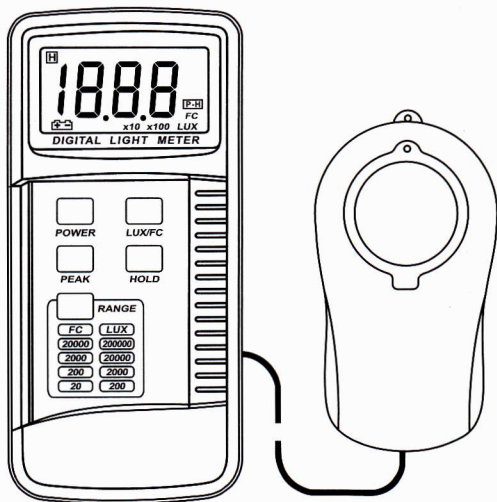


# OPERATION MANUAL

## DIGITAL LUX METER



Appreciate your choice of this Lux meter. Please read through this manual carefully for proper operating techniques. This digital lux meter is a precise instrument which could be used for detecting light intensity in any situations.

## I FEATURES

- High accuracy in measuring, fast reflection time
- Data hold function
- Symbolically and unit display for easy reading
- Zeroize automatically

## II GENERAL SPECIFICATIONS

- Measuring range: 0.1Lux ~ 200,000Lux  
0.01FC ~ 20,000FC
- Display: 3 1/2 digits LCD display, maximum display value 1999
- Range Selection:  
200Lux, 2,000Lux, 20,000Lux, 200,000Lux  
20FC, 200FC, 2,000FC, 20,000FC  
20,000Lux range: reading  $\times 10$   
200,00Lux range: reading  $\times 100$   
20,000FC range: reading  $\times 10$

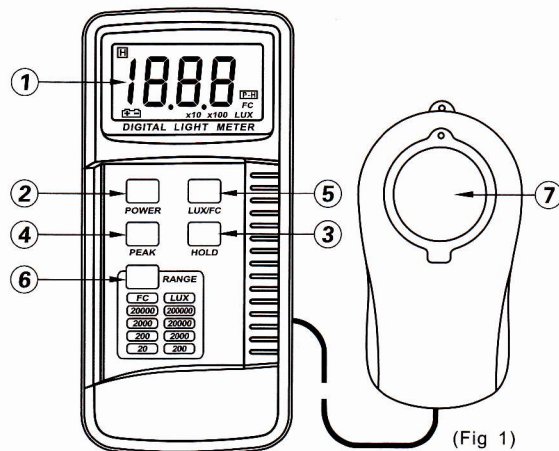
Annotate: 1FC=10.76Lux

- Accuracy:  $<20,000\text{Lux}/2,000\text{FC} \pm (4\% \text{rdg} + 10 \text{dgt})$   
 $\geq 20,000\text{Lux}/2,000\text{FC} \pm (5\% \text{rdg} + 10 \text{dgt})$   
(Calibrated to standard incandescent lamp at color temperature 2856K)
- Resolution: 0.1Lux
- Repeatability:  $\pm 2\%$
- Temperature Characteristic:  $\pm 1\%/^{\circ}\text{C}$
- Test Rate: 2 times/sec

- Photo Sensor: one silicon photo diode with filter.
- Operation temperature-humidity:  $0^{\circ}\text{C}$  to  $40^{\circ}\text{C}$   
( $32^{\circ}\text{F}$ - $104^{\circ}\text{F}$ ) 0 ~ 70%Rh
- Storage temperature-humidity:  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$   
( $14^{\circ}\text{F}$ - $122^{\circ}\text{F}$ ) 0 ~ 80%Rh
- Over-input: indication of "1"
- Power Supply: one 9V battery (Model 6F22)
- Battery life: 200 hours for continuously use
- Photo Detector Dimension: 105x58x28mm
- Dimension: 162x78x43mm
- Weight: about 310g

## III PANEL DESCRIPTIONS AND FUNCTIONS:

(Fig 1)



(Fig 1)

1. LCD display
2. Power switch button
3. Data-hold button: press this button, hold the current value on display
4. Peak-hold button: press this button, enter peak hold mode.
5. Unit switch button: press this button, switch between LUX and FC unit
6. Range select button: 200.0Lux、2, 000Lux、20, 000Lux、200, 000Lux; or 20.00FC、200.0FC、2, 000FC、20, 000FC
7. Photo detector probe

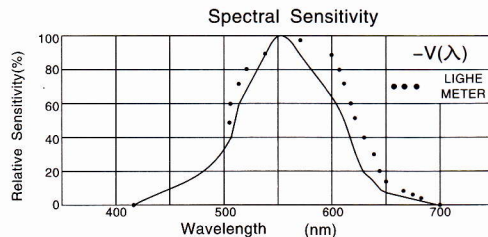
#### IV OPERATION INSTRUCTIONS

1. Insert battery, and turn on meter
2. Press the range select button until desired range.
3. Remove the photo detector cap and face it to light source.
4. Read the test value from the LCD display.
5. If the instrument only display one "1", it means the range used is overflow and should change to larger range.
6. Data-Hold mode: press the "DH" key to select Hold mode. During Hold mode, the LCD display the "H" and the value is locked on the LCD. Press the button "DH" again, exit Hold mode.
7. Peak-hold mode: press "PEAK" key to select peak hold mode, LCD display "P-H" symbol. The meter is sensitive for light pulse signal larger than 100ms and will display max light intensity. It updates and display new value only when a larger light pulse or light intensity appear. Press "Peak" button again to exit peak hold mode.
8. After using the instrument, cover photo detector with cap and turn off power.

#### V BATTERY CHECK-UP & REPLACEMENT

1. when left corner of LCD display show "B", a battery replacement is required.
2. After turning off meter, unscrew and open battery cover to replace a new 9V battery.
3. Close battery cover and tighten the screw.

#### VI SPECTRAL SENSITIVITY CHARACTERISTIC



#### VII MAINTENANCE

1. Do not use or store the instrument in extrem high temperature or humidity environment.
2. Keep photo detector clean during usage.
3. The reference level, as marker on the face plate, is the top of photo detector globe.
4. According to operational conditions and time, the sensitivity of meter decreases. In order to maintain the accuracy of the instrument, periodic calibration is recommended.

## VIII RECOMMENDED ILLUMINATION

### HOSPITAL:

illumination ( Lux )	Locale
10000~300	Ophthalmological
1500~750	Operating
750~300	Dispensary, remedial room, drugstore, office, dissecting room, pathogen room, deanery, first-aid room, delivery room, nurse room, assembly room
300~150	Sickroom, powder chamber, surgical treatment room
150~75	Changeroom, physiotherapy room, x-ray room, sickroom aisle, germfree room, sickroom, stairway
75~30	Zoom room, darkroom, mortuary

### HOME:

illumination ( Lux )	Locale
2000~1500	Handicraft, dressmake
1500~750	Do homework
750~300	Reading room, toilette, table, phone room, repairing room
300~150	Washhouse, playroom, living room
150~75	Garderobe, balneary, washroom, stairway, aisle
75~30	Mail drop, veranda

### OFFICE:

illumination ( Lux )	Locale
2000~300	Design room, affair room
1500~750	Hall passage ( daytime ), bussiness hall, drawing room, clock on and off
750~300	PC room, assembly room, pressroom, antechamber, playroom, dining-room
300~150	Stack room, playroom, refectory, retiring room, gatehouse, lift, washroom
150~75	Drinking room, changeroom, storage, night watchman room(entrance)
75~30	Safety passage

### FACTORY:

illumination ( Lux )	Locale
3000~300	Transnormal exactitude work, design room, drawing room
1500~750	Design room, analysis, debugger, packaging
750~300	Product line, warehouse office
300~150	Dye-works, foundry, electrical room
150~75	Inlet and exit, aisle, passage, stairway, toilet room, washroom, inspection office
75~30	Safety passage, storage, dynamic equipment outdoor

**HOTEL, CABARET, RECREATION GROUND:**

illumination ( Lux )	Locale
1500~750	Counter
750~300	Banquet, affair room, stall, cookroom
300~150	Restaurant, washroom, big house which is Japanese style
150~75	Playroom, aisle, stairway, guest room, balneary, basilic lighting in the courtyard, changeroom
75~30	Safety passage

**SHOP, BAZAAR:**

illumination ( Lux )	Locale
3000~300	Display in the room, jewelry showcase, the place where demonstrate perform, check-out counter, packing counter
750~300	lift hall, escalator
300~150	Chatting room, toilet room, washroom, stair, aisle
150~75	Retiring room, normal illumination in the store

**HAIR SOLON:**

illumination ( Lux )	Locale
1500~750	Marcel and hairdressing room, toilet room
750~300	Shampoo, registration dais, bathing box
300~150	Washroom in the store
150~75	Aisle, stairway