Walfront LX1330B

Walfront LX1330B Digital Light Meter User Manual

Model: LX1330B

1. INTRODUCTION

This user manual provides detailed instructions for the operation, maintenance, and troubleshooting of the Walfront LX1330B Digital Light Meter. This device is designed for accurate measurement of illuminance, offering both Lux and Foot-Candle (FC) units. Please read this manual thoroughly before using the device to ensure proper and safe operation.

2. PRODUCT FEATURES

- Wide Measurement Range: Capable of measuring illuminance from 0.1 to 200,000 Lux or 0.01 to 20,000 FC.

- High Accuracy Sensor: Equipped with a high-precision sensor for reliable and accurate readings.

- Rapid Response: Provides quick measurement results.

- Large LCD Display: Features a clear 3-1/2 digits 18mm LCD for easy reading in various lighting conditions.

- Unit Conversion: Easily switch between Lux and Foot-Candle (FC) units with a dedicated button.

- Data Hold Function: Allows freezing the current measurement on the display for convenient recording.

- Peak Hold Function: Captures and displays the maximum illuminance value detected.

- Over-range Indication: Alerts the user when the measured value exceeds the selected range.

- Low Power Consumption: Designed for efficient battery usage.

- Durable Construction: Includes a rubber protective sleeve for enhanced durability, wear resistance, and dust protection.

- Retraction Support: Features a fixed bracket on the back for easy observation and placement.

Image: The Walfront LX1330B Digital Light Meter showcasing its key features including high accuracy sensor, wide application range, large HD screen, unit conversion, data hold, and quick reaction.

3. Package Contents

Upon opening the package, please verify that all the following items are included and in good condition:

- 1 x Walfront LX1330B Digital Light Meter
- 1 x User Manual
- 1 x Screw (for battery compartment, if applicable)
- 1 x Storage Box

Image: The Walfront LX1330B Digital Light Meter and its light detect probe stored within its protective case, demonstrating the complete package contents.

4. PARTS IDENTIFICATION

Familiarize yourself with the different components of the Walfront LX1330B Digital Light Meter:

Image: A detailed view of the Walfront LX1330B Digital Light Meter, with labels pointing to the LCD display, power on/off button, LUX/FC unit switch, data hold button, peak hold button, range selection buttons, and the light detect probe.

- **LCD Display:** Shows measurement readings, units (Lux/FC), and other indicators.

- **Power On/Off Button:** Turns the device on or off.

- **LUX/FC Button:** Toggles between Lux and Foot-Candle measurement units.

- **HOLD Button:** Freezes the current reading on the display.

- **PEAK Button:** Activates the peak hold function to capture the maximum reading.

- **RANGE Buttons:** Used to manually select the appropriate measurement range.

- **Light Detect Probe:** The sensor that measures illuminance, connected via a coiled cable. It has a protective cap.

5. SETUP

5.1 Battery Installation

The Walfront LX1330B Digital Light Meter requires a 9V battery (not included). To install the battery:

1. Locate the battery compartment cover on the back of the unit.

2. Use a small screwdriver (if necessary) to open the battery compartment.

3. Connect a 9V battery to the battery connector, observing the correct polarity (+/-).

4. Place the battery inside the compartment and close the cover securely.

PRODUCT DETAILS

LCD DISPLAY
Choose Lcd HD Lcd Display, Large Subtitles Clear

RETRACTION SUPPORT
The Back of the Fuselage Has a Fixed Bracket for Easy Observation and Placement

BATTERY BIN DESIGN
Long Life with Battery

PROTECTIVE JACKET
With High Quality Rubber Protective Jacket Explosion-Proof, Dust-Proof, Anti-Fall

Image: A close-up view illustrating the battery compartment design of the Walfront LX1330B, showing where the battery is inserted.

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

- Press the **POWER** button to turn the light meter on. The LCD will display a reading.
- Press the **POWER** button again to turn the device off.

6.2 Taking a Measurement

1. Ensure the light meter is powered on.
2. Remove the protective cap from the light detect probe.
3. Position the light detect probe at the location where you wish to measure illuminance. Ensure the sensor dome is facing the light source.
4. Read the illuminance value directly from the LCD display.

Image: The Walfront LX1330B Digital Light Meter showing a digital reading on its LCD screen, with the light detect probe positioned for measurement.

6.3 Unit Selection (Lux/FC)

- Press the **LUX/FC** button to switch between Lux and Foot-Candle (FC) measurement units. The selected unit will be indicated on the LCD.

6.4 Data Hold Function

- To freeze the current reading on the display, press the **HOLD** button. An "H" symbol will appear on the LCD.
- Press the **HOLD** button again to release the data hold and resume live measurements.

Image: The Walfront LX1330B Digital Light Meter with its display showing the "H" symbol, indicating that the data hold function is active, freezing the measurement.

6.5 Peak Hold Function

- To capture and display the maximum illuminance value detected during a measurement session, press the **PEAK** button.
- Press the **PEAK** button again to exit peak hold mode.

6.6 Range Selection

The LX1330B has multiple measurement ranges. The device typically auto-ranges, but you can manually select a range using the **RANGE** buttons if needed for specific applications or to prevent "over-range" indications.

Measurement Ranges

FC Range	Lux Range
20 FC	200 Lux
200 FC	2,000 Lux

FC Range	Lux Range
2,000 FC	20,000 Lux
20,000 FC	200,000 Lux

If the display shows "1" or "OL", it indicates an over-range condition. Select a higher range or move the sensor to an area with lower illuminance.

7. MAINTENANCE

7.1 Cleaning

- Wipe the device body with a soft, dry cloth.
- For the light detect probe, gently clean the sensor dome with a soft, lint-free cloth. Do not use abrasive cleaners or solvents.
- Ensure the device is off and dry before cleaning.

7.2 Battery Replacement

When the battery low indicator appears on the LCD, replace the 9V battery as described in the "Battery Installation" section (5.1). Remove the battery if the device will not be used for an extended period to prevent leakage.

7.3 Storage

Store the light meter in its protective case in a cool, dry place, away from direct sunlight and extreme temperatures. Ensure the protective cap is on the light detect probe during storage.

8. TROUBLESHOOTING

Common Issues and Solutions

Problem	Possible Cause	Solution
Device does not power on.	Dead or improperly installed battery.	Check battery polarity, replace battery if necessary.
"1" or "OL" displayed on LCD.	Over-range condition; illuminance exceeds selected range.	Select a higher measurement range or move the sensor to a less intense light source.
Inaccurate readings.	Dirty sensor dome; incorrect unit selected; sensor not properly positioned.	Clean the sensor dome; ensure correct unit (Lux/FC) is selected; position the sensor directly towards the light source.
Display is dim or flickering.	Low battery.	Replace the 9V battery.

9. SPECIFICATIONS

Technical Specifications

Parameter	Value
Model	LX1330B
Display	3-1/2 digits 18mm LCD

Parameter	Value
Range	0.1 to 200,000 Lux / 0.01 to 20,000 FC
Over-input Indication	"1"
Accuracy	≤20,000 Lux: ±(4%rdg + 10digit) >20,000 Lux: ±(5%rdg + 10digit)
Resolution	0.1 Lux
Repeatability	±2%
Temperature Characteristic	±1%/°C
Sampling Time	2 times/second
Photo Detector	One silicon photo diode with filter
Product Dimensions	16 x 7.5 x 4 cm / 6.3 x 3 x 1.6 inches (approx.)
Item Weight	529g / 18.7 oz (approx.)
Power Supply	9V battery (not included)

Widely used for light test of public stores, library, museum, lamp factory, photo shooting, stage disposition of light, etc.

Image: The Walfront LX1330B Digital Light Meter with its dimensions clearly marked in both centimeters and inches, showing its compact size.

10. SAFETY INFORMATION

Please observe the following safety precautions to ensure safe operation and to prevent damage to the device:

- Do not expose the device to extreme temperatures, humidity, or direct sunlight.
- Avoid strong vibrations or impacts.
- Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.
- Keep the device away from water and other liquids.
- Remove the battery if the device is not used for a long period to prevent battery leakage.
- Dispose of batteries and the device according to local regulations.

11. APPLICATIONS

The Walfront LX1330B Digital Light Meter is a versatile tool suitable for a wide range of applications, including but not limited to:

- Light testing in public stores, offices, and commercial spaces.

- Illuminance measurement in libraries and educational institutions.

- Light level assessment in museums and art galleries for preservation.

- Quality control in lamp manufacturing facilities.

- Optimizing lighting for photography and videography.

- Stage lighting disposition and setup.

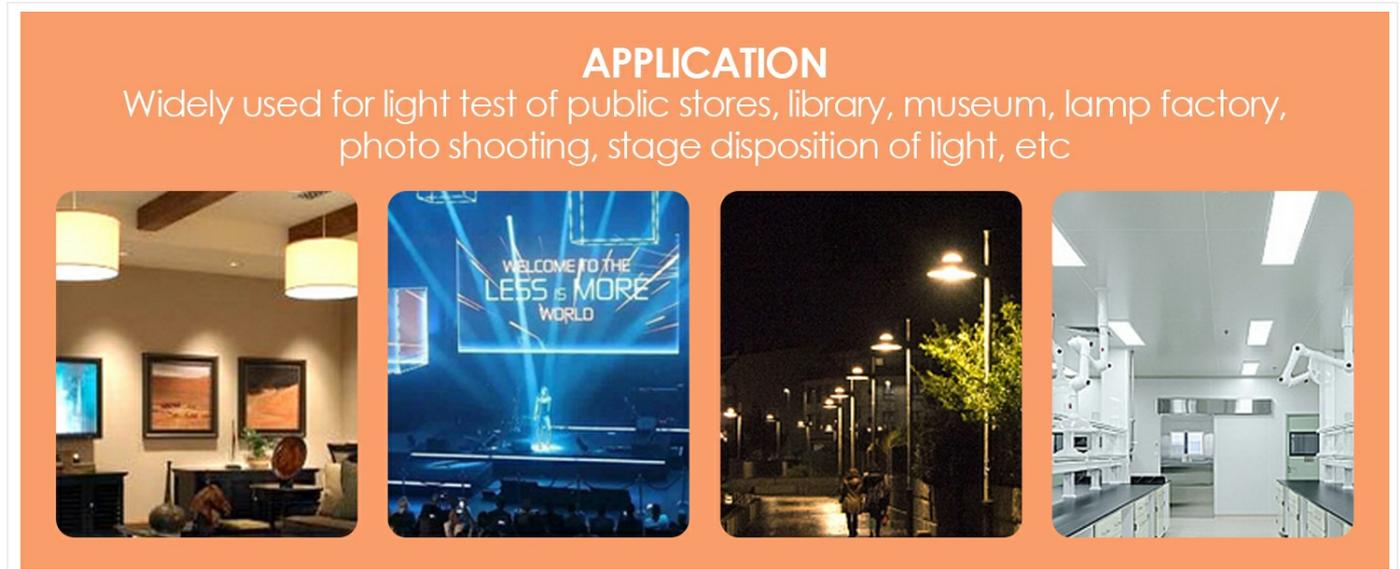- General environmental light monitoring.

Image: Collage showing various environments where the light meter can be used, such as restaurants, stage lighting, outdoor street lighting, and laboratories, highlighting its wide applicability.

12. WARRANTY AND SUPPORT

Walfront products are manufactured to high-quality standards. While specific warranty details are not provided in this manual, please retain your purchase receipt as proof of purchase. For any technical support, troubleshooting assistance, or warranty inquiries, please contact Walfront customer service through the retailer where the product was purchased or visit the official Walfront website for contact information.

For more information, you may visit the Walfront store: Walfront Official Store