



INSTRUCTION MANUAL

MODEL

ACT 1330

DIGITAL LIGHT METER

DIGITAL ILLUMINANCE METER

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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 0.01 lux to 20,000 lux , 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 : 20, 200, 2,000 and 20,000 lux
(20,000 lux range reading $\times 10$)

- Overrange Display : Highest digit of "1" is displayed.
- Accuracy : $\pm 3\%$ rdg $\pm 0.5\%$ f.s ($\pm 4\%$ rdg ± 10 dgt as $> 10,000$ lux range) .
(Calibrated to standard incandescent lamp at color temperature 2856 K) .
- Repeatability : $\pm 2\%$.
- Temperature Characteristic : $\pm 0.1\%$ / $^{\circ}\text{C}$.
- Measuring Rate : Approximately 2.0 time / sec..
- Photo detector : One silicon photo diode with filter.
- Operating Temperature and Humidity :
0 $^{\circ}\text{C}$ to 40 $^{\circ}\text{C}$ (32 $^{\circ}\text{F}$ to 104 $^{\circ}\text{F}$)
0 to 80% RH.
- Storage Temperature and Humidity :
-10 $^{\circ}\text{C}$ to 60 $^{\circ}\text{C}$ (14 $^{\circ}\text{F}$ to 140 $^{\circ}\text{F}$)
0 to 70% RH.
- Power Source : One 9 Volt battery, NEDA 1604 or JIS 006P or IEC 6F22.
- Battery Life (typical) : 200 hours (Alkaline Battery).
- Photo Detector Lead Length : 150 cm (approx.).
- Photo Detector Dimensions : 100L \times 60W \times 27H (mm),
3.94" (L) \times 2.36" (W) \times 1.06" (H).
- Dimensions : 135L \times 72W \times 33H (mm),
5.31" (L) \times 2.83" (W) \times 1.3" (H).
- Weight : 250g (8.8oz) .
- Accessories : Carry case, instruction manual, battery.

1. LCD Display : 3-1/2 Digits with a maximum reading of 1999, and the indicating sign of " Lux ". Data-Hold " H " .Range " 20,000 " . " x10 " (reading by ten) .Low Battery "BT", etc..
2. Range indicator : It indicates 20 lux, 200 lux, 2,000 lux and 20,000 lux ranges, respectively.
3. Power Switch : The power switch key turns the illuminance meter ON or OFF.
4. 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.
5. Range Switch : Pressing the range key changes 20 lux, 200 lux, 2,000 lux and 20,000 lux ranges, circularly .
6. Photo Detector.
7. Tilt Stand. (Back)

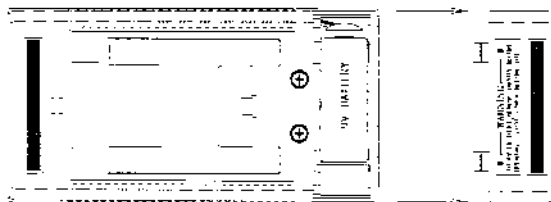
V OPERATING INSTRUCTIONS :

1. Power-up : Press the power key to turn the meter ON or OFF.
2. Selecting the lux scale : Set the range selection switch to desired lux 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. Overrange : 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 mode. 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. 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 "BT" : 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 battery from the instrument and replace it with a standard 9-volt transistor battery and go for the cover.



IX RECOMMENDED ILLUMINATION :

LOCATIONS	Lux		
• OFFICE			
Conference, Reception room.	200	~	750
Clerical work	700	~	1,500
Typing 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 room			
Emergency Treatment	750	~	1,500
• SCHOOL			
Auditorium, Indoor Gymnasium	100	~	300
Class room	200	~	750
Laboratory Library Drafting room	500	~	1,500

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