### **TROUBLESHOOTING (CONT.)**

#### SET UNIT OF MEASURE

The preferred unit of measure shown on the logger display and for downloaded data is set separately.

**Display:** The display value is changed using Dickson software.

DicksonWare 17.30: Go to Setup and click on the Display Scale tab. Choose your unit of measure under Logger and click on Save.

**DicksonWare 2.0:** Go to Configure / Channels. Choose the unit of measure and Save

**Downloaded Data:** In DicksonWare 17.30 or 2.0 go to File / Preferences. Set the preferred unit of measure for downloaded data and Save.

#### DISPLAY IS FROZEN OR WILL NOT DISPLAY

- 1. Unit may be "locked up". Remove the battery and then replace it after a few moments.
- 2. Removing the battery will not erase any stored data.
- 3. Battery may be dead or low, replace the battery.

#### -42 READING IN DOWNLOADED DATA

A dummy reading of -42 PSI marks the point where

logging resumed once the battery was replaced.

**Note:** The logger does not keep track of time when power is lost. The time stamp assigned to all data saved after power is restored will be off. Clearing the logger via DicksonWare will restore the correct time/date.

#### WILL DATA BE LOST IF THE BATTERY IS REMOVED OR THE LOGGER LOSES POWER?

The logger will not lose saved data when power is lost.

# WHAT DOES W.H., SHOWN IN THE UPPER RIGHT OF THE LOGGER DISPLAY, STAND FOR?

W.H. stands for Water Hammer. W.H. will display when a 1 second sample rate is selected.

# WHY DOES THE LOGGER STOP LOGGING WHEN THE SD CARD IS USED?

The Memory Download Feature was designed to work with standard SD cards. SD Plus cards can cause the unit to stop logging when used to download data. If it appears the unit stops logging when the Flash Memory Download Feature is used, the card may be an SD Plus card. We recommend using Dickson SD Cards.

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# USER MANUAL & PRODUCT GUIDE



PR125/325/525

#### Need additional support?

Web: DicksonData.com Telephone: 630.543.3747 Email: support@dicksondata.com

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# PRESSURE LOGGER WITH DIGITAL DISPLAY

## **GETTING STARTED**

- Install DicksonWare version 13.0 or greater for Windows 7 / XP, or DicksonWare 2.0 for Windows 10 on your PC.
- 2. Install battery:
  - a. Carefully unscrew the case lid to remove the battery compartment
  - b. Insert the battery positive side up
  - c. Replace the battery cap (do not over tighten)
  - d. It may take up to 5 seconds for unit to power up
- 3. Open DicksonWare software via the icon on your desktop.
- 4. Connect the USB cable to the logger (port located to the left of the display) and to an available working USB port on your PC.
- 5. Your computer may detect the logger when it is powered on and connected to the computer via

## **CHANGING LOGGER DEFAULTS**

#### PRESSURE LOGGER DEFAULTS:

Sample Rate = 5 Minutes

Stop or Wrap When Full = Wrap

Logger Display Unit of Measure = PSI

DicksonWare Unit of Measure = PSI

- To change any of the logger defaults, connect the logger to your PC via the USB cable and open DicksonWare
- 2. Click on Setup
- 3. The following settings can be modified:
  - a. Setup/Identification
    - i. Logger ID: Name logger
    - ii. Calibration Date: Set user calibration date
    - iii. Calibration Interval: Set calibration interval
  - b. Setup/Samples
    - i. Sample Interval: How frequently the logger takes a pressure reading

## **USEFUL FEATURES**

#### **REAL TIME MONITORING** (Not available on DicksonWare 2.0)

This allows you to monitor and graph the data points as they are being logged. You can also print and save real-time data from the screen. (Note: This feature should be used sparingly as it causes the battery to drain very quickly).

#### **CUSTOMIZE GRAPHED DATA**

DicksonWare calculates the Minimum, Maximum and

the USB connection. Depending on your version of Windows, the computer may go through an "Add New Hardware" routine.

- Click on the Setup button. You will be prompted to select USB or Serial COM Port connection. Select USB then click Continue.
- 7. A Setup window will appear. All fields should be automatically filled in, confirming that DicksonWare has recognized the logger. Should all fields appear blank, the logger is not recognized by the PC. Refer to "Troubleshooting" section.
- 8. Once DicksonWare recognizes the logger, press the Clear button. This will delete all data currently stored.
- 9. Your logger is now ready to be placed in the desired data logging location.

# ii. Sub 10 Second Interval: Selecting this

- automatically activates "Water Hammer" mode with a sample of 1 second
- iii. Stop or Wrap When Full: Stops logging when logger is full or writes over oldest sample points when logger is full
- c. Setup/Channels
  - i. Name Logger Channel
- d. Setup/Display Scale
  - i. Logger: Set the scale displayed on unit display
  - ii. DicksonWare: Set the scale displayed when data is downloaded to DicksonWare

**Note:** To achieve longer battery life during operation, use a less frequent sample rate, disconnect the unit from the USB port when not downloading data, limit the frequency of SD card transfers, and do not fully insert the SD card unless downloading.

Average of all the data collected. You can customize the Min, Max and Avg data to show only the desired information.

#### **EXPORT DATA**

A snapshot of your graph or a real-time graph of points can be easily exported to other programs such as Excel or PowerPoint.

**Note:** For detailed instructions on how to use the above features, click on the Features button in DicksonWare.

## LOGGER OPERATING INSTRUCTIONS

**Note:** These loggers have a continuous display that cannot be disabled.

#### DOWNLOAD TO SD:

Pressing this button will download any data stored on the logger to the removable SD card. Once pressed, a countdown from 100 will start. DO NOT remove the SD card until the countdown is complete and the unit displays current readings.

**Note:** Leaving the SD card installed in the logger will reduce battery life by 50% and will damage the SD card port if the cap is screwed back on. If you notice "Err" on the display, please refer to the "Troubleshooting" section.

#### MIN/MAX:

Pressing this button will start the Min/Max display cycle.

#### CLEARING MIN/MAX VALUES:

To clear the stored minimum and maximum values, hold the "MIN/MAX" button down for 3 seconds until "clr" appears on display.

**Note:** DicksonWare shows the minimum and maximum values of the downloaded data. These could be different than the values displayed on the unit itself. For example, your logger is set for a 5 minute sample rate, which is good for about 224 days. After 5 days, you clear the "MIN/ MAX". After another 6 days, you download the data from logger onto your computer. The Min/Max displayed by the logger is the Min/Max for the last 6 days. The Min/

# TROUBLESHOOTING

#### LOGGER IS NOT RECOGNIZED BY PC WHEN CONNECTED VIA USB

- 1. Make sure the logger has a fully powered battery.
- DicksonWare: Make sure that USB is selected under File > Preferences > Communications.
- 3. Verify that you are using a USB data cable.
- 4. Plug the USB cable into a different USB port on your PC.
- Remove all power to the logger (this will not cause the unit to lose any data within the logger, but you will have to start the unit logging again using DicksonWare) unplug the USB cable, power the logger back on, then reconnect the USB cable.
- 6. If the cap was not properly secured, condensation may have gotten into the logger. Allow the logger to sit (with the cap removed) in a warm dry environment for 24 hours. Clear memory and try again. If the logger is in a location where it is exposed to direct moisture, applying a thin layer of

Max shown on DicksonWare is the Min/Max for the entire 11 days.

#### **REPLACING THE BATTERY:**

Battery type: DL123 Lithium Battery (Qty 1) If the battery is low: Press the Clear button before replacing battery to ensure uninterrupted logging. A dummy reading of -42 PSI marks the point where logging resumed once the battery was replaced.

#### If the battery loses power before being replaced: The

logger will resume logging once the battery is replaced. A dummy reading of -42 PSI marks the point where logging resumed once the battery was replaced.

**Note:** The logger does not keep track of time when power is lost. The time stamp assigned to all data saved after power is restored will be off. Clearing the logger via DicksonWare will restore the correct time/date.

#### **DISPLAY FEATURES:**

- 1. Low Battery Indicator
- 2. Unit of Measure Indicator
- 3. Water Hammer Mode Indicator
- 4. Logger Full Indicator (logger has stopped logging)
- 5. Min/Max Readings

#### IP RATING:

- 1. This logger has an IP rating of 68
- 2. A silicone lubricant must be applied to the cap O-ring in order to achieve these results.

silicone grease to the gasket will improve the water resistance of the cap seal.

7. If possible, try another PC.

#### SD CARD ERROR CODES

- Err 1 No SD card
- Err 2 SD card locked or protected
- Err 3 Wrong size file (too big) or no data to log yet
- Err 5 Trouble writing file to SD card
- Err 14 This is a generic fault code. There is something wrong with the card (full or not formatted correctly) or there is a hardware issue (a bad connector or the SD card cannot be read).
- Err 16 Trouble accessing SD card
- Err 23 SD card requires reformatting
- Err 66 SD card full