Collector Connector

Version 3.0 for Windows

Produced by

Simplicity Systems

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Simplicity Systems, Inc.
1621 Second Avenue N.E., P.O. Box 556
East Grand Forks, Minnesota 56721-0556

Sales Telephone:	(218) 773-8917
Sales Fax:	(218) 773-3849
E-mail:	sales@simsystems.com
Internet Home Page:	http://www.simsystems.com
Technical Support:	**(218) 773-7966**
Technical Support Fax:	(218) 773-3849
E-mail:	support@simsystems.com

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CREDITS

The Collector Connector software was written by Shirl A. Vonasek.
The printed and on-line documentation was written by Shirl A. Vonasek of Simplicity Systems, Inc. and Andrew G. Roe of AGR Associates, Inc. (E-mail: agroe@compuserve.com).

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Section 1
Introduction

1.01 Brief Overview of Collector Connector

Collector Connector is an easy-to-use, Windows-based link between your data collector and your computer. In addition, Collector Connector will format the transferred coordinate files for use with your coordinate geometry program. Collector Connector will also convert a data collector or total station file that has already been transferred onto the PC by another communications program.

Collector Connector supports coordinate geometry data files from Simplicity Systems' **"Sight" Survey, Survey 4.0**, **Survey 3.0**, **Survey Lite**, **Survey!, DigiMate,** and **CogoMate**, as well as coordinate files from third-party software companies. It also formats downloaded coordinate files for use with the **L.I. Contour** contouring program and creates a point-plot batch file for the **Generic CADD 6.0** program.

1.02 Overview of New Features

Collector Connector for Windows contains many new features and enhancements, all of which have originated from customer requests. We value your opinions and suggestions for improving our products and our company. Sincere thanks goes to all of you who have helped to improve our software!

The major features added to Collector Connector for Windows are:

- Windows-based for compatibility with Win 3.1, Win 95 & NT;
- Compatibility with "Sight" Survey, ProCogo, and Star*Net;
- Seamless, integrated operation within our "Sight" Survey for Windows COGO program;
- Ability to merge an incoming data collector file into an existing COGO file, with full point-overwrite protection;

- Ability to send just a RANGE of points, or the entire file;
- Windows file browser capabilities for all file selections;
- Ability to save previously used file names for easy recall & re-use;
- Ability to easily abort file transfers which are in progress;
- Separate default data file paths for the "Receive to" and "Send from" paths;
- Compatibility with serial ports COM3 and COM4;
- Support for baud rates up to 115,200;
- Ability to configure advanced communications settings such as handshaking and buffer sizes;
- Ability to specify an SDR Scale Factor other than 1;
- Ability to specify a time frame to cancel or abort a transfer.

1.03 The Instruction Manual

This manual is organized into eight main sections:

Section 1: **Introduction,** this section, contains a brief overview of the Collector Connector program and information regarding this manual.

Section 2: **Setup** contains installation and setup information for Collector Connector.

Section 3: **Configuration** contains information on configuring Collector Connector to work with your computer system and data collector. Each item on the **Configure** tab and on the Advanced Configuration screen is explained in detail.

Section 4: **Running Collector Connector** details the actual operation of Collector Connector, and explains in detail each item on the **Send/Receive** tab.

Section 5: **Getting Support** contains the important information you need in the event that you find it necessary to call Simplicity Systems for support.

Section 6: **Troubleshooting** contains helpful information for better program operations and a list of errors and messages which may appear while

using this program. It also contains suggestions and solutions to common problems and questions.

Appendix A: **Coordinate Geometry File Types** contains information on various file types that may be used with Collector Connector.

Appendix B: **Data Collector Interfaces** contains configuration information for most supported data collectors.

1.04 Manual Syntax

As you page through this manual, you will notice that different items appear in different type styles. Program prompts are depicted in a **Bold Helvetica** type and user responses are depicted in **`Bold Courier`** type. Additionally, this manual contains certain items in keycap outlines. For example, ↵Enter indicates that you should press the Enter key. Keycaps such as F1 indicate function key presses, and other keycaps such as Y indicate the pressing of a single number or letter.

Enter vs. Press

You should also note that there is a difference between the words *ENTER* and *PRESS*. Whenever the word *ENTER* is used, you will need to press ↵Enter after typing in your data. Whenever the word *PRESS* is used, the program will respond to a single key press without requiring the ↵Enter key.

Accessing Menus

In most cases, pull-down menu items may also be selected from the keyboard. This type of selection will be depicted with keycaps such as Alt, F. To respond to this type of entry, press the first key and release it, then press the second key. Sometimes a third key is listed, such as Alt, F, R. In this case, press and release the first key, second key, and third key in succession. ***Do not press the , key.***

In this manual, menus and sub-menus are depicted in the following manner: **Menu ➪Sub-menu**. For example: **File ➪Run** would indicate to select the **File** menu and then select **Run**.

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Section 2
Setup

2.01 Minimum System Configuration

Collector Connector for Windows requires a personal computer incorporating a DX386, DX486, Pentium, or better central processing unit, as well as the following:

Required Items

- Windows 3.1, Windows for Workgroups 3.11, Windows 95, or Windows NT
- A minimum of 8 MB of RAM
- One 3½", high-density, floppy disk drive
- A hard drive with at least 9 MB of free space
- A mouse, or compatible pointing device

Optional Hardware

- A math coprocessor, if you are using an SX-style CPU
- A dot-matrix or laser printer

2.02 Before Installing Collector Connector

If you are going to be using our "Sight" Survey for Windows COGO program, we highly recommend that you install that program ***before*** you install Collector Connector.

IMPORTANT NOTE:
Exit all other programs before you install Collector Connector!

2.03 READ.ME Files

Upon receiving any new program, you should search the disk(s) for a file named **READ.ME**, **README.DOC** or **README**, etc. If one exists, it contains important information and/or corrections that were added since the program went to press. ***It is imperative that you read these files before installing the program!*** The easiest way to view a "read me" file is to load the file into your word processing program, which allows you to scroll through the document at your leisure.

2.04 Do You Need a Site License?

Your purchase of Collector Connector is nothing more than a license to run the Collector Connector program on a single computer. You may need an additional site license if you plan to:

- Install Collector Connector on more than one computer at your place of business;
- Install Collector Connector on a home computer;
- Install Collector Connector on a field computer;
- Install Collector Connector on a network computer or server;
- Have Collector Connector available at temporary field office sites within your company.

The best rule to follow is: If there is any probability that a single copy of Collector Connector will be running on more than one computer at a time, an additional site license is required!

The "Transportable" License

Realizing that you may not always perform your job entirely in the office, the Collector Connector license is a "Transportable" license which allows you to copy the Collector Connector program to your home computer and use it there for no additional fee, provided that Collector Connector is used in accordance with the copyright. In other words, you may use Collector Connector under the "Transportable" license only when you are certain that no other licensed copies of Collector Connector are running at the same time.

If the Collector Connector license was originally purchased by a Company, and the Company has multiple owners, the license extends to one owner only. The Company must purchase site licenses in order for additional owners and/or their employees to have a legal copy of Collector Connector on their home computers. The purchasing Company retains ownership of ALL licenses of the programs.

The "Transportable" license may also be used to allow Collector Connector to be loaded on a portable field computer instead of, or in addition to, a single home computer, if the user can guarantee that only a single copy of Collector Connector is running at a time.

Multiple Office Installations

The Collector Connector license covers only a single site (i.e., a building or address). If you have multiple locations, each location is expected to purchase their first license at full cost, with subsequent purchases for each location in accordance with the established site licensing fees.

Network Installations

If Collector Connector is loaded on a network computer, either a server or a node, a site license may be needed. If the network administrator limits access to Collector Connector to a single user at any one time, a site license is not needed. However, if Collector Connector is available to more than one networked computer at a time, at least one additional site license is required. The number of site licenses required is based on the number of computers likely to be using Collector Connector concurrently, not necessarily the total number of computers on the network.

Site Licensing Fees

A site license granting you permission to make an additional copy of this software and manual is available at a cost of 50% of the full version price, per computer licensed. An extra manual and disks may be purchased from Simplicity Systems at an additional cost. Prices are subject to change without notice. Call for verification.

2.05 Installing Collector Connector

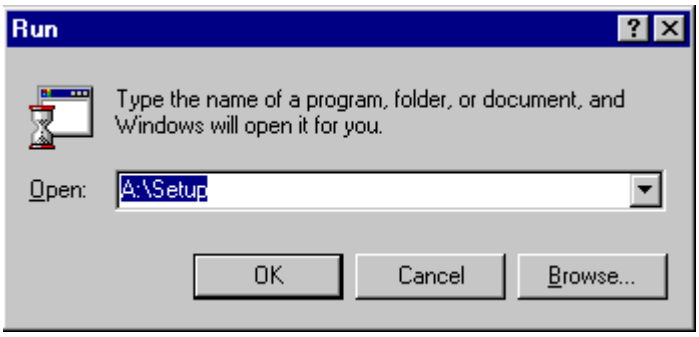
To install Collector Connector, make sure Windows is running, and perform the following steps. (To simplify installation instructions, we assume that your floppy disk is drive A.)

STEP 1 If you will be using our "Sight" Survey for Windows COGO program and have not yet installed it, do so now.

STEP 2 Exit **ALL** other Windows programs, including "Sight" Survey, before running the Collector Connector Setup program.

STEP 3 Place the **Collector Connector Disk 1** in your floppy drive. Most often this will be drive A:. ***Do not write-protect the Collector Connector Program disk or the installation will fail.***

STEP 4 Start the Setup program as described below.
For ***Windows 95***, use your mouse to select **Start ➔ Run** (or press Alt S, R) and type **`A:\SETUP`**, as shown below. Then press ↵Enter, or click OK.



Run Dialog Box

For ***Windows 3.1x***, use your mouse to select **File ➔ Run** from the Program Manager main menu (or press Alt F, R) and type **`A:\SETUP`** ↵Enter.

After you have started the Setup program, you will see the screen display shown in the following figure. Select Next > to continue.

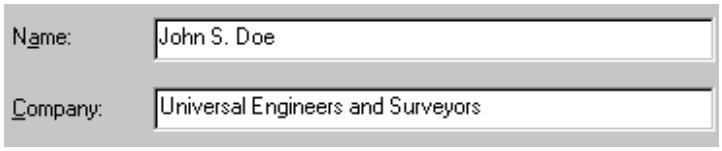
Initial Setup Screen

STEP 5 Setup will then display the license agreement for Collector Connector. Select Yes if you wish to accept the terms of the agreement and proceed. If you select No, the Setup program will close.

STEP 6 In a similar manner, Setup will display information contained in the README file. After reviewing this information, select Next > to continue.

STEP 7 You will then be asked to provide your name and company name, followed by the location to install Collector Connector, as shown in the following figures. After furnishing the required information on each screen, select Next >. We recommend you accept the default directory shown on your screen; however, if you already installed Collector Connector or "Sight" Survey to a different drive

and/or directory than the default, select Browse... to specify the existing directory.

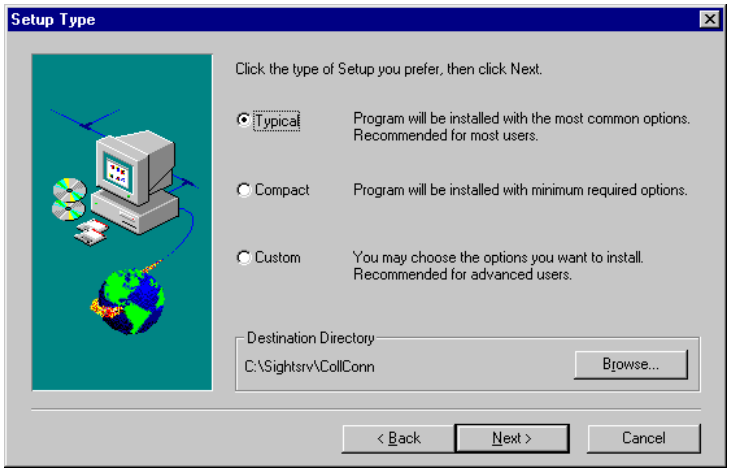


Name and Company Information

Destination Directory Information

STEP 8

Setup will ask you to select the type of installation you prefer, as shown in the following figure. Under most circumstances, you should accept the **Typical** installation and click Next >. If you wish to minimize or customize the number of options available, select **Compact** or **Custom**, respectively, and click Next >.



Setup Type Selection

STEP 9

After you have selected the setup type, Setup will display the default program folder or directory where icons will be placed. Make a selection and click Next > to proceed.

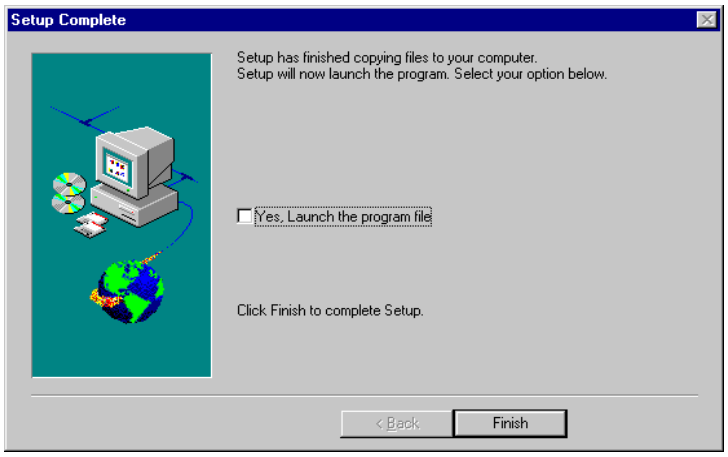
STEP 10

Setup will display a series of screens to inform you of the installation status. You will also be asked to insert disks 2 and 3 at various stages of the installation process. Exchange disks and click Next > or OK when prompted to do so. When asked to complete the SSI Registration Form, make sure you put your name, or the primary user of Collector Connector, as the Contact Name. Select Accept when you have completed the Registration Form.

After verifying that the information you entered is correct, you will be prompted to print the Registration Form. At this point, we strongly suggest that you print it, sign it, fold it, stamp it, and mail it to us. It's a quick and simple task and is important for many reasons. It provides us with updated information so that we can contact you with upgrade information and other news. But more importantly, ***we will not provide support for unregistered software.***

STEP 11

If this is the first Simplicity Systems product to be installed on your computer, the installation program will automatically create a **Simplicity Systems** program group and place Collector Connector in that group. If you already have a **Simplicity Systems** program group, Collector Connector will be added to that group. When Setup has finished installing Collector Connector, you will see the display shown in the following figure.



Setup Completion Screen

If you wish to run Collector Connector immediately, check the box marked "Yes" to launch the program and click Finish to complete the installation process. If you wish to finish the installation procedure without launching Collector Connector, leave the box blank and click Finish.

IMPORTANT NOTE FOR WINDOWS 3.1 USERS!

If you are installing Collector Connector into a Windows 3.1 system, you should NOT launch the program file at this time. Instead, select the Finish *button and then restart your Windows 3.1 system. (Windows 3.1 is restarted by exiting the program (*Alt F, X*) and typing "WIN" at the DOS prompt.).*

2.06 Starting Collector Connector

Collector Connector can be run integrated within our "Sight" Survey Professional COGO program, or it can be run as a stand-alone program.

Within "Sight" Survey

If Collector Connector found your "Sight" Survey program during installation, it updated "Sight" Survey's configuration and installed itself under the "Sight" Survey **Add-Ins** pull-down menu. To access

Collector Connector from within "Sight" Survey, you must be using "Sight" Survey Professional, version 2.0 or higher, with a serial number greater than 970801.

When Collector Connector is started from within "Sight" Survey, it runs as an integrated add-on module. Control will remain inside the "Sight" Survey program and the Collector Connector window will not be displayed. An exception to this occurs when using the **Configuration / Run Full-Screen** option.

To run Collector Connector from within "Sight" Survey, select the desired option from the **Add-Ins** ➔ **Collector Connector** pull-down submenu. The options available when running integrated are: **Send Coordinates to the Collector**, **Receive Coordinates from Collector, Import Existing Coordinate File**, and **Configuration / Run Full-Screen**.

Send Coordinates

The **Send Coordinates to the Collector** option sends the currently open "Sight" Survey COGO file to the collector. You will be prompted to save your existing file changes, if any have been made, and for the range of points to send. For additional information, refer to **Section 4.05—Sending a File to the Data Collector**.

Receive Coordinates

The **Receive Coordinates from Collector** option receives a file from your data collector and places the coordinates into the currently open "Sight" Survey COGO file. You will be prompted to save your existing file changes, if any have been made. If the current file contains any coordinate points, the incoming file will be merged with the existing points. If duplicate points are encountered, you will be prompted how you would like Collector Connector to handle them. After receiving and converting the file, the points will be displayed in "Sight" Survey's Edit Coordinates window and the conversion status will be written into the Text Output window. For additional information, refer to **Section 4.06—Receiving a File from the Data Collector**.

Import Coordinates

The **Import Existing Coordinate File** option imports a data collector file (that is already on your computer) into the currently open "Sight" Survey COGO file. You will be prompted to save your existing file changes, if any have been made. The **File Selection**

Screen will appear, prompting you to select the data collector file to be imported. If the current file contains any coordinate points, the incoming file will be merged with the existing points. If duplicate points are encountered, you will be prompted how you would like Collector Connector to handle them. After converting the file, the points will be displayed in "Sight" Survey's Edit Coordinates window and the conversion status will be written into the Text Output window. For additional information, refer to **Section 4.07—Converting an Existing Coordinate File**.

IMPORTANT!

If you do not wish to merge the incoming file with your current job, simply issue the ***New Job (NJ)*** *routine to start a new, empty "Sight" Survey job file.*

Configuration / Run Full-Screen

The **Configuration / Run Full-Screen** option will run Collector Connector full-screen, as if the program was started in stand-alone mode. This allows you to make configuration changes and to write a file to another format other than the "Sight" Survey for Windows file format. You will be prompted to save your existing file changes, if any have been made. For additional information, refer to **Section 4**.

IMPORTANT!

When running full-screen from within "Sight" Survey, if you want to send points from, or receive points to, the currently open job file, you must enter a filename of ***Drive:\TempDir\COGO.ZAK,*** *where* ***Drive:\TempDir*** *is replaced by the drive and directory containing your Windows temporary files. Most often, this is* ***C:\Windows\Temp****, but it can vary from system to system. If you are unsure of the temporary directory, it is best to make your configuration changes, return to "Sight" Survey, and then select the desired option from the* ***Add-Ins → Collector Connector*** *pull-down submenu.*

As Stand-Alone Program

As a stand-alone program, Collector Connector can be started in a wide variety of ways, similar to most Windows programs. The fol-

lowing instructions touch on the most common start-up methods for Windows 3.1 and Windows 95.

Windows 3.1

Mouse Method: Double-click on the Simplicity Systems program group. When the group window opens, double-click on the Collector Connector icon ( ).

Keyboard Method: Press Alt, F, R to open the **File Run** dialog window. In the filename box, type **`C:\SightSrv\Collconn\Collconn`** and press Enter. (If necessary, change the drive letter and directory name to match your installation.)

Windows 95

Start **Button Method:** Perform the following steps.

1. Click on the Windows 95 Start button.
2. Point to **Programs**. After a moment, the Windows program list appears.
3. Point to **Simplicity Systems**. After a moment, the Collector Connector program list appears.
4. Point to **Collector Connector for Windows** and click your mouse once.

Shortcut Method: First you must create a shortcut for Collector Connector.

IMPORTANT!

If you are not familiar with the Windows 95 Desktop and Windows Explorer, please consult your Windows documentation before attempting this procedure.

1. Click on the Windows 95 Start button.
2. Point to **Programs**. After a moment, the Windows program list appears.
3. Point to **Windows Explorer** and click your mouse once.
4. Use Explorer to move to the folder containing Collector Connector. This folder will usually be named

C:\SightSrv\Collconn, unless you changed it during the installation process.

5. To create a shortcut to Collector Connector, simply click and hold your right mouse button on the file **collconn.exe** and drag the item from Explorer to the Desktop.
6. Release the mouse button and select **Create Shortcut(s) Here**. The shortcut to Collector Connector will be located on the Desktop. Close Explorer. You can now use your mouse to drag the shortcut icon to a convenient location on the Desktop.
7. To launch Collector Connector from the shortcut icon, double-click your mouse on the icon.

Keyboard Method: Press Alt S, R to open the **Start ➪Run** dialog window. In the filename box, type **`C:\SightSrv\Collconn\Collconn`** and press ↵Enter. (If necessary, change the drive letter and directory name to match your installation.)

2.07 Un-installing Collector Connector

To un-install Collector Connector, you run the un-install program in a manner similar to that used to start Collector Connector. In Windows 3.1, simply open the Simplicity Systems program group and click on the **Un-install Collector Connector** icon () instead of the Collector Connector icon. In Windows 95, click on the **Uninstall Collector Connector** program item instead of the **Collector Connector** icon.

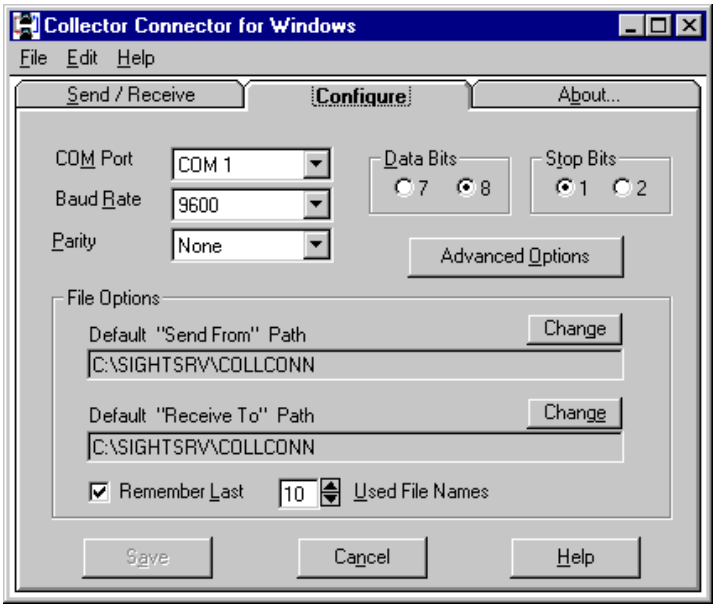
Collector Connector

Section 3
Configuration

3.01 Why You Need to Configure

Before you use Collector Connector, you must configure the program for your system. This will set operating parameters like the communications port, baud rate, and parity, as well as default directory locations for sending and receiving files. You will generally need to configure Collector Connector only once, unless you change data collector types.

To configure Collector Connector, click on the **Configure** tab in the main screen. You should then see the following display:



Configure Screen

Additional settings, such as data collector types and coordinate geometry (COGO) file types are selected from the **Send/Receive** menu. These settings are discussed further in Section 4 and Appendix A.

3.02 Selecting Config Items

All of the "Sight" Survey configuration routines use a variety of data entry fields. These fields are:

Check Boxes

☑ Item Active 3 Item Inactive

Check Boxes are toggle switches. Check Box items are active when the box contains a ✓ or an X. If a *group* of check box items is displayed, you may select as many as you need.

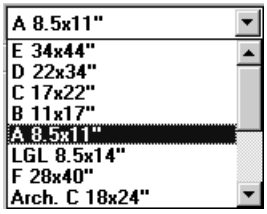
Option Buttons

⊙ Item Active ○ Item Inactive

Option Buttons are toggle switches. Option button items are active when the button contains a smaller dot. Option buttons are used to present mutually exclusive options. In other words, if a *group* of option button items is displayed, you may select only one.

Selection Lists

Selection Lists are marked by a ▼ button (or ⬇ in Windows 3.1) on the left side of the entry field, which already contains a selection. Click your mouse on the ▼ button, then make your choice by using the ↑ or ↓ key or your mouse. Press Esc to exit a list without making a choice. Depending upon how you choose an item, you may need to press ↵Enter.



Some selection lists (such as the one shown to the right) are scrollable, as indicated by the presence of a scroll bar along the right side of the list. Scrollable lists contain more selections than can be shown in the selection list at one time. You

can scroll the list by using your ↑ and ↓ keys, or by clicking your mouse on the ▲ and ▼ arrows on the scroll bar. You may also click and hold your mouse on the button in the scroll bar while you slide the button up and down.

Text Entry Boxes

Text Entry Boxes are simply boxes into which you type text. Position the cursor in the box using your mouse or the Tab key. Type the data requested and press ↵Enter. If a highlighted value exists in a text entry box, the data you type will replace the existing data.

Response Buttons

Response Buttons function as simple push buttons. Activate a response button in one of two ways: either by clicking your mouse on the button, or (in this example) by pressing Alt H, where the letter following the Alt key corresponds to the underlined letter on the button. (Occasionally, you may need to press ↵Enter after using an Alt key combination.)

3.03 Communications Settings

Communications settings control how data is exchanged between your computer and a data collector. These settings are selected on the **Configure** tab. They are also displayed in the field labeled **Data Collector File** on the **Send / Receive** tab when you have selected either **SEND** or **RECEIVE**. The **Data Collector File** field is only used during the **CONVERT** process.

COM Port

The communications port is also known as a serial or RS232 port. It is the place on the back of your computer where you connect a serial cable from a data collector.

To select a port, click on the down arrow next to the **COM Port** box. Then, highlight the port on your computer that the data collec-

tor cable will be attached to for the transfer process. Your choices are: **COM1, COM2, COM3,** or **COM4.**

Baud Rate

Baud rate refers to the transmission speed, or the number of bits transferred per second, between your data collector and your computer. Simply stated, it is the speed at which one device sends and receives data from another device.

To select a speed, click on the down arrow next to the **Baud Rate** box. Then, highlight the speed that matches the baud rate of your data collector. If you do not select the correct rate, either an error will occur or your data will not be transferred properly. Your data collector reference manual should list the correct baud rate if you are unsure of which option to use. Your choices are: **300, 1200, 2400, 4800, 9600, 14400, 19200, 28800, 38400, 57600,** or **115200**.

Valid baud rates are determined by both the installed windows communication driver and the type of universal asynchronous receiver transmitter (UART) that your serial port uses. Some PS/2 computers have UARTs that do not support baud rates greater than 19,200. Also, Windows 3.0 does not allow baud rates greater than 19,200.

Parity

Parity is simply a mechanism for error detection in the communication line between two devices.

To select a setting, click on the down arrow next to the **Parity** box. Then, highlight the setting that matches the parity of your data collector. If the option you choose does not match your data collector setting, an error will occur when you attempt to send or receive a file. Your data collector reference manual should list the correct parity if you are unsure of which option to use. Your choices are: **None**, **Odd**, or **Even**.

Data Bits

Data bits, also known as word length, refers to the number of bits that make up one character.

Click the option button next to the setting that matches the data bits of your data collector. If the option you choose does not match your data collector setting, an error will occur when you attempt to send

or receive a file. Your data collector reference manual should list the correct data bits (or word length) if you are unsure of which option to use. Your choices are **7** or **8**.

Stop Bits

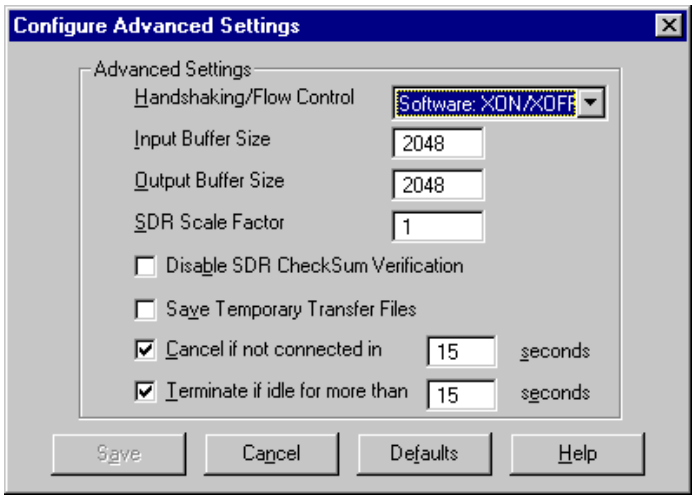
Stop bits refers to the number of bits that separate, or delimit, each character in the transmission.

Click the option button next to the setting that matches the stop bits of your data collector. If the option you choose does not match your data collector setting, an error will occur when you attempt to send or receive a file. Your data collector reference manual should list the correct stop bits if you are unsure of which option to use. Your choices are **1** or **2**.

3.04 Advanced Communications Options

The Advanced Communications Options are communications settings that normally would not be changed. However, the settings are available in the event that you desire more control over the communications process.

To access these options, select the Advanced Options button from the **Configure** tab. The following screen will be displayed.



Advanced Communication Settings Screen

Handshaking / Flow Control In order for communications to occur between a data collector and a computer, the two devices must "talk" to each other. This setting specifies the language or signals used by them during these communications. Both devices must use the same type of handshaking, and they use it to tell each other when they are ready to receive or send more data.

Although this setting will usually default to the correct handshaking for your data collector, the ability to change this setting allows you to correct for inconsistencies between data collector firmware revisions or optional data collector connection ports.

The default for this setting depends upon the selected data collector.

Input Buffer Size This setting refers to the actual size of the memory area used to store data that is received from the data collector before Collector Connector can process it. If you receive an overflow error during a Receive, you would normally increase this number, in multiples of 512. Increasing this number can usually speed up transfers, but it can also cause errors when converting large data files.

The default for this setting is **2048**.

Output Buffer Size This setting refers to the actual size of the memory area used to store data that is sent from Collector Connector to the data collector before the data collector can process it. If you receive an overflow error during a Send, you would normally increase this number, in multiples of 512. Increasing this number may or may not speed up data transfers.

The default for this setting is **2048**.

SDR Scale Factor This setting allows you to specify a scale factor for use when sending files to the Lietz or Sokkia data collectors. If you wish to use a scale factor other than **1**, enter the desired scale factor in the text box. This setting has no effect on files received from the data collector.

The default for this setting is **1**.

Disable SDR CheckSum Verification

When this setting is enabled, the checksum verification process that occurs when using Lietz or Sokkia data collectors is not performed. This option is provided in the event that the checksum algorithm used by your data collector is different from that used by Collector Connector. Instead of having Collector Connector issue a message that the file should be re-transferred, you can instead have Collector Connector ignore the checksum.

Although disabling the checksum verification process will result in faster Lietz and Sokkia data transfers, it may result in incorrect data being transmitted. We do not recommend enabling this option.

The default for this setting is **Disabled**.

Save Temporary Transfer Files

When this setting is enabled, Collector Connector will save the temporary transfer files that get created during the transfer process. The temporary files could be used as a backup data file or as an audit trail.

Temporary files are also extremely beneficial to the programmer and/or technical support when attempting to track down a specific problem or error that may have occurred. If you are having difficulty transferring files, you may be asked to enable this setting and submit the temporary files to our technical support department for further evaluation.

The default for this setting is **Disabled**.

Cancel If Not Connected

When this setting is enabled, Collector Connector will cancel the transfer process if a connection between the data collector and the computer has not occurred within the specified number of seconds.

The default for this setting is **Enabled** and `15` seconds.

Terminate If Idle

When this setting is enabled, Collector Connector will terminate the current transfer process if the transfer stops for the specified number of seconds. This allows an easy termination if you are using a data collector which does not send a signal that it is done transmitting or receiving. However, this setting can also **cause** a problem with certain data collectors (especially the HP48's) if the data file you

are transmitting has a large number of blank points between the used points.

The default for this setting is **Enabled** and `15` seconds.

Resetting the Defaults

To reset all the Advanced Settings to their original, default settings, simply click the Defaults button.

Saving the Changes

If changes have been made to the Advanced Settings, the Save button will become enabled. Click on it to save the changes, or click on Cancel to abort the changes.

3.05 File Options

The lower portion of the **Configure Screen** shown on page 17 contains areas for selecting default paths for sending and receiving files, and allows you to enable or disable the saving of last-used filenames.

Default "Send From" Path

This setting tells Collector Connector where to look for data files that are "sent" to the data collector. When the **Transfer Type** on the **Send/Receive** tab is set for either **SEND a Coordinate File to Data Collector** or **SEND a Raw Data File to Data Collector**, the **COGO File Name** field (on the **Send/Receive** tab) will default to the path specified in this setting.

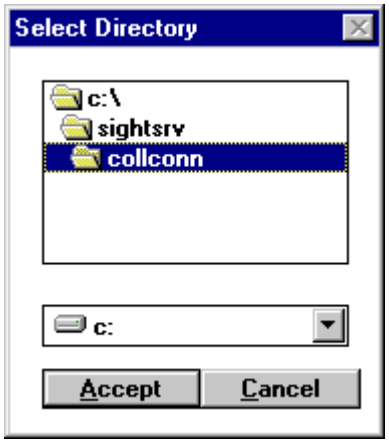
To change this path setting, select the Change button or press Alt G. The **Directory Selection Screen** (shown later in this section) will be displayed.

Default "Receive To" Path

This setting tells Collector Connector where to create the data files that are "received" from the data collector. When the **Transfer Type** on the **Send/Receive** tab is set for either **RECEIVE a Coordinate File from Data Collector** or **RECEIVE a Raw Data File from Data Collector**, the **COGO File Name** field (on the **Send/Receive** tab) will default to the path specified in this setting. When the **Transfer Type** is set for either **CONVERT a Coordinate File already on the PC** or **CONVERT a Raw Data File already on the PC**, both the **COGO File**

Name and the **Data Collector File** fields will default to the path specified in this setting.

To change this path setting, select the Change button or press Alt E. The **Directory Selection Screen** will be displayed.



Directory Selection Screen

The top portion of the Directory Selection Screen contains the current path name. The lower selection list shows the current drive.

To Change Drives: Click on the drive selection list, or on the button. (The drop-down list may or may not be scrollable.) Click on the new drive.

To Change Directories (or folders): Set the file path in the upper box by clicking your mouse on directories and subdirectories until you have located the desired directory.

When you have selected the correct drive and directory, click on Accept or press Alt A.

Remember Last File Names

This setting tells Collector Connector if you want to store your last-used COGO and data collector file names for easy recall, and if so, how many to store. When this option is enabled, Collector Connector will remember the names of the COGO and data collector

files that you have previously used so that you can recall them quickly without having to retype them.

You can store anywhere from 0 to 20 of the last-used COGO and data collector file names. The last-used ***COGO file*** names will appear in the **COGO File Name** list box and the last-used ***data collector file*** names will appear in the **Data Collector File** list box on the **Send/Receive** tab. To access them, you simply click on the ▼ button next to these fields. Pressing ↓ (on the keyboard) will place the name of the very last file you used into the file name box. In addition, pressing the ↑ and ↓ keys allows you to cycle through the entire list of last-used file names.

To change the number of most recently used file names that you wish to store, simply click the up or down arrow of the spin button to the right until the desired number is displayed in the box, or just type in the desired number. The number must be between `1` and `20`, inclusive. If you do not wish to use this feature, enter `0` in the box or disable the feature by removing the check mark from in front of the prompt.

The default for this setting is **Enabled** and `10` file names.

Saving the Changes

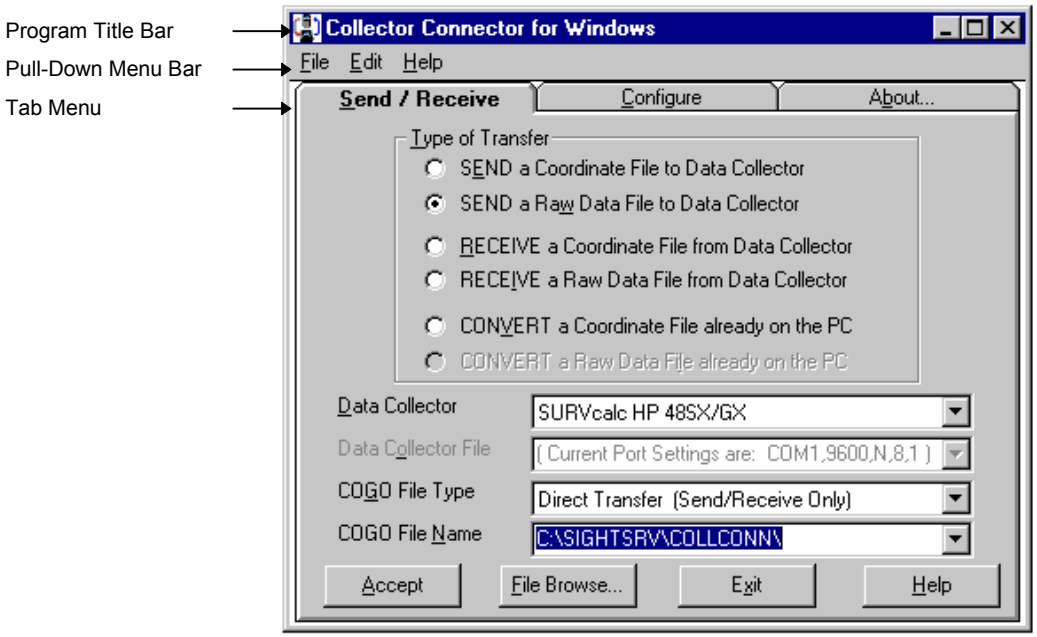
If changes have been made to the Configuration Settings, the Save button will become enabled. Click on it to save the changes, or click on Cancel to abort the changes. In either case, you will be returned to the **Send/Receive** tab.

Collector Connector

Section 4
Running Collector Connector

4.01 Operational Overview

When you start Collector Connector, you first see the main Collector Connector screen, as shown in the following figure. This screen contains the primary tools used to send, receive, and convert data. As you can see, the main screen consists of three main areas: the program title bar, the pull-down menu bar, and the tab menu.



Main Collector Connector Screen

Title Bar

The title bar displays the program name and contains the standard Windows title bar controls. At the left end of the title bar is the control icon  . Clicking on the icon opens the Control menu, which you can use to position the Collector Connector window or to exit the program. Double-clicking closes Collector Connector. At the right end of the title bar are standard window buttons, as shown in the following table.

Standard Window Buttons

Minimize		Maximize		Restore		Close
Win95	Win3.1	Win95	Win3.1	Win95	Win3.1	Win95
						
Reduces window to an icon		Enlarges window to fill the screen		Returns window to its last non-minimized, non-maximized position		Closes the window

Pull-Down Menu Bar

The pull-down menu bar contains menus for managing files, editing text, and obtaining on-line help. You open a menu by clicking on it, or by pressing and releasing Alt, then the letter underlined in the menu's title. For example, to open the **File** menu, you press and release Alt, then press F. You choose a menu selection by clicking on it, by pressing its underlined letter, or by using the cursor keys to highlight it and then pressing ↵Enter. Additional information on the pull-down menus can be found in Section 4.02.

Tab Menu

The tab menu consists of three tabs: **Send/Receive**, **Configure**, and **About**. To display the contents of a tab, simply click the tab once. The **Send/Receive** tab, which is displayed by default when you start Collector Connector, contains the primary tools used to send, receive, and convert data. Additional information on these tools can be found in Sections 4.03 through 4.05. The **Configure** tab displays Collector Connector settings and allows you to set parameters for your system. Additional information on configuration can be found in Section 3. The **About** tab displays general information about your version of Collector Connector.

4.02 Using the Pull-Down Menus

File Menu

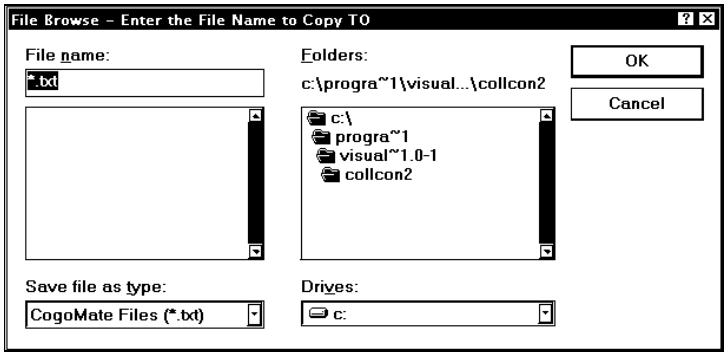
The **File** menu contains commands for copying, deleting and viewing files without leaving the program. As with most other Windows programs, it also contains an **Exit** command.

File ➪Copy File

This routine will make an exact copy of any file on your computer without leaving the Collector Connector program. You can make a copy of the file under a new name in the same subdirectory, or you can copy the file to another drive and/or directory, either keeping the same name or changing it. This routine does not change the format of the file; it simply makes a duplicate copy of the file.

To copy a file, first enter the name of the file you wish to copy in the **COGO File Name** field and then select **File ➪Copy File** or press Alt, F, C. For the name of the file to be copied ***from***, you can type in the name or click File Browse... to select from a list of files using your mouse.

After entering a valid file name to copy ***from***, the **File Browse Screen** will appear prompting you to enter the drive, directory and name of the file to copy ***to***.



File Browse Screen (File to Copy TO)

Section 4

The instructions for using this screen are the same as any other Windows file selection screen, and can be found in **Section 4.05** under the **File Browse Screen** shown on page 37.

After entering a valid file name to copy ***to***, Collector Connector will check if the destination file exists. If the destination file exists, you will be asked to confirm your intention to overwrite the file. If the file does not exist, the source and destination file names will be displayed, and you will have the option of selecting [OK] to perform the copy or [Cancel] to abort the process.

File ➪Delete File

This routine will delete any file on your computer without leaving the Collector Connector program. ***Once a file has been deleted using this routine, it cannot be recovered.***

To delete a file, first enter the name of the file you wish to delete in the **COGO File Name** field and then select **File ➪Delete File** or press Alt, F, D. You can type in the file name or click [File Browse...] to select from a list of files using your mouse.

After entering a valid file name to delete, Collector Connector will warn you which file you are about to delete, and that the file cannot be recovered once it has been deleted. If you are certain that you want to delete the specified file, select [Yes]. If you do not wish to delete this file, select [No] to abort the process.

File ➪ View CCInfo File

This menu item allows you view the conversion status or audit trail for the last processed file. The file will appear in the NotePad or WordPad program. To view the file, select **File ➪View CCInfo File** or press Alt, F, V.

Once the file is loaded into the editor, if you wish to print the file, press Alt, F, P. To exit the editor and return to Collector Connector, press Alt, F, X.

File ➪Exit

To exit Collector Connector, select **File ➪Exit** or press Alt, F, X.

Edit Menu

The **Edit** menu contains commands for cutting and copying information from the Collector Connector file name fields to the Windows clipboard, and for pasting that information back into the Collector Connector file name fields. These commands are most useful for copying a filename from one of the filename fields to the other without having to retype the filename.

Edit ➪Cut

To use the **Cut** command, first highlight the characters in the filename field that you wish to cut. Then select **Edit ➪Cut** or press Alt, E, T. You can also press Ctrl X to access the **Cut** command.

Edit ➪Copy

To use the **Copy** command, first highlight the characters in the filename field that you wish to copy. Then select **Edit ➪Copy** or press Alt, E, C. You can also press Ctrl C to access the **Copy** command.

Edit ➪Paste

To use the **Paste** command, place the cursor in the filename field where you want to paste the information. Then select **Edit ➪Paste** or press Alt, E, P. You can also press Ctrl V to access the **Paste** command.

Help Menu

The **Help** menu provides access to Collector Connector's on-line help file.

Help ➪Contents

This menu item will show you a listing of the on-line help contents, allowing you to select from several specific help topics. You can access this help screen from the keyboard by pressing Ctrl F1, or by pressing Alt, H, C.

Help ➪Current Topic

This menu item displays a help screen for the currently highlighted field (where the cursor is located) or for the currently displayed message box. You can access this help screen from the keyboard by pressing F1, or by pressing Alt, H, T.

Help
Search for Help on… This menu item allows you to search for help on certain topic by typing in a search keyword. You can access this help screen from the keyboard by pressing Alt, H, S.

Help
How to Use Help This menu item displays information on how to use the on-line help system. You can access this information from the keyboard by pressing Alt, H, H.

Help Obtaining
Tech Support This menu item displays information about how to obtain technical support for this program. You can access this information from the keyboard by pressing Alt, H, O.

Help About
Collector Connector This menu item displays the Collector Connector **About** tab from the main program screen. It contains general information about your version of Collector Connector. You can also access this screen by simply clicking on the **About** tab, or by pressing Alt, H, B on your keyboard.

4.03 Data File Types

Whether you are sending, receiving or converting data, Collector Connector works with three types of data files: coordinate files, raw data files, and data collector files.

Coordinate Files

Coordinate files are the files that are formatted specifically for a particular coordinate geometry (COGO), contouring, or CAD program. You use the **COGO File Type** field to tell Collector Connector the format of the coordinate file that you are sending, or the format of the file to be created when receiving or converting a data collector file. Collector Connector allows you to exchange data with a wide variety of these file formats, as discussed in **Appendix A**.

Raw Data Files

Raw data files are files which contain mostly raw field data such as bearings, distances, offsets, etc. Raw data files can be sent or received from the data collector; however, no conversions are performed on them in this version of the program. If you receive a raw data file from a data collector, the file will be stored in the raw data format of the data collector from which it came. If you send a raw data file to a data collector, it must already be formatted in the raw data format of the data collector to which it is being sent. When you are sending or receiving a raw data file, the **COGO File Type** field will automatically be set to **Direct Transfer**.

Even though this version of Collector Connector does not convert raw data files to COGO files, nor vice-versa, the ability to send and receive raw data files is a valuable feature. If your COGO program can read and/or write raw data files ***in your data collector's format***, you can transfer files with Collector Connector and then convert them using your COGO program. In addition, it is a good safety precaution to periodically download **ALL** the files from your data collector to your PC to serve as a backup of your files in the event that your data collector's memory is wiped out.

Data Collector Files

Data collector files are the actual coordinate or raw data files which are ***usually*** stored on your data collector or total station. However, whether they reside on the data collector, total station or on the PC, ***these files are always in the native format of the data collector or total station***, which may be either ASCII or binary.

Many data collector and total station manufacturers supply software with their equipment to download their files to the PC, but provide no software on the PC to convert the downloaded files to a COGO, contouring or CAD program. If you have data collector or total station files on your PC, you may be able to use Collector Connector's **CONVERT** options to get those files into your COGO, contouring or CAD program. You use the **Data Collector File** field to tell Collector Connector the name of the file on your PC that you want to convert. (If you want to use Collector Connector to create a copy of an actual data collector file on your PC, you would receive a file from your data collector with the **COGO File Type** field set to **Direct Transfer**.)

Collector Connector allows you to exchange data with a wide variety of data collectors, as discussed in **Appendix B**.

4.04 Transfer & File Options Summary

The Send/Receive tab, which contains the primary tools used to send, receive, and convert data, provides several options for transferring data. These options are summarized below and discussed in more detail in sub-sections 4.05 through 4.07.

SEND a Coordinate File to Data Collector

This option will read a coordinate geometry (COGO) file on the PC, convert it to the format required by the specified **Data Collector**, and then transfer the converted file to the data collector. Collector Connector allows you to send an entire data file or a simply range of points.

SEND a Raw Data File to Data Collector

This option will directly transfer an existing raw data file from the PC to the data collector. Since no conversions are performed, the file must already be formatted in the native raw data format of the specified **Data Collector**.

RECEIVE a Coordinate File from Data Collector

This option will transfer a file from the specified **Data Collector** to the PC. It will then read that file and convert it to the format required by the specified **COGO File Type**. Collector Connector allows you to create a new data file, or merge the incoming coordinates into an existing file.

RECEIVE a Raw Data File from Data Collector

This option will directly transfer a raw data file from the specified **Data Collector** to the PC. Since no conversions are performed, the file will be formatted in the native raw data format of the specified **Data Collector**.

CONVERT a Coordinate File already on the PC

This option will read a data collector coordinate file that is already on the PC and convert it to the coordinate format required by the specified **COGO File Type**. Collector Connector allows you to create a new data file, or merge the incoming coordinates into an existing file.

CONVERT a Raw Data File already on the PC

In this version of Collector Connector, this feature is disabled. In the Professional version of Collector Connector, this option will read a data collector raw data file that is already on the PC and convert it to the raw data format required by the specified **COGO File Type**.

Data Collector

When sending or receiving files, this setting tells Collector Connector which data collector you are using. When converting files, this setting tells Collector Connector the format of the existing data collector file. Collector Connector supports a wide variety of data collectors, as discussed in **Appendix B**.

Data Collector File

When converting files, this setting tells Collector Connector the name of existing data collector file on the PC. This setting is disabled when sending or receiving files; however, for your convenience, the text box will display the current communications port settings: com port, baud rate, parity, data bits, stop bits.

COGO File Type

When sending files to a data collector, this setting tells Collector Connector the format of the data file which is being sent. When receiving or converting files, this setting tells Collector Connector into which file format to convert the file. Collector Connector supports a wide variety of file types, as discussed in **Appendix A**.

COGO File Name

When sending files to a data collector, this setting tells Collector Connector the name of the data file which is being sent. When receiving or converting files, this setting tells Collector Connector the name of the file to which you want the converted data to be written.

Click on Accept or press Alt A to start the transfer process.

Click on File Browse... or press Alt F from either the **Data Collector File** or **COGO File Name** fields to easily select your file names from a Windows-style file selection box.

Click on Exit or press Alt X to exit the program.

Help — Click on Help or press F1, or Alt H to access on-line help.

4.05 Sending a File to the Data Collector

Connect the Data Collector — Before you send a file to the data collector, make sure that your data collector is connected to the appropriate communications port and that the configuration options of Collector Connector match the configuration of your data collector. Refer to **Appendix B** for specific information on your data collector.

Select the Transfer Type — To send a file to the data collector, first select what type of file you are going to send. To send a coordinate file, select the **SEND a Coordinate File to Data Collector** option, or press Alt E. To send a raw data file, select the **SEND a Raw Data File to Data Collector** option, or press Alt W.

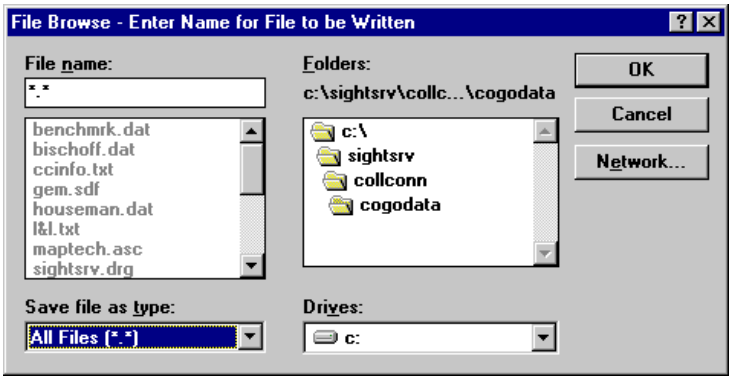
Select the Data Collector — Next select the type of data collector that will be receiving your data. Click the down arrow next to the **Data Collector** box and highlight the appropriate data collector.

Select the COGO File Type — Click the down arrow next to the **COGO File Type** box and highlight the appropriate file type. If you are sending a raw data file, select **Direct Transfer**. (If you try to send a raw data file with another file type, a message will be displayed that raw data files can only be sent using **Direct Transfer**.)

Select COGO File Name — To select a file to be sent to the data collector, you can type in the name or select from a list of files using your mouse. To type in a file name, simply click in the **COGO File Name** box and type in the name, ensuring that the path preceding the file name is correct.

You can select a file using your mouse in a couple of different ways. If you would like to choose from the most recently used files, as discussed on page 25, click the down arrow next to the **COGO File Name** box, and you will see a list of files most recently used. You can then highlight the file of your choice. To automatically enter the name of the last used file, simply press ↓ on the keyboard.

If you would like to browse through files on your computer, click the File Browse... button, or press Alt F. You will then see the following screen.

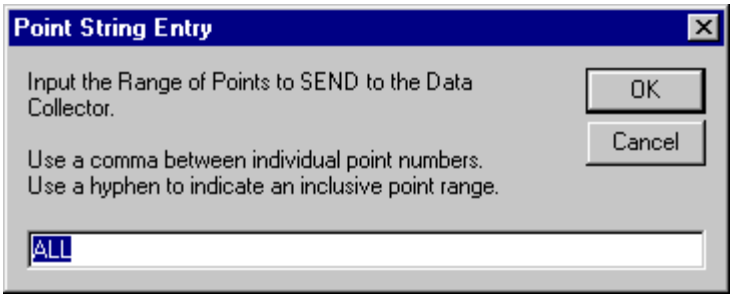


File Browse Screen (File to be Written)

If you wish to change drives, click the down arrow to the right of the **Drives** box and highlight the appropriate drive. If you wish to change directories, double-click on the appropriate directory. You can then highlight the file of your choice and click OK. Note that if you change the file type in the browser window, this does not change the selected data collector type—it merely controls the type of files displayed in the file name box.

Click Accept

Once you have made the above selections, click Accept to begin the data transfer process. You should then see the following display.



Point String Entry Screen

If you want to send all points in the file, click OK or press ↵Enter. If you wish to send only a range of points in the file, type in the range according to the following rules and examples, and then click OK or press ↵Enter.

ⓘ RULES FOR ENTERING POINT STRINGS

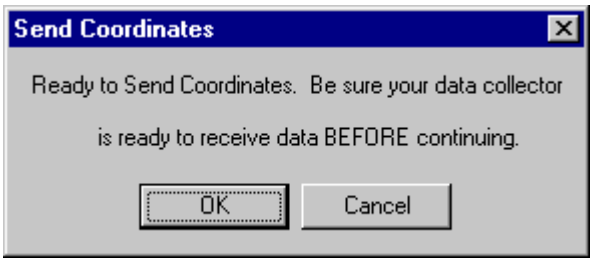
1. Point Strings can be any combination or numbers, letters, commas, or hyphens.
2. It can include individual points and/or point ranges.
3. Separate single points by a comma, for example `1,3,5,7.`
4. Separate a consecutive range of ***numeric*** point numbers by a dash, for example `1-7.`
5. Single points and consecutive ranges may be combined into one point string, for example `1,3,5,7-10,25.`
6. Enter all ***alphanumeric*** point numbers individually and separate them by a comma (i.e., `PT1,PT3,PC8,NCorL1`).
7. DO NOT start your point string with a dash or a comma (`-` or `,`).
8. Use care when entering your point string since the program will not attempt to screen your entry for illegal characters or unassigned points.

ⓘ NOTE

Point ranges are not allowed when working with ***alphanumeric*** *point numbers. Each point number must be entered individually, separated by commas. For example:*

`NECorL1,SECorL1,NWCorL2,NWCorL1`

After your file has been read and converted to the data collector format, you will see the following screen:

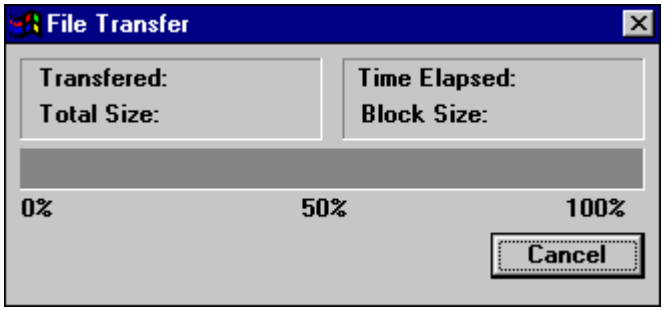


Ready to Send Coordinates Screen

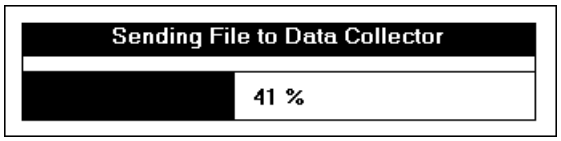
IMPORTANT!

If you send a data file to the data collector before the data collector is ready to receive the file, the first few records of information (and possibly the entire file) will not be received. You must then repeat the sending process to get a complete and correct transfer of data.

Prepare your data collector and click OK, or press ↵Enter ***when your data collector is waiting to receive the file***. If you do not want to perform the transfer, press Esc or click Cancel. Once the data transfer process is underway, you may see one of the following screens indicating the transfer progress. (The progress screen that will appear depends upon which data collector you are using.)



File Transfer Screen 1



File Transfer Screen 2

If you wish to abort the file transfer process:

- When File Transfer Screen 1 is showing, click on Cancel.
- When File Transfer Screen 2 is showing, click on Abort.

When the transfer process is complete, you should see the following screen.

End of File Transfer Screen

4.06 Receiving a File from the Data Collector

Connect the Data Collector

Before you attempt to receive a file from the data collector, make sure that your data collector is connected to the appropriate communications port and that the configuration options of Collector Connector match the configuration of your data collector. Refer to **Appendix B** for specific information on your data collector.

Select the Transfer Type

To receive a file from the data collector, first select what type of file you are going to receive. To receive a coordinate file, select the **RECEIVE a Coordinate File from Data Collector** option, or

press Alt R. To receive a raw data file, select the **RECEIVE a Raw Data File from Data Collector** option, or press Alt I.

Select the Data Collector

Next select the type of data collector that will be sending the data. Click the down arrow next to the **Data Collector** box and highlight the appropriate data collector.

Select the COGO File Type

Click the down arrow next to the **COGO File Type** box and highlight the appropriate file type. If you are receiving a raw data file, select **Direct Transfer**. (If you try to receive a raw data file using any other file type, a message will be displayed that raw data files can only be received using **Direct Transfer**.)

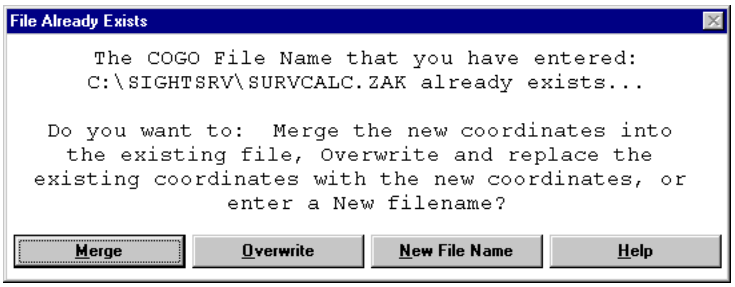
Select COGO File Name

To select a name for the file to be received from the data collector, you can type in the name or select from a list of files using your mouse. The procedure is the same as that described for sending data on page 36.

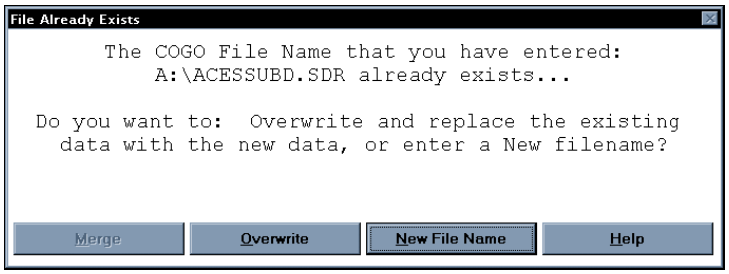
Click Accept

Once you have made the above selections, click Accept to begin the data transfer and conversion process.

If you have entered a COGO file name that already exists, you will be prompted with one of the following displays:



File Already Exists Screen



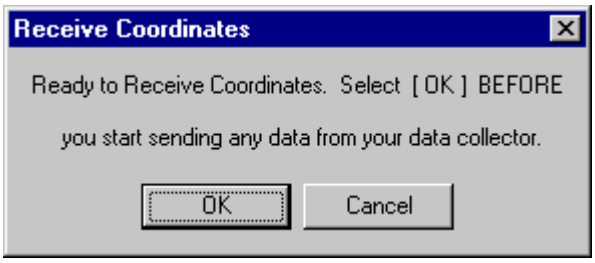
File Already Exists - Raw Data & Direct Transfers

NOTE

If you are receiving or converting a raw data or direct transfer file, you will not be given the option to merge files.

If you wish to combine the coordinates to be received with the co-ordinates already existing in the file, click **Merge** or press Alt M. If you wish to overwrite and replace the existing coordinates with the new coordinates, click **Overwrite** or press Alt O. To enter a different file name, click **New File Name** or press Alt N. If you have chosen to merge your data into the existing file, your existing file will be read into memory before the transfer begins.

After making your selections, you should see the following **Ready to Receive** screen.



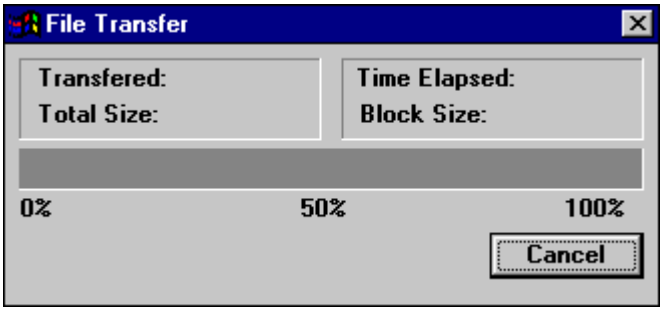
Ready to Receive Coordinates Screen

IMPORTANT!

If you send a data file from the data collector before Collector Connector is ready to receive the file, the first few records of information (and possibly the entire file) will not be received. You must then repeat the sending process to get a complete and correct transfer of data.

Prepare your data collector to send the data to the PC, but **DO NOT** actually start the sending process. Once your data collector is READY to send a file, then click the OK button in response to the **Ready to Receive** prompt. After selecting OK, then begin the sending process on your data collector.

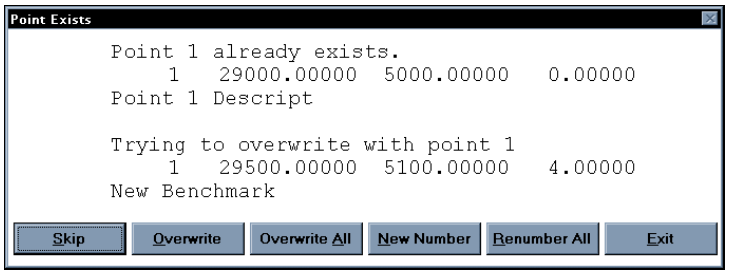
If you do not wish to send the file, click Cancel, or press Esc. Once the data transfer process is underway, you should see the following screen indicating the transfer progress.



File Transfer Screen

Merging Files

After the file has been transferred, if you elected to merge the file with an existing file, Collector Connector checks the incoming data file for duplicate points that are already assigned in the existing COGO file. When a duplicate point number is found, you will be prompted with the **Point Already Exists** dialog box which displays both the existing point coordinates (shown first) and the new point coordinates (shown last), similar to the following screen:



Merging: Point Already Exists

This screen allows you to either **Skip** (ignore) the new point, **Overwrite** the existing point, **Overwrite All** duplicate points, assign a **New Number** for the duplicate point, assign a starting number at which to **Renumber All** duplicate points, or **Exit** the file merge. You must respond to this screen to let Collector Connector know what to do with the incoming point that already exists in the COGO file.

Skip

If you wish to keep the original coordinates for the point shown, click Skip or press S. Collector Connector will ignore the new point coordinates and they will not be placed into the data file.

Overwrite

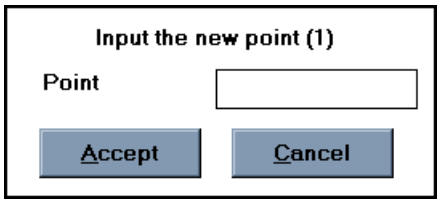
If you wish to overwrite the original coordinates with the coordinates of the new point, click Overwrite or press O. When Collector Connector encounters the next duplicate point in the file, it will again prompt you with the **Point Already Exists** dialog box.

Overwrite All

If you wish to overwrite the original coordinates of any and all existing points with the coordinates of the new points, click Overwrite All or press A. When Collector Connector encounters the next duplicate point in the file, it will automatically overwrite the existing coordinates with the new coordinates, without prompting you.

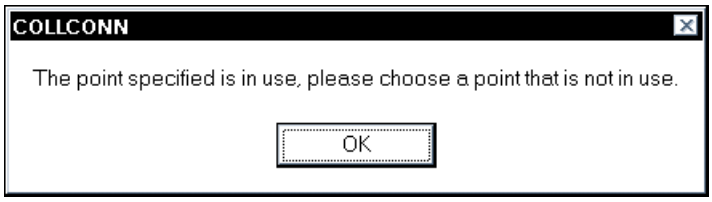
New Number

If you wish to enter a new point number for the new incoming point, click New Number or press N. You will be prompted for the new point number as follows:



Merging: Input New Point Number for Specified Point

The original point number is shown in parenthesis behind the prompt. Simply type in a new point number and press ↵Enter. Collector Connector will verify that the new point number is available and renumber the point accordingly. If the new point number already has assigned coordinates, you will be prompted to re-enter the point number as follows:



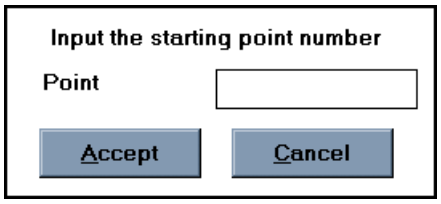
Merging: Point In Use

Click OK or press ↵Enter and then key in a new, unassigned point number in the **Input New Point** dialog box. If you wish to return to the **Point Already Exists** prompt, select Cancel.

If Collector Connector encounters additional duplicate points in the file, it will again prompt you with the **Point Already Exists** dialog box.

Renumber All

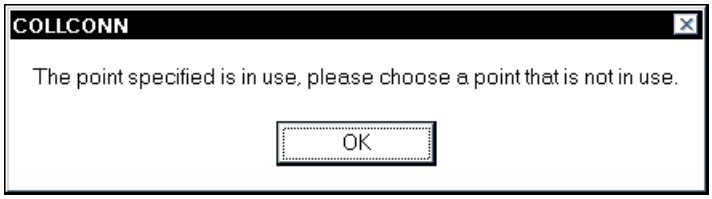
If you wish to renumber all of the new incoming points that have duplicate point numbers, click Renumber All or press R. You will be prompted for the new starting point number as follows:



Merging: Input New Starting Point for Renumbering

The incoming duplicate point will be renumbered to the new point number that you enter into this prompt. Any additional duplicate points found in the incoming file will be renumbered in numerical sequence from this number. For example if you enter **2000** as the new starting point number, when the next duplicate point in the file is encountered, Collector Connector will automatically renumber that point to **2001**, if available, without prompting you.

Type in the new starting point number and press ↵Enter. Collector Connector will verify that the new point number is available and re-number the point accordingly. If the new point number already has assigned coordinates, you will be prompted to re-enter the point number as follows:



Merging: Point In Use

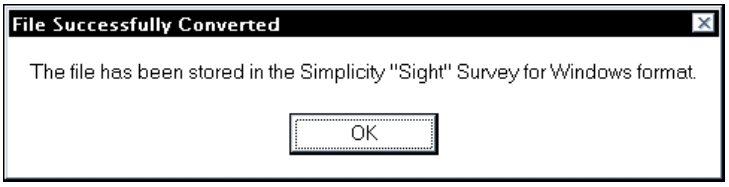
Click OK or press ↵Enter and then key in a new, unassigned point number in the **Input New Point** dialog box. If you wish to return to the **Point Already Exists** prompt, select Cancel.

Exit

If you wish to abort the merging of the new points, click Exit or press E. The remainder of the points in the incoming file will not be processed, and as such, will not get converted to the merged file.

Transfer Complete

When the transfer process is complete, you should see one of the following screens.

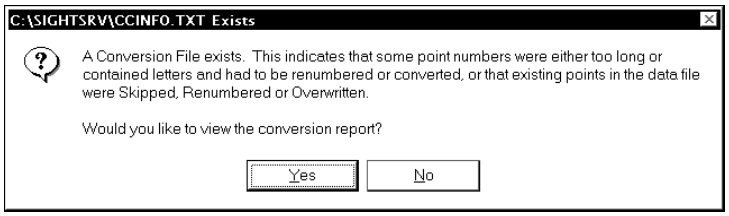


Coordinate File Received & Converted Successfully

Direct Transfer File Received Successfully

Conversion File

If Collector Connector encountered any duplicate points in the file, it wrote a summary of your responses to the **Point Already Exists** dialog box into an informational audit trail file. The name of this file is ***(Datapath)*\CCINFO.TXT**, where ***(Datapath)*** is replaced with the drive and directory containing your original data file. If this file exists and you are not running within "Sight" Survey, Collector Connector will ask you if you would like to view the file. If you are running within "Sight" Survey, the file will be automatically imported into "Sight" Survey's **Text Output Window**.



Merging: Conversion File Exists

If you wish to view the file, click **Yes** or press ↵Enter. If you do not wish to view the file, Click **No** or press N. If you do not

view the file at this time, you can always view the information for the last processed data file using the **File ➔ View CCInfo File** pull-down menu option. If you chose to the view the file at this time, the file will be displayed in the Windows Notepad or WordPad editor as shown below.

Merging: NotePad View of CCINFO.TXT

Once the file is loaded into the editor, if you wish to print the file, press Alt F, P. To exit the editor and return to Collector Connector, press Alt F, X.

4.07 Converting an Existing Data Collector File

Select the Transfer Type

To convert an existing file that has already been transferred from a data collector or total station to your computer, first select what type of file you are going to convert. To convert a coordinate file, select the **CONVERT a Coordinate File already on the PC** option, or press Alt V. *(The **CONVERT a Raw Data File already on the PC** option is only enabled in the professional version. Contact the Simplicity Systems sales office at 1-800-777-7978 for availability.)*

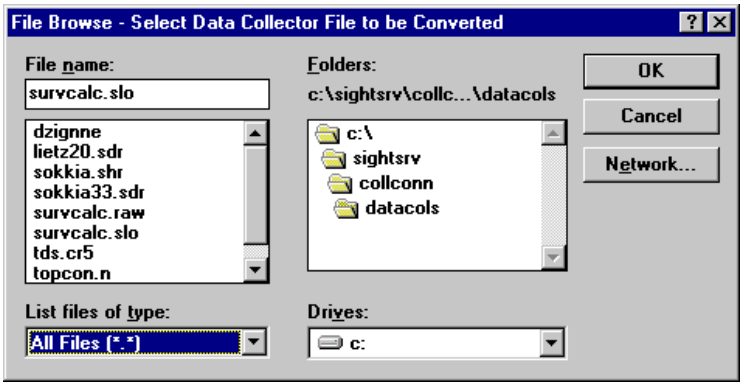
Select the Data Collector

Next select the type of data collector file that you will be converting ***from***. Click the down arrow next to the **Data Collector** box and highlight the appropriate data collector.

Select Data Collector File

You may have noticed that the **Data Collector File** field displays communications settings when not in use (i.e., you have selected either Send or Receive). This field is only active during the Convert process. You can now use this field to select the data collector file that you will be converting ***from***. You can type in the name or select from a list of files using your mouse. The procedure is similar to

that described for selecting COGO file names on page 36. The browse screen will look slightly different, as shown in the following figure.



File Browse Screen (File to be Converted)

Select the COGO File Type

Click the down arrow next to the **COGO File Type** box and highlight the appropriate file type you wish to convert ***to***.

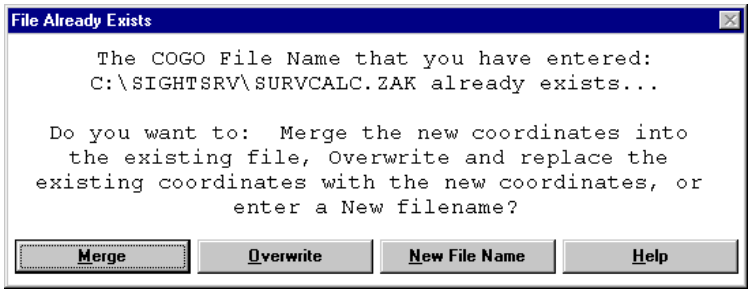
Select COGO File Name

To select a name for the file to be converted ***to***, you can type in the name or select from a list of files using your mouse. The procedure is the same as that described for sending data on page 36.

Click Accept

Once you have made the above selections, click Accept to begin the data conversion process.

If you have entered a COGO file name that already exists, you will be prompted with the following display:



File Already Exists Screen

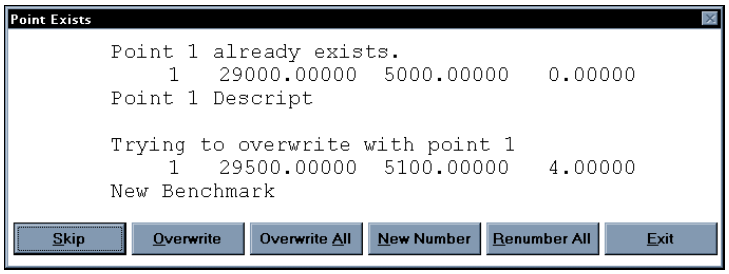
NOTE

If you are converting a raw data file, you will not be given the option to merge files.

If you wish to combine the coordinates in the data collector file with the coordinates already existing in the COGO file, click **Merge** or press Alt M. If you wish to overwrite and replace the existing coordinates with the new coordinates, click **Overwrite** or press Alt O. To enter a different file name, click **New File Name** or press Alt N. If you have chosen to merge your data into the existing file, your existing file will be read into memory before the conversion begins.

Merging Files

If you elected to merge the file with an existing file, Collector Connector checks the data collector file for duplicate points that are already assigned in the existing COGO file. When a duplicate point number is found, you will be prompted with the **Point Already Exists** dialog box which displays both the existing point coordinates (shown first) and the new point coordinates (shown last), similar to the following screen:



Merging: Point Already Exists

This screen allows you to either **Skip** (ignore) the new point, **Overwrite** the existing point, **Overwrite All** duplicate points, assign a **New Number** for the duplicate point, assign a starting number at which to **Renumber All** duplicate points, or **Exit** the file merge. You must respond to this screen to let Collector Connector know what to do with the incoming point that already exists in the COGO file.

Skip

If you wish to keep the original coordinates for the point shown, click Skip or press S. Collector Connector will ignore the new point coordinates and they will not be placed into the data file.

Overwrite

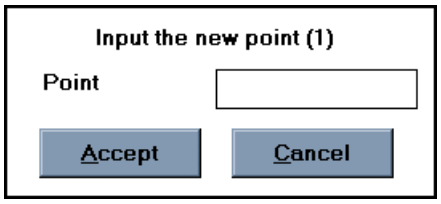
If you wish to overwrite the original coordinates with the coordinates of the new point, click Overwrite or press O. When Collector Connector encounters the next duplicate point in the file, it will again prompt you with the **Point Already Exists** dialog box.

Overwrite All

If you wish to overwrite the original coordinates of any and all existing points with the coordinates of the new points, click Overwrite All or press A. When Collector Connector encounters the next duplicate point in the file, it will automatically overwrite the existing coordinates with the new coordinates, without prompting you.

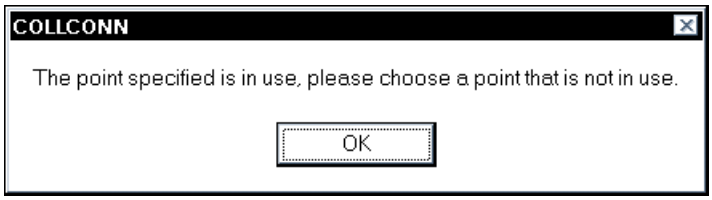
New Number

If you wish to enter a new point number for the new incoming point, click New Number or press N. You will be prompted for the new point number as follows:



Merging: Input New Point Number for Specified Point

The original point number is shown in parenthesis behind the prompt. Simply type in a new point number and press ↵Enter. Collector Connector will verify that the new point number is available and renumber the point accordingly. If the new point number already has assigned coordinates, you will be prompted to re-enter the point number as follows:



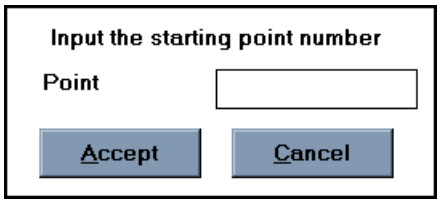
Merging: Point In Use

Click OK or press ↵Enter and then key in a new, unassigned point number in the **Input New Point** dialog box. If you wish to return to the **Point Already Exists** prompt, select Cancel.

If Collector Connector encounters additional duplicate points in the file, it will again prompt you with the **Point Already Exists** dialog box.

Renumber All

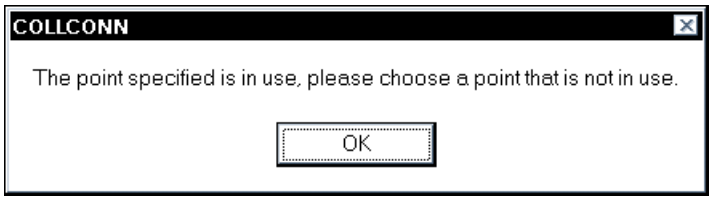
If you wish to renumber all of the new incoming points that have duplicate point numbers, click Renumber All or press R. You will be prompted for the new starting point number as follows:



Merging: Input New Starting Point for Renumbering

The incoming duplicate point will be renumbered to the new point number that you enter into this prompt. Any additional duplicate points found in the data collector file will be renumbered in numerical sequence from this number. For example, if you enter **2000** as the new starting point number, when the next duplicate point in the file is encountered, Collector Connector will automatically renumber that point to **2001**, if available, without prompting you.

Type in the new starting point number and press ↵Enter. Collector Connector will verify that the new point number is available and renumber the point accordingly. If the new point number already has assigned coordinates, you will be prompted to re-enter the point number as follows:



Merging: Point In Use

Click OK or press ↵Enter and then key in a new, unassigned point number in the **Input New Point** dialog box. If you wish to return to the **Point Already Exists** prompt, select Cancel.

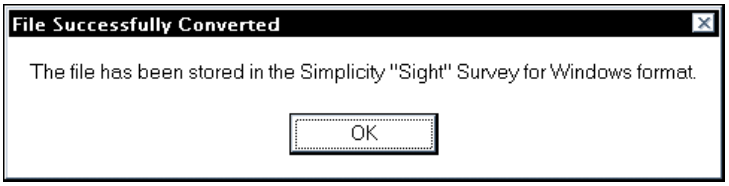
Exit

If you wish to abort the merging of the new points, click Exit or press E. The remainder of the points in the data collector file will

not be processed, and as such, will not get converted to the COGO file.

Transfer Complete

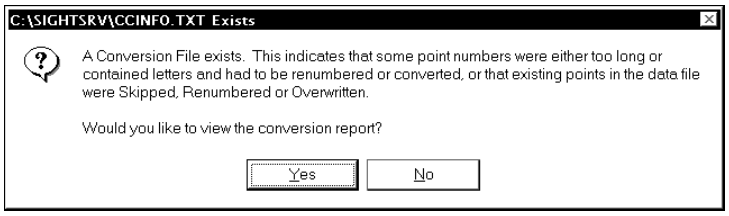
When the transfer process is complete, you should see the following screen.



Coordinate File Converted Successfully

Conversion File

If Collector Connector encountered any duplicate points in the file, it wrote a summary of your responses to the **Point Already Exists** dialog box into an informational audit trail file. The name of this file is ***(Datapath)*\CCINFO.TXT**, where ***(Datapath)*** is replaced with the drive and directory containing your original data file. If this file exists and you are not running within "Sight" Survey, Collector Connector will ask you if you would like to view the file. If you are running within "Sight" Survey, the file will be automatically imported into "Sight" Survey's **Text Output Window**.



Merging: Conversion File Exists

If you wish to view the file, click **Yes** or press Enter. If you do not wish to view the file, Click **No** or press N. If you do not view the file at this time, you can always view the information for the last processed data file using the **File ➪ View CCInfo File** pull-down menu option. If you chose to the view the file at this time, the file will be displayed in the Windows Notepad or WordPad editor as shown below.

Merging: NotePad View of CCINFO.TXT

Once the file is loaded into the editor, if you wish to print the file, press Alt F, P. To exit the editor and return to Collector Connector, press Alt F, X.

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Section 5
Getting Support

5.01 Help!

Free Support

Simplicity Systems, Inc., provides **FREE** (but **not** toll-free) technical support during the software warranty period, provided the user has returned a signed software registration form. Free support is provided with initial purchases of our products; it is not included with revisions or site licenses.

Check the Manual

Experience demonstrates that well over 80% of the support calls we receive could be avoided if the caller would first look in the manual. Many long hours have gone into the preparation of this manual in an effort to provide all of the information necessary to the operation of this program. So please check the manual before you call.

Technical support is available **ONLY** at the following numbers:

Voice: 1-218-773-7966
Fax: 1-218-773-3849
E-mail: support@simsystems.com
Web Site: http://www.simsystems.com

Support Hours

Telephone support hours are 8:00am to 5:00pm (Central time), Monday through Friday, exclusive of holidays. If all support lines are busy when you call for support, you have the option of trying your call again later or leaving a message for a technician to return your call. We will be happy to return the call to your toll-free (800 or 888) number, if you have one. If you do not leave your toll-free number, we will call you back direct, but you will be charged a **$15 call back fee**. Please also refer to the **Billing Terms** information later in this section.

If at all possible, please be at your computer when you call for support. This way a support technician will be able to step you through

the procedure in question, which will save you the frustration of trying to remember our instructions at a later time. It will also be helpful for the technician to know the exact procedural steps you were following when you encountered the problem. **Raw Data** files and **Text Output** printouts are especially helpful for this.

If your question or problem does not require an immediate answer, please write down your problem and mail or fax it to the Simplicity technical support department including printouts, data disks, etc. Include your program serial number, your phone and fax numbers, and the hours/days you may be available. A support technician will solve your problem and provide you with the solution by mail, fax, or telephone.

You are encouraged to become as familiar with the operation of your computer as possible. When helping you, we will often ask you to perform certain functions such as: Copying a disk; Formatting a disk; Checking the contents of a disk, directory or folder; and Copying, Renaming, and Moving files. It is not within the scope of our technical support plans to assist you with, or tutor you on the use of Windows. Therefore, it is to your advantage to be familiar with these commands before you call.

If you are having a problem such as constant input/output (I/O) errors, etc., chances are good that the problem is hardware or media related. Please contact your hardware dealer first.

Billing Terms

We do not maintain an accounts receivable, and as such, we do not normally allow "on receipt" billing terms. If you absolutely do not have or do not wish to use a credit card for support charges, we will invoice your company under *Net 10 Days* terms (from invoice date) **with the addition of a $10 processing fee**. However, if your account is not in good standing, you may be denied future support unless you bring your account up-to-date and place future charges on a credit card.

5.02 Support Plans

The subject of charging a fee for technical support is a controversial subject across the software industry. However, when you compare the initial product cost, it appears that many of the companies that do *not* charge for technical support have actually built a prepaid support charge into the price of their software package. If you are like most people, you don't want to pay for something that you may never use.

At Simplicity, we pride ourselves on dependable, practical, and perhaps best of all, *affordable* software solutions. We have not "built-in" a prepaid support charge into the price of our software. You get a great program with well-written documentation and up to 90 days of free support. We do not charge you "up front" for software support that you may never need.

After the initial period of free support, users who feel they will need additional help are encouraged to subscribe to one of our support plans. A technical support order form was enclosed with the shipment of this program. Please refer to this form for prices and updated information on the following support plans.

ⓘ NOTE

Customers who do not subscribe to a support plan will be automatically transferred to the Basic Service when their 90 days of free support has expired.

Basic Support

The **Basic Support** plan provides technical support at a flat rate of **$45 per incident**. You will be charged once for each support incident, regardless of the time required to solve the problem. This is designed for the user who rarely needs support and can use Visa, MasterCard, or American Express for the billing.

One Year Unlimited

The **One Year Unlimited** plan provides priority technical support for **one person** for one full year for $199. Additional employees can be added to this support plan for $80. Any person who calls for technical support who is not covered under the **One Year Unlim-**

ited plan will be charged the **Basic Support** plan rate, or may be added to the original support plan for $80.

Disk Revisions

Disk Revisions provide you with the latest release(s) of our software. They are usually available quarterly for a minimal charge of $25 each, subject to change without notice. Disk Revisions are only available for software that is written by Simplicity Systems, Inc. ***Software upgrades (see Section 5.03) are not included.***

5.03 Updates & Upgrades

It is Simplicity's policy to regularly maintain and update our software programs. Occasionally, (approximately once each quarter), Collector Connector may undergo *slight* changes such as minor enhancements, bug fixes, etc. which we refer to as software ***revisions*** or ***updates***.

These changes may or may not result in a change of the internal version number of this program. For example, the first *revision* or ***update*** of Collector Connector 3.0 will most likely be referred to as Collector Connector 3.01. The next revision/update would most likely be Collector Connector 3.02, etc. These changes are available for a nominal fee. Refer to Disk Revisions as explained in Section 5.02.

Much less frequently, this program may undergo *major* changes such as the addition of new routines, etc., which may or may not require the addition of a manual addendum. These changes will always result in the change of the version number. For example, the first ***upgrade*** of Collector Connector 3.0 will most likely be referred to as Collector Connector 3.1. These changes are available for a fee commensurate with the changes that have been made.

Whether you choose to update and/or upgrade this program is strictly optional. Depending on the changes that have been made during each release, you may choose to purchase every update, or you may choose to “skip” any update and purchase the next one

when the changes may be more substantial. Either way, the choice is *yours*.

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Section 6
Troubleshooting

6.01 Startup & Loading Problems

Collector Connector Does Not Appear On "Sight" Survey Menu

Collector Connector is located on the **Add-Ins** pull-down menu inside of "Sight" Survey. The **Add-Ins** menu is located between the **Utilities** and **Window** pull-down menus. If you can't find the **Add-Ins** menu, you should first be sure that you are running the "Sight" Survey ***Professional*** version, and that your "Sight" Survey serial number is 970812 or greater. You can find both these items shown on the bottom of the **System Information** screen within "Sight" Survey. Enter the routine code **SI** to access this screen.

If you do not have the ***Professional*** version, or if your serial number is less than 970812, you may wish to call our sales office at 1-800-777-7978 to purchase a "Sight" Survey upgrade. Pricing will vary depending upon the version of "Sight" Survey that you currently own. If you do not wish to purchase the upgrade, you can still use Collector Connector as a stand-alone program; however, you will not be able to use it seamlessly integrated within your "Sight" Survey program.

If you **do** have the ***Professional*** version, and your serial number is 970812 or greater, then Collector Connector should appear on the **Add-Ins** menu; however, it may appear grayed-out or dimmed. If you are unable to access Collector Connector because the selection is dimmed, then the **Path To CollConn** setting on the **File Paths** tab of the "Sight" Survey **Configuration Menu** is not properly set. Enter the routine code **CM**, followed by Alt P to access this screen. Change the **Path To CollConn** setting to the name of the directory where Collector Connector is installed. The default name that the installation program uses for this directory is: ***Drive*:\SightSrv\CollConn**, where ***Drive*** is replaced by the drive letter where the program is installed. If you installed the program to a different directory, you must select that directory instead.

Running Collector Connector Across a Network

If Collector Connector is being run across a local area network (LAN), it is important that all users have read/write access to the program directory. If users do not have access to this directory, an error will occur when they try to load the program. The most common error to occur under this situation is an **Access Denied** error, but the exact error will vary depending upon your system setup. The user will not be able to run the program until he has access rights to the directory where Collector Connector is installed. The default name that the installation program uses for this directory is: ***Drive*:\SightSrv\CollConn**, where ***Drive*** is replaced by the drive letter where the program is installed.

Illegal Function Call Error

If Collector Connector issues an **Illegal Function Call** error when it first attempts to load into memory, it is most likely because an invalid configuration setting exists in the **COLLCONN.INI** initialization file. To correct the situation, simply use the Windows **File Manager** or the Windows 95 **Explorer** to delete the initialization file from the Collector Connector program directory and restart the program. The default name that the installation program uses for the directory containing the initialization file is: ***Drive*:\SightSrv\CollConn**, where ***Drive*** is replaced by the drive letter where the program is installed. See also **Section 6.02—File-Related Problems**.

Program Appears To Hang Upon Startup

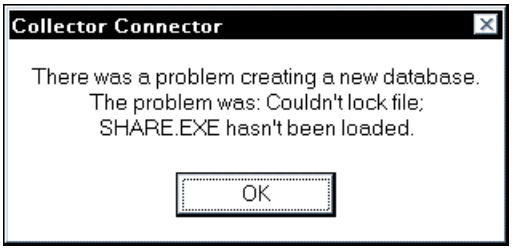
If Collector Connector appears to hang or "lock up" when it first loads into memory, it is most likely because an invalid configuration setting exists in the **COLLCONN.INI** initialization file. To correct the situation, simply use the Windows **File Manager** or the Windows 95 **Explorer** to delete the initialization file from the Collector Connector program directory and restart the program. The default name that the installation program uses for the directory containing the initialization file is: ***Drive*:\SightSrv\CollConn**, where ***Drive*** is replaced by the drive letter where the program is installed.

DEMO Version

When Collector Connector is running in demo mode, only 10 coordinate points will be sent, received or converted. You will know your program is in demo mode, because the title bar at the top of the program screen will contain the words "DEMO VERSION." If you have actually purchased the program, you can solve this problem by simply reinstalling Collector Connector from your original disks. If you have not purchased the program, call our sales office at 1-800-777-7978. Have your credit card ready for payment and we can upgrade your program right over the phone.

Sharing Violation Error (Win 3.1 Only)

If Collector Connector issues a **Sharing Violation** error when it first attempts to load into memory, or when it first attempts to access a "Sight" Survey COGO file, it is most likely because neither the DOS **SHARE.EXE** or Windows **VSHARE** is loaded into memory. Since VShare, if needed, is loaded by Collector Connector's **Setup / Installation** program, this error should only occur if you are using Windows 3.1 and did not restart Windows after the installation was complete. The message may appear similar to the following screen:



Sharing Violation Error

To correct the situation, you simply need to restart your Windows session or reboot your computer for VShare to be loaded into memory, then restart Collector Connector.

If for some reason, this does not correct the problem, you may need to install VShare manually. To install VShare manually, you must edit the Windows 3.1 **SYSTEM.INI** configuration file located in the **Windows** directory.

To edit the SYSTEM.INI file when using Windows 3.1, open the Windows File Manager program and double-click on the **SYSTEM.INI** file located in the Windows directory.

The file should open up in the Windows Notepad or WordPad editor. Under the **[386Enh]** section, add the following line:

```
DEVICE=VSHARE.386
```

Save the changes, exit, and restart Windows. You should now be able to run Collector Connector.

Multiple Config Files

If you use more than one data collector with Collector Connector, you may wish to save separate configuration files for each collector. Or, if you have more than one person using the program on the same computer or over the network, you may wish for each person to have their own configuration file. Use the following steps to create each configuration file.

1. You must first create the default configuration file called **COLLCONN.INI**. This file is automatically created the first time the program is loaded and exited. The file is stored in the Collector Connector program directory. The default name that the installation program uses for this directory is: ***Drive*:\SightSrv\CollConn**, where ***Drive*** is replaced by the drive letter where the program is installed.
2. Use the Windows 3.1 File Manager or Windows 95 Explorer to copy the default file to the desired file name of the new configuration file. The new configuration file must have a **.INI** file name extension and also must reside in the Collector Connector program directory.
3. Next, start the Collector Connector program using the Windows 3.1 **File ➔Run** routine or the Windows 95 **Start ➔Run** routine. When prompted for the program name, type: ***Drive*:*Directory*\CollConn.Exe** Space Bar **/CONFIG=*Configname***, where ***Drive*** is replaced by the drive letter where the program is installed, ***Directory*** is replaced by the directory where the program is installed, and ***Configname*** is replaced by the name of the new configuration file. Using the defaults, this would like the following command: **C:\SightSrv\CollConn\CollConn.Exe** Space Bar **/CONFIG=Sokkia**.

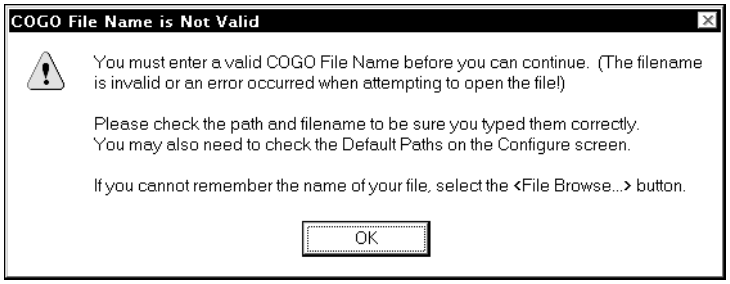
4. Make the configuration changes for this configuration file and perform a transfer or exit the program.

To use the new configuration file, start the program using the **/CONFIG=*Configname*** parameter each time you wish to use the special configuration files. You can either start the program as discussed in Step 3 above, or create a special short-cut to start the program with this parameter.

6.02 File-Related Problems

Invalid COGO File Name

If the file name you enter for the **COGO File Name** is not a valid file name or it does not exist, or if an error occurs when attempting to open the specified file, you will receive a message similar to the following:



Invalid COGO File Name

Check the file name to be sure it is a valid file name. File names and directories are limited to a maximum of eight characters with a three character extension, and even when running in Windows 95, they ***must not*** contain any of the following characters:

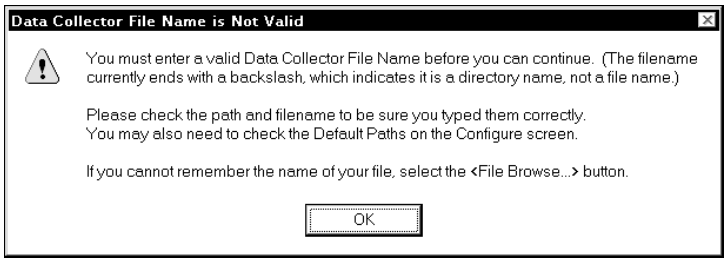
/ [ ] : | < > + = ; , * ?

Be sure to follow all drive designations with **:** and place a **** after each directory name. Do **not** place a **** after an actual file name or Collector Connector will treat it as a directory name.

If you are having difficulty entering a valid file name, it is best simply to use the File Browse... feature to enter or select your file name from the Windows-style file selection screen.

Invalid Data Collector File

If the file name you enter for the **Data Collector File** is not a valid file name or it does not exist, or if an error occurs when attempting to open the specified file, you will receive a message similar to the following:



Invalid Data Collector File Name

Since you only enter a data collector file name when you are converting an existing data collector file to a COGO file, the file name that you enter ***must*** exist. You can be sure that the file exists if you select it using the File Browse... feature instead of typing in the file name.

Check the file name to be sure it is a valid file name. File names and directories are limited to a maximum of eight characters with a three character extension, and even when running in Windows 95, they ***must not*** contain any of the following characters:

/ [ ] : | < > + = ; , * ?

Be sure to follow all drive designations with **:** and place a **** after each directory name. Do **not** place a **** after an actual file name or Collector Connector will treat it as a directory name.

If you are having difficulty entering a valid file name, it is best simply to use the File Browse... feature to enter or select your file name from the Windows-style file selection screen.

Can't Find a File That was Received

If you have **received** a file from your data collector, but cannot locate the file when you attempt to load it into your COGO program, you should first check what directory is specified for the **Default "Receive To" Path** on the Collector Connector **Configure** tab. If this directory is set to something other than the directory where your COGO program looks for its data files, you will need to either move the file to the appropriate directory (using the Windows **File Manager** or the Windows 95 **Explorer**), or simply load the file out of the directory where it was received. To avoid this problem in the future, you may wish to set the **Default "Receive To" Path** on the Collector Connector **Configure** tab to the desired directory.

If the path is set to the correct directory, you should verify that you typed the file name correctly. If you have elected to **Remember Last Used File Names**, you can view the name you entered for the last COGO file by pressing the ↓ key when the cursor is located in the **COGO File Name** field.

If this was the last file that you accessed through Collector Connector, you can check the contents of the **CCINFO.TXT** file for the status of the file transfer. You can view this file using the **File ➔ View CCInfo File** routine. For more information, refer to **Section 4.02—Using the Pull-Down Menus**.

Points Missing or Wrong

If Collector Connector transfers a file and your COGO program or data collector does not recognize some or all of the points that were transferred, there are a number of things to check to help determine why this happened.

1. Make sure that you entered the correct point number. If other points in your file have been transferred properly, you may just have mis-typed the point number.
2. Make sure that the point is actually in the file that was transferred.
3. Make sure that you transferred the correct file.
4. Make sure that you don't have two different copies of the data file and you transferred an earlier one that doesn't contain the point you're trying to use.
5. Verify that you have selected the correct **COGO File Type** and that the format of your data file matches the format that Collector Connector uses for the selected file type. If none of the

points in your file transferred properly, then the **COGO File Type** selected is either wrong, or Collector Connector uses a format which is different than the format of your data file. You can verify this by comparing your file to the format listed in the on-line help under the topic **COGO File Formats**.

Only 10 Points in File

If Collector Connector sends or receives a file and only 10 coordinate points appear in the file, your program may be operating in demo mode. To solve this problem, simply reinstall Collector Connector from your original disks.

Points Garbaged

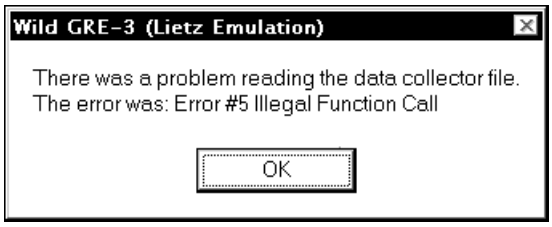
If some of the coordinates or elevations in a data collector file are scrambled or contain invalid characters such as empty boxes, it is referred to as having "garbaged" points.

It has been proven that some two-way radios or walkie-talkies, when operated too close to a data collector or total station can result in garbaged points. The radio signals apparently interfere with the electronics in the equipment and cause garbaged characters to be placed into the file instead of valid coordinates. It has also been shown that equipment will even register an inaccurate reading (such as an inaccurate bearing) when a radio is held near it. Moving the radio away from the equipment causes the reading to change to the correct reading. You should be aware of this potential problem and operate your communication devices at a safe distance from your surveying equipment.

If one of your data collector files contains garbaged characters, you may need to individually edit each point on the data collector before you will be able to transfer the file. You could also download the file to the PC as a **Direct Transfer** and edit the received file in an editor on the PC. After editing the file, you can use the **CONVERT a Coordinate File already on the PC** option to get that file into your COGO format. You can also use the **Direct Transfer** file type option to send the edited file back to the data collector.

Problem Reading Data Collector File

The following error may occur if you are **receiving** a file from a data collector or are **converting** an existing data collector file:



Problem Reading Data Collector File

The most common cause of this error is that the **Data Collector** option on the **Send/Receive** tab is incorrectly set. The **Data Collector** which you are currently configured for is shown in the title bar of the error message. If this does not match the data collector that you are actually using, you can solve the problem by setting it to the correct one and re-transferring the file.

Another cause of the error could be that you were not sending the file in the properly emulation mode. In the same screen shot, the **Data Collector** is set for **Wild GRE-3 (Lietz Emulation)**. If you were indeed using a Wild GRE-3 data collector, but did not transfer the file using the **Lietz emulation** format, Collector Connector would not be able to properly read the file, and an error would occur.

Path/File Access Error

A **Path/File Access Error** can occur for several reasons. The most common of these, and the appropriate solutions, are covered here.

Path/File Access Error

1. If you are attempting to install Collector Connector, make sure that the installation diskettes are not write-protected.
2. If you are attempting to send, receive or convert a file on a floppy disk, make sure that the disk is not write-protected.
3. If you are attempting to send, receive or convert a file on a network drive, make sure that you have file read, write, creation and deletion rights to that drive and directory. Check with your network administrator.
4. If you are running Windows over a network, make sure that you have file read and write access to the **Windows** directory, and that you have file read access to the **Windows\System** subdirectory. Check with your network administrator.
5. If you are attempting to send, receive or convert a file that is located in a directory containing 255 files (or close to it), you may need to move some of the files to another directory, delete some of the files, or create a new data directory for the new files.

Illegal Function Call Error

If Collector Connector issues an **Illegal Function Call** error when it attempts to send a file or after it has received a file, it is most likely because the file structure of the coordinate geometry file does not match the format specified for the **COGO File Type**. This most commonly would occur when attempting to use a third-party data file.

If you are using a third-party data file, be sure that you have set the **COGO File Type** option to the correct file format. If you have verified that your selection is correct, your file may not be in the same format as the file format Collector Connector uses for that file type. You can verify this by comparing your file to the format listed in the on-line help under the topic **COGO File Formats**. You simply may not have converted the file to an ASCII format (if necessary), or you may not be using the current version of the third-party program, or you may need to purchase an update to Collector Connector to read a later version of that program. See also **Section 6.01—Startup & Loading Problems**. If you are unable to solve this problem on your own, contact our technical support office.

Input Past End Error

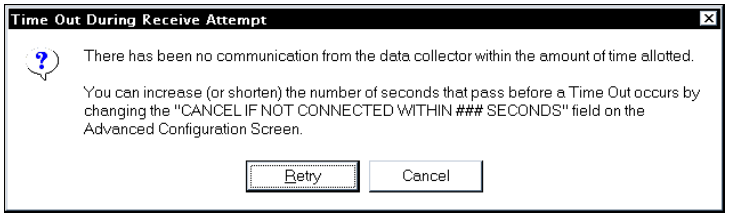
If Collector Connector issues an **Input Past End of File** error when it attempts to send a file or after it has received a file, it is most likely because the file structure of the coordinate geometry file does not match the format specified for the **COGO File Type**. This most commonly would occur when attempting to use a third-party data file.

If you are using a third-party data file, be sure that you have set the **COGO File Type** option to the correct file format. If you have verified that your selection is correct, your file may not be in the same format as the file format Collector Connector uses for that file type. You can verify this by comparing your file to the format listed in the on-line help under the topic **COGO File Formats**. You simply may not have converted the file to an ASCII format (if necessary), or you may not be using the current version of the third-party program, or you may need to purchase an update to Collector Connector to read a later version of that program.

Occasionally, this error is caused by point descriptions that are too long, or by "garbaged" points. Refer to the **Points Garbaged** subsection found previously in this section.

Time Out Error

If you are attempting to **send** to **receive** a file and the connection is not made within the number of seconds specified for the **Cancel if not connected in ## seconds** setting on the **Advanced Configuration Screen**, you will receive a message similar to the following:



Time Out Occurred During Receive Attempt

If you need more time to enable your data collector before Collector Connector issues this message, simply increase the number of sec-

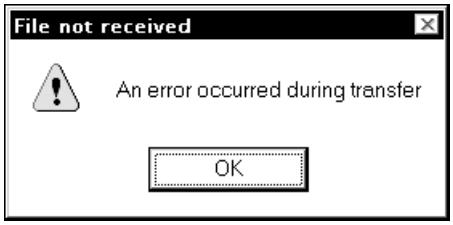
onds specified. Refer to **Section 3.04—Advanced Communications Options** for more information.

The most common cause of this error is that the wrong serial port has been specified for the **COM Port** setting on the **Configure** tab. Simply change the setting to a different port and retry.

Another common cause of this error is an incorrect setting for the **Handshaking/Flow Control** option on the **Advanced Configuration Screen**. Check **Appendix B** for the handshaking recommended for your data collector and change the setting if it is incorrect.

Error During Receive

If you are attempting to **receive** a file from a data collector and an error occurs either in the transfer process or in the conversion process, you may receive the following message:



Error During Receive Attempt

Check the communications settings on the **Configure** tab, the **Data Collector** and the **COGO File Type** settings on the **Send/Receive** tab, and reattempt the file transfer after making any necessary changes.

Parity Error

A parity error may occur when the setting you have chosen for the **Parity** setting on the Collector Connector **Configure** tab does not match the parity setting of your data collector. First clear the error message by clicking the OK button, then cancel the transfer in progress by clicking the Abort button on the Collector Connector **Send/Receive** tab. Adjust the parity settings as needed and reattempt the transfer.

This error may also occur if you have set **Parity** to either **Odd** or **Even** and **Data Bits** is set to **8**. If this is the case, simply change Collector Connector's **Parity** setting to **None** and reattempt the transfer.

Device I/O Error

A device I/O error indicates that an input or output error has occurred on a device. You may be trying to use a floppy disk which has not been formatted, or your hard or floppy drive may need servicing. The error may also occur if you have entered a parity or baud rate that does not match your data collector.

Device Unavailable

This error can occur if Collector Connector attempts to access a device which is not available on your computer system. You may have selected serial port **COM2** instead of **COM1**. Make sure you are configured for the correct serial port. If you have just entered a file name, you may have entered a drive letter (such as P:) that doesn't exist on your system.

Buffer Overflow

Communications from your data collector is reaching the computer in a format or speed that Collector Connector and/or your computer cannot handle. Be sure that the baud rate and other configuration options are set to match your data collector. Try increasing the **Input Buffer Size** setting on the **Advanced Configuration Screen**. If this error occurs while sending a file to the data collector, try increasing the **Output Buffer Size** setting on the **Advanced Configuration Screen**.

File Already Open

This error may occur after another error has occurred. A file may not have been properly closed when the first error occurred. Exit the error message, exit Collector Connector, and restart the program. After you have corrected the cause of the original error, you should reattempt the transfer.

Continual Retry Messages

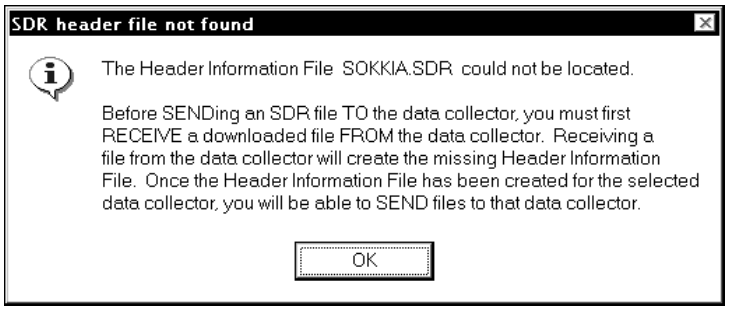
If you are sending or receiving a file to an **HP 48** data collector and get continual "Retry" messages, there are a number of things to check to help resolve the problem.

1. Check that the following items are properly set on the HP48 **I/O Setup Menu**: **IR/Wire**, **ASCII/Binary**, **Checksum Type** and **Translate Code**.

2. Check the data collector file to see if you have a large gap of blank (unassigned) coordinate points in the beginning or middle of the file. If you do have a point gap, nothing gets sent to the computer as the data collector cycles through point numbers searching for a non-blank point. This can cause a series of "re-try" messages and even a "time-out" error. To solve this type of problem, you can create a few "dummy" points within the blank point range on your data collector. You can also try increasing the **Cancel if not connected in ## seconds** and **Terminate if idle for more than ## seconds** settings on the **Advanced Configuration Screen**.
3. Check each of the items listed in the **Other Communication or Transfer Problems** sub-section found later in this section.

SDR Header Not Found

This message box will occur if you are attempting to **send** a file to a Lietz or Sokkia data collector without first **receiving** one from the data collector. Unless you first download a file from the data collector, Collector Connector does not have the vital header information that needs to be placed at the top of the file that the data collector receives. In order for Collector Connector to obtain this information, you must first download any file from the collector to the computer. This will create a file, either **LIETZ.SDR** or **SOKKIA.SDR** in the Collector Connector program directory. After receiving just one file from the collector, you will then be able to send any number of files back to the collector.



SDR Header File Not Found

SDR CheckSum Error

A numeric value called a checksum is used on the Lietz and Sokkia data collectors to verify the integrity of the data file once it has been transferred. If you are **sending** a file to a Lietz or Sokkia data collector and the data collector displays the message "CheckSum Error," it means that the file received by the data collector does not exactly match the file that was sent. If you are **receiving** a file from a Lietz or Sokkia data collector and the file received on the PC does not exactly match the file that was sent, Collector Connector will display the following message:

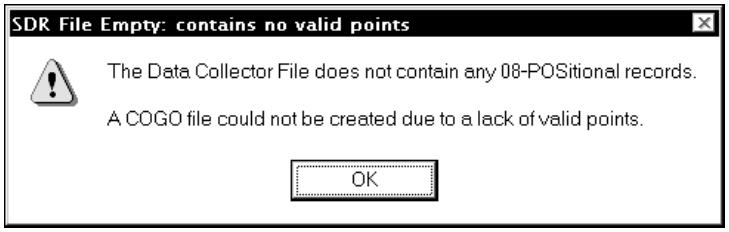
SDR CheckSum Error

It is always best to retransfer the data file after any checksum error occurs. If the message occurs for every transfer, and you have determined that several files are indeed correct, you may wish to disable the error checking by enabling the **Disable SDR CheckSum Verification** option on the **Advanced Configuration Screen**.

SDR File Empty

Collector Connector currently reads only the **08-POSitional** records from Lietz and Sokkia data collector files. The file should be resent from the data collector with the records formatted in the **POSitional View**. Set the **POS View** record type to `Yes` on the data collector using the **Output Options** screen and resend the file.

If you resend the file in **POSitional View** and the message still appears, you should do a **Direct Transfer** of the file from the data collector and then load the file into an editor to view it. If none of the records (lines) in the file begin with `08`, then there are no actual coordinate points stored on the data collector.



SDR File Empty Error

SDR Transfers Slowly

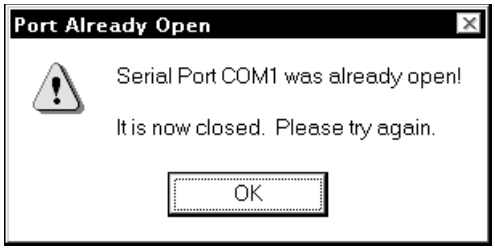
If you feel your SDR data collector transfers files too slowly, be sure you are using the highest **Baud Rate** available for your collector. Also try setting the **Output Delay** on the SDR **Comms Setup** screen to **0**. You could also experiment with using different types of **Handshaking/Flow Control**, however, we recommend leaving it set to **Both Hardwr & Softwr**, which allows Collector Connector to make adjustments internally as needed while sending and receiving files.

SDR Doesn't Transfer

If your SDR data collector will not transfer the file either to or from the PC, most likely the cause of the problem is the setting of the adapter switch on the communications cable. The switch needs to be set towards the **DTE** position. (If the switch is set toward the **DCE** position, no communications will occur.) Flip the switch and reattempt the transfer.

Port Already Open

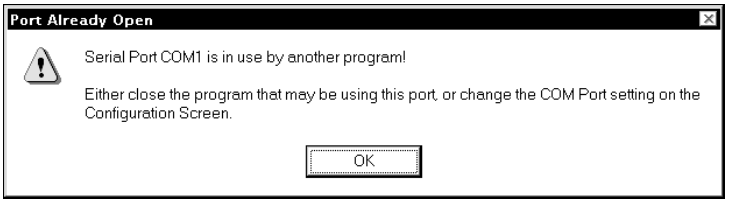
This error will occur if you attempt to send or receive a file after a previous transfer error has occurred. Collector Connector has remedied the error for you and you can simply reattempt the transfer.



Port Already Open Error

Port Already In Use

This message will appear if you have set the **COM Port** on the **Configure** tab to a port that is currently in use by another device or software program. You will either need to close the other program that is using the serial port, or you will need to select a different serial port for Collector Connector to use. If you were using a DOS program that used the serial port, but is no longer using that port, you will need to exit the DOS program. If that program was running under a DOS **SHELL** session, you may even need to close the DOS **SHELL** window for the port to be freed up.

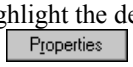


Port In Use By Other Software

Other Communication or Transfer Problems

If you are have general communication problems or are having no success at all in transferring files, there are a number of things to check to help resolve the problem.

1. Ensure that the cable between the data collector and the PC is securely plugged in at the data collector and at the computer.
2. Ensure that the cable between the data collector and the PC is attached to the ***correct*** serial port.
3. If a switch box is attached between the computer and the data collector, ensure that it is switched to the correct setting.
4. Ensure that the batteries in your data collector are strong. Some data collectors are unable to transfer data when they contain weak batteries. If in doubt, try new batteries, or use the data collector's AC adapter when transferring files.
5. Ensure that you are using the correct cable for transfers between your data collector and a PC. If you are unsure about the cable, contact your data collector manufacturer. A "null modem" cable or adapter is usually a good choice.

6. Ensure that you have selected the correct **COM Port**, **Baud Rate**, **Parity**, **Stop Bits**, **Data Bits**, **Handshaking/Flow Control**, and **Data Collector** ***within Collector Connector***. Refer to **Appendix B** for the recommended settings for your data collector.
7. Ensure that you have selected the correct **Port**, **Baud Rate**, **Parity**, **Stop Bits**, **Data Bits**, **Handshaking/Flow Control**, **Transfer Type**, **File Type**, **Checksum Type**, and/or **Translate Code** ***on your data collector***. Not all of these settings apply to every data collector, but be sure that the settings that apply to ***your*** data collector are set correctly.
8. Try each of the **Handshaking/Flow Control** options on the Collector Connector **Advanced Configuration Screen**. Even if both Collector Connector and your data collector setting match, there may be an incompatibility in your cable. Change the setting in Collector Connector, **each time also changing the necessary setting on the data collector to match**. Retry the transfer using each setting.
9. Ensure that the selected **COM Port** works by attaching another device such as your mouse or plotter to that port and using that device in another program. Don't forget to reconfigure your device and/or port both before and after this test.
10. If you are using ***Windows 95***, ensure that the COM port settings match both the settings on the data collector ***and*** within Collector Connector, using the following steps.
    a. Click on the  button.
    b. Select the **Settings** group, and the **Control Panel** folder.
    c. Select the **System** icon, and click on the **Device Manager** tab.
    d. Highlight the desired **Communications Port** and click on the  button, and the **Port Settings** tab.
    e. Check the port settings against the settings within Collector Connector and on your data collector. Pay particular attention to the **Flow Control** (handshaking) setting. Click on the  button and adjust the Buffer settings, if needed or desired. Click  on each screen to save the new settings.

    f. Retry the transfer.

11. If you are using ***Windows 3.1***, ensure that the COM port settings match both the settings on the data collector ***and*** within Collector Connector, using the following steps.
    a. In Program Manager, double-click on the **Main** program group.
    b. Select the **Control Panel** folder and the **Ports** icon.
    c. Highlight the desired **Communications Port** and click the Settings button. Be certain that the settings shown match both the settings on the data collector ***and*** within Collector Connector. Pay particular attention to the **Flow Control** (handshaking) setting. Click the Advanced... button and adjust the settings only if you understand what you are doing. Contact your Windows Administrator for help if needed. Click OK on each screen to save the new settings.
    d. Retry the transfer.
12. If you are using ***Windows NT***, ensure that the COM port settings match both the settings on the data collector ***and*** within Collector Connector.
    a. Click on the Start button.
    b. Select the **Settings** group, and the **Control Panel** folder.
    c. Select the **Ports** icon, highlight the desired **Communications Port**, and click the Settings button.
    d. Check the port settings against the settings within Collector Connector and on your data collector. Pay particular attention to the **Flow Control** (handshaking) setting. If you need to make any changes to the Advanced settings, you will need to contact your Windows NT Administrator. Click OK on each screen to save the new settings.
    e. Retry the transfer.

Error During Install

If, during installation, you receive an error specifying that a particular file is locked (or in use) and cannot be updated, it means that another program is using a file that may need to be updated by the Collector Connector **Setup** program. You **must** close down **all** programs that are running, and then rerun the **Setup** program.

File Is Locked Message

If you **did** close all programs before you ran **Setup**, then a device driver or other system-type program is causing a conflict. You will need to determine which driver is causing the problem and then disable that driver while Collector Connector installs. Determining which driver is causing the problem is not always an easy task, so you may just need to disable each driver one at a time (or several at a time) until Collector Connector's **Setup** program does not issue the **File is Locked** message.

To disable startup files or device drivers, press Ctrl Alt Delete to get a menu of the programs which are running. Select the item you wish to disable and then click on the End Task button. Now, rerun Collector Connector's **Setup** program. If you still get the **File is Locked** message, you will need to disable additional files. Repeat this procedure until the **File is Locked** message does not appear when you run the **Setup** program. After installing Collector Connector, simply restart your computer and your device drivers and startup files will be loaded normally.

COMPOBJ is Locked

A known conflict occurs with the 16-bit scanner driver for the OmniPage Pro OCR program. That program uses a file called COMPOBJ.DLL and will issue the **File is Locked** message shown previously in this section. The file that causes the conflict is called **OPWARE16**. To disable this file, press Ctrl Alt Delete to get a menu of the programs which are running. Now, click on **OPWARE16** and then click on the End Task button. Rerun the **Setup** program. After installing Collector Connector, simply restart your computer and your device drivers and startup files will be loaded normally.

A known conflict occurs with the Microsoft Bob™ software program. That program uses a file called COMPOBJ.DLL and will is-

sue the **File is Locked** message shown previously in this section. The file that causes the conflict is called **MAPISP.EXE**. To disable this file, press Ctrl Alt Delete to get a menu of the programs which are running. Now, click on **MAPISP** and then click on the End Task button. Rerun the **Setup** program. After installing Collector Connector, simply restart your computer and your device drivers and startup files will be loaded normally.

NOTE

If you have disabled all programs from your task list and are still receiving a **File is Locked** message, you have three remaining options.

1. Restart your Windows session and hold down the left Shift key until the program is loaded. This will prevent Windows from loading the programs in your Startup folder that automatically get loaded when Windows starts.
2. If option 1 didn't work for you, you may need to rename your Windows Startup folder so that the programs do not get loaded. Option 1 is a safer option.
3. If you wish to permanently remove the conflicting program from the Windows Startup folder, follow these steps:
   a. Click the **Start** button, and then point to **Settings**.
   b. Click **Taskbar…**, and then click the **Start Menu Programs** tab.
   c. Click **Remove**, and then double-click on the **Startup** folder to open it.
   d. Locate and click on the program you want to remove, and then click **Remove**. Although this deletes the shortcut from the **Start** menu, the original program remains on your computer.

6.03 Special COGO or Data Collector File Formats

If you have a special COGO or Data Collector file format that you would like Collector Connector to read or write, a modification to the program ***may*** be possible. Please contact our technical support

department for further information. Please note that there is a service charge for a modification to the program.

Appendix A
Coordinate Geometry File Types

A.01 File Type Information

When sending a file to the data collector, the **COGO File Type** setting tells Collector Connector what format the COGO file is in so that it can be converted and transferred properly.

When receiving or converting a data collector file, the **COGO File Type** option tells Collector Connector what COGO format you want the data collector file converted into.

If your COGO program is not listed in the **COGO File Type** selection box, you should compare the formats of the supported files to see if one of them matches the format of your file. You can search the on-line help for the topic **COGO File Formats** to see a sample output from each compatible file type, with the exception of binary files.

IMPORTANT!

NOTE: *When translating the file, if the file type selected does not match the actual file format that Collector Connector uses, the coordinate values in the file will be translated incorrectly. This can happen even if the file formats vary only slightly. However, if the file formats vary significantly, Collector Connector may produce an error message, (most likely an* ***Illegal Function Call*** *or* ***Input Past End****) and not allow you to continue.*

Collector Connector places a few restrictions on some of the file types. These restrictions are explained in the following sub-sections. If a file type is not listed, there were no special restrictions on that file type at the time this manual was printed. Be sure to check the on-line help topic **COGO File Formats** (or the **README.TXT** file) for updated information.

A.02 Simplicity "Sight" Survey for Windows

File Extension

"Sight" Survey files must have an extension of "***.ZAK***". If you do not enter an extension on the file name, this extension will be added automatically. If you enter a different extension on the file name, it will be changed to ***".ZAK"***.

Overwriting Files

If you specify a **COGO File Name** that already exists, and then choose to **overwrite** that file, only the coordinates (and possibly the text output) will be overwritten. Any drawings, offsets, defined figures, or stations associated with the file will **not** be overwritten. If you are running Collector Connector stand-alone, the text output file will be overwritten; if you are running integrated within "Sight" Survey, the text output file will be appended.

Merging Files

If you are running Collector Connector integrated with "Sight" Survey, the program assumes that you want to **merge** the coordinates into the currently open COGO file (unless you use the **Configuration / Run Full-Screen** option). If you want the coordinates to go into a new job file, you must issue the **New Job - NJ** routine within "Sight" Survey, before selecting a Collector Connector option.

Point Numbers

"Sight Survey" uses 8-character alphanumeric point numbers. When using data collectors (such as the SDR 33), we recommend that you limit the point number length to 8 characters for direct compatibility. If a point number is sent to the PC with more than 8 characters, it will be truncated to 8 characters. If this results in a duplicate point number, you will be prompted how to handle it.

When sending alphanumeric points from "Sight" Survey to a data collector that uses only numeric point numbers, the point number will automatically be converted to an available numeric point. If you do not want your points automatically renumbered for you, you should only use numeric point numbers which are compatible with your data collector.

Integration

If you are running Collector Connector integrated with "Sight" Survey, after receiving and converting a data collector file, the coordinate points will be displayed in "Sight" Survey's **Edit Coordinates** window. You may then review the data to check its accuracy, and when you are satisfied, click **Accept**.

Networked Files

When "Sight" Survey has a COGO file open, it is writing to a temporary data file, not the actual COGO file. If you have more than one user using "Sight" Survey or Collector Connector on a network, you must be careful not to specify a **COGO File Name** that may be in use by another user.

For example, when John opens **`N:\Surveys\Oakwoods.Zak`** inside "Sight" Survey, "Sight" Survey makes a copy of that file called **`COGO.ZAK`** and places it in the Windows temporary directory. As long as John is working on that file, "Sight" Survey is actually working on **`COGO.ZAK`**, not **`OAKWOODS.ZAK`**. If you receive a file to **`N:\Surveys\Oakwoods.Zak`** while John is still working on the file, John has no idea that you are using that same file. If John then saves the file when he exits "Sight" Survey, everything that you received from the data collector will be overwritten by John's version of the file.

A.03 Simplicity Survey 4.0 & Survey Lite

File Extension

Survey 4.0 and **Survey Lite** files must have an extension of "***.DAT***". If you do not enter an extension on the file name, this extension will be added automatically. If you enter a different extension on the file name, it will be changed to ***".DAT"***.

Overwriting Files

If you specify a **COGO File Name** that already exists, and then choose to overwrite that file, only the coordinates will be overwritten. Any offsets or defined figures associated with the file will **not** be overwritten.

A.04 Simplicity Survey 3.0

File Extension

Survey 3.0 files must have an extension of ***".DAT"***. If you do not enter an extension on the file name, this extension will be added automatically. If you enter a different extension on the file name, it will be changed to ***".DAT"***.

In order to upload COGO point descriptions to the collector, the ***".NME"*** file must be in the same path as the data file.

Appendix A

Overwriting Files

If you specify an existing **COGO File Name**, then choose to overwrite that file, only the coordinates will be overwritten. Any offsets or defined figures associated with the file will **not** be overwritten.

A.05 Simplicity Survey! - Version 2

File Extension

Actual **Survey! (Version 2)** files do **not** have a file name extension. However, because these files are an ASCII format that may be used by other programs, if you enter an extension on the file name, the extension will **not** be removed, and it will be assumed that you intend to use the file name that you actually entered.

A.06 Direct Transfer

NOTE

*This file type can only be used with the **SEND** and **RECEIVE** transfer types. It cannot be used with the **CONVERT** types.*

If you want to transfer a file from a data collector without formatting it for a specific file type, select the **Direct Transfer** file type.

You should also select this file type when you have a file to send to the data collector that is already formatted in the data collector file format. Just remember that Collector Connector does not verify the accuracy of the file format that you are transferring and the data collector must be able to handle the file in the format it is currently in.

Since this version of Collector Connector does *not* currently perform any conversion when transferring raw data files, only a direct transfer file type will be allowed when sending or receiving raw data files.

A.07 ASCII - Custom Formats

Whenever you want to send, receive or convert a file that is in an ASCII (text) format, and it is not listed in the file type selection box, you must use the **ASCII - Custom Formats** file type. Since most

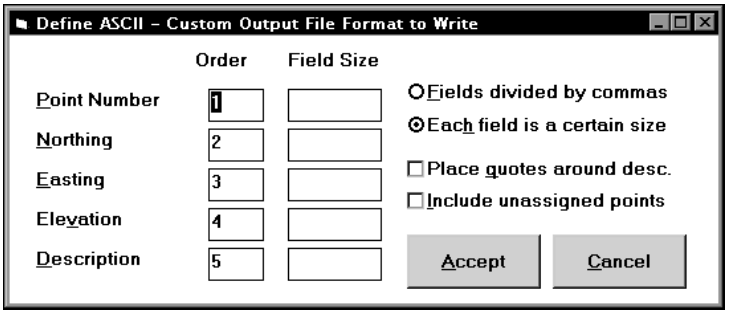
COGO programs currently on the market will import and export their coordinate data in ASCII files, this format is able to be tailored for use with most any program.

Receiving or Converting to ASCII Files

When receiving or converting a data collector file, this option will prompt you to define the custom ASCII file format that you wish to write. The ASCII file will be created using your custom definition.

If you have chosen the **ASCII - Custom Formats** file type, the **Custom ASCII Output** dialog box appears after you click Accept on the Collector Connector **Send/Receive** tab.

> **NOTE**
>
> *If you are merging the coordinates into an existing custom ASCII file, you will first be presented with the **Custom ASCII Input** dialog box so that Collector Connector can read your existing file. (For more information, refer to the **Sending ASCII Files** sub-section found later in this appendix.) After responding to the **Custom ASCII Input** dialog box, the **Custom ASCII Output** dialog box shown below will appear.*



Custom ASCII Output Dialog Box

When the box first appears, the option button **Fields divided by commas** is marked as active, and the **Field Size** column of text entry

boxes is not present. (Field size is only relevant when fields are structured in length and not separated by commas. If this matches your situation, click on the option button designated **Each field is a certain size**.) First set the field order, the order in which the data fields are placed into the file. Then type in values (number of characters) for the field sizes, if necessary.

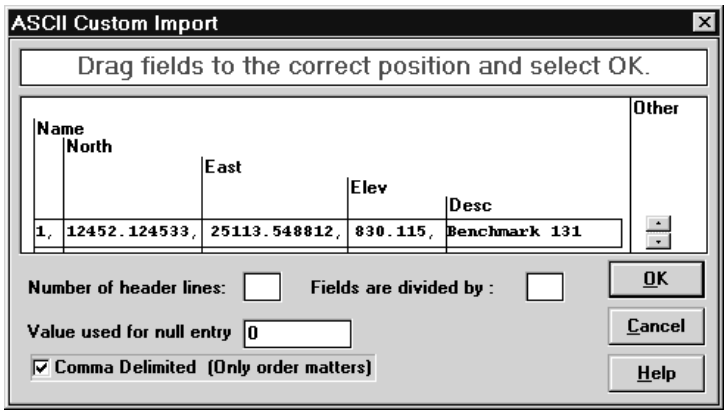
If you wish to place quotes around the point descriptions, click on the **Place quotes around desc.** check box to enable it. If you have enabled the option button designating **Each field is a certain size**, be sure to include the two quotes as part of the **Description** length

If you wish to have ***all*** points placed into the ASCII file, even those points which have zero coordinate values for their Northing, Easting, and elevation, click on the **Include unassigned points** checkbox to enable it. For example, let's assume you have coordinates assigned for points `1`, `2`, `5`, and `10`. If you enable this checkbox, your ASCII file will contain **ten** points, numbered `1` through `10`; if you do not enable this checkbox, your file will contain only the **four** points `1`, `2`, `5`, and `10`.

When you have completed the dialog box, click **Accept**.

Sending ASCII Files

When sending a file to the data collector, this option will read your data file and display the first line of the file, allowing you to identify its various components. Using your identifications, the remainder of the file is then read into memory. The **Custom ASCII Input** dialog box appears after you specify the range of points to send to the data collector. This is where you will define the actual data file format.



Custom ASCII Input Dialog Box

Drag Fields

In the **Drag Fields** box, move the **Name**, **North**, **East**, **Elev**, **Desc**, and **Other** field-bars to indicate the various elements of the data line. To move a field-bar, click and drag the field name to a new location. Position the field-bars so that the vertical separator line falls before the data in the field, as illustrated above.

Number of header lines

Some ASCII files contain header lines that typically identify the filename, and other job information. If the first line in the file does not contain coordinate data, use the ▼ and ▲ buttons (to the right of the data line) to count the number of header lines. Stop when you reach the first data line and type the number of header lines into the **Number of header lines** text box.

Value for null entry

Many programs use a value other than zero to signify a null (or non-assigned) entry. Often this is a number such as `99999`. If your data file uses a value other than zero, you must type the number into the **Value used for null entry** text box.

Comma or Space Delimited

Most programs produce ASCII data files with comma or space delimited fields. If this is the case with your data file, activate the **Comma or Space Delimited** checkbox. In a comma or space delimited file, the exact start column for each data field is ignored. The **Drag Fields** items need only be in the correct order.

Fields are divided by

If your data file is not comma or space delimited, you must type the delimiting character into the **Fields are divided by** text box.

When your data file format has been established, click OK and the data file will be read into memory and then sent to the data collector.

A.08 CogoMate

NOTES

1. *This file type can only be used with the **RECEIVE** and **CONVERT** transfer types. It cannot be used with the **SEND** types.*
2. *You cannot merge a data collector file into an existing **CogoMate** file.*

File Extension

CogoMate files must have an extension of "***.TXT***". If you do not enter an extension on the file name, this extension will be added automatically. If you enter a different extension on the file name, it will be changed to ***".TXT"***.

After the file has been converted to the CogoMate format, the display indicates the minimum and maximum values of the Northings and Eastings contained within the file. After the conversion is finished, you should write down the displayed values for use with the **LIMITS** command. Refer to your CogoMate reference manual for more information on using these values.

A.09 DigiMate

NOTE

*This file type can only be used with the **SEND** transfer type. It cannot be used with the **RECEIVE** or **CONVERT** types.*

File Extension

DigiMate files have an extension of ***".PTS"***. However, because DigiMate files are in a standard ASCII format that may be compatible with other file types, if you do not enter an extension on the file name, this extension will **not** be added automatically. Likewise, if you enter a different extension on the file name, it will **not** be changed.

A.10 Generic CADD Batch File

NOTES

1. *This file type can only be used with the **RECEIVE** and **CONVERT** transfer types. It cannot be used with the **SEND** types.*
2. *You cannot merge a data collector file into an existing **Generic CADD 6 Batch** file.*

File Extension

Generic CADD 6 Batch must have an extension of ***".MCR"***. If you do not enter an extension on the file name, this extension will be added automatically. If you enter a different extension on the file name, it will be changed to ***".MCR"***.

These batch files are only compatible with Generic CADD 6.x.

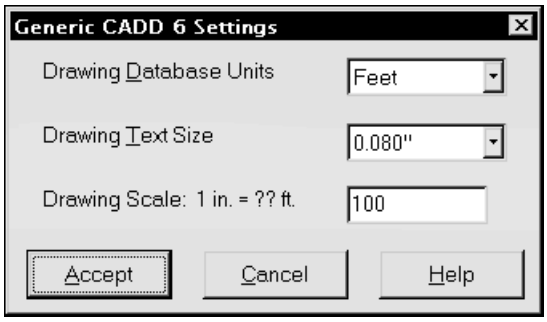
This file type will create a batch file that is compatible only with Generic CADD 6.x. The file will containing the following information for each point in the transferred file:

Item	Layer	Location
Point ("+" sign)	50	Actual Coordinates
Point Number	51	Upper Right Corner
Northing & Easting	52	Lower Left Corner
Point Elevation*	53	Upper Left Corner
Point Description	54	Lower Right Corner

* If the elevation value is zero, the elevation will not be displayed for that point.

After entering clicking Accept, the following screen will appear with the fields defaulting to their last used values.

Appendix A



Drawing Database Units

Select **Feet** if your COGO file is in English units and your CADD database units are in inches or feet. Select **Meters** if your COGO file is in metric units and your CADD database units are in meters.

Drawing Text Size

Select the desired size for the text that will be placed on the CADD drawing. You can choose from ten different text sizes.

When the **Drawing Database Units** field is set to **Feet**, the ten available text sizes are: **0.060"**, **0.080"**, **0.100"**, **0.120"**, **0.140"**, **0.175"**, **0.200"**, **0.240"**, **0.350"** and **0.500"**.

When the **Drawing Database Units** field is set to **Meters**, the ten available text sizes are: **1.5 mm**, **2.0 mm**, **2.5 mm**, **3.0 mm**, **3.6 mm**, **4.4 mm**, **5.1 mm**, **6.1 mm**, **8.9 mm** and **12.7 mm**.

> **NOTE**
>
> *The actual text size is determined entirely by the final scale that the drawing is plotted at. If you plot the final drawing at a scale that is different from what you entered for the **Final Scale** in the next prompt, your text size will not be the selected size. For example, if you enter the **Final Scale** as `100`, but you actually plot the drawing within CADD 6 at a `50` scale, your text will be double the size that you specified in the **Drawing Text Size** setting.*

Drawing Scale 1 in. = ?? ft.
Drawing Scale 1 cm = ?? cm

If you selected the **Drawing Database Units** as **Feet**, enter the anticipated final plot scale in **feet.** If you selected the **Drawing Database Units** as **Meters**, enter the anticipated final plot scale in **centimeters**.

NOTE

The scale is not stored in the CADD batch file and must be input again during the printing/plotting routine within Generic CADD to properly scale your drawing.

A.11 LI Contour

The **LI Contour** file type will create an ASCII file containing the point number, Northing, Easting and elevation for each point that does not have a zero elevation value.

To load the ASCII file into the L.I. Contour or L.I. Contour V+ program, use the **Input Coordinate File** option and enter a file format of: **`L Y X ZN`**. After the data has been loaded, you *may* need to factor the Eastings and Northings by 12 to convert inches to feet if you plan to load the output from L.I. Contour into Generic CADD. Refer to your L.I. Contour manual for further information.

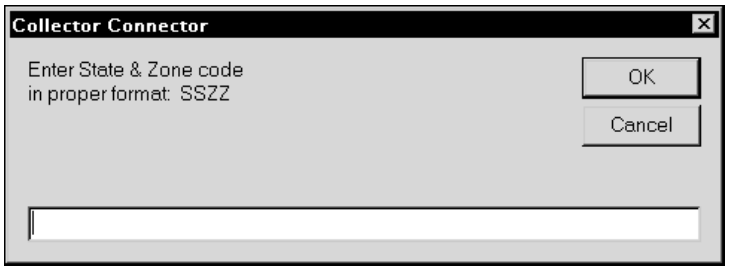
A.12 Micromate

NOTE

*This file type can only be used with the **SEND** transfer type. It cannot be used with the **RECEIVE** or **CONVERT** types.*

A.13 NOAA State Plane Record

The **NOAA State Plane Record** file type converts a file to and from the format specified in the FGCC publication, *Input Formats and Specifications of the National Geodetic Survey Data Base*. When choosing to **receive** or **convert** a file to this format, you will receive the following message:



NOAA State Plane Screen

Respond by entering the two character abbreviation for your state followed by the one or two character zone code for your area within that state.

A.14 Star*Net Coordinate File

NOTE

*This file type can only be used with the **SEND** transfer type. It cannot be used with the **RECEIVE** or **CONVERT** types.*

A.15 Surveyor II

File Extension

Surveyor II file types must have an extension of *".**D**##"*, where the *"##"* is replaced by the Surveyor II file number. If you do not enter an extension on the file name in this format, you will receive a message that **Surveyor II files require a ".D##" extension**. Point names will only be transferred to the data collector if the name file exists in the same path as the data file and has an extension of *".**X**##"*.

A.16 Other COGO File Types

If the **COGO File Type** that you are using is not listed is this appendix, there were no special restrictions on that file type at the time this manual was printed. However, be sure to check the on-line help

topic **COGO File Formats** (or the **README.TXT** file) for updated information.

If you have a special COGO (or Data Collector) file format that you would like Collector Connector to read or write, a modification to the program ***may*** be possible. Please contact our technical support department for further information. Please note that there is a service charge for a modification to the program.

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Appendix B
Data Collector Interfaces

B.01 D'Zign HP 48 Survey Pac 1

NOTES

1. *Select the **D'Zign HP 48 Survey Pac N E** option when using a Survey Pac card that supports two-dimensional data (Northings & Eastings only).*
2. *Select the **D'Zign HP 48 Survey Pac N E Z D** option when using a Survey Pac card that supports three-dimensional data (Northings, Eastings, & elevations) plus descriptions.*
3. ***In this section,** keys shown in white-on-black color are normal HP 48 key presses. Keys shown in black-on-white color are HP 48 "softkey" key presses. Softkeys are the six white keys found on the top row of the HP 48.*

Attach Collector

Attach the serial cable to the HP 48 and to a serial port on your PC.

Configure

Configure the HP 48 and Collector Connector communication settings as recommended below. To access the **I/O Setup Menu** on the HP 48, press ← PRG SETUP.

Data Collector Settings

IR/Wire:	`Wire`
ASCII/Binary:	`ASCII`
Baud:	`9600`
Parity:	`None 0`
Checksum Type:	`3`
Translate Code:	`1`

Collector Connector Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the HP 48 Survey Pac, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the HP 48 Survey Pac to send a file, press ← PRG ' α, then type the name of the file to transfer and press α.

> **NOTE**
>
> ***You may prefer this alternative method for sending files to the PC:*** *This method does not require you to actually type in the file name. Press* VAR NXT *(you may need to press* NXT *more than once here to make your file name appear). Then press* ' *followed by the* ***softkey*** *(_____) under the D'Zign file you wish to transfer. Then press* ← PRG.

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** press the SEND softkey on the HP 48.

After the transfer has been completed, close the HP 48 I/O channel (and save the battery) by pressing NXT CLOSE.

Sending Files

To send a file to the HP 48 Survey Pac from the PC, you must first create the D'Zign file on the HP 48. To create this file, press VAR FILES α, type the name of the file to be transferred (extension not needed), press α NEW, enter the number of the highest point in the file and then press ← ON.

NOTE

In older versions of the D'Zign Survey Pac: *When following the instructions in the previous paragraph, you may need to press the* UTIL *softkey after pressing* VAR *and before pressing* FILES.

Follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. To instruct the HP 48 Survey Pac to receive a file, press ← PRG ' α, type the name of the D'Zign file you created, and then press α.

When Collector Connector displays the **Ready to Send** prompt (shown on page 39), press the RECV softkey on the HP 48 and **THEN** click on the computer.

After the transfer has been completed, close the HP 48 I/O channel (and save the battery) by pressing NXT CLOSE.

Now, on the HP 48, press VAR ' and the leftmost ***softkey*** ( ) below the newly transferred file name. Press → STO ' NXT (you may need to press NXT more than once here to make your newly created D'Zign file name appear). Press the ***softkey*** ( ) under the newly created D'Zign file and then press STO. This procedure copies the coordinates from the temporary (transferred) file and stores them into the D'Zign file you created on the HP 48.

After the coordinates have been stored, press VAR ' and the leftmost ***softkey*** ( ) below the transferred file name. Then press ← DEL to purge the ***temporary*** (transferred) file from the HP 48's memory.

Appendix B

B.02 Lietz/Sokkia SDR 2, 20, 22, 24

Attach Collector

Attach the female DB25 adapter onto the end of the SDR serial cable. If you have a 9 pin serial port on your computer, attach a "9 pin to 25 pin" adapter onto the DB25 adapter. Then plug the data collector into a serial port on your PC.

IMPORTANT!

The switch on the DM25 adapter must be set to **DTE** *or the communication link will fail, causing a time-out error, or even possibly causing the system to act as if it is "hung-up".*

Configure

Configure the SDR and Collector Connector communication settings as recommended below. On the SDR, select the **Comms Setup** option from the **Communications Menu**. To change a setting, highlight the item you wish to change, press EDIT, then highlight the correct setting and press ENTER.

Data Collector Settings

Baud Rate:	9600
Parity:	None 0 (Not Set)
Word Length:	8
Stop Bits:	1

Collector Connector Settings

Baud Rate:	9600
Parity:	None
Data Bits:	8
Stop Bits:	1
Handshaking:	Both Softwr & Hardwr

IMPORTANT!

SDR data collectors require special setup information to be included at the beginning of a data file. Since this information is unique to each data collector, you must first download a file from the data collector to the computer, before you can upload one from the computer to the data collector. The download procedure creates a file called ***LIETZ.SDR*** *which must remain in the Collector Connector program directory for any uploads to the collector to work.*

Receiving Files

To receive a file from the SDR, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the SDR to send a file, select the **COMMS OUTPUT** option on the SDR **Communications Menu**. Prepare to send the desired file, but do not actually send the file yet.

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** press ENTER on the SDR.

Sending Files

To send a file to the SDR from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**.

When Collector Connector displays the **Ready to Send** prompt (shown on page 39), select the **COMMS INPUT** option on the SDR **Communications Menu** and **THEN** click OK on the computer.

B.03 Sokkia SDR 31 or 33

NOTES

1. *Select the **Sokkia SDR 31 or 33 (4-Char. Numeric Pt IDs)** option if your SDR files have 4-character numeric point numbers.*
2. *Select the **Sokkia SDR 31 or 33 (14-Char. Alpha Pt IDs)** option if your SDR files have 14-character alpha-numeric point numbers.*
3. *If you are using 14-character alphanumeric point numbers, we recommend that you limit the point number length to 8 characters for direct compatibility with our "Sight" Survey files. If you are not using "Sight" Survey, we recommend that you use only 4-character numeric point numbers.*
4. ***In this section,** keys shown in white-on-black color are normal SDR key presses. Keys shown in black-on-white color are SDR "softkey" key presses. Softkeys are the five keys found on the top row of the SDR, labeled **F1** through **F5**.*

Attach Collector

Attach the female DB25 adapter onto the end of the SDR serial cable. If you have a 9 pin serial port on your computer, attach a "9 pin to 25 pin" adapter onto the DB25 adapter. Then plug the data collector into a serial port on your PC.

IMPORTANT!

The switch on the DM25 adapter must be set to **DTE** *or the communication link will fail, causing a time-out error, or even possibly causing the system to act as if it is "hung-up".*

Configure

Configure the SDR and Collector Connector communication settings as recommended below. To access the **Communications Menu** on the SDR, press the COM softkey. Next, use the ▼ key to highlight **Comms Setup** and then press OK. Use the ▼ and ▲ keys to select any item that you wish to change. Then use the ◄ and ► keys to change the setting.

Data Collector Settings

Port:	Top
Modem:	No
Baud Rate:	38400
Data Bits:	8
Parity:	Not Set
Stop Bit:	1
Output Delay:	0

After making the **Comms Setup** changes, press OK to return to the SDR **Communications Menu**. Next, use the ▼ key to highlight **Output Options** and then press OK. Use the ▼ key to highlight **POS View** and then press OK. You may select other views to download if you wish, however, this version of Collector Connector only works with POSitional records. (Selecting the **Send All As POS** option assures that all records are sent in POSitional view.)

Collector Connector Settings

Baud Rate:	`38400`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Both Softwr & Hardwr`

IMPORTANT!

*SDR data collectors require special setup information to be included at the beginning of a data file. Since this information is unique to each data collector, you must first download a file from the data collector to the computer, before you can upload one from the computer to the data collector. The download procedure creates a file called **SOKKIA.SDR** which must remain in the Collector Connector program directory for any uploads to the collector to work.*

Receiving Files

To receive a file from the SDR, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the SDR to send a file, select the **COMMS OUTPUT** option on the SDR **Communications Menu**. Prepare to send the desired file, but do not actually send the file yet.

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** press OK on the SDR.

Sending Files

To send a file to the SDR from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**.

When Collector Connector displays the **Ready to Send** prompt (shown on page 39), select the **COMMS INPUT** option on the SDR **Communications Menu** and **THEN** click OK on the computer.

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B.04 Nikon (Lietz Emulation)

> **NOTE**
>
> ***In order to transfer files using Collector Connector,*** *you must configure your Nikon data collector to send and receive files in the Lietz format, using Lietz transfer emulation. Refer to your data collector manual or Nikon technical support for additional information.*

Attach Collector

Attach the serial cable to the Nikon and to a serial port on your PC.

Configure

Configure both the Nikon and Collector Connector communication settings as recommended below.

Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the Nikon, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** begin sending the file from the Nikon.

> **IMPORTANT!**
>
> *If you begin sending the file from the data collector before you click* OK *on the computer, you will not get a correct transfer as points will be lost.*

Sending Files

To send a file to the Nikon from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. When Collector Connector displays the **Ready**

to Send prompt (shown on page 39), begin the receiving process on the Nikon and **THEN** click OK on the computer.

IMPORTANT!

If you begin sending the file to the data collector before the collector is actually waiting to receive the file, you will not get a correct transfer as points will be lost.

B.05 Pentax SC-5 (Lietz Emulation)

NOTE

In order to transfer files using Collector Connector, *you must configure your Pentax data collector to send and receive files in the Lietz format, using Lietz transfer emulation. Refer to your data collector manual or Pentax technical support for additional information.*

Attach Collector

Attach the serial cable to the Pentax and to a serial port on your PC.

Configure

Configure both the Pentax and Collector Connector communication settings as recommended below.

Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the Pentax, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** begin sending the file from the Pentax.

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IMPORTANT!

If you begin sending the file from the data collector before you click OK *on the computer, you will not get a correct transfer as points will be lost.*

Sending Files

To send a file to the Pentax from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. When Collector Connector displays the **Ready to Send** prompt (shown on page 39), begin the receiving process on the Pentax and **THEN** click OK on the computer.

IMPORTANT!

If you begin sending the file to the data collector before the collector is actually waiting to receive the file, you will not get a correct transfer as points will be lost.

B.06 SMI HP48 COGO Cards

NOTES

1. *Select the **SMI HP48 SC** option when using an SMI HP48 Standard COGO (SC) card. This option uses an ASCII space-delimited data format of P N E Z (no descriptions).* ***When set for this format, you must make sure that the SMI card is set to store elevations.***
2. *Select the **SMI HP48 BCE, SCE, AC/ACE, or DC/DCE/CVCE** option when using any SMI COGO Card other than a BC or SC card. This option uses an ASCII comma-delimited data format of P,N,E,Z,D.* ***When set for this format, you must make sure that the SMI card is set to store both elevations & descriptions.*** *Some of the older BCE and SCE cards may not work with Collector Connector because of a problem storing files which contain elevations and/or descriptions. If you have an older BCE or SCE card and are having transfer problems, you may need to update your COGO card. Contact SMI or your dealer for pricing and availability.*

ⓘ NOTES *(Continued)*

3. ***In this section,*** *keys shown in white-on-black color are normal HP 48 key presses. Keys shown in black-on-white color are HP 48 "softkey" key presses. Softkeys are the six white keys found on the top row of the HP 48.*

Attach Collector

Attach the serial cable to the HP 48 and to a serial port on your PC.

Configure

See the special NOTES section above for important information. Configure the HP 48 and Collector Connector communication settings as recommended below. To access the **I/O Setup Menu** on the HP 48, press ← PRG SETUP.

Data Collector Settings

IR/Wire:	`Wire`
ASCII/Binary:	`ASCII`
Baud:	`9600`
Parity:	`None 0`
Checksum Type:	`3`
Translate Code:	`3`

Collector Connector Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the HP 48 SMI Module, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the HP 48 SMI Module to send the current job file to the PC, press EEX NXT TOPC.

ⓘ NOTE

If you have an SMI non-enhanced card, *the instructions displayed on the HP 48 should be ignored -- they do not apply to Collector Connector.*

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click [OK] on the computer and **THEN** press the [COMM] softkey on the HP 48. *(If you are using the **SMI HP48 SC**, you must press the [SPACE] softkey instead.)*

When the transfer is complete, the HP 48 will beep and display the message **PRESS ALTx ON PC TO EXIT… DONE**. On the PC, press [Alt] [X] or click the [Exit / Finish] button in the **File Transfer Status** box to continue.

Finally, close the HP 48 I/O channel (and save the battery) by pressing [←] [PRG] [NXT] [CLOSE].

Sending Files

To send a file to the HP 48 SMI Module from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. To instruct the HP 48 SMI Module to receive a file from the PC, press [EEX] [NXT] [TO48].

NOTE

***If you have an SMI non-enhanced card,** the instructions displayed on the HP 48 should be ignored -- they do not apply to Collector Connector.*

When Collector Connector displays the **Ready to Send** prompt (shown on page 39), initiate the receiving process on the HP 48 by pressing the [COMM] softkey. *(If you are using the **SMI HP48 SC**, you must press the [SPACE] softkey instead.)* You will be prompted for the lowest and highest point numbers in the file and for the name of the job that you are transferring. You must answer these prompts with the correct information or the file transfer will not work properly. The job name that you should enter is the main part of the file name that was entered for the Collector Connector **COGO File Name** prompt. For example, if your file name on the computer is **C:\SURVEY3\OAKWOODS.DAT**, you would use **OAKWOODS** for the job name on the HP 48.

After typing in the correct job name, press [ENTER] on the HP 48. Wait until the HP 48 creates the job file and then displays the

Connecting message, **THEN** click [OK] on the computer to start the actual file transfer.

When the transfer is complete, the HP 48 will beep and display the message **DONE**.

After the transfer has been completed, close the HP 48 I/O channel (and save the battery) by pressing [←] PRG NXT CLOSE.

B.07 SURVcalc HP 48SX/GX

> **NOTE**
>
> ***In this section,*** *keys shown in white-on-black color are normal HP 48 key presses. Keys shown in black-on-white color are HP 48 "softkey" key presses. Softkeys are the six white keys found on the top row of the HP 48.*

Attach Collector

Attach the serial cable to the HP 48 and to a serial port on your PC.

Configure

Configure the HP 48 and Collector Connector communication settings as recommended below. To access the **I/O Setup Menu** on the HP 48, press [←] PRG SETUP.

Data Collector Settings

IR/Wire:	`Wire`
ASCII/Binary:	`ASCII`
Baud:	`9600`
Parity:	`None 0`
Checksum Type:	`3`
Translate Code:	`1`

Collector Connector Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the HP 48 SURVcalc card, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** begin sending the file from the HP 48.

IMPORTANT!

If you begin sending the file from the data collector before you click OK *on the computer, you will not get a correct transfer as points will be lost.*

Sending Files

To send a file to the HP 48 SURVcalc card from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. When Collector Connector displays the **Ready to Send** prompt (shown on page 39), begin the receiving process on the HP 48 and **THEN** click OK on the computer.

IMPORTANT!

If you begin sending the file to the data collector before the collector is actually waiting to receive the file, you will not get a correct transfer as points will be lost.

B.08 TDS HP 48
TOPCON FC-48

NOTES

1. *Select the **TDS HP 48** option when using a TDS Surveying Card.*
2. *Select the **TOPCON FC-48** option when using a TOPCON Surveying Card.*

NOTES ***(Continued)***

3. ***In this section,*** *keys shown in white-on-black color are normal HP 48 key presses. Keys shown in black-on-white color are HP 48 "softkey" key presses. Softkeys are the six white keys found on the top row of the HP 48.*

Attach Collector

Attach the serial cable to the HP 48 and to a serial port on your PC.

Configure

Configure the HP 48 and Collector Connector communication settings as recommended below. To access the **File Transfer Menu** on the HP 48 from the TDS or Topcon main menu, press NXT SIN. Use the ▼ and ▲ keys to select any field that you wish to change. Then use the ◀ and ▶ keys to change the selection.

Data Collector Settings

File Type:	`>CRD (Coordinate Files)`
	`>Raw (Raw Data Files)`
IR/Wire:	`>Wire`
Baud Rate:	`>9600`
Parity:	`>None`
Start Pt:	`Start Pt# to Send`
End Pt:	`End Pt# to Send`

Collector Connector Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the HP 48, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the HP 48 to send a file, press SEND to send an entire file or press SBLK to send a partial file.

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer, **THEN** on the

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HP 48, select the file you wish to send and press the SELCT softkey.

Sending Files

To send a file to the HP 48 from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**.

When Collector Connector displays the **Ready to Send** prompt (shown on page 39), press the RECV softkey on the HP 48 and **THEN** click OK on the computer.

> **NOTE**
>
> *The TDS HP 48 and TOPCON FC-48 data collectors will not accept raw data from external sources; therefore, Collector Connector's transfer option for sending a raw data file to a data collector cannot be used with these data collectors.*

B.09 TOPCON FC-4

Attach Collector

Attach the appropriate TOPCON A-1, A-5 (25 pin) or A-16 (9 pin) cable between the TOPCON FC-4 and the serial port of your computer.

Configure

Configure the FC-4 **Hardware Parameters** and Collector Connector communication settings as recommended below.

Data Collector Settings

Baud:	`4800`
Parity:	`None`
Communications:	`RS232C`

Collector Connector Settings

Baud Rate:	`4800`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

☞ REMEMBER

TOPCON FC-4 ***Coordinate Files*** *have an extension of* **.N***; and* ***Raw Data Files*** *have an extension of* **.R***.*

Receiving Files

To receive a file from the FC-4, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. To instruct the FC-4 to send a file, select the F1 **Send FC-4 Data** option on the File Manager **Data Transfer** menu.

When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer, **THEN** on the FC-4, select the file you wish to send and press ENTER.

Sending Files

To send a file to the FC-4 from the PC, you must first setup the job using the F2 **Collect Data** option on the File Manager **Data Transfer** menu. After entering the Job File name and Job Prompt, press F3 **<Y>** to start the job and create the file on the FC-4. Next, select the F2 **Receive A File** option, but do not select a file name yet.

Follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. When Collector Connector displays the **Ready to Send** prompt (shown on page 39), select the file name on the FC-4 for the job that you will be receiving. Wait until the FC-4 displays the **Receiving No.→** message, **THEN** click OK on the computer. When all data has been received, the FC-4 will display the message **Done Receiving**.

ⓘ NOTE

If the FC-4 or Collector Connector appears to be suspended after sending or receiving a file, simply wait a few seconds for the transfer to time-out, or simply click Cancel *or* Abort.

B.10 Wild GRE-3 (Lietz Emulation)

> **NOTE**
>
> ***In order to transfer files using Collector Connector,*** *you must configure your Wild data collector to send and receive files in the Lietz format, using Lietz transfer emulation. Refer to your data collector manual or Wild technical support for additional information.*

Attach Collector

Attach the serial cable to the GRE-3 and to a serial port on your PC.

Configure

Configure both the GRE-3 and Collector Connector communication settings as recommended below.

Settings

Baud Rate:	`9600`
Parity:	`None`
Data Bits:	`8`
Stop Bits:	`1`
Handshaking:	`Software: XON/OFF`

Receiving Files

To receive a file from the GRE-3, follow the Collector Connector instructions in **Section 4.06—Receiving a File from the Data Collector**. When Collector Connector displays the **Ready to Receive** prompt (shown on page 42), click OK on the computer and **THEN** begin sending the file from the GRE-3.

> **IMPORTANT!**
>
> *If you begin sending the file from the data collector before you click* OK *on the computer, you will not get a correct transfer as points will be lost.*

Sending Files

To send a file to the GRE-3 from the PC, follow the Collector Connector instructions in **Section 4.05—Sending a File to the Data Collector**. When Collector Connector displays the **Ready**

to Send prompt (shown on page 39), begin the receiving process on the GRE-3 and **THEN** click [OK] on the computer.

IMPORTANT!

If you begin sending the file to the data collector before the collector is actually waiting to receive the file, you will not get a correct transfer as points will be lost.

B.11 Other Data Collector Interfaces

If the **Data Collector** that you are using is not listed is this appendix, Collector Connector was not compatible with that collector at the time this manual was printed. However, be sure to check the on-line help topic **Data Collectors** (or the **README.TXT** file) for updated information.

If you have a special Data Collector (or COGO file) format that you would like Collector Connector to read or write, a modification to the program ***may*** be possible. The more requests we get for specific collectors and program features, the sooner we will add them to the program.

Please contact our technical support department for further information. Please note that there is a service charge for a custom modification to the program.

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