TOUCHSCREEN DATA LOGGER MANUAL

This manual applies to the following product: TSB - Touchscreen with USB connectivity

TSB Touchscreen Logger

- 1. Touchscreen Logger
- 2. Replaceable Sensor(s) Purchased Separately
- 3. AC Adapter
- 4. Mounting Kit

All instructions and information are given for the base model Touchscreen (TSB):

- 1. Open the box!
- 2. Plug your Replaceable Sensors into the Touchscreen Unit.
- 3. Plug your Touchscreen into AC Power.*
- 4. That's it!

The Touchscreen's Graph functions as the home screen for the Touchscreen. Data is displayed at user-selectable time ranges, and users can zoom and scroll through data easily with the Touchscreen's interface.

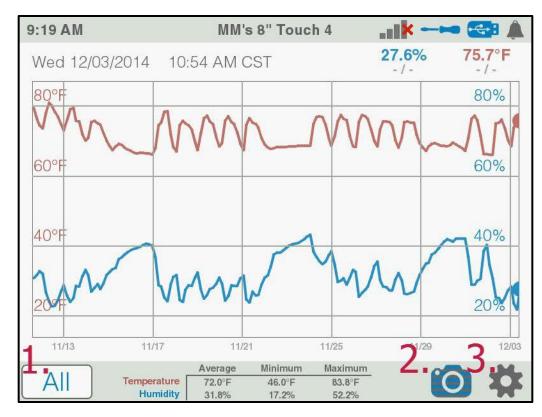
Downloading Data via USB

- 1. Plug a USB Flash Drive into Your Touchscreen Logger.
- 2. Navigate to the "Stored Data" page in the device settings.
- 3. Push "Save to USB"
- 4. Plug USB Flash Drive into Your PC.
- 5. Download the data via DicksonWare Software (see "Working with DicksonWare below")

Saving a Screenshot via USB

- 1. Plug a USB Flash Drive into Your Touchscreen Logger.
- 2. Navigate to the your device home screen, or graph screen.
- 3. Push the Camera Button, in the bottom right corner of the screen.

There are 3 Key Buttons on the Touchscreen's Graph Screen, as shown in the image below:



- 1. The Data Selection
 Button: This button
 allows you to see various
 intervals of data, and to
 reset the view after you
 scroll or zoom in the
 graph.
- 2. The Screenshot
 Button: Pressing this
 button, while having a
 USB Flash Drive plugged
 into your logger, allows
 you to save a JPEG of the
 data currently shown on
 your Touchscreen.
- 3. The Settings Button:
 Allows you to access your devices settings pages, which include: Device Information, General Settings, Graph Settings, Network Settings, Alarms, Calibration Options, USB Download Feature, and the Settings Lock Tool.

The Touchscreen's graph allows users to scroll through, and zoom in on their recorded temperature, humidity, or other environmental data. Users do this by:

- Pinching in and out to zoom in on your data
- Swiping left and right to scroll throw your data

Your Touchscreen's Graph has a variety of features and settings. Working with the buttons and data is below. However, we wanted to call your attention to the following features, displayed on across the top of your Graph:

- Current time of day (top left corner)
- Name of device (top center)
- Touchscreen settings such as alarm, connection, calibration, and attached USB (top right corner)

Also, across the bottom of your graph, you will see the following:

- The Data Selection Button (explained below)
- The Screenshot Button (explained below)
- The Settings Button (explained below)
- Your Data Overview



> Your Data Overview is a snapshot summary of the data your graph is currently showing. It displays the average, minimum, and maximum data, for that currently selected time period.

If you push the Settings Button on the home screen of your Touchscreen device, you are taken to a menu that features seven buttons on the left, and thus seven Settings Menus that allow you to change some of the functions on your device, and download data to a USB. Those Menus are, from top to bottom:

- Information
- General Settings
- Graph Settings
- Network Settings (For TWP and TWE devices only)
- Alarm Settings
- Calibration Settings
- Stored Data
- Screen Lock

Information

The Information Screen of your Touchscreen device features no buttons, and no changeable settings. Instead, it provides an overview of what your device is, and the essential components currently featured on your device. That information is:

- Model Number
- Serial Number
- Firmware Version
- Attached Pods
- Attached Channels

This information is valuable for auditors, and it is important to know whenever you are troubleshooting a device.

General Settings

On the General Settings Screen, users can change the following features of their Touchscreen Device:

- Device Name: Name your device something meaningful to your application.
- Time Format: 12hr or 24hr
- Temperature Units: Celsius or Fahrenheit
- When Full: Action when device memory is full overwrite or stop logging
- Sample Rate: Select an appropriate sample rate
- Time Zone
- Date and Time: Set the Date and Time of the Device
- DST Active: Daylight Savings Time
- Screen Saver: Automatically dim the screen after a set amount of time
- Brightness: Adjust the brightness of your screen.

Graph Settings

On the Graph Settings Screen, users can change the following features of their Touchscreen's Graph:

- Display View: This allows users to switch between a Real-time Text Display and a Graph Display for the Home screen of their device.
- Display Statistics: This allows users the choice whether to display the summary statistics found at the bottom of their Graph Screen.
- Vertical Scale Auto: This feature allows you to force their graph to automatically scale the data shown
 to fit your screen, regardless of how much you may scroll or zoom out of your temperature, humidity, or
 other variable range.
- Variable Max's: You have the ability to place maximum value on your temperature and humidity display. For example, you can choose to only view humidity data that falls between 50%-65% relative RH. This feature lets you zoom in on data more efficiently, especially if your data tends to fall between a smaller value than 0-100%RH, or a small temperature.
- Channel Settings: This feature allows you to enable specific channels and set min/max's for those channels
 - Display Display this channel on the home screen (maximum of 2 can be displayed but any connected channels are recorded).
 - Min/Max If this is turned on, you'll see the high and low lines (lighter shade)

Alarm Settings

To configure the alarm, follow these steps:

- 1. Enable the aralm (up to two per channel or one high and one low per channel).
- 2. Select an above or below condition to trigger the alarm.
- 3. Set the value the reading must be above or below in order to trigger the alarm.
- 4. Enable the audible alarm if desired (if disabled, a message will still appear on the screen).

Readings To Trigger (alarm delay):

The number of readings that an alarm condition must exist until an alarm is triggered. Example: if sample rate is 5 minutes and "Readings To Trigger" is set at 2, the unit must be in and stay in an alarm condition for 2 consecutive readings (10 minutes) before an alarm is triggered.

Stored Data

Downloading Data – To download the data from your device, plug in a USB flash drive and follow these steps:

- 1. Select the Save to USB icon.
- 2. Select the desired export...
 - a. **CSV (All channels)** Export all stored channels on the device, including old replaceable sensors that were not cleared, in a CSV format.
 - b. **CSV (Connected channels)** Export only stored channels for the replaceable sensors currently connected to the device in a CSV format.
 - c. **DicksonWare (All)** Export all stored channels on the device including old replaceable sensors that were not cleared. Compatible with the DicksonWare software and maintains 21CFR11 compliance.
 - d. **DicksonWare (Displayed)** Export displayed channels only. Compatible with the DicksonWare software and maintains 21CFR11 compliance.

Screen Lock Settings

- Enabled: Toggle the settings lock on/off
- Timeout: How long until the screen lock is enabled
- Set Passcode: Set the 4-digit passcode and confirm it before it is saved
- Lock Now: Engage lock screen immediately