5.5 Testing Different Glass Types

The LS201 is versatile and can be used to test various types of glass constructions, including:

- Triple Glazing
- Double Glazing
- Insulating Glass
- Laminated Glass



Figure 5.5: Visual examples demonstrating the LS201 meter's application for measuring triple glazing, double glazing, insulating glass, and laminated glass.

6. MAINTENANCE

6.1 Cleaning

To ensure optimal performance and longevity of your LS201 meter:

- Wipe the device with a soft, dry cloth after each use.
- For stubborn dirt, slightly dampen the cloth with water. **Do not** use abrasive cleaners, solvents, or immerse the device in water.
- Keep the measurement sensor clean and free of dust or debris.

6.2 Storage

When not in use, store the LS201 meter in its protective carrying case in a cool, dry place, away from direct sunlight and extreme temperatures.

6.3 Battery Replacement

Replace batteries when the low battery indicator appears on the display or when the device fails to power on. Refer to Section 4.1 for battery installation instructions.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Low or dead batteries; Incorrect battery installation.	Replace batteries with new ones; Ensure batteries are installed with correct polarity.

Problem	Possible Cause	Solution
Inaccurate readings.	Sensor not fully in contact with glass; Dirty sensor; Glass surface is not flat.	Ensure full contact; Clean the sensor; Measure on a flat section of glass.
Display is dim or flickering.	Low battery power.	Replace batteries.
Cannot switch language.	Incorrect button sequence; Firmware issue.	Refer to the detailed manual for language change steps; Contact support if issue persists.

8. SPECIFICATIONS

Parameter	Value
Model	LS201
Manufacturer	Graigar
Measurement Precision	±0.1 mm
Material	Plastic
Dimensions (L x W x H)	13 x 7.2 x 3.3 cm
Weight	330 Grams
Power Source	Battery operated (Batteries not included)
Display	High-definition with backlight
Language Modes	Chinese, English

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official documentation provided with your purchase or contact Graigar customer service directly. Specific warranty terms may vary by region and retailer.

For further assistance, please visit the manufacturer's website or contact their support channels.