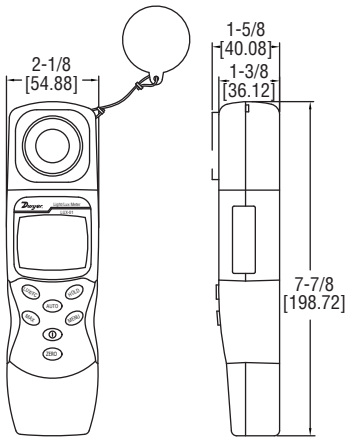
Model LUX-01 Digital Light Meter

Specifications - Installation and Operating Instructions



Model LUX-01 Digital Light Meter is able to measure the intensity of fluorescent, metal halide, high-pressure sodium, and incandescent light sources. This meter shows readings on a 3-1/2 digit LCD and can record measurement up to 200,000 lux and up to 20,000 foot-candles. The silicon photodiode sensor allows for use in high temperatures and has a strong angular correction for a highly accurate reading. Model LUX-01 also includes a protective cap for the sensor, ensuring that the meter is always zero calibrated. Applications include HVAC, medical facilities, photography, and cinematography.

PRODUCT OVERVIEW

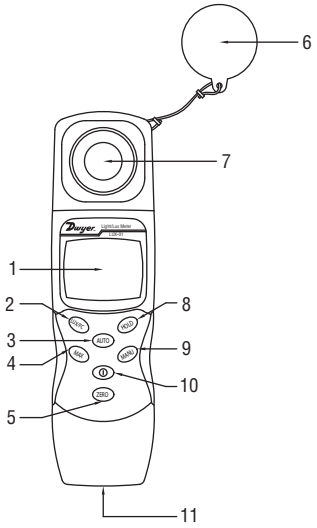


Figure 1

1. LCD Screen
2. Lux/FC button
3. Auto Range Button
4. Max/Min Button
5. Zero Adjustment
6. Light Sensor Cap
7. Photo Detector
8. Data Hold Button
9. Manual Range Button
10. Power Button
11. Battery Compartment Cover

SPECIFICATIONS:
Range: Up to 200,000 lux; up to 20,000 foot-candles.
Accuracy: ±3% of reading (Calibrated to standard incandescent lamp 4681°F (2583°C)) or ±6% other visible light source.
Display: 3-1/2 digit LCD.
Resolution: 1.0 lux; 1.0 foot-candle.
Sensor: Silicon photodiode and filter.
Angle Deviation from Cosine Characteristics: 10° ±0.5%, 30° ±2%, 50° ±3%, 60° ±6%, 80° ±25%.
Temperature Limits:
Operating: 14 to 122°F (-10 to 50°C);
Storage: 14 to 122°F (-10 to 50°C).
Power Requirements: 9 V carbon zinc battery, included, user replaceable.
Battery Life: 200 hours.
Weight: 22.4 oz (635 g).
Agency Approvals: CE, RoHS.

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OPERATION

1. Press the power button to turn the power on.
2. Remove the cap of the light sensor and place the light sensor at the spot where the meter can test the source of light. To obtain the best result, aim the light source at the top of the light sensor ball plane at a 0 degree angle. See Figure 2 for an example.

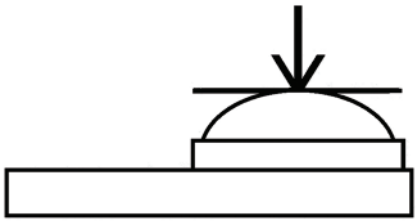

Figure 2

After the reading becomes stable, the result will then be displayed on the LCD.

3. After testing, place the cover of the light sensor back to its former position and press the power button again to turn the power off.

Note: When the meter is not in use, keep the cap of the light sensor in its place to avoid wearing out the photodiode sensor. If it is not in use for an extended period of time, remove the batteries and do not keep in a place of high temperature or humidity.

Changing Unit

To change the unit, press the Lux/Fc button to toggle between the units.

Data Hold

To keep the reading value on the LCD permanently after it has been recorded, press the Data Hold button. The locked screen can be released by pressing the Data Hold button again.

Maximum/Minimum

To view the maximum or minimum recorded values, press the Max/Min button. The maximum value will be shown on the first press of the button and the minimum value will be shown on the second press. On the third press, it will go back to the current reading.

Range Function

This meter features auto and manual ranging options. To select the decimal point position, press the Manual Range button until the decimal point appears in the correct place. To let the meter select the decimal point position, press the Auto Range button. The meter will base the positioning on the value it is currently reading.

Zero Calibration

To zero calibrate the meter, place the light sensor cap over the sensor. If any numbers appear on the LCD, press the Zero Adjustment button.
Note: If the light sensor cap is not attached when zero calibrating, the meter will display “CAP” on the LCD.

BATTERY REPLACEMENT

When the battery symbol appears on the LCD, the battery needs to be replaced. To change the battery, remove the cover to the battery compartment and remove the battery currently in the instrument. Place the new battery in and replace the cover.

RECOMMENDED LEVELS OF ILLUMINATION

Offices

Illuminance (Lux)	Place
1500 to 750	Designing/drawings rooms
750 to 300	Conference rooms, computer rooms
300 to 100	Work rooms, corridors, stairways
75 to 30	Indoor emergency stairways

Factories

Illuminance (Lux)	Place
3000 to 1500	Extremely precise visual work
1500 to 750	Precise visual work
750 to 300	Regular visual work
300 to 150	Wrapping and packing
75 to 30	Indoor emergency stairways

Schools

Illuminance (Lux)	Place
1500 to 300	Drawing/drafting rooms, library
750 to 200	Classrooms, reading rooms, staff rooms, gymnasiums
300 to 75	Lecture halls, assembly rooms, locker rooms, corridors, stairways
75 to 30	Warehouses, emergency stairways
10 to 2	School passages

MAINTENANCE/REPAIR

Upon final installation of the Model LUX-01, no routine maintenance is required. The Model LUX-01 is not field serviceable and should be returned if repair is needed. Field repair should not be attempted and may void warranty.

WARRANTY/RETURN

Refer to “Terms and Conditions of Sale” in our catalog and on our website. Contact customer service to receive a Return Goods Authorization number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.

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