

LogTag Recorders QUICK START GUIDE

This Quick-Start guide covers preparation, use and maintenance to assist you in getting the best results from your LogTag.

PRODUCTS

LogTag Recorders offer a variety of different models. The product range is constantly being updated and new models added, so visit the LogTag Website at <http://www.logtagrecorders.com> frequently to get the latest information and news about upcoming product releases.

You can find a list of the most common models in table 1. Using the LogTag most appropriate to your measuring and monitoring task will ensure the best results.

LogTags have a number of features in common: a green OK LED, a red ALERT LED, a START/MARK button and a mounting lug.



GETTING STARTED

All you need to use the LogTag Recording system are a LogTag Interface, a PC running Windows 2000 or later, the LogTag Analyzer PC application and the LogTag Recorder itself. Don't plug the interface into the computer just yet, this will be done at the conclusion of the software installation.

SOFTWARE INSTALLATION

Before using a LogTag Recorder you will need to download the LogTag Analyzer software from LogTag's web site at www.logtagrecorders.com/software/software.htm. After registering you will be e-mailed with a link, from where you can download the standard version or the unicode version for languages with special characters such as Chinese.

Once downloaded, start the executable to initiate the installation process; please note you will need limited administrator rights to do this.

Wait until finished before installing your interface.

INTERFACE INSTALLATION

After the installation is complete, you will see a new icon on your desktop. You can now plug your interface into a USB port, or an RS232 port if you were supplied this type of interface. For USB interfaces the drivers will now install automatically. Your operating system will notify you once the driver installation has succeeded. You can use multiple interfaces on one computer and also mix RS232 and USB interfaces.



When all interfaces are installed you are ready to proceed.

CONFIGURING A LOGTAG

You will need to configure a LogTag if you want to take readings with it. Insert the LogTag into the interface, contacts in first and the LED's towards the interface label as shown in the picture on the right.

Start the software. The easiest way to configure the LogTag for a trip is the use of the LogTag Wizard by clicking on the 'Wizard' toolbar button or selecting 'LogTag'-'Wizard' from the menu.

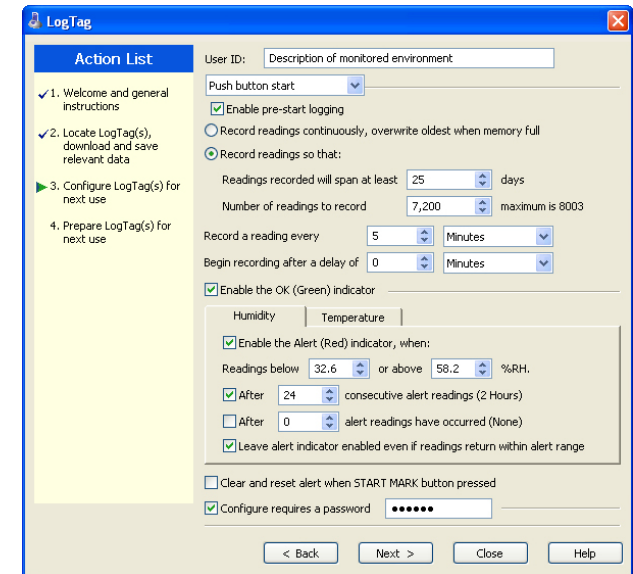


Product Type	Integrated Temperature Sensor	Integrated Humidity Sensor	Sensor Probe	Display	Temperature Range	Memory
TRIX-8	●				-40°C to 85°C	8,000 samples
HAXO-8	●	●			-40°C to 85°C	8,000 samples
SRIC-4	●				-20°C to 65°C	4,000 samples
TREX-8			●		-40°C to 99°C	8,000 samples
TRIL-8	●				-80°C to 40°C	8,000 samples
TREL-8			●		-80°C to 40°C	8,000 samples
SRIL-8	●				-80°C to 40°C	8,000 samples
TRID30-7	●			●	-30°C to 60°C	7770 samples

Table 1: LogTag Logger Models

The Wizard will

- Query all interfaces and any loggers inside them
- Download any data from loggers found and save them to files
- Allow you to enter parameters for a new trip, like shown in this screen:



- Upload the new configuration to the loggers
- You can enter parameters such as start method (push button or date/time), logging interval (30 seconds to 18 hours), logging duration, start delay, access passwords and not to forget Alert values, which are used for the Alert LED activation and the reporting functions in LogTag Analyzer, and also add a description about your trip.

ANALYSING THE RESULTS

Once loggers have completed a trip, you can use the LogTag Analyzer software to analyse and archive the data, to export them to other programs such as MS Excel or to e-mail them and upload them to an off-site server.

A number of controls and displays assist you in operating the software.

- Menu
- Toolbars
- Status
- Data window with graph, list, summary and averaging tabs
- Multichart windows and annotations for adding notes
- Context menus allowing quick access to the most used functions.

For a full list of features please see the LogTag Analyzer User Guide, which can be accessed through the Help Menu. You can also call up on-line help information for all windows and dialogue buttons by pressing the F1 key.

LOGTAG INDICATORS

The LogTag Recorder itself can give you important status information by flashing its indicators in different patterns. Both the red 'Alert' and the green 'OK' LED's convey information about configuration and trip parameters, Alert status and give feedback when users interact with the START/MARK button.

You will find a summary of the indicator patterns with a description about their meaning in table 2 on the right.

START/MARK BUTTON

Once a LogTag has been configured, pressing the START/MARK button has a different outcome depending on what the logger is doing at the time the button is pressed.

- If the logger is configured for a push button start, pressing this button will activate the main recording. There is no need to be concerned about any lost data if the user forgets to press this button, as a pre-start recording feature can be activated, logging data even before the trip is started.
- Once the LogTag has been started, pressing the button will insert an inspection mark in the data recordings, which is displayed when viewing the data in the software.
- If configured, Alert Conditions can be reset when this button is pressed.

CUSTOMISING THE SOFTWARE

The software allows you to customise many of the features to your individual requirements. Not only can you change some of the more basic options like display language and temperature units, but also adapt some of the more advanced parameters for e-mail and FTP functions, storage folder location, file name and frequency for automatic software updates.

GETTING THE RIGHT RESULTS

When you use the LogTag units, please take a moment to consider the application and how

to best approach the monitoring task. Allow the units to be located in a place with good air movement, make sure HAXO units are not lying flat so water and dust cannot gather around the sensor filter and provide adequate insulation around access holes for sensors with probes.

CERTIFICATIONS

LogTag has achieved certification with a number of Authorities, demonstrating the quality and suitability of the LogTag Recorders for applications where accuracy and consistency is required. Such certifications have - amongst others- been issued by such organisations as the FCC, CE, C-TICK, TÜV and the WHO.

FDA TITLE 21 CFR 11

Compliance to the FDA requirements is available to users via a special server utility, available on request, which can log events and be used to digitally sign data files.

Signal	Sequence	Occurrence
LogTag wake-up signal	Sequence of four alternate flashes of green-red LED's	<ul style="list-style-type: none"> • displayed after configuration has been successfully applied to the LogTag • when a LogTag is woken up from hibernation state Not to be mixed up with...
LogTag start-up signal	Sequence of sixteen alternate flashes of green-red LED's	<ul style="list-style-type: none"> • displayed when the LogTag starts its recording cycle
Mark signal	Sequence of five simultaneous flashes of green and red LED's	<ul style="list-style-type: none"> • displayed when pressing start/mark button while recording to indicate an inspection mark in the software • displayed directly after the start-up signal following a push button start where a recording delay has been configured. In this instance the start-up signal is repeated when the actual recording begins
Logging active, no alert present	Single flash of green LED every 4 seconds (approx.)	<ul style="list-style-type: none"> • indicates LogTag is recording • This is not displayed when pre-start is active and the main logging cycle has not yet started. It is also not displayed when the green LED has been turned off in the configuration screen
Logging finished, no alert present	Single flash of green LED every 8 seconds (approx.)	<ul style="list-style-type: none"> • indicates LogTag has finished recording • This is not displayed when the green LED has been turned off in the configuration screen. Will also be displayed when unit has been woken up from hibernation
Alert condition present	Single flash of red LED every 4 seconds	<ul style="list-style-type: none"> • displayed when the LogTag has detected an alert condition and the Alert LED has been activated If an alert is present you cannot determine if the unit is still logging or has finished its log cycle. If the Alert LED has not been activated during configuration, in essence the visual indicators have been disabled, and the green LED will flash every 4 or 8 seconds as above.
Communication	The green LED will flash occasionally	<ul style="list-style-type: none"> • during communication with the interface the green LED will flash occasionally; no information is conveyed in this
Start button press	red LED glows faintly	<ul style="list-style-type: none"> • This is by design but conveys no information

Table 2: Light Patterns

MAINTENANCE

LogTag data loggers are rugged and need little maintenance, it does pay however to observe some basic rules when handling the recorders to maximise their use.

BATTERY REPLACEMENT

All LogTag data loggers have a replaceable battery. In some products, however, these batteries are soldered to the electronics to avoid contact issues that exist with other branded loggers; you will need some soldering expertise and a battery replacement kit from your distributor. Please also note that the products do contain a non-rechargeable Lithium Battery, which must be disposed of in accordance with local regulations.

HIBERNATION

To prolong the life of your data logger, you can hibernate it between trips via LogTag Analyzer when it is not being used for extended periods. Please refer to the User Guide in the section about 'Hibernation'

CALIBRATION

All LogTag Recorders can be calibrated with special utility software, which will be made available to calibration labs upon request. Re-calibrated loggers can be identified and traced back to the calibrating lab thus reducing the risk of fraudulent data tampering.

BASIC TROUBLESHOOTING

WATER INGRESS

Please carefully observe the IP rating for your unit and remember that none of the LogTag products can be immersed into liquids.

CONTACT CLEANING

Keep the three metal contacts at the back of the logger clean and free from tape residue, dirt or other contaminants, as these usually result in communications problems. If required, clean them with a soft pencil eraser, but don't use abrasive materials as you may permanently damage them.

GETTING HELP

If after studying the User Guide you still need further information, please call ThermoWorks at 800-393-6434.

ThermoWorks, Inc. | 1762 W. 20 S. #100
Lindon, UT 84042 | ph: 801-756-7705
www.thermoworks.com