# PR2000

Pressure Data Logger with LCD Screen



# PRODUCT USER GUIDE

To view the full MadgeTech product line, visit our website at **madgetech.com**.

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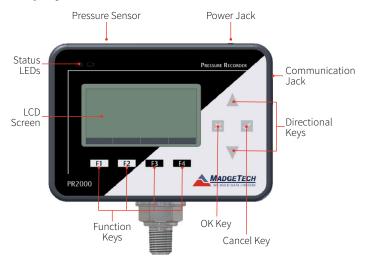




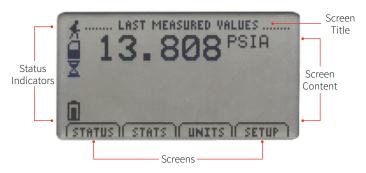
## **Product Overview**

The PR2000 is a pressure data logger with LCD display. The device features an IP rating of 65, which means it is dust proof and splash proof making it available to be used outdoors. The convenient LCD provides access to the current pressure reading, as well as minimum, maximum and average statistics. A trending graph is also displayed of the last 100 readings.

## **Display Overview**



#### **LCD Screen Overview**



### **Status Indicators**



Battery Power (Full, Half-full, Empty)



Memory Remaining (Empty, Half-full, Full)



Device is running



Device is stopped



Delay Start



Wait Icon (device is busy)



Device reset has occurred



External power present

## Installation Guide

## **Installing the Interface Cable**

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

## **Installing the Software**

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

## **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 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 USB 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.

## **Device Functions**

## **Changing Display Units**

The PR2000 comes with factory default display units of PSI for pressure and the real-time pressure graphing feature.

To change the units from the **Home Screen**:

- 1. Press 13 to view the Units Screen
- 2. Press **F1** for **pressure** or **F2** for **pressure** graph
- 3. Scroll through the available units using  $\triangle V$

## **Checking Memory Status**

A status icon appears on all screens representing memory, but further information including percent memory left and number of readings taken can also be viewed.

To check the memory status from the **Home Screen**:

- 1. Press F1 to view the Status Screen
- 2. Press 12 to view memory status information

## **Checking Power Status**

A battery status and external power status (if available) icon appear on all screens, but per-cent battery power remaining and external power presence as well as battery type, current battery voltage, and current external voltage can also be viewed.

To check the power status from the **Home Screen**:

- 1. Press 14 to view the **Device Configuration Menu**
- 2. Press F2 to access the power options
- 3. Press 4 and 4 again to view the **Power Status Screen**, including battery power percent remaining and the presence of external power. Battery type and battery voltage are also displayed, as well as external power voltage (if connected).

## **Changing LCD Contrast**

To change the LCD screen contrast from **Any Screen**:

1. Press  $\times$  +  $\wedge$  to increase or  $\nabla$  to decrease

## Screen Descriptions

#### **Main Screen**

Displays last measured values.



#### Status Screens



**Run Parameters** 



**Memory Status** 



**Date and Time** 

#### **Statistics**



**Statistics Menu Screen:** Displays options available within the statistics menu



**Channel Statistics:** Displays statistics



Type Statistics: Displays statistics from the pressure channel



**Statistics Information** Screen: Displays current statistics information

## **Device Configuration Menu**

Displays options available within the device configuration



- **F1** = DISPLAY: enters Adjust Visibility screen
- F2 = POWER: enters Power Modes screen
- F3 = INFO: goes to Device Information screens
- F4 = EXIT: returns to main screen
- $\times$  or  $\sqrt{\phantom{0}}$  = returns to main screen
- ▲ ▼ = no function

## Device Reset

This device includes two reset options, Hardware and Power Interruption.



Hardware Reset: Displayed as notification when a hardware reset has occurred.



## **Power Interruption:**

Displayed as notification when power is interrupted during device operation.

- F1 = OK: accepts notification and displays main screen
- F2 = no function
- F3 = no function
- F4 = no function
- $\times$  = no function
- = accepts notification and displays main screen
- ▲ ▼ = no function

## Device Maintenance

## **Battery Replacement**

Materials: 3/32 inch HEX Driver (Allen Key) and Replacement Batteries (6 AA)

- 1. Remove the cover from the device by unscrewing the four screws.
- 2. Remove the batteries from the compartment and unsnap it from the connector.
- 3. Snap the new batteries into the terminals and verify it
- 4. Replace the cover taking care not to pinch the wires. Screw the enclosure back together securely.

**Note:** Be sure not to over tighten the screws or strip the threads.

#### 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.



## 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**.

