Landtek B0CHYSJBK2

Landtek Decibel Meter Sound Level Meter with Data Logging

Model: B0CHYSJBK2 - User Manual

1. Introduction

This manual provides detailed instructions for the operation and maintenance of your Landtek Decibel Meter Sound Level Meter with Data Logging, Model B0CHYSJBK2. This device is designed for accurate measurement and recording of sound levels in various environments.

Key Features:

- 13-inch Large LCD Display for clear readings.
- Integrated Data Logging function with PC connectivity.
- 16.4 ft (5m) corded sound sensor for flexible placement.
- Audible and Visual Alarm with adjustable thresholds and external output.
- Multiple mounting options: desktop, wall mount, hanging, tripod attachment.

2. Package Contents

Verify that all items are present in the package:

- Landtek Decibel Meter Main Unit
- Corded Sound Sensor (16.4 ft / 5m cable)
- USB Cable
- Power Adapter (DC 5V/1A)
- Mounting Hardware (screws, wall anchors, hanging hooks)
- Instruction Manual

Image: Contents of the Landtek Decibel Meter package, including the main unit, sensor, cables, mounting hardware, and manual.

3. Product Overview

The Landtek Decibel Meter features a large display and a remote sensor for versatile noise monitoring.

Image: Front view of the Landtek Decibel Meter, displaying a sound level reading and showing the connected remote sound sensor.

Components:

- **Large LCD Display:** 13-inch screen for clear visibility of decibel readings.
- **Sound Sensor:** A 6mm condenser microphone sensor attached via a 16.4 ft (5m) cable for flexible placement away from the main unit.
- **Control Buttons:** Includes 'SEL' for selection, arrow buttons for adjustment, and a power button.
- **Indicators:** REC (recording), USB (connection), and Alarm indicators.
- **Ports:** DC 5V/OUT for power and external alarm, USB for PC connection.

Image: Diagram illustrating the dimensions of the 13-inch display and the approximate 196-inch (16.4 ft) length of the sound probe cable.

4. Setup

4.1 Powering On

1. Connect the power adapter to the DC 5V/OUT port on the side of the decibel meter.
2. Plug the power adapter into a standard electrical outlet. The device will power on automatically.

4.2 PC Software Installation and Synchronization

To utilize the data logging features and configure advanced settings, the device must be connected to a PC with the dedicated software. The software is compatible with Windows 7, 8, 10, and 11 (64-bit versions).

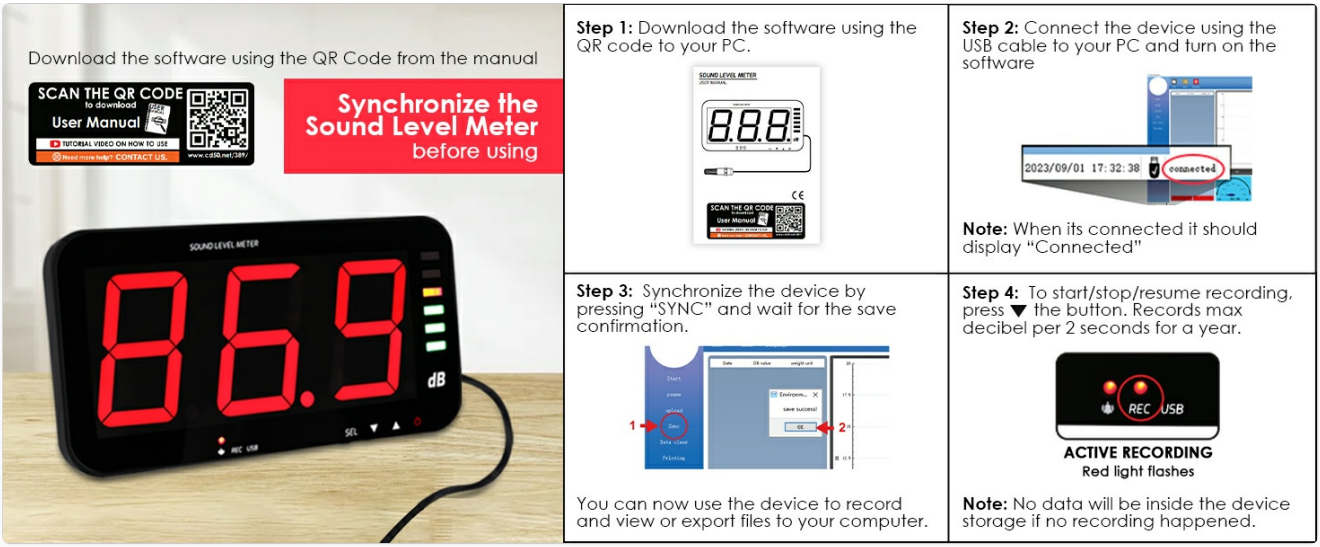


Image: Step-by-step instructions for downloading software via QR code, connecting the device to a PC, and synchronizing for data logging.

1. **Download Software:** Scan the QR code provided in the physical manual or visithttps://cd50.net/389/ to download the PC software.
2. **Connect Device:** Use the provided USB cable to connect the decibel meter to your PC.
3. **Launch Software:** Open the downloaded software on your PC. The software should display "Connected" once the device is recognized.
4. **Synchronize:** Press the "SYNC" button within the software to synchronize the device. Wait for the save confirmation.

Important Note: The device requires a continuous power supply to retain settings. If power is disconnected, settings may revert to default, requiring re-synchronization with the PC software.

5. Operating Instructions

5.1 Basic Measurement

Once powered on, the device will immediately begin measuring ambient sound levels and display the decibel (dB) value on the large LCD screen.

5.2 Understanding the Display

The display shows the current decibel reading. An analog bar level indicator on the right side provides a quick visual reference of the noise level range.

Image: Close-up of the decibel meter display, accompanied by a chart explaining the color-coded analog bar level indicator and corresponding dB ranges.

5.3 Data Logging

The device can record sound level data at 2-second intervals for up to one year. This data can be retrieved and analyzed using the PC software.

1. **Start/Stop Recording:** Press the '▼' (down arrow) button for 2 seconds to start or stop recording. The 'REC' indicator light will flash when active.
2. **Data Retrieval:** Connect the device to your PC and use the software to view, export, and analyze recorded data.

Image: The decibel meter connected to a laptop, displaying the data logging software interface with a graph of recorded sound levels.

5.4 Alarm Functions

The meter features audible and visual alarms when a predefined decibel threshold is exceeded. The default alarm threshold is 120dB.

1. **Setting Thresholds:** Long press the 'SEL' button to enter alarm settings. Use the arrow buttons to adjust the decibel threshold and alarm duration.
2. **Visual Alarm:** The alarm indicator light will illuminate or flash when the threshold is met.
3. **Audible Alarm:** An internal buzzer will sound.
4. **External Alarm Output:** The device includes a 3.5mm jack port for connecting an external 12V alarm speaker (not included).

Image: The decibel meter displaying a sound level with the alarm indicator light active, signifying an audio and visual alarm condition.

Image: Side view of the decibel meter showing the DC 5V/OUT port connected to an external red alarm speaker, demonstrating the external alarm output interface.

6. Mounting Options

The Landtek Decibel Meter offers several flexible mounting solutions to suit various environments.

- **Desktop Placement:** Use the integrated stand for discreet tabletop placement.
- **Wall Mount:** Utilize the provided mounting hardware to secure the unit to a wall.
- **Hanging:** The device can be hung using hooks or chains (not included) from a ceiling or overhead structure.
- **Tripod Attachment:** A standard tripod screw hole allows for attachment to a camera tripod (tripod not included).

Image: A collage demonstrating four different ways to mount the decibel meter: wall mount, hanging, tabletop placement, and attachment to a tripod.

7. Specifications

Feature	Specification
Measurement Range	30 ~ 130 dB
Accuracy	±1.5 dB (at 94dB@1KHz)
Resolution	0.1 dB (<100dB); 1 dB (>100dB)
Frequency Weighting	A weighting
Frequency Response	31.5 Hz ~ 8.5 KHz
Sampling Rate	2 times/second
Time Weighting	FAST, 0.5 seconds

Feature	Specification
Sensor	6mm condenser microphone sensor
Test Probe Cable Length	5 meters (approx. 16.4 ft)
Display	LED digital tube, single character 4 inches
Alarm Output	12V high level
Alarm Alert	Sound and Light
Power Supply	DC 5V / 1A
Dimensions	323 x 173 x 40 mm (approx. 12.7 x 6.8 x 1.6 inches)
Weight	Approx. 980 grams (2.16 lbs)

8. Maintenance

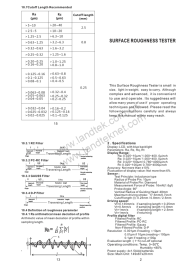
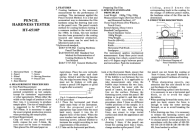
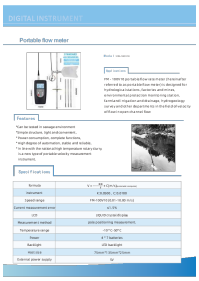
To ensure the longevity and accuracy of your decibel meter, follow these maintenance guidelines:

- **Cleaning:** Wipe the display and casing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Sensor Care:** Keep the microphone sensor clean and free from dust or debris to maintain measurement accuracy.
- **Power Supply:** Always use the provided power adapter to prevent damage to the device.

9. Troubleshooting

- **Device loses settings after power off:** This device requires continuous power to retain custom settings. If the power supply is interrupted, settings may revert to default. Reconnect to PC and re-synchronize using the software to restore desired settings.
- **Display is blank:** Ensure the power adapter is securely connected to both the device and a working electrical outlet.
- **No data logging on PC:** Verify that the USB cable is properly connected and the PC software is running. Ensure the device is synchronized with the software (refer to Section 4.2). Check that recording is active on the device (REC indicator flashing).
- **Alarm not triggering:** Check the alarm threshold settings via the PC software or by long-pressing the 'SEL' button. Ensure the threshold is set appropriately for the noise levels being monitored.
- **Slow update intervals:** The device updates approximately once per second. This is normal operation. For very short, transient sounds, the meter may not register the peak value instantly.

Related Documents - B0CHYSJBK2

	[LANDTEK GM-6, GM-26, GM-268 Gloss Meter Operation Manual] Detailed operation manual for the LANDTEK GM-6, GM-26, and GM-268 Gloss Meters, covering features, specifications, usage, calibration, data management, and troubleshooting.
	[LANDTEK BTT-2880S Sonic Belt Tension Tester User Manual] User manual for the LANDTEK BTT-2880S Sonic Belt Tension Tester. Learn about its features, operation, calibration, and how to accurately measure belt tension using frequency.
	[Landtek HM-6560 Leeb Hardness Tester User Manual] This user manual provides comprehensive instructions for operating, preparing, calibrating, and maintaining the Landtek HM-6560 Leeb Hardness Tester. It covers features, specifications, testing principles, procedures, and troubleshooting for accurate hardness measurements.
	[LANDTEK SRT-6200S Surface Roughness Tester User Manual] Comprehensive user manual for the LANDTEK SRT-6200S Surface Roughness Tester, detailing features, specifications, measurement procedures, calibration, and maintenance.
	[HT-6510P Pencil Hardness Tester User Manual] This document provides detailed instructions and specifications for the HT-6510P Pencil Hardness Tester, a device used to determine the film hardness of coatings using the Pencil Scratch Method.
	[LANDTEK FM-100V10 Portable Flow Meter - Digital Instrument] Discover the LANDTEK FM-100V10, a versatile portable flow meter designed for accurate velocity measurement in open channels. Features include a liquid crystal display, wide speed range, and robust design for various environmental applications.