

# DIGITAL LIGHT METER INSTRUCTION MANUAL

## INSTRUCTION

Congratulations on your purchase of the Honeytek LX1010B+ Digital Light Meter, it is a precision instrument used to measure luminance in the field and fully cosine corrected for the angular incidence of light. This portable, compact light meter provides LUX and FC measurements, the light sensitive component used in this meter is a very stable sensor.

## FEATURES

- Light measuring level ranges are from 1Lux to 5000Lux or 1FC to 5000FC respectively
- High accuracy and rapid response
- Data-Hold function for holding measuring values
- Max-Hold function for holding peak values
- Unit and sign display for easy reading
- Automatic zeroing
- Auto power off
- Meter corrected for luminous efficiency function
- Correction factor need not be manually calculated for non-standard light sources
- Short rise and fall time

## SPECIFICATIONS

### General Specifications

<b>Display:</b>	3½ digit back light LCD display (reads 0 to 1999)
<b>Over range indication:</b>	OL (over load) is displayed
<b>Measurement rate:</b>	2.0 readings per second approximately
<b>Power supply:</b>	One 9V battery (NEDA 1604/JIS 006P/IEC6F22)
<b>Battery life:</b>	200 hours typical
<b>Low battery indication:</b>	Battery symbol is displayed when the battery power drops below the operating voltage
<b>Operation condition:</b>	Temperature: 0°C to 60°C (or 32°F to 104°F) Humidity: 10 to 80%RH
<b>Storage condition:</b>	Temperature: -10°C to 60°C (or 14°F to 140°F) Humidity: 10 to 70%RH
<b>Dimension:</b>	224(L) x 73.6(W) x 32(H) mm
<b>Weight:</b>	215g
<b>Accessories:</b>	Instruction manual, battery

### Electrical Specifications

**Measuring ranges:** 2000, 20,000 and 50,000 Lux

**Accuracy:**  $\pm 3\%$  rdg  $\pm 5\%$

**Spectral response:** **CIE photo optic**

Note: The CIE photo optic curve is an international standard for the color response of the average human eye. The CIE standard illuminant 'A' is defined as a gas-filled Tungsten filament lamp operating at a correlated color temperature of 2856K.

**Cosine response:**  $f^2 \leq 6\%$

**Repeatability:**  $\pm 2\%$

**Temperature character:**  $\pm 0.1\%/^{\circ}\text{C}$

## **OPERATING INSTRUCTIONS**

- 1> Set the function switch to the desired unit of measure; Lux or FC  
Turn to MAX position, the meter captures and hold the maximum noise level
- 2> Select the LUX scale, set the range selection switch to desired lux range
- 3> Remove the photo detector cover and face it to light source in a horizontal position
- 4> Read the luminance value on the LCD display, if the meter only display "OL", the input signal is too strong and a higher range should be selected
- 5> Data-hold mode: Press the hold button the LCD shows "HOLD", the meter stops all further measurements and only displays hold value. Press the HOLD button again to exit Data-Hold mode.
- 6> When the measurement is completed, replace the light sensor cover and turn the power off

## **BATTERY CHECK-UP & REPLACEMENT**

- 1> When the battery power is low, LCD will display "low-battery" symbol, and replacement of new battery is required.
- 2> Turn off the meter, disconnect the battery cover with a screw driver.
- 3> Disconnect the battery from the meter and replace it with a new battery and screw the battery cover back into place.

## **MAINTENANCE**

- 1> The white plastic disc on the top of the detector should be cleaned with a damp cloth when necessary.
- 2> Do not store the instrument where temperature or humidity is excessively high.
- 3> The reference level, as marker on the face plate, is the tip of the photo detector globe
- 4> 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.