

TRIL/SRIL-16U USB PDF TEMPERATURE RECORDER

Quick Start Guide

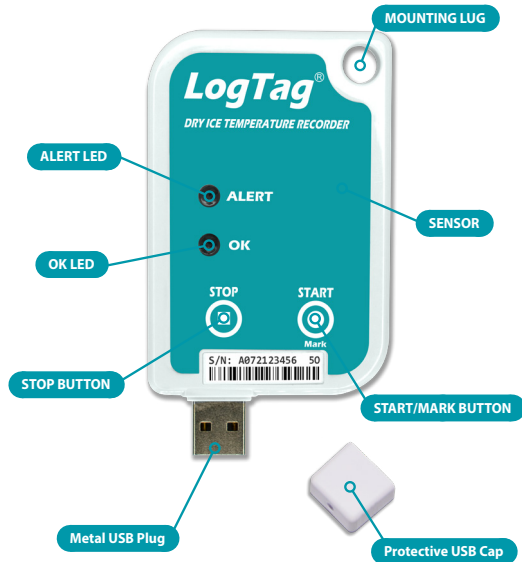
LogTag®

Introduction

LogTag's TRIL/SRIL-16U is a fully configurable, multi-use USB temperature recorder that can create temperature reports without the need to install proprietary software or hardware at the destination. It can be plugged straight into a computer's USB port and generates a PDF file, which can be accessed using PDF software such as Acrobat Reader.

Hardware Requirements

- LogTag® TRIL or SRIL-16U USB PDF temperature recorder.
It is recommended you connect all TRIL/SRIL-16U devices via a permanently plugged in USB extension cable or a USB hub to protect your computer's USB socket.
- A computer with a USB port.
- For configuration - a PC running Windows 8.1 or later.



Software Requirements

Software requirements vary depending on the type of file you want the TRIL/SRIL-16U to generate when plugged into USB at the destination.

- If you wish to **configure** TRIL/SRIL-16U products you will need to download the LogTag® Analyzer software from LogTag's web site at <https://logtagrecorders.com/ita3/>. Follow the instruction to install and start the software.

- If you only plan on **evaluating data**, plug the TRIL/SRIL-16U into a computer's USB socket. A PDF file will be generated¹, which you can open by accessing the recorder's USB memory storage with PDF reader software such as Acrobat Reader.
- At the same time an LTD file will be created¹ that can be **opened** with LogTag Analyzer. Here you can analyze data in detail, generate report files and create charts from multiple recorders for comparison.
- You can also choose to create a CSV file, which can be opened directly with MS Excel™.
- You can also **download** data directly into LogTag Analyzer.

Configuring the TRIL/SRIL-16U

TRIL/SRIL-16U products can be ordered ready to start, or configured using LogTag Analyzer:

- Start the LogTag Analyzer software, remove the protective cap and insert the TRIL/SRIL-16U into a USB port. You will receive a message that a new USB device has been found², and a generic driver will be installed.
- Once the driver is installed and the TRIL/SRIL-16U is ready (indicated by the green LED on the recorder blinking every second), it can receive configuration data. If the TRIL/SRIL-16U does not appear in the list of devices simply click **Rescan**.

Standard Configuration Options

The standard configuration options include settings such as

The screenshot shows the 'User Information' window in LogTag Analyzer. It includes fields for 'Description' and 'Password'. There are checkboxes for 'Configure requires a password' and 'Download requires a password'. Under 'Logging Parameters', there is a dropdown for 'Push button start' and a checkbox for 'Enable pre-start logging'. The 'Record maximum number of readings' section has three radio button options: 'Record maximum number of readings' (selected), 'Record readings continuously, overwrite oldest when memory full', and 'Record readings go that:'. Below this, there are fields for 'Readings recorded will span at least' (56 Days), 'Number of readings to record' (16129, maximum is 16129), 'Record a reading every' (5 Minutes), and 'Begin recording after a delay of' (0 Minutes).

User ID, start method, pre-start recording, logging interval and duration, start delay and password.

Alarm Settings

¹ Depending on the configuration, the TRIL/SRIL-16U may produce a combination of different file types, or none at all if file generation is disabled when configuring the unit.
² Depending on the factory configuration additional drivers may be installed at this time.

The screenshot shows the 'Alarm Settings' window in LogTag Analyzer. It has two sections: 'Upper' and 'Lower'. Each section has a 'Violation readings (1 Hour)' dropdown. The 'Upper' section has a temperature range of 10.0 to 8.0 °C, with an 'After' value of 2 and an 'Accumulative' option. The 'Lower' section has a temperature range of 2.0 to -20.0 °C, with an 'After' value of 2 and an 'Accumulative' option.

In this tab you define the conditions in which the TRIL/SRIL-16U will display an alert. You can set up to 6 alarm trigger conditions.

The screenshot shows the 'Advanced Options' window in LogTag Analyzer. It includes sections for 'Date Format' (DD/MM/YY or MM/DD/YY), 'Time Format' (12-hour (am/pm) or 24-hour), 'Scale Y Axis' (Range of readings, Range of sensor, or Minimum range), and 'Files to generate' (PDF, LTD, CSV). There are also fields for 'PDF temperature unit' (Celsius), 'PDF Time Zone' (UTC +13:00), 'PDF Language' (English), 'Upper Limit' (1.0), and 'Lower Limit' (0.0).

The screenshot shows the 'Advanced Alarm Options' and 'Advanced Logger Options' windows in LogTag Analyzer. The 'Advanced alarm options' section has a checkbox for 'Leave alert indicator enabled even if readings return to non-alert range' and a checkbox for 'Clear and reset alert when START MARK button pressed'. The 'Advanced logger options' section has a checkbox for 'Enable the OK (Green) indicator' and a checkbox for 'Allow logging stop with STOP button'.

File Settings

This tab lets you decide which files -if any- are generated at the end of the trip, and also determine the appearance of the PDF file by setting options such as [scaling](#), [grid and alarm line display](#), [temperature unit](#), [date and time format](#), [time zone](#), [PDF language](#) and [MKT settings](#).

Advanced Settings

Click [Advanced Settings](#) for additional configuration options, for example, whether or not the recorder can be stopped using the [STOP](#) button and the ability to clear alarms.

Finalising the configuration

- Click [Configure](#) and the recorder will be configured with these settings.
- When the configuration is complete, unplug the TRIL/SRIL-16U from the USB socket and replace the protective cap.
- If you wish to configure more TRIL/SRIL-16U units with the same configuration profile, insert the next recorder into the USB socket, wait until it is ready for configuration and click [Repeat Configure](#).
- You can also configure multiple units at the same time.

Signal	Sequence	Occurrence
Wake-up signal	Sequence of four quick alternate flashes of green-red LED's	<ul style="list-style-type: none"> • displayed after configuration has been successfully applied to the TRIL/SRIL-16U • Not to be mixed up with...
Start signal	Sequence of ten alternate flashes of green-red LED's	<ul style="list-style-type: none"> • displayed when the TRIL/SRIL-16U starts its recording cycle. • The delay timer is re-started (followed by Delay Signal).
Mark signal Delay 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. • 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 TRIL/SRIL-16U 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 TRIL/SRIL-16U has finished recording. • This is not displayed when the green LED has been turned off in the configuration screen.
Logging active, alert condition present	Single flash of red LED every 4 seconds	<ul style="list-style-type: none"> • indicates TRIL/SRIL-16U is recording, an alert condition has occurred. • not displayed when pre-start recording has been configured and the recorder has not yet been started.
Logging finished, alert condition present	Single flash of red LED every 8 seconds	<ul style="list-style-type: none"> • indicates TRIL/SRIL-16U has finished recording and an alert condition was present during the trip.
Communication	The green LED will flash occasionally	<ul style="list-style-type: none"> • during USB communication the green LED will flash occasionally; no information is conveyed in this.
Initiate Stop	Sequence of simultaneous flashes of green and red LED's for 4 seconds	<ul style="list-style-type: none"> • This LED sequence appears when the stop sequence is initiated and requires that the STOP button is enabled.
Stopping	Sequence of very quick simultaneous flashes of green and red LED's for 2 seconds	<ul style="list-style-type: none"> • When this LED sequence starts, the STOP button must be released for the recorder to stop.
Ready for USB	Two quick flashes of the green LED every second	<ul style="list-style-type: none"> • The TRIL/SRIL-16U is connected to a USB port and waiting for USB communication.

Light sequences on the TRIL/SRIL-16U and what they mean

Starting the TRIL/SRIL-16U

During configuration you can decide when the TRIL/SRIL-16U recorder should start taking temperature readings:

- ... via [Push button start](#)
The recorder starts taking temperature readings immediately after you press the [START/Mark](#) button.
- ... via [Push button start with pre-start logging enabled](#)
The TRIL/SRIL-16U starts recording pre-start readings as soon as it is unplugged from the USB port until you start the unit by pressing the [START/Mark](#) button. The pre-start readings will not be shown on the PDF.
- ... with a [Start Delay](#)
The recorder starts taking readings, once a defined period has passed

after you press the [START/Mark](#) button.

- ... via [Date/Time start](#)
The recorder will start taking temperature readings at the specific date and time (local time).

While recording...

While the TRIL/SRIL-16U is recording the green LED blinks every 4 seconds if none of the configured alarm conditions have been met. As soon as one of the alarm conditions is met, the red alert LED blinks every 4 seconds.

Marking a reading with an inspection mark