

TEMPERATURE RECORDER

TRID30/TRED30 QUICK START GUIDE

WHAT HARDWARE DO YOU NEED?

- · LogTag TRID30-7 or TRED30-7 Temperature recorder.
- TRED30-7 requires an external Sensor (ST100x-xx).
- LogTag LTI/USB Interface Cradle.
- PC running Windows XP or later version.

WHAT ABOUT SOFTWARE?

LogTag Analyzer software is available for download from LogTag Recorders website.

- Goto http://www.logtagrecorders.com/software/ after registering; you will be e-mailed a link, from where you can download the software.
- After installation is complete, a new icon will appear on your desktop.

NSTALLING THE INTERFACE CRADLE

- Plug the Interface Cradle into a USB port.
- USB drivers will install automatically. Your operating system will inform you when installation is complete.



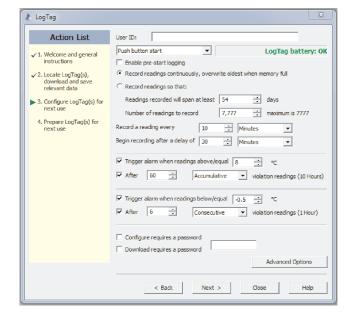
CONFIGURING THE RECORDER

The Recorder must be configured before you can take readings.

- Start the LogTag Analyzer software.
- Insert the Recorder into the Interface Cradle with the blue label to the front. You will here a click as the contacts engage.
- The screen will show 'A new LogTag has been detected..... Please wait.....'.
- If a Recorder has been used previously, a chart will appear.
- Select 'LogTag' 'Wizard' to bring up the configuration wizard. The 'Welcome and general instructions' will be displayed.
- Click on 'Next'; LogTag Analyzer will scan for a Recorder, once found the configuration options will be displayed.



CONFIGURATION OPTIONS



- · User ID user can enter details about each Recorder.
- Select 'Push button start' or 'Date/Time start' depending on requirements.



Enable pre-start logging

- Enter the start Date and Time if selected.
- Tick 'Enable pre-start logging'. Enabling this function causes the Recorder to start taking readings immediately after configuration (useful in case the user forgets to press the Start button).
- Select recording mode Continuously (overwrites old readings when memory is full) or Reading for a specific time (note that changing the recording interval automatically re-calculates the recording duration).
- Enter a start delay if required (allows the Recorder to stabilise before recording starts).
- Set a upper temperature alert value and tick 'Trigger alarm' if you require a visual upper 'ALARM' to show on the Recorder's display once triggered.
- Set a lower temperature alert value and tick 'Trigger alarm' if you require a visual lower 'ALARM' to show on the Recorder's display once triggered.
- You can also setup various trigger conditions for both the upper and lower alarms, single violation or a set of consecutive violation readings or a total of violation readings encountered (called accumulative).

Configure requires a password	
Download requires a password	

If you wish to control future configuration of this Recorder, tick the 'Configure requires a password' box and enter a password. You can also control future downloads, tick the 'Download requires a password'. NOTE: Passwords are case sensitive.

Advanced Options

 Click 'Advanced options' to view and change the Recorder's Advanced features including the 'Pause' function, Stopping and Re-activation, Clearing and Latching Alarms, Power save and displayed units °C or °F.





- If enabled, any button activity will prevent readings being processed for max/min/duration statistics and alarm triggers for the configured paused duration. This allows the user to review current statistics or clear an alarm without causing a false alarm or statistic while handling the Recorder.
- The Recorder can display temperature in units of °C or °F, select the units you require.
- The option 'Switch off the display after 30 seconds (Power save)' will
 extend battery by automatically deactivating the display after 30
 seconds of no button activity, button activity will temporarily reactivate
 the display.
- The Recorder can be configured to allow the user to Stop and/or Reactivate the Recorder, tick which options are required.
- Click 'OK' to exit the Advanced dialog, returning to Configuration Options.
- · Click 'Next' and the Recorder will be configured.
- When configuration is complete remove the Recorder from the Interface Cradle.
- If you wish to configure more Recorders with the same configuration profile, insert the next Recorder into the Interface Cradle and click 'Again'. Repeat until all Recorders are configured.

DISPLAY OVERVIEW



The temperature can be displayed in °C or °F

Reading type

CURRENT = The temperature of the last reading taken.

MAX = The maximum reading in a given 24hour period.

MIN = The minimum reading in a given 24hour period.

Above/below limit markers:

Up arrow marker appears when the temperature displayed is above the upper alert limit.

Down arrow marker appears when the temperature displayed is below the lower alert level.

ALARM appears when an alarm is triggered.

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

TIME = displaying Current Time.

TIME DELAY = displaying DELAYED START time

displayed is indicated by the following:

DURATION = displaying duration of a given MAX or MIN statistic above/below the limits of a given day.

Battery test is performed hourly:-

displayed when battery tested OK displayed when battery tested LOW.

State indicators:-

READY Ready to start recording. If a delayed start incoording. If a delayed start is configured then displays time remaining to start recording.

RECORDING Recording.

PAUSED Max/Min statistics collection paused due to button press activity.

STOPPED Recording has stopped.

The display is organized with a table of 'day alarm indicators' segments named "Today" to "-29d" which are switched on when a given day has an alarm trigger present.

The day number of the currently selected day statistic is displayed when in review mode. TODAY is day 0, yesterday is day '-1'. Can be configured to display the total number of days collected while recording.

STARTING THE RECORDER

If the Recorder has been configured with a Date/Time start, it will start automatically.



Only when the display shows **READY** can the Recorder be started manually.



Press and hold the Start O button. Continue to hold while **STARTING** flashes on the display; release the button when the flashing stops (after approx 5 seconds).



The Recorder will now display the delayed start time remaining (if configured). This example shows a start delay of 30 minutes remaining.

At the end of the delayed start (if configured) the Recorder will start collecting data and show the word **RECORDING** on the display.

PAUSED FUNCTION

If enabled, any button activity will suspend processing of readings and the Recorder will display **PAUSED**. This allows the user to review the statistics or clear an alarm without causing an invalid reading, alarm or statistic.

SETTING THE DISPLAY CLOCK

LogTag Analyzer sets the Recorder's internal real time clock to the configuration PC's time however the user can manually change the display clock if required. Press and hold the ◁ and O buttons together continuously for 8 seconds. During this period the display will flash CLOCK ADJ. Release the buttons when the flashing stops to enter 'clock adjust' mode.



The minutes will flash. Press ≺ to increment the minutes and O to accept the minute changes and to start editing the hours. The hours will now flash, press

d to increment the hours and O to accept and store the new time.

If recording is active a clock change event will be recorded with the next logged reading which will be displayed when the data is downloaded.

Output

Description

RECORDING DISPLAY

During recording, the display shows the temperature of the last reading taken, the current time, battery status and a combination of alarm status and history. A reading is taken and the display updated every logging interval as configured in LogTag Analyzer.

Following are some examples:-



Here the display shows that alarm events occurred 7 and 19 days ago. The current temperature is over the upper limit (indicated by the 1) but has not been over for long enough to trigger an alarm.



10 Hours later the over temperature has triggered an alarm. The **ALARM** symbol and the today marker day alarm are shown.



A further 2 hours later the temperature has returned to the acceptable range but the alarm remains present.

The day summary has shifted by 1 day as the time has gone through midnight.

CLEARING AN ALARM

When an alarm event has occurred, the **ALARM** symbol is displayed.

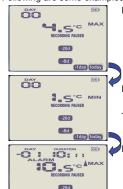
To clear the **ALARM** symbol from the display, press and hold the Clear O button until the **ALARM** symbol stops flashing then immediately release.

Alarm events continue to be displayed in the history area of the display and can be reviewed with the day statistics.

Note: The option to clear and latch alarms can be disabled see advanced options in LogTag Analyzer.

REVIEWING DAY STATISTICS

The Recorder will display up to 30 days of max/min/duration and alarm statistics. If the Recorder is configured to record longer than 30 days (or continuously) then the day statistics will contain up to the latest 30 days. To review the day statistics press the Review ◀ button. Each press of the button will step through the Max and Min temperatures for each day starting with today and moving backwards through the days (displayed day will flash). Any button activity during recording will place an *inspection mark* in the next reading of logged data which will be displayed when the data is downloaded. Following are some examples:-



-8d

-20d

-8d

10°C MIN

-AT

Pressing the Review \triangleleft button displays current day's **MAX** statistic. The today segment flashes and **DAY 00** is shown to indicate the 'Today' selection. The selected day (today) does not have any recordings outside the preset limits.

Pressing the Review ◀ button again displays the day's **MIN** statistic.

The **MIN** statistic is not below the limit and did not trigger an alarm.

Pressing the Review ⊲ button again displays the next previous day's MAX statistic. There are recordings that are above the upper limit. The MAX statistic is above the upper limit (indicated by ▲) and the ALARM was triggered for a duration of 10 hours and 11 minutes.

Pressing the Review **◁** button again displays the day's **MIN** statistic.

The **MIN** statistic is not below the limit and did not trigger an alarm.

If less than 30 days of recordings have been collected, the day marker only advances as far as there is data available. After the last day for which statistics have been collected is displayed, the next press of the ◁ button rolls the summary back to the statistic for today. Pressing the ○ button at any time shows the normal recording display again.

STOPPING THE RECORDER

If enabled you can stop the Recorder; press and hold the Stop O button. Continue to hold while **STOPPED** flashes on the display; release the button when the flashing stops. The Recorder will no longer take any readings, however you can still review the day statistics and download the logged results to a PC with LogTag Analyzer.

Note: The option to stop the Recorder can be disabled, see advanced options in LogTag Analyzer.

RE-ACTIVATING THE RECORDER

If enabled, the Recorder can be re-activated for re-use by either reconfiguring using LogTag Analyzer or using the Start O button.

To re-activate using the Start O button, press and hold the Start O button observing the **READY** text flashing on the display; release the button when the flashing stops. The recorder will then be ready for a push button start. Data/time start is only possible by re-configuring with LogTag Analyzer. Re-activating the Recorder will erase all previously recorded readings and

Note: The option to re-activate the Recorder can be disabled, see advanced options in LogTag Analyzer.

BATTERY

The Recorder contains a Lithium Battery. Dispose or recycle the battery in accordance to your local regulations. Do not expose to extreme temperatures.



The end of battery life is indicated by a low battery symbol, the Battery/Recorder should be replaced within 30 days when this symbol appears.

The TRID30-7R and TRED30-7R have a replaceable CR2032 battery. Battery access sits behind the square white label on the back of the Recorder's case. Contact your supplier or check the LogTag website for further details.

The TRID30-7F and TRED30-7F Recorder battery's are not user replaceable and should be replaced or serviced by a suitably qualified and authorized service centre.

DOWNLOADING DATA

- · Start LogTag Analyzer software.
- · Insert the Recorder into the Interface Cradle.
- The screen will show 'A new LogTag has been detected..... Please wait.....'.
- After a few seconds, the downloaded data will appear (by default shown as a chart, see below).
- Data can be displayed in Chart, Data, Summary or Day Summary formats by clicking the tabs at the bottom of the chart dialog.
- Data can also be saved in a number of formats including TXT, PDF, HTML and CSV for import into a spreadsheet program.

GETTING HELP

If after reading this guide you still need further information, please visit the LogTag Recorders website http://www.logtagrecorders.com/support



Example of a Zoomed in chart within LogTag Analyzer.