



***Instruction Manual
In-Transit FlashLink® Data Logger
In-Transit FlashLink® Software***

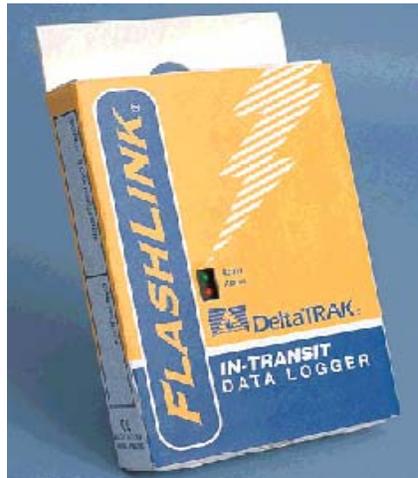


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INTRODUCTION

The In-Transit FlashLink Data Logger is a single use instrument designed with a unique, patented communications feature via the PC's parallel port, which allows an extremely fast data download (typically 760 data points per second). The 25-pin cable (included) connects FlashLink to your computer's parallel (printer) port. . (A Serial Port Adapter is available for computers that do not have a parallel port) The PC time and date is used to track data history to the last data point collected. The software will automatically tabulate and graph the collected data.

- You will need both the FlashLink Data Logger and In-Transit FlashLink Software properly installed and configured for use. Refer to page 5 "*Software Installation*" and follow the instructions to install the In-Transit FlashLink Software onto your PC. The software can also be downloaded from http://www.deltatrac.com/contribute/software_new.shtml

In-Transit FlashLink Software Features

- Single Windows-based user-friendly program for downloading, graphing, and reporting.
- Patented design downloads 3800 data points in 5 seconds on average.
- Capable of communicating through either Parallel or Serial Ports.
- Patented shadow logging design. (See page 17).
- Embedded independent email engine, eliminating the need for additional email software such as Microsoft Outlook.
- Automatic file naming, point-and-click interface, single-point connection to a PC and other easy-to-use features allow even non-technical users to download data quickly.
- The program allows easily customization with your company name and logo, time zone, temperature scale, and other operational preferences.
- Data can be saved as a text delimited file for insertion into any spreadsheet or database program.
- Status monitoring screen checks data logger activity status without disturbing operation except if the log interval is less than 20 seconds.
- FlashLink Data Loggers are Year 2000 compatible.

Data Logger Features

- Non-volatile data memory – data can be recovered after power loss.
- Standard 25-pin connector for downloading data to the PC; communicates with PC through parallel printer port. (Optional Serial Port Adapter Available)
- Green and red LEDs indicate whether the data logger is in active mode or alarm mode.
- Internal temperature sensor or external probe option
- Patented utility packaging for hanging, probe storage, and PC access
- Shock resistant ABS plastic case construction
- CE mark certified by TÜV

SETUP

Minimum PC Requirements

IBM (or compatible) 486 with 4 megabytes of memory. The In-Transit FlashLink Software runs on all versions of Windows (3.1, 95, 98, 2000, ME, XP and NT). It will also run on Windows LAN servers if the “client computers” use Windows 3.1, 95, or 98.

Some brands of laptop computers may not be compatible with the In-Transit FlashLink Software. See page 36 of this manual for a list of compatible laptop computer models or call DeltaTRAK® Customer Service for the latest information. . *The optional Serial Port Adapter will make most computers compatible.*

Connecting to Your Computer

The recommended connection method is to use a standard 25-pin PC data cable, serial or parallel, with male on one end and female on the other. Remove the printer cable from the PC. Connect male end of the data cable to the back of the computer. The female end can be connected to the printer or to the data logger as needed.

The data logger can be connected directly to the PC’s parallel (printer) port on a laptop or desktop computer, but mounting hardware on the PC may get in the way of making a reliable connection.

IMPORTANT: Do not turn on your computer or reboot with a data logger connected to your PC as it may cause loss of data.

Software Installation

Instructions for Win 98/95/3.1

1. Check the date and time setup in your computer. It is extremely important to have the correct information in your computer before installing the program disk or downloading the data to the PC.
2. If you have downloaded the software from www.DeltaTRAK.com, double click the **FLITFULLx_x.exe** icon; (**x_x indicates the version #**) click "Yes" to continue. Go to *step 4*.
3. If you have the Installation CD, insert the In-Transit FlashLink Software Installation CD into your CDROM drive.

(If the program does not open automatically, follow the instructions below.)

Windows 95/98

- a. Go to *Start*.
- b. Choose *Run*.
- c. Type **D:\Disk1\Setup.exe** (if the CD drive is D:\)
- d. Press *Enter*.

Windows 3.1

- a. Go to *File Manager*.

4. The computer will start loading the program. Read the Welcome message, then click on *Next* to continue.
5. **User Information Screen:**
The registered owner of the computer may already appear in the fields, or you may type in your name and company name. Click on *Next* to accept the settings and continue.

6. **Choose Destination Location:**
C:\Flash is automatically entered as the default directory. To change the destination, click on *Browse*. Select the directory you want, then click on *Next* to accept the settings and continue.
7. **Select Program Folder:**
The “In-Transit FlashLink Software” folder is automatically entered as the default program folder. You can also select an existing folder from the list. Click on *Next* to accept the settings and continue.
8. **Start Copying Files:**
The settings that you just entered are displayed. Click on *Back* to make changes. Click on *Next* to accept the settings and continue. *If installing from diskette, continue to next step, else go to Step 9.*
9. Two program versions are included. Email (EFlit.exe) and non-Email (Flit.exe).
10. The icon for the Email and non Email versions are automatically created. To place an icon onto your Desktop, press and hold CTRL, then click on the icon (EFlit or Flit) and drag it out of the Flash window.
11. Windows 3.1 systems may show the message “Cannot load OLE2.DLL”, click *OK* and continue.
12. Reboot the PC.

Instructions for Windows 2000, XP and NT

To install FlashLink Program Manager Software on Windows 2000, XP and NT:

*Network Users: See your LAN Administrator.

1. Restart the computer and log on as the Administrator. (You cannot install the software in of these Windows NT based systems without having Administrator access).
2. IF you have downloaded the software from www.DeltaTRAK.com, double click the **FLITFULLx_x.exe** icon; (**x_x indicates the version #**) click "Yes" to continue. Go to *step 8*.
3. If you have the Installation CD, insert the In-Transit FlashLink Software Installation CD into your CDROM drive.
(If the program does not open automatically, follow the instructions below.)
4. Go to Start
5. Choose Run
6. Type D:\Disk1\setup.exe (if the CD Drive is D:\)
7. Press Enter
8. The computer will start loading the program. Read the welcome message and click on *Next* to continue.

If you have an error when trying to access the FlashLink logger, insure that you have administrator privileges before installing the software. If the problem persists, check the port settings for your computer.

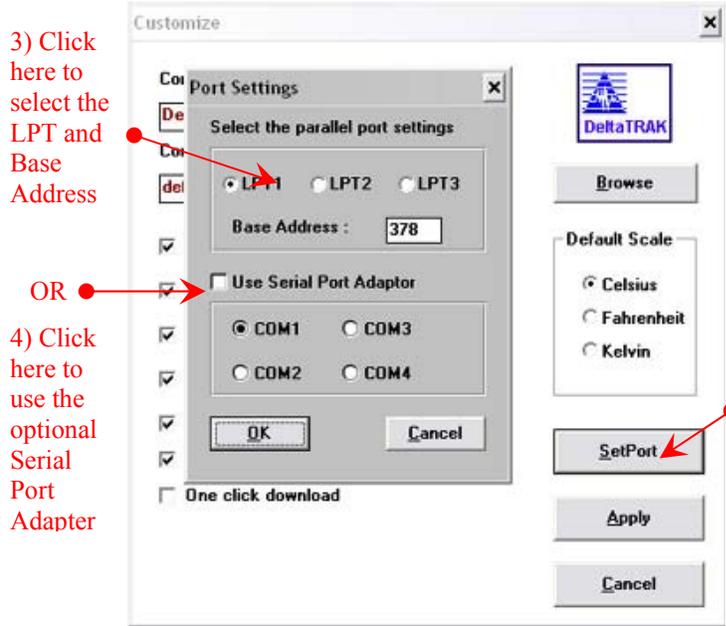
Port Settings

The parallel port drive will try to allocate the parallel port with FlashLink automatically with the first run of the FlashLink software under the following conditions:

Standard port address assignment

- a) One parallel port configuration
LPT1 address: 0x378
- b) More than one parallel port configuration
LPT1 address: 0x3BC
LPT2 address: 0x378
LPT3 address: 0x278

In all non-standard cases the user has to specify explicitly the LPT address of the parallel port used with the FlashLink. This can be done using the Customize Screen → Port Setup. (*See next page for illustration.*)



Windows 98/95

To check your port settings in Windows 98/95/3.1, do the following:

1. Press start button, go to setting then control panel.
2. Double click on system icon.
3. Click on device manager tab.
4. Click on ports.
5. Double click on port you wish to use for FlashLink and write down port number.
6. Click on resources tab.
7. Write down first number of the first input/output range line. Should be something like 3BC. This is your base address.

Then start your FlashLink Software and select from the top menu “Customize”. Then click the “Set Port” button. You will see the port-setting value that FlashLink Software is using in the “Base Address” field. Put the port-setting value that you wrote down from the above instructions into the “Base Address” field.

Windows 3.1

Uses Standard port configuration.

Windows NT

To check your port settings in Windows NT, do the following:

1. Go to "Start".
2. Choose "Programs".
3. Choose "Administrative Tools".
4. Choose "Window NT Diagnostic".
5. Select the "Resources Tab".
6. Select the "I/O port" button.

This will display the port settings for LPT1 where the FlashLink can be accessed. They should look something like 03BC, write this down.

Then start your FlashLink Software and select from the top menu "Customize". Then click the "Set Port" button. You will see the port-setting value that FlashLink Software is using in the "Base Address" field. Put the port-setting value that you wrote down from the above instructions into the "Base Address" field.

Windows XP

To check your port settings in Windows XP, do the following:

1. Go to “Start”.
2. Choose “Control Panel”.
3. Choose “Administrative Tools”.
4. Choose “Computer Management”
5. Double click “Device Manager” in the left quadrant.
6. Double click “Ports (COM & LPT)” icon in the right quadrant.
7. Double click “Printer Port (LPT1)” icon in the right quadrant.
8. Click the “Resources” tab.

This will display the port settings for LPT1 where the FlashLink can be accessed. They should look something like “0378-037F”, write down “0378”.

Then start your FlashLink Software and select from the top menu “Customize”. Then click the “Set Port” button. You will see the port-setting value that FlashLink Software is using in the “Base Address” field. Put the port-setting value that you wrote down from the above instructions into the “Base Address” field.

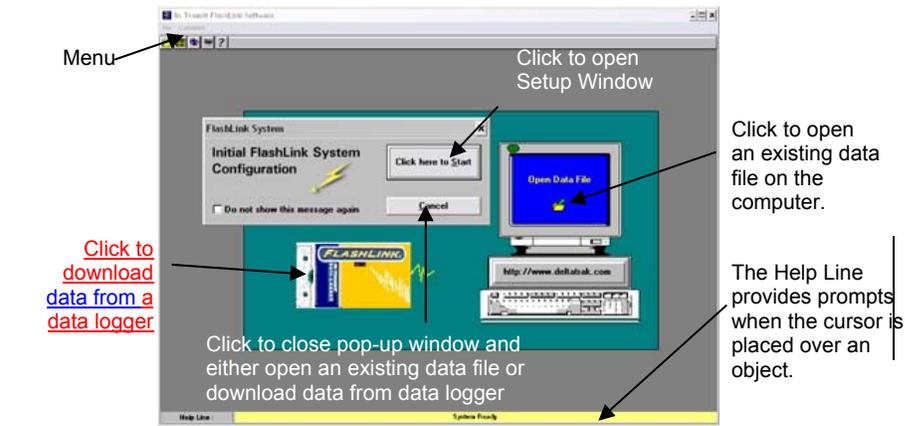
OPERATING INSTRUCTIONS

Starting the Data Logger

The data logger must be started by the shipper by inserting a ballpoint pen or other small blunt object into the start switch hole on the front of the data logger. The green LED will flash rapidly three times to indicate it started. If the green LED does not flash, press the start switch again. If the data logger still does not activate after three tries, contact your distributor or DeltaTRAK, Inc., for technical assistance.

Main Screen Description

With the In-Transit FlashLink Software you can download data, open existing data files on the computer, manipulate data presentation, create graphs, and print reports. All functions are customizable and accessible from the main screen. Double click on the FlashLink icon “EFLIT” or “Flit” to start the program.



Menu Bar

File

Open Data File: Open an existing (previously saved) data file on the computer.

Download Data: Download data from a data logger to the PC. *Proceed to page 15.*

View Current Status: Check the status of the data logger. *Proceed to page 26.*

Email Data File: *Proceed to page 27.*

Customize

Select to set your preferences for company name, logo, on-line help, temperature scale, and graph and reporting defaults. *Proceed to page 14 for complete information on the Customize Screen.*

NOTE: This can only be accessed from the Main Menu.

Icon Bar



Open a previously saved data file on the computer



Download data from the data logger



View current status of data logger



Software version

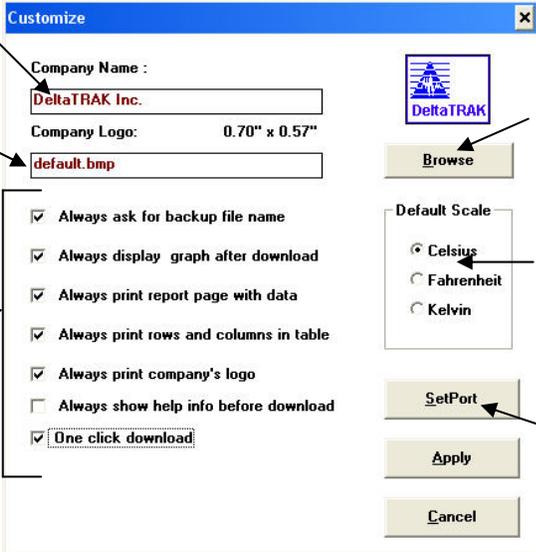


Email data

Customize Screen

You can customize how the software works and the look of your data. The information can be updated or changed later, if desired. (Click "Customize" on the menu bar to open the window shown below.)

Enter your company name



The screenshot shows the 'Customize' dialog box with the following fields and options:

- Company Name :** A text box containing 'DeltaTRAK Inc.'
- Company Logo:** A text box containing 'default.bmp' and a dimension of '0.70" x 0.57"'. To the right is a preview of the logo and a 'Browse' button.
- Default Scale:** Radio buttons for 'Celsius' (selected), 'Fahrenheit', and 'Kelvin'.
- Checkboxes:**
 - Always ask for backup file name
 - Always display graph after download
 - Always print report page with data
 - Always print rows and columns in table
 - Always print company's logo
 - Always show help info before download
 - One click download
- Buttons:** 'SetPort', 'Apply', and 'Cancel'.

Annotations with arrows point to the following elements:

- Company Name field: 'Enter your company name'
- Company Logo field: 'Enter the file name for your logo (it must be in .bmp format). Your logo will appear on the printed reports, if desired.'
- Checkboxes: 'Click to select or de-select actions. The selections may be changed at any time after starting the program.'
- Browse button: 'Click here to search and select from available .bmp files.'
- Celsius radio button: 'Click here to select the temperature scale.'
- SetPort button: 'Click here to change the port setting for the printer.'

Auto Backup

Data files are automatically saved when they are downloaded. The directory is named Databack, and is automatically created in the program's "Flash" directory with your first download.

If the custom option "*Always ask for backup file name*" is checked (*to check: click "Customize" on the top menu bar*), you may use whatever naming convention you wish (Up to 8 characters). You will be prompted to name each file as it is saved. Choosing Cancel at this point will still save the file, however, it will be saved using the automatic naming convention described below.

If the custom option "*Always ask for backup file name*" is *not* checked, the data files will be named automatically using the data logger's serial number. A numbered extension is added each time that particular data logger is downloaded. Therefore, downloading data logger number 00000403 three times will give you file names of 00000403, 00000403.001, and 00000403.002.

The software will give you another chance to save the data in case you have changed computers, deleted files, etc. When the screen asks, "Data has been already saved! Continue Auto Backup anyway?" you can click OK to save the data again or Cancel to proceed without resaving.

Download Data

Downloading can be done several ways. Connect the data logger to the data cable and do one of the following.

- Click on the Data Logger illustrated on the Main Screen, or
- Select File, Download Data, or
- Click the icon. 

You will be guided through the time zone selection and data tag screens.

Note: If the custom option “Always show help info before download” is checked, the screen will display helpful information about connecting your computer. Click Next when your connection is complete.

Shadow Logging

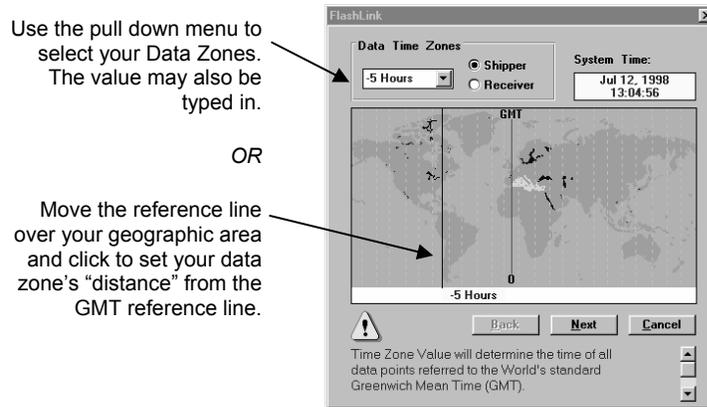
Shadow Logging is a failsafe background program in the FlashLink Data Logger that collects data at a 30 minute interval. It is active when in *Manual Start Waiting* mode. It will record 80 days of data.

When the logger is manually started it reverts to the programmed conditions and shadow data is erased from the memory.

Time Zone Map

Time zone information is based on Greenwich Mean Time (GMT), also known as Coordinated Universal Time. The field will accept decimals for those areas with fractional time zones.

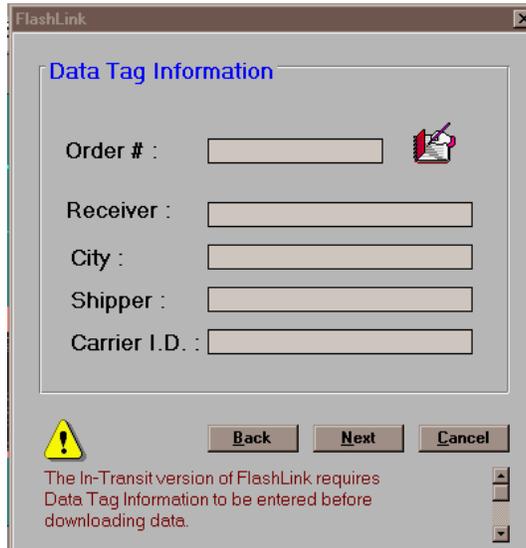
1. Choose either “Shipper” or “Receiver” classification for the time zone of your data, graphs, printouts, etc.
2. Select or enter the time zone; the “Data Time Zones” field will accept decimals for those areas with fractional time zones.
3. Click Next.



Data Tag Information

1. Enter the data tag information. It can be edited later, if desired.
2. Click Next to start the download.

Note: The Receiver field must be filled in before downloading will start unless the “One Click Download” option is selected in the “Customize” screen. Using the One Click Download option will skip both the Time Zone Map and the Data Tag screens and go directly to the Data screen.



The image shows a dialog box titled "FlashLink" with a close button (X) in the top right corner. The main area is titled "Data Tag Information" and contains five text input fields with labels: "Order #", "Receiver", "City", "Shipper", and "Carrier I.D.". To the right of the "Order #" field is a small icon of a document with a pencil. Below the input fields are three buttons: "Back", "Next", and "Cancel". At the bottom left, there is a yellow warning triangle icon. Below the icon is a red text message: "The In-Transit version of FlashLink requires Data Tag Information to be entered before downloading data." To the right of this message are three small, vertically stacked square icons.

Downloading

The data will immediately download.

Menu Bar
See page 19.

Icon Bar
See page 21.

Click on the Data Info or Statistics tabs to access the other pages of the Information Panel.

Data Grid – Use the scroll bar to move up or down through the downloaded data.

Select Options, Statistics Range, then click on desired beginning and ending sequence numbers, or enter the sequence numbers in the FROM and TO boxes.

Seq#	Date	Time	1-T ^o C
0	Aug 21 99	19:32:52	24.7
1	Aug 21 99	20:02:52	25.7
2	Aug 21 99	20:32:52	26
3	Aug 21 99	21:02:52	26
4	Aug 21 99	21:32:52	25.9
5	Aug 21 99	22:02:52	25.8
6	Aug 21 99	22:32:52	25.7
7	Aug 21 99	23:02:52	25.5
8	Aug 21 99	23:32:52	25.4
9	Aug 22 99	00:02:52	25.2
10	Aug 22 99	00:32:52	25.1
11	Aug 22 99	01:02:52	25
12	Aug 22 99	01:32:52	24.8
13	Aug 22 99	02:02:52	24.7

Data Tag	Data Info	Statistics
Model#: 20204	Serial#: 0000028948	Statistics Range: 1 to 67
Recorded Time: 0 day 0 hr 4 min 28 sec	Start Date: Aug 21, 1999 19:32:52	Sensor 1
Startup Delay: 0 day 0 hr 0 min 0 sec	Temp: <input type="text"/>	Minimum: 65.3 F
Log Interval: 0 hr 0 min 4 sec	Instr. Sn #: 00000004	Maximum: 71.6 F
Data Points: 67	Order #: <input type="text"/>	Average: 69.2 F
Battery Expiration: Jul 03, 1999	Receiver: <input type="text"/>	Std. Deviation: ± 0.39F
Setup Time: Jul 12, 1998 11:44:29	City: <input type="text"/>	Sensor 2
Start Time: Jul 12, 1998 11:44:29	Shipper: <input type="text"/>	Minimum: 75.7 F
Sched. Stop Time: Jul 12, 1998 12:24:33	Carrier I.D.: <input type="text"/>	Maximum: 78.7 F
Actual Stop Time: Jul 12, 1998 11:48:57		Average: 75.9 F
Download Time: Jul 12, 1998 15:32:31		Std. Deviation: ± 0.00F
Time Zone: -8 Hours GMT, Shipper		

Menu Bar

File

Open

Open an existing data file on the computer.

Save...

Update the backup file of the displayed data.

Note: You can only update or modify after downloading the Data Tag information. The Data Info and Statistics cannot be modified.

Save As

Save the backup file under a new name or location.

Save as Text

Save all downloaded data and information as an ASCII text file.

Save as Delimited

Creates a text delimited file for opening into an Excel or Access program.

(Continued)

View

Download Data

Download another FlashLink Data Logger.

Graph Data

Show downloaded data in a graph.

Maximum

Locate the highest value in the selected statistical range.

Minimum

Locate the lowest value in the selected statistical range.

Current Status

View the status of a data logger without interrupting the data logging process.

Options

Statistics Range

Select and change the statistical range in the Statistics Information Panel. Type the Sequence # in the "From" and "To" boxes, or click on two data points in the table.
Note: Statistics calculation affects only the data points within the statistical range!

File**View****Options****Delete**

The file currently open will be permanently removed from your hard drive.

Email

Proceed to page 27.

Close

Close the current screen.

Printer SetUp

Open the printer setup screen.

Print, Selection

Print a selected range of data points.

Print, Report Page

Print the Data Summary Report Page.

Exit

Terminate and leave the In-Transit FlashLink Software program.

Icon Bar



Same as File, Save



Same as View,
Maximum



Same as File, Print,
Print Selection



Same as View,
Minimum



Same as View, Graph
Data



Email data



Open a previously saved
data file on the
computer



Download data from the
data logger



View current status of
data logger



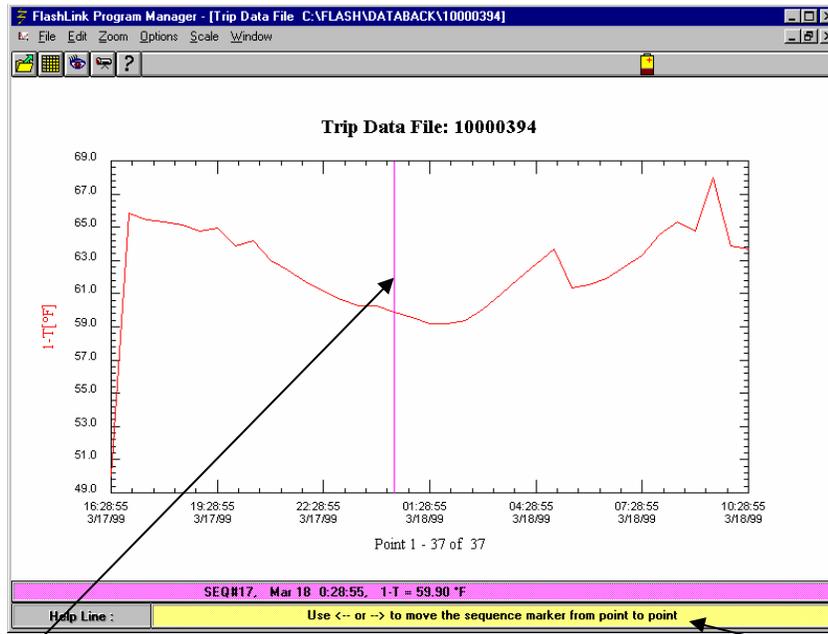
Software version

Graphs and Reports

Graphs

1. After downloading a data logger or opening an existing data file, report and graph windows appear.

* If no graph appears, select View, Graph Data or click on the icon. 



Use the arrow keys to move the sequence marker. Information about the individual data points will be displayed in the Help Line if Options, Show Sequence Marker is turned on.

Menu Bar**Edit****Copy as Full Color
MetaFile**

16 Bit Color Clipboard
File. Most Colors,
Largest Size File.

**Copy as Color
MetaFile**

256 Color Clipboard
File. Fewer Colors,
Medium Size File.
(Recommended)

Copy as BW MetaFile

Black & White
Clipboard File. Smallest
Size

Copy as Bitmap

Copies image from
display. Quality, Size
and Colors Dependent
on Display Driver.

Zoom**Zoom In**

Click and drag your
mouse over the area
you want to zoom in
on. You can
continue zooming in
to see details.

Restore

Return to the
original full graph
view.

Select 8 HR Period

View the graph in
8 hour segments.

Options,**Axes, Axes**

Select the font(s).

Axes, Grid

Select colors for the
graph, turn gridlines off
or on, select gridline
colors.

Axes, Scale

Use Manual Scaling to
limit the time scale of
the graph and turn
rounding on or off.

Axes, Ticks

Adjust the tick marks in
the graph.

Lines+Text,**Lines**

Select data indicator line
styles and colors.

Text

Enter Axis labels, title
and select font.

Font Color

Select font color.

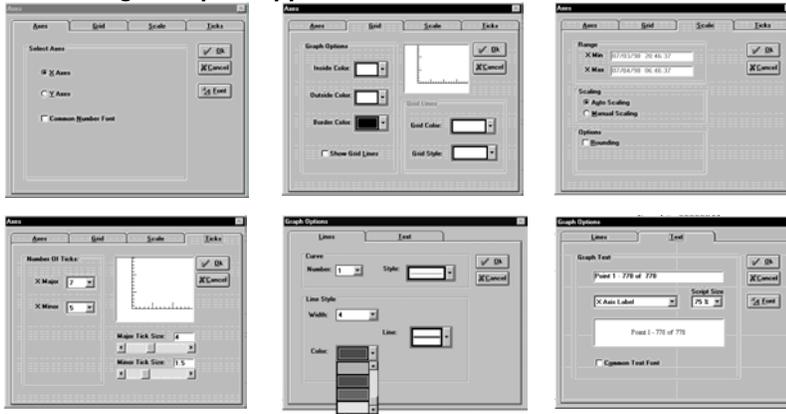
Edit

Zoom

**Options,
Hide Sequence
Marker**

✓ **Show Sequence Marker**
Shown on page 23.

Customizing a Graph's Appearance:



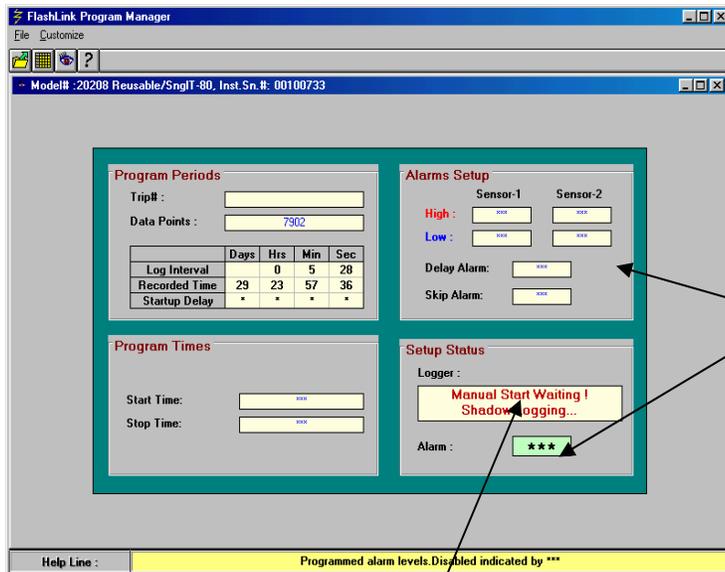
Reports

1. After downloading a data logger or opening an existing data file.
2. Select **File**, **Print Report Page** to print the data and the information found on the Data Tag, Data Info, and Statistics panels on the Download Screen.
3. Select **File**, **Print Selection** if you want to select a specific range of data points.

Current Status Screen

The Current Status Screen allows you to check a data logger's status without disturbing the operation. If the logging interval is 20 seconds or less, the time data will be off by one second.

Select **File**, **View Current Status**, or click on the icon .



Asterisks (***) indicate a feature is disabled.

For Setup Status
Logger Messages
see page 32

Email

You can send a file attached to an email message without leaving the FlashLink Program Manager program if you have access to the internet. You can also attach a data file using your own email program.

Before you can email a file from within the FlashLink Program Manager you will be asked to enter in your Mail Account Information. If you do not have this information you should contact your Internet provider or your IT department.



The image shows a dialog box titled "Mail Account Information" with a close button (X) in the top right corner. The dialog box is divided into several sections for inputting email account details:

- User Name:** A text box containing "FlashLink".
- E-mail Address:** A text box containing "youremail@webhost.com".
- SMTP Server Name:** A text box containing "mail.webhost.com".
- Requires Authentication:** A checkbox that is checked, with the text "Requires Authentication" next to it.
- SMTP User Name:** A text box containing "user name".
- SMTP User Password:** A text box containing "*****".

At the bottom of the dialog box, there are two buttons: "OK" and "Cancel".

LED INDICATORS

LED ACTIVITY	WHAT IT MEANS
3 green flashes:	Data logger activated
1 green flash every 12 seconds:	Logging
1 red flash every 12 seconds:	Alarm limits exceeded, logging continues
No flashing	Manual Start waiting or logging completed

ERROR AND WARNING MESSAGES

ERROR AND WARNING MESSAGES	WHAT THEY MEAN
Corrupted Configuration Data	The data logger will not communicate. This might be a sign of a serious internal hardware problem. Contact DeltaTRAK, Inc., Technical Support for further assistance.
EEPROM Failure!	The data logger will not communicate. This might be a sign of a serious internal hardware problem. Contact DeltaTRAK, Inc. Technical Support for further assistance.

ERROR AND WARNING MESSAGES	WHAT THEY MEAN
FlashLink Not Accessible!	<p>This message appears when there is no connection between PC and the data logger.</p> <p>Check for good contact between the data logger, cable, and computer.</p> <p>Use only a 25-pin “male-female” extension cable</p> <p>Check the parallel port settings on your computer.</p> <p>Note: Only the following parallel port settings are recognized. Search order is- Basic configuration 0000 = 0378-037F Basic configuration 0001 = 03BC-03BF Basic configuration 0002 = 0278-027F</p> <p>If you continue receiving this message, contact DeltaTRAK, Inc. Technical Support for further assistance.</p>
No Available Data!	<p>This message appears when you try to download the data logger and logging hasn't started or no data points are recorded. This also occurs if the data logger is waiting for manual start.</p>

ERROR AND WARNING MESSAGES	WHAT THEY MEAN
Process not Completed!	This message follows critical errors to let you know the download was not completed.

Current Status Logger Messages

MESSAGE	WHAT THEY MEAN
Logging Interruption!	Logging unexpectedly stopped. Data may not be present.
Manual Start Waiting!	Push <i>Manual Start</i> switch to begin logging.
Startup Failure!	Invalid program conditions. Check PC clock setting and download.
*Shadow Logging Finished! *See page 15	<i>Manual Start</i> not activated. Only * <i>Shadow Data</i> may be present.
Manual Start Waiting! *Shadow Logging...	Only * <i>Shadow Data</i> is present.
Data Downloaded, Logging Stopped	Data is available. Logger has discontinued logging data.
Data Complete! Logging Finished!	The programmed conditions are complete. Data is available for downloading.
Logging...	The programmed conditions are in process.
Logging Failure!	Download PC, <i>Time</i> or <i>Time Zone</i> may be incorrect. Number of samples does not match current time.

TROUBLESHOOTING

1) Software Installation Problems

- a) Make sure the FlashLink Data Logger is not connected to the PC.
- b) Close all applications and shut down the PC completely. Restart the computer* and install the software again.
- c) If you are still experiencing problems installing the software contact DeltaTRAK Inc., Technical Support for assistance.

2) FlashLink Communication Problems

- a) Always start the In-Transit FlashLink Software before connecting the FlashLink Data Logger.
- b) Verify that the FlashLink Data Logger and the data cable, or the FlashLink Data Logger and PC parallel port (i.e. if directly connected) are firmly connected. Click on the *Current Status* icon to check the connection.
- c) Replace the data cable that connects the FlashLink Data Logger to the PC parallel port. Click on the *Current Status* icon to check the connection.
- d) Disconnect the FlashLink Data Logger and restart the PC*. Start the In-Transit FlashLink Software, reconnect the FlashLink Data Logger and click on *Current Status* icon.
- e) If you are still experiencing problems establishing communication contact DeltaTRAK Inc., Technical Support for assistance.

* If problems persist, push “Ctrl + Alt + Delete” keys at the same time once and “End Task” on all programs in list except “systray” and “explorer” then retry.

APPENDICES

Product Specifications

Instrument

Operating Range:	-40°F~150°F (-40°C~66°C)
Ext. Probe Cable:	-112°F~230°F (-80°C~110°C)
Temperature Resolution:	0.1°F or °C
Logged Data Capacity:	3,800 data points
Two LED indicators:	12 second flashing red for alarm / green for logging
Battery Type / Life:	18 months with typical use
Enclosure:	ABS plastic case construction
Shock Resistance:	Drop from 3 feet to hard surface
Certification:	TÜV – CE Mark

Probes/ Sensors

Internal Sensor Range:	-40°F~150°F (-40°C~66°C)
External Probe Range:	-112°F~230°F (-80°C~110°C) Low Range
Ext. Probe Stabilization:	15 seconds in moving fluid, for a step change of temperature of 50°F / 25°C
Temp. Accuracy:	± 1°F (.5°C) at 32°F~150°F (0°C~66°C) ± 2°F (1°C) over entire range

Software

Data Download Time:	5 seconds typical for 3,800 data points
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In-Transit FlashLink Data Logger Models Available

Model #	Description
20011	05-Day In-Transit Temperature Logger
20012	15-Day In-Transit Temperature Logger
20013	45-Day In-Transit Temperature Logger
20014	75-Day In-Transit Temperature Logger
20041	05-Day In-Transit External Temperature Blunt Probe -80°C
20042	15-Day In-Transit External Temperature Blunt Probe -80°C
20043	45-Day In-Transit External Temperature Blunt Probe -80°C

Hardware Compatibility

The following laptop computers have been tested for compatibility with the FlashLink Data Logger and In-Transit FlashLink Software:

Chicony NP Series	IBM ThinkPad
Compaq Armada Series	NEC Versa Series
CTX EZ Book	Toshiba Satellite Series
Hewlett Packard Omnibook	Sony VAIO Series

Contact DeltaTRAK for the latest compatibility information

Additional Connection Options

- Add a PC card with a dual parallel port.
 - SIIG Inc. Model 101828 allows the FlashLink Data Logger to function simultaneously with your printer.
- Add a data switch with a 25 pin parallel port to manually switch between the FlashLink Data Logger and the printer.
 - Belkin Components, Precision Instruments
- Add a Port Buffer to increase data logger download speed, compensate for a weak printer port, low battery, or low quality cable.
 - DeltaTRAK
- Add a Data switch with port buffer to get functionality of both the data switch and port buffer combined.
 - DeltaTRAK
- Add the Serial Port Adapter model # 20218
 - DeltaTRAK

Warranty

DeltaTRAK instruments have a limited warranty period of 1 year against defects in materials and workmanship from the date of purchase. Accessory items and sensors have a limited warranty of 3 months. DeltaTRAK, Inc. shall, at its option, either repair or replace hardware products that prove to be defective, if a notice to that effect is received within the warranty period. DeltaTRAK, Inc. makes no other warranties or representations of any kind whatsoever, expressed or implied, except that of title, and all implied warranties including any warranty of merchantability and fitness for a particular purpose are hereby disclaimed.

Limitation of Liability

The remedies of purchases set forth herein are exclusive and the total liability of DeltaTRAK, Inc. with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the product upon which liability is based. In no event shall DeltaTRAK, Inc. be liable for consequential, incidental, or special damages.

Contacting DeltaTRAK, Inc.

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