The Model LDL2-030 Vented Water Level Data Logger has a vented cable and end cap to allow it to automatically compensate for atmospheric pressure fluctuations. The data logger measures water level up to 30 ft (9.14 m) and has an internal temperature sensor that accurately records temperatures between -40 to 176°F (-40 to 80°C). The innovative design makes it ideal for use in waste water treatment facilities as well as monitoring well and ground water levels. The battery-powered data logger can store over 16,000 measurements per channel, and the software allows for user selectable sampling rates. The easy to use DL700 software allows the LDL2-030 to be easily started and stopped from a PC or delayed to start up to six months in advance.

**NOTICE**

Before the logger is submerged, make sure all caps and parts of the data logger are tightened to ensure that it is properly sealed. Since the LDL2-030 is atmospheric pressure compensated, the communications end of the data logger, (the end with the vented cap and the key ring hole) must remain above water. Do NOT allow water or other liquids to come into contact with this end. Tie a secure line to the key ring hole before submerging.

**SOFTWARE INSTALLATION**

1. Insert installation CD and click Install Dwyer 2.00.
2. Follow onscreen instructions.
3. Next, click Install USB Interface Drivers on the CD Contents screen.
4. Click Install.

**SPECIFICATIONS**

- **Range:** Temperature: -40 to 176°F (-40 to 80°C); Water Level: 0 to 30 ft (0 to 9.14 m).
- **Memory Size:** 16,383 readings per channel.
- **Accuracy:** ±0.9°F (±0.5°C), ±0.3%FSR @ 77°F (25°C).
- **Resolution:** Temperature: 0.2°F (0.1°C); Water Level: 0.02 in (0.051 cm).
- **Sampling Method:** Stop on memory full.
- **Sampling Rate:** Selectable from 2 sec to 12 hrs.
- **Computer Requirements:** Windows® 95, Windows® 98, Windows® 2000, Windows® ME, Windows NT®, and Windows® XP operating systems, one free USB port.
- **Power Requirements:** User replaceable, 3.6V lithium battery.
- **Battery Life:** 1 year (approx).
- **Interface:** USB port (interface cable required).
- **Material:** 303 stainless steel.
- **Weight:** 3 lb (1.4 kg).
- **Agency Approvals:** CE.

**NOTICE**

A message may appear stating that the software has not passed Windows® Logo Testing. This software has been tested and works properly. Click Continue Anyway if this window appears.

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CONNECT THE LOGGER
1. Remove the Warning sticker from the USB Data Logger Interface converter to uncover the female end of the jack.
2. Insert one end of the jack into the USB Data Logger Interface converter and the other end into the serial port in the data logger.
3. The serial port is located under the cap that has the key ring hole. Unscrew the cap and connect the cable.
4. Connect the DL700 USB cord to the PC and connect the other end to the USB Data Logger Interface converter.

START THE LOGGER
1. To start the logger, from the Communication menu select Auto Configure Port.
2. From the Device menu select Start Device and choose the desired Reading Rate.
3. Click the Start button.

NOTICE
Starting the device erases all data currently stored in the logger.

DOWNLOAD DATA
1. To download data, connect the logger to the PC.
2. Select Read Device Data from the Device menu.
3. Data is then presented graphically.

*For more detailed information on using the DL700 software, please consult the Software Manual.

DISICCANT
To ensure that water has not gotten into the communications end of the logger, unscrew the canister that has the key ring hole. There is a viewing window that shows the indicating silica. It is blue when dry and pink when wet.

The desiccant lasts for 7 days at 99%RH. It can be regenerated by heating the canister at 350°F (177°C) for 1 hour.

BATTERIES
Typical battery life is 1 year. Fast logging will considerably shorten the battery life. To preserve battery life, it is recommended to use the longest practical sampling rate, and when the logger is not in use, select Stop Device from the Device menu.

BATTERY REPLACEMENT INSTRUCTIONS
1. The submersible end of the data logger has a notched cap (the end without the key ring hole). Unscrew the middle section of this end from the cable to reveal the snap-ring.
2. Remove the snap-ring with snap-ring pliers.

3. Once the snap-ring has been removed, press gently on the white disk to force one end up for easy removal.
4. Use a 1 inch wrench, or a non-slip grip to remove the other end cap.
5. Gently slide the circuit board from the metal case.
6. Set the circuit board down and make note of the orientation of the battery's positive (+) terminal. The “+” indication is also on the circuit board.
7. Remove the old battery and install the new battery noting the orientation of the positive (+) terminal.

NOTICE
Depending on where you purchased the battery, the leads may not be bent correctly or at all. Follow the diagram below for bending the battery leads properly.

8. Repeat steps 5 through 1 in reverse order to complete installation.

MAINTENANCE
Upon final installation of the Model LDL2-030 Data Logger, no routine maintenance is required. The Model LDL2-030 is not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a Return Goods Authorization number before shipping.