Level1000
Water Level and Temperature
Data Logger

PRODUCT
USER GUIDE

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PRODUCT USER GUIDE

Product Overview

The Level1000 is a water level and temperature data logger. The stainless steel housing allows the device to be used in fresh water applications. The device is equipped with a 30 PSIA sensor, allowing the device to measure down to 30 feet of water.

The Level1000 is not atmospheric pressure compensated, therefore a reading should be taken prior to submerging the device into water. That reading will then need to be subtracted from all readings to provide accurate water level measurement.

Water Resistance

The Level1000 is fully submersible and rated IP68. It can be placed in environments with up to 30 feet (9 m) of water.

Installation Guide

Installing the Interface Cable

IFC200 — Insert the device into a USB port. The drivers will install automatically.

Getting Started

To access the COM Port for the interface cable, unscrew the key-ring end cap. Screw the end cap onto the data logger until the o-ring cannot be seen, before deploying it.

Installing the Software

The Software can be downloaded from the MadgeTech website at **madgetech.com**. Follow the instructions provided in the Installation Wizard.

Ordering Information

- 900335-00 — Level1000
- 900298-00 — IFC200
- 901747-00 — TLH-5902 Replacement Battery

Device Operation

Connecting and Starting the Data Logger

1. Once the software is installed and running, plug the interface cable into the data logger.

2. Connect the USB end of the interface cable into an open USB port on the computer.

3. The device will appear in the Connected Devices list, highlight the desired data logger.

4. For most applications, select **Custom Start** from the menu bar and choose the desired start method, reading rate and other parameters appropriate for the data logging application and click **Start**. *(**Quick Start** applies the most recent custom start options, **Batch Start** is used for managing multiple loggers at once, **Real Time Start** stores the dataset as it records while connected to the logger.)*

5. The status of the device will change to **Running** or **Waiting to Start**, depending upon your start method.

6. Disconnect the data logger from the interface cable and place it in the environment to measure.

Note: *The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.*

Downloading Data from a Data Logger

1. Connect the logger to the interface cable.

2. Highlight the data logger in the Connected Devices list. Click **Stop** on the menu bar.

3. Once the data logger is stopped, with the logger highlighted, click **Download**.

4. Downloading will offload and save all the recorded data to the PC.

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Device Maintenance

Battery Replacement

Materials: Snap Ring Pliers, ⁹⁄₁₆ inch (15 mm) Wrench and a Replacement Battery (TLH-5902)

1. Remove the end cap of the data logger.

2. Remove the retaining clip using pliers.

3. Remove the white Teflon washer.

4. VERY CAREFULLY use a ⁹⁄₁₆ inch (15mm) wrench to remove the NPT end of the data logger.

5. Once the NPT end is completely unscrewed, gently slide the circuit board out of the enclosure. Be careful not to break or sharply bend the cable between the level sensor and the electronics.

6. The battery is the purple cylinder on the circuit board, gently pull out the battery.

7. Insert the new battery one lead at a time, pressing down firmly with your index finger to make sure the lead is secure in its terminal. *Note: the battery should be flat against the circuit board, and the positive lead should be closest to the communications jack.*

8. Insert the electronics back into the tube. Make sure the cable is not twisted, sharply bent, or kinked. From the connection to the circuit board, it should run up towards the battery, then down the sensor.

9. VERY CAREFULLY screw the NPT end cap back onto the tube, making sure the electronics rotate with the end cap.

10. Insert the Teflon washer and retaining clip to secure the electronics.

11. Replace the end cap.

Recalibration

Recalibration is recommended annually. To send devices back for calibration, visit **madgetech.com**.

Product Support & Troubleshooting:

- Visit our Resources online at **madgetech.com/resources**.
- Contact our friendly Customer Support Team at (603) 456-2011 or **support@madgetech.com**.

MadgeTech 4 Software Support:

- Refer to the built-in help section of the MadgeTech 4 Software.
- Download the MadgeTech 4 Software Manual at **madgetech.com**.
- Contact our friendly Customer Support Team at (603) 456-2011 or **support@madgetech.com**.

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