LM-200LED
LED Light Meter

Users Manual
AMPROBE®

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LED Light Meter

Users Manual

LM-200LED_Rev04
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Repair
All test tools returned for warranty or non-warranty repair or for calibration should be accompanied by the following: your name, company's name, address, telephone number, and proof of purchase. Additionally, please include a brief description of the problem or the service requested and include the test leads with the meter. Non-warranty repair or replacement charges should be remitted in the form of a check, a money order, credit card with expiration date, or a purchase order made payable to Amprobe® Test Tools.

In-Warranty Repairs and Replacement – All Countries
Please read the warranty statement and check your battery before requesting repair. During the warranty period any defective test tool can be returned to your Amprobe® Test Tools distributor for an exchange for the same or like product. Please check the “Where to Buy” section on www.amprobe.com for a list of distributors near you. Additionally, in the United States and Canada In-Warranty repair and replacement units can also be sent to a Amprobe® Test Tools Service Center.

Non-Warranty Repairs and Replacement – US and Canada
Non-warranty repairs in the United States and Canada should be sent to a Amprobe® Test Tools Service Center. Call Amprobe® Test Tools or inquire at your point of purchase for current repair and replacement rates.

In USA
Amprobe Test Tools
Everett, WA 98203
Tel: 877-AMPROBE (267-7623)

In Canada
Amprobe Test Tools
Mississauga, ON L4Z 1X9
Tel: 905-890-7600

Non-Warranty Repairs and Replacement – Europe
European non-warranty units can be replaced by your Amprobe® Test Tools distributor for a nominal charge. Please check the “Where to Buy” section on www.amprobe.com for a list of distributors near you.
European Correspondence Address*
Amprobe® Test Tools Europe
Beha-Amprobe GmbH
In den Engematten 14
79286 Glottertal, Germany
Tel.: +49 (0) 7684 8009 - 0
www.amprobe.eu

*(Correspondence only – no repair or replacement available from this address. European customers please contact your distributor.)
1 Light Sensor  
2 Display(LCD)  
3 MAX HOLD  
4 Lux / foot candles  
5 Power Button: ON/OFF  
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SYMBOLS

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<tr>
<th>☢️</th>
<th>Caution! Refer to the explanation in this Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ⓟ</td>
<td>Complies with EU directives</td>
</tr>
<tr>
<td>⓻</td>
<td>Conforms to relevant Australian standards.</td>
</tr>
<tr>
<td>☠️</td>
<td>Do not dispose of this product as unsorted municipal waste.</td>
</tr>
</tbody>
</table>

⚠️ Warning and Precautions

- Do not operate the meter in explosive gas (material), combustible gas (material) steam or filled with dust.
- The light sensor is calibrated to CIE standard incandescent lamp at 2856 °K and may give different readings for spectrums from other lamp types.

UNPACKING AND INSPECTION

Your shipping carton should include:
1. LM-200LED LED light meter
2. 9 volt battery
4. Carrying case

If any of the items are damaged or missing, return the complete package to the place of purchase for an exchange.

INTRODUCTION

The instrument measures light output of LED sources for all visible light ranges.

The lumen is a measure of total amount of visible lights emitted by a source. The lumen is defined as in relation to the candela as 1 lm = 1 cd.sr.

A foot-candle is the luminance cast on a surface by a one-candela source one foot away. One foot-candela is equal to one lumen per square foot or approximately 10.764 lux.

OPERATION

1. Press the ▼ button to turn power on or off
2. Remove sensor protective cap and place the sensor perpendicular to the light.
3. Select the measurement unit (LUX or FC) by using Lx/FC button.
4. Set the measurement range by using R button.
5. Press \textbf{M-H} button to obtain the maximum reading during measurement.

6. Press \textbf{D-H} button to freeze the present reading on the display.

\textbf{\textit{Always put the sensor protective cap back when the instrument is not in use.}}

\textbf{Lx / fc}

Press \textbf{Lx/Fc} button to select the measurement unit.

1 foot-candle = 10.764 Lux and 1 Lux = 0.09290 foot-candle

\textbf{Measurement Range \textbf{R}}

Press \textbf{R} button to select the measurement range. An “OL.” Symbol on display indicates over-range, select a higher range for measurement.

\textbf{Maximum Hold}

Press \textbf{M-H} button to obtain the maximum reading during measurement (MAX symbol shows on display).

Press \textbf{M-H} button again to exit maximum hold mode (MAX symbol disappears on display).

\textbf{Data Hold}

Press \textbf{D-H} button to freeze present reading on display (D-H symbol shows on display).

Press \textbf{D-H} button again to resume measurement (D-H symbol disappears on display).

\textbf{Zero Adjustment}

The instrument zero may change over time. To reset to zero follow the instructions:

1. Make sure the sensor protective cap is fully covered on the sensor.
2. Set the range at the lowest LUX or FC range
3. Using a small flat screwdriver to adjust zero control (0 ADJ) until display shows “0.00”.

\textbf{SPECIFICATIONS}

\textbf{General}

Display: 2000 count LCD

Sensor: Silicon photodiode and filter.

Environment: Indoor operation

Altitude: Up to 2000m.
Temperature / Humidity

Operating: -10 °C to 40 °C (14˚F to 104˚F), 0 to 80 %RH.
Storage: -10 °C to 50 °C (14˚F to 122˚F), 0 to 70 %RH.
Power Supply: 9V NEDA 1604, IEC 6F22, JIS 006P battery
Battery life: typical 200 hours (Alkaline)
Auto Power Off: approx 6 min
Dimension (Base): 130 x 63 x 38 mm (5.1 x 2.5 x 1.5”)
Dimension (Sensor): 80 x 55 x 29 mm (3.2 x 2.2 x 1.1”)
Weight: 220 g (.48 lb.) include battery

-EMC: EN61326-1 This product complies with requirements of the following European Community Directives: 89/336/EEC (Electromagnetic Compatibility) and 73/23/EEC (Low Voltage) as amended by 93/68/EEC (CE Marking). However, electrical noise or intense electromagnetic fields in the vicinity of the equipment may disturb the measurement circuit. Measuring instruments will also respond to unwanted signals that may be present within the measurement circuit. Users should exercise care and take appropriate precautions to avoid misleading results when making measurements in the presence of electronic interference.

Illumination:

Measuring Range: 200, 2000, 20000, 200000 Lux
20, 200, 2000, 20000 Foot candles
Accuracy: ±3% for white LED light (Calibrated to standard incandescent lamp 2856º K and corrected LED day white-light spectrum).
± 8% for other visible light sources
Angle deviation from cosine Characteristics
30 ° ± 2 %
60 ° ± 6 %
80 ° ± 25 %
Cosine Angular corrected per JIS C 1609:1993 and CNS 5119 general A class specifications.

MAINTENANCE AND REPAIR

If there appears to be a malfunction during the operation of the meter, the following steps should be performed in order to isolate the cause of the problem.

1. Check the battery. Replace the battery immediately when the symbol “🔋” appears on the LCD.
2. Review the operating instructions for possible mistakes in operating procedure.
Except for the replacement of the battery, repair of the meter should be performed only by a Factory Authorized Service Center or by other qualified instrument service personnel. The front panel and case can be cleaned with a mild solution of detergent and water. Apply sparingly with a soft cloth and allow to dry completely before using. Do not use aromatic hydrocarbons or chlorinated solvents for cleaning.

**Battery Replacement**

1. Turn off the meter and slide out the battery cover. Replace the battery with a NEDA type 1604 or equivalent 9V alkaline battery. Replace the cover.

2. Remove battery when the instrument is not used for extended period.
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