

LinkLoss™ Description

LinkLoss™ software is used with Siecorm OTS-200 and OTS-300 Series Optical Meters and Optical Testers. Along with an RS-232 cable, it provides a simple and flexible link to transfer stored test data from these portable testers to a Microsoft Windows-based personal computer (PC).

LinkLoss™ allows a user to:

- Print and Save data in chart form.
- Customize Title and Header information.
- Merge data files for BiDirectional loss charts.
- Export test data to common spreadsheets and applications.

What You Need to Use LinkLoss™

- Any IBM®-compatible PC with an 80386 processor or higher.
- A hard disk with at least 5 megabytes of available space.
- A 3.5-inch floppy disk drive.
- At least 4 megabytes of RAM memory.
- Microsoft Windows version 3.1 or later.
- A printer set up to work with Windows applications.

Installation & Setup

LinkLoss™ software can be installed and used on the Windows 3.1X (version 3.1 and later) and the Windows 95 operating systems.

Windows 3.1X Installation

1. Insert the LinkLoss™ system disk into the 3.5" disk drive. From Program Manager select the Run command. At the command line type "A:\install" and press ENTER.
2. At the prompts enter the desired drive and directory names for the LinkLoss™ application and data files. (LinkLoss™ will suggest default drive and directory which can be changed on your particular PC.)
3. Press ENTER, and the application installs itself. After completion, double-clicking on the icon will start the LinkLoss™ program.
4. Two sample files are included to allow the user to become familiar with the view, edit, and print functions.

Windows 95 Installation

1. Insert the LinkLoss™ system disk into the 3.5" disk drive. Click the Start button on the taskbar and Select the Run command. At the command line type "A:\install" and press ENTER. Follow steps 2-4 above.

Starting & Quitting LinkLoss™

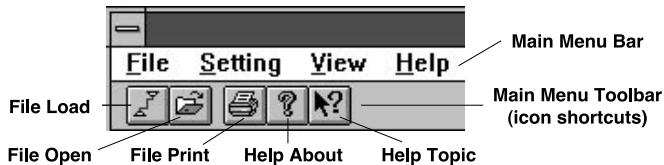
- To Start Program, open the program group in which you installed the LinkLoss™ program and double-click on the LinkLoss™ icon.
- To quit, select the File command and click on Exit (at the bottom).

Menu Functions

LinkLoss™ uses common Windows interface, menu commands, and toolbar icons. For information about the Windows interface, commands, and functions, consult the appropriate Windows User's Guide or Help Index.

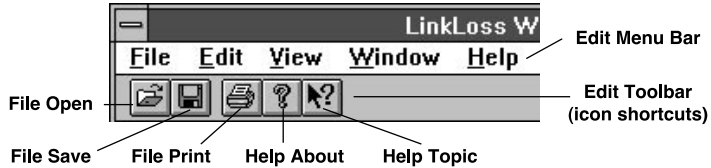
LinkLoss™ has two menus:

1. The **Main Menu** displays menu bar commands (File, Setting, View, Help) and icons for loading (handheld) or Main (PC) files. Use these commands to select the test data file(s) to work with.



Main Menu: *Menu Bar & Toolbar*

2. Once a PC data file is opened, the **Edit Menu** displays menu bar commands (File, Edit, Window) and icons for editing and using the PC file(s).



Edit Menu: *Menu Bar & Toolbar*

Note: In order to load files from the handheld unit to the PC, all data files must be closed first to display the Main Menu. This prevents confusion between test data files in the handheld unit and test data files on the PC.

File Commands/Main Menu

Selecting File from the Main Menu lists the following drop-down commands, segmented into handheld file functions (Load, Erase, Format) and PC file functions (Open, Print, Print Setup).

Load: uploads all data files from a connected Siecor OTS-200 or OTS-300 Series tester to the PC.

Erase: deletes selected files from the OTS tester.

Format: erases all files in the attached tester.

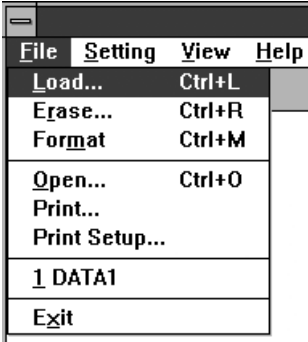
PC File Functions

Open: opens existing test data files from the tester.

Print: prints selected data file(s) from any selected PC drive and directory using the Windows Print Manager.

Print Setup: selects printer, paper size, page orientation, and other print-related options.

Exit: quits the LinkLoss™ application and returns to the previous Windows function.



<u>F</u> ile	<u>S</u> etting	<u>V</u> iew	<u>H</u> elp
<u>L</u> oad...		Ctrl+L	
<u>E</u> rase...		Ctrl+R	
<u>F</u> ormat		Ctrl+M	
<u>O</u> pen...		Ctrl+O	
<u>P</u> rint...			
<u>P</u> rint Setup...			
<u>D</u> ATA1			
<u>E</u> xit			

File Commands/Edit Menu

Selecting **File** while a data file is open displays drop-down file management commands that perform the following action on the active file:

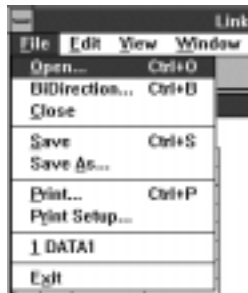
Open: opens another data file from any PC drive and displays it in a separate window.

BiDirection: opens another data file and merges data with the active file to generate a single chart with bidirectional test data.

Close: saves and closes the active file; if the changes have been made, a confirm prompt is displayed.

Save: saves the active file with any changes under the given file name, useful when any editing has been done.

Save As: saves the active file under a new user specified drive and name, useful when copying to another drive or saving a second version with edited information, BiDirection charts for example.



Print: prints selected data file(s) from any selected PC drive and directory using the Windows Print Manager.

Print Setup: selects printer, paper size, page orientation, and other print-related options.

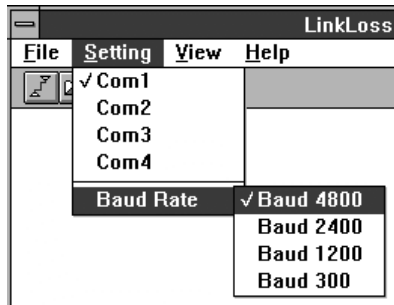
Exit: quits the LinkLoss™ application and returns to the previous Windows function.

Setting Commands/Main Menu

Choose Setting from the Main Menu bar to choose the serial port and transmission speed of the specific PC. Setting these parameters during first time use with each PC (or with changes in the serial port used) will assure reliable communication between the PC and handheld test unit(s).

COM Setting: Select the desired PC serial (COM) port to which the connecting cable will be attached.

Baud Rate: Allows manual setting of the appropriate serial port speed for error-free transmission on older PC's with slower data transfer standards.

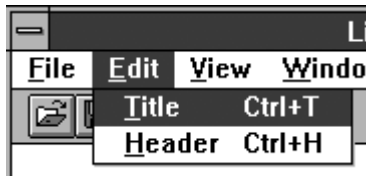


Note: *In some cases the COM ports on the PC may not be labeled. In many PC's that have a 9-pin serial connector mouse attached, the available COM port is often COM2. Many recent PC's and PC's with a proprietary mouse port have a COM1 port available.*

Edit Commands/Edit Menu

Title: entered information is printed in two centered lines at the top of the first page.

Header: entered information is printed in sequential two-column cells below the title. The Edit Header dialog box allows free-form addition of any number of cells with user-specified title and contents.

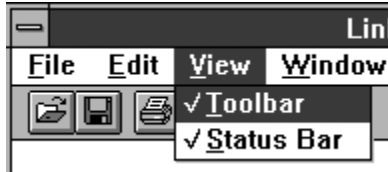


View Commands

The View commands toggle off and on the display of the Toolbar (icons) and the Status Bar. "On" is the default setting, indicated by a checkmark.

Toolbar: display of icons that provide shortcuts to menu drop-down commands. "Off" displays only the text commands.

Status Bar: displays basic command description and help information at the bottom of the LinkLoss™ window.

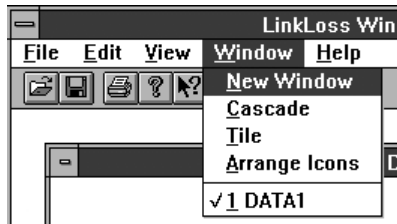


Window Commands/Edit Menu

The LinkLoss™ program displays each test data file in a separate window. Window commands allow for easy rearrangement and selection among multiple data files using the following drop-down functions:

- New Window:** opens another window for the active file, useful for bidirectional charts and editing a second version.
- Cascade:** resizes and layers open data file windows so that each title bar is visible.
- Tile:** resizes and arranges open data file windows as adjacent non-overlapping tiles.
- Arrange Icons:** evenly arranges the icons of minimized data files along the bottom of the LinkLoss™ window.

Open File List: displays a list of open data files with a checkmark beside the active file; select another file name to make it active.



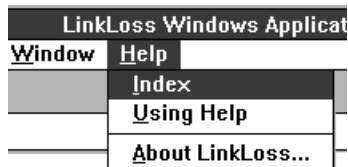
Help Commands

The Help commands provide on-line instruction in the format of a short-form manual with indexed topics that allow quick and basic information on the commands and functions of LinkLoss™ application. If you have other questions, contact the Siecor Test Equipment Service Center at 1-800-743-2671.

Index: provides basic description of LinkLoss™ Main Menu and Edit Menu commands and functions.

Using Help: displays a topical index for general use of the Windows help facility.

About LinkLoss™: displays the application name, version number, and copyright information.



To load test data from a handheld unit to a PC, follow the steps below.

Note: *Before attempting to load test data to a specific PC for the first time, use the Setting command to select the appropriate PC serial (COM) port as described in the Setting Commands section.*

Step 1: Physical Connection

Use the RS-232 cable included with the Siecor OTS-200/300 product to connect between the PORT (single pin connector) on the OTS product and the COM port on the PC (9-pin connector). Turn the OTS unit on.

Note: *Some COM ports based on older standards have 25-pin connectors. If necessary, a 9-pin to 25-pin adapter may be used to make this connection.*

Step 2: File Load Command

From the LinkLoss™ Main Menu, select the File Load command or icon. The Handheld Link Status box displays the messages communicated between the PC and the handheld unit. After a few seconds when communication is complete, all files saved in the OTS unit will be listed in the File List of the Load and Save File dialog box.

Step 3: Select and Save Files

Select the file(s) to be saved on the PC. To save all the files in the list, click on the Save All option box. To save individual files, hold down the CTRL key and click on the desired files. To save a group of consecutive files, hold down the Shift key and click on the first and last files of the group.

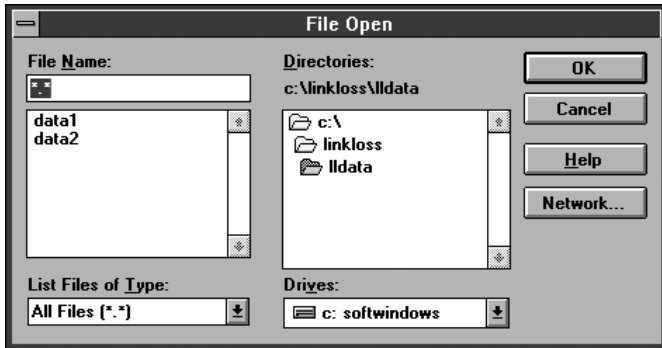
Select the desired save options by checking the desired option boxes from the Load and Save File dialog box:

- Save All:** as indicated above, a shortcut to load and save all files from the handheld on the PC.
- Include Model:** includes the model and serial number of the OTS unit in the header information of each test data file saved to the PC.
- Current Header for All Files:** includes the current header information (from Edit Header) in each test data file saved to the PC.
- Edit Header by File:** allows the user to customize header information for each selected file as it is saved to the PC. (See the Editing Headers section on page xviii for details.)

Press the Save button to save the selected file(s) to the Current Path. If you want to save the file(s) to another drive or directory, choose the desired drive from the Drive List. Choose the directory in which you want to save the file(s) and press Save.

Opening Data Files

To view or edit a test data file, open the desired file by choosing the File Open command. In the File Open dialog box, choose the drive and directory where the test data files are stored, and select or type the desired file name in the File Name box. Click on OK to open the highlighted file and view the test data.



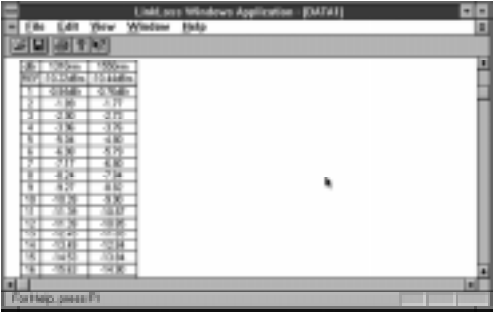
BiDirection Data Files

To merge bidirectional test data from two data files into a single chart -

Step 1: Open the first file using the File Open command.

Step 2: Choose File BiDirection and select the second file to be opened.

Step 3: LinkLoss™ automatically merges the test data as shown below, with test data for each fiber number by wavelength, file name, and bidirectional average.



The screenshot shows a window titled "LinkLoss Windows Application - [DATA1]". The window contains a table with the following data:

Fiber	Wavelength	File 1	File 2	Bidirectional Average
1	1550nm	-0.70dB	-0.70dB	-0.70dB
2	1550nm	-0.70	-0.70	-0.70
3	1550	-0.70	-0.70	-0.70
4	1550	-0.70	-0.70	-0.70
5	1550	-0.70	-0.70	-0.70
6	1550	-0.70	-0.70	-0.70
7	1550	-0.70	-0.70	-0.70
8	1550	-0.70	-0.70	-0.70
9	1550	-0.70	-0.70	-0.70
10	1550	-0.70	-0.70	-0.70
11	1550	-0.70	-0.70	-0.70
12	1550	-0.70	-0.70	-0.70
13	1550	-0.70	-0.70	-0.70
14	1550	-0.70	-0.70	-0.70
15	1550	-0.70	-0.70	-0.70

Note: An error message "File is not comparable" is displayed when the wavelength(s) or measurement units of the two files are not identical.

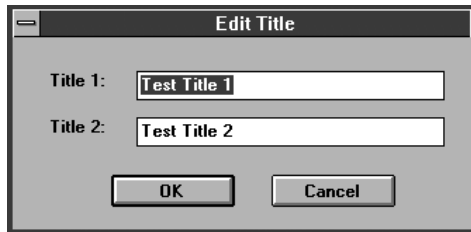
Note: The bidirectional average is performed as an edit to the first file name. To prevent overwriting the first file, choose File Save As and rename the file.

Editing Data Files (Title & Header)

Open the desired file and use the Edit commands to change the title and header lines that are printed along with the test data. **Note:** Test data can not be altered in LinkLoss™ - only the descriptive information contained in the title and header.

Editing Titles

Select the Edit Title command and type the desired information in the two lines displayed. These two lines will be printed at the top of each page with centered alignment.



Editing Headers

The header functions as a freeform two-column chart with individual cells that can be edited by the user. Select the Edit Header command and use the Header Data Input dialog box commands to Add, Modify, or Delete header names and/or contents from the current information displayed in the header list.

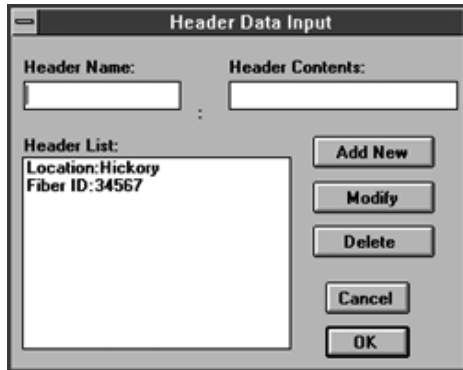
Add New: Inserts a new header cell after the current cells. Type in the header name and contents and then select Add New.

OK: Accepts all changes made while in the Header Data Input dialog box and returns to the Edit Menu.

Modify: Edits an existing header name and contents. From the Header List, choose the desired header and select Modify or OK to accept the changes.

Delete: Deletes an existing header name and contents. Highlight the desired header and choose Delete. Select Cancel to undo the deletion.

Cancel: Skips any changes made in the Header Data Input dialog box and returns all header names and contents to their previous state.

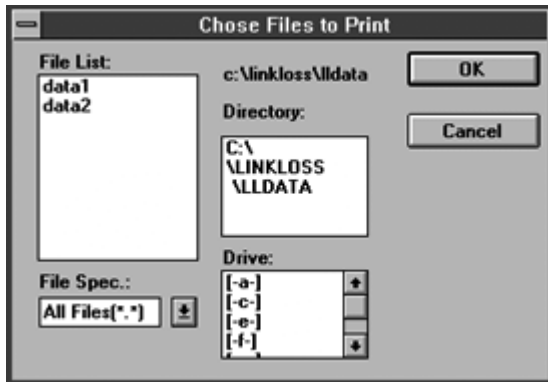


The image shows a dialog box titled "Header Data Input". It has a title bar with a close button on the left. The dialog is divided into several sections. At the top, there are two input fields: "Header Name:" and "Header Contents:", each with a corresponding text box. Below these is a "Header List:" section containing a list box with two entries: "Location:Hickory" and "Fiber ID:34567". To the right of the list box are five buttons stacked vertically: "Add New", "Modify", "Delete", "Cancel", and "OK".

Printing Data Files

Choose File Print (or the Print icon) from the Main Menu to display the Choose Files to Print dialog box. Choose the drive and directory of the desired test data files and select the file(s) to be printed. To print multiple files, hold down the Ctrl key and click on the desired files. To print a group of consecutive files, hold down the Shift key and click on the first and last files of the group. Select OK when the desired files are highlighted.

When a data file is open, choose File Print from the Edit Menu or click on the print icon to print the active file to the selected printer. Select the desired number of copies, print range and resolution, and click on OK to print. To change the selected printer, paper size, page orientation, and other print-related options, choose the File Print Setup command.



Saving Data Files

Test data files are automatically saved by their original file names when the File Load commands transfer them from an OTS handheld to the PC. As common in other Windows applications, once a file is open use -

Save: to save the active file with any changes under the given file name, directory, and drive. This is useful when any editing has been done.

Save As: to save the active file under a new user-specified drive, directory, and/or file name. This is useful when copying to another drive or saving a second version with edited information, BiDirection charts for example.

Importing Test Data to Other Windows Applications

LinkLoss™ PC Software provides quick and easy printing, header information, and BiDirection charts from OTS handheld files. In addition, OTS test data files can be opened from a variety of existing Windows software applications for flexible and powerful format customization, statistical analysis, and network management.

For example, Microsoft Excel and other spreadsheets can import OTS test data directly by opening the file and supplying basic information about the file format. OTS data files use a standard ANSI format with tab delimiters and general column data format. For specific instructions on importing data refer to the appropriate software user's manual.

Since the internal storage space in the OTS is limited, it is desirable to erase files in the handheld periodically to free memory for future tests. Individual internal files can be erased from the OTS handheld itself. LinkLoss™ can also erase all or selected files in a connected OTS unit using the following commands from the Main Menu (all data files closed):

Erase: deletes selected file(s) from the attached OTS tester. To delete multiple files at once, hold down the Ctrl key and click on the desired files. To delete a group of consecutive files, hold down the Shift key and click on the first and last files of the group. Select Erase when the desired files are highlighted.

Format: erases all files in the attached OTS tester.

Files saved to the PC can be erased, copied, or saved using standard Windows file management functions.

LinkLoss™ commands and dialog boxes are designed to be as simple and intuitive as possible. In the event of questions or difficulties, refer to the on-line help function.

Help Index command: displays a topical index of LinkLoss™ Main Menu and Edit Menu commands and functions. Selecting a topic displays a basic description and operation information to perform the desired function.

Help icon: displays basic description and information about the selected object. Click on the Help icon, point to the object (command, icon) in question and click again to display context-sensitive help information on that object.

In the event of other questions or difficulties, contact the Siecor Test Equipment Service Center at 1-800-743-2671 (800-SIECOR1), extension 5040. Please have ready the software version (from About LinkLoss™), OTS serial number (from back of unit), and a detailed description of the question or difficulty encountered.

