VOLTCRAFT DL-210TH

VOLTCRAFT DL-210TH Temperature and Humidity Data Logger

User Manual

Official VOLTCRAFT Product

1. INTRODUCTION

The VOLTCRAFT DL-210TH is a versatile data logger designed for long-term recording of air temperature and relative humidity. This device offers a user-friendly experience, allowing configuration via a web browser without the need for dedicated software. It automatically generates PDF and CSV reports upon connection to a computer or printer, simplifying data analysis. The integrated display provides real-time, minimum, and maximum values, and an alarm LED indicates limit exceedances. Its customizable start/stop modes offer flexibility for various monitoring needs.

2. SAFETY INFORMATION

- Read this manual thoroughly before operating the device.
- Keep the device away from extreme temperatures, direct sunlight, strong vibrations, and high humidity.
- Do not open the device casing. Servicing should only be performed by qualified personnel.
- Use only specified batteries. Dispose of batteries according to local regulations.
- Clean the device with a dry, soft cloth. Do not use abrasive cleaners or solvents.

3. PRODUCT OVERVIEW

3.1 Device Components

Figure 1: Front view of the DL-210TH data logger, showing the display and control buttons.

Figure 2: Angled view of the DL-210TH, highlighting its compact design and ventilation slots.

Figure 3: The DL-210TH with its protective cap removed, revealing the integrated USB connector for data transfer.

- **LCD Display:** Shows current, min/max values, and logger ID.
- **Control Buttons:** For navigation and configuration.
- **USB Connector:** For data transfer and configuration.
- **LED Indicators:** For alarm status and operational feedback.
- **Sensors:** Integrated temperature and humidity sensors.

4. SETUP

4.1 Initial Setup

1. **Insert Battery:** Open the battery compartment and insert the specified battery, observing polarity.
2. **Power On:** The device will automatically power on or can be activated via a button press.

4.2 Device Configuration (Browser-based)

The DL-210TH can be configured directly via a web browser without installing any software. The necessary link for configuration is stored on the logger itself.

1. **Connect to PC:** Plug the data logger into a USB port on your computer (PC or Mac).
2. **Access Configuration:** The device will appear as a removable drive. Open the drive and locate the configuration file or link provided on the logger.
3. **Set Parameters:** Use the browser interface to set logging intervals, alarm thresholds, time/date, and other operational parameters.

5. OPERATION

5.1 Starting and Stopping Data Logging

The data logger offers various methods to start and stop recording, adaptable to your specific needs:

- **Immediate Start:** Logging begins as soon as the device is activated.

- **Delayed Start:** Logging starts after a pre-set delay.
- **Scheduled Start:** Logging begins at a specific date and time.
- **Button Press Start:** Logging initiates upon pressing a designated button on the device.
- **Custom Stop Modes:** Configure logging to stop after a certain duration, when memory is full, or via a button press.

5.2 Display Functions

The integrated LCD display provides essential information during operation:

- **Current Values:** Displays real-time temperature and humidity readings.
- **Min/Max Values:** Shows the minimum and maximum recorded values during the current logging session.
- **Logger ID:** Useful for identifying individual loggers when multiple units are in use.
- **LCD Deactivation:** The display can be turned off to conserve battery life.

5.3 LED Alarm Indication

When activated, the alarm LED provides a quick visual alert for limit value exceedances without requiring detailed data review. This feature can be enabled or disabled during configuration to optimize energy consumption.

6. DATA RETRIEVAL AND ANALYSIS

The DL-210TH simplifies data analysis by automatically generating reports.

- **Automatic Report Generation:** Once data recording is complete and the logger is connected to a USB interface, a PDF file and a spreadsheet (CSV) are automatically generated.
- **PDF Report:** Contains general device information, logger settings, alarm status, and a graphical representation of measured values over the recording period.
- **CSV File:** Provides detailed tabular data for further analysis in spreadsheet software.
- **Software Compatibility:** While the data logger is compatible with VOLTSOFT software, it is generally not required for basic data retrieval and reporting.

7. MAINTENANCE

- **Battery Replacement:** Replace the battery when the low battery indicator appears on the display. Ensure correct battery type and polarity.
- **Cleaning:** Wipe the device with a soft, dry, lint-free cloth. Do not use liquid cleaners or immerse the device in water.
- **Storage:** Store the device in a cool, dry place when not in use for extended periods.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Battery is dead or incorrectly inserted.	Replace battery or check polarity.
No data report generated.	Device not properly connected to USB or logging not completed.	Ensure secure USB connection; verify logging session has ended.

Problem	Possible Cause	Solution
Incorrect time/date on reports.	Time/date not set or battery removed for extended period.	Reconnect to PC and reconfigure time/date via browser interface.
Alarm LED constantly on/off.	Alarm thresholds exceeded or alarm function disabled.	Check current readings against thresholds; verify alarm settings in configuration.

9. TECHNICAL SPECIFICATIONS

Specification	Value
Product Dimensions (L x W x H)	1.9 x 3.7 x 8.6 cm
Weight	42 grams
Manufacturer	VOLTCRAFT
Item Model Number	DL-210TH
Included Components	1 piece (Data Logger)
Number of Units	1 Total

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official VOLTCRAFT website. Keep your proof of purchase for any warranty claims.