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Extech LT40 LED Light Meter User Manual

Model: LT40

1. INTRODUCTION

The Extech LT40 is a compact and accurate LED Light Meter designed for measuring light levels from white LED light sources, as well as standard light sources. This device is essential for professionals needing to monitor and optimize environmental light levels in various settings such as offices, warehouses, public lots, hallways, and stairways. It provides measurements in both Lux and Foot-Candle (FC) units.





Figure 1: Extech LT40 LED Light Meter

2. SAFETY INFORMATION

Please read all safety information before operating the Extech LT40 LED Light Meter. Failure to follow these instructions may result in damage to the device or personal injury.

- Do not expose the meter to extreme temperatures or high humidity.
- Avoid dropping the meter or subjecting it to severe impact.
- Keep the sensor clean and free from obstructions to ensure accurate readings.
- Do not attempt to open the meter casing; there are no user-serviceable parts inside.
- Dispose of batteries according to local regulations.

3. PRODUCT OVERVIEW

3.1 Key Features

- USB interface for easy setup and data download.

- Selectable data sampling rates from 1 second to 24 hours.
- LCD displays current readings, min/max, and alarm status.
- Includes Windows 2000, XP, and Vista compatible analysis software.
- Measures white LED and standard lighting in Lux or Foot-Candle (FC) units.
- Features cosine and color corrected sensor for accurate measurements.

3.2 Components

The Extech LT40 LED Light Meter consists of the following main components:

- **Light Sensor:** Located at the top of the meter, responsible for detecting light.
- **LCD Display:** Shows measurement readings, units, and status indicators.
- **Control Buttons:**
 - **Power Button:** Turns the meter on/off.
 - **LUX/FC Button:** Toggles between Lux and Foot-Candle units.
 - **CAL/ZERO Button:** Used for calibration and zeroing the sensor.
 - **MAX/MIN Button:** Displays maximum and minimum recorded readings.
 - **HOLD Button:** Freezes the current reading on the display.
- **Battery Compartment:** Located on the back of the unit.
- **USB Port:** For connecting to a computer for data transfer.

4. SETUP

4.1 Battery Installation

1. Locate the battery compartment on the back of the LT40 meter.
2. Slide the battery cover open.
3. Insert two (2) AAA batteries, ensuring correct polarity (+/-). The batteries are included with the meter.
4. Close the battery cover securely.

4.2 Software Installation

The LT40 includes analysis software compatible with Windows 2000, XP, and Vista. Refer to the software's installation guide for detailed instructions on installing and configuring the software for data download and analysis.

5. OPERATING INSTRUCTIONS

5.1 Taking a Measurement

1. Press the **Power** button to turn on the meter.
2. Select the desired unit (Lux or FC) by pressing the **LUX/FC** button.
3. Place the light sensor in the area where you wish to measure the light level. Ensure the sensor is facing the light source directly for accurate readings.
4. Read the light level displayed on the LCD.



Figure 2: Measuring light levels with the Extech LT40

5.2 Zeroing the Meter

To ensure accuracy, it is recommended to zero the meter before taking measurements, especially in low light conditions.

1. Place the protective cap over the light sensor to block all light.
2. Press the **CAL/ZERO** button. The display should show '0' or a very low value.
3. Remove the cap to begin measurements.

5.3 Using MAX/MIN and HOLD Functions

- **MAX/MIN:** Press the **MAX/MIN** button to cycle through the maximum, minimum, and current readings. This is useful for monitoring light level fluctuations over time.
- **HOLD:** Press the **HOLD** button to freeze the current reading on the display. Press it again to release the hold and resume live measurements.

5.4 Data Logging and Transfer

The LT40 supports data logging with selectable sampling rates. Connect the meter to a computer using the USB interface and utilize the included software to configure logging parameters, download recorded data, and perform analysis.

Your browser does not support the video tag.

Video: Overview of Extech LED Light Meters, including the LT40, demonstrating measurement capabilities and features like Lux/FC units and cosine/color corrected measurements.

6. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your Extech LT40 LED Light Meter.

- **Cleaning:** Wipe the meter clean with a dry, soft cloth. Do not use abrasive cleaners or solvents. Ensure the light sensor is free of dust and debris.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the

meter in a cool, dry place, away from direct sunlight and extreme temperatures.

- **Calibration:** While the meter is designed for high accuracy, periodic professional calibration may be required depending on your application and industry standards. Refer to Extech's official support for calibration services.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Meter does not power on.	Dead or incorrectly installed batteries.	Check battery polarity. Replace batteries with new AAA batteries.
Inaccurate readings.	Dirty sensor, incorrect zeroing, or sensor obstruction.	Clean the sensor. Perform a zero calibration. Ensure nothing is blocking the sensor.
Display shows "OL" (Overload).	Light intensity exceeds the meter's measurement range.	Move the meter to an area with lower light intensity or use a different meter if the light source is too strong.
Cannot connect to PC via USB.	Driver issues, incorrect cable, or software problem.	Ensure USB cable is properly connected. Reinstall the analysis software and drivers. Check PC's device manager.

8. SPECIFICATIONS

Specification	Detail
Brand	Extech
Model Number	LT40
Product Dimensions	5.3 x 1.9 x 0.2 inches
Item Weight	4.94 ounces
Batteries	2 AAA batteries (included)
Display Type	Digital LCD
Connectivity Technology	USB
Special Feature	High Accuracy
Included Components	Extech LT40 LED Light Meter
Country of Origin	Taiwan
Material	Plastic
Specification Met	CE

9. WARRANTY AND SUPPORT

Extech Instruments is a trusted brand by professionals, sold in over 100 countries for over 45 years.

- **Manufacturer:** Extech
- **Warranty:** Refer to the manufacturer's official website or the documentation included with your product for specific warranty details and terms.
- **User Manual (PDF):** For a downloadable PDF version of the user manual, please visit the official Extech website or access it via this link: [Extech LT40 User Manual PDF](#).
- **Online Support:** For additional support, FAQs, and product information, visit the official Extech store: [Extech Store on Amazon](#).

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Related Documents - LT40

 <p>EXTECH USER MANUAL White LED Light Meter Product Code: 20200 Model: LT40 Additional User Manual available at www.extech.com</p>	<p>Extech LT40 White LED Light Meter User Manual</p> <p>User manual for the Extech LT40 White LED Light Meter, detailing its features, operation, specifications, and safety guidelines. The LT40 measures light intensity from various sources in Lux or foot-candles.</p>
 <p>EXTECH INSTRUMENTS USER GUIDE Heavy Duty Meter Model 407026</p>	<p>Extech 407026 Heavy Duty Light Meter User Guide</p> <p>User guide for the Extech 407026 Heavy Duty Light Meter, detailing its specifications, operation, and features for measuring light levels.</p>
 <p>EXTECH User Manual 4-in-1 Humidity, Temperature Airflow and Light Meter Model 45170</p>	<p>EXTECH 45170 4-in-1 Humidity, Temperature, Airflow, and Light Meter User Manual</p> <p>User manual for the EXTECH 45170, a 4-in-1 meter measuring humidity, temperature, airflow, and light. Includes operation, specifications, and warranty information.</p>

 <p>EXTECH INSTRUMENTS MANUALE UTENTE Misuratore di Livello di Radiazione UV-AB Modello UV505</p>	<p><u>Manuale Utente Misuratore di Radiazione UV-AB Extech UV505</u></p> <p>Manuale utente completo per il Misuratore di Radiazione UV-AB Extech UV505. Include istruzioni operative, specifiche tecniche, informazioni di sicurezza e manutenzione.</p>
 <p>EXTECH INSTRUMENTS MANUEL D'UTILISATION Photomètre UVA-UVB Modèle UV505</p>	<p><u>Extech UV505 UV-AB Light Meter User Manual</u></p> <p>User manual for the Extech UV505 UV-AB Light Meter. This document provides detailed information on the device's features, operation, specifications, safety precautions, and maintenance for measuring UVA and UVB light.</p>
 <p>Gebrikerhleiding EXTECH EX810 1000 Amp Klemmeter Met IR Thermometer</p>	<p><u>Extech EX810 1000 Amp Klemmeter met IR Thermometer Gebruikershandleiding</u></p> <p>Gedetailleerde gebruikershandleiding voor de Extech EX810 1000 Amp klemmeter met ingebouwde IR thermometer. Bevat instructies, veiligheidsrichtlijnen en technische specificaties voor nauwkeurige metingen van spanning, stroom, weerstand, capaciteit, frequentie en temperatuur.</p>