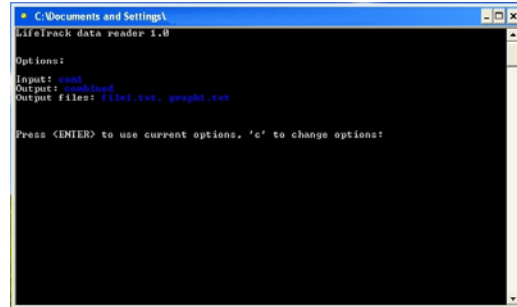


Data playback uses an optional RS232 IR Cable, and the LifeTrack data download software



1: Hook the RS232 cable to your computer, and start the LifeTrack data download software. This will appear as a text window on your screen



2: The program starts up with a configuration screen. This allows you to select the com port for data input as well as the output options.

3: To configure the program to your com port, or select alternate output options, enter "c" and fill in the information as requested

<pre>LifeTrack data reader lite 1.0 Options: Input: com1 Output: screen Press <ENTER> to use current options, 'c' to change options:</pre>	<pre>LifeTrack data reader lite 1.0 Options: Input: com1 Output: screen Press <ENTER> to use current options, 'c' to change options: c Change com port? Y/N: y Enter new com port number [1..4]: 2</pre>
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4: If you want to output data to a human readable text file, select "file". If you want to graph the data for a spreadsheet, select "graph", for both do "combined"

5: When you have selected the options that you want, exit the program, and restart. Your new options should then be displayed on the screen.

<pre>LifeTrack data reader lite 1.0 Options: Input: com1 Output: screen Press <ENTER> to use current options, 'c' to change options: c Change com port? Y/N: y Enter new com port number [1..4]: 2 Com port changed to com2 Change output options? Y/N: y Enter new output options: 1=screen, 2=file, 3=graph, 4=combined [1..4]: 4 Output changed to combined Change output file filename? Y/N: y Enter new file filename [xxx.txt]: lfile1.txt file output to lfile1.txt Change output graph filename? Y/N: y Enter new graph filename [xxx.txt]: lgraph1.txt</pre>	<pre>LifeTrack data reader lite 1.0 Options: Input: com2 Output: combined Output files: lfile1.txt, lgraph1.txt Press <ENTER> to use current options, 'c' to change options:</pre>
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6: Once the parameters are correct, press [enter], and the program will go to the data collection screen

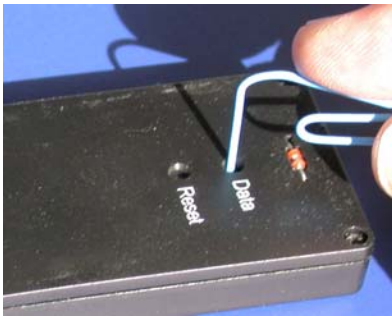
7: To play back data, hold the lens of the IR cable next to the unit's IR port. To avoid transmission errors, shield the unit from high intensity stray light.

First reading:
 Hold the LifeTrack IR port to the cable, and press the LifeTrack 'Data' button. When the computer receives the LifeTrack data, press keyboard 'p' to process the input data, or clear away serial port errors due to light interference.
 Waiting for data...
 Port status:



8: While still holding the cable in place, use a small paper clip to briefly press the "DATA" button.

9: If the cable is positioned properly, the program will receive the LifeTrack data as a series of characters. After the data has been received, press "p".



First reading:
 Hold the LifeTrack IR port to the cable, and press the LifeTrack 'Data' button. When the computer receives the LifeTrack data, press keyboard 'p' to process the input data, or clear away serial port errors due to light interference.
 Waiting for data...
 Port status:
 DEMO UNIT
 ~ABCD0123456789~01~000B954D~000B954D~00003334~0000~0000~00000000~00000000~00000000~00000000~129A

10: If the data is OK, the unit will process the data and show the results on the screen. Here, a fresh unit has just been downloaded

11: If the cable is not positioned properly, or if there is too much interfering light, you may get various error messages. If so, check the unit and cable, and repeat.

DEMO UNIT , ID Code: ABCD0123456789
 Security code: 13108, Checksum: 4762 vs 4762 OK
 Status: OK (100.0 % life remaining)
 Hours elapsed since LifeTrack start: 0
 Temperature logger (degrees C):
 Logger frequency: 0.5 hours, total logger time: 0.0 hours
 Temperatures recorded
 [- 0 hr.]
 Logger still running when downloaded.
 Enter notes. End with a 'q' to quit:

Next reading:
 Hold the LifeTrack IR port to the cable, and press the LifeTrack 'Data' button. When the computer receives the LifeTrack data, press keyboard 'p' to process the input data, or clear away serial port errors due to light interference.
 Waiting for data...
 Port status:
 Parity Error detected
 Framing Error detected
 Break Signal detected

12: As long as the LifeTrack unit has not expired, the LifeTrack temperature recorder will record the last 100 * n hours, where n is 0.5 hours to 86 hours per point. The +/- value is a deviation value, and most of the readings fall within +/- 2x to 3x this value.

13: If the LifeTrack unit has expired, the time of expiration (local time) will be recorded. In this example, the product was initially kept at room temperature, refrigerated for a few hours, and then exposed to high heat just before expiration

<p>DEMO UNIT , ID Code: ABCD0123456789</p> <p>Security code: 12851, Checksum: 12795 vs 12795 OK</p> <p>Status: OK (50.7 % life remaining)</p> <p>Hours elapsed since LifeTrack start: 769 Hours run: 769, Average temperature: 23.6 +/- 0.1 C</p> <p>Temperature logger (degrees C): Logger frequency: 0.5 hours, total logger time: 50.0 hours</p> <p>Temperatures recorded [- 50 hr.] 24, 25, 24, 24, 25, 25, 25, 24, 24, 25, [- 45 hr.] 25, 25, 25, 25, 24, 24, 24, 24, 24, 24, [- 40 hr.] 24, 24, 24, 24, 24, 23, 23, 23, 23, 23, [- 35 hr.] 23, 23, 23, 22, 22, 22, 22, 22, 23, 23, [- 30 hr.] 23, 24, 24, 24, 24, 24, 24, 24, 25, 25, [- 25 hr.] 25, 24, 24, 24, 24, 24, 24, 24, 24, 24, [- 20 hr.] 24, 24, 24, 23, 23, 23, 24, 23, 23, [- 15 hr.] 22, 22, 23, 22, 22, 23, 23, 23, 23, 23, [- 10 hr.] 23, 23, 22, 22, 22, 22, 22, 22, 23, 23, [- 5 hr.] 23, 23, 23, 23, 24, 24, 25, 25, 25, 25, [- 0 hr.]</p> <p>Logger still running when downloaded.</p> <p>Enter notes. End with a 'q' to quit:</p>	<p>DEMO UNIT , ID Code: ABCD0123456789</p> <p>Security code: 4370, Checksum: 5968 vs 5968 OK</p> <p>Status: EXPIRED</p> <p>Hours elapsed since LifeTrack start: 150 Hours run before expiration: 7, Average temperature: 12.0 +/- 5.8 C Hours run since expiration: 143, Average temperature: 28.5 +/- 0.4 C</p> <p>Temperature logger (degrees C): Logger frequency: 0.5 hours, total logger time: 7.0 hours</p> <p>Temperatures recorded before expiration: [- 150 hr.] 24, 21, 6, 1, 0, 0, 0, 0, 0, 0, [- 145 hr.] 0, 22, 37, 40,</p> <p>Logger expired on Thu Mar 25 17:05:59 2004 (local time), 143 hours ago.</p> <p>Enter notes. End with a 'q' to quit:</p>
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14: To see a record of many past readings, open the "file.txt" file (use the name you specified). This stores a record of many different downloaded readings in a simple, human-readable, format.

15: To import data into a spreadsheet for graphing or computer database purposes, use the "graph.txt" (use the name you specified). This stores a record of many different downloaded readings in a simple, tab delimited, computer readable format.

