

MicroDAQ.COM, LTD.

**Centura Health
Physician Group**



Centura Health®

**LOGTAG TRAINING
FOR TRED30-7R LOGGER**



Outline

- Unpacking the Loggers
- Installing Loggers – vial/probe, probe cable & logger mount
- Configuring Logger
- Starting Loggers
- Reviewing Daily Statistics – Min/Max, Alarms & Twice Daily Temperatures
- Viewing/Saving Data

Unpacking The Loggers



Unpacking the Loggers

Each kit has been checked by our staff to ensure it is complete

Each Kit Includes the following items:

- TRED30 Data Logger
- External Probe w/60ml Glycol Bottle
- Label Sticker
- Wall Mount Bracket
- Spare Battery
- 2 x Velcro Squares
- 2 x Zip Ties
- Calibration Certificate

If you are unable to find anything listed on the checklist please contact us at support@microdaq.com or by phone at 603-746-5524

Match the Probe & Logger – **Important!!**

- Each logger and probe/vial must be matched by serial number
- When unboxing take care to keep probe/vial & matching logger together



Remove Protective film from front of logger by peeling it off



A decorative graphic on the left side of the slide, consisting of several overlapping, flowing blue and light blue wavy lines that curve upwards and then downwards, resembling a stylized ribbon or water flow.

Install the Vial and Probe Cable

- Place vial in center of fridge/freezer unit
 - secure with tape or with Velcro included
 - place vial in tray if used with wire rack
- Run probe cable through hinge side of door
- Attach the cable with tape or with the zip ties included
- Allow 1 ½ to 2 hours for probe/vial to adjust to temperatures in fridge/freezer before starting to record with the logger

Example of installation on wire rack



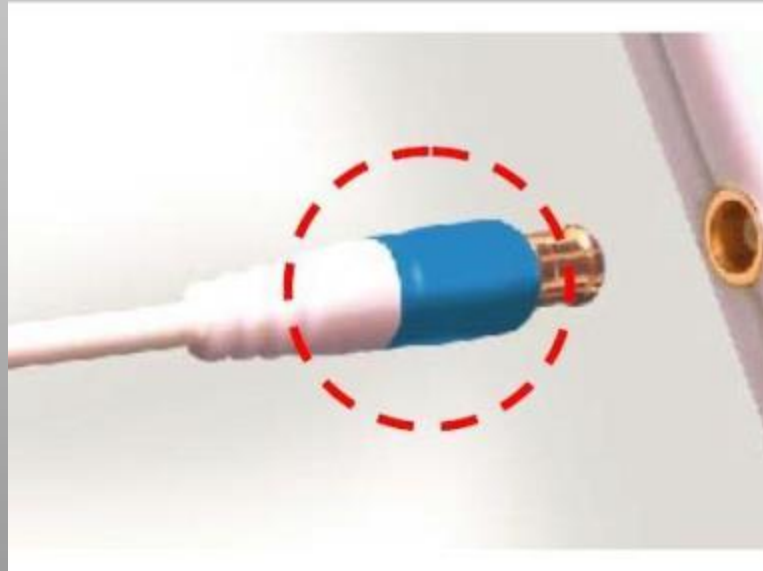
Installing the Logger

- Identify mounting location outside of fridge/freezer
- Be sure it's within reach of both freezer/fridge probes & is easily accessible
- Attach LTI-MOUNT (clear plastic mount) using the included double sided tape (located in each mount)
- Slide logger into mount without the probe attached



Attach Probe to Logger

- **Important! - Make sure serial number on Logger matches serial number on Probe/Vial**
- Insert probe end into plug on logger. You should hear the probe “Click” into place
- Care must be taken not to damage the probe tip. Inserting the probe into the logger at an angle will damage it



- Logger with probe attached in mount



LogTag[®] Recorders



LogTag[®] Analyzer

Software Installation

Software installation will be completed by your IT Department. Please place a self-service ticket with your IT Department requesting the LogTag Analyzer Software and include the following information:

- Computer name(s) where the software is to be loaded
- Contact name for vaccine coordinator and any others that will be downloading logger data
- Clinic name that will be used for the S: drive shared folder downloads

Launching and setting up the Software

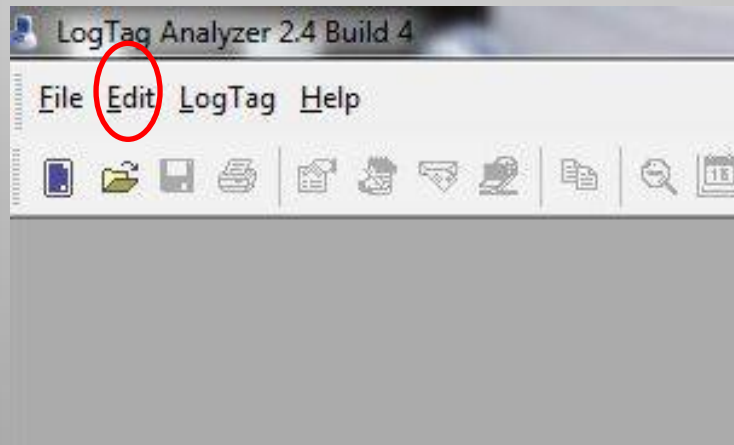
- Locate the LogTag Analyzer (LTA) icon on your desktop and double click it to launch the software



General Software Settings

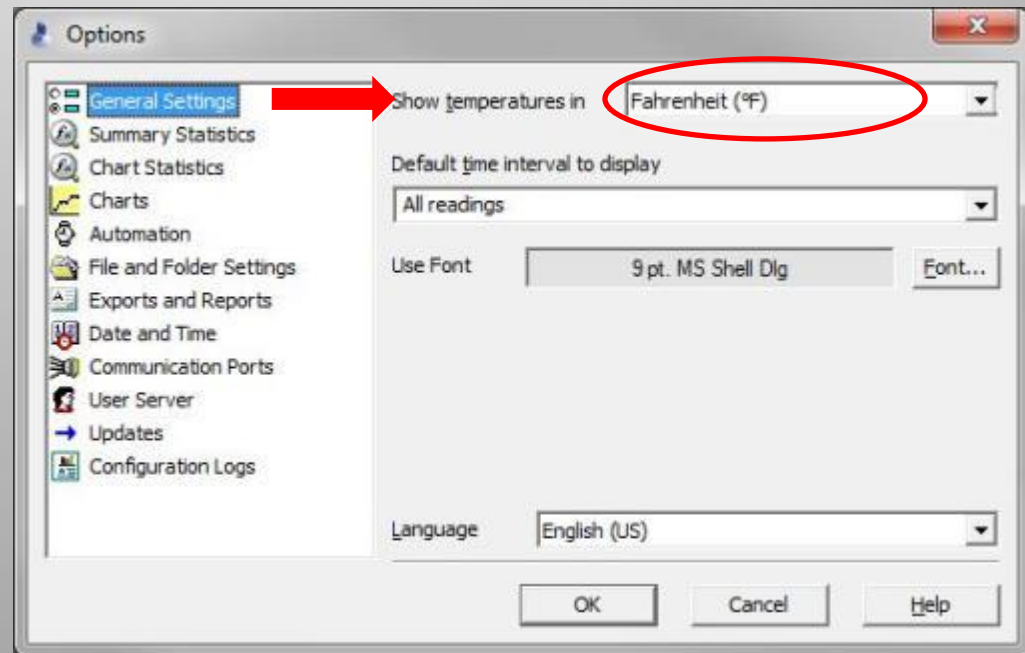
The software will displays temp in Fahrenheit by default. If you want to display your data in Celsius:

- Choose “Edit” > “Options” to access the General Settings screen



General Software Settings

- You can change temperature from Fahrenheit to Celsius by using the drop down menu next to the “Show temperatures in” field.
- To exit without making changes click “Cancel”. If you made changes click “OK” to save them



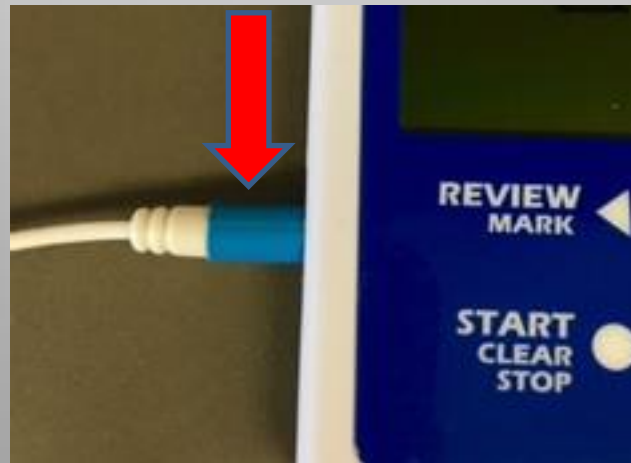
Configuring the Logger

The loggers have been preconfigured for use based on settings specified by the CDC/CO VFC, however you will need to familiarize yourself with the configuration process so you can review your settings before each use or and/or change your settings should you need to.



Configuring the Logger

- Carefully unplug the probe from Logger – Important: Do not pull on the probe cable to unplug the probe from the logger as this can permanently damage the probe
- To remove the probe grasp with fingers on probe end (blue band) and pull straight back from the Logger

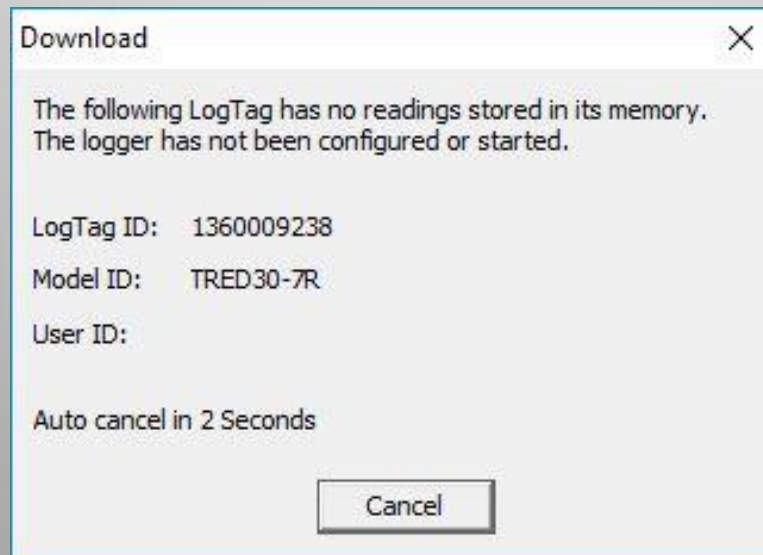


Configuring the Logger

- **IMPORTANT** – Loggers must be plugged back into the proper serial number matched probe. Take care to return each logger to it's original location after configuration is complete
- Open LogTag Analyzer Software (LTA) (If not already open)
- Drop Logger into docking station – Push down until you hear logger click into place

Configuring the Logger

- If this is your first time inserting the logger, a notification box will pop up telling you that there is no data on the device
- Message will time out or you can click “Cancel” to proceed

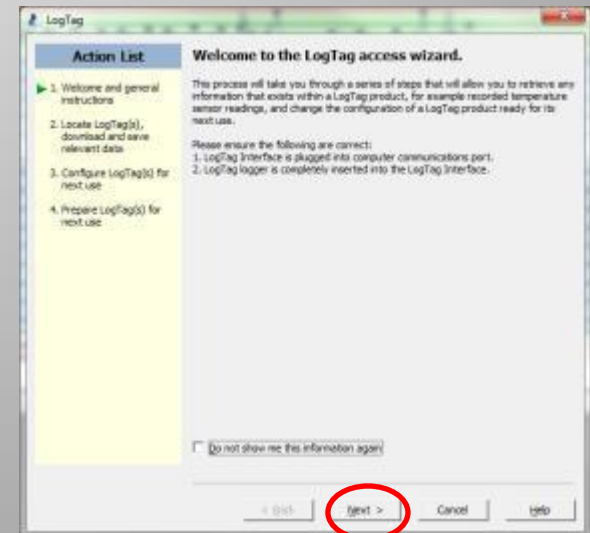


Configuring the Logger

- Launch the Configuration Wizard by clicking on the icon



- This will open the LogTag Access Wizard window.
- Click "Next" to launch the Configuration Window



Configuration Window Overview

LogTag

Action List

- ✓ 1. Welcome and general instructions
- ✓ 2. Locate LogTag(s), download and save relevant data
- 3. Configure LogTag(s) for next use
- 4. Prepare LogTag(s) for next use

User ID:

Push button start ▼

LogTag battery: OK

☐ Enable pre-start logging

☐ Record readings continuously, overwrite oldest when memory full

☒ Record readings so that:

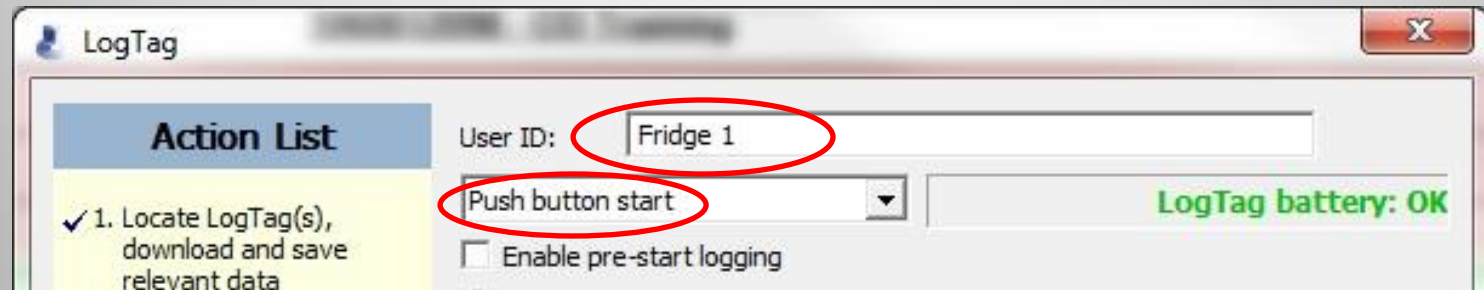
Readings recorded will span at least days

Number of readings to record maximum is 7777

Record a reading every Minutes ▼

- LTA will automatically populate each field with each logger's previous configuration data so most fields will already be completed
- Even though loggers have been pre-configured it is highly recommended that you give each logger a unique User ID name (This name will be what shows on the S: shared folder downloads). The default name for each logger is the serial number.

Configuring the Logger



- User ID: Give each logger a unique name for easy identification
- Example: “Fridge 1” or “Store Room”
- Confirm that “Push button start” is chosen

Configuring the Logger

2. Configure LogTag(s) for next use

3. Prepare LogTag(s) for next use

☐ Record readings continuously, overwrite oldest when memory full

☒ Record readings so that:

Readings recorded will span at least days

Number of readings to record maximum is 7777

Record a reading every Minutes

Begin recording after a delay of Minutes

Confirm the following settings

- “Record readings so that:” is selected
- Set “Record a reading every” to 30 Minutes
- Set “Begin recording after a delay of” to 5 minutes

Configuring the Logger

The screenshot displays two sections of a configuration form. The top section is for 'above/equal' alarms, with a red arrow pointing to the checked checkbox and a red circle around the value '46.1'. The bottom section is for 'below/equal' alarms, with a red arrow pointing to the checked checkbox and a red circle around the value '35.9'. Both sections include an 'After' field set to '2', a 'Consecutive' dropdown menu, and a 'violation readings (None)' label.

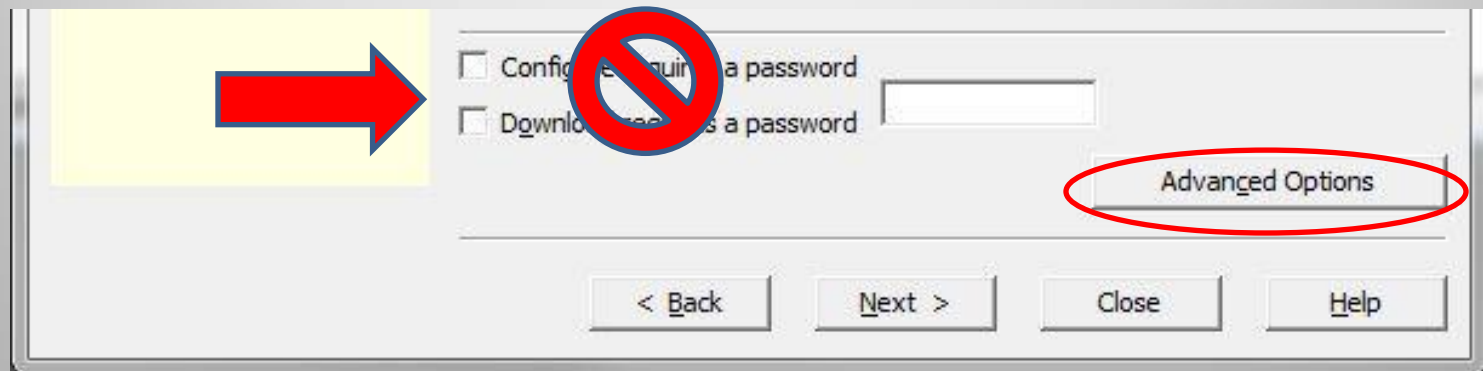
☒ Trigger alarm when readings above/equal 46.1 °F
☐ After 2 Consecutive violation readings (None)

☒ Trigger alarm when readings below/equal 35.9 °F
☐ After 2 Consecutive violation readings (None)

Confirm the following settings

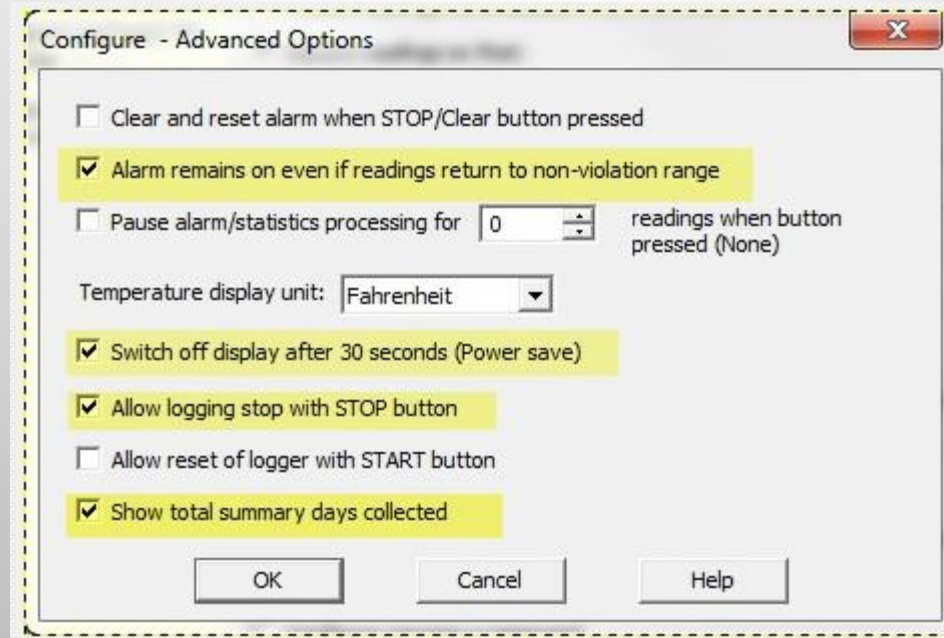
- Box checked next to “Trigger alarm when readings above/equal”
- 46.1°F (8.1°C) is in the field for Fridge or 5.1°F (-14.9°C) for Freezer
- Box checked next to “Trigger alarm when readings below/equal”
- 35.9°F (-1.9°C) is in the field for Fridge or -40°F (-40°C) for Freezer

Configuring the Logger



- We recommend leaving the “Configure requires a password” and “Download requires a password” options unchecked.
- If enabled and the password is lost, the logger will require factory support to unlock
- Click the “Advanced Options” button to continue

Configuring the Logger

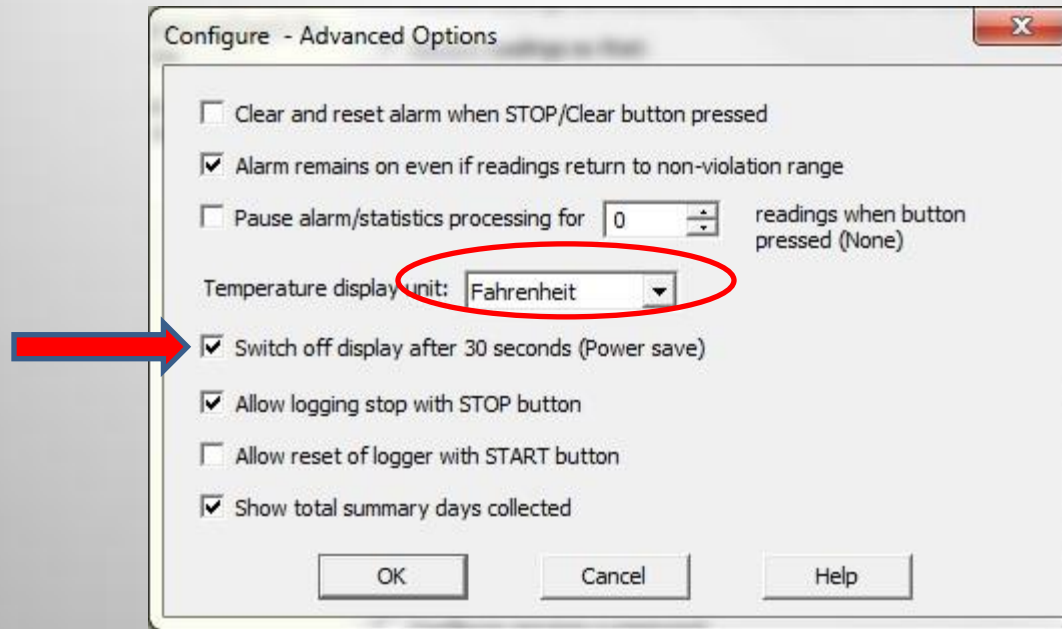


Confirm the following settings

- Box is checked for “Alarm remains on even if readings return to non-violation range”
- Box is checked for “Switch off display after 30 seconds (Power save)”
- Confirm that “Temperature display unit is set to the desired scale”
- Box is checked for “Allow logging to stop with STOP button”
- Box is checked for “Show total summary days collected”

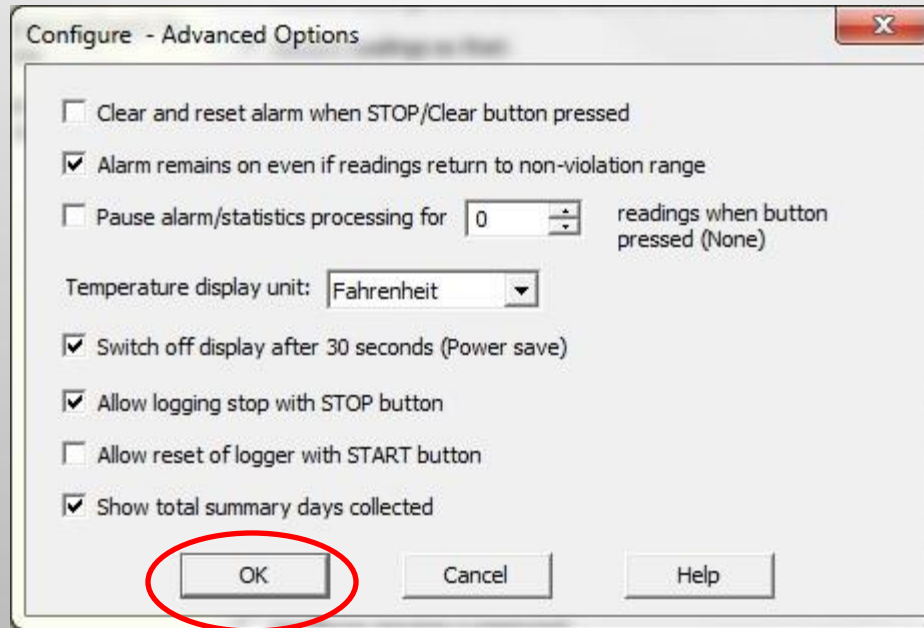
Click the “OK” button to continue

Configuring the Logger



- The logger will display temperature in Fahrenheit by default. If you would like to change it to Celsius you can do so by selecting it in the drop down menu
- With “Power Save” enabled the logger display will turn off after 30 seconds in order to maximize battery life. To turn on the display simply press the “Review” button on the logger
- The logger continues to record even when the display is off

Configuring the Logger



Click the "OK" button to continue

Configuring the Logger

LogTag

Action List

- ✓ 1. Welcome and general instructions
- ✓ 2. Locate LogTag(s), download and save relevant data
- ▶ 3. Configure LogTag(s) for next use
- 4. Prepare LogTag(s) for next use

User ID:

LogTag battery: OK

☐ Enable pre-start logging

☐ Record readings continuously, overwrite oldest when memory full

☒ Record readings so that:

Readings recorded will span at least days

Number of readings to record maximum is 7777

Record a reading every Minutes

Begin recording after a delay of Minutes

☒ Trigger alarm when readings above/equal °F

☐ After Consecutive violation readings (None)

☒ Trigger alarm when readings below/equal °F

☐ After Consecutive violation readings (None)

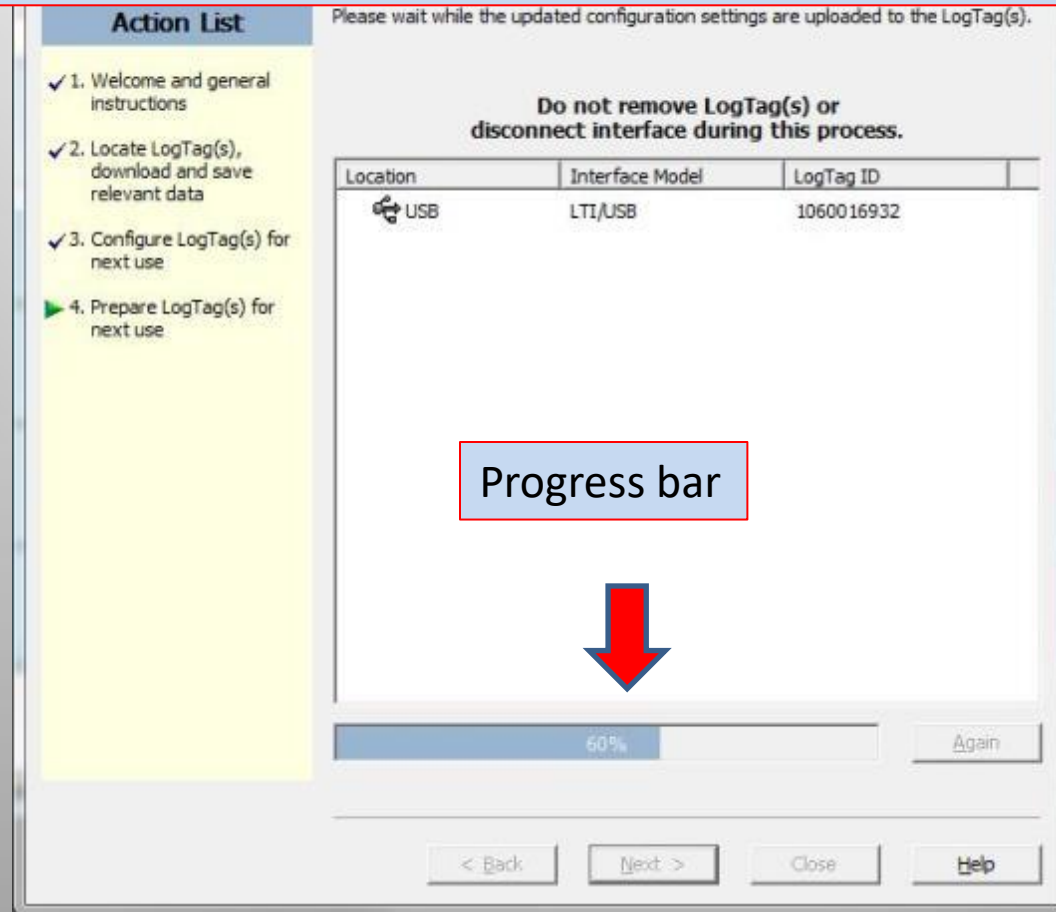
☐ Configure requires a password

☐ Download requires a password

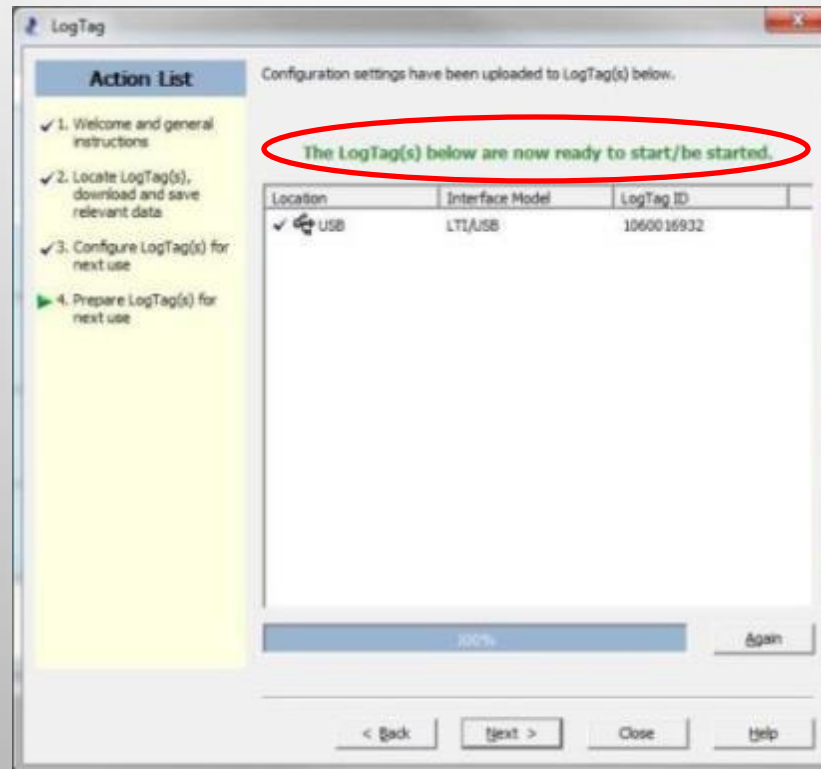
Click "Next" to send configuration to the logger

Configuring the Logger

Configuration is now being transferred to the logger



Configuring the Logger



- Once progress bar reaches 100% you can remove the Logger from the dock
- If you are done configuring click “Close” or if you have another logger to configure insert it and click “Next”

Configuring the Logger

- You can now bring the logger back to it's proper location and carefully reattach the probe
- **Important** – Loggers must be plugged into serial number matched probe

Button Actions Overview



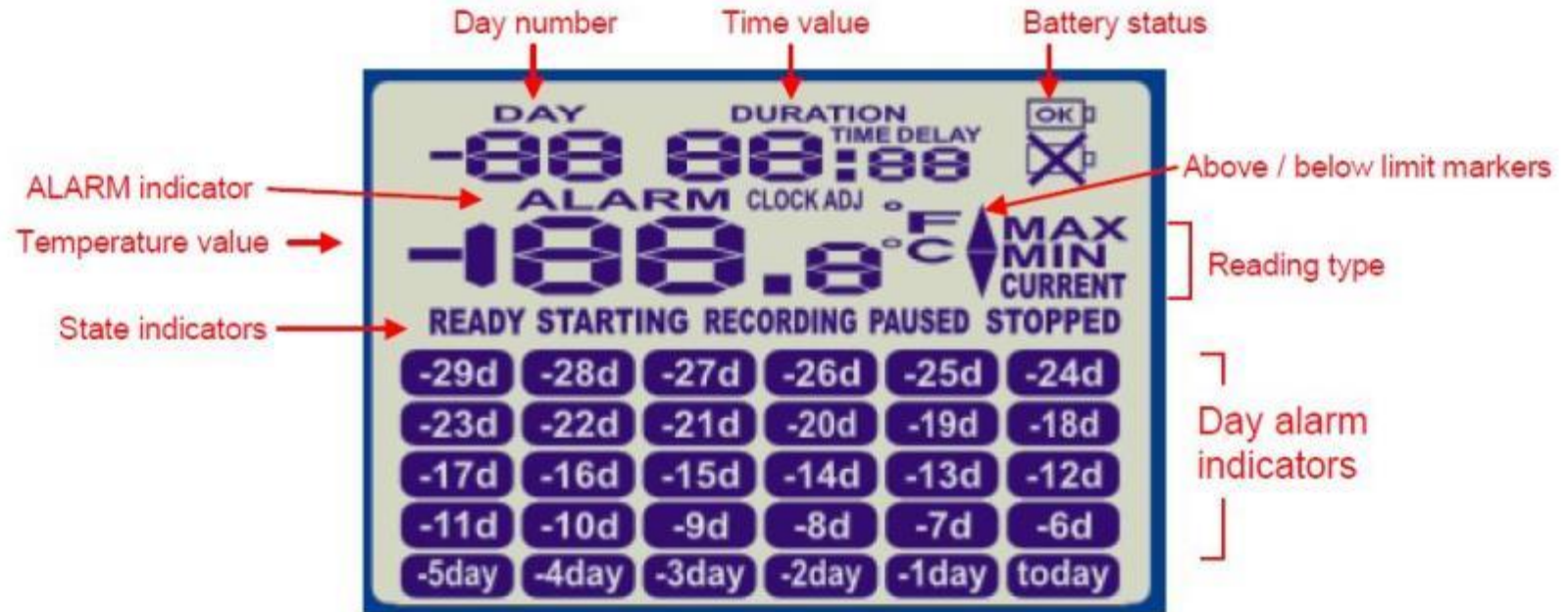
Review/Mark button

Press to enter REVIEW mode and then press again to advance through the day statistics.
This action also places an inspection mark in the log if recording is active

Start/Clear/Stop button

Press to start recording
Press to clear alarm (if function enabled)
Press to Stop recording (if function enabled)
Press to exit day summary review.

Display Overview

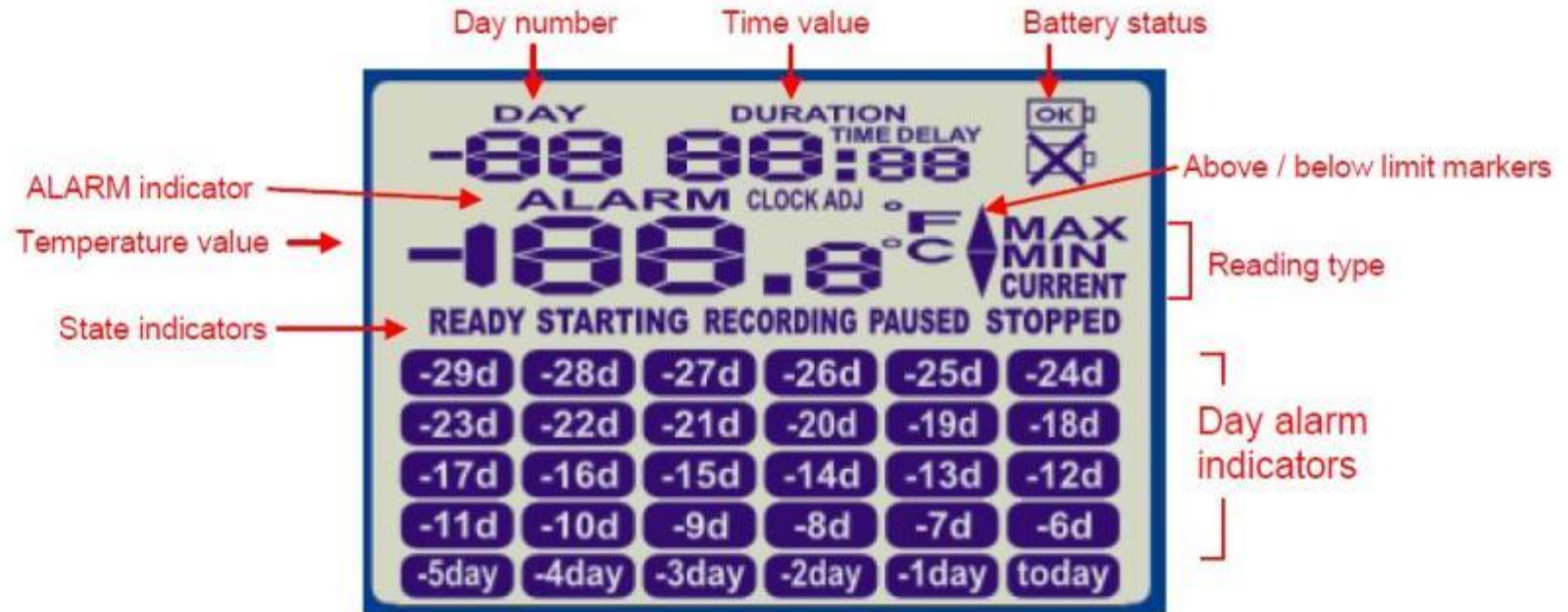


Temperature Value - Temperature value (in °C or °F)

Reading Type -
CURRENT = The temperature of the last reading taken
MAX = The maximum reading in a given 24hr period
MIN = The minimum reading in a given 24hr period

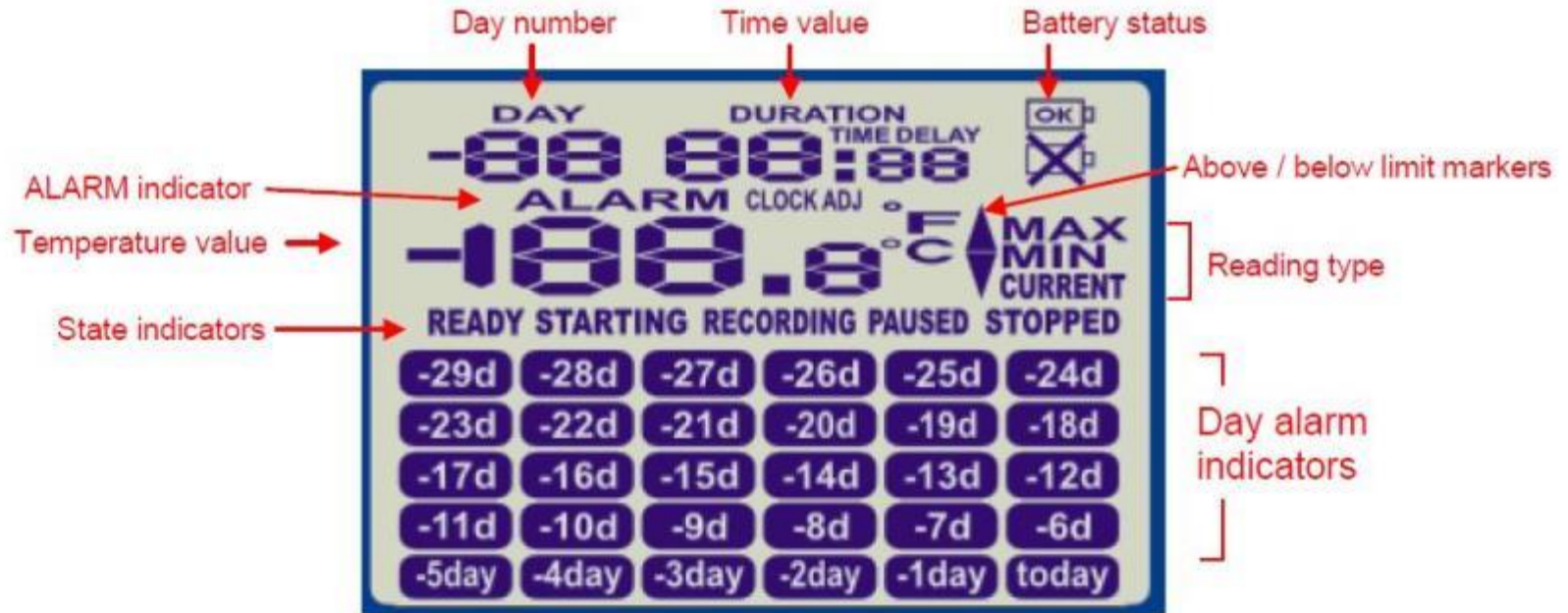
ALARM Indicator – ALARM appears when an alarm is triggered

Display Overview



Time value - The time (in HH:MM) can be current time, time remaining to start of delayed start, or duration of a given max/min value above/below the specified limits.

Display Overview



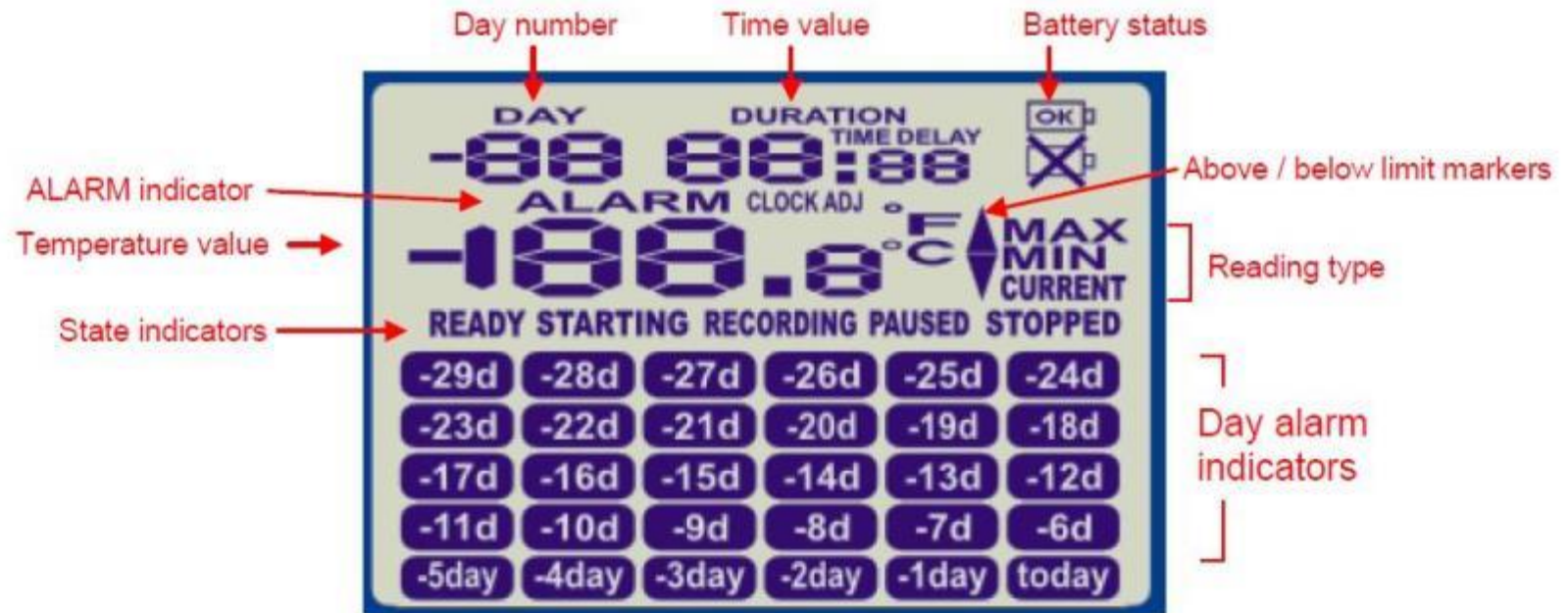
The value displayed is indicated by the following:

TIME = Displaying Current Time (READY & RECORDING modes)

TIME DELAY = Displaying remaining time to recording start when a DELAYED START time has been configured (STARTING MODE)

DURATION = Displaying duration of a given MAX/MIN statistic above/below the limits in a given day (REVIEW MODE)

Display Overview



Battery status – Performs battery test hourly

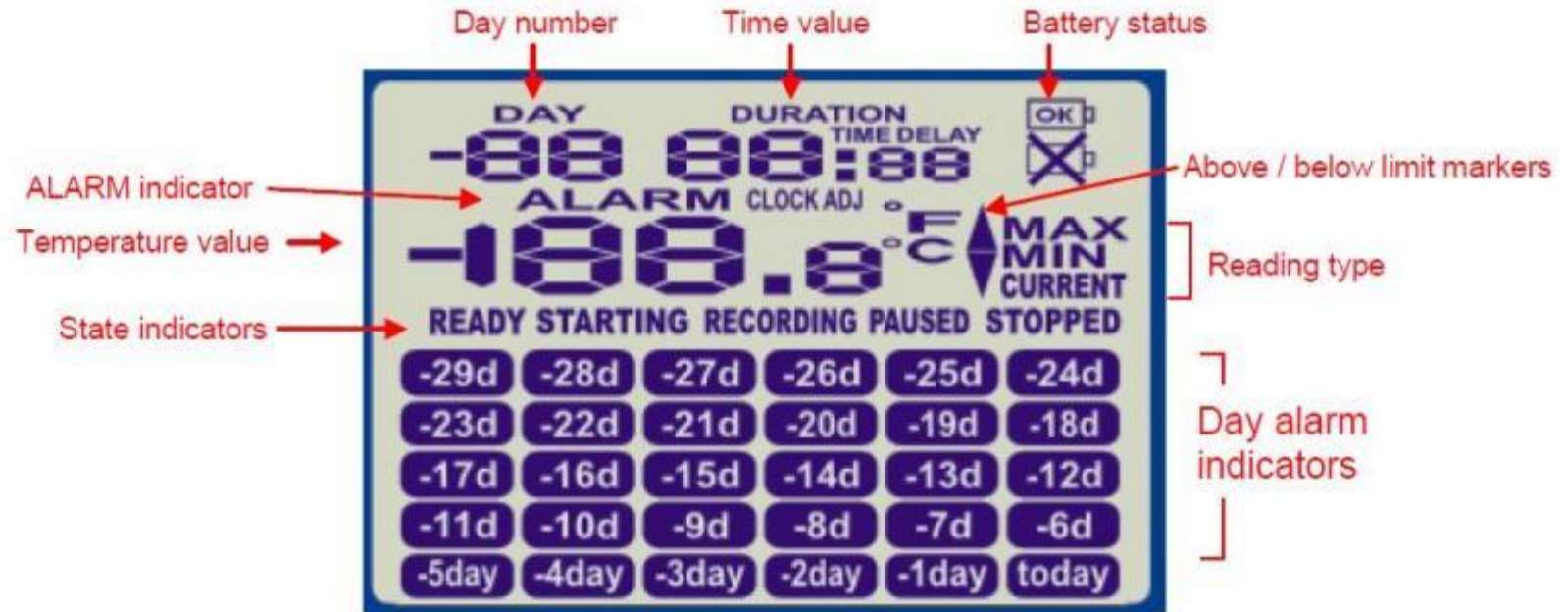


displayed when battery is tested OK.



displayed when battery is tested LOW.

Display Overview



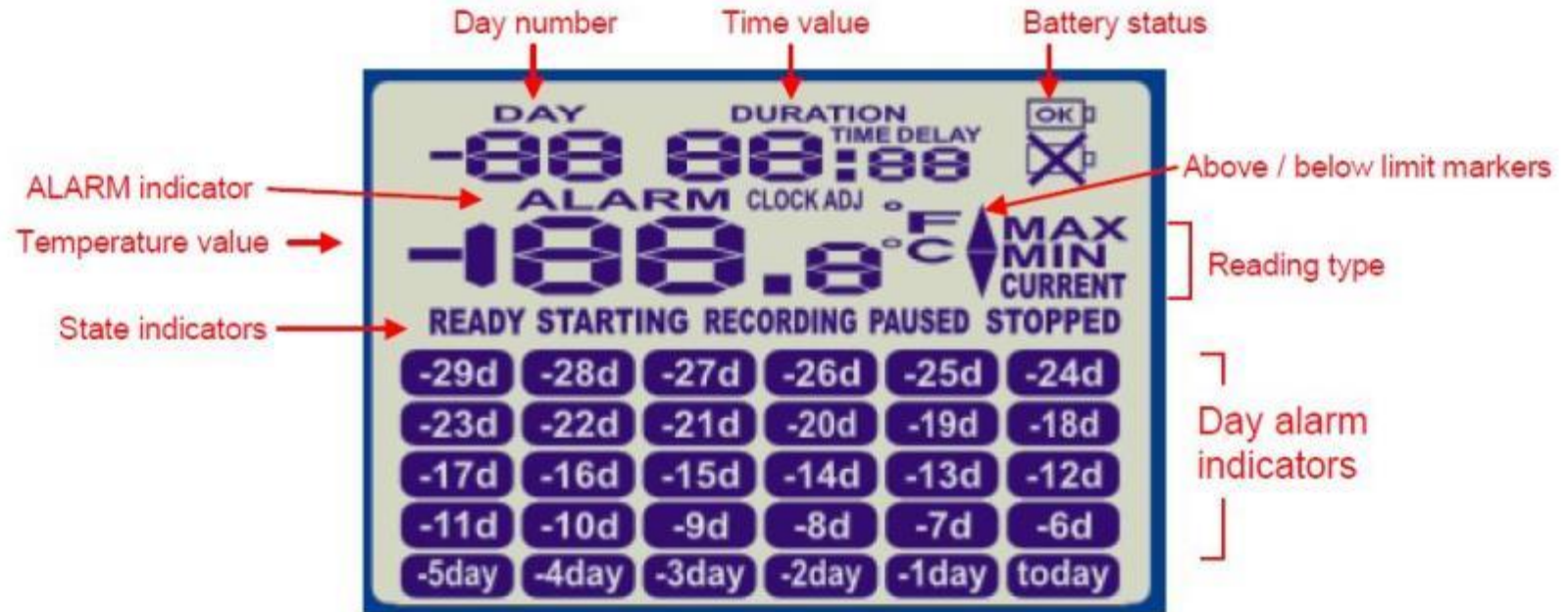
State Indicator

READY = Ready to start recording

STARTING = Preparing to start recording. If a delayed start is configured then displays time remaining to recording start

RECORDING = Logger is recording (logging data)

Display Overview

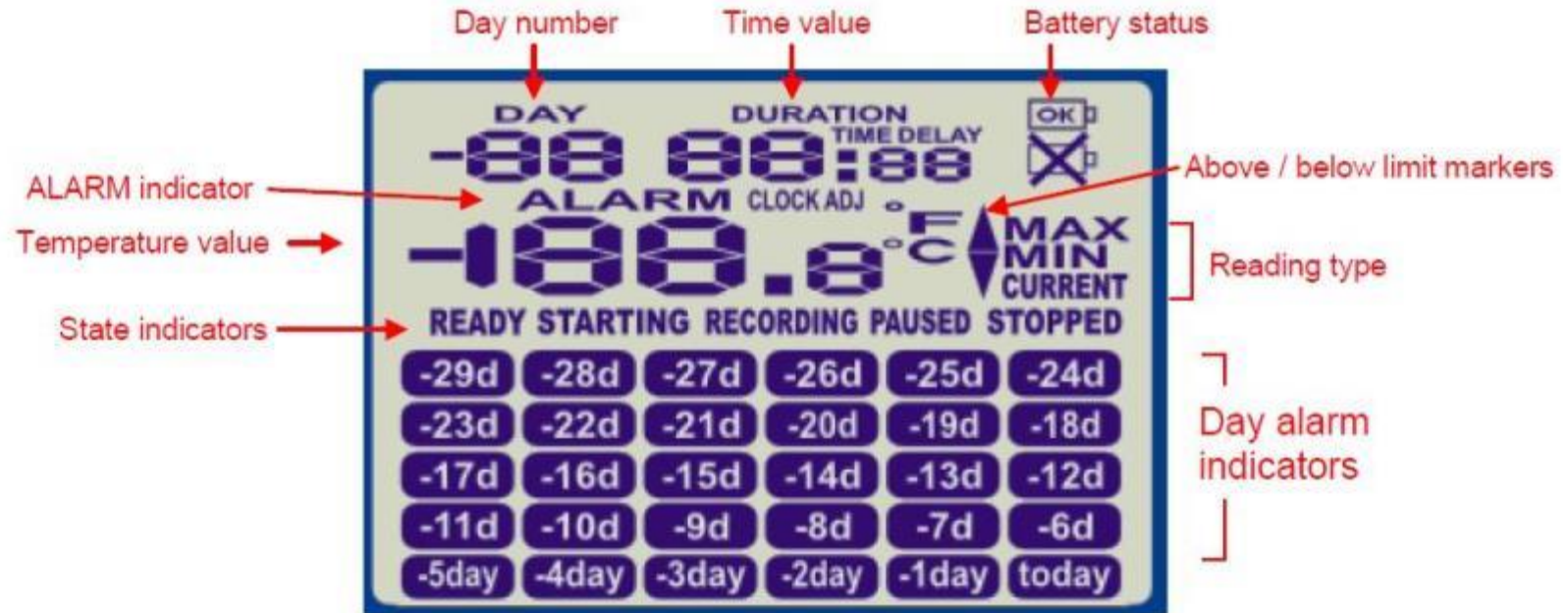


State Indicator

PAUSED = Max/Min statistics paused due to button press activity (if so configured)

Stopped = Recording has stopped

Display Overview



Day Alarm Indicators – The display is organized with a table of “day alarm indicator” segments named “Today” to “-29d” which are switched on when a given day has an alarm trigger

Day Number – Default is the day number of the current selected day statistic is displayed when in review mode. TODAY is DAY “0”, yesterday is DAY “-1”

Your loggers are configured to display the total number of days collected while recording

Starting the Logger

It is recommended that you read through the next few slides before attempting to start your logger. Once done please go through them again while you follow along with your logger.

1. Confirm that “Ready” is displayed on the LCD Screen
2. Press and hold the start button and observe that the “STARTING” icon starts flashing – Hold button down and release as soon as “Starting” stops flashing. (Typically 4-6 seconds but it can take longer if button is not continually depressed)



Starting the Logger

- Once released “STARTING” icon stops flashing – If it doesn’t or goes back to “Ready” try again.
- The logger is now in “STARTING” mode – “TIME DELAY 00:05” will be displayed
- Once the start delay times out (after 5 min) the logger will enter “RECORDING” mode. At this time the display will show current temperature, current time, battery status, and any alarm triggers. This information is updated each time a log is taken



Starting the Logger



- It is important to release the start button as soon as the “starting” icon stops flashing.
- Holding the button too long or releasing the button too soon will revert the logger back to “ready” status. It can take some practice to get your timing right.
- It’s a good idea to wait until the 5 min delay times out so you can confirm the logger goes into “Record” mode the first few times you configure it

Congratulations!

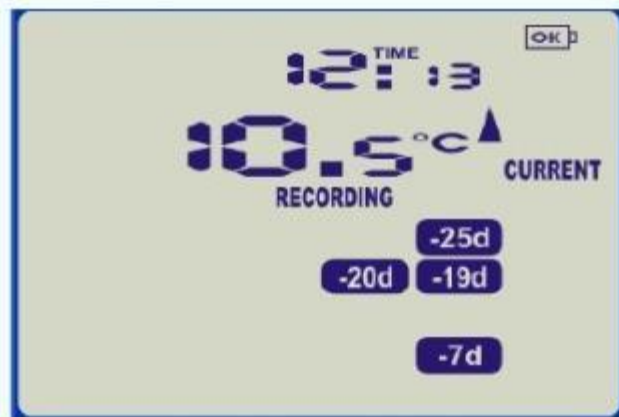
You're Logging!



Recording Display



- The normal recording mode display shows the current temperature of the last log taken. It's updated at the same rate as the logging interval.
- The current time, battery status and alarm trigger day summary are also displayed.

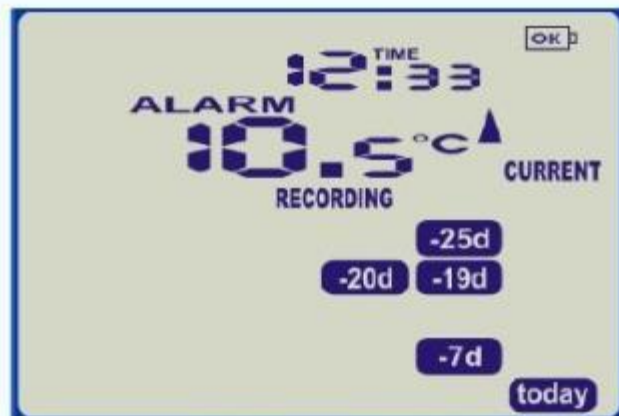


The recorder shows alarm triggers 7, 19, 20 & 25 days ago.

The current temperature is over the upper limit (as indicated by the up arrow) but the duration of this temperature excursion has not yet triggered an alarm.



20 Minutes later



The temperature excursion has triggered an alarm.

The **ALARM** symbol is shown and the **today** marker day alarm indicator is shown.



12 hours later

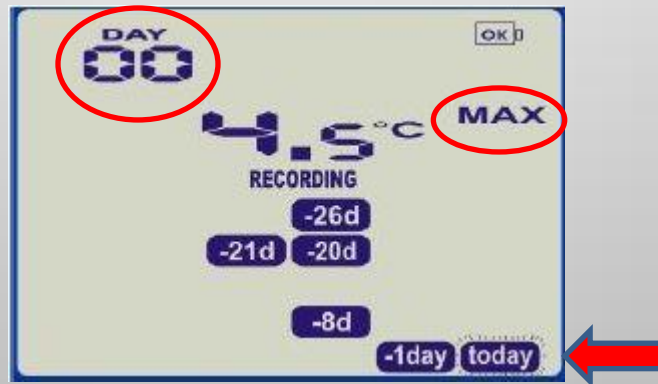


The temperature has returned to the acceptable range but the alarm remains present.
(i.e has not been inspected and cleared)

The day summary has shifted by 1 day as the display time has gone through midnight (00:00).

Reviewing Daily Statistics

- Press the “Review” button to displays the currents day’s max temperature
- Document this max temperature on your paper temperature log



- The “Today” segment flashes and ‘Day 00’ is shown to indicate the ‘Today’ selection.

NOTE: With the Power Save feature enabled the display will go blank after 30 seconds. Pressing the “Review” button will wake the logger and bring up the display

Reviewing Daily Statistics

- Pressing “Review” again displays the day’s minimum temperature
- Document this min temperature on your paper temperature log



Reviewing Daily Statistics

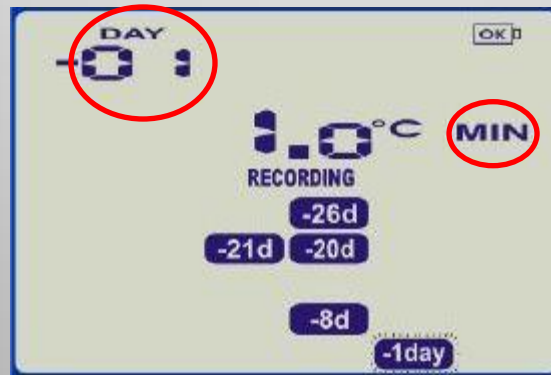
- Pressing “Review” again displays the next previous day’s max statistic



- In this example the selected day has recorded temperatures that are above the upper limit and the duration value shows the amount of time recorded above the limit.
- The max temperature is above the upper limit so the up arrow is shown and an alarm was triggered by this reading as indicated by the ALARM text shown.

Reviewing Daily Statistics

- Pressing “Review” again displays the next previous days minimum temperature



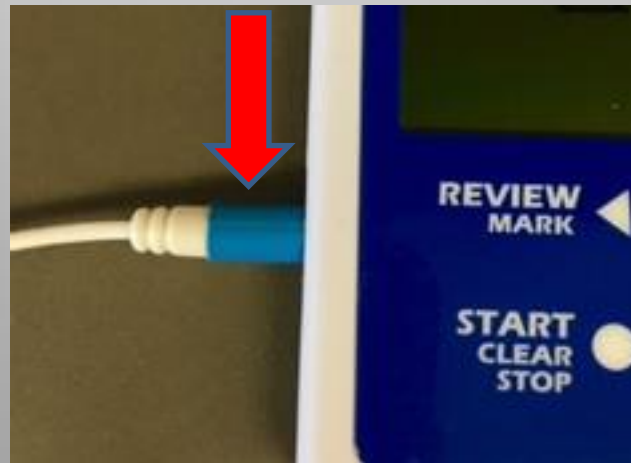
- With each press of the “Review” button the next previous days max and min temperatures will be displayed (up to DAY -29)
- Pressing the “START” button at any time will revert the display back to normal mode

View/Save Logger Data

- Slide logger out of mount
- Stop the recording process by pressing and holding the “Start/clear/stop” button
- When “STOPPED” is no longer flashing release the button
- You should see “STOPPED” on screen
- ***It is important to confirm that the logger is stopped before continuing to the next step of unplugging the probe***

View/Save Logger Data

- Unplug probe from Logger – Important: Do not pull on the probe cable to unplug the probe from the logger as this can permanently damage the probe
- To remove the probe grasp with fingers on probe end (blue band) and pull straight back from the Logger

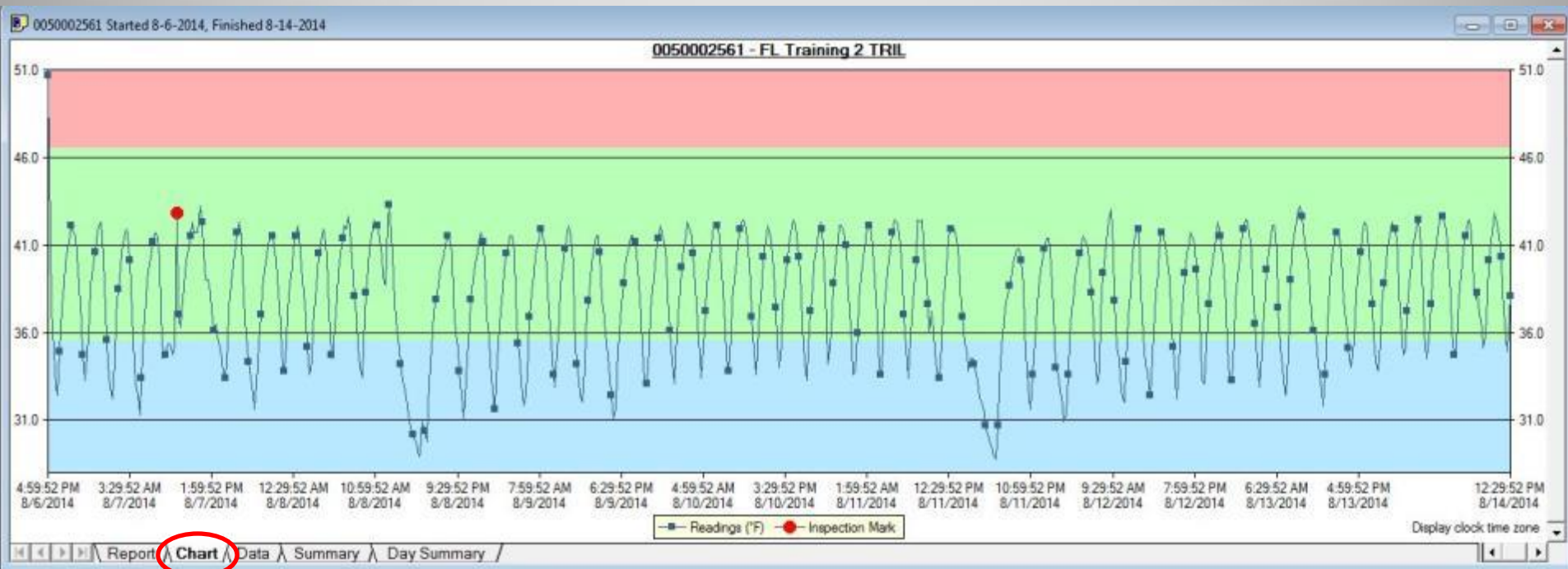


View/Save Logger Data

- **IMPORTANT** – Loggers must be plugged back into the proper serial number matched probe. Take care to return each logger to it's original location
- Open LogTag Analyzer Software (LTA)
- Insert Logger into docking station – Be sure Logger “clicks” into place

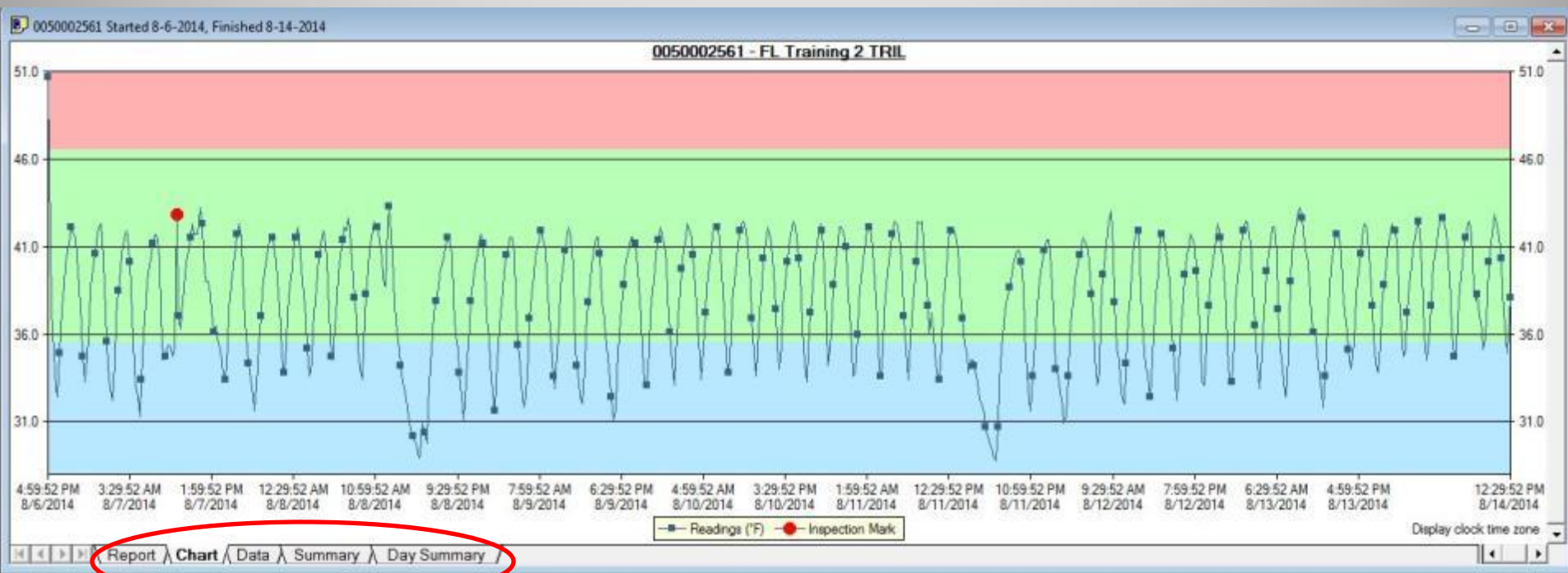
View/Save Logger Data

- Data is automatically saved to computer and LTA launches data window and displays the “Chart” tab



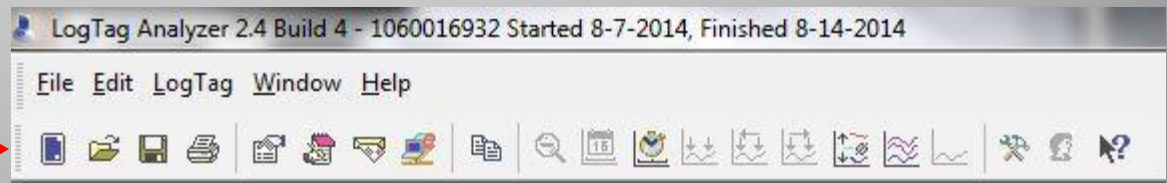
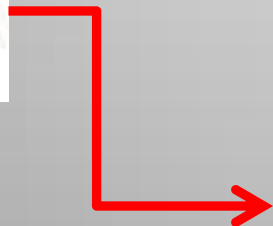
View/Save Logger Data

- Additional views and report options can be chosen from the tabs at the bottom of the window



View/Save Logger Data

- Once graph is visible the data has been saved and the logger can be re-launched.
- To re-launch the logger click on the LogTag Analyzer Wizard button



View/Save Logger Data

- The logger can now be re-launched by following the same procedure described in the “Configuring the Logger” section
- LTA will retain the configuration settings, however we recommend double checking that they are correct before sending the configuration to the logger and re-launching the logger – see “Configuring the Logger” section
- Once configuration is complete and sent to the logger you can remove the logger from the docking station and return it to it’s proper location.
- **Broken Record** - Loggers must be plugged into serial number matched probe

View/Save Logger Data

- Be sure to start each logger and ensure that probe is correctly attached
- It is recommended that you double check that the logger has started 5 minutes after pressing the start button
- You can now move on to the next logger

Troubleshooting

- Issue: Display or data shows -199.9 as temperature reading
 - Cause: Probe is/was not plugged into logger or not properly attached > reattach probe to logger
- Issue: Logger doesn't start after pressing "Start" button
 - Solution: Review section on Starting the Logger
- Issue: Software/PC doesn't recognize that Logger is plugged into dock
 - Solution 1: Ensure cardboard insert is removed from logger slot on docking station
 - Solution 2: Ensure logger is firmly seated in docking station
 - Solution 3: See "Resolving USB Installation Issues" document found on the website – www.MicroDAQ.com/Centura

Additional Support

- Detailed instructions on using the logger and LTA Software can be found in the LogTag Analyzer manual
- Manual can be downloaded from the website or by clicking on the “help” option from inside the LTA software
- Technical support is available from MicroDAQ.com, Ltd. Monday – Friday from 9:30 – 4:30 EST by calling **603-746-5524** or email at support@microdaq.com
- Including “Centura Support” in the subject line of your email will ensure the quickest response time

Email Questions to Support@Microdaq.com



Thank you!