

OPERATION MANUAL DIGITAL LUX METER

Your purchase of this **DIGITAL LUX METER** makes 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.

| Range | Resolution | Accuracy(23 ± 5°C) |
|--------------------|------------|--------------------|
| 0-1,999 Lux | 1 Lux | ± (4%rdg+2d) |
| 2,000-19,999 Lux | 10 Lux | ± (4%rdg+2d) |
| 20,000-100,000 Lux | 100 Lux | ± (5%+2d) |

NOTE: Accuracy tested by a standard parallel light tungsten lamp of 2854 °K temperature

| | |
|---------------------------------|----------------------------------------------------------------------------------------------|
| Repeatability: | ± 2% |
| Temperature Characteristic: | ± 0.1d/°C |
| Test rate: | 2 times/sec. |
| Photo detector: | one silicon photo diode with filter. |
| Operation temperature-humidity: | 0°C to 40°C(32°F-104°F) 0-70% Rh |
| Storage temperature-humidity: | -10°C to 50°C(14°F-122°F) 0-80% Rh |
| Over-input: | Indication of "1" (2,000 Lux/20,000 Lux) Indication of "OVER" (100,000 Lux) |
| Dimension: | 106 × 57 × 26mm(photo detector) 130 × 72 × 30mm(meter body) 150cm(photo detector lead) |
| Weight: | 170g |
| Power Supply: | one 9V battery, Consumption current approx.2mA |
| Accessories: | Instruction-manual, battery, carrying case |

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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.

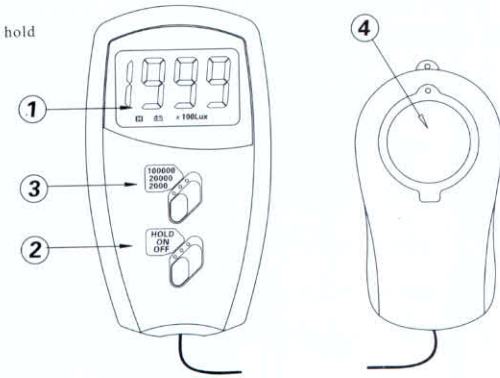
II GENERAL SPECIFICATIONS

| | |
|----------|--------------------------------------------------------------|
| Display: | 3 1/2 digits LCD display, maximum reading value display 1999 |
| Ranges: | 1-100,000 Lux.(3 Ranges) |
| | 2,000 Lux range: reading × 1 |
| | 20,000 Lux range: reading × 10 |
| | 100,000 Lux range: reading × 100 |

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III PANEL DESCRIPTIONS

1. LCD display
2. Turn off, turn on, value hold
3. Range select button
4. Photo detector



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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 LCD, 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 "H" 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:

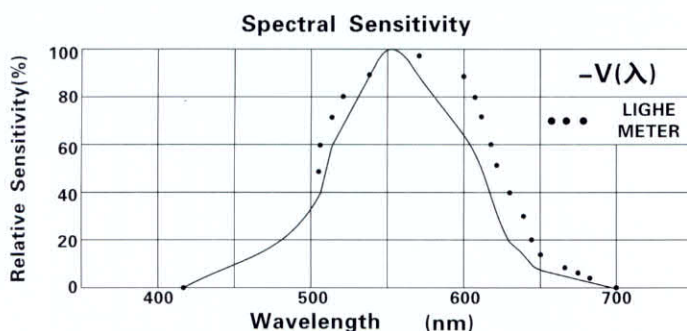
1. It is necessary to replace another one 9V battery, when left corner of LCD display show "E".
2. After turning off the meter, press the battery cover and push in the direction of

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the arrow to open.

3. Disconnect the battery from the instrument and replace it with a standard 9-volt transistor battery and go for the cover.

VI SPECTRAL SENSITIVITY CHARACTERISTIC:



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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 on 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.

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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 | 750-1,500Lux |
| | Forefront of show window | 1,500-3,000Lux |
| 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 |

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