Casella CEL-246/K1

Casella CEL-246/K1 Digital Logging Integrating Sound Level Meter Type 2 Kit User Manual

Model: CEL-246/K1

Brand: Casella

1. INTRODUCTION

This manual provides comprehensive instructions for the proper use, setup, operation, and maintenance of the Casella CEL-246/K1 Digital Logging Integrating Sound Level Meter Type 2 Kit. This device is designed for precise sound level measurements, incorporating Digital Signal Processing (DSP) technology for accurate and reliable data.

The CEL-246/K1 offers a wide measurement range, selectable frequency weightings (A and C), and time responses (Slow, Fast, Impulse). It features a non-decaying maximum hold function and a clear display showing current, highest, and average noise levels, along with a time history trend. Data logging capabilities are available via a USB output port.

2. WHAT'S INCLUDED

The Casella CEL-246/K1 Kit includes the following components:

- One (1) Casella CEL-246/K1 Sound Level Meter
- One (1) Acoustic Calibrator
- One (1) Foam Windscreen
- One (1) Carrying Case
- One (1) Calibration Certificate
- Three (3) AA Batteries

3. SETUP

3.1 Battery Installation

1. Locate the battery compartment on the rear of the sound level meter.
2. Open the compartment cover.
3. Insert three (3) AA batteries, ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.

3.2 Attaching the Foam Windscreen

Gently slide the foam windscreen over the microphone at the top of the sound level meter. This helps to reduce wind noise during outdoor measurements.

3.3 Initial Power On

Press the power button to turn on the device. The display will illuminate, showing the current measurement mode and readings.

An image showing the Casella CEL-246/K1 Digital Logging Integrating Sound Level Meter. The device is blue and grey, with a display screen showing measurement data and a graph. A black foam windscreen is attached to the top microphone.

4. OPERATING INSTRUCTIONS

4.1 Basic Operation

The CEL-246/K1 features simple two-button operation for ease of use. Refer to the on-screen prompts and the full user guide for detailed button functions.

4.2 Frequency Weighting

The meter supports two frequency weighting scales:

- **A-Weighting:** Attenuates lower frequencies to approximate the human ear's response, which is most sensitive between 3000 and 4000 Hz. Use for general noise measurements.
- **C-Weighting:** Reads all frequencies more uniformly, providing a better response to higher frequencies than A-weighting. Useful for pinpointing problems when A-weighted readings are very high.

4.3 Time Weighting

Selectable time responses include:

- **Slow:** Provides a slower response, suitable for measuring steady noise levels.
- **Fast:** Offers a quicker response, ideal for capturing fluctuating noise levels.
- **Impulse:** Designed for very short, sharp noise events.

4.4 Maximum Hold Feature

The non-decaying maximum hold feature captures and displays the highest sound pressure level detected until manually reset. This is useful for identifying peak noise events.

4.5 Data Logging and USB Output

The meter includes a USB output port for simple data logging. Connect the device to a PC to download stored data or for real-time data analysis using the optional software package. Data can be exported in spreadsheet format for further analysis.

4.6 Auto Calibration

The CEL-246/K1 supports auto calibration at a selected decibel level using the included acoustic calibrator. Refer to the full user guide for detailed calibration procedures to ensure measurement accuracy.

5. MAINTENANCE

5.1 Cleaning

Wipe the meter's exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents. Ensure no moisture enters the device.

5.2 Battery Replacement

Replace batteries when the low battery indicator appears on the display. Always use three (3) new AA batteries of the same type.

5.3 Storage

When not in use for extended periods, remove the batteries to prevent leakage. Store the meter in its carrying case in a cool, dry place, away from direct sunlight and extreme temperatures.

5.4 Calibration

Regular calibration is crucial for maintaining measurement accuracy. Use the provided acoustic calibrator according to the instructions in Section 4.6 and the full user guide. It is recommended to calibrate the device before each critical measurement session.

6. TROUBLESHOOTING

6.1 Meter Not Powering On

- Check if the batteries are correctly inserted with proper polarity.
- Replace with fresh AA batteries.
- Ensure the power button is pressed firmly.

6.2 Inaccurate Readings

- Perform an auto calibration using the acoustic calibrator.
- Ensure the foam windscreen is properly attached to minimize wind noise.
- Verify that the correct frequency (A or C) and time weighting (Slow, Fast, Impulse) are selected for your measurement environment.
- Check for any physical damage to the microphone or device.

6.3 Data Logging Issues

- Ensure the USB cable is securely connected to both the meter and the PC.
- Verify that the necessary software drivers are installed on your PC.
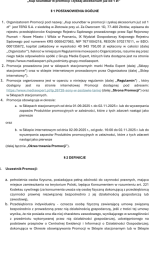- Consult the software manual for specific data transfer instructions.
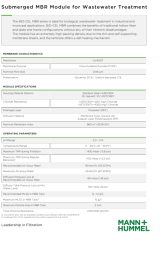
7. SPECIFICATIONS

Feature	Specification
Model Number	CEL-246/K1
Measurement Range	30 to 130 dB
Frequency Weighting	A or C
Time Weightings	Slow, Fast, Impulse
Display	Current, Highest, Average Noise Level, Time History Trend
Output Port	USB for data logging
Power Source	3 x AA Batteries
Package Dimensions	17 x 12.5 x 4 inches
Package Weight	3.9 pounds
Country of Origin	United Kingdom
Manufacturer	Cole-Parmer

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact Casella customer service directly. Keep your purchase receipt as proof of purchase.
Manufacturer: Cole-Parmer

Related Documents - CEL-246/K1

Casella Insight Version 17 Installation Guide - Software Setup

Official installation guide for Casella Insight Version 17 software. Learn how to download, install, and upgrade the Insight application with step-by-step instructions and support contact details.

Casella dBadge2 Personal Noise Dosimeter Field Guide

A field guide for the Casella dBadge2 personal noise dosimeter, covering setup, operation, charging, calibration, and data download. Includes information on models, features, and the Airwave app.

Regulamin promocji: Kup soundbar Sony i zyskaj akcesorium od 1 zł

Oficjalny regulamin promocji TERG S.A. (Media Expert) 'Kup soundbar Sony i zyskaj akcesorium już od 1 zł'. Szczegóły dotyczące produktów, dat i zasad uczestnictwa.

BIO-CEL MBR Series: Technical Datasheet for Wastewater Treatment Membranes | MANN+HUMMEL

Detailed technical specifications and product information for the BIO-CEL MBR series membrane bioreactor systems from MANN+HUMMEL, designed for industrial and municipal wastewater treatment.

BIO-CEL L-2 Stack MBR Module for Wastewater Treatment | MANN+HUMMEL

Detailed technical specifications and product overview for the BIO-CEL L-2 Stack, a Submerged MBR Module designed for industrial and municipal wastewater treatment by MANN+HUMMEL. Learn about its membrane characteristics, module specifications, operating parameters, and physical dimensions.

Casella Insight Version 17 Installation Guide - Software Setup

Official installation guide for Casella Insight Version 17 software. Learn how to download, install, and upgrade the Insight application with step-by-step instructions and support contact details.

Documents - Casella – CEL-246/K1

[pdf] Datasheet Warranty

CEL 200 keison co uk products casella Data Sheet Casella Measurement Series Digital Sound Level Meters |||

CEL-200 Series Digital Sound Level Meters Full Compliance, Great Value Sound Level Meters CEL-200 S ... -110/2 calibrator, instruction manuals. Kits can be specified by adding /K1 to the part number e.g. **CEL-246/K1**. Distributed By: SM09002 v1.1 Think Environment Think Casella Thank you for reading t...

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[pdf] Datasheet

Sound Level Meter CEL 24X datasheet Chinese idealind content dam india casella ecommerce datasheets |||

24X 24X www.casellameasurement.com IEC 61672 35 USB PC ... ANSI S1.43, IEC 60804 CEL-240 l l CEL-246 l l l l l l * dB24 CEL-246 CEL-110/2 /K1 **CEL-246/K1**. Casella Regent House, Wolseley Road, Kempston, Bedford, MK42 7JY. United Kingdom Tel: ...

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[pdf] Datasheet Warranty

Data SheetCasella Measurement CEL 200 Series Digital Sound Level Meterskeison co uk products casella |||

CEL-200 Series Digital Sound Level Meters Full Compliance, Great Value Sound Level Meters CEL-200 S ... -110/2 calibrator, instruction manuals. Kits can be specified by adding /K1 to the part number e.g. **CEL-246/K1**. Distributed By: SM09002 v1.1 Think Environment Think Casella Thank you for reading t...

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CASELLA USA CEL-246 DIGITAL LOGGING INTEGRATING SOUND LEVEL METER OVERVIEW CEL-246 Digital Logging S ... ples. Ordering information CEL-246 CEL-120/2 CEL-6841 CEL-6840 CMC51 CEL-6842 Other items available **CEL-246/K1** CEL-246/K2 CEL-246/6 Key benefits Wide range from 30 to 130dB Large graphic LCD screen...

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