Lascar EL-USB-LITE

Lascar EL-USB-LITE USB Temperature Data Logger User Manual

Model: EL-USB-LITE | Brand: Lascar

1. INTRODUCTION

The Lascar EL-USB-LITE is a compact USB temperature data logger designed for monitoring temperature in various environments. It records over 4,000 readings within a temperature range of -10°C to +50°C (+14°F to +122°F) at a fixed sample rate of 30 minutes. The device is powered by a coin-cell battery, providing approximately one month of operation. An integrated LED indicator provides visual feedback on alarm conditions.

Image 1.1: The Lascar EL-USB-LITE USB Temperature Data Logger. This image shows the compact device with a USB connector cap and a button on its body.

2. SETUP

2.1. Battery Installation

The EL-USB-LITE is supplied with a coin-cell battery. To install or replace the battery:

1. Carefully unscrew the end cap of the data logger.
2. Insert the coin-cell battery with the positive (+) side facing upwards.
3. Securely screw the end cap back onto the device.

Note: The device does not have an on/off switch. Battery life is consumed when the battery is installed. Remove the battery for extended storage.

2.2. Software Installation

Before using the data logger, you must install the necessary software on your Windows-based computer. The software

allows for configuration of the logger and download of recorded data.

1. Obtain the latest version of the EL-USB-LITE software from the official Lascar Electronics website.
2. Run the installer and follow the on-screen instructions to complete the installation.
3. Connect the EL-USB-LITE to an available USB port on your computer. The system may automatically install drivers.

Compatibility: The software is compatible with Microsoft Windows operating systems. MacOS is not supported.

3. OPERATING INSTRUCTIONS

3.1. Configuring the Data Logger

Use the installed software to configure the data logger's settings before deployment.

1. Connect the EL-USB-LITE to your computer's USB port.
2. Launch the Lascar data logger software.
3. The software will detect the connected logger. You can then set parameters such as:

    - Start mode (e.g., immediate, delayed start, button start)
    - Alarm thresholds (high and low temperature limits)
    - Logger name

4. Apply the settings to the device.

3.2. Starting and Stopping Logging

Once configured, the logger will begin recording data according to the chosen start mode. The fixed sample rate is 30 minutes.

- **Button Press:** A single button press on the device will illuminate an LED. A green LED indicates no alarm conditions have been met, while a red LED indicates that a preset alarm level has been exceeded during the logging period.
- **Stopping Logging:** Logging can be stopped via the software when the device is connected to a computer, or automatically if configured to stop after a certain number of readings or time.

3.3. Downloading Data

After the logging period, connect the device to your computer to download the recorded data.

1. Connect the EL-USB-LITE to your computer's USB port.
2. Launch the Lascar data logger software.
3. Select the option to download data from the device.
4. The software will display the temperature readings and allow you to export them for analysis (e.g., to Excel for graphing).

4. MAINTENANCE

4.1. Battery Replacement

The coin-cell battery provides approximately one month of usage. Replace the battery when the low battery indicator appears in the software or if the device fails to power on.

- Refer to Section 2.1 for battery installation instructions.
- Use only recommended coin-cell battery types.

- Dispose of used batteries according to local regulations.

4.2. Cleaning

Clean the exterior of the data logger with a soft, damp cloth. Do not use abrasive cleaners or immerse the device in water.

5. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not recognized by computer.	Software/drivers not installed correctly; faulty USB port; device not properly connected.	Ensure software and drivers are installed. Try a different USB port. Reconnect the device firmly.
Logger not recording data.	Battery depleted; logger not configured to start; memory full.	Replace battery. Reconfigure logger via software to start logging. Download data and clear memory if full.
LED shows red.	Temperature exceeded preset alarm limits.	This indicates an alarm condition. Review recorded data to identify when and for how long the alarm was triggered.
Short battery life.	Continuous use; frequent data downloads; old battery.	Replace battery. Minimize frequent connections to PC if not downloading data. Ensure battery is fresh.

6. SPECIFICATIONS

Model: EL-USB-LITE

Measurement Range: -10°C to +50°C (+14°F to +122°F)

Accuracy: Approximately ±1°C (±2°F)

Resolution: 1°C (2°F)

Logging Rate: Fixed at 30 minutes

Memory Capacity: Over 4,000 readings

Battery Life: Approximately 1 month (coin-cell battery)

Power Source: Coin-cell battery (user replaceable)

Interface: USB

Software Compatibility: Microsoft Windows

Item Weight: 0.64 ounces

Manufacturer: Lascar

Country of Origin: China

Date First Available: October 20, 2010

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Lascar Electronics website or contact their customer service department. Keep your purchase receipt as proof of purchase.

Online Resources: www.lascarelectronics.com