

auto range

0 to 50,000 Lux, 3 ranges

LIGHT METER

Model : LX-113S



Your purchase of this LIGHT METER marks a step forward for you into the field of precision measurement. Although this LIGHT METER is a complex and delicate instrument, its durable structure developed. Please read the following instructions carefully and always keep this manual within easy reach.

OPERATION MANUAL

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1. FEATURES

- * 2,000/20,000/50,000 Lux , Autorange.
- * Light sensor used the exclusive photo diode & color correction filter, spectrum meet C.I.E. photopic.
- * Light sensor cosine correction factor meet standard.
- * Separate Light Sensor allows user to measure the light at an optimum position.
- * Light meter can default the display unit to Lux or Ft-cd with default.
- * Zero key function.
- * Sepeare light probe, easy operation
- * Microprocessor circuit.
- * DC 9V battery (006 P).
- * Microcomputer circuit provides high accuracy.
- * Data hold function for freezing the desired value.
- * Built-in low battery indicator.

2. SPECIFICATIONS

2-1 General Specifications

Circuit	Custom one-chip of microprocessor LSI circuit.
Display	LCD size : 44 mm x 29 mm dual function LCD display.
Light Meter	<i>Range :</i> 0 to 50,000 LUX 0 to 5,000 Feet-candle (Ft-cd), * 3 ranges * Auto range.
	<i>Unit :</i> LUX, Feet-candle (Ft-cd).
	<i>Sensor :</i> The exclusive photo diode & color correction filter, spectrum meet C.I.E. Cosine correction factor meet standard.
	<i>Zero Adjustment :</i> External adjustment by pushing button.
Over Indication	Show " - - - - - ".
Data Hold	Freeze the display reading.
Sampling Time of display	Approx. 1 second.
Power off	Manual off by push button.
Operating Temperature	0 to 50 °C .
Operating Humidity	Less than 80% R.H.
Power Supply	006P DC 9V battery (Alkaline or Heavy duty type).
Power Current	Approx. DC 5 mA
Weight	278 g/0.61 LB. * Include light probe and battery.

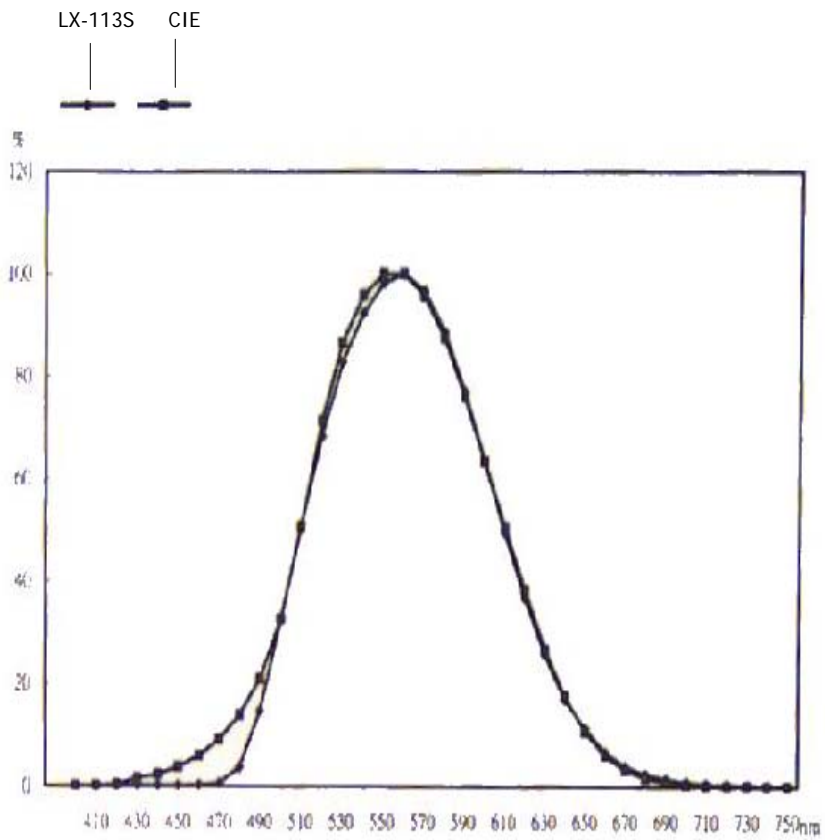
Dimension	Meter	135 x 60 x 33 mm. (5.3 x 2.4 x 1.3 inch).
	Light probe	82 x 55 x 7 mm (3.2 x 2.2 x 0.3 inch).
Accessories Included	Instruction manual..... 1 PC Light probe..... 1 PC	
Optional Accessories	* Carrying case, CA-52A.	

2-2 Electrical Specifications (23± 5 °C)

LUX @ auto range			
Range	In-range Display	Resolution	Accuracy
2,000 LUX	0-1,999 LUX	1 LUX	± (5 % + 4 LUX)
20,000 LUX	2,000-19,990 LUX	10 LUX	± (5 % + 40 LUX)
50,000 LUX	20,000-50,000 LUX	100 LUX	± (5 % + 400 LUX)

Feet-candle (Ft-cd) @ auto range			
Range	In-range Display	Resolution	Accuracy
200 FC	0-199.9 Ft-cd	0.1 FC	± (5 % + 0.4 FC)
2,000 FC	200-1,999 Ft-cd	1 FC	± (5 % + 4 FC)
5,000 FC	2,000-5,000 Ft-cd	10 FC	± (5 % + 40 FC)
@ FC = Ft-cd			

2-3 Spectrum for Light Sensor



3. FRONT PANEL DESCRIPTION

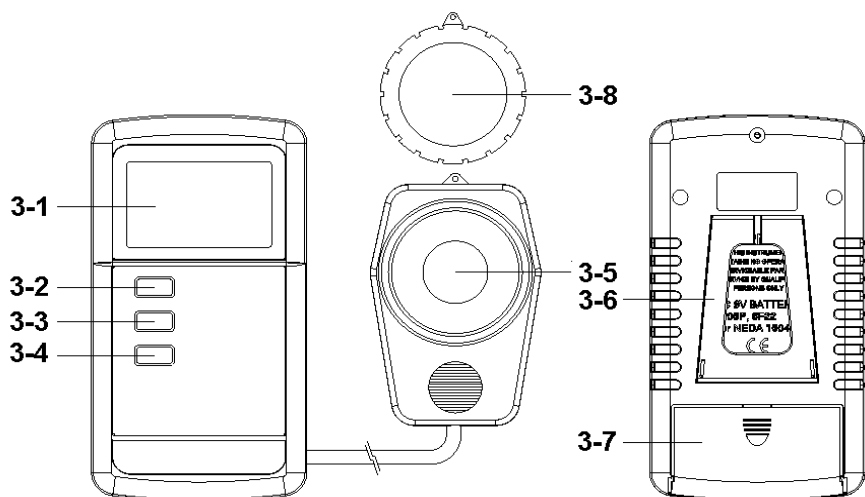


Fig. 1

- 3-1 Display
- 3-2 Power button
- 3-3 Hold/UNIT button
- 3-4 ZERO button
- 3-5 Light sensor
- 3-6 Stand
- 3-7 Battery compartment/Cover
- 3-8 Light probe cover

4. GENERAL MEASURING PROCEDURE

The meter default value are :

** The light unit is LUX..*

4-1 Light measurement

- 2) Power on the meter by pressing the " Power button " (3-2, Fig. 1) once.

The display show the Light unit (LUX or Ft-cd), the meter is ready for the light measurement.

or Ft-cd →

LUX 631

** During the power on , if press the " Power button " (3-2, Fig. 1) once again will off the meter.*

- 3) Position the " Light Sensor " (3-5, Fig. 1) directly under the light source.

The display will show the measuring light value that sensing from the " Light sensor " .

Change the light measuring unit

If press the " UNIT button " (3-3, Fig. 1) > 2 seconds will change the the measurement unit from " LUX " to " Ft-cd " (or from the Ft-cd " to " LUX ") with default.

Zero Adjustment

Cover the Light Sensor (3-5, Fig. 1) with " Light probe cover " (3-8, Fig. 1) completely, press the " ZERO button " (3-6, Fig. 1) once, the display will show zero value.


* *The zero adjustment can be executed when display value is within 10 LUX.*

4-2 Data Hold

During the measurement, press the " HOLD button " (3-3, Fig. 1) once will hold the measured value & the LCD will display a " HOLD " symbol.

* Press the " HOLD button " once again will release the data hold function.

5. BATTERY REPLACEMENT

- 1) When the left corner of LCD display show "  it is necessary to replace the battery. However, in-spec. measurement may still be made for several hours after low battery indicator appears before the instrument become inaccurate.
- 2) Open the " Battery Cover " (3-7, Fig. 1) away from the instrument and remove the battery.
- 3) Replace with 9V battery (Alkaline or Heavy duty type) and reinstate the cover.
- 4) Make sure the battery cover is secured after changing the battery.

6. OPTIONAL ACCESSORIES

Carrying case CA-52A	Soft carrying case with sash. (200 x 80 x 50 mm)
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