

# OPERATION MANUAL

## DIGITAL LUX METER

Your purchase of this DIGITAL LUX METER marks a step forward for you into the field of precision measurements. Although this LUX meter is a complex and delicate instruments, it's ruggedness will allow many years of use if proper operating techniques are developed. Please read the following instructions carefully and always keep this manual within easy reach.

### I FEATURES

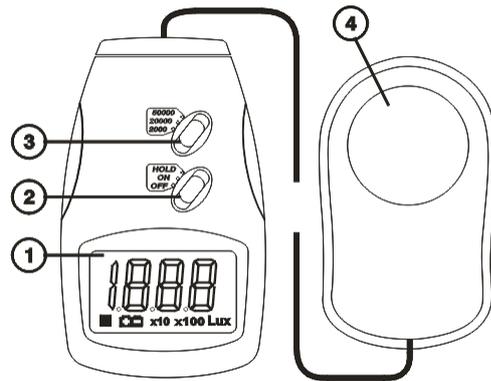
- Precise and easy readout.
- High accuracy in measuring.
- LSI-circuit use provides high reliability and durability.
- Permits a wide range of light measurements.
- LOW BATTERY indicator.
- Adjusting zero automatically and excellent operation.
- LCD display provides low power consumption and clearly read out evening high ambient light.
- Separate LIGHT SENSOR allows user take measurements at an optimum position.

### II GENERAL SPECIFICATIONS

Display:	3 1/2 digits LCD display, maximum reading value display 1999
Ranges:	1-50,000Lux.
Resolution:	1Lux
Accuracy:	$\leq 10,000\text{Lux}$ : $\pm 4\% \text{rdg} \pm 0.5 \text{f.s}$ $\geq 10,000\text{Lux}$ : $\pm 5 + 10 \text{digits}$ (Calibrated to standard incandescent lamp at color temperature 2856K)
Repeatability:	$\pm 2\%$
Temperature Characteristic:	$\pm 0.1\% / ^\circ\text{C}$
Test rate:	0.4 sec.
Photo detector:	one silicon photo diode with filter.
Operation temperature-humidity:	$-10^\circ\text{C}$ to $40^\circ\text{C}$ ( $32^\circ\text{F}$ - $104^\circ\text{F}$ ) 0~70%Rh
Storage temperature-humidity:	$-10^\circ\text{C}$ to $50^\circ\text{C}$ ( $14^\circ\text{F}$ - $140^\circ\text{F}$ ) 0~80%Rh
Over-input:	indication of "1" (2,000Lux/20,000Lux) Indication of "OVER" (100,000Lux)
Dimension:	$106 \times 57 \times 26\text{mm}$ (photo detector) $230 \times 72 \times 30\text{mm}$ (meter body) 150cm (photo detector lead )
Weight:	190g
Power Supply	one 9V battery, Consumption current approx.2mA
Accessories:	Instruction-manual, battery, carry case

### III PANEL DESCRIPTIONS:

1. LCD display
2. turn off, turn on, value hold
3. range select button
4. photo detector



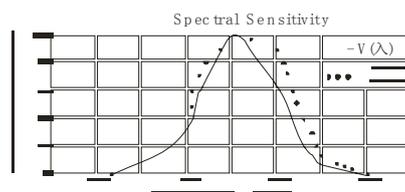
#### IV OPERATION INSTRUCTIONS:

1. Connect the battery, and then press the button to “ON”
2. Press the range selection switch to desired range.
3. Remove the photo detector cap and face it to light source in a horizontal position.
4. Read the test value from the LCD display.
5. Over range: if the instrument only display one “1” in the M.S.D., the input signal is too strong, and a higher range should be selected.
6. Data-Hold mode: press the HOLD key to select Hold model. When HOLD mode is selected, the LUX meter stops all further measurements and the test value with hold on the LCD. Press the button “HOLD” to the “ON”, the hold value will be cancelled.
7. When the measurement is completed, replace the photo detector cap and turn the power selector OFF.

#### V BATTERY CHECK-UP & REPLACEMENT:

1. It is necessary to replace another one 9V battery, when left corner of LCD display show “ ”.
2. After turning off the meter, press the battery cover and push in the direction of the arrow to open.
3. Disconnect the batter from the instrument and replace it with a standard 9-volt transistor battery and go for the cover.

#### VI SPECTRAL SENSITIVITY CHARACTERISTIC:



#### VII MAINTENANCE:

1. The white plastic disc on the top of the detector should be cleaned with a damp cloth when necessary.
2. Do not store the instrument where temperature or humidity is excessively high.
3. The reference level, as marker on the face plate, is the top of the photo detector globe.
4. The calibration interval for the photo detector will vary according to operational conditions, but generally the

sensitivity decreases in direct proportion to the product of luminous intensity by the operational time. In order to maintain the basic accuracy of the instrument, periodic calibration is recommended.

#### VIII RECOMMENDED ILLUMINATION:

OFFICE	Conference, reception room	200~750Lux
	Clerical work	700~1,500Lux
	Typing drafting	1,000~2,000Lux
FACTORY	Packing work, entrance passage	150~300Lux
	Visual work at production line	300~750Lux
	Inspection work	750~1,500Lux
	Electronic parts assembly line	1,500~3,000Lux
HOTEL	Public room, cloakroom	100~200Lux
	Reception, cashier	220~1,000Lux
STORE	Indoors stairs corridor	150~200Lux
	Show window, packing table	750~1,500
	Forefront of show window	1,500~3,000
HOSPITAL	Sickroom, warehouse	100~200Lux
	Medical examination room	300~750Lux
	Operation room, emergency treatment	750~1,500Lux
SCHOOL	Auditorium, indoor gymnasium	100~300Lux
	Class room	200~750Lux
	Laboratory, library, drafting room	500~1,500Lux