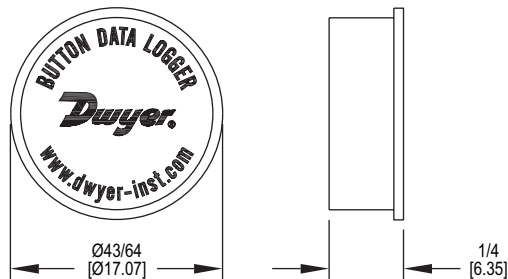




## Series BDL Button Data Logger

### Specifications - Installation and Operating Instructions



The **Series BDL Button Data Logger** records temperatures and humidity in applications where size and cost effectiveness are key. The BDL is housed in a stainless steel case and is water resistant, making it durable in hostile environments where excessive moisture is present. The BDL is self-powered and features a USB interface. Sample rate and high/low alarms are user selectable through the Windows®-based application. The included software displays downloaded data graphically with trace and zoom functions. The logger is very small which enables it to be inserted into small items and packages. The Series BDL-K Logger Kit includes 2 buttons, 2 magnets, an interface cable, and a plastic button holder.

#### SOFTWARE INSTALLATION

1. Ensure that no applications are running.
2. Insert the installation CD and select the install option from the menu.
3. Follow the onscreen instructions.
4. Restart the computer. A new icon will be placed on the desktop.
5. After installing the software, connect the logger.
6. The first time you open the software, you will be prompted to enter a password. The password will only be used if you decide to use the security functions. Enter and take note of the password.

#### SOFTWARE FEATURES

- Graphing of downloaded data
- Zooming function
- Temperature in °F or °C
- Up to two traces per graph
- Multiple traces per graph (Full Version Only)\*
- Exporting to spreadsheet (Full Version Only)\*
- Viewing the data table (Full Version Only)\*
- Calculating Mean Kinetic Temperature (MKT) (Full Version Only)\*
- Emailing graphs (Full Version Only)\*

\*In order to obtain the Full Version Only features, the software upgrade key must be purchased. To access the full version, the software key is inserted into a USB port on the PC and the full version features are automatically added onto the existing software.

#### SPECIFICATIONS

**Range:** BDL-1: -40 to 185°F (-40 to 85°C); BDL-2: -4 to 185°F (-20 to 85°C), 0 to 100% RH.

**Memory Size:** BDL-1: 2048 readings; BDL-2: 4096 temperature and 4096 humidity readings (low resolution), 2048 temperature and 2048 humidity readings (high resolution).

**Accuracy:** BDL-1: ±1.5°F (±1°C) from -22 to 158°F (-30 to 70°C); BDL-2: ±0.9°F (±0.5°C) from 14 to 158°F (-10 to 70°C), ±5% RH.

**Resolution:** BDL-1: 8 bit; BDL-2: 8 or 11 bit.

**Sampling Method:** Stop on memory full or continuous recording.

**Sampling Rate:** BDL-1: Selectable from 1 to 255 min; BDL-2: Selectable from 1 sec to 24 hrs.

**Computer Requirements:** Windows® 98, Windows® 2000, Windows® ME, Windows NT®, Windows® XP, and Windows Vista® operating system with 16 MB RAM, one free USB port.

**Power Requirements:** Internal, non-replaceable 3.0V lithium battery.

**Battery Life:** BDL-1: 10 years (approx); BDL-2: 5 years (approx).

**Alarms:** Programmable high/low.

**Interface:** USB port (cable included with kits).

**Housing Material:** 305 stainless steel.

**Weight:** 0.14 oz (4g).

**Agency Approvals:** CE, RoHS.

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## CONFIGURATION

The first time the software is opened a password will need to be entered. Once a password has been entered, the Configuration window will come up.

After the initial launch of the software, whenever a new type of data logger is connected to the PC, the correct data logger will have to be selected from the Configuration window. From the Options menu, select Configuration to bring up the Configuration window.

In the Graph tab, choose the desired temperature units and other graph options.

In the Device tab, select the correct logger by clicking the button displaying the device icon matching the logger you are using.

Set up the logger by inserting the Series BDL Button Data Logger into the button adapter and connecting the adapter to the PC.

From the Logger Operations menu, select Issue Logger to bring up the Issue Window. Enter the relevant parameters into the operating software such as sample rate, alarm parameters, etc.

### NOTICE

Issuing the parameters erases all data currently stored in the logger.

## INITIAL SETTING

The first time a logger is set, you will be prompted to enter an Owners Manifest and a Passcode. This is the only time you will be asked for this information and it cannot subsequently be changed.

Owners Manifest is a label for the logger normally used to record details of the owner and/or details related to the logger such as date purchased, shipment, application, etc.

If the default Passcode is changed, and if it is lost, not even the factory can retrieve it. If this happens then the logger cannot be issued ever again. It is recommended that the Passcode NOT be changed.

## DOWNLOAD DATA

Connect the button adapter to the PC.

Insert the Series BDL into the button adapter, and from the Logger Operations menu, select Read Logger.

Data is then presented graphically. At this stage, data can be saved to the computer.

## ALARMS

Within the Issue Window, click the Alarm/LED Blink tab to enter the high and low Alarm Set Points. The high and low Alarm Delays state how long the logger has to be in an alarm state before it is registered as an alarm.

The alarms are armed the first time the temperature is in a non-alarm range. However, if Delayed Start is enabled, then the alarms are armed as soon as it starts logging on the specified date and time.

## LOGGER NAMING/LABELING

Within the Issue Window, click the Manifest Text tab. The User Manifest is a label for the logger that takes up to 450 characters and can be changed every time the logger is set.

The Owner Manifest is set the first time the logger is set.

## MAINTENANCE

Upon final installation of the Series BDL Button Data Logger, no routine maintenance is required.

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, to set the sampling rate to the longest option.

A periodic check of system calibration is recommended. The Series BDL 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.