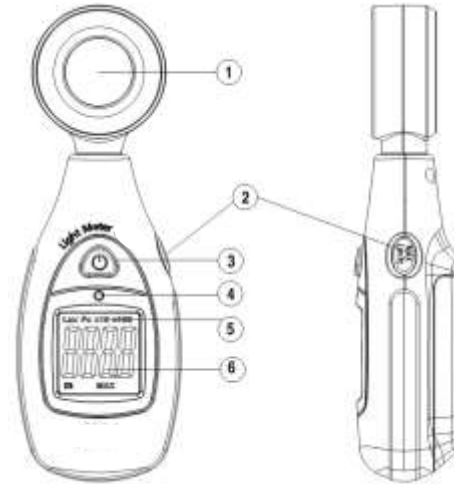# TENMA MINI LIGHT METER

User Manual

Features

- Easy to use, pocket sized and light weight
- 3 1/2 digital LCD displays with Lux, foot candle (Fc), low battery and max indication
- Accurately measures light level in Foot Candles (Fc) or Lux
- Measures from 0 ~40,000 Lux/ Fc in four ranges with a resolution of 0.1
- Auto ranging
- Max Hold
- Light sensitive backlight LCD
- Auto power off

Specifications

Display:	1999 count LCD display
Polarity:	Automatic, (-) negative polarity indication.
Over-range:	"OV" indication
Low battery indication:	The "BAT" icon is displayed when the battery voltage drops below the operating level.
Measurement rate:	2.5 times per second, nominal
Storage temperature:	-10~60°C (14~140°F) at < 80 % RH
Operating temperature:	0~ 40°C (32~104°F) at <80% RH
Auto Power Off:	Meter automatically shuts down after 17 minutes of inactivity.
Power:	One (1) 9V battery
Dimensions/Wt.:	157 (H) x 54 (W) x 34 (D) mm/170g
Measuring Range:	200, 2000, 20000, 40000 Lux/fc (1Fc=10.76 Lux)
Accuracy:	$\pm$ 5% rdg $\pm$ 10dgts (< 10,000Lux/fc)
	$\pm$ 10% rdg $\pm$ 10dgts (> 10,000Lux/fc)
	(20K lux range x10, 40K lux range x100)
Overrate Display:	"OL" is displayed.

(Calibrated to standard incandescent lamp at color temperature 2856 k).

Repeatability:	$\pm$ 2%.
Temperature Characteristic:	$\pm$0.1% / °C.
Photo detector:	One silicon photo diode with filter.

Display

1. **Photo detector:** long life silicon photo diode inside
2. **MAX and LUX/Fc function button:** Press button to display the max reading. Pressing it once again will release the max hold and allow another measurement. Holding the button for 2 seconds will change the display between Lux and Foot Candles (Fc).
3. **Power :** Turn power ON or OFF.
4. **LCD Backlight Control**: Meter senses environment light intensity, if the environment is too dark, it will turn on the LCD backlight on automatically.
5. **Auto-ranging**: x10 means the meter is in 20K Lux range, and the readings should by multiplied by 10; x100 means the meter is in range 40k Lux, and the readings should multiplied by 100.
6. **LCD display:** 1999 counts LCD display

Operating Instructions

1. Press the power button to begin measurement.
2. Position the photo detector to face light source (typically between waist and eye level, or working level—such as a desktop)
3. Read the luminance value on the LCD display. If the environment is dark, the LCD backlight will automatically turn on.
4. The measure range will changed automatically with the light intensity. It includes 200.0 Lux, 2000 Lux, 20K Lux and 40K Lux ranges for Lux; or 20.0 Fc, 200 FC, 2000 Fc, 4000 Fc ranges for Fc.
5. Hold the side function button for 2 seconds to switch the measurement unit between Lux and Fc
6. Press the function button to change to the Max Hold function. Press once again to release the hold and allow another measurement.
7. Over-range: If the instrument displays "OL", the input signal is too strong
8. When the measurement is finished, press the power button to turn the unit off.
9. Spectral characteristics of sensitivity: The photo diode with filters applied to the spectral sensitivity does meet CIE (International Commission on Illumination) photopia curve.

Battery Replacement

If the battery icon ⌦ appears on the LCD display, it indicates that the battery should be replaced. Open the battery case and replace the expired battery with new battery. (1 x 9V battery)

Recommended Illumination

Locations	Lux
Office	
Conference, Reception room	200～750
Clerical work	700～1,500
Designing and drafting	1000～2,000
Factory	
Packing work, Entrance passage	150～300
Visual work at production line	300～750
Inspection work	750～1,500
Electronic parts assembly line	1500～3,000
Hotel	
Public room, Cloakroom	100～200
Reception, Cashier	200～1,000
Store	
Indoors Stairs Corridor	150～200
Show window, Packing table	750～1,500
Forefront of show window	1500 ～3,000
Hospital	
Sickroom, Warehouse	100～200
Medical Examination room	300～750
Operating or Emergency room	750～1,500
School	
Auditorium, Indoor Gymnasium	100～300
Class room	200～750
Laboratory, Library, Drafting room	500～1,500