INSTRUCITON MANUAL

DIGITAL ILLUMINANCE METER

Ⅰ INSTRUCTION:

The Digital Illuminance Meter is a precision instrument used to measure illuminance in the field.
It is fully cosine corrected for the angular incidence of light.
The illuminance meter is compact, tough and easy to handle owing to its construction.
The light sensitive component used in the meter is a very stable, long life silicon diode.

Ⅱ FEATURES:

- Light-measuring levers ranging from 0.1Lux to 200,000Lux, 0.01FC to 20,000FC repeatedly.
- High accuracy and rapid response.
- Data-Hold function for holding measuring values.
- Unit and sign display for easy reading.
- Automatic zeroing.
- Meter corrected for Luminous Efficiency function.
- Correction factor need not be manually calculated for nonstandard light sources.
- Short rise and fall times.

Ⅲ SPECIFICATIONS:

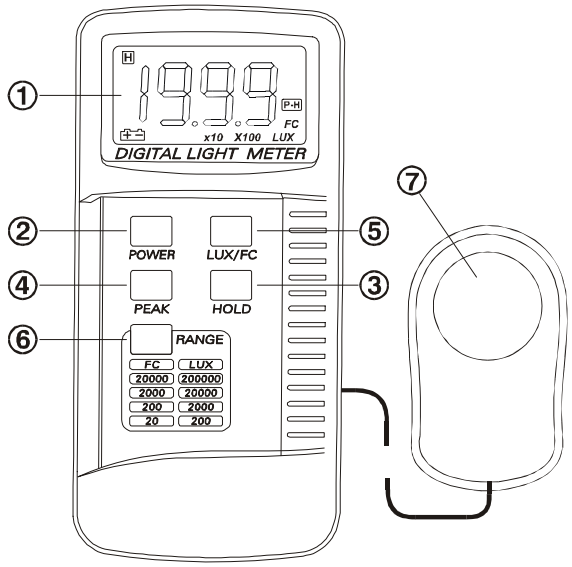
- DISPLAY: 3-1/2 digit LCD.
- Measuring Range: 200, 2,000, 20,000 and 200,000Lux
  (20,000Lux range reading×10,
  200,000Lux range reading×100)
  20, 200, 2,000, 20,000FC
  (20,000FC range reading×10)

1FC+10.76Lux

- Over range display: Highest digit of "1" is displayed.
- Accuracy: ±3%rdg ±0.5%f.s(±5%rdg±10dgt as>20,000Lux/2,000FC range).
  (Calibrated to standard incandescent lamp at color temperature 2856K)
- Repeatability: ±2%
- Temperature Characteristic: ±0.1%/℃.
- Measuring Rate: Approximately 2.0time/sec.
- Photo detector: One silicon photo diode with filter.
- Operating Temperature and Humidity: 0℃to 40℃(32℉ to 104℉)
  0 to 80% RH.
- Storage Temperature and Humidity: -10℃to 60℃(14℉ to 140℉)
  0 to 80% RH.
- Power Source: One 9Volt Battery, NEDA 1604 or JLS 006P or IEC6F22.
- Battery life (typical):200hours (Alkaline Battery).
- Photo Detector Lead Length: 150cm (approx).
- Photo Detector Dimensions: 100mm(H) ×60mm(w) ×200mm(D).
- Dimensions: 149mm(H) ×71mm(w) ×41mm(D).
- Weight: 250g (5.8oz).

- Accessories: Carry case, instruction manual, battery.

Ⅳ NAME OF PARTS AND POSITIONS:



1. LCD Display: 3-1/2 Digits with a maximum reading of 1999.
2. Power Switch: The power switch key turns the illuminance meter ON or OFF.
3. Data-Hold Switch: pressing the HOLD key selects HOLD mode. When HOLD mode is selected, the illuminance meter stops all further measurements. Pressing the HOLD key again cancels HOLD mode, causing the illuminance meter to resume taking measurements.
4. Data-Peak Switch: Pressing the PEAK key again to clear the peak recording mode.
5. Lux/FC Unit Switch: pressing the Lux/FC key to choose Lux or FC unit.
6. Range Switch: Pressing the range key changes 200Luc/20FC, 2,000Lux/200FC, 20,000Lux/2,000FC, 200,000Lux/20,000FC ranges, circularly.
7. Photo Detector.

Ⅴ OPERATING INSTRUCTIONS:

1. Power-up: press the power key to turn the meter ON or OFF.
2. Selecting the Lux/FC scale: set the range selection switch to desired Lux/FC range.
3. Remove the photo detector cap and face it to light source in a horizontal position.
4. Read the illuminance nominal 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 illuminance meter stops all further measurements. Press the HOLD key again to cancel HOLD mode. Then it resumes normal operation.
7. Data-Peak mode: press the PEAK key to select PEAK mode. When PEAK mode is selected, the illuminance meter stops all further measurements. Press the HOLD key again to cancel HOLD mode. Then it resumes normal operation.
8. When the measurement is completed, replace the photo detector cap and turn the power selector OFF.

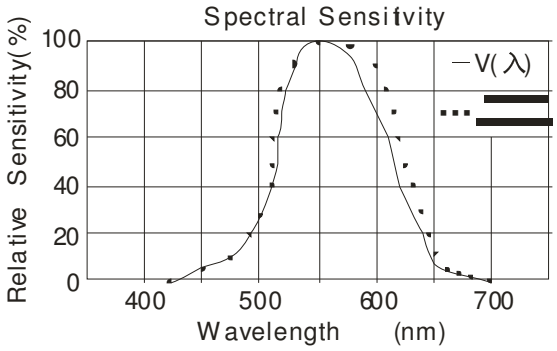
Ⅵ BATTERY CHECK-UP & REPLACEMENT:

1. As the battery power is not sufficient, LCD will display " ▭ "; and replacement of one new battery type 9V is required.
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.

Ⅶ SPECTRAL SENSITIVITY CHARACTERISTIC:

- To the detector, the applied photo diode with filters makes the spectral sensitivity characteristic almost meet C.I.E.

(INTERNATIONAL COMMISSION ON ILLUMINTION)
photopic curve V as the following chart described.



Ⅷ MAINTENANCE:

4. The white plastic disc on the top of the detector should be cleaned with a damp cloth when necessary.
5. Do not store the instrument where temperature or humidity is excessively high.
6. The reference level, as marker on the face plate, is the tiof thep photo detector globe.
7. 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.

Ⅸ RECOMMENDED ILLUNINATON：

LOCATIONS	
● OFFICE	
Conference, Reception room.	200～750
Clerical work	700～1,500
Typing drafting	1,000～2,000
● FACTORY	
Packing work, Entrance passage	
Visual work at production line	
Inspection work	
Lux	

150～300
300～750
750～1500
Electronic parts assembly

- HOTEL

Public room, cloakroom
Reception, cashier

- STORE

Indoors Stairs Corridor
Show window, packing table
Forefront of show window

- HOSPITAL

Sickroom, Warehouse
Medical Examination room
Operating room
Emergency Treatment

- SCHOOL

Auditorium, Indoor Gymnasium
Class room
Laboratory Library drafting room

100～300
200～750
500～1,500

1,500～3,000

100～200
220～1,000

150～200
750～1,500
1,500～3,000

100～200
300～750

750～1,500