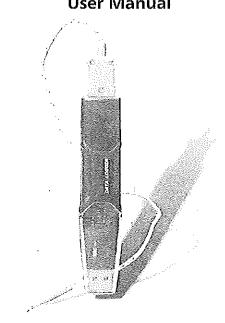


MT643 Temperature Datalogger User Manual



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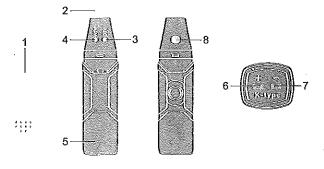
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1.Features

- •Memory for 31,808 readings
- Status Indication
- •USB Interface
- •User-Selectable Alarm
- Analysis software
- Multi-mode to start logging
- •Long battery life
- Selectable measuring cycle:
- •1s, 2s, 5s, 10s, 30s, 1m, 5m, 10m, 30m, 1hr, 2hr, 3hr, 6hr, 12hr

2.Discription

- 1-Protective cover
- 2-USB connector to PC port 3-Alarm LED(red)
- 4-Record LED(green)
- 5-Mounting clip 6-Type-K anode
- 7-Type-K cathode
- 8-Start Button.



LED Status Guide LED GREEN



3.LED Status Guide

LEDs	Indication	Action
REC ALM	Both LED lights OFF	Start logging Replace battery
	Logging not active	and download the data
	Or Low Battery	
	One green flash every	
	10 sec. *	i
REC ALM	Logging, no alarm	
	condition**	To start, hold the start button
	Green double flash	until Green flash 4 times
	every 10 sec. *	
	Delayed start	
	Red double flash every	
	30 sec. *	
REC ALM	-Logging, low	
	Temperature alarm.	logging, it will stop automatically.
	Red Triple flash every	No data will be lost. Replace
	30 sec. *	battery and download data
,	-Logging, high	
	temperature alarm.	
	Red single flash every	
	20 sec.	
	-Low Battery****	
	Red single flash every	It won't logging until the Type-K
REC ALM	2 sec.	probe connect to the logger.
	-Type-K not connect	
	to the logger	
REC ALM	Red and green single	Download data
	flash every 60 sec.	
	-Logger memory full	

4. Operating Instructions

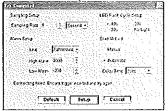
- · Setup the DataLogger by software before use it.
- Under the Manual mode, press and hold the button for 2s, DataLogger start to measure, and LED indicates the function at the same time. (see LED FLASH INDICATION for details.)
- Under the Automatic mode, you can choose the delay start time, if you choose to delay zero second, the DataLogger will start to measure after setup in software immediately, LED indicate the function at the same time. (see LED FLASH INDICATION for details.)
- During measurement, the green LED indicates the working state by flashing with the frequency setup in the software.
- If the Type-K probe is not connect to the logger, the red light will single flash every 2 sec. it won't record the data, connect the Type-K probe to the logger, it will start record the data normally.
- •When datalogger memory full, Red LED and Green will flash every 60 sec.
- As the battery power is not sufficient, red LED will flash every 60 sec for indication.
- Press and hold the button for 2s untill Red LED sequency flash four times, and then logging will stop, or connect the datalogger to the host and download the data, the datalogger will stop automaticity.
- DataLogger data can be read time after time, the readings you are checking are the real time measured ones.(1 to 32000 readings); if set the datalogger the last data will be losed.
- •If the logger is logging, the Type-K probe is disconnected, the logger will stop logging automaticly.
- Without battery, the latest 1 hours (the most) data will be lost.
 Other data can be read in software after battery is installed.
- When replacing the battery, turn off the meter and open the battery cover. Then, replace the empty battery with a new 1/2AAA 3.6V battery and replace the cover.
- *To save power, the logger's LED flashing-cycle can be changed to 20s or 30s via the supplied software.
- * To save power, alarm LEDs for temperature can be disabled via the supplied software.

*When the battery is low, all operations will be disabled automatically. NOTE: Logging automatically stops when the battery weakens (logged data will be retained). The supplied software is required to restart logging and to download logged data.

5.Software Operation

1. Datalogger Setup

Click on the icon on the menu bar. The Setup window will appear as shown below; descriptions for each field in the Setup window are listed directly below for illustration:



- The Sampling Setup field instructs the DATA LOGGER to log readings at a specific rate. You can input specific sampling rate data at the left Combo box and select the time unit at the right Combo box.
- The LED Flash Cycle Setup field can be set 10s/20s/30s by the user depending on the requirement. By selecting "No Light" option, there will be no flash there by increase the battery life.
- The Alarm Setup field allows the user to set HIGH and LOW temperature limits.
- •There are two start methods at the Start Mehod field:
- (1)Manual:Chose this item, the user need to click the logger button to start data logging.
- (2)Automatic:Choose this item the logger will start data logging automatic after the delay time.

User can set a specific delay time, if the delay time is 0 second, the logger will start logging immediately.

Click on the SETUP button to save changes. Press the DEFAULT button to set the Logger to factory default condition. Press the CANCEL button to abort the setup.

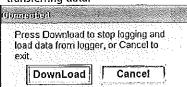
Notes:All stored data will be permanently erased when Setup is finished. To enable you to save the data before it is lost, click Cancel and then you need to download data.

The battery might be exhausted before logger finish specified sample points. Always ensure that the remaining power in the battery is sufficient for completing your logging task. If in doubt, we recommend that you always install a fresh battery before logging critical data.

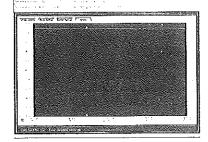
2'. Download Data 😝

To transfer the readings stored in the Logger to the PC:

- Connect the DATA LOGGER to the USB port.
- •Open the Datalogger software program if it is not still running
- Click the Download icon ().
- •The Window shown below will appear. Click DOWNLOAD to begin transferring data.



Once the data is successfully downloaded, the window shown below will appear.



6.Specifications

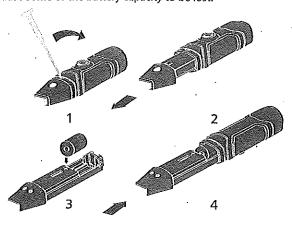
Temperature	Overall Range	-200 to 1370°C
·	_	(-328 to 2498°F)
	Accuracy	±2°C(±4°F)
	(overall error) Max.	
	Accuracy	±1°C(±2°F)
	(overall error) Typ.	<u></u>
Logging rate	Selectable sampling interval: From 1seconds	
•	up to 24 hours	
Operating temperature	0 to 40°C(57.6to 97.6°F)	
Operating humidity	0 t0 85%RH	
Storage temperature	-10 to 60°C(39.6 to 117.6°F)	
Storage humidity	0 t0 90%RH	
Battery type	3.6V lithium(1/2AA)(SAFT LS14250, Tadiran	
	TL-5101 or equivalent)	
Battery life	1 year(typ.) depending on logging rate,	
	ambient temperature & use of Alarm LEDs	
Dimensions/Weight	101x24x21.5mm/172g (6oz)	

7.Battery Replacement

Only use 3.6V lithium batteries. Before replacing the battery, remove the model from the PC. Follow diagrammatic and explaination steps 1 throught 4 below:

- •With a pointed object(d.g. a small screwdriver or similar), open the casing. Lever the casing off in the direction of the arrow.
- •Pull the data logger from the casing.
- Replace/Insert the battery into the battery compartment observing the right polarity. The two displays briefly light up for control purposes(alternating, green, yellow, green).
- Slide the data logger back into the casing until it snaps into place. Now the data logger is ready for programing.

Leaving the model plugged into the USB port for longer than necessary will cause some of the battery capacity to be lost.



Warning: Handle lithium batteries carefully, observe warnings on battery casing. Dispose of in accordance with local regulations.