## Track-It Data Logger Instructions

The Track-It Data Logger is an extremely versatile compact battery powered data logger that can record up to 2 channels of data. It has a wide range of triggering and alarm options as well as differing input options. It has a built in LCD display to view data in the field. It works in conjunction with the Track-It PC Software. The unit plugs directly into a USB port on the PC to allow programming, upload data and display data in real time (certain modes only).
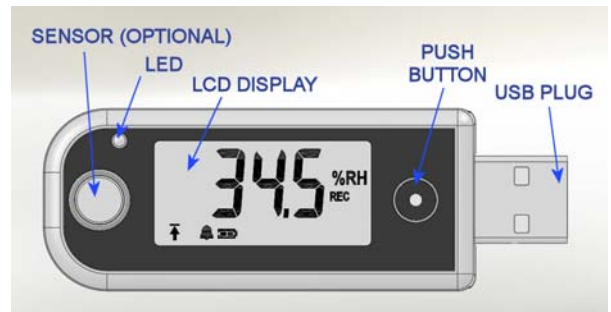
LCD Display

The LCD display show status and real time information and is user programmable via the Track-It PC Software. Not all segments are available in all modes. The LCD display is energized when the push button is pressed and will shut off after a predetermined time as programmed. The following information may be shown on the display (user programmed) - each button press will show the next value.

Real Time Values for one or both channels in engineering units relevant to the module type. Engineering units are °C, °F, %RH, A, V, mA, mV, Hz, RPM. What is visible is dependent on the device you have and how it is programmed.

Time and date in the form of hours and minutes with blinking colon 12 or 24 hour format) eg 12:20 AM followed by the year 2009 then the month and date 11:23

Amount of memory used as 20.05 % m

Icon Indications:

Bell = On steady if any alarms enabled. Blinks if any alarm detected.

Up arrow (High Alarm), Down arrow (Low Alarm) = Blinks if any high/low alarm occurred and is current. On steady if any high/low alarm has been detected since the recorder was configured. The unit does not have to be recording for the alarms to be monitored. Alarms can be reset by the user - see below

REC = On steady if recording is enabled but the unit is not currently recording,(Armed but not recording). Blinking if currently recording data - triggered by any triggering source (timers, alarms, button toggle).

Battery Condition – Shows Full (Solid), Half and Empty. Blinks when battery is too low to operate reliably.

LED:

The LED (Light Emitting Diode) can be programmed to blink when the unit is waiting to record, when the unit is recording (Green blink) or when there is an Alarm condition (Red blink). The blink period (time between blinks) is user programmable. Note that enabling the LED increases the drain on the battery.

Push Button:

The actual button function is programmable by the user using the Track-It PC Software.

Short press (0 - 1 sec.) will activate the LCD view. Successive short presses will rotate the views as programmed.

Press and hold - (1 - 2 secs.) LED blinks once - (must be enabled by user using configuration program) This resets any Alarms (holds/latches, arrow indications) and will stop any Alarm triggered recordings currently active. Display will indicate r5t.

Continue to hold - (2 - 3 secs.) LED second blink - (must be enabled by user using configuration program), toggles record mode. If the unit is currently recording it will stop the recording. If the unit is currently NOT recording it will start recording. Note: Other events may impact the record mode if they have been set to trigger the recording. This button will not stop any recording started by other triggers. Display will show rOn for **r**ecord **on** or rOFF for **r**ecord **OFF.** Release button to activate.

Continue to hold - (3 - 4 secs.) LED third blink = (must be enabled by user using configuration program). This toggles (activates or deactivates) the Master Record Enable. When Master Record Enable is enabled the recorder will record on any event that was programmed by the user to start recording - alarm, timers or button press. When Master Record Enable is disabled the recorder will not record under any event until the Master Record Enable is re-enabled. Display will show *rEnb* for Master **r**ecord **Enab**le on or *rdiS* for Master **r**ecord **dIS**able. Release button to activate

Continue to hold for LED fourth blink - cancels operation. LCD Blanks out.

Analog Input

Most Track-It Data Loggers have the ability to measure up to 2 channels of analog inputs (4-20mA, 0-5Vdc etc) using external analog modules that plug onto the USB connector. These may be purchased from your dealer and are programmed using the Track-It PC software.

Protection

The data Logger comes with a rubber boot that can be installed to protect the USB connector and provide some degree of bump and splash protection. The unit should have the boot installed when traveling. The button can be operated when the boot is in place. The boot cannot be fitted when analog modules are attached. The unit should not be immersed in liquid.
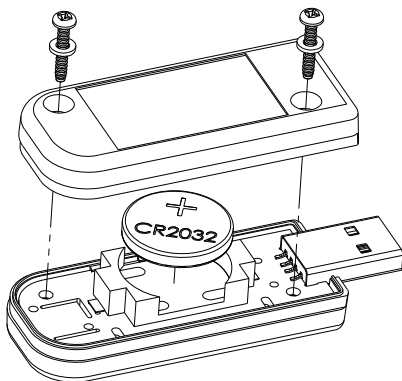

Track-It Software

The Track-It PC Software allows the Data Logger to be programmed, allows the data to be retrieved, displayed, saved to disk or exported to Excel^{TM}. Data can also be displayed in real time (on devices with internal sensors). The software has both simple and advanced modes for programming Data Logger. Some of the features are:

- Delayed recordings, fixed duration recordings by time or number of samples, multiple record times, manual record by button press, record on alarms.
- Sample rates from 2 seconds to 24 hours. Instantaneous, average, maximum or minimum values.
- Two Alarms, high or low, latched or momentary and record under these alarm conditions
- Input scaling and offset for analog modules. Engineering unit selection for internal sensors.
- Button functions, LED functions and LCD display functions.
- Display of data graphically, digitally or tabular formats with alarm indication.
- Export user selected data in Excel^{TM} or CSV formats. Filter data to be exported.
- Simple setup (single screen) or advanced mode.

Replacing the Battery

To replace the battery - loosen the two screws on the back of the Logger and remove the bottom case half. Caution - the screws have small plastic washers. There are two battery options. Replace the relevant battery then replace the cover and the screws.

Option 1 - Coin Cell CR2032 3.0V   Option 2 - Lithium Thionyl Chloride EF651625 3.6V (LTC-7PN)