

# User manual

# DIGITAL LED LUX METER LX-108L





Before using the instrument, please read this manual carefully, and save it well for future using.

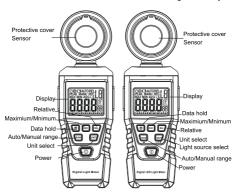
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#### Introduction

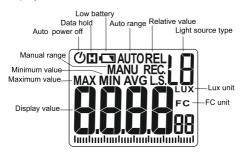
Visible light emitted by fluorescent lamp, metal halide lamp, high voltage sodium lamp or incandescent lamp can be measured.

One lux is the light received on the surface of a candle with a vertical intensity of 1 meters and an area of 1 square meters.

One FC is the light received on the surface of a 1 inch square foot at a distance of 1 feet from a candle with a light intensity.



# Display



# Operation

#### Meter Power and Automatic Power Off

- 1. Press the POWER button to turn the meter on.
- 2. Press the POWER button again to turn the meter off.
- The meter has an automatic power off feature that conserves battery energy. After 10 minutes the meter automatically shuts off
- To press and hold the button to turn the meter on, the auto power off function will be cancelled. And the O icon disappears.

## Taking measurements

- 5. Press the button to turn power on.
- 6. Remove the protective cap from the sensor.
- Place the sensor in a horizontal position at the measurement location.
- 8. Read the light level on the display.

#### Caution:

To protect the lens from scratches, keep the protective cap on the sensor whenever the unit is not in use.

#### Data hold

Press the button to freeze the displayed reading. The 'H' hold icon will appear on the display.

# Auto/Manual range

Press the RAN button to put the manual range. The meter will display "MANU" icon. Press the RAN key once to enter the next range.

To exit the manual range mode to the Auto range mode, press and hold the RAN button (2 seconds) until the MANU icon disappear.

Default auto range of power on.

#### MAX/MIN function

- Press the REC button once to put the meter in MAX/MIN mode. The meter will now display the highest reading that occurs while the function is enabled. The "MAX" icon will appear in the display.
- Press the REC button again to display the lowest reading that occurs while the function is enabled. The "MIN" icon will appear in the display.
- Press REC again to toggle between the MAX and MIN readings.
- To exit the MAX/MIN mode and return to the normal real time display, press and hold the REC button (2 seconds) until the MAX and MIN icons disappear.

#### Relative function

Press REL button to turn on or off Relative value measurement

#### Units of measure

Press the UNIT button to select the unit of measure. "LUX" or "FC" will appear in the display.

## Selecting light source (only LED Meter)

- Press and hold the UNIT button (2 seconds) to put the selecting light source mode. The "L.S.Ln" icon will appear on the display, and the "n" number will flicker.
- 2. Press RAN or UNIT button to change "n" number.
- After the selection is completed, press button to confirm, and exit selecting light source mode.

# Self-defined light source coefficient (only LED Meter)

- Press and hold the UNIT button (2 seconds) to put the selecting light source mode. The "L.S.Ln" icon will appear on the display, and the "n" number will flicker.
- Press RAN or UNIT button to change "n" number, and select one of L7, L8 and L9.
- Press REL button to put light coefficient setting mode, and the "n" number will stop flickering, digital flicker in digital display area

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- Increase or decrease values by press RAN or UNIT button, Increase or decrease coefficient quickly by press and hold RAN or UNIT button.
- 5. After setting, press 🗓 button to confirm and exit.

L0-> Standard light source: 1.000

L1->White LED: 0.990

L2->Red LED: 0.516

L3—>Yellow LED: 0.815

L4->Green LED: 1.216

L5->Blue LED: 1.475

L6->Purple LED: 1.148

L7--L9--> Self-defined light: 1.000(default)

# Specifications

Range	LUX: 1000、10000、200000
range	FC: 100、1000、20000
	±(3%+5Lux) (at 2854°K incandescent lamps)
Accuracy	±(6%+5Lux) others
Accuracy	Cosine angle deviation characteristics
	30° ±2%; 60° ±6%; 80° ±25%
Calibration	Calibrated to a standard incandescent lamp at color temperature 2854°K
Calibration	
Resolution	LUX: <1000:0.1LUX; ≥1000:1LUX FC: <100:0.01FC; <1000: 0.1FC; ≥1000: 1FC
Resolution	
Sensor	Silicon photo-diode and spectral response filter
Operating	Temperature:0~40°C, Humidity:<80%RH
conditions	Altitude :<2000m
Storage	Temperature:-10~50°C, Humidity:<80%RH
conditions	
Sampling rate	Approx. 2 times per second
Spectral	320~730nm
range	320 - 7 30HH
Auto power	10 minutes
off	
Power	3 x 1.5VAAA(LR03) batteries

#### Maintenance

#### **Battery Replacement**

When the battery voltage is low the 'II' symbol will appear on the display.

Replace the three (3) 1.5 'AAA' batteries by removing the rear (center) battery compartment screw and accessing the battery compartment. Observe polarity when placing the batteries in the compartment. Ensure that the compartment cover is securely fastened when finished.

#### Cleaning and storage

**∆** Caution

To avoid damaging the instrument housing, do not use corrosive or solvent to clean the instrument.

The white plastic sensor dome should be cleaned with a damp cloth when necessary

Store the meter in an area with moderate temperature and humidity (refer to the operating and storage range in the specifications chart earlier in this manual).





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