TITAN S8

Portable Data Acquisition Logger

Product User Guide

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Chapter 1: General

Device Overview

The MadgeTech Titan S8 is a portable, multi-use industrial data logger with eight channels and a user-friendly touchscreen interface. This versatile logger measures and records temperature, current, voltage and pulse simultaneously and displays data in real time. The Titan S8 is compatible for use with many thermocouple, RTD or thermistor probes as well as a number of voltage output sensors, current switches, transmitters and transducers.

Versatility makes Titan S8 the perfect companion for industrial engineers, quality assurance professionals, compliance officers or automotive technicians. The Titan S8 is very easy to use and configure via the built in capacitive touchscreen graphic display.

The Titan S8 is a powerful, independent tool. Unlike many other data loggers, the Titan S8 delivers an all-in-one data collection and monitoring solution that does not require a PC or any downloaded software for operation.

External Features

Front   Side   Back

Power Button   Input Ports   Power Input

Tabletop Kickstand

Home Button   LCD Touchscreen   USB Port

Mounting Keyholes

» Power Button: To power on and power off the device, hold down the Power button for 3 seconds.
» Home Button: The Home button will return the user to the home screen. (home screen details on page 8)
» Input Ports: The Titan S8 features 8 sensor channel inputs plus one alarm port and a ground (details on pages 5-6).
» LCD Touchscreen: 5 inch LCD capacitive touchscreen.
» USB Port: The Titan S8 has a built-in USB port for downloading data to a flash drive.
» Power Input: Charging port.

Device Orientation

The Titan S8 display can rotate 180 degrees depending on the desired orientation of the device. This option is available from the Settings menu under the Display section. Please note: Power restart required in order to apply screen rotation
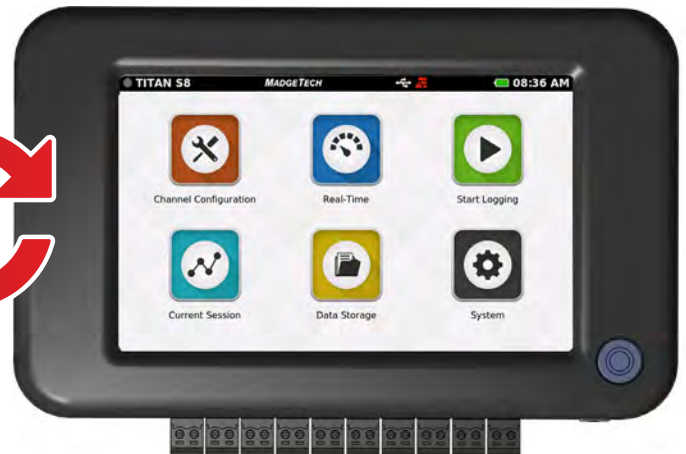
Desktop Orientation
For handheld and tabletop use, the inputs will be on the top.

Wall Mount Orientation
For wall mount use the unit will be rotated so that the inputs will be on the bottom.
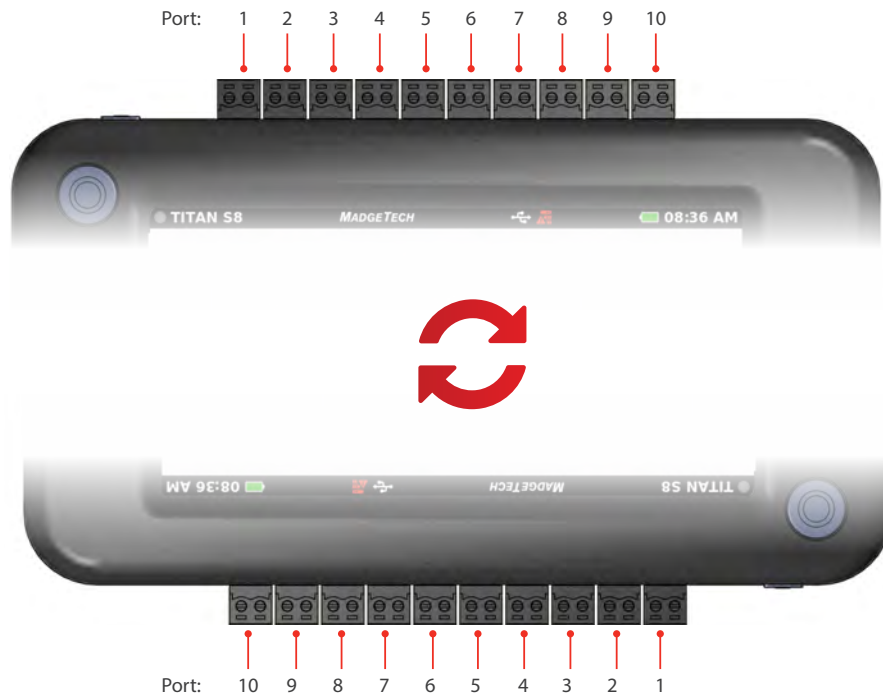

Tabletop Orientation
The Titan S8 features a built in kickstand on the back of the device for use on a flat surfaces.

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Device Ports:

The Titan S8 features 10 ports. Please refer to the image below for the port number as it relates to device orientation.

Channels and Functions

Ports 1 thru 8 are sensor input channels (Temperature, Current or Voltage)
Port 9 serves as an alarm output
Port 10 serves as a ground for the device

Frequency or Pulse Counter

Can only be used on port 1

3-Wire and 4-Wire PT100 RTD Sensors

Use ports 1-2, 3-4, 5-6, or 7-8

2-Wire PT100 RTD Sensors

Can be used on ports 1-8

Sensor Types & Measurement Ranges

Each of the 8 input channels can be individually configured for the following types and sensor ranges.

Parameter	Input Type	Range
» Current	Current input	0 mA - 24 mA
» Frequency (port 1 only)	Frequency input	20 to 20,000 Hz
» Pulse / Counter (port 1 only)	Pulse input	0 to 4,000,000,000 Pulses
» Voltage	Volt input	0 V - 10 V
» Voltage	Millivolt input	0 mV - 100 mV
» Temperature	Thermistor NTC-1 (2252)	-25 °C to +150 °C
» Temperature	Thermistor NTC-2 (10K)	-25 °C to +150 °C
» Temperature	PT100 RTD 2-Wire	-200 °C to +400 °C
» Temperature	PT100 RTD 3-Wire	-200 °C to +400 °C
» Temperature	PT100 RTD 4-Wire	-200 °C to +400 °C
» Temperature	Thermocouple J	-210 °C to +760 °C
» Temperature	Thermocouple K	-270 °C to +1370 °C
» Temperature	Thermocouple T	-270 °C to +400 °C
» Temperature	Thermocouple E	-270 °C to +980 °C
» Temperature	Thermocouple R	-50 °C to +1760 °C
» Temperature	Thermocouple S	-50 °C to +1760 °C
» Temperature	Thermocouple N	-270 °C to +1300 °C
» Temperature	Thermocouple B	+50 °C to +1820 °C

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Powering, Charging and Downloading Data

Power Button
(On/Off)

USB-C Charging Port
(Cable Included)

USB Port
(For offloading data files and
updating device software)

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Chapter 2: User Interface

Top Menu Bar

The top bar of the Titan S8 Interface features status icons and useful information to refer to while using the device.


Logging Session Indicator

Internal Memory

Alarm Set

External Memory

Current Time

Battery Level

Charging Indicator

Inactive

Delayed Start Configured

Actively Logging

Internal Memory

90% - 97% Full

97% - 100% Full
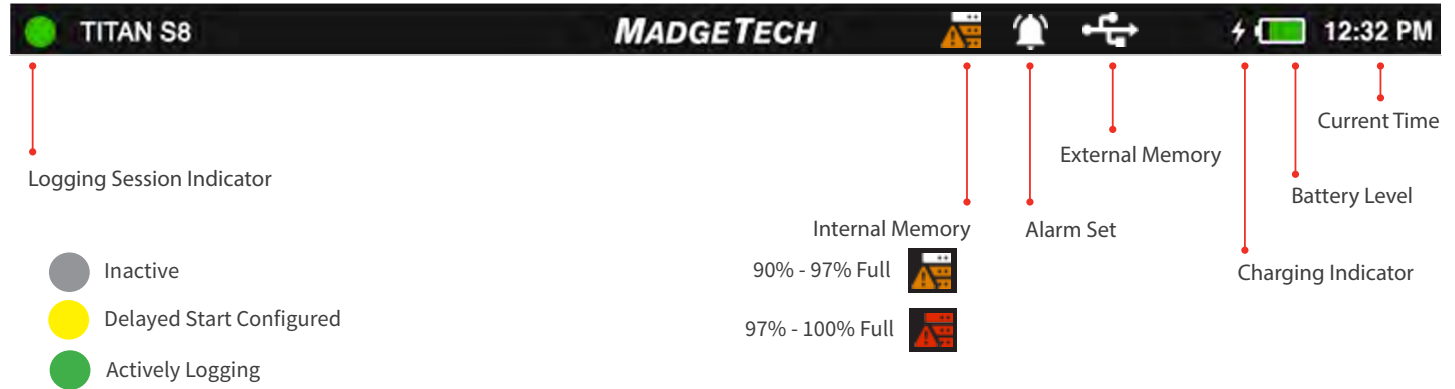
Home Screen

Home Button

The Home screen will display the following options when the Home button is selected.

» Channel Configuration: Configure parameters and options for each channel
» Real-Time: Quickly view Real-Time data for all active channels
» Start Logging: Start logging using current settings (Stop logging if device is actively logging)
» Current Session: View data from the current logging session as graph, tabular or real-time
» Data Storage: View, Copy, Delete and Add notes to logged sessions
» Settings: Access device preferences and options

Channel Configuration

Real-Time

Start Logging

Current Session

Data Storage

System
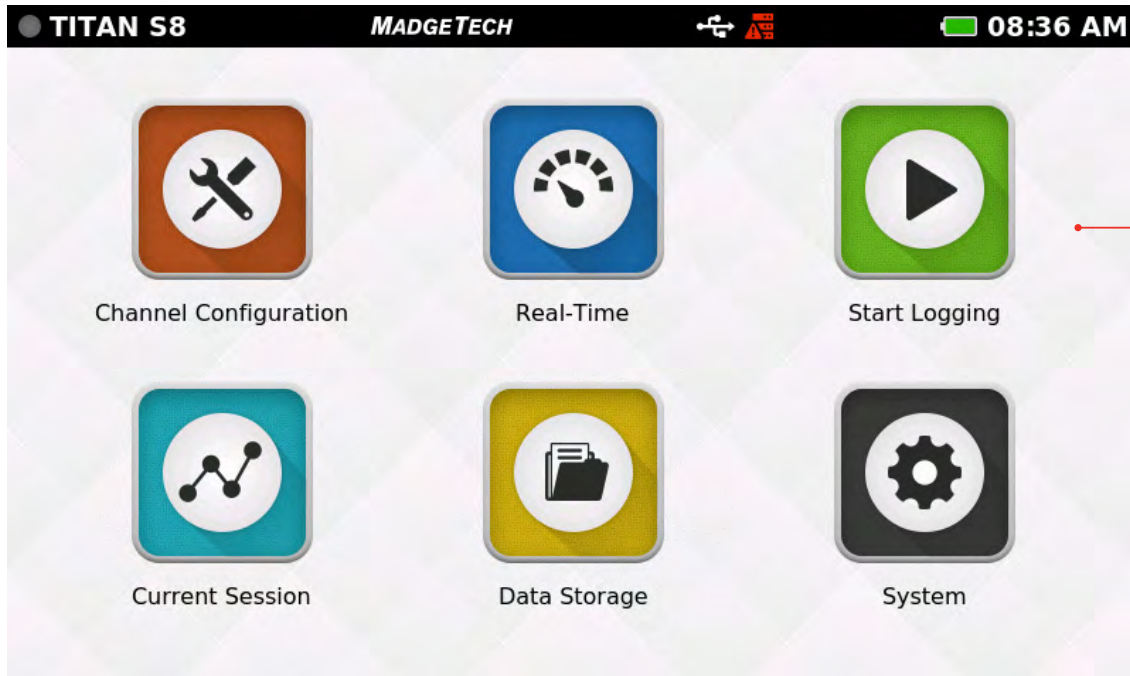
Stop Logging

The Start Logging icon will change to "Stop Logging" when device is recording.

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Follow these steps for first use or when the device is powered up for the first time, or if the battery has been removed / replaced.

» Power Button: Press and hold the Power Button for 3 seconds to power up the device.
» Screen Ready: Wait for the device to initiate, you will see the MadgeTech logo when complete.

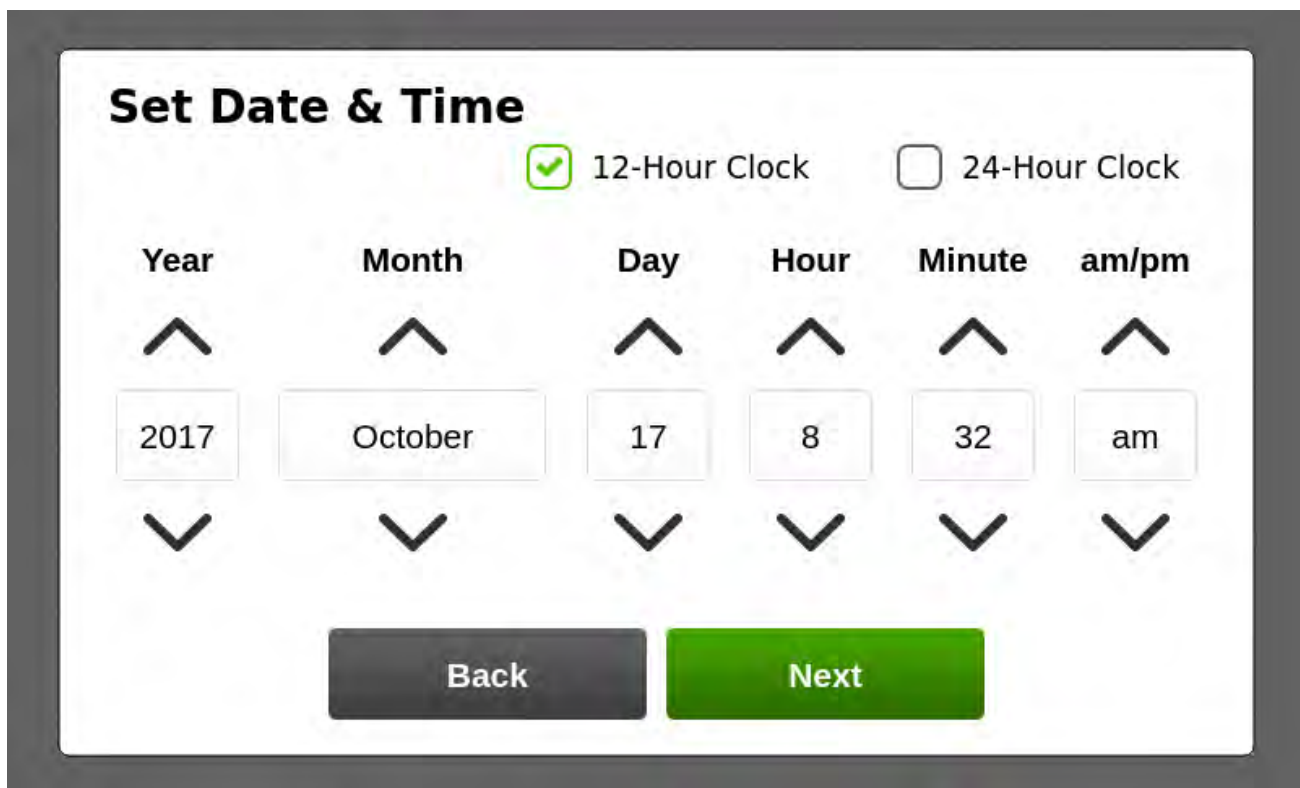## Select screen orientation

For Desktop use, inputs are facing upward.

For wall mounted use, inputs are facing downward.

Screen orientation will show up on initial power up, or if the battery has been removed / or replaced.

Please select a screen orientation.

Desktop   Wall Mount
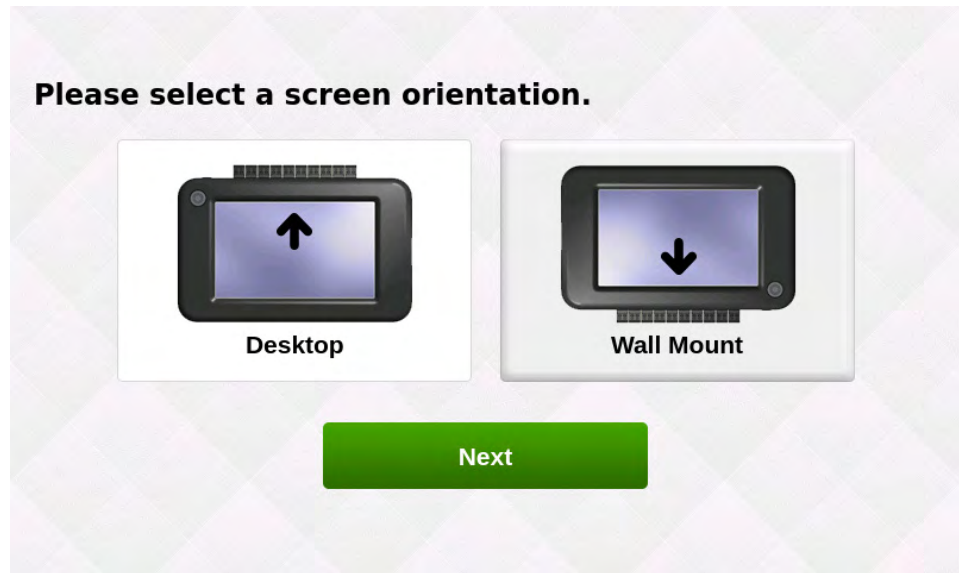
Next

Set up initial date and time

» Local Time: Enter the local date and time to be used by the device and click Next to continue to Home Screen.
» Home: When the device presents the Home screen it is ready to use.

Set Date & Time

✓ 12-Hour Clock   ☐ 24-Hour Clock

Year	Month	Day	Hour	Minute	am/pm
2017	October	17	8	32	am

Back   Next

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Channel Configuration

When the Channel Configuration icon is selected, the device will display the screen shown below

» Channel 1-8: Configure the type of channel input, units, engineering units (if applicable), alarms and user calibration adjustments.
» Update: Applies the current channel configuration to make the device ready to start logging or display real-time data.
» File: The File button will load previously saved channel configurations.
» Save: The user has the ability to save the current channel configuration so it may be loaded and used later.
» Disable All: Clears the configuration of all channels, returning them to the default disabled status.
» Cancel: Cancels changes then goes back to home screen.

Select Channel Configuration

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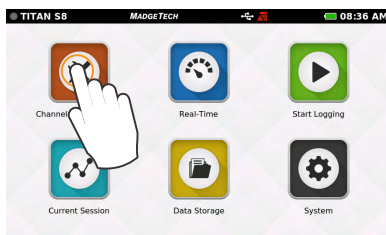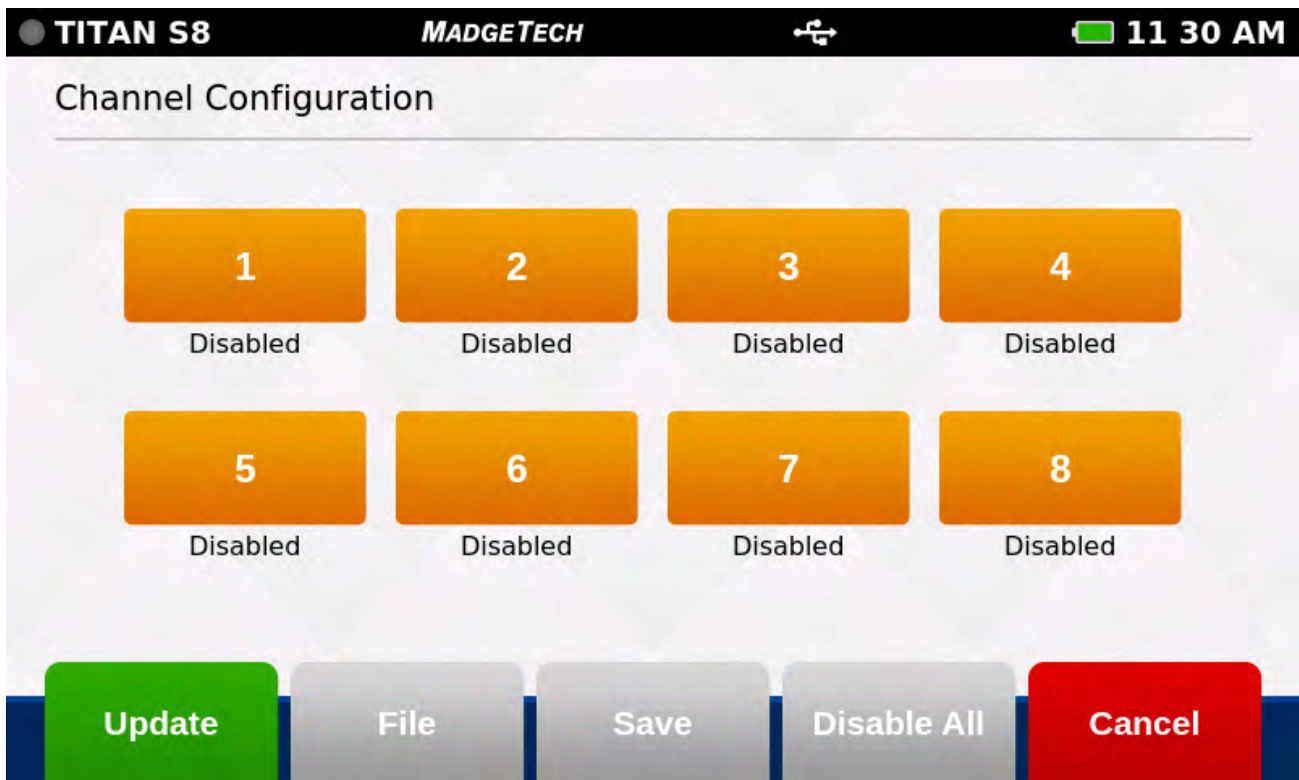
Channel Setup

When the user selects a channel, the device will display the screen shown below with the following options.

» Disable (Channel is not being used)
» RTD (RTD probe)
» TC (Thermocouple probe)
» Voltage
» Current
» Thermistor (Thermistor probe)
» Pulse (Only available on channel 1)
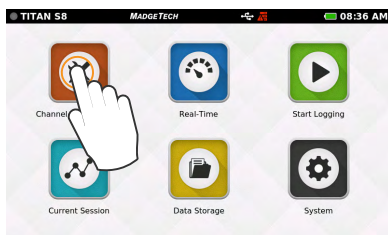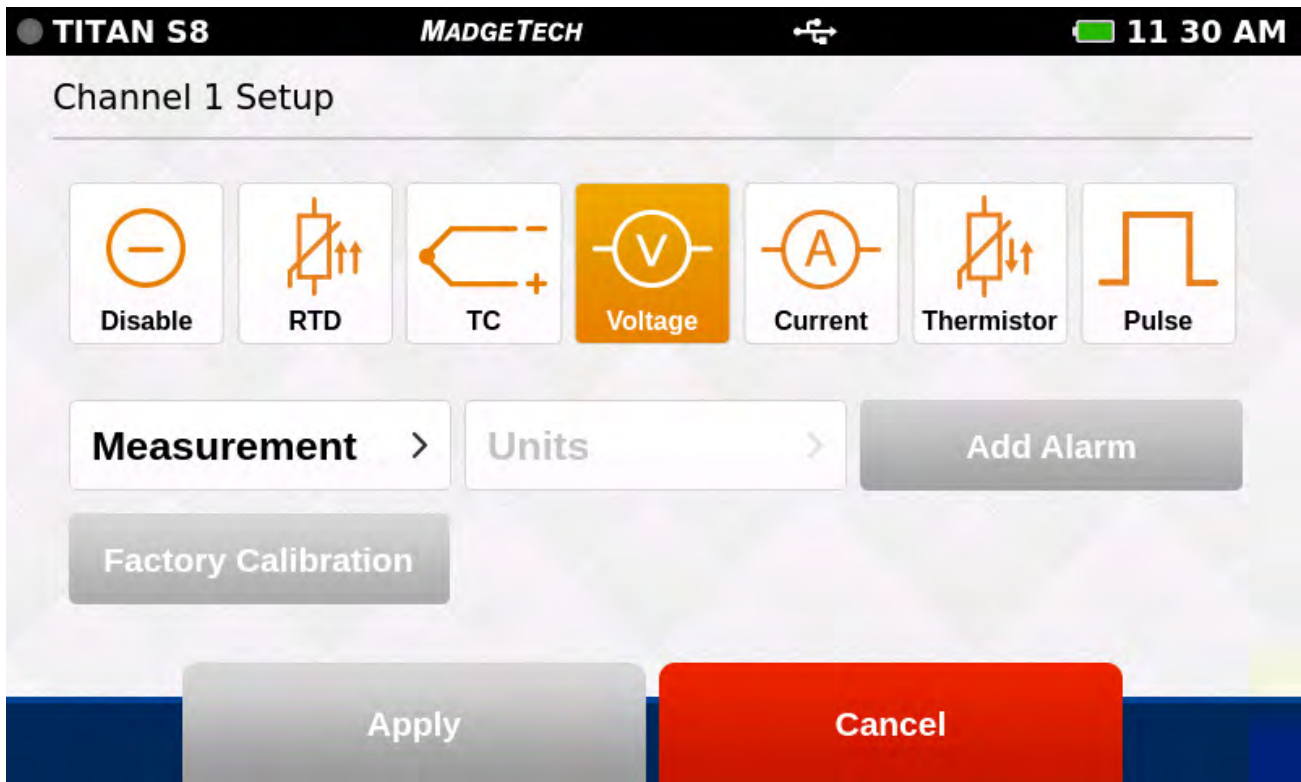

Select Channel Configuration

Select a Channel

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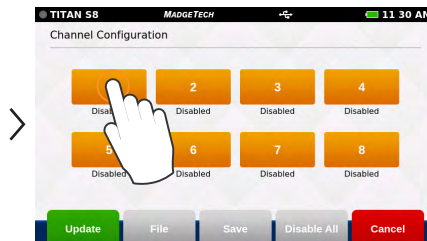
Measurement Setup

When the user selects a measurement parameter, the device will display the the relevant options for that selection.
(Example shown are the Voltage options)

Select the Measurement button to display a popup screen of relevant measurement types to choose from.
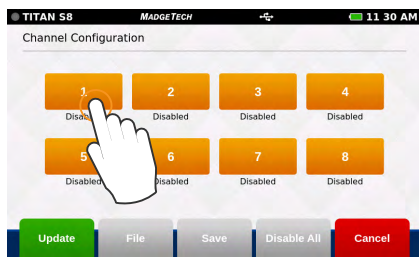
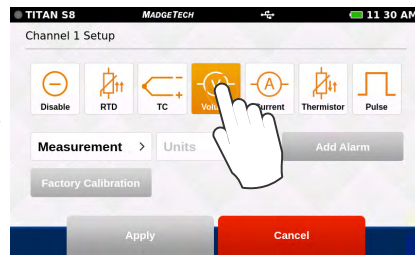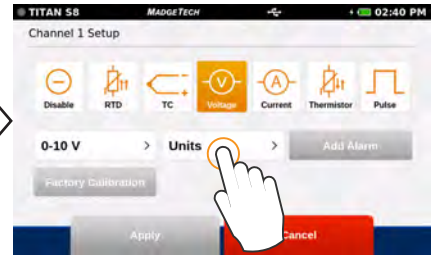Select a Channel
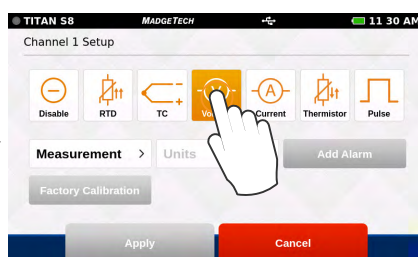
Measurement Parameter

Measurement Type

Measurement Units

When the user selects the Units button, the device will display a popup menu of the relevant options for that selection.
(Example shown are the Voltage options)

» Engineering Units: This will be an option to setup if the user selects the Voltage, Current or Pulse sensor. (see details page 14-15)
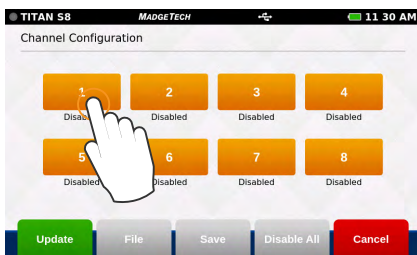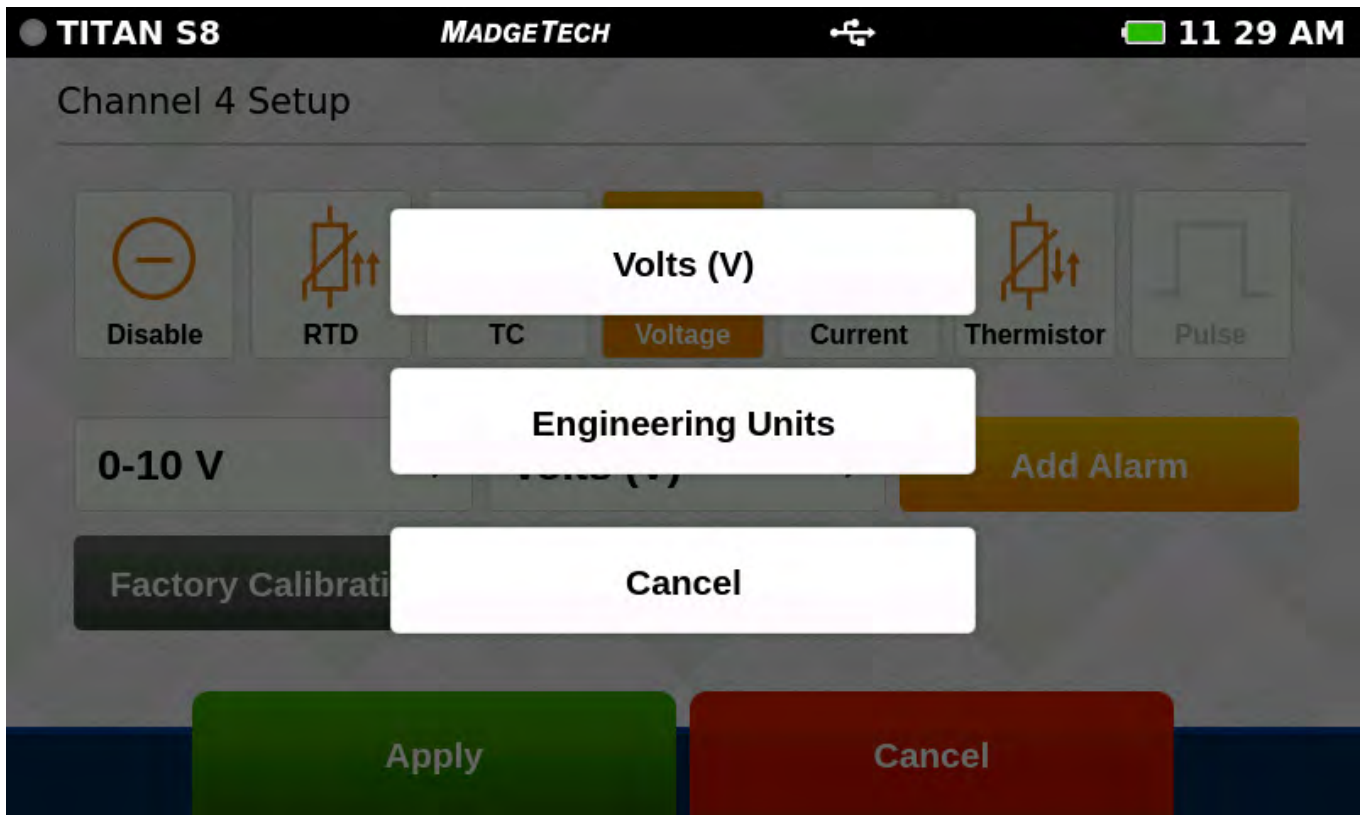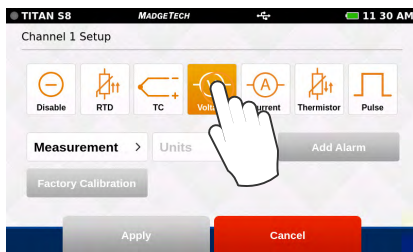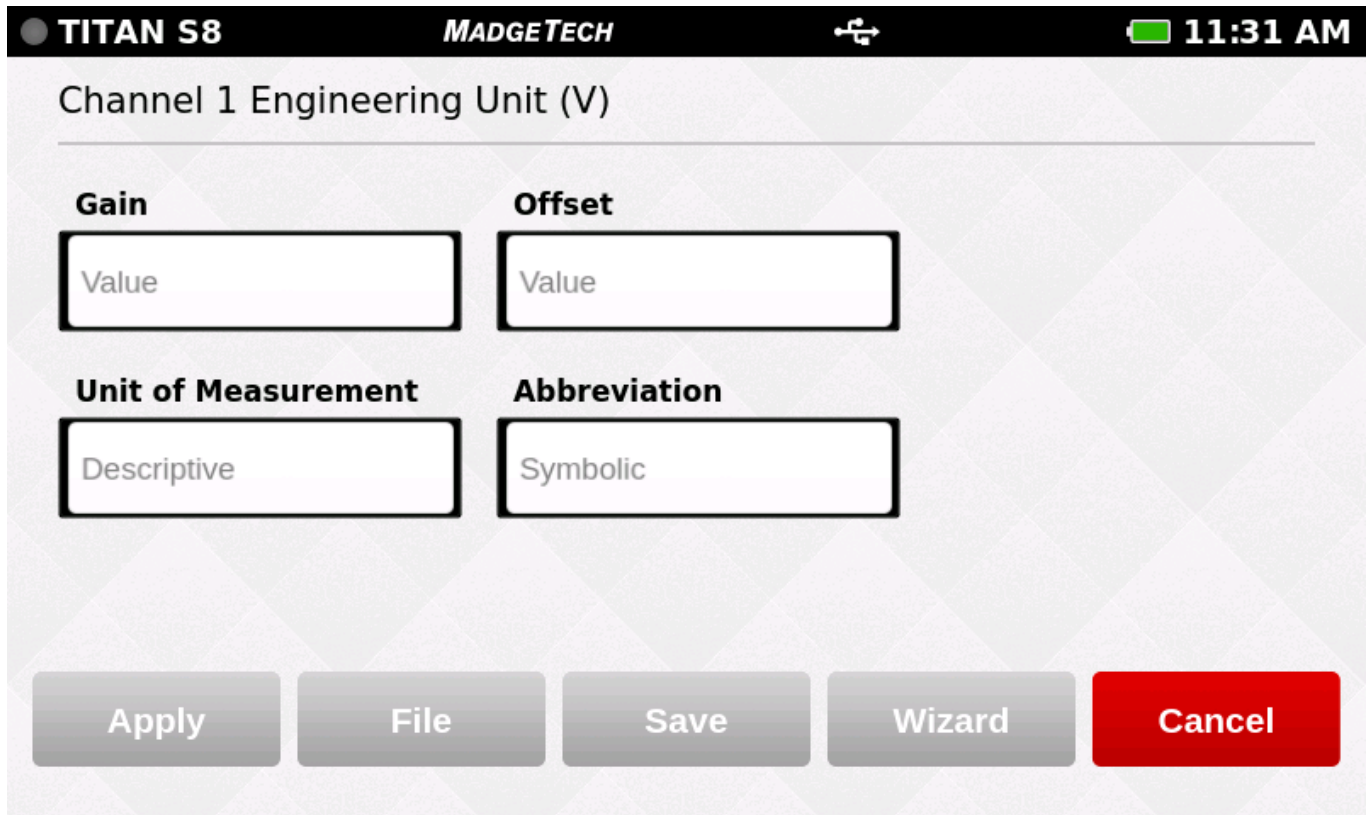

Select a Channel

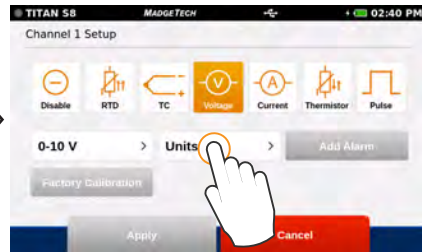Measurement Parameter

Measurement Units

Engineering Units

Engineering Units can be applied to a any channel measuring Voltage, Frequency or Pulse to display readings in a user selected custom unit of measure.
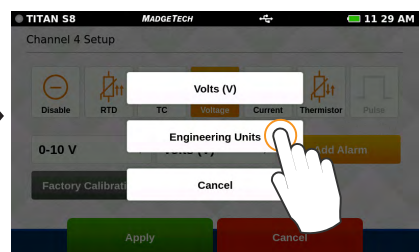
- » Gain: User selected gain value
- » Offset: User selected offset value
- » Units Label: User selected label to display
- » Apply: Saves the settings
- » File: Retrieves a previously saved Engineering Unit setting.
- » Save: Saves the Engineering Unit setting for future use.
- » Wizard: Allows the user to set up units by entering the input and output values for low and high scale points. The unit will automatically calculate the gain and offset the from these values.
- » Cancel: Returns the user to the Channel Configuration screen
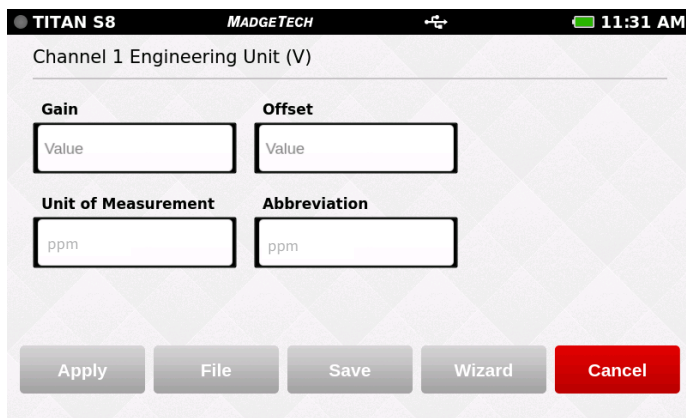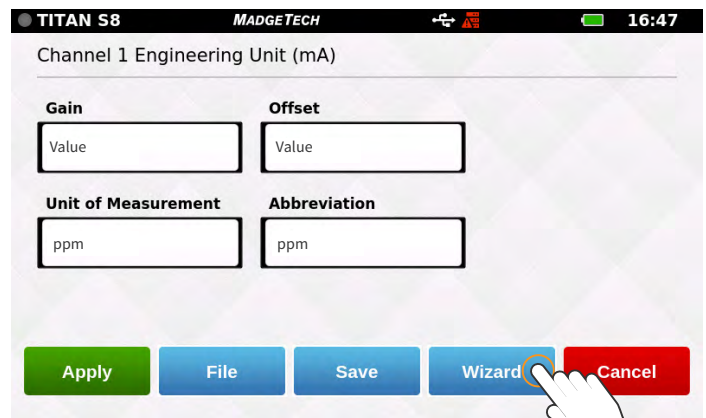

Measurement Parameter
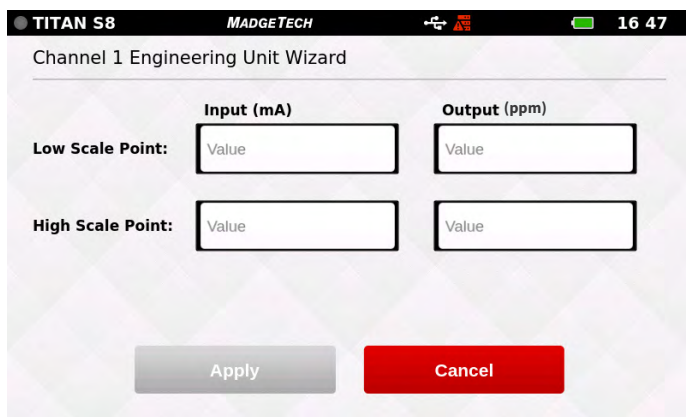

Measurement Units

Select Engineering Units

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Setting Up Engineering Units

TITAN S8   *MADGETECH*   11:31 AM

Channel 1 Engineering Unit (V)

Gain   **Offset**

Value   Value

Unit of Measurement   **Abbreviation**

ppm   ppm

Apply   File   Save   Wizard   Cancel

Enter the unit of measurement and abbreviation

TITAN S8   *MADGETECH*   16:47

Channel 1 Engineering Unit (mA)

Gain   **Offset**

Value   Value

Unit of Measurement   **Abbreviation**

ppm   ppm

Apply   File   Save   Wizard   Cancel

Click the Wizard button to launch the Engineering Unit Wizard

TITAN S8   *MADGETECH*   16 47

Channel 1 Engineering Unit Wizard

       Input (mA)   **Output (ppm)**

Low Scale Point: Value   Value

High Scale Point: Value   Value

Apply   Cancel

Enter the low and high scale point inputs and outputs and click apply.

TITAN S8   *MADGETECH*   16:47

Channel 1 Engineering Unit (mA)

Gain   **Offset**

62.5   -250

Unit of Measurement   **Abbreviation**

ppm   ppm

Apply   File   Save   Wizard   Cancel
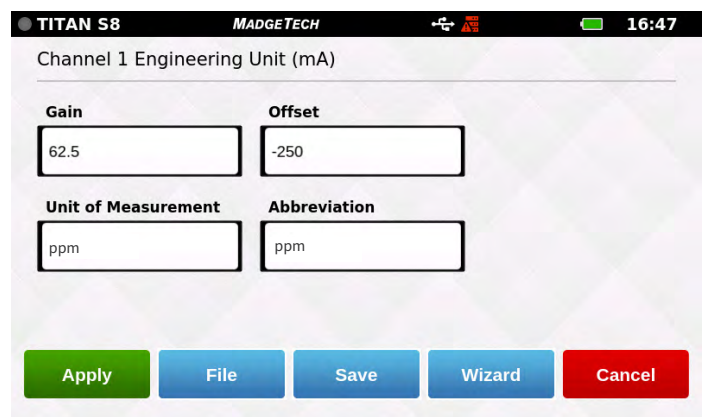
The gain and offset are automatically set. Click **Save** to save the engineering units to the channel and click **Apply** to apply the changes to current logging session.

Keyboard Function

When the user taps in any text field within the interface, the keyboard will appear. The numeric keypad appears when the Gain and Offset fields are selected. The keyboard appears when when Unit of Measurement and Abbreviation fields are selected.

To prevent the keyboard from obscuring content, the screen will always focus on the selected field and bring it into view. Once the text field is complete, the user can tap anywhere on the screen and the keyboard will disappear from view.

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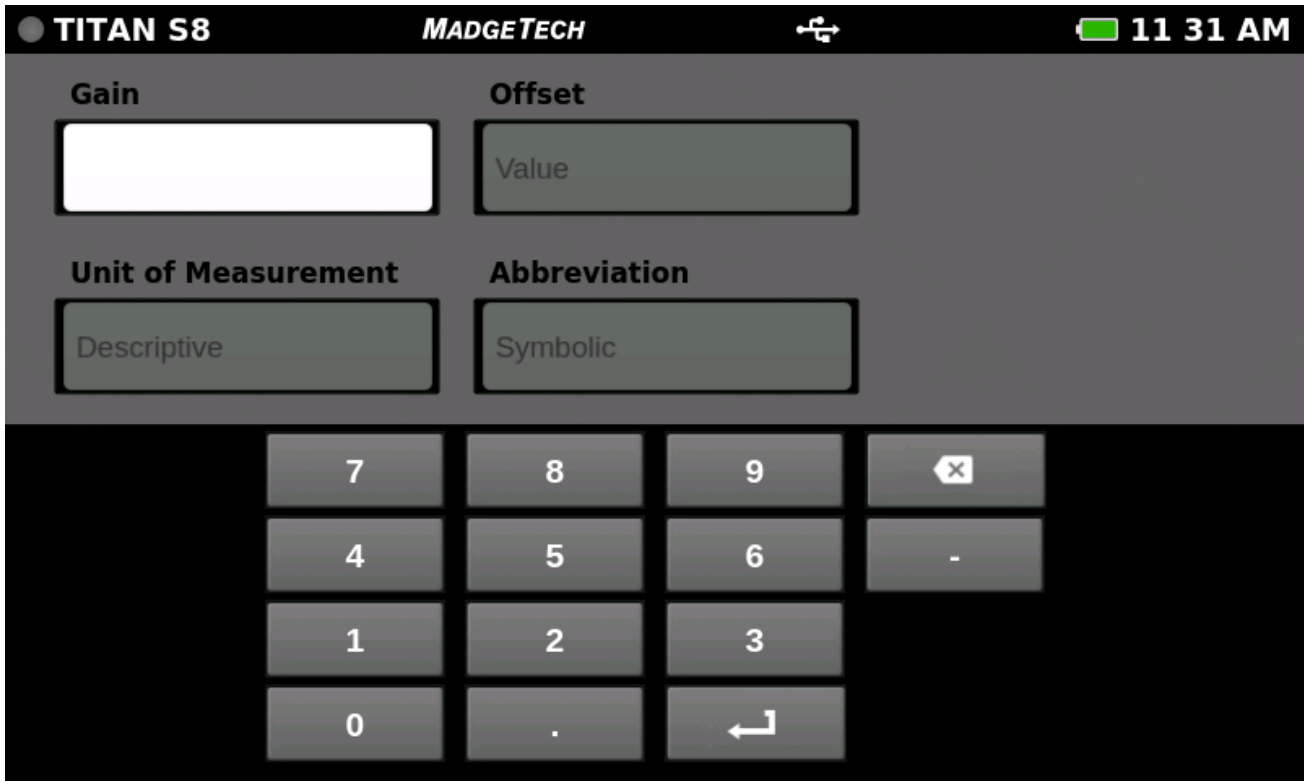
Alarms

Users can create one alarm configuration per channel with up to two alarm values per channel (above and below threshold)

- » Above: The above value indicates the high reading threshold at which the alarm becomes active
- » Below: The below value indicates the low reading threshold at which the alarm becomes active
- » Enabled/Disabled: Tap the button to either enable or disable the text field to enter desired alarm value
- » Disable All: Clears the alarm settings
- » Apply: Applies the setting to the current channel
- » Cancel: Cancels changes then returns the user to the Channel Configuration screen
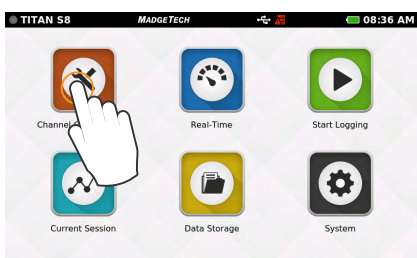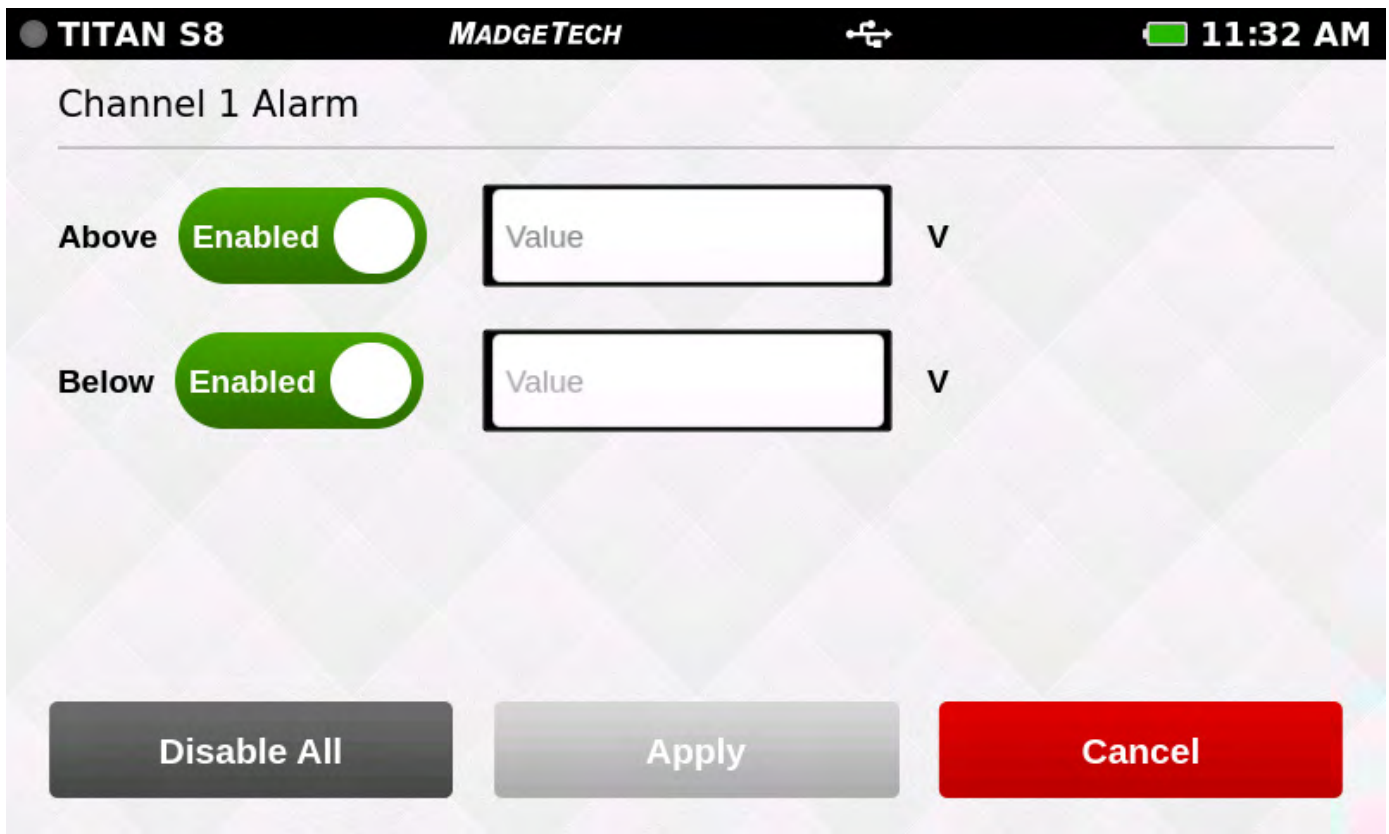
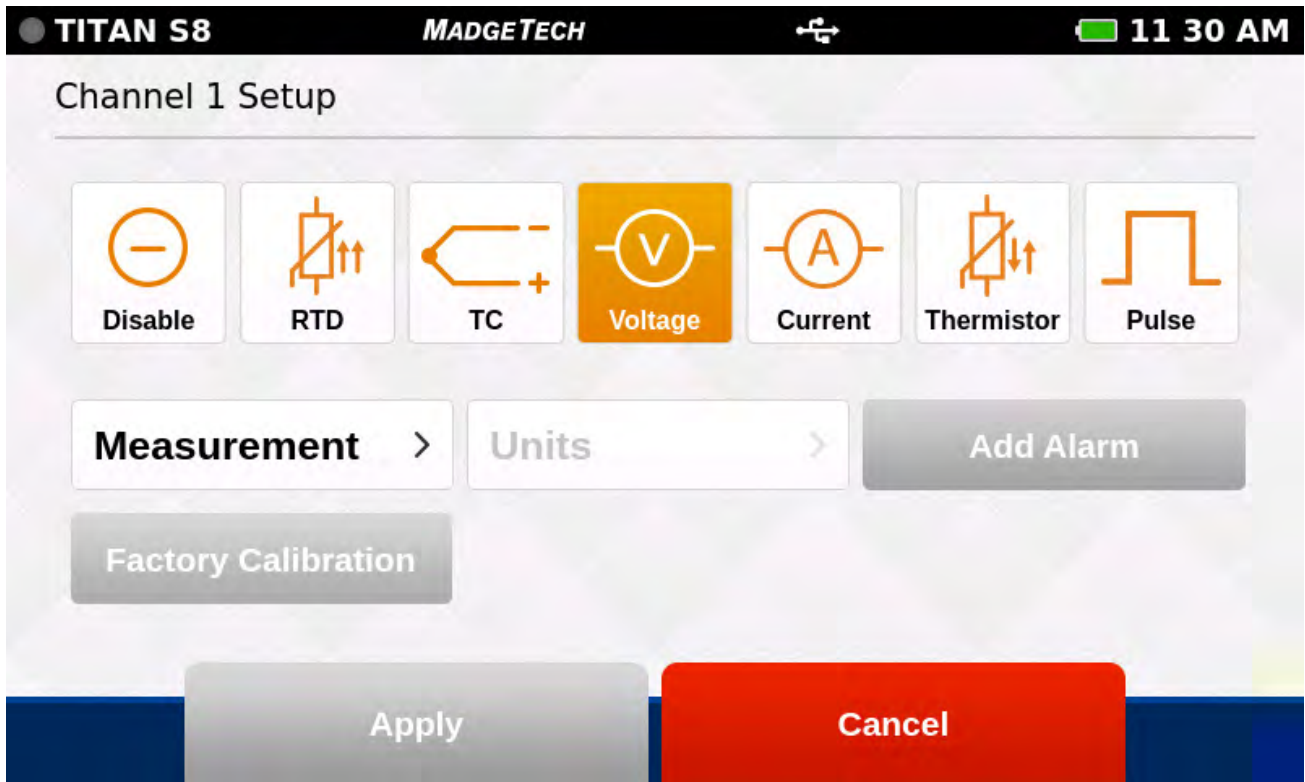

Channel Configuration
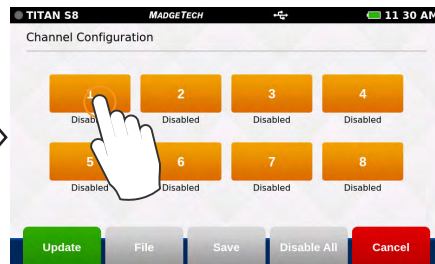
Channel Selection

Add Alarm
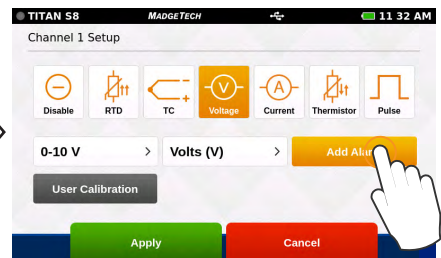
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Factory Calibration

The Titan S8 comes with a complete Factory Calibration and provides users the ability to adjust the calibration settings per channel, and roll back to the factory settings at any time. Note: For best performance and accuracy, Factory Calibration should be performed at least once every 12 months.

» Factory Calibration: Indicates the device is currently in the factory calibrated state.
» User Calibration: Indicates the calibration settings have been modified by the user.

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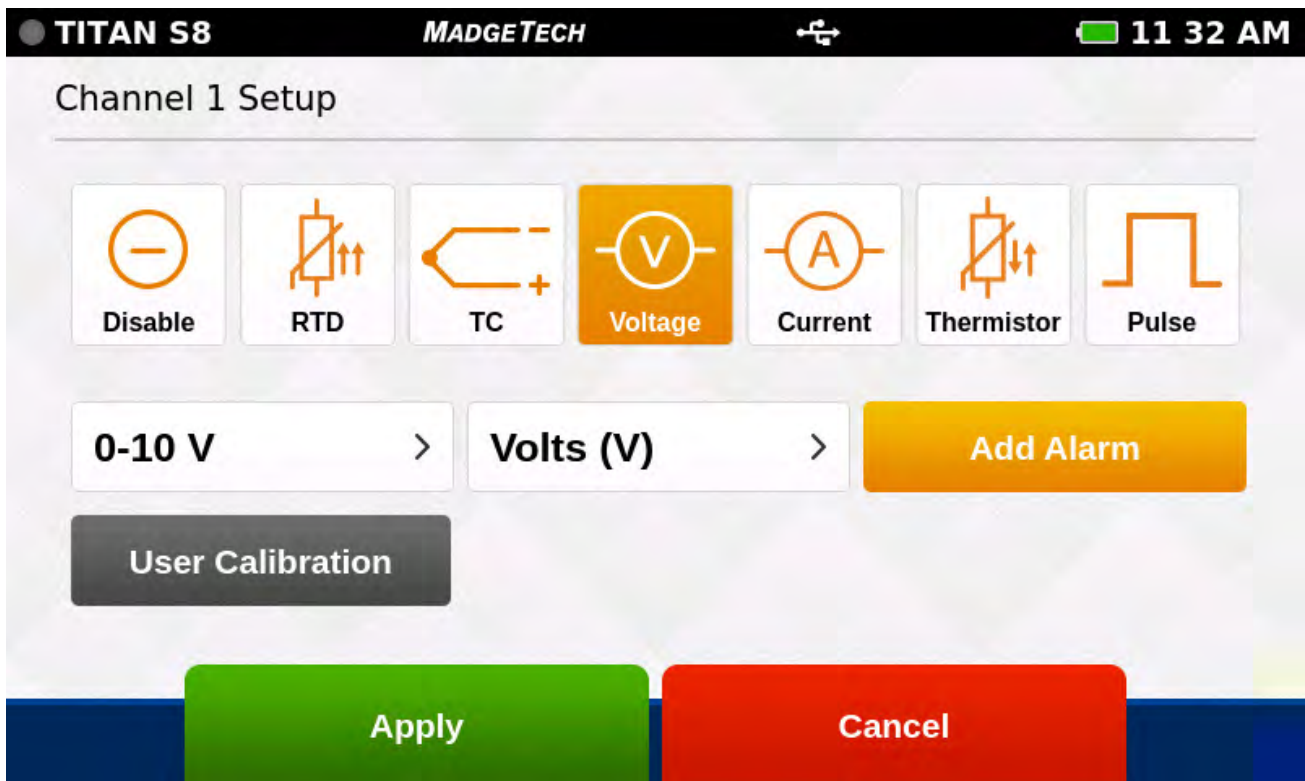
Channel Configuration Overview

An example of a completed channel configuration screen is shown below.

» View Wiring Diagram: The user will be taken to a screen to show how to properly wire the device.

» Green Channel: Enabled channel

» Orange Channel: Disabled channel

» Linked Channels / Gray Channels: 3 or 4 wire RTD sensor types can be selected for Channels 1, 3, 5 and 7. This sensor type will also occupy the next sequential channel and will be visually represented with a Link icon as seen between Channels 3 and 4 on the screen below.

» Update: Once the user has configured the channel settings, this button will apply the current settings to all channels.

» File: The File Button will load previously saved configurations.

» Save: The user has the ability to save the current Channel Configuration so it may be loaded and used in the future.

» Disable All: Clears the programmed channels to disable all.

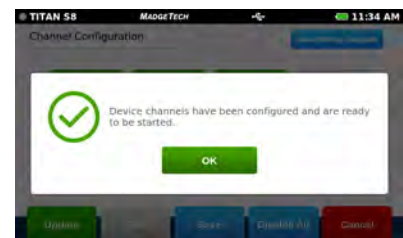» Cancel: Cancels user changes then goes back to home screen.
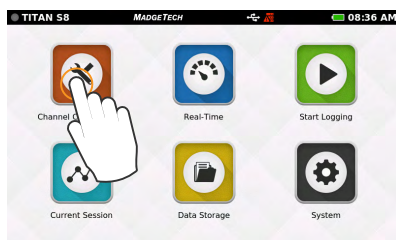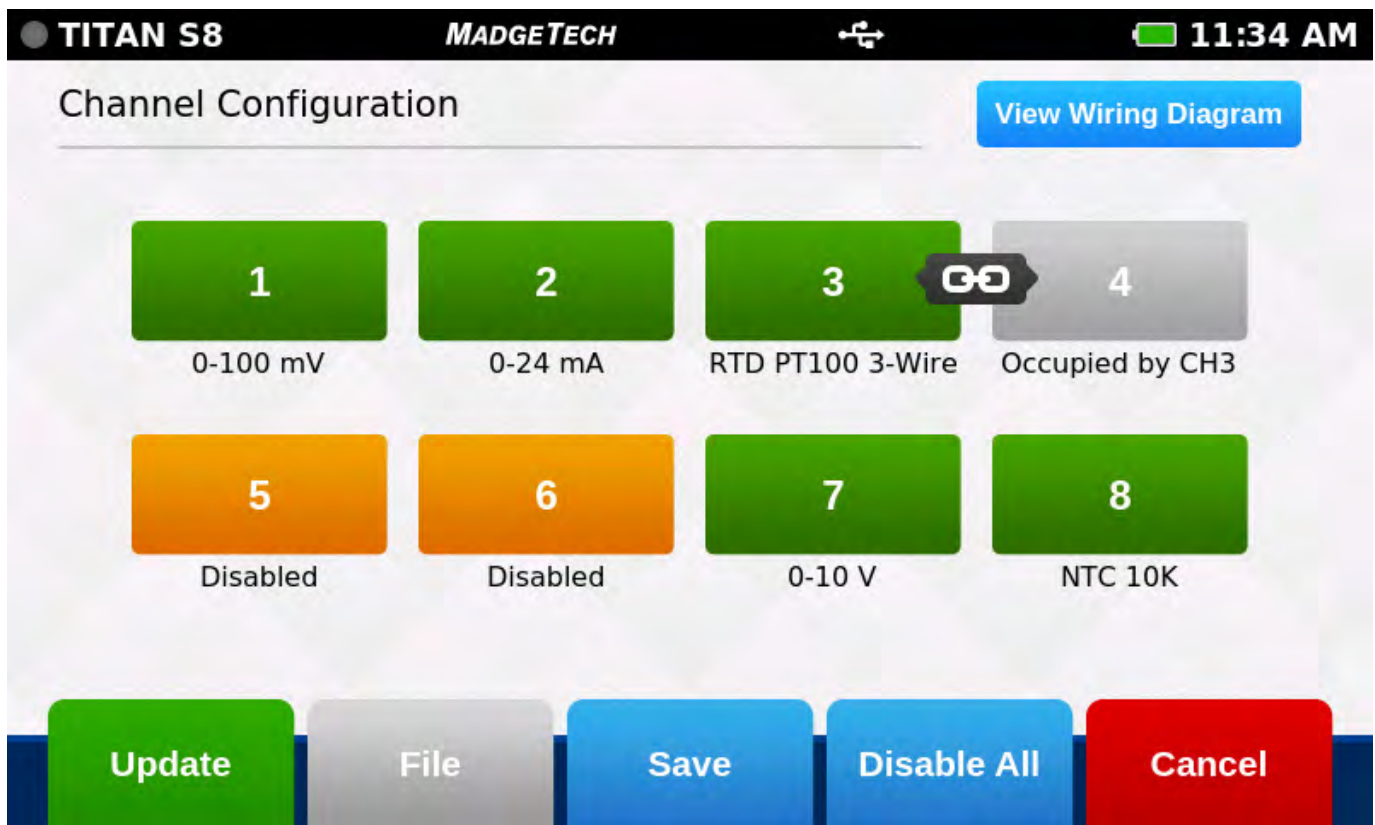
Channel Configuration
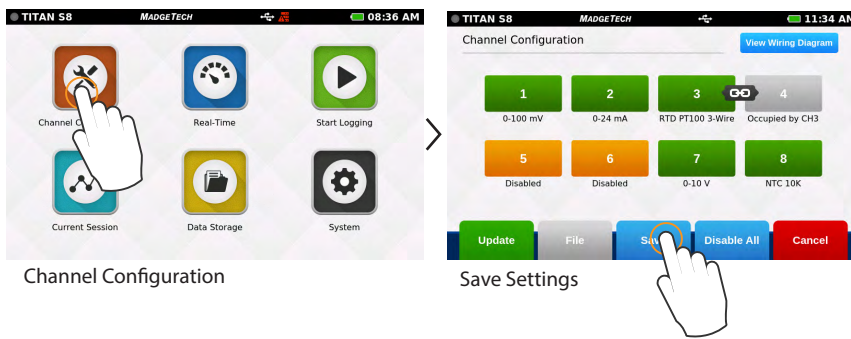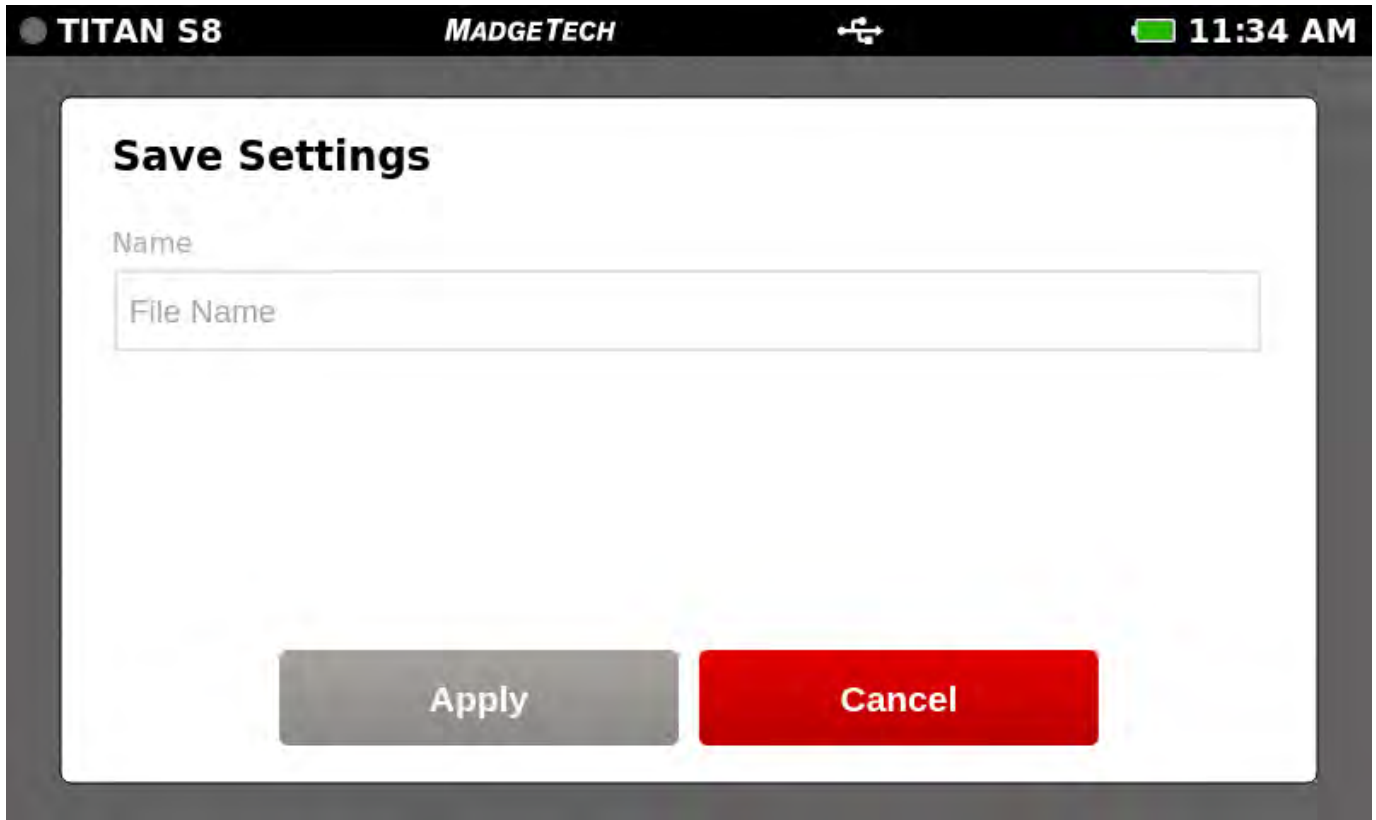
Apply Channel Configuration

Once channels are configured as desired, the user must then select Update to use those settings.

A pop up as shown to the right will confirm that settings have been applied.
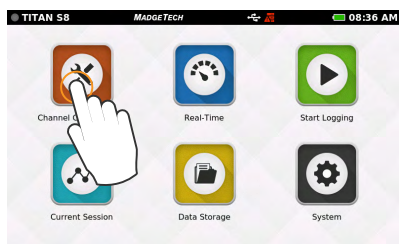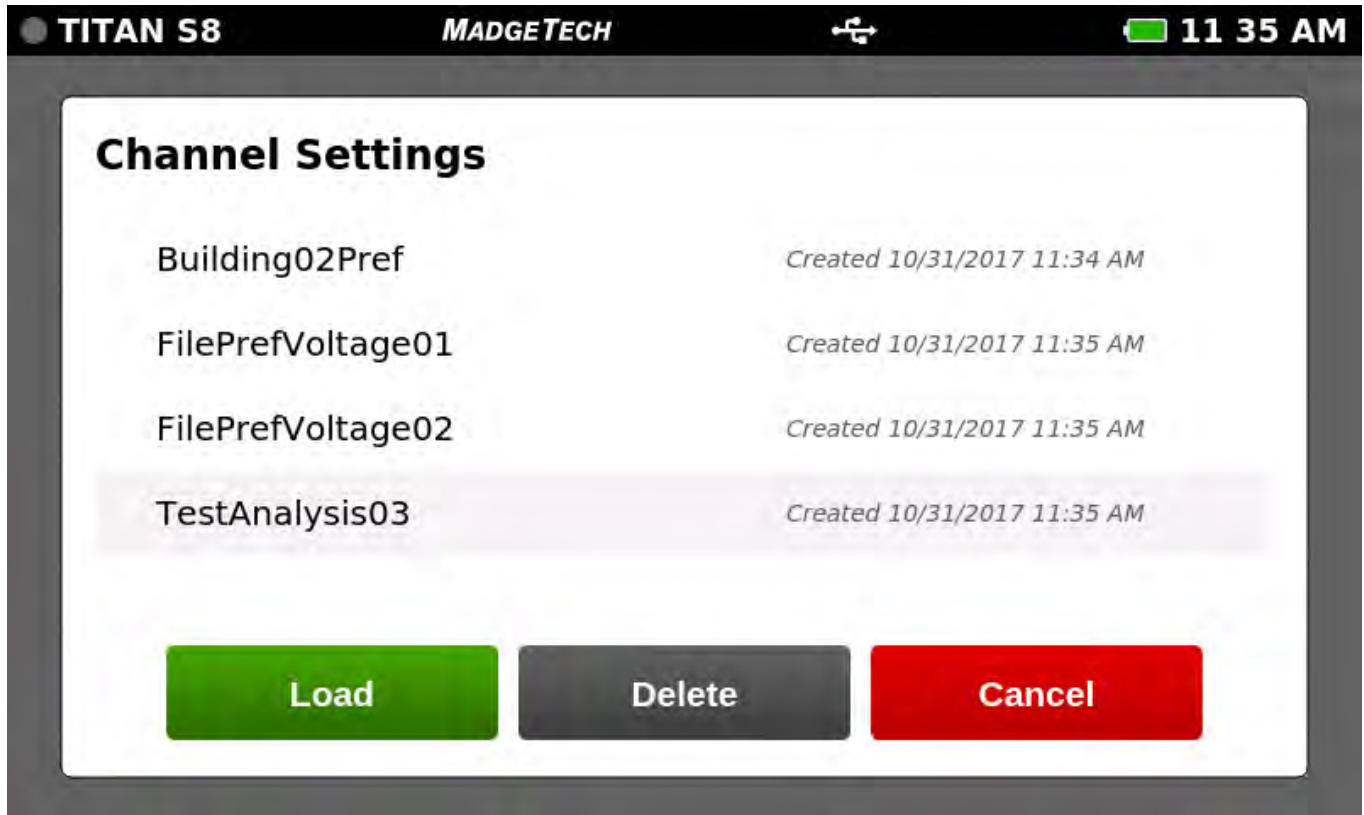
Saving Configuration Settings

Completed channel configurations can be saved for repeated use. The user can select Save from the channel configuration screen to select a name for the saved settings file and apply them.
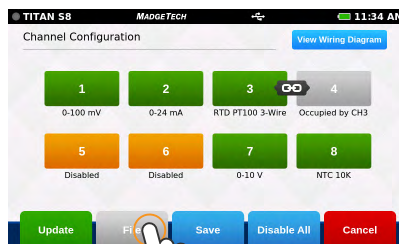

Channel Configuration

Save Settings

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Load Configuration Settings

Saved channel configurations can be easily loaded for repeated use. The user can select File from the channel configuration screen to choose from the list of previously saved settings files.

Note: Loading a saved settings file will replace the exisiting configuration.
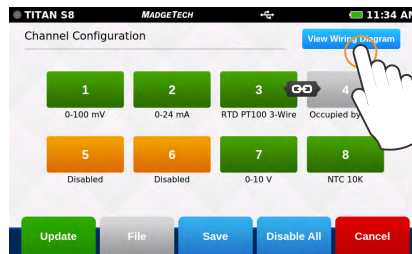

Channel Configuration

Load Settings

Wiring Diagram

From the channel configuration screen, the user can select the Wiring Diagram button to display the proper wiring of the unit based on the currently applied configuration. Please note the position of channel 1 in regards to screen orientation.
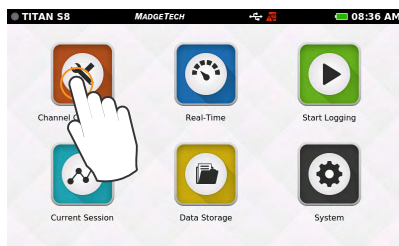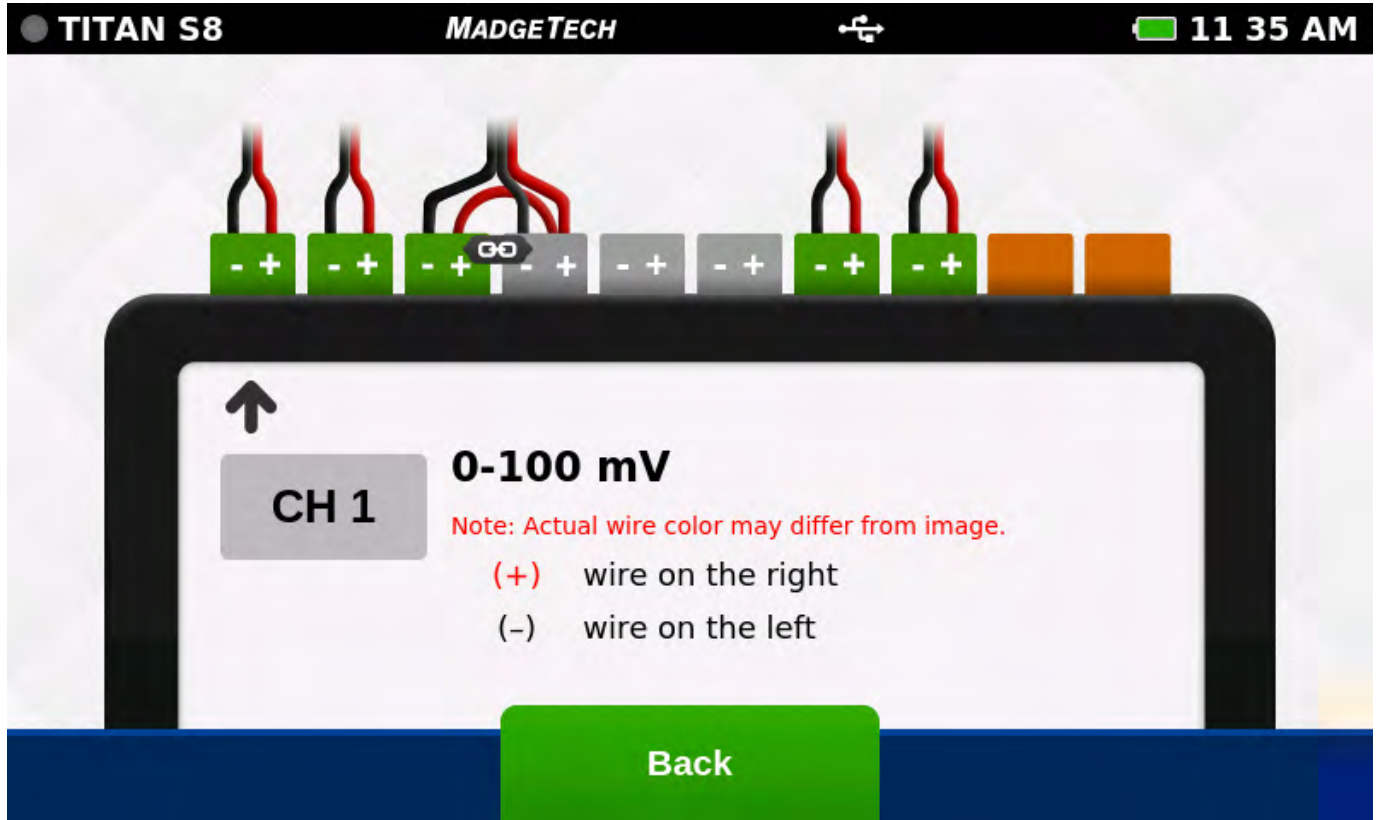

Channel Configuration

Wiring Diagram

Chapter 3: Logging, Viewing and Managing Data

Start Logging

When Start Logging is selected from the Home screen, the Logging Configuration screen will appear and the user will be prompted to name the data logging Session. If the user has not already configured the channels, they will be prompted to configureprior to starting a logging session. The user will be able to configure start time, stop time, and reading rate in addition to naming the logging session.

» Session Name: The user will enter the desired name for the logging session. If no name is given, a unique default name will be assigned (i.e. Session 1)

» Delayed Start: The user has the option of either selecting a Delayed Start time or simply tap the Start Logging Data button to start immediately.

» Automatic Stop: The user has the option of selecting an Automatic Stop time. If no time is selected, the user will use the Stop Logging button on the Home screen to manually stop the device.

» Reading Rate: The user has the option of selecting a reading rate. The reading rate will default to 1 minute, or use the setting of the last session configuration. Maximum number of readings per session is 1,000,000

» Start Logging Data: The user will select Start Logging to begin logging data immediately.

» Cancel: Cancels user changes and returns back to the home screen.
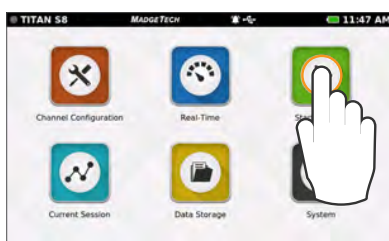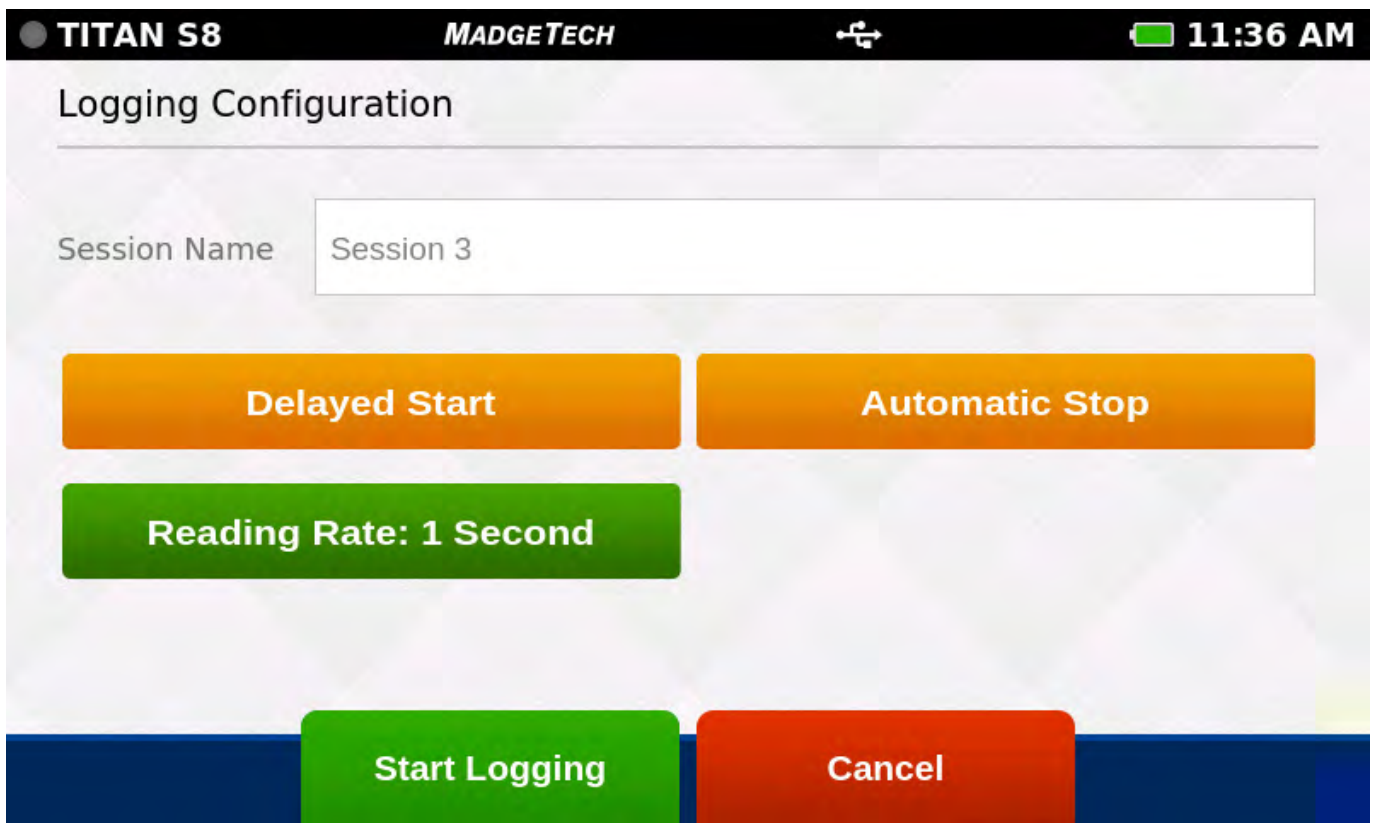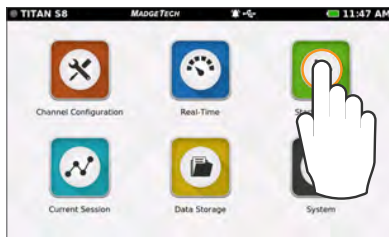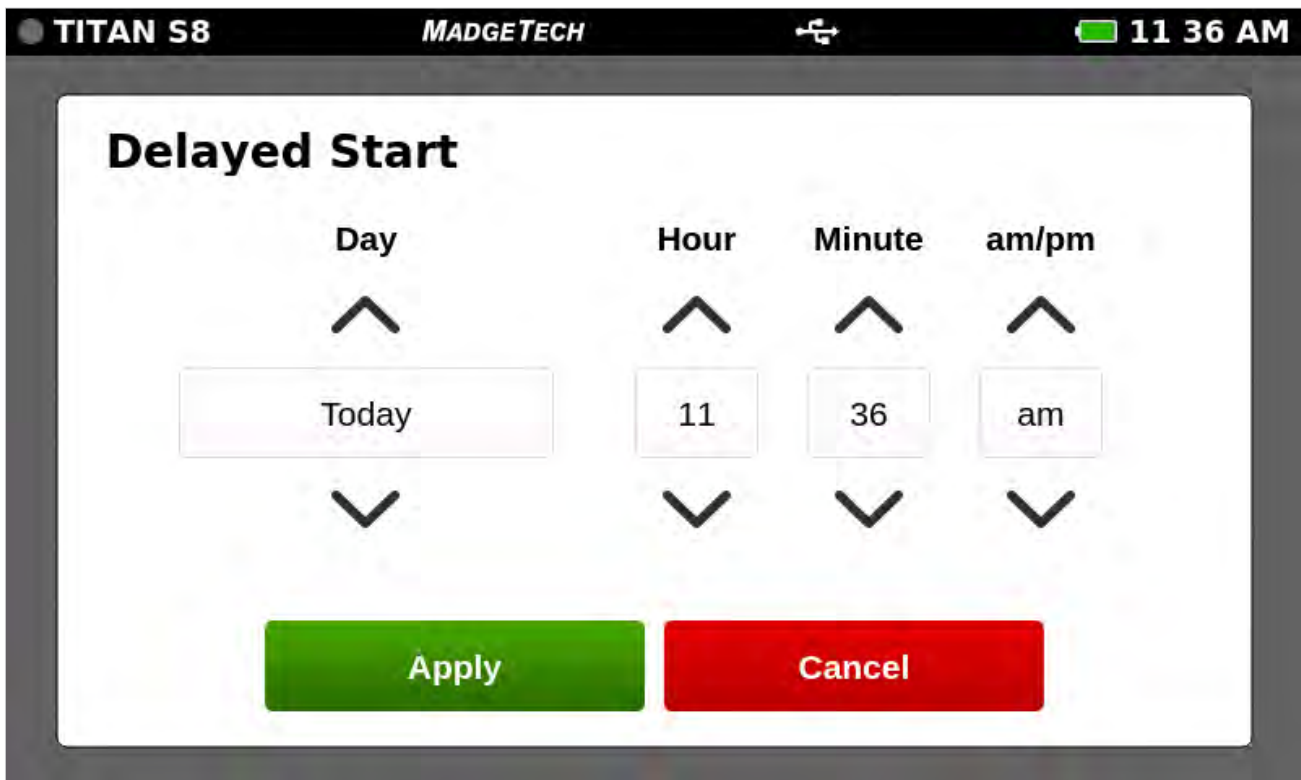

Start Logging

Keyboard Function

The keyboard will automatically appear when the user taps in the text field to type the session name.
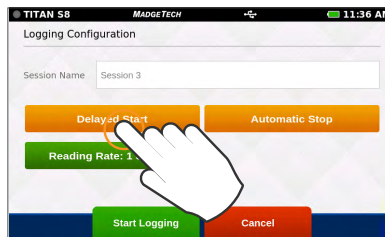
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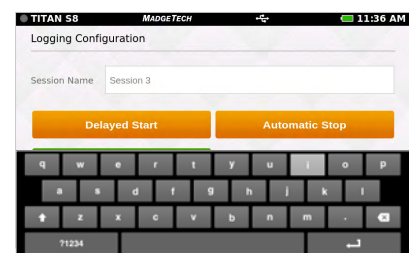
Delayed Start

If the user selects Delayed Start, the following configuration screen will appear.

» Day: Using the up and down arrows, the user is able to adjust the day.
» Hour: Using the up and down arrows, the user is able to adjust the hour.
» Minute: Using the up and down arrows, the user is able to adjust the minute.
» am/pm: Using the up and down arrows, the user is able to select am or pm (12-hour clock only).
» Apply: Applies the start or stop time settings and returns the user back to the Logging Configuration screen.
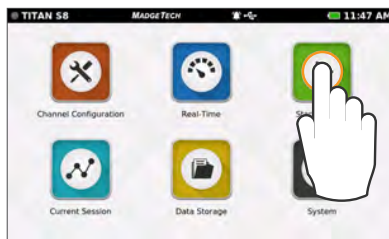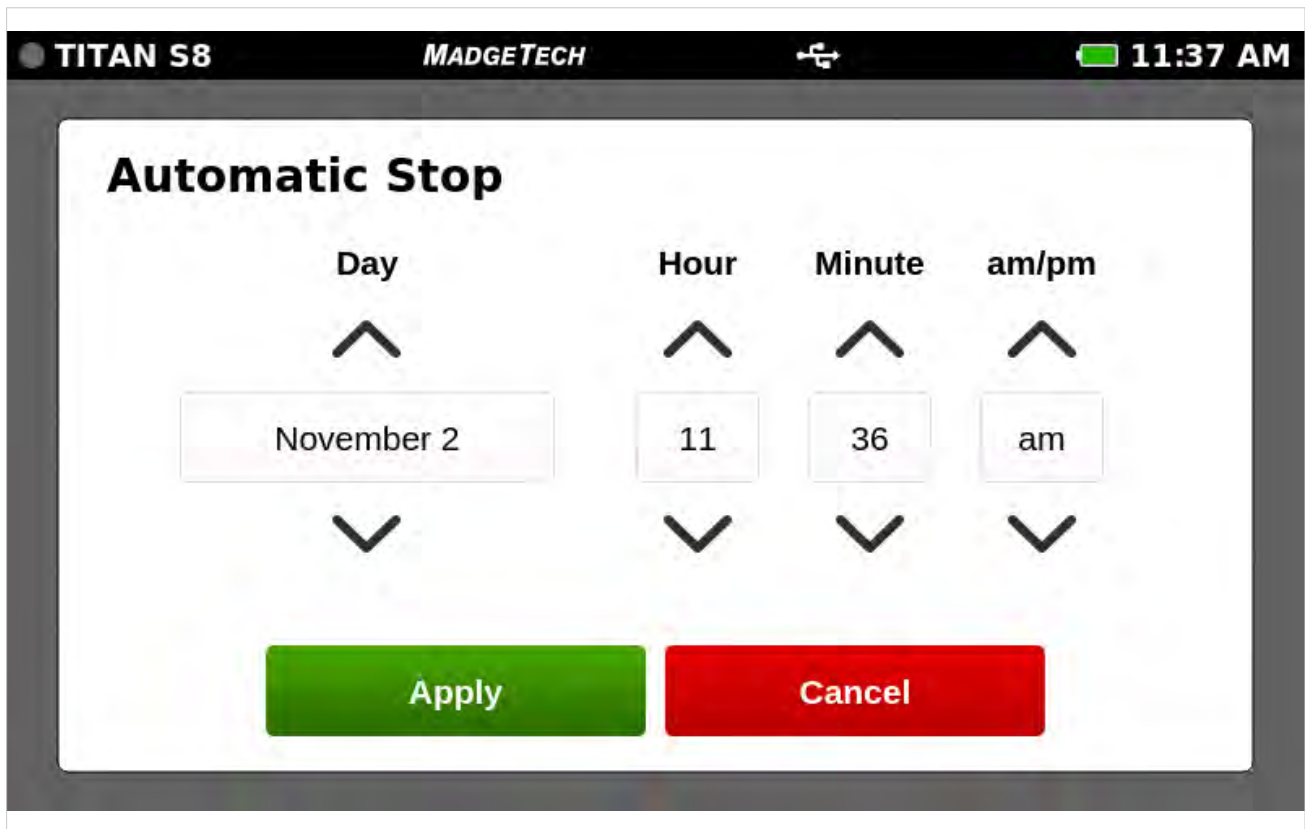» Cancel: Returns the user to the Logging Configuration screen.


Start Logging

Delayed Start

Automatic Stop

If the user selects Automatic Stop, the following configuration screen will appear.

» Day: Using the up and down arrows, the user is able to adjust the day.
» Hour: Using the up and down arrows, the user is able to adjust the hour.
» Minute: Using the up and down arrows, the user is able to adjust the minute.
» am/pm: Using the up and down arrows, the user is able to select am or pm (12 -hour clock only.)
» Apply: Applies the start or stop time settings and returns the user back to the Logging Configuration screen.
» Cancel: Returns the user to the Logging Configuration screen.

Start Logging

Automatic Stop

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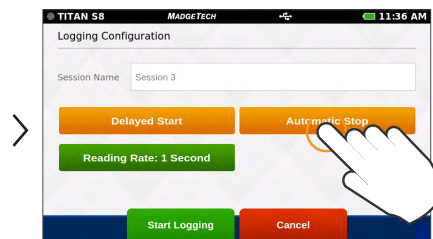
Reading Rate

When the user selects Reading Rate, the following configuration screen will appear. Once the desired reading rate is selected, the user must select Apply to use that option, or cancel to return to the previous screen. (see page 44 for available reading rates)
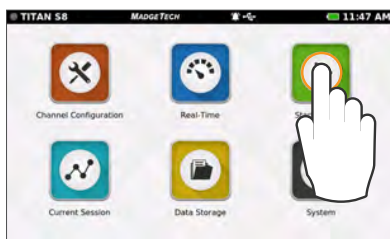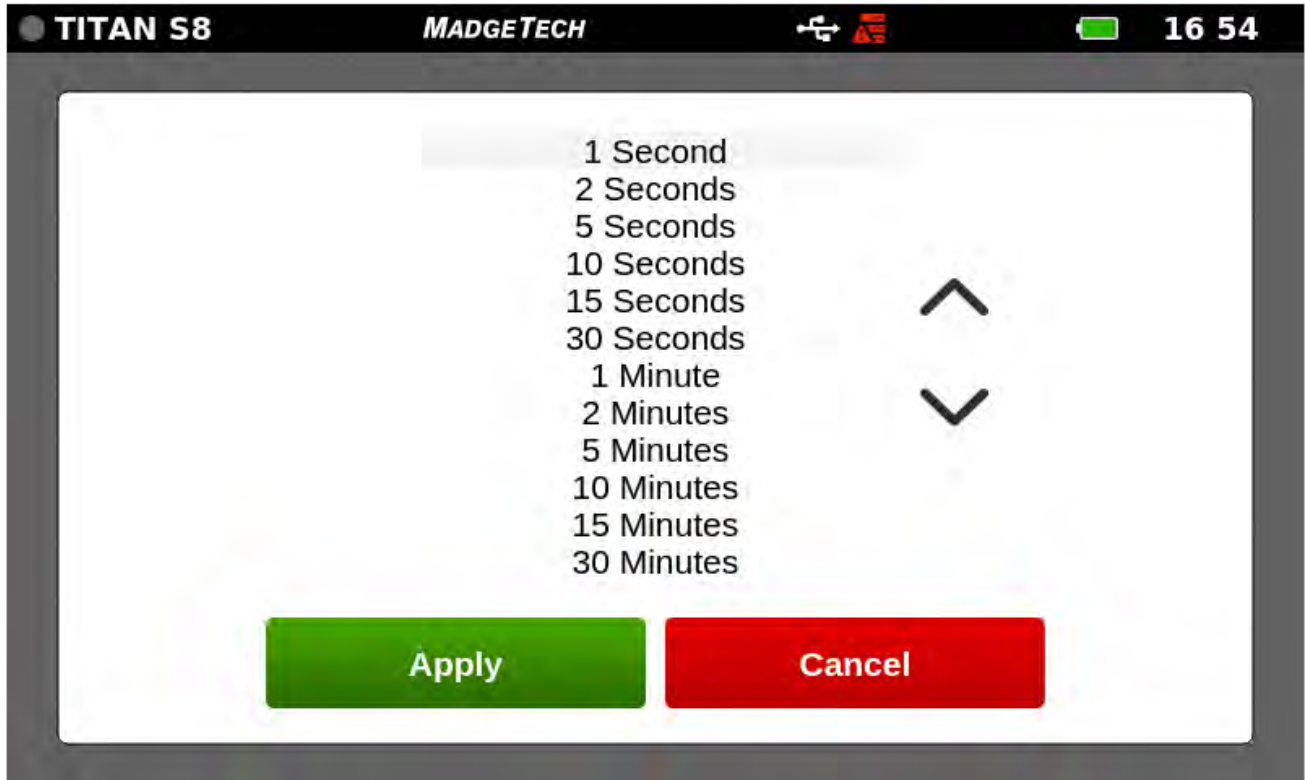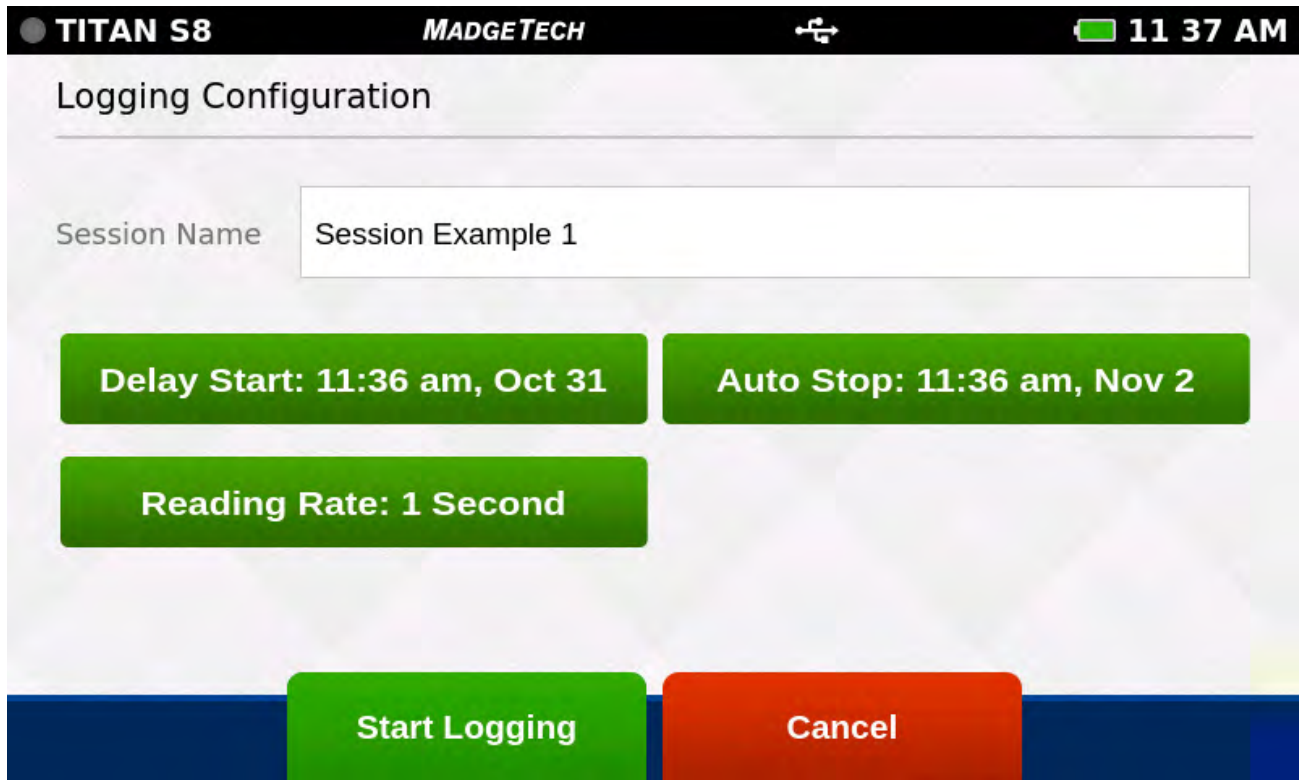

Start Logging

Reading Rate

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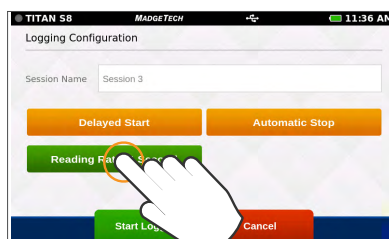
Review Session Details and Start Logging

Once the user selects a Session Name, Start Time, Stop Time and Reading Rate, the screen will look similar as it does below. Once the settings are complete, the user will select Start Logging Data to begin Logging Mode. After selecting start, the user will be brought to the Home screen.


Device Memory Warning

After selecting Start Logging, if the internal memory of the device is 100% full, the user will be notified with a popup warning message and two options to choose from.

» View Stored Sessions: This button will take the user to the Data Storage screen to delete or remove stored data from the device.
» Dismiss: This button will take the user back to the Home screen and logging will not start.

This warning will also appear if the internal memory of the device reaches 100% capacity while actively logging.

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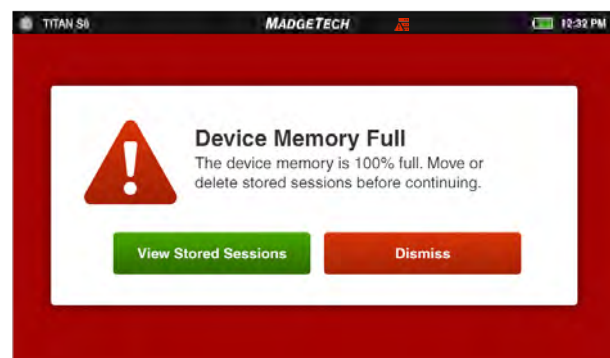
Real-Time Data

When Real-Time is selected from the Home screen, the device will display data from all enabled channels and update at the user selected reading rates. The Real-time view is also available from the Current Session menu when the device is actively logging.

» Current Reading: Will be displayed in the center of the gauge
» Minimum: The minimum reading will be displayed on the bottom left of each gauge
» Maximum: The maximum reading will be displayed on the bottom right of each gauge
» Zero: (Pulse Only) The Zero button will reset the displayed reading to zero
» Scale: The scale button will scale the readings on the screen, maximum value will be reset to the current value.
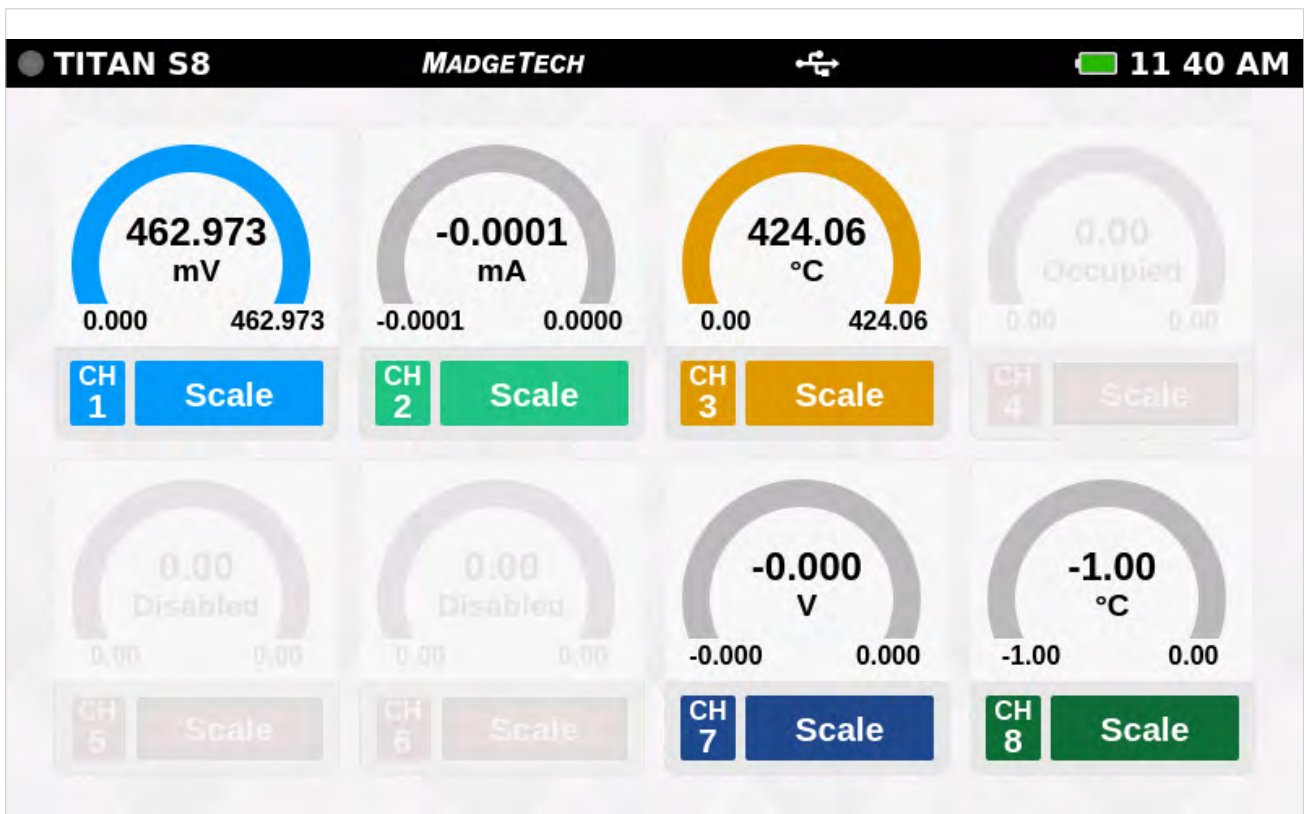
Select Real-Time

Configuration Warning

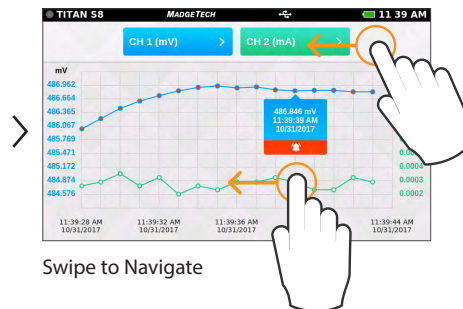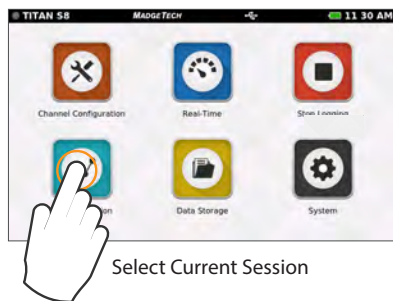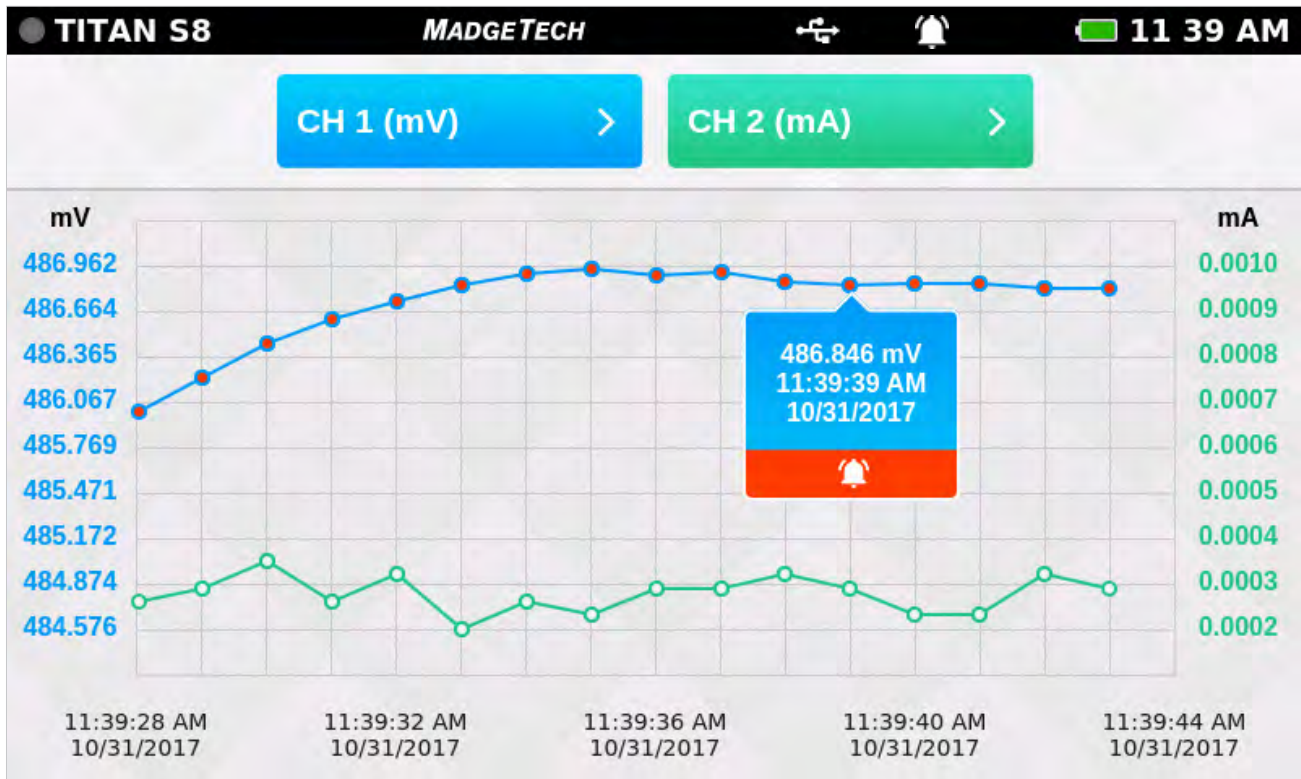Real-Time data is only available if the device channels are configured.

Current Session

Select the Current Session button from the home screen to view the recorded data in various formats, swipe the screen to the left or right to navigate.

Graph View
» Use the drop down menus at the top to select which channels to view.
» Touch any point on the graph line to display more detailed information.
» Triggered alarm events will be visible within the graph.

Select Current Session

Swipe to Navigate

Swipe Options

» Swipe left at the top of the screen to go to the tabular data view.
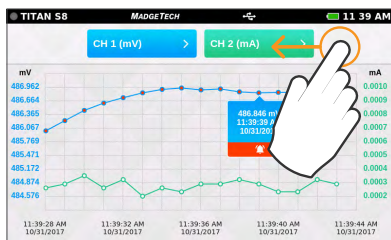» Swipe within the graph to scroll through the graph timeline.

Current Session

Select the Current Session button from the home screen to view the recorded data in various formats, swipe the screen to the left or right to navigate.

Tabular View
» Displays the Minimum, Maximum and Average values for the current session.
» Readings that exceeded user selected thresholds/alarms are displayed as red.
» Scroll vertically to see data timeline in tabular format.
» View four channels at a time.
» Swipe left at the top of the screen to see additional active channels.

Swipe Left to View Tabular Data

Swipe Vertically to Scroll Timeline

Swipe Left for Additional Active Channels

Additional Views

Swipe left and right to rotate through the various screens.
Graph View > Tabular Views > Real-Time View > Current Session Overview

Note: Use the swipe navigation of data views for both current and stored sessions.

Stop Logging

To manually stop a logging session, the user will select the Stop Logging button from the Home screen.
Note: Access the Home screen at any time by pressing the Home button.

Stop Logging Confirmation

When the user selects Stop Logging, a popup screen will emerge prompting the user to confirm the action.

» Stop Logging: This option will end the current logging session.
» Cancel: Continues logging and returns the user to the Home screen.

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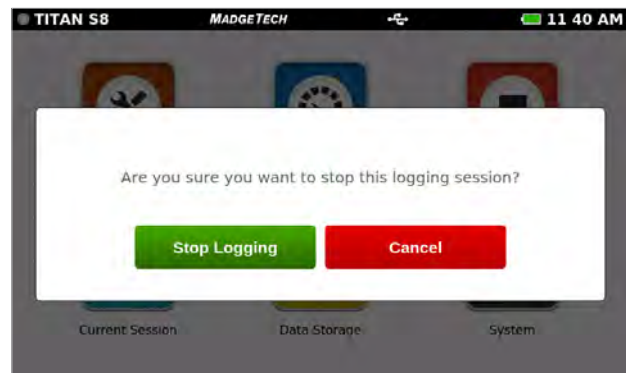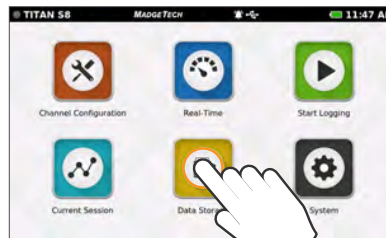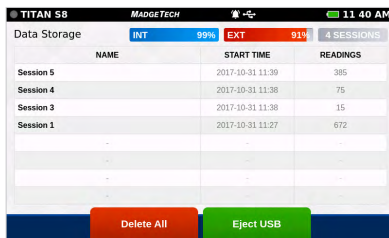
Data Storage

Selecting the Data Storage icon will bring up the screen pictured below. The options available on this screen include the following:

» INT : Available percentage of internal memory remaining on the device.
» EXT : Available percentage of memory remaining on the external USB drive.
» Number of Sessions: The total number of stored sessions on the device.

Stored sessions are displayed in a scrollable list, swipe vertically to browse the list. Session Information includes the Name of the session, the Start Time and date of the session and the number of readings.

» Session Information: The user can tap on any row to view session specific options.
» Delete All: This button will erase all stored sessions from the internal memory.
» Eject USB: Select this button prior to removing the external USB drive.

Data Storage
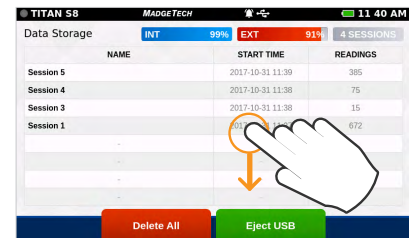
Swipe Vertically Through Sessions

Storage Space

Thermocouple channels:
    1 Hz or slower – 62,000,000 to 150,000,000 readings (depends on number of configured channels) in 1,000,000 reading increments
    4 Hz – 88,000,000 to 150,000,000 readings (depends on number of configured channels) in 1,000,000 reading increments
    Maximum number of readings per session is 1,000,000.

Millivolt, Volt, RTD, Thermistor (NTC), milliamp channels:
    1 Hz or slower – 93,000,000 to 164,000,000 readings (depends on number of configured channels) in 1,000,000 reading increments
    4 Hz or faster – 164,000,000 to 173 ,000,000 readings (depends on number of configured channels) in 1,000,000 reading increments

Frequency/Counter (Single Channel)
    1 Hz or slower – 93,000,000 readings in 1,000,000 reading increments
Every channel configured is considered a separate reading, so the number of readings divided by the number of channels gives you the readings per channel. Maximum number of readings per session is 1,000,000.
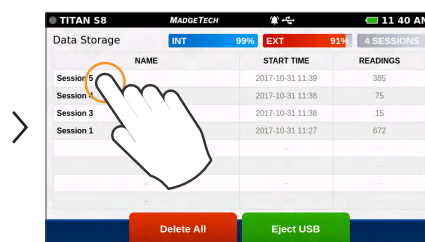
Saved Session Options

From the Data Storage screen, tap on any row in the list to select a specific session to view options. The session options screen features four actions the user can take on any stored session.

» Copy: This button will copy the stored session to an external USB drive. If no USB drive is plugged into the device, the Copy button will not display.
» View Data: The user can view the data of this session in tabular or graph view.
» View/Edit Note: The user can add notes/comments to the session.
» Delete: This button will remove the stored session from the device.

Data Storage

Select a Session

1.800.561.8187   www.itm.com   information@itm.com
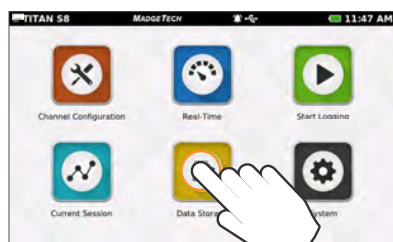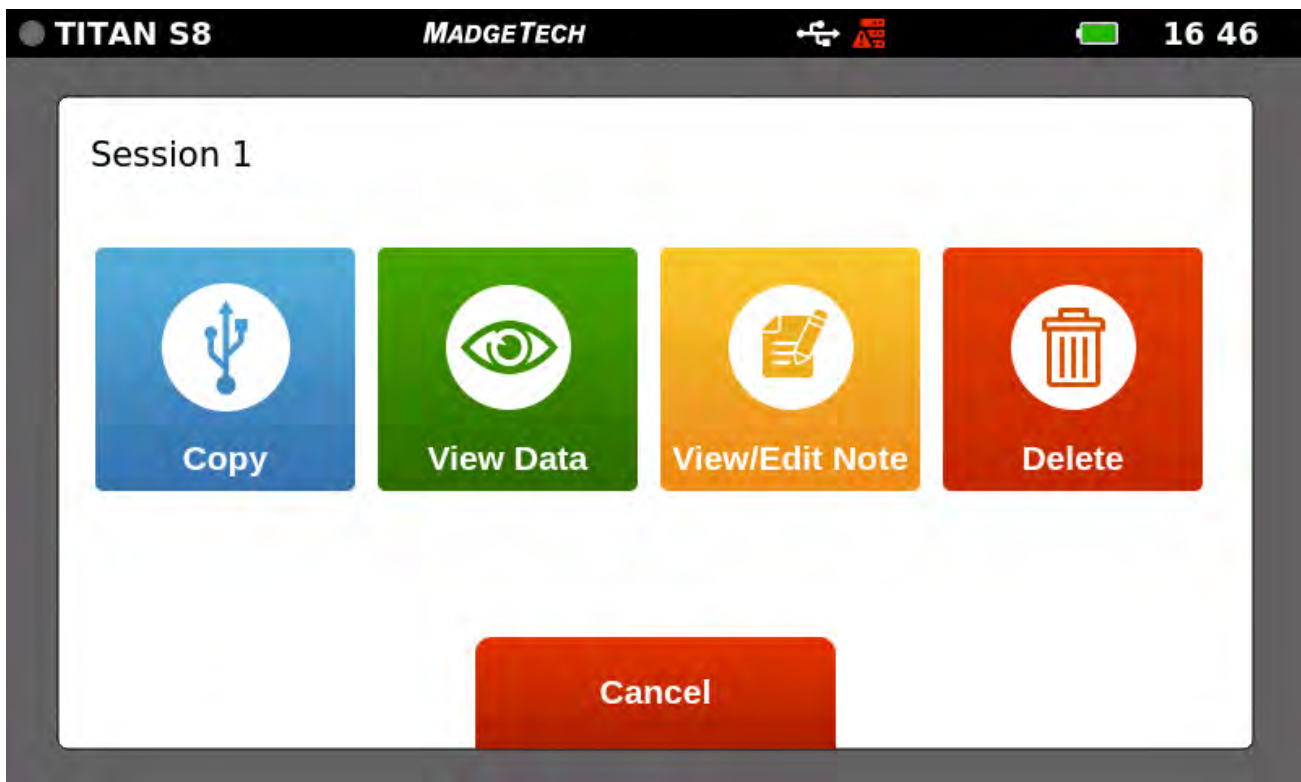
Copy Stored Sessions

Sessions can be copied from the internal device memory to an external USB drive. When the Copy option is selected, the Copy Stored Session popup will appear to confirm the user's request.

» Copy Data: The session is copied to the external USB drive.
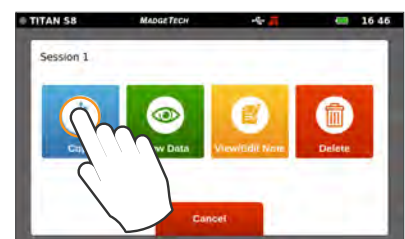» Cancel: Takes the user back to the Options screen.

Note: Data saved to external memory will be in .csv file format.
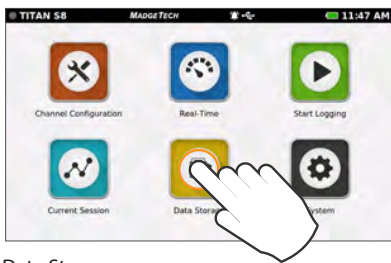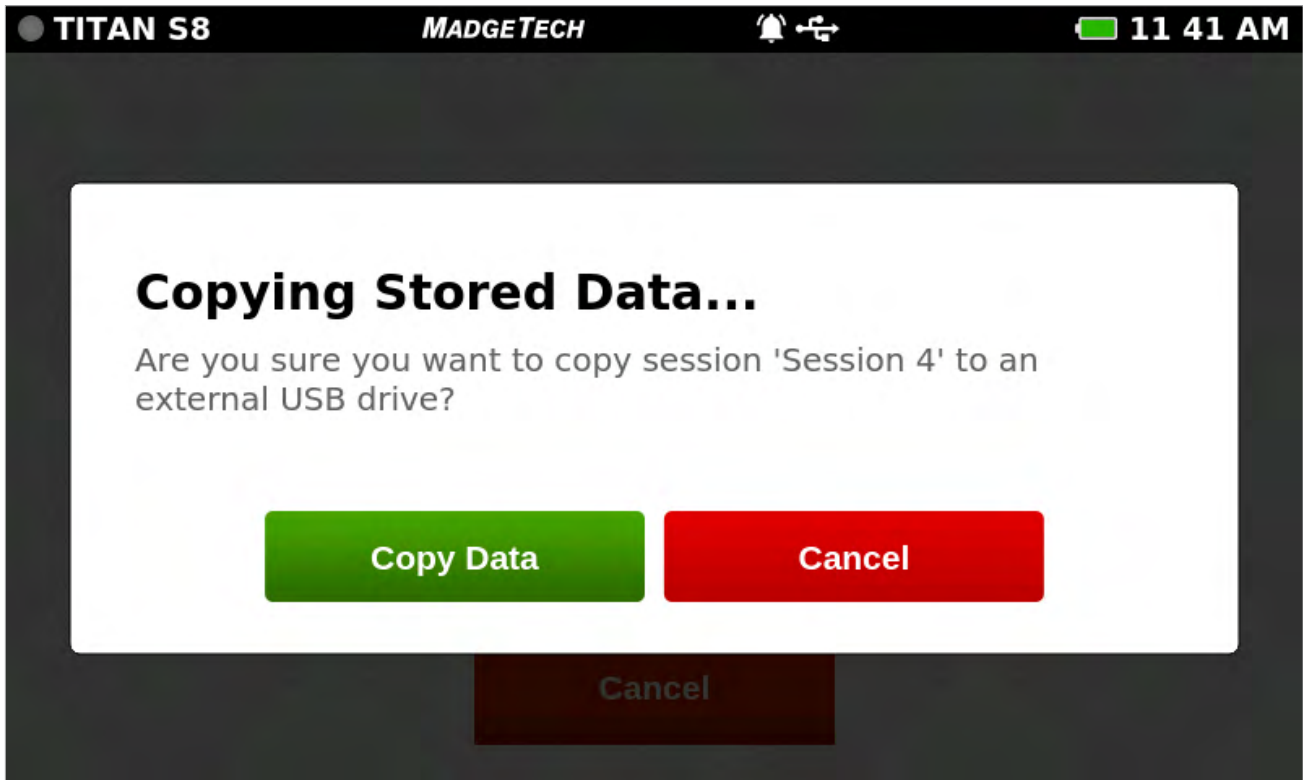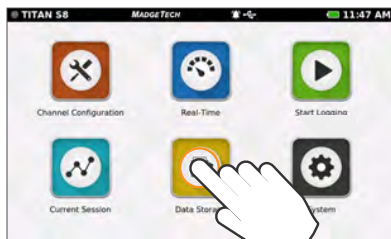

Data Storage
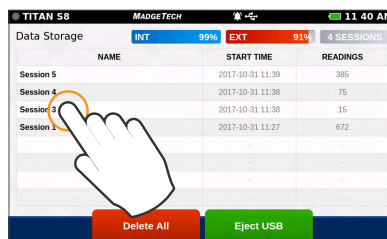
Select a Session

Copy a Session

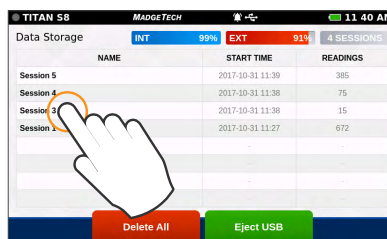1.800.561.8187   www.itm.com   information@itm.com

View Data Sessions

When the View Data option is selected, the user is presented with the Tabular Data view of that session. From this screen the user can swipe left and right to navigate other views of the recorded data from that session (see swipe navigation options on page 28).
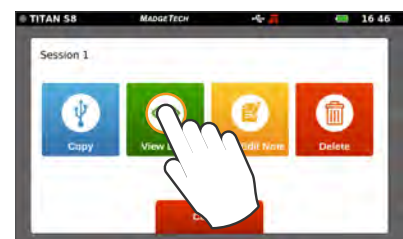

Data Storage

Select a Session

View Session Data

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View/Edit Note

When the View/Edit Note option is selected, the user is presented with a text entry screen. Text entered here is stored as a note associated with a particular session. This can be accessed and edited by users as desired.
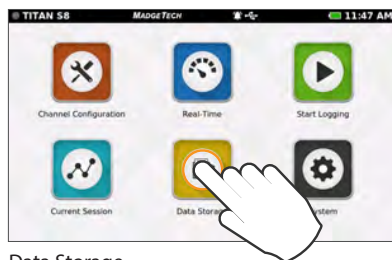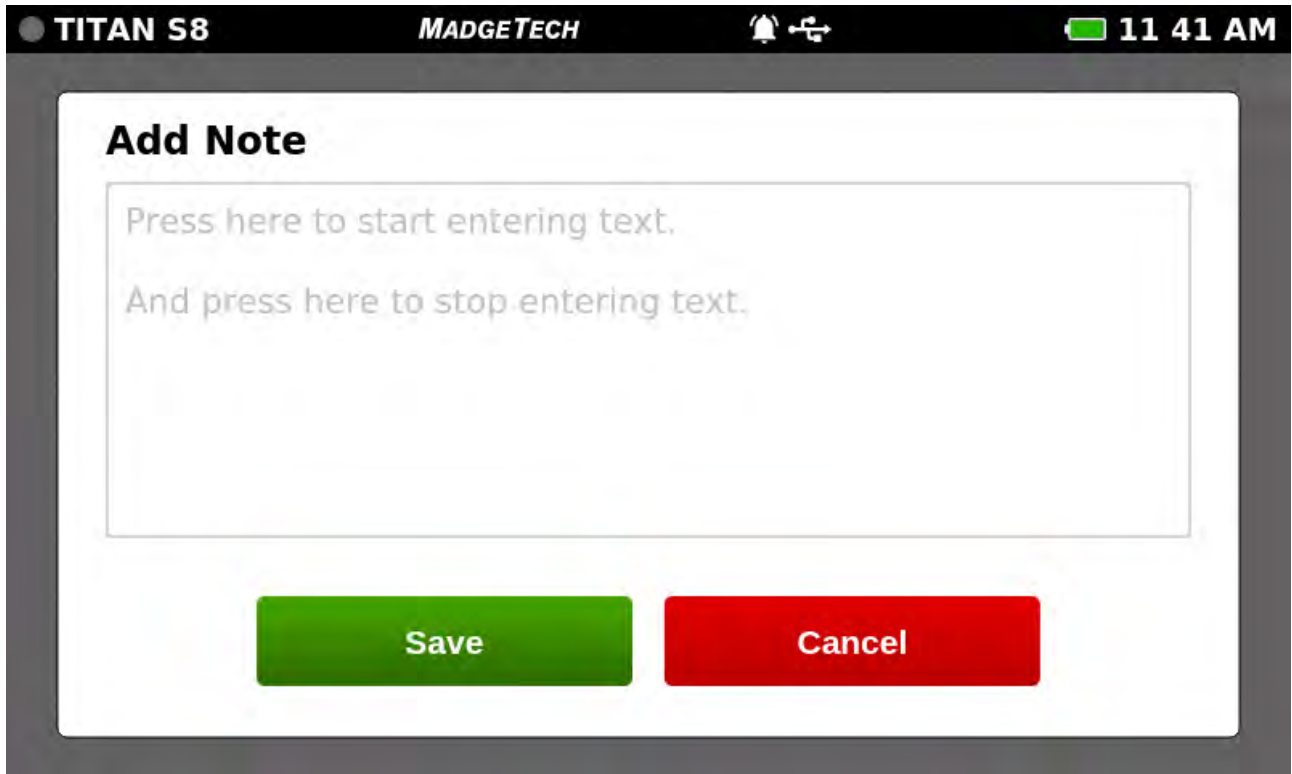
Data Storage
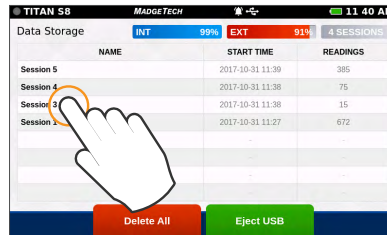
Select a Session
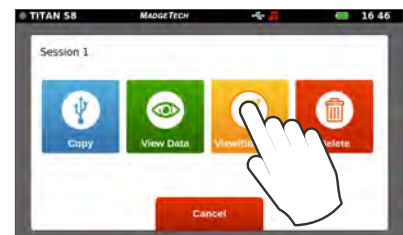
View/Edit Note

Note Flag

When a note has been added to a logging session, a notes icon appears in the list of sessions.

Delete a Note

To delete a note, simply edit to remove all text and save.

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Delete Stored Sessions

When the Delete session option is selected, the user is presented with a pop up screen confirming the request.
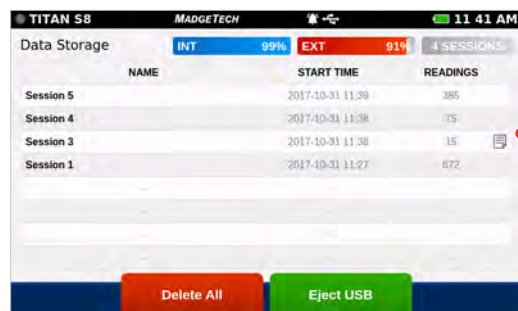
- » Delete Data: Confirm the data removal.
- » Cancel: Takes the user back to the Options screen.
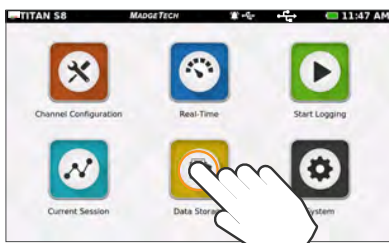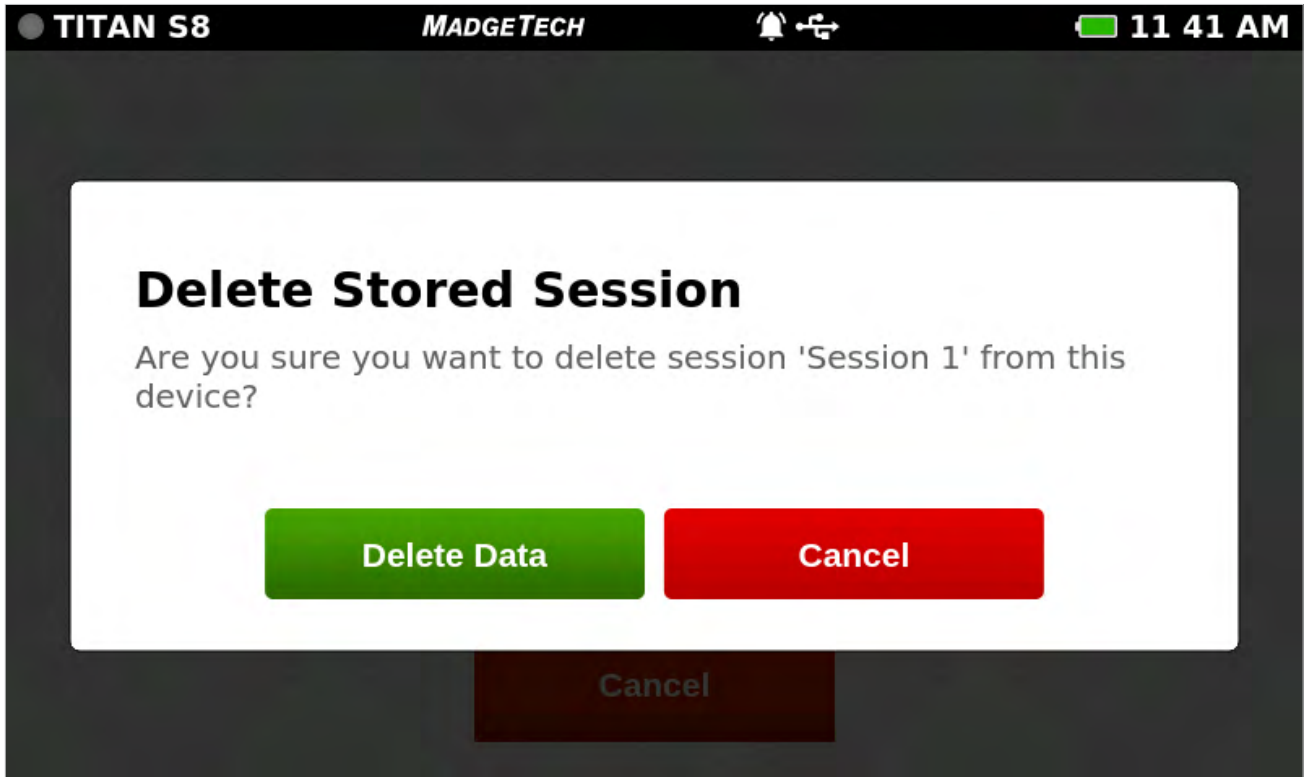
Data Storage
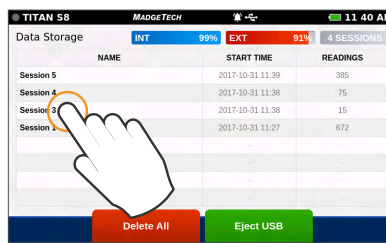
Select a Session

Delete Session

Deleting Stored Data Confirmation

When Delete Data is seleted a pop up screen will display a progress bar and confirm when action is complete. After data is successfully removed the user will be returned to the Data Storage screen.
Warning: Deleting a session is a perminent action.

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Delete All

» Delete All: This will delete the entire list of of stored sessions.
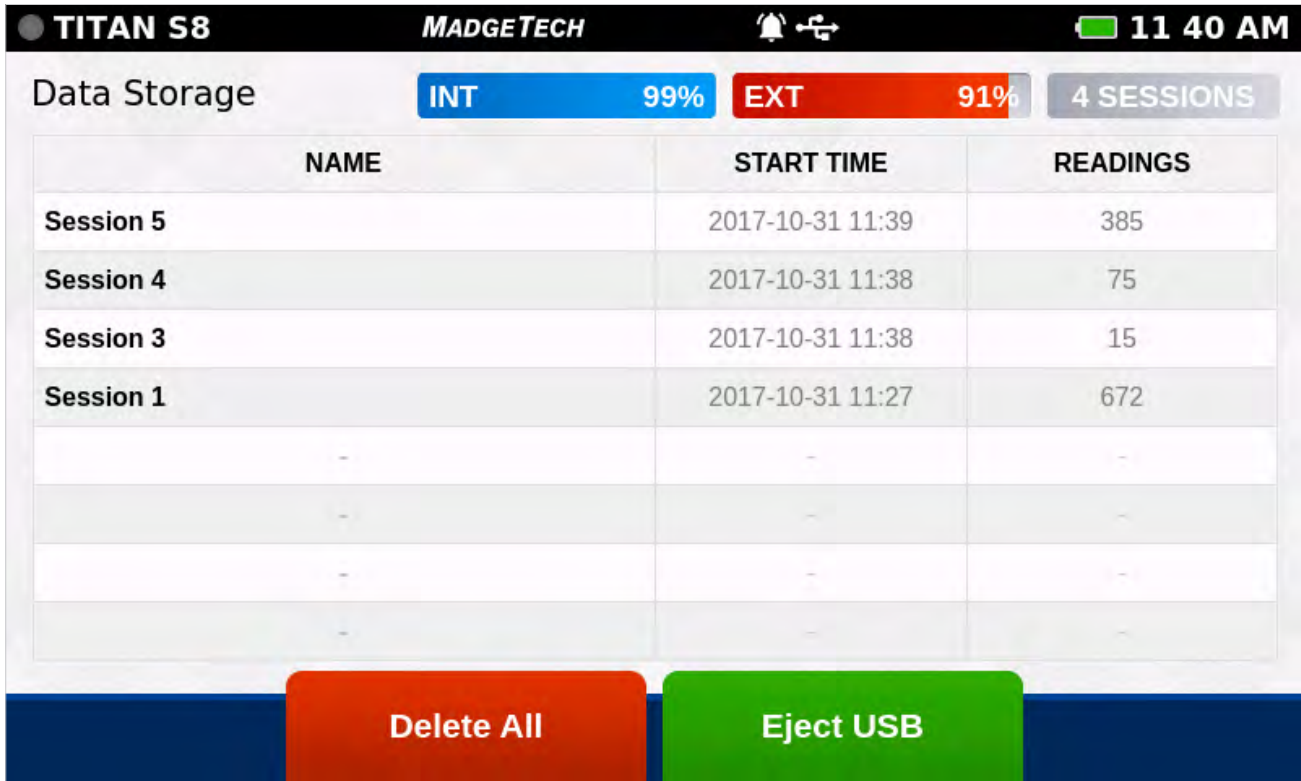
Confirmation Screen

If a user selects the Delete All option, they will be presented with a confirmation screen. Selecting Cancel from either screen will return the user to the Data Storage screen and the stored data will not be deleted.

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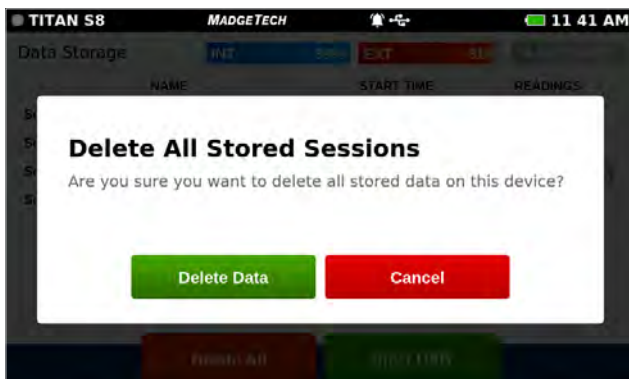
No Stored Sessions

Before first use or after all data has been deleted, the Data Storage screen on the device will resemble the screen shown below.
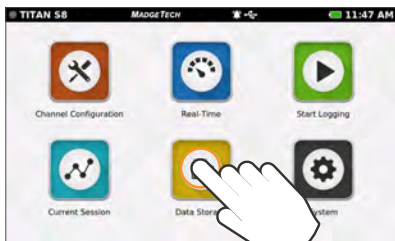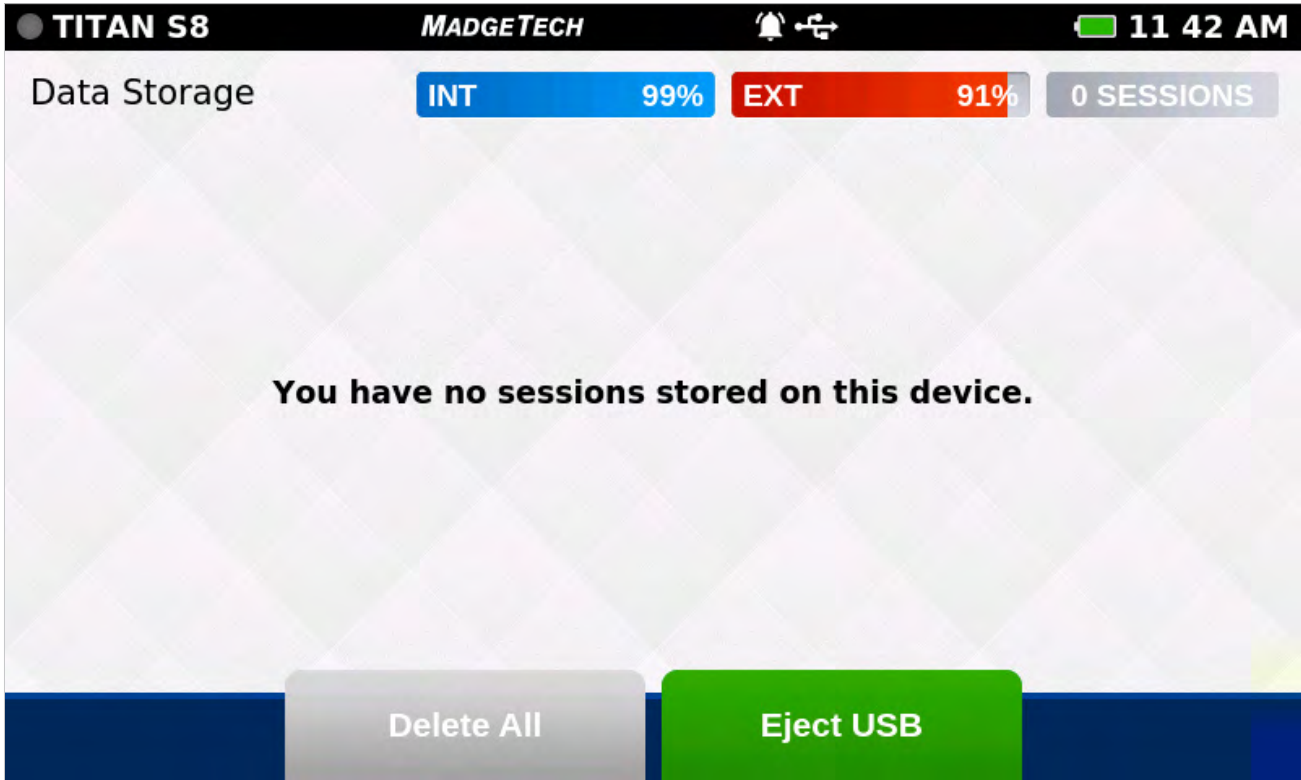
Data Storage

Chapter 4: Settings, Preferences and Support

Device Settings

When the Settings button is selected from the Home screen, the user is presented with options, preferences and information as shown below.
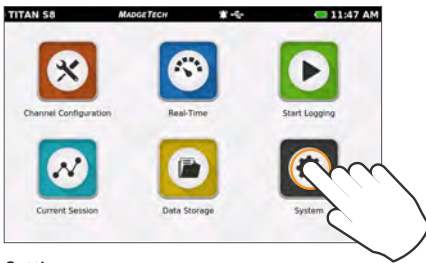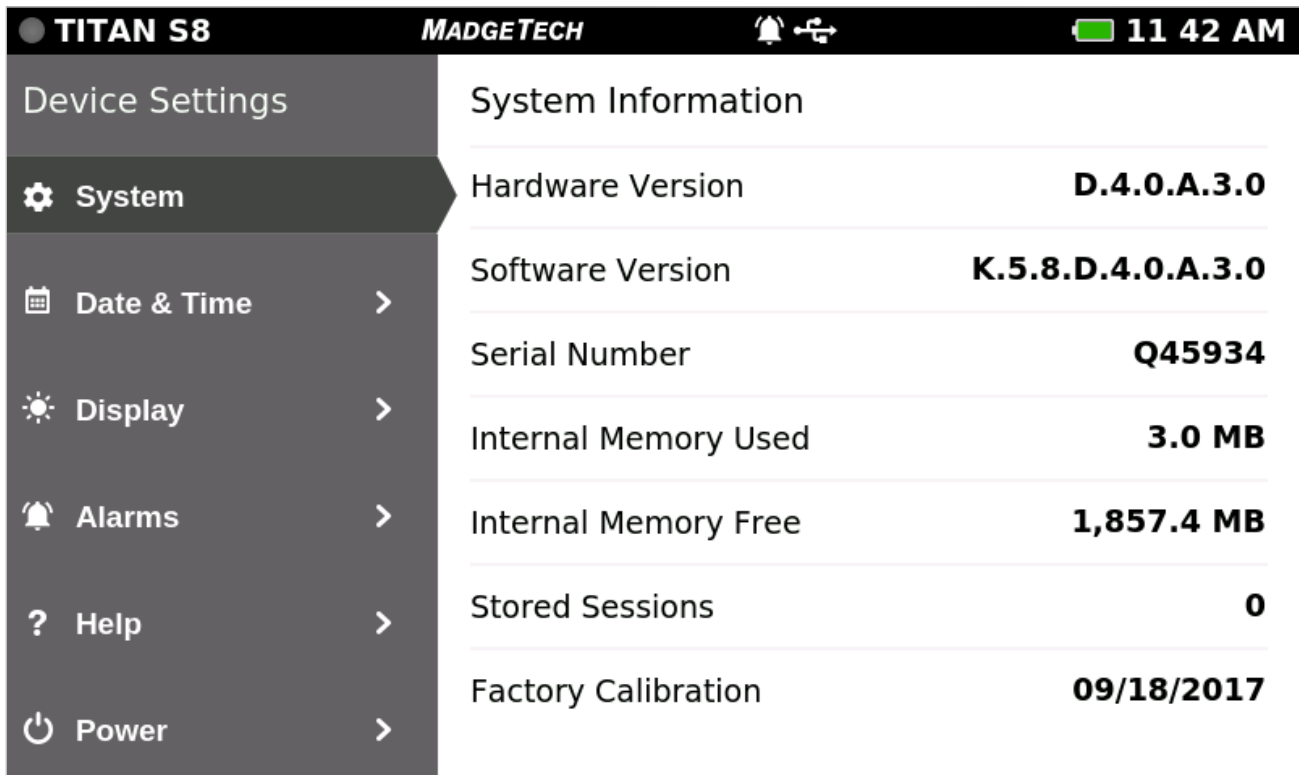
Settings

System

The System panel displays an overview of information specific to the device including:

» Hardware Version
» Software Version
» Serial Number
» Internal Memory Used and Available
» Number of Stored Sessions
» Factory Calibration Date
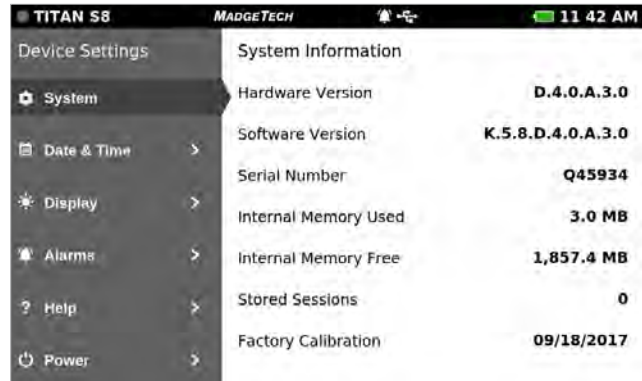
Date & Time

The Date & Time screen will display the current data and time as well as providing the user with 12-Hour or 24-Hour clock options.
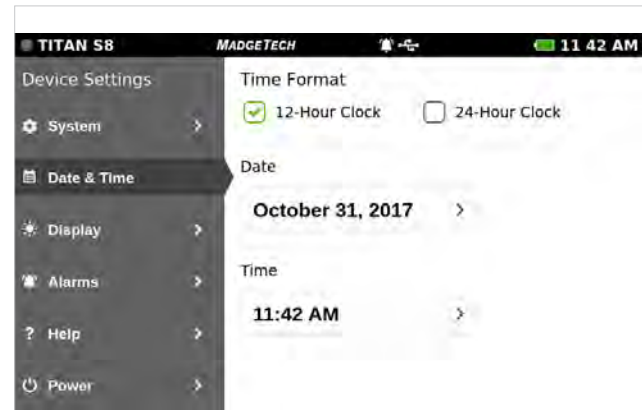
Display

The Display screen allows the user to adjust options for the touch-screen display including:

» Display Orientation (requires reboot)
» Graph background - white / black
» Display Backlighting time out - User selectable timeout period
» Display Brightness - User adjustable screen brightness level
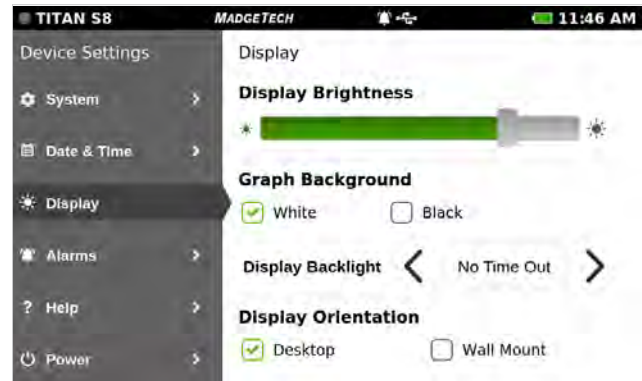
Alarms

The Alarms screen provides the user with two Contact Closure options for when an alarm is triggered.

» Always/Temporary Mute
» Contact Closure: Normally Open / Closed
» Contact Signal: Pulse / Latch

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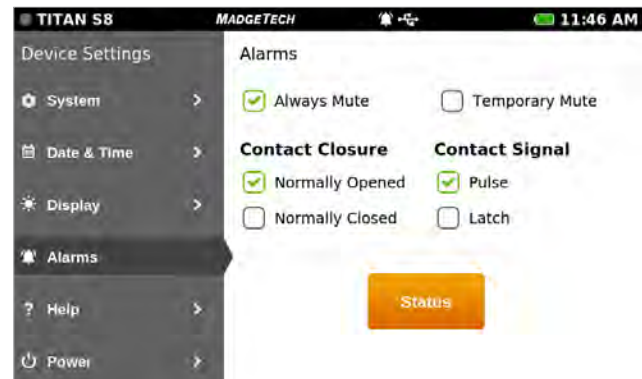
Help Menu - Provides contact information for the user

Power - Provides sleep mode, power off via screen and factory reset.

Warning: Factory reset will restore the unit to Factory Settings. This will delete all saved sessions and configurations.
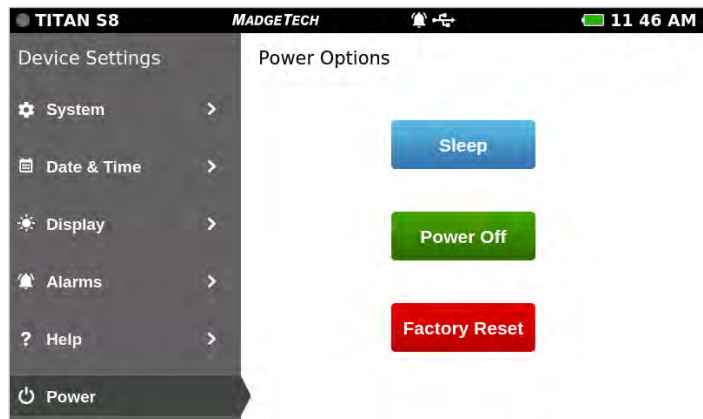
Device Maintenance

To provide optimum performance and accuracy, MadgeTech recommends an annual factory calibration for the Titan S8.

Support

The MadgeTech technical sales team and techical support staff are just an email or phone call away. They are ready and eager to assist in guiding the use of MadgeTech products as well as identifying and solving data logging challenges to provide you with the best solution.

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Chapter 5: Titan S8 Specifications

Dimensions	6.65 in x 4.40 in x 1.41 in (168.9 mm x 111.8 mm x35.8 mm) Data logger only
Touch Screen Dimensions	5 inches
Number of Channels	8
Weight	1.3 lbs (20.8 oz)
IP Rating	IP20
Start Modes	Immediate Start & Delay Start
Memory	1,000,000 readings
Battery Type	Rechargable 3.7 V Lithium Ion Battery Pack
Battery Life	Continuous on-screen Sampling: 9 hours Stand-by Mode: 100 hours
Data Format	Exported .csv file format
Time Accuracy	±1 minute/month
Operating Environment	0 °C to +50 °C (32 °F to +122 °F); 0 %RH to 95 %RH non-condensing
Enclosure Material	Polycarbonate, TPE Protective Boot
Calibration	Factory calibration is recommended annually

Battery Life:

Setup: Backlit intensity set to 20%, Backlit timeout set for 5 seconds, 1 second reading rate.
1.   1-minute reading rate, 8 channels = 10 Hours, 30 minutes

Setup: Backlit intensity set to 20%, Backlit timeout set to off, 1 second reading rate
1.   1-second reading rate, 8 channels = 9 Hours

0-24 MA

Resolution……………… 0.0001 mA

Accuracy……………… ±0.024 mA

Input Impedance ……… 30 Ω

0-100 MV

Maximum Voltage ……. 3.0 V

Resolution……………… 0.001 mV

Accuracy……………… ±0.1 mV

Input Impedance ……… 1 GΩ

0-10 V

Maximum Voltage 25 V

Resolution……………… 0.001 V

Accuracy……………… ± 0.01 V

Input Impedance ………… 1 GΩ

FREQUENCY / PULSE

Maximum Count……….. 4,000,000,000

Maximum Frequency…. 20 KHz

Input Signal …………… 0 V - 12 V

Input Impedance ……… 58 KΩ

TEMPERATURE NTC-1 (2252)

Resolution……………… 0.01 °C

Accuracy……………… ±0.50%

Range ………………… -25 °C to 150 °C

TEMPERATURE NTC-2 (10K)

Resolution……………… 0.01 °C

Accuracy……………… ±0.50%

Range ………………… -25 °C to 150 °C

TEMPERATURE PT-100 (2-WIRE RTD)

Resolution……………… 0.01 °C

Accuracy……………… ±0.1 °C

Range ………………… -200 °C to 400 °C

TEMPERATURE PT-100 (3-WIRE RTD)

Resolution……………… 0.01 °C

Accuracy……………… ±0.1 °C

Range ………………… -200 °C to 400 °C

TEMPERATURE PT-100 (4-WIRE RTD)

Resolution……………… 0.01 °C

Accuracy……………… ±0.1 °C

Range ………………… -200 °C to 400 °C

BATTERY WARNING: BATTERY MAY EXPLODE OR FIRE IF MISTREATED. DO NOT DISASSEMBLE OR DISPOSE OF IN FIRE. DO NOT CHARGE EXCEPT SPECIFIED WITH CHARGING CONDITION. DO NOT HEAT ABOVE 212 °F, OR SHORT CIRCUIT. DO NOT CRUSH OR MODIFY.

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Chapter 5: Titan S8 Specifications

Reading Rate Information

All channels will use the same reading rate.
Reading rates will be capped at 4 Hz when a temperature channel is selected

· 4 KHz   (Supports single channel of voltage or current measurment only)
· 2 KHz   (Supports single channel of voltage or current measurment only)
· 1 KHz   (Supports single channel of voltage or current measurment only)
· 500 Hz   (Supports single channel of voltage or current measurment only)
· 250 Hz   (Supports single channel of voltage or current measurment only)
· 100 Hz   (Supports single channel of voltage or current measurment only)
· 50 Hz   (Supports single channel of voltage or current measurment only)
· 25 Hz   (Supports single channel of voltage or current measurment only)
· 10 Hz   (Supports multiple channels of voltage or current measurment only)
· 4 Hz
· 1 Second
· 2 Seconds
· 5 Seconds
· 10 Seconds
· 15 Seconds
· 30 Seconds
· 1 Minute
· 2 Minutes
· 5 Minutes
· 10 Minutes
· 15 Minutes
· 30 Minutes
· 1 Hour
· 2 Hours
· 5 Hours
· 10 Hours
· 12 Hours
· 24 Hours

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