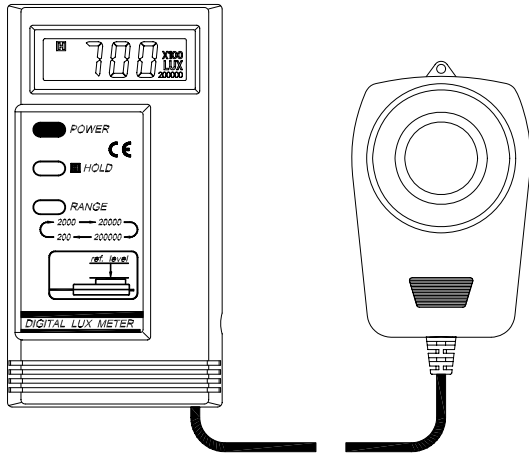
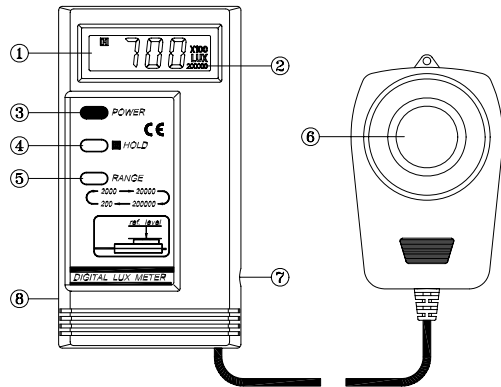


ISO-TECH - 1332A
INSTRUCTION MANUAL



IV NAME OF PARTS AND POSITIONS



1. LCD Display : 3¹/₂ Digits with a maximum reading of 9999, and indicating symbols for: " LUX ", Data-hold " H ", Range "20,000", "x10" (reading × 10), "200,000", "x100" (reading × 100), Low battery "BT", etc.
2. Range indicator : Indicates 200 LUX, 2000 LUX, 20,000 LUX, and 200,000 LUX ranges respectively.
3. Power button : The power button turns the illuminance meter on or off.

I INSTRUCTION

The ISO-TECH 1332A 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, robust and easy to use. The light sensitive device used in the instrument is a very stable, long life silicon diode.

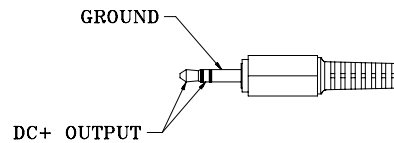
II FEATURES

- Light-measuring levels ranging from 0.01 lux to 200,000 lux.
- High accuracy and rapid response.
- Data-hold function for holding measured values.
- Unit and symbol display for easy reading.
- Automatic zeroing.
- Meter corrected for Luminous Efficiency.
- Automatic correction factor for nonstandard light sources.

III SPECIFICATIONS

- Display : 3-1/2 digit LCD.
- Measuring ranges : 200 , 2,000 , 20,000 and 200,000 LUX
(20,000 LUX range = reading × 10 · 200,000 LUX range = reading × 100)

4. Data-hold button : Press the HOLD button to select HOLD mode. When HOLD mode is selected, the illuminance meter stops all further measurements. Pressing the HOLD button again cancels HOLD mode, causing the illuminance meter to resume measurement.
5. Range button : Pressing the range button changes from 200 LUX, 2,000 LUX, 20,000 LUX and 200,000 LUX range sequentially.
6. Photo detector.
7. Analog D.C. output :



- DC+ on pin and intermediate connector, ground on sleeve.
8. Tilt stand. (Back)

V OPERATING INSTRUCTIONS

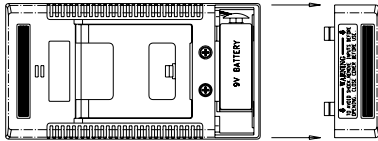
1. Power-up : Press the power button to turn the meter on or off.
2. Selecting the lux scale : Press the range selection button to set the desired range.
3. Remove the photo detector cap and position the sensor perpendicular to the light source.
4. Read the illuminance value from the LCD display.

- Overrange display : Highest digit of "1" is displayed.
- Spectral response: CIE Photopic. (CIE human eye response curve).
- Spectral accuracy: CIE Vλ function f₁ ≤ 6%
- Cosine response: f₂ ≤ 2%
- Accuracy : ±3% of reading ± 0.5% full-scale (±4% of reading ±10 digits > 10,000 lux range) .
(Calibrated to a standard incandescent lamp at colour temperature of 2856 K) .
- Repeatability : ±2% .
- Temperature characteristics : ±0.1% / °C .
- Measuring rate : Approximately 2 readings /sec.
- Photo detector : Silicon photo diode with filter.
- Operating temperature and humidity :
0°C to 40°C (32°F to 104°F) 10 to 80% RH.
- Storage temperature and humidity :
-10°C to 60°C (14°F to 140°F) 10 to 70% RH.
- Power source : One 9 Volt battery, NEDA 1604 or JIS 006P or IEC 6LF22/6LR61.
- Battery life (typical) : 200 hours (Alkaline battery).
- Photo detector lead length : 150 cm (approx.).
- Photo detector dimensions : 100(L) × 60(W) × 27(H) mm,
3.94"(L) × 2.36" (W) × 1.06" (H).
- Dimensions : 135(L) × 72(W) × 33(H) mm, 5.31" (L) × 2.83" (W) × 1.3" (H).
- Weight : 250g (8.8oz).
- Accessories : Carrying case, instruction manual and battery.

5. Overrange : If the instrument only display one "1" in the M.S.D. position, 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 and normal operation is resumed.
7. When measurements are complete, replace the photo detector cap and turn the power selector OFF.

VI BATTERY CHECK-UP & REPLACEMENT

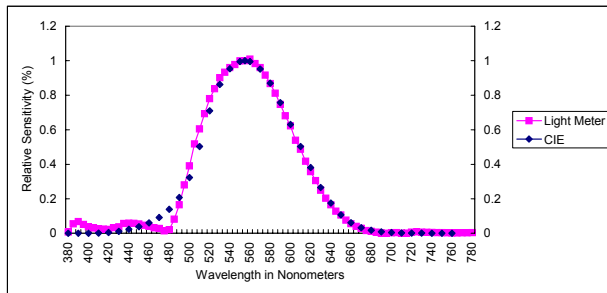
1. When the battery power is not sufficient provide accurate operation, the "BT" symbol will appear on the LCD indicating the battery requires replacement
2. After turning off the meter, press the battery cover and push in the direction of the arrow to open (See drawing below).
3. Disconnect the battery from the instrument and replace it with a new 9 Volt type 6LR61 battery (or equivalent), observing correct polarity. Refit the cover.
4. Turn the instrument on and check for correct operation.



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VII SPECTRAL SENSITIVITY CHARACTERISTIC

- The sensor device in the instrument together with its filter, makes the spectral sensitivity characteristic very close to the C.I.E. (INTERNATIONAL COMMISSION ON ILLUMINATION) photopic curve $V(\lambda)$ as shown in the following chart.



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VIII MAINTENANCE

- The white plastic disc on the top of the detector should be cleaned with a damp cloth when necessary.
- Do not store the instrument where temperature or humidity is excessively high.
- The sensor reference level, as marked on the display unit face-plate, is the tip of the photo detector globe.
- 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 and the operational time. In order to maintain the basic accuracy of the instrument, periodic calibration is recommended.

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

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● HOTEL		
Public room, Cloakroom	100	~ 200
Reception, Cashier	200	~ 1,000
● STORE		
Indoors stairs corridor	150	~ 200
Shop window, Packing table	750	~ 1,500
Forefront of shop 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
Classroom	200	~ 750
Laboratory, Library, Drafting room	500	~ 1,500

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