

Sincorder Companion

**Utilities for the
M.C. Miller Sincorder Data Logger**

Users Guide

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Overview

SINCORDER COMPANION was written to aid all those who use the M. C. Miller SINCORDER. This program is intended **ONLY** as an aid for the experienced Cathodic Protection practitioner.

SINCORDER COMPANION is designed to help the Corrosion Engineer or Technician with receiving data from the SINCORDER, transferring prompt files to the SINCORDER, remote operation, formatting data for use with spread sheet programs, and graphing and evaluating close interval survey data. SINCORDER COMPANION is designed using the windows graphical user interface utilizing the mouse pointer, check boxes and speed buttons so that little prior computer knowledge is required. The operation is documented with an on line help system.

System Requirements

The Minimum Requirements are:

100% IBM Compatible 486 or higher PC.

Microsoft Windows 95 or higher.

8MB RAM minimum. 16MB recommended.

Hard Disk drive with 20MB free disk space.

256 color or SVGA video.

Works with any printer supported by Windows 95.

Acknowledgments

Sincorder Companion was developed using Delphi 3 for Windows 95 and NT.

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TCommPortDriver component Copyright 1997 by Maco Cocco.

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SETUP

The program consists of one to four 3.5 " disks depending on how many modules you have licensed.

To install ***Sincorder Companion*** first place disk 1 in your 3.5" drive.

From Windows 95 select Run from the START menu or Install New Software from the Control Panel.

Follow the instructions and feed it the disks on request.

This requires about 12 megabytes of disk space to install.

A program group named ***Sincorder Companion*** will be installed in your program manager. You open this group then double click in the appropriate icon to start a program module.

The documentation for the program is on line. Select Help/Contents then click on getting started. At any point in the program pressing F1 will display the appropriate help screen.

Communications

This module has been designed to provide a more effective way to communicate with the SINCORDER through the RS232C Port than with the use of general-purpose communication programs. You may communicate either by modem over the telephone lines or directly by plugging the SINCORDER RS232C cable into the serial port of your personal computer.

The communication module supports receiving data from the SINCORDER, sending data to the SINCORDER and remote operation of the SINCORDER from your PC keyboard.

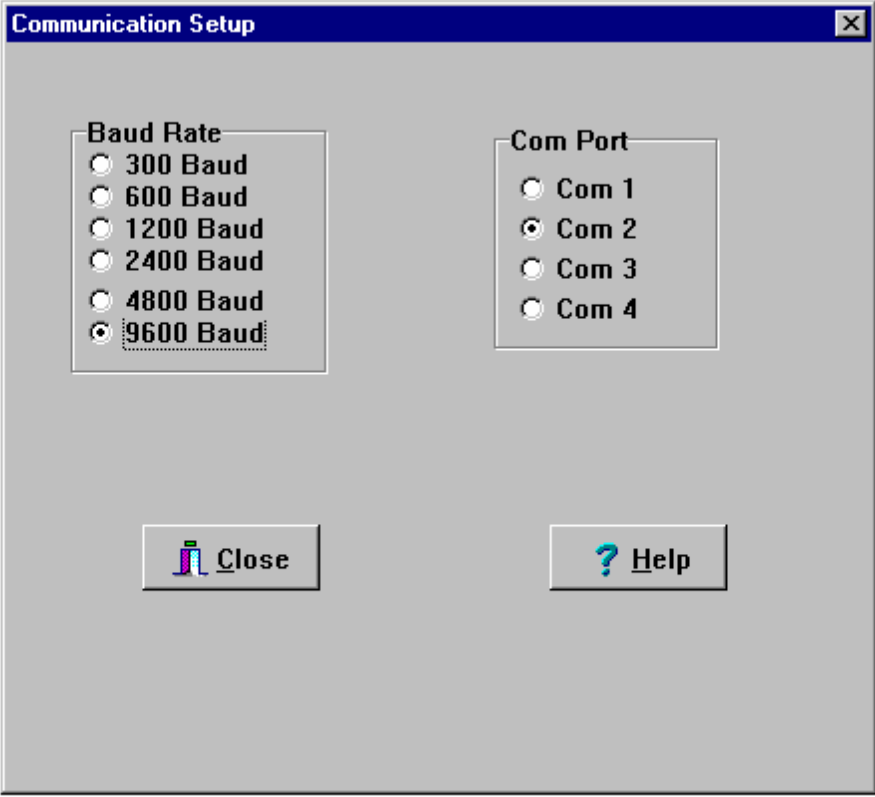
When you select SINCORDER COMMUNICATIONS from the Sincorder Companion program group the COMMUNICATION MODULE FORM with the following screen is displayed:

Click on the appropriate buttons to continue



Communication Setup

Press the  button Main Form and you are presented with this Form:



The image shows a 'Communication Setup' dialog box with a blue title bar and a close button. It contains two panels: 'Baud Rate' and 'Com Port'. The 'Baud Rate' panel has six radio buttons, with '9600 Baud' selected. The 'Com Port' panel has four radio buttons, with 'Com 2' selected. At the bottom, there are two buttons: 'Close' with a small icon and 'Help' with a question mark icon.

Panel	Option	Selected
Baud Rate	300 Baud	No
	600 Baud	No
	1200 Baud	No
	2400 Baud	No
	4800 Baud	No
	9600 Baud	Yes
Com Port	Com 1	No
	Com 2	Yes
	Com 3	No
	Com 4	No

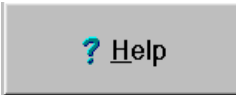
The **Baud Rate** panel allows you to select from 300, 1200, 2400, 4800, or 9600 BAUD. The default setting is 9600. Click on the radio button for the speed that you want to use. Make sure that the SINCORDER is set at the same Baud Rate. This setting will be saved and will become the new default.

If you have a problem with data dropout try a slower baud rate.

The **Comm. Port** Panel allows you to select COM1, COM2, COM3 or COM4. . Click on the radio button for the port that you want to use. The default setting is COM 2. This setting will be saved and will become the new default.

The following parameters are preset for compatibility with the SINCORDER:

Start bits = 1
Data bits = 8
Stop bits = 1
Parity = None

Press the  button to enter the online Help System

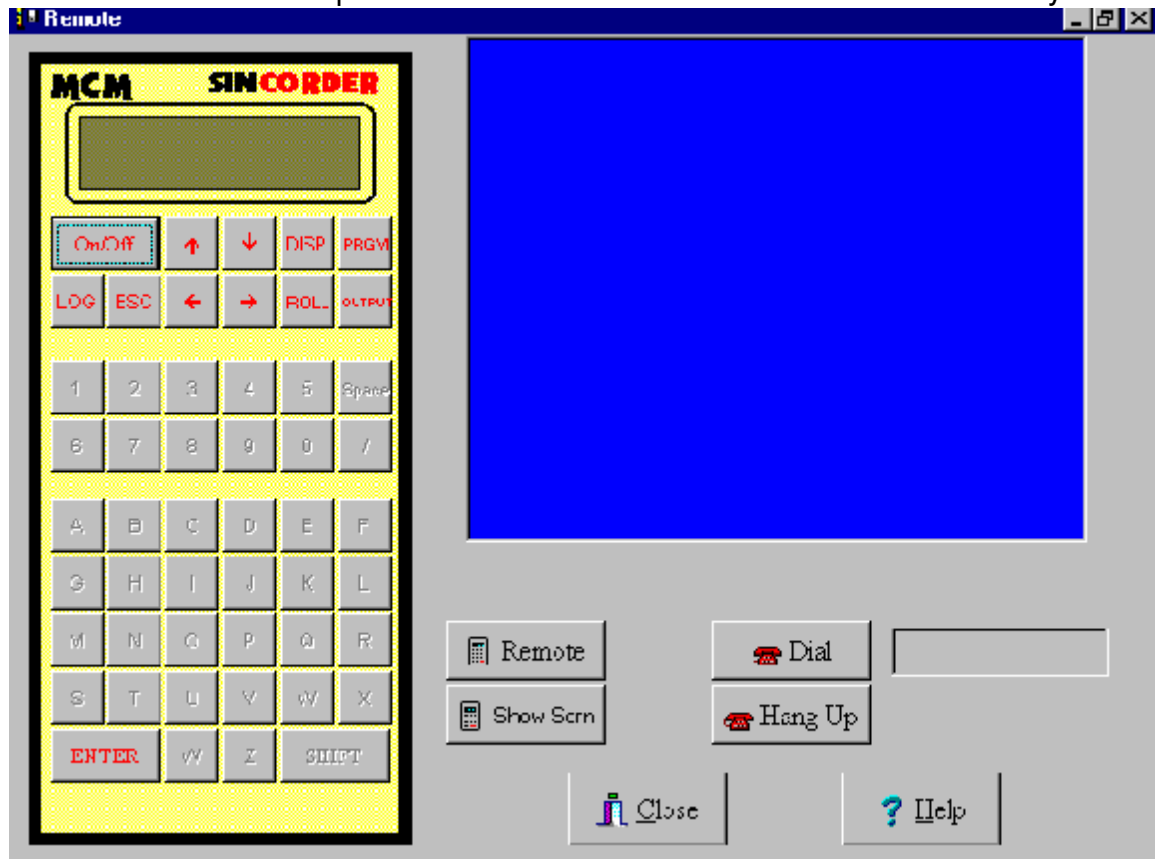
Press the  button to return to the Main Form.

Remote Operation

 Remote

Press the button on the Main Form and you are presented with the Remote Form.

Press the **Button** to put the SINCORDER in the remote mode. You may now do



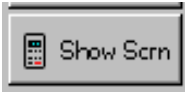
 Remote

Press the button to put the SINCORDER in the remote mode. You may now do anything with the remote SINCORDER that you can do from the keyboard.

The Remote Mode takes advantage of the remote capabilities of the SINCORDER. When you enter the Remote Form a representation of the SINCORDER will appear on the screen.

From the Remote Form you can operate a remote SINCORDER as if it is in your lap. A Button on the Screen keyboard has been assigned to each of the

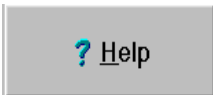
SINCORDER special keys. The SINCORDER screen is displayed in the blue window at the top of the Remote Form.

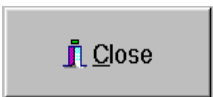
Press the  button to display the current SINCORDER screen.

If you have the SINCORDER connected to a remote modem you can enter the phone number in the edit box on the lower right portion of the form.

Press the  button to dial the number

Press the  button when you are finished

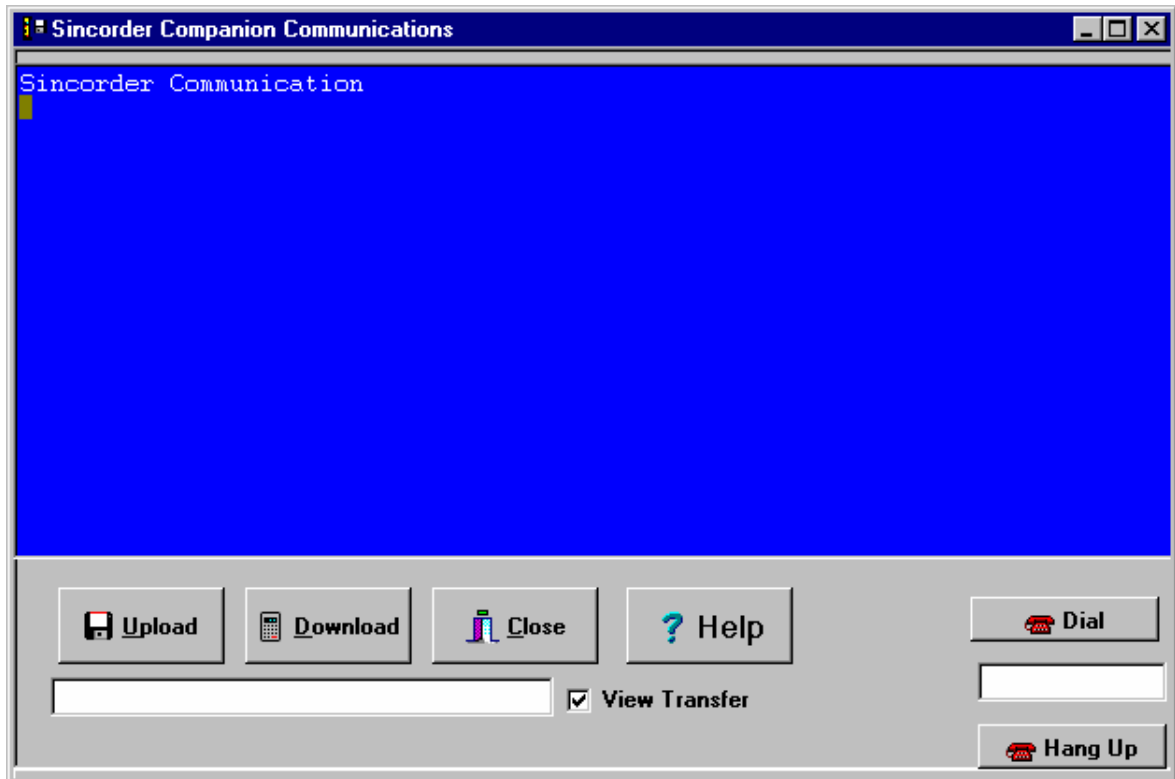
Press the  button to enter the online Help System

Press the  button to return to the Main Form.

File Transfer



Press the File Transfer button on the Main Form and you are presented with the File Transfer Form:



Press the Upload button and a Save File Dialog will help you choose the file to save the data to. Enter only the primary file name. The program will provide an extension of .SDP This extension is necessary for other modules of SINCORDER COMPANION.

If there is more than one file in the current mode you will be prompted for the file number or All. The file or files in the current mode of the SINCORDER will then be transferred to the disk file that you specified. If there is a mixture in files i.e.: Logger and Single, you will first be prompted to make a selection. Press the RETRY button to select then press OK to continue.



Press the  button and an Open File Dialog will help you choose the file to transfer. The file must be properly formatted (see CHAPTER 4 'DOWNLOADING' in the SINCORDER Manual) and must have the extension SUR. After a couple of questions to make sure this is what you really want to do the program will prompt you to select SINGLE or MULTIPLE Mode. Press the RETRY button to change the setting then press the OK button. The program will then clear the SINCORDER memory, send the survey data format. NOTE: The Voltage range and scaling must set before the file is sent.

If you have the SINCORDER connected to a remote modem you can enter the phone number in the edit box on the lower right portion of the form.

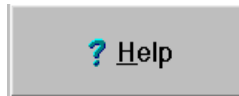


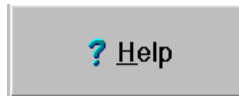
Press the  button to dial the number

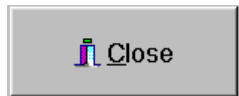


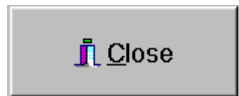
Press the  button when you are finished

Uncheck the **View Transfer** box to speed the file transfer.



Press the  button to enter the online Help System

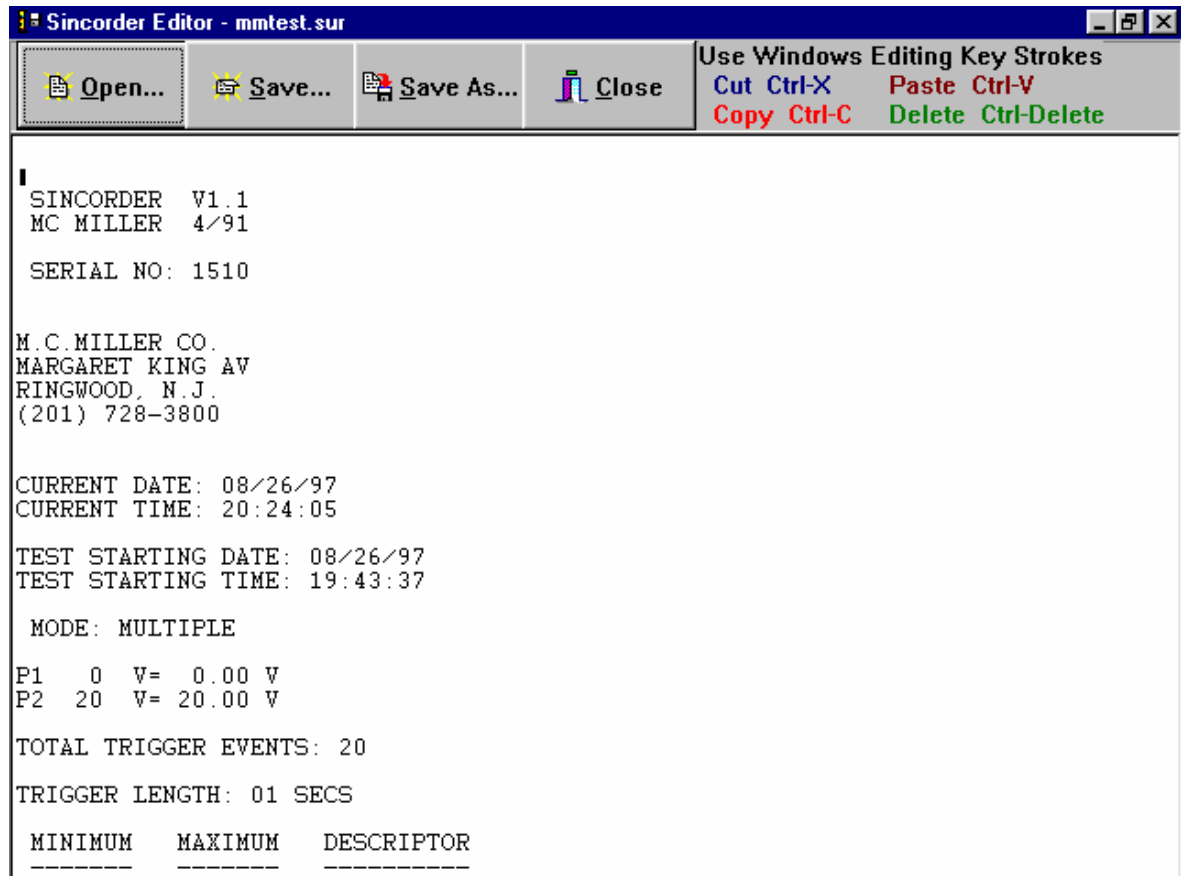


Press the  button to return to the Main Form.

EDIT FILES

 Edit Files

Pressing the  button will take you to a simple text editor that will let you view or edit the SINCORDER Download Files and the Survey Route (upload) Files.



```
SINCORDER V1.1
MC MILLER 4/91

SERIAL NO: 1510

M.C.MILLER CO.
MARGARET KING AV
RINGWOOD, N.J.
(201) 728-3800

CURRENT DATE: 08/26/97
CURRENT TIME: 20:24:05

TEST STARTING DATE: 08/26/97
TEST STARTING TIME: 19:43:37

MODE: MULTIPLE

P1 0 V= 0.00 V
P2 20 V= 20.00 V

TOTAL TRIGGER EVENTS: 20
TRIGGER LENGTH: 01 SECS

MINIMUM MAXIMUM DESCRIPTOR
-----
```

About



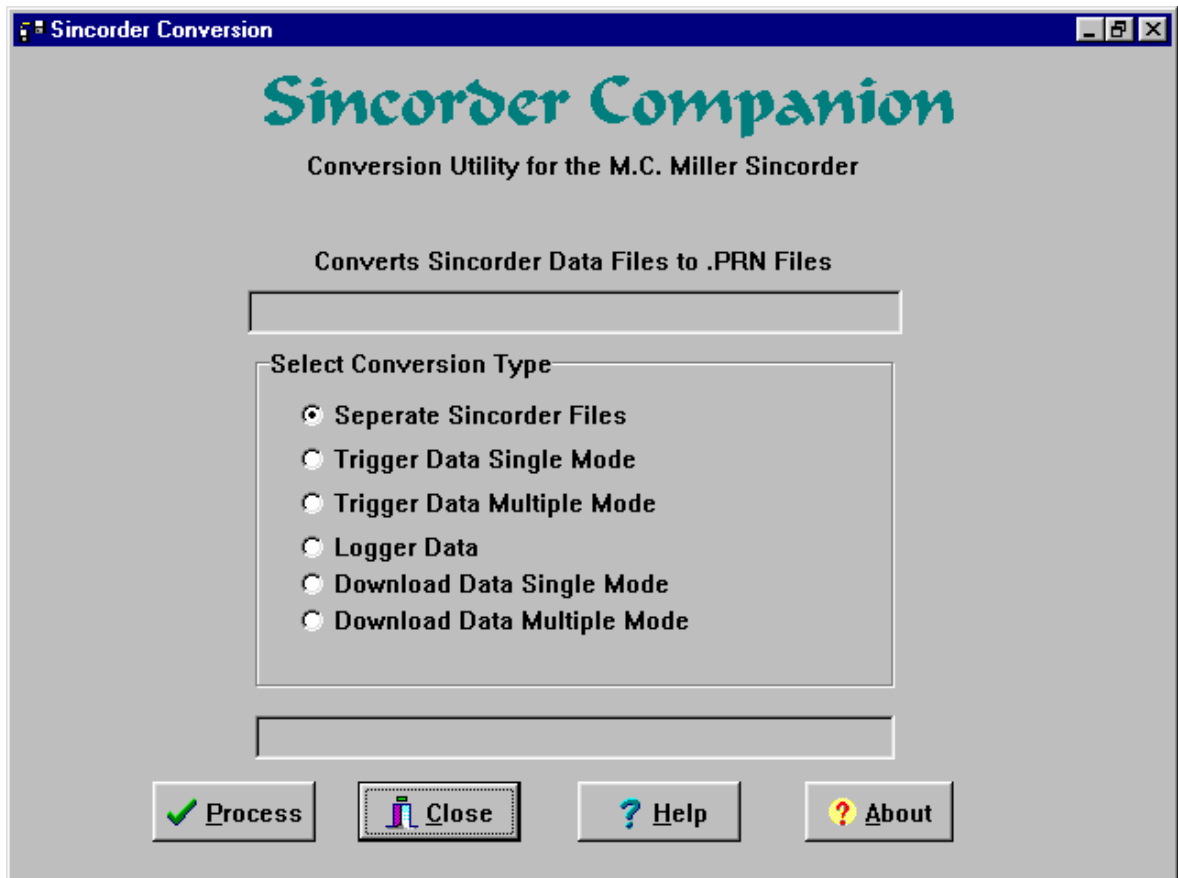
Pushing the button displays the About Box that contains the version and copyright information



Sincorder File Conversion

This module is designed to convert the SINCORDER ASCII output to a format that can be loaded directly into a spreadsheet program such as LOTUS 123, Symphony and others that will accept the standard comma delineated ASCII file input. This module places the header, text, and DESCRIPTORS in quotes" " and moves the DESCRIPTORS to the right of the data. You can then import the SINCORDER DATA into the spreadsheet. In Lotus 123 you would use the following commands. / File Import Numbers Filename.PRT. Please refer to your application program documentation for details on importing ASCII Files.

When you enter the Conversion Module you will be presented with the following screen:



Click on the type of conversion you desire from the selection panel.

SEPARATE SINCORDER FILES

If you had more than one file in the SINCORDER you can use this option to separate them into individual files. Select this option and the program will prompt you to enter the name of the source file. The file must have the extension .SDR. The SINCORDER COMPANION Communication Receive function writes all files with the .SDP extension.

You are then prompted for the output file name. This file will also have an extension of .SDR. The output prompt will be repeated until all files have been separated. The original file will remain intact for further processing if necessary.

NOTE: DO NOT name an output file the same as the input file or an Exception will occur and you may LOSE your data (FOREVER). If the filename is less than eight characters long a number 0-9 will be appended to help prevent this from happening.

Logger Files

If the Separate utility is used on a LOGGER file a different result is obtained. . A minimum of two files will be created. The first will be the Header Data, i.e.

MC MILLER SINCORDER
VERSION 1.0 11/86

SERIAL NUMBER: 1199

Etc.

Each additional file will be the data between page breaks.

You can then use the Logger Data Conversion on each file and then import them into a spreadsheet where you want them. You can also use the DOS Command

COPY file1.prn + file2.prn + file3.prn + file4.prn filename.prn to recombine the files.

TRIGGER DATA SINGLE MODE

This option converts a single mode SINCORDER file to be imported into a spreadsheet as a standard ASCII file. The program prompts for the input file name and then writes an output file with the .PRN extension.

TRIGGER DATA MULTIPLE MODE

This option converts a multiple mode SINCORDER file to be imported into a spreadsheet as a standard ASCII file. The program prompts for the input file name and then writes an output file with the .PRN extension.

LOGGER DATA

This option converts a logger mode SINCORDER file to be imported into a spreadsheet as a standard ASCII file. The program prompts for the input file name and then writes an output file with the .PRN extension.

It may be useful to separate the file before it is converted.

DOWNLOAD DATA SINGLE MODE

This option converts a Single Mode SINCORDER Download Data file to be imported into a spreadsheet as a standard ASCII file. The program prompts for the input file name and then writes an output file with the .PRN extension.

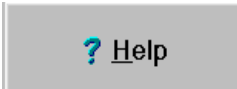
DOWNLOAD DATA MULT MODE

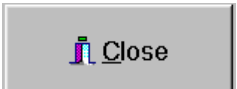
This option converts a Multiple Mode SINCORDER Download Data file to be imported into a spreadsheet as a standard ASCII file. The program prompts for the input file name and then writes an output file with the .PRN extension.

Press the  button and an Open File Dialog will help you choose the file to process.

Pushing the  button displays the About Box that contains the version and copyright information



Press the  button to enter the online Help System

Press the  button to return to the Main Form.

Interrupted Close Interval Survey

This module was designed to process Interrupted Close Interval Survey data that has been recorded with the SINCORDER. The data can then be presented as a printed graph or a video graph. A data list with on potentials, off potentials, survey stations, and remarks can be generated. An exception table can be printed to show off readings that fall above or below a specified value. The following conventions must be followed in order for this module to function properly.

MODE: MULTIPLE

INTERVAL SPACING MUST BE ONE OF THE FOLLOWING:

2 1/2, 5, 10, 20, 50, OR 100 FOOT (1,2,3,5,10 METRES)

ENTER a flag as a DESCRIPTOR every 100 FT, (30,50,60,75 or 100 METRES) using symbols /, /f or /F to indicate a flag.

ENTER a station update as a DESCRIPTOR using the symbol /M followed by the new station number. ie. /M 105+21. When the program encounters this, it will start renumbering the output at this (105+21) new station number.

ENTER a jump update as a DESCRIPTOR using the symbol /J followed by the number of feet to be jumped. ie. /J 100. When the program encounters this, it will add this amount (100 feet) to the previous station number.

NOTE: Do not use these symbols and letters for any other purpose.

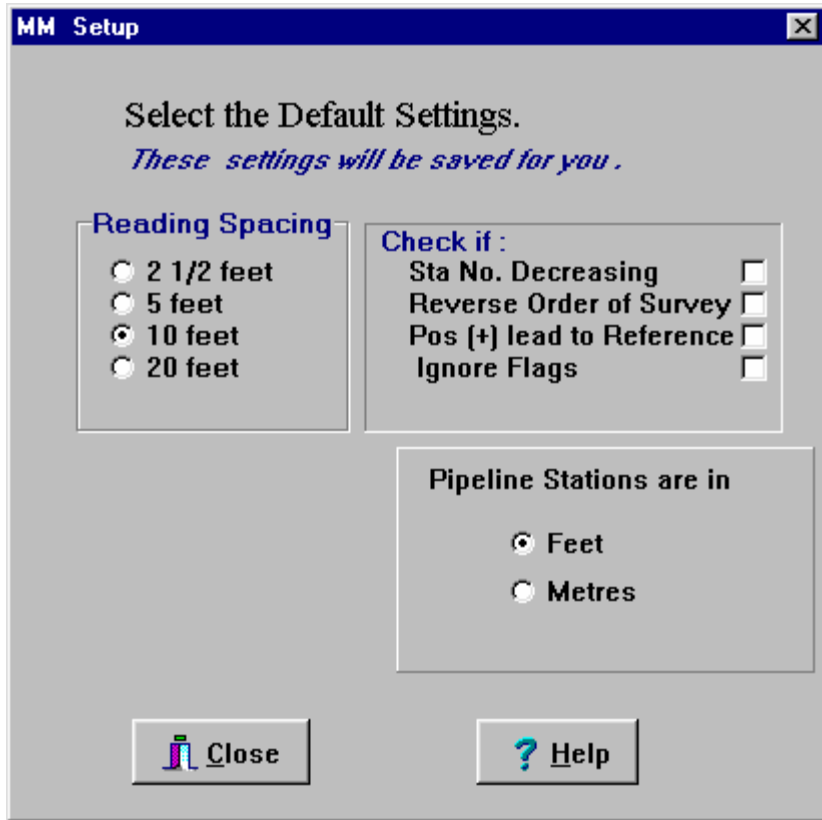
When you select **MMCIS** from the Sincorder Companion program group the Interrupted Close Interval Survey Module with the following screen is displayed:



Click on the appropriate buttons to continue

SINCORDER System Settings

Press the  button and you will be presented with the following screen. Any changes made on this form are saved and become the default.



MM Setup

Select the Default Settings.
These settings will be saved for you .

Reading Spacing

☐ 2 1/2 feet
☐ 5 feet
☒ 10 feet
☐ 20 feet

Check if :

☐ Sta No. Decreasing
☐ Reverse Order of Survey
☐ Pos (+) lead to Reference
☐ Ignore Flags

Pipeline Stations are in

☒ Feet
☐ Metres

 **Close**  **Help**

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

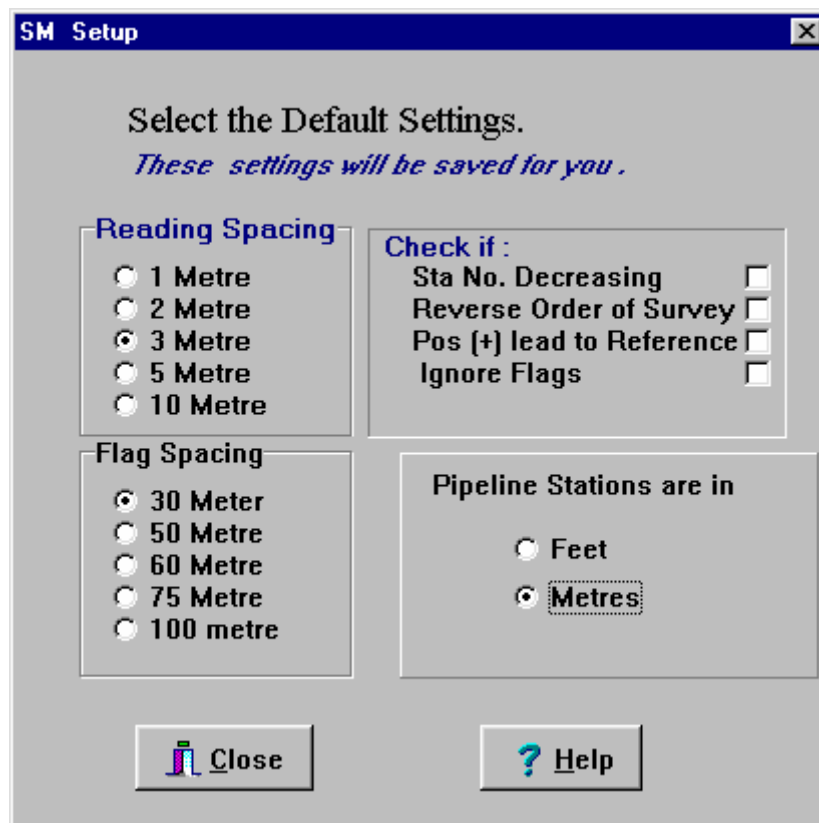
Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough, or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

If you select **Pipeline Stations are in Metres** the form will change to the following:



The screenshot shows a window titled "SM Setup" with a close button in the top right corner. The main text reads "Select the Default Settings." followed by the italicized instruction "These settings will be saved for you .". The window is divided into four panels. The "Reading Spacing" panel on the left contains five radio buttons: "1 Metre", "2 Metre", "3 Metre" (which is selected), "5 Metre", and "10 Metre". The "Check if :" panel on the right contains four checkboxes, all of which are unchecked: "Sta No. Decreasing", "Reverse Order of Survey", "Pos (+) lead to Reference", and "Ignore Flags". Below the "Reading Spacing" panel is the "Flag Spacing" panel with five radio buttons: "30 Meter" (selected), "50 Metre", "60 Metre", "75 Metre", and "100 metre". To the right of the "Flag Spacing" panel is the "Pipeline Stations are in" panel with two radio buttons: "Feet" and "Metres" (which is selected and has a dashed border). At the bottom of the window are two buttons: "Close" with a small icon of a window and "Help" with a question mark icon.

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the box in the **Flag Spacing** panel that corresponds to the spacing at which the flags were entered.

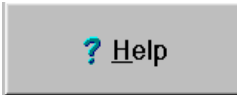
Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough, or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

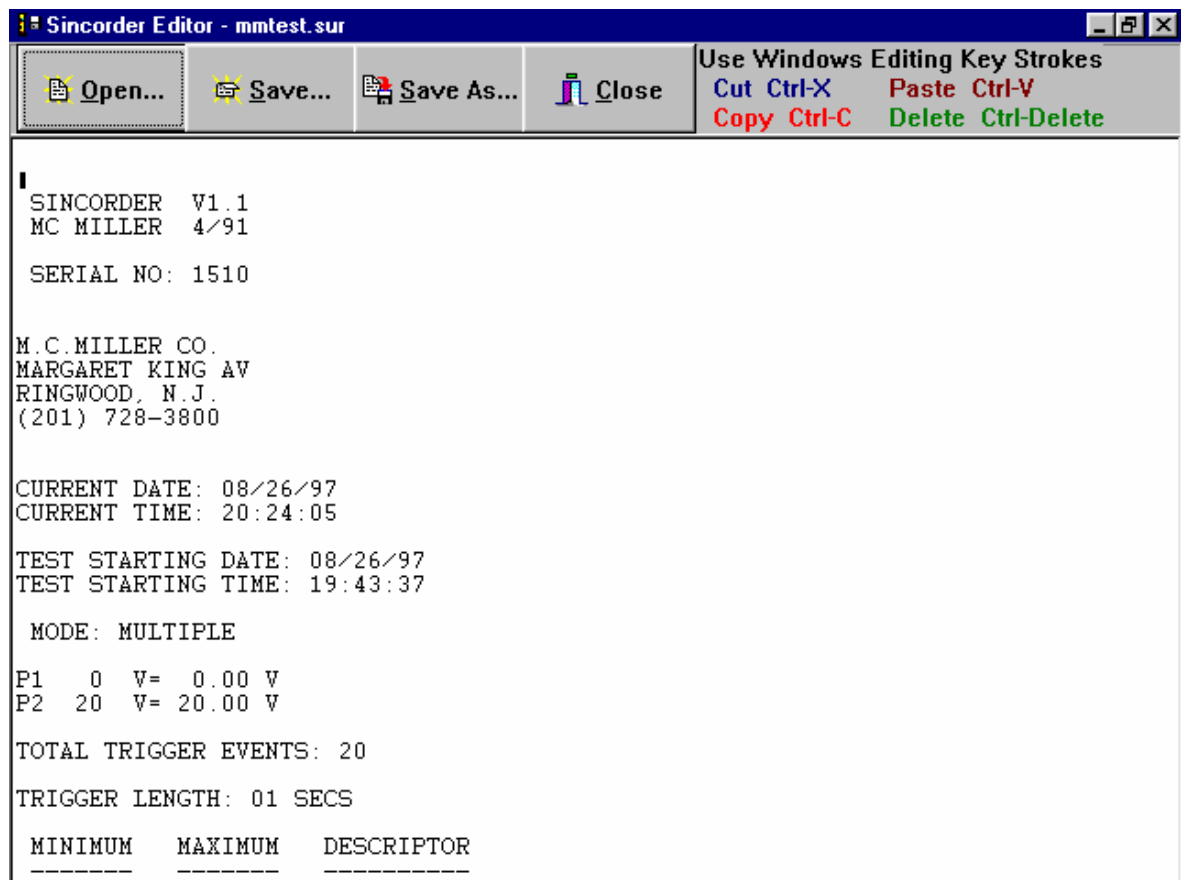
Press the  button to enter the online Help System

Press the  button to return to the Main Form.

EDIT FILES

A rectangular button with a light gray background and a thin black border. It contains a small icon of a document with a pencil and the text "Edit Files".

Pressing the  button will take you to a simple text editor that will let you view or edit the SINCORDER Download Files and the Survey Route (upload) Files.

A screenshot of a text editor window titled "Sincorder Editor - mmtest.sur". The window has a menu bar with "Open...", "Save...", "Save As...", and "Close". To the right of the menu bar is a section titled "Use Windows Editing Key Strokes" with "Cut Ctrl-X", "Paste Ctrl-V", "Copy Ctrl-C", and "Delete Ctrl-Delete". The main text area contains the following text:

```
SINCORDER V1.1
MC MILLER 4/91

SERIAL NO: 1510

M.C.MILLER CO.
MARGARET KING AV
RINGWOOD, N.J.
(201) 728-3800

CURRENT DATE: 08/26/97
CURRENT TIME: 20:24:05

TEST STARTING DATE: 08/26/97
TEST STARTING TIME: 19:43:37

MODE: MULTIPLE

P1 0 V= 0.00 V
P2 20 V= 20.00 V

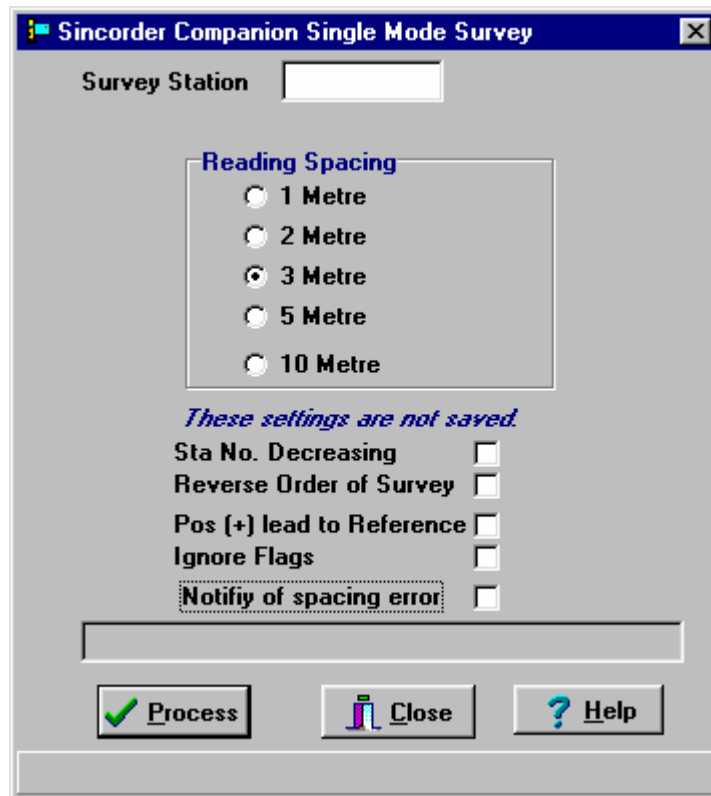
TOTAL TRIGGER EVENTS: 20

TRIGGER LENGTH: 01 SECS

MINIMUM MAXIMUM DESCRIPTOR
-----
```

Process SINCORDER Data

Press the  **Process** button on the Main Form and you are presented with the Process Form:



The screenshot shows a software window titled "Sincorder Companion Single Mode Survey". At the top, there is a text box labeled "Survey Station". Below this is a section titled "Reading Spacing" containing five radio button options: "1 Metre", "2 Metre", "3 Metre" (which is selected), "5 Metre", and "10 Metre". Underneath the radio buttons, a message states "These settings are not saved." followed by four checkboxes: "Sta No. Decreasing", "Reverse Order of Survey", "Pos (+) lead to Reference", and "Ignore Flags". Below these checkboxes is another checkbox labeled "Notify of spacing error". At the bottom of the window, there are three buttons: "Process" (with a green checkmark icon), "Close" (with a red X icon), and "Help" (with a question mark icon).

Enter the starting **Survey Station** of the survey in the edit box at the top of the form..

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

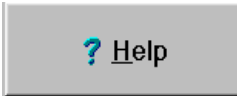
If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough, or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

If the **Notify of Spacing Error** box is checked processing will pause and an error message will be displayed each time a spacing error is encountered.

The Status of the operation is displayed in the text box at the bottom of the form.

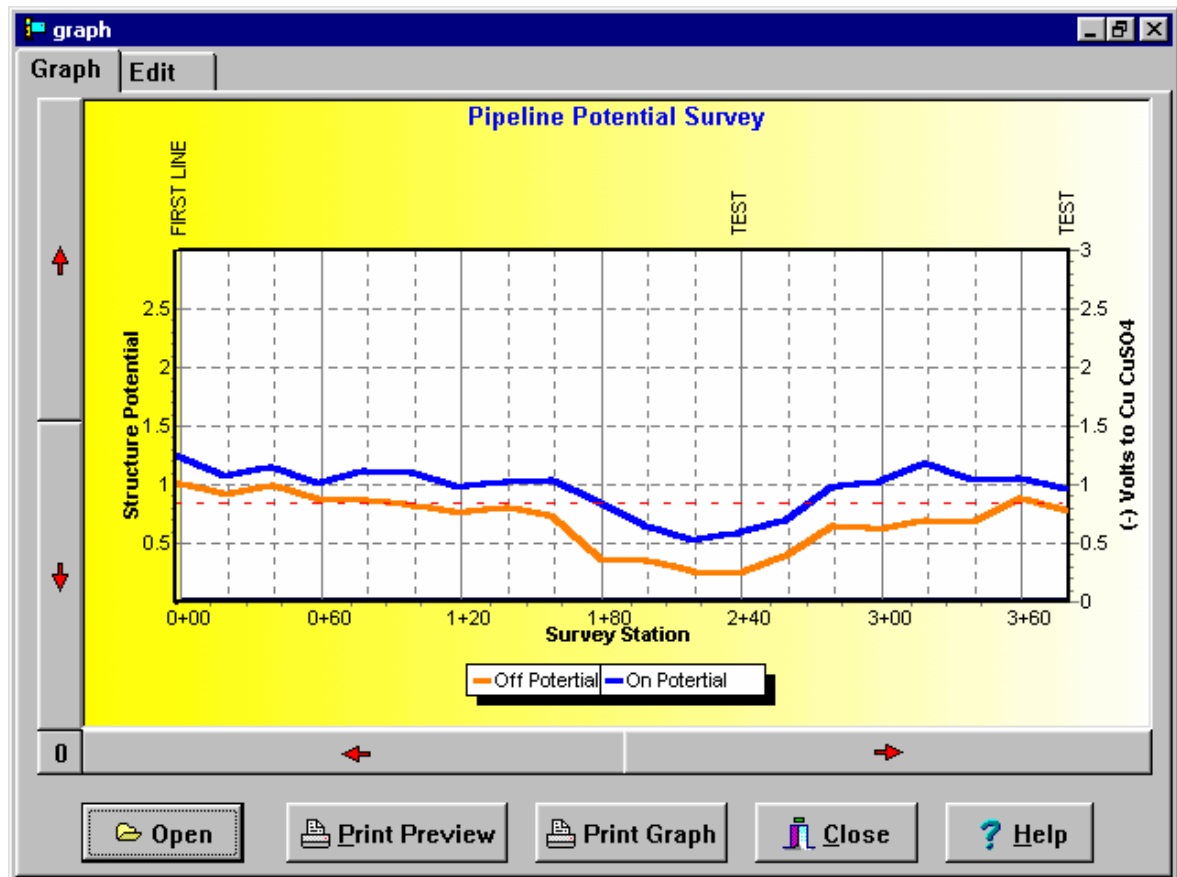
Press the  button and an Open File Dialog will help you choose the file to process.

Press the  button to enter the online Help System

Press the  button to return to the Main Form.

Graphs

Press the  **Graphs** button and the following form will be presented.

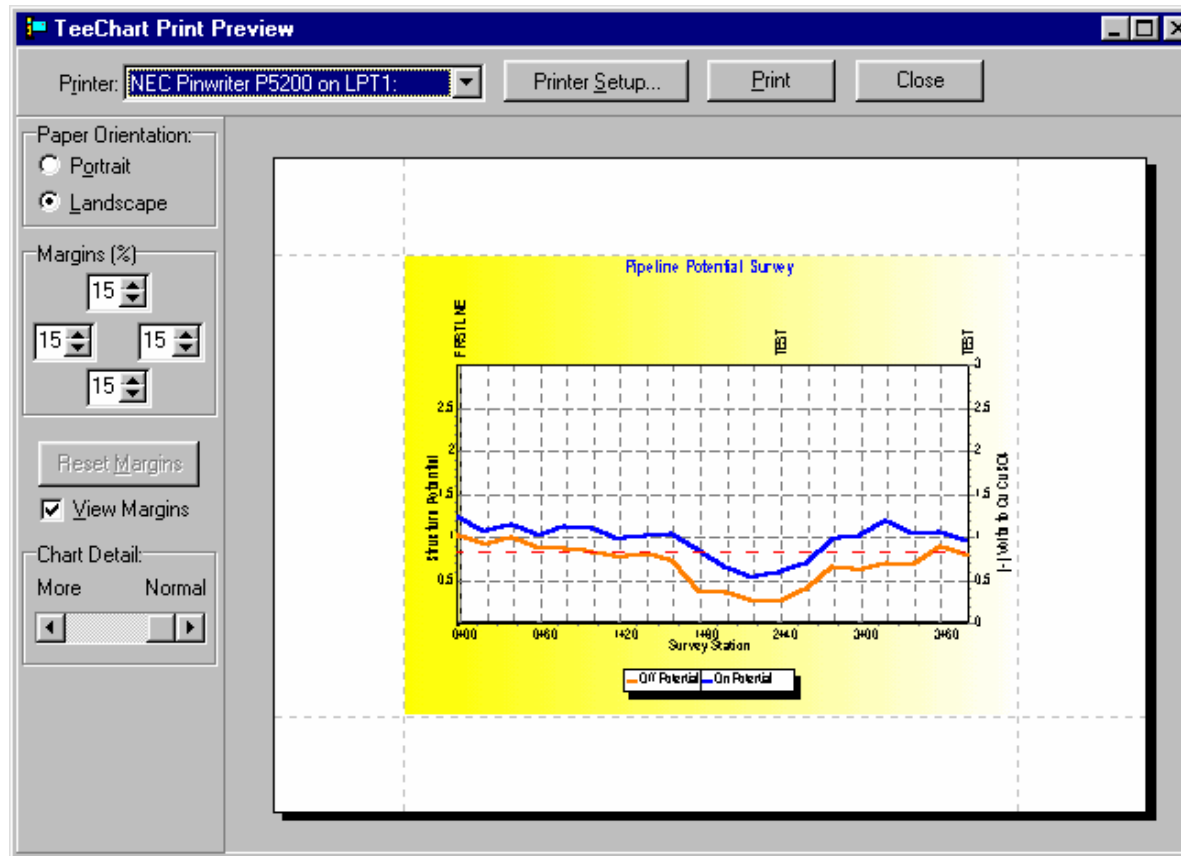


Press the  **Open** button and an Open File Dialog will help you choose the file to view.

Press the



button and the Print Preview Form will appear.



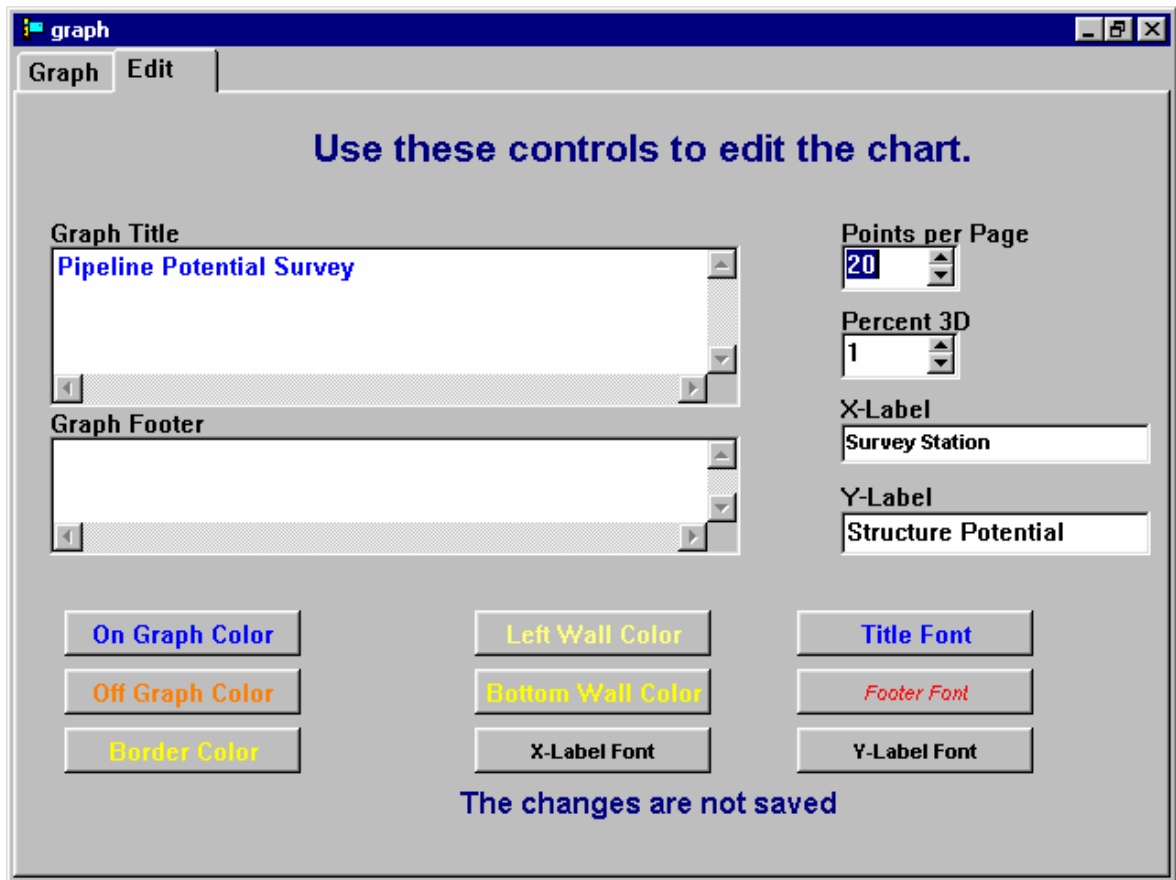
This form is used to alter the way the graph will be printed. You can change the margins, printer setup and paper orientation. Press the **Print** button to print the current page.

Press the



button to print the entire graph.

Click on the  tab to switch to the graph setup up form.

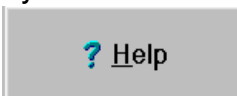


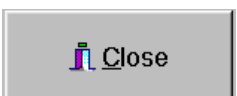
This form allows you to edit the Graph Title, add a Graph Footer, Edit the X-Label and the Y-Label.

You can also change the Number of points per page and the percent of 3D display.

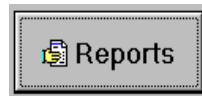
Fonts and colors can also be changed for your taste.

These changes apply to the current session only. The chart will return to the default when you exit the Graph Form.

Press the  button to enter the online Help System

Press the  button to return to the Main Form.

Reports



Press the button and the following form will be presented.

A screenshot of a "Print" dialog box. The title bar is blue with the word "Print" and a close button. The main area is light gray. At the top, there's a label "Caption" above two empty text input boxes. Below this is a section titled "Select Output" containing three radio buttons: "Survey Data", "Exception Table" (which is selected), and "Graph". Under "Exception Table" are two sub-labels, "Low Limit" and "High Limit", each followed by an empty text box. Below the radio buttons is a checked checkbox labeled "Print Voltage Grid". To the right of the "Select Output" section is another section with a checked checkbox labeled "Print Partial Survey". Below this are two rows of input fields: "Begin" followed by an empty box and a "+ 00" label, and "End" followed by an empty box and a "+ 00" label. At the bottom of the dialog are three buttons: "OK" with a green checkmark icon, "Cancel" with a red X icon, and "Help" with a blue question mark icon. Below these buttons is a progress bar showing "0%".

Caption

Enter the Report Caption in these Edit Boxes. This might be the Line name and the Date Surveyed. Any information entered here will be printed on each page of the output.

Select Output

Survey Data-This option prints a formatted listing of the survey data. The header data from the SINCORDER will be printed on the first page of this report.

Exception Table- This option will print an Exception Table from the data. When you enter this section you will be prompted for the maximum acceptable off potential, and minimum acceptable off potential. A formatted listing will then be printed.

The header data from the SINCORDER will be printed on the first page of this report.

Print Partial Survey- This section prints only a portion of the selected report. You must enter the beginning and ending survey station numbers.

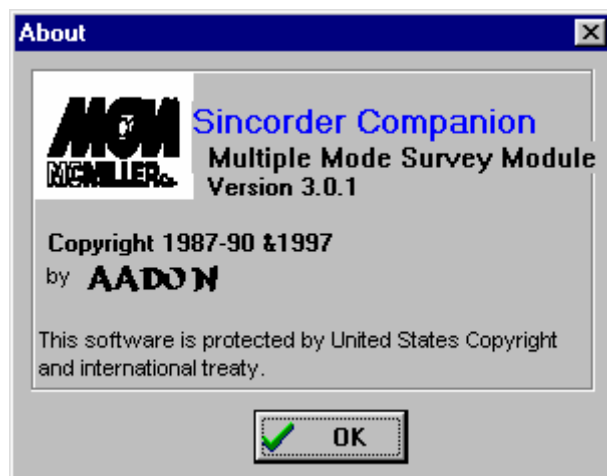
Press the  button and an Open File Dialog will help you choose the file to process.

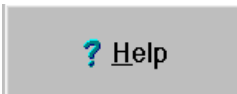
Press the  button to enter the online Help System

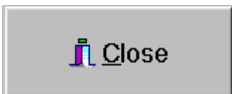
Press the  button to return to the main form.

From the Main Form

Pushing the  button displays the About Box that contains the version and copyright information



Press the  button to enter the online Help System

Press the  button to return to Exit to the Desktop.

Close Interval Survey

This module was designed to process Close Interval Survey data that has been recorded with the SINCORDER. The data can then be presented as a printed graph or a video graph. A data list with potentials, survey stations, and remarks can be generated. An exception table can be printed to show readings that fall above or below a specified value. The following conventions must be followed in order for this module to function properly.

MODE : SINGLE

INTERVAL SPACING MUST BE ONE OF THE FOLLOWING:

2 1/2, 5, 10, 20, 50, OR 100 FOOT (1,2,3,5,10 METRES)

ENTER a flag as a DESCRIPTOR every 100 FT, (30,50,60,75 or 100 METRES) using symbols /, /f or /F to indicate a flag.

ENTER a station update as a DESCRIPTOR using the symbol /M followed by the new station number. ie. /M 105+21. When the program encounters this, it will start renumbering the output at this (105+21) new station number.

ENTER a jump update as a DESCRIPTOR using the symbol /J followed by the number of feet to be jumped. ie. /J 100. When the program encounters this, it will add this amount (100 feet) to the previous station number.

NOTE: Do not use these symbols and letters for any other purpose.

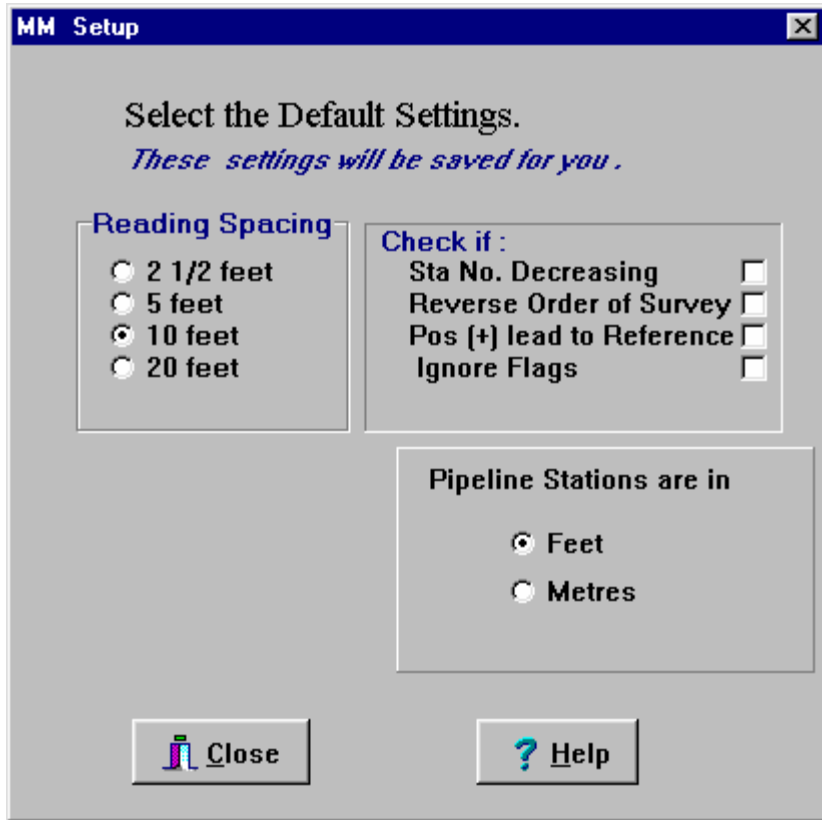
When you select **SMCIS** from the Sincorder Companion program group the Close Interval Survey Module with the following screen is displayed:



Click on the appropriate buttons to continue

SINCORDER System Settings

Press the  button and you will be presented with the following screen. Any changes made on this form are saved and become the default.



MM Setup

Select the Default Settings.
These settings will be saved for you .

Reading Spacing

☐ 2 1/2 feet
☐ 5 feet
☒ 10 feet
☐ 20 feet

Check if :

☐ Sta No. Decreasing
☐ Reverse Order of Survey
☐ Pos (+) lead to Reference
☐ Ignore Flags

Pipeline Stations are in

☒ Feet
☐ Metres

 **Close**  **Help**

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough, or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

If you select **Pipeline Stations are in Metres** the form will change to the following:

The screenshot shows a window titled "SM Setup" with a close button in the top right corner. The main text reads "Select the Default Settings." followed by the italicized instruction "These settings will be saved for you .". The window is divided into four panels. The "Reading Spacing" panel on the left contains five radio buttons: "1 Metre", "2 Metre", "3 Metre" (which is selected), "5 Metre", and "10 Metre". The "Check if :" panel on the right contains four checkboxes: "Sta No. Decreasing", "Reverse Order of Survey", "Pos (+) lead to Reference", and "Ignore Flags", all of which are currently unchecked. Below the "Reading Spacing" panel is the "Flag Spacing" panel with five radio buttons: "30 Meter" (selected), "50 Metre", "60 Metre", "75 Metre", and "100 metre". To the right of the "Flag Spacing" panel is the "Pipeline Stations are in" panel with two radio buttons: "Feet" and "Metres" (which is selected and has a dashed border). At the bottom of the window are two buttons: "Close" with a small icon of a window and "Help" with a question mark icon.

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the box in the **Flag Spacing** panel that corresponds to the spacing at which the flags were entered.

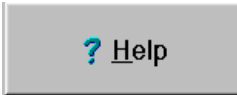
Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

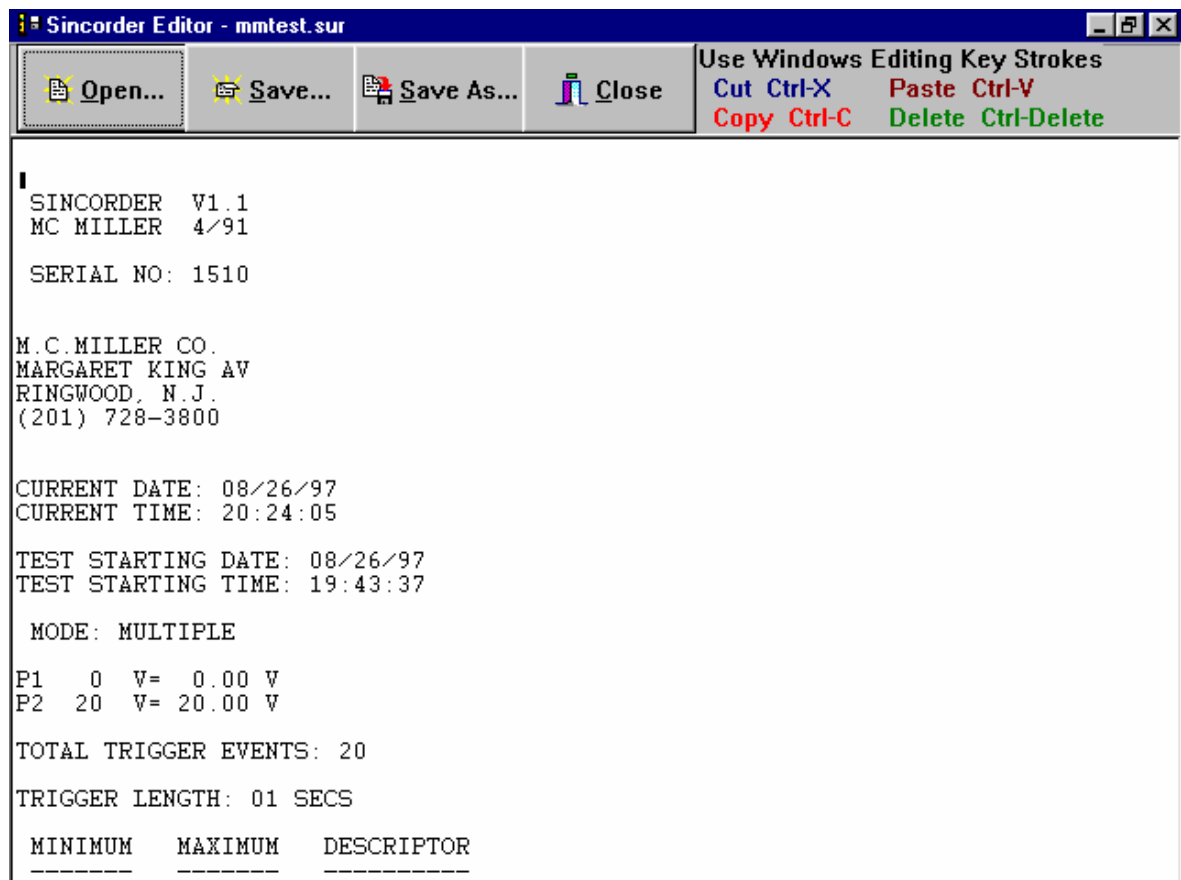
Press the  button to enter the online Help System

Press the  button to return to the Main Form.

EDIT FILES

A rectangular button with a light gray background and a thin black border. It contains a small icon of a document with a pencil and the text "Edit Files".

Pressing the button will take you to a simple text editor that will let you view or edit the SINCORDER Download Files and the Survey Route (upload) Files.

A screenshot of a text editor window titled "Sincorder Editor - mmtest.sur". The window has a menu bar with "Open...", "Save...", "Save As...", and "Close". To the right of the menu bar is a section titled "Use Windows Editing Key Strokes" with "Cut Ctrl-X", "Paste Ctrl-V", "Copy Ctrl-C", and "Delete Ctrl-Delete". The main text area contains the following text:

```
SINCORDER V1.1
MC MILLER 4/91

SERIAL NO: 1510

M.C.MILLER CO.
MARGARET KING AV
RINGWOOD, N.J.
(201) 728-3800

CURRENT DATE: 08/26/97
CURRENT TIME: 20:24:05

TEST STARTING DATE: 08/26/97
TEST STARTING TIME: 19:43:37

MODE: MULTIPLE

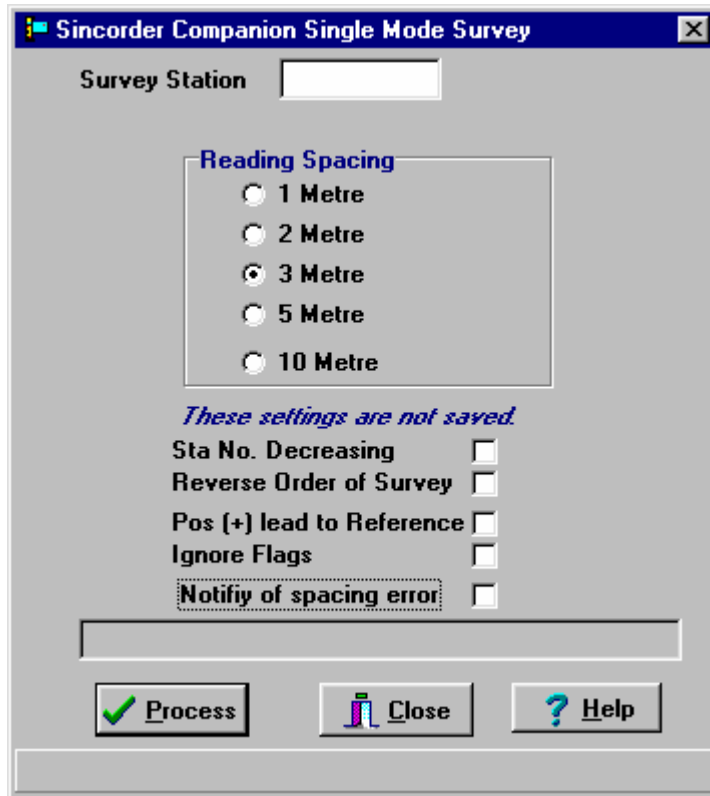
P1 0 V= 0.00 V
P2 20 V= 20.00 V

TOTAL TRIGGER EVENTS: 20
TRIGGER LENGTH: 01 SECS

MINIMUM MAXIMUM DESCRIPTOR
-----
```

Process SINCORDER Data

Press the  **Process** button on the Main Form and you are presented with the Process Form:



Enter the starting **Survey Station** of the survey in the edit box at the top of the form..

Check the box in the **Reading Spacing** panel that corresponds to the spacing at which the readings were taken.

Check the **Sta No. Decreasing** box if the survey was run with decreasing survey stations.

Check the **Reverse Order of Survey** box to reverse the order of the survey.

Check the **Pos Lead to Reference** box if the positive lead was connected to the reference electrode and the negative lead was connected to the structure.

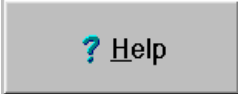
If you select the **Ignore Flags** option the data will be processed as is and any errors in spacing will carry over to the output.

If you do NOT check this box the flag spacing will be compared against the number of readings between flags and readings will be deleted if there are too many. An average of the previous few readings will be inserted if there are not enough, or a flag inserted if one was left out. Every effort should be made in the field to enter the flag symbol at the proper place as such editing DECREASES the validity of the survey.

If the **Notify of Spacing Error** box is checked processing will pause and an error message will be displayed each time a spacing error is encountered.

The Status of the operation is displayed in the text box at the bottom of the form.

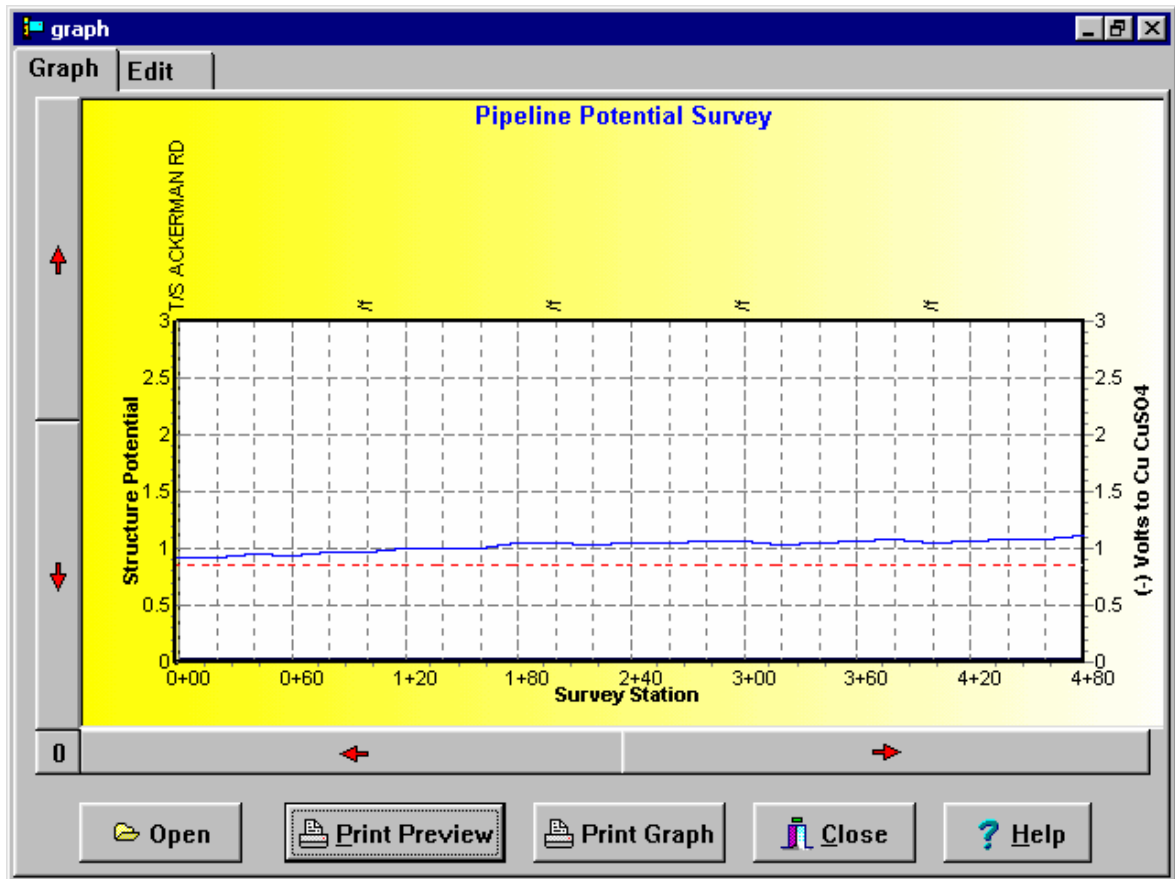
Press the  button and an Open File Dialog will help you choose the file to process.

Press the  button to enter the online Help System

Press the  button to return to the Main Form.

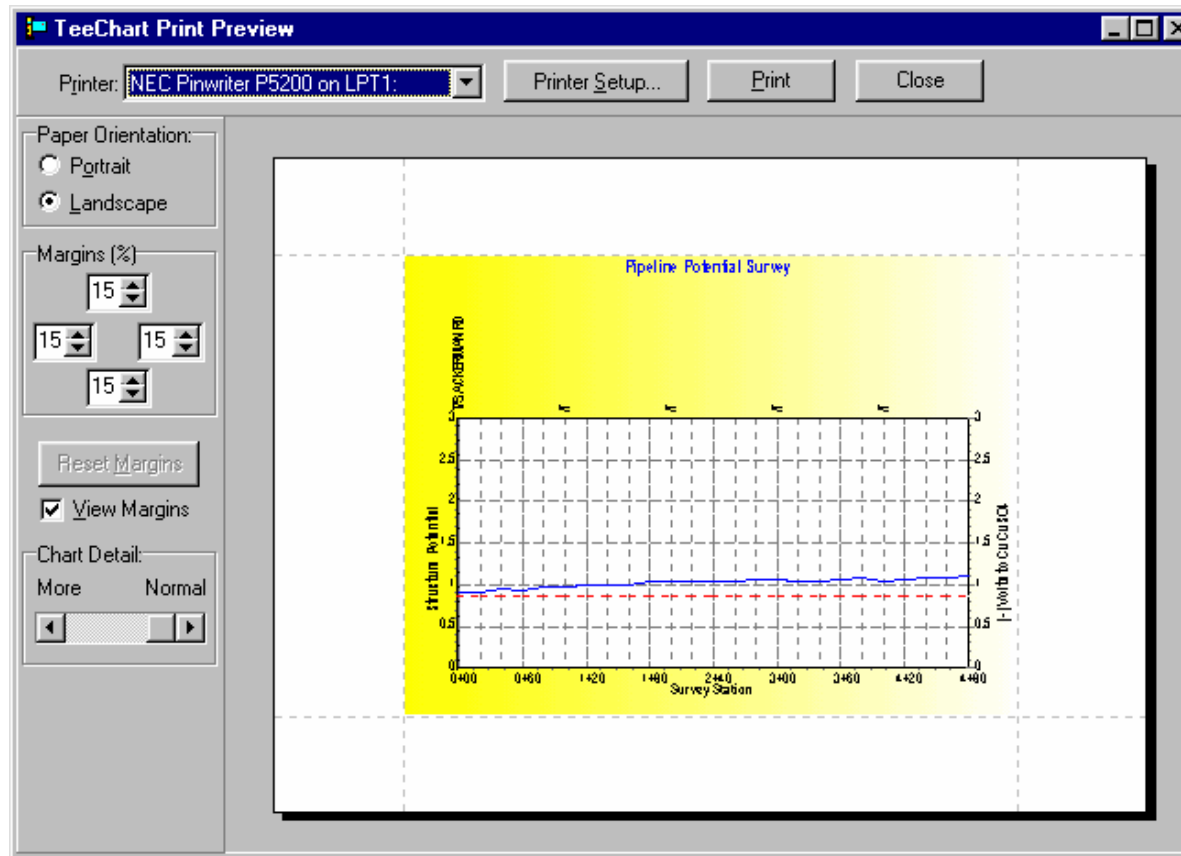
Graphs

Press the  **Graphs** button and the following form will be presented.



Press the  **Open** button and an Open File Dialog will help you choose the file to view.

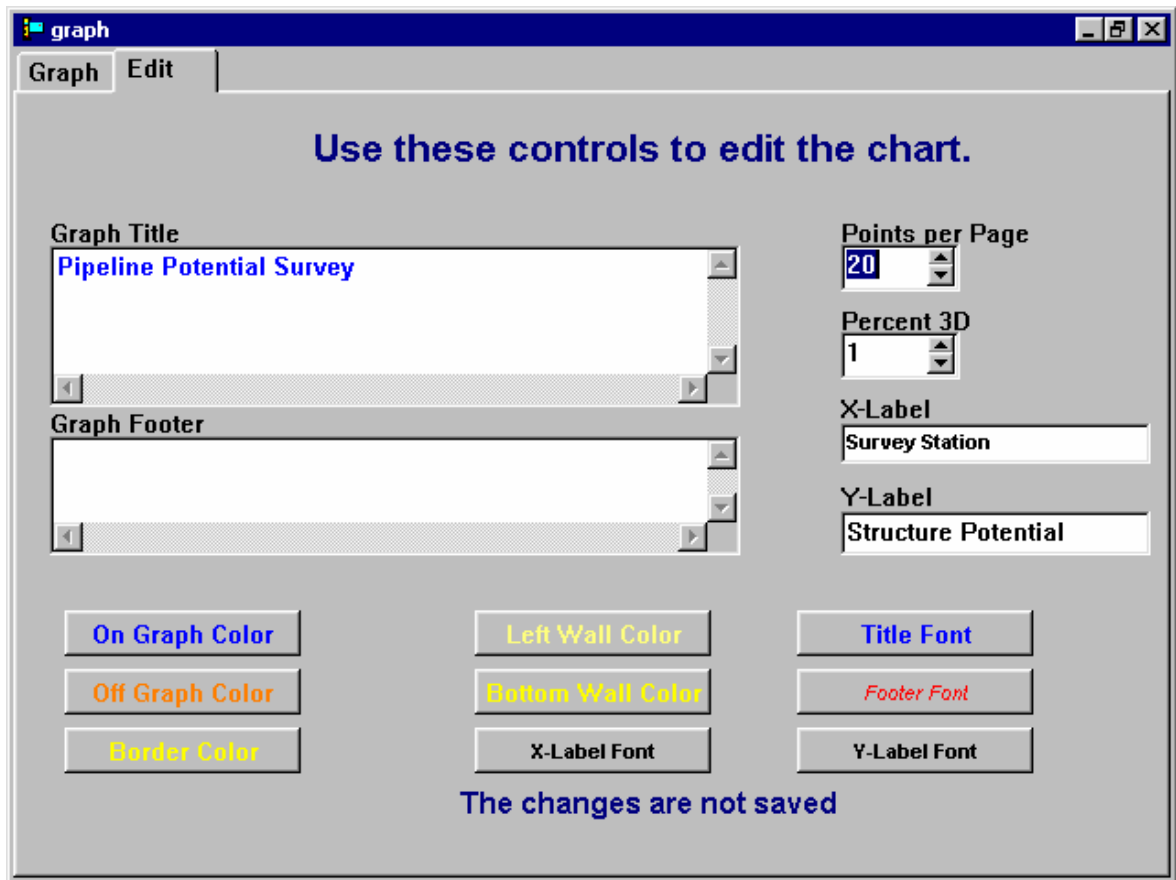
Press the  button and the Print Preview Form will appear.



This form is used to alter the way the graph will be printed. You can change the margins, printer setup and paper orientation. Press the **Print** button to print the current page.

Press the  button to print the entire graph.

Click on the  tab to switch to the graph setup up form.

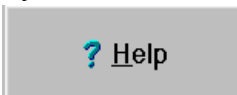


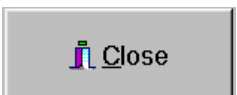
This form allows you to edit the Graph Title, add a Graph Footer, Edit the X-Label and the Y-Label.

You can also change the Number of points per page and the percent of 3D display.

Fonts and colors can also be changed for your taste.

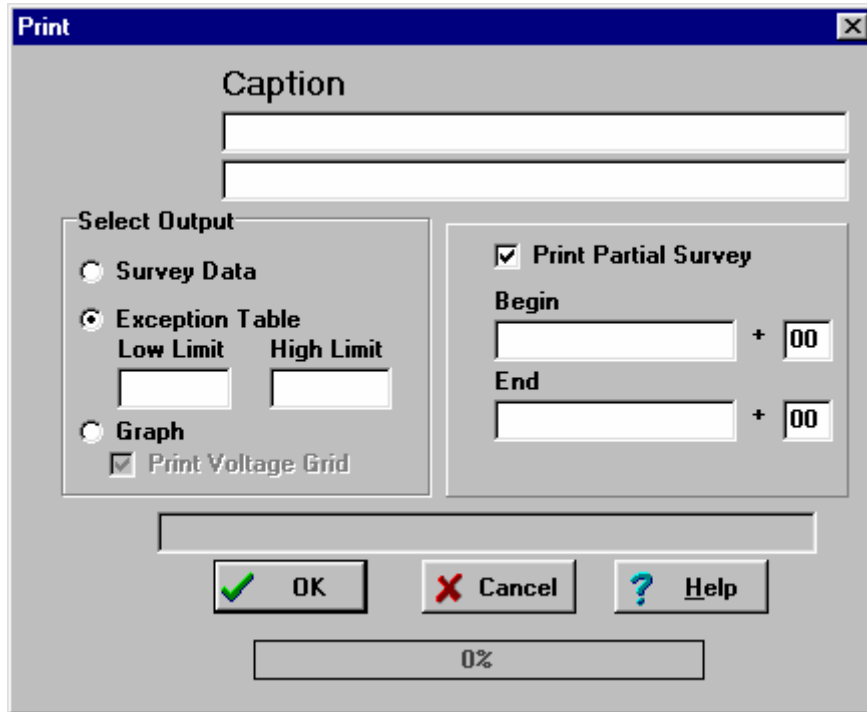
These changes apply to the current session only. The chart will return to the default when you exit the Graph Form.

Press the  button to enter the online Help System

Press the  button to return to the Main Form.

Reports

Press the  button and the following form will be presented.



The image shows a 'Print' dialog box with a title bar containing the word 'Print' and a close button. The dialog is divided into several sections. At the top, there is a 'Caption' section with two empty text boxes. Below this is a 'Select Output' section with three radio buttons: 'Survey Data', 'Exception Table' (which is selected), and 'Graph'. Under 'Exception Table', there are two text boxes labeled 'Low Limit' and 'High Limit'. To the right of the 'Select Output' section is a 'Print Partial Survey' section with a checked checkbox. Below this checkbox are two rows, each with a text box for 'Begin' or 'End' followed by a '+' sign and a two-digit number box (currently showing '00'). At the bottom of the dialog, there is a progress bar showing '0%'. Below the progress bar are three buttons: 'OK' (with a green checkmark icon), 'Cancel' (with a red X icon), and 'Help' (with a blue question mark icon).

Caption

Enter the Report Caption in these Edit Boxes. This might be the Line name and the Date Surveyed. Any information entered here will be printed on each page of the output.

Select Output

Survey Data-This option prints a formatted listing of the survey data. The header data from the SINCORDER will be printed on the first page of this report.

Exception Table- This option will print an Exception Table from the data. When you enter this section you will be prompted for the maximum acceptable potential, and minimum acceptable potential. A formatted listing will then be printed.

The header data from the SINCORDER will be printed on the first page of this report.

Print Partial Survey- This section prints only a portion of the selected report. You must enter the beginning and ending survey station numbers.



Press the button and an Open File Dialog will help you choose the file to process.



Press the button to enter the online Help System

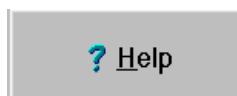


Press the button to return to the main form.

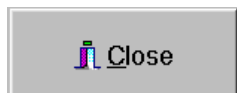
From the Main Form



Pushing the button displays the About Box that contains the version and copyright information



Press the button to enter the online Help System



Press the button to return to Exit to the Desktop.

CUSTOMER SERVICE

Customer Service

M. C. MILLER CO. offers full support for SINCORDER COMPANION. Licensees are encouraged to take full advantage of these valuable services that include:

Technical Support

Program Upgrades

One Year replacement of defective disk

To qualify for these benefits and services, you must return the completed license agreement. Please fill out and sign the enclosed PROGRAM LICENSE AGREEMENT and mail it to M.C. MILLER CO. immediately.

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You are not licensed to use this software until you have agreed to, signed and returned the License Agreement. If you do not agree with the terms you may return the documentation and the sealed distribution disk within five days for a full refund less shipping charges.

2. Technical Support

M. C. MILLER CO. is dedicated to assisting you in achieving the maximum satisfaction from SINCORDER COMPANION. If you have any problems using the program take the following steps:

a: Consult the user manual. It has been carefully written to provide answers to most questions. Make sure that the program is compatible with your hardware and operating system.

b: If you still have difficulties, Fill out the SINCORDER COMPANION Problem Report and mail it to us. We will respond promptly

3. Upgrades

From time to time M. C. MILLER CO. may release new versions of SINCORDER COMPANION with additional features. M. C. MILLER CO. will notify you by mail of the option to order the new version at a special discount price.

4. Disk Replacement

If within one year your Distribution Disk should become defective you should return it to M.C. MILLER CO. for replacement at no charge. If your Distribution Disk becomes defective after one year, you may obtain a replacement disk by returning it, along with a money order for \$25.00 for regular mail or \$35.00 for Express Mail to M.C.MILLER CO..

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PROGRAM LICENSE AGREEMENT

On the condition that you have paid the license fee and that you sign and return this license agreement to M.C. Miller Co., you are granted a nonexclusive license to use Sincorder COMPANION. Failure to sign and return this agreement and still use this software is illegal.

I understand that I may use SINCORDER COMPANION on a single CPU. I understand that I may not:

- A. provide use of the software in a computer service business, network, time-sharing, multiple CPU or multiple user arrangement to users who are not individually licensed;
- B. make copies of the User's Manual or the program disks;
- C. make alterations in the software;
- D. grant sub license, leases, or other rights in the software to others;
- E. make verbal or media translations of the User's Manual;
- F. make modifications for use with non-compatible hardware;
- G. make telecommunications data transmissions of the software;
- H. distribute or rent the software on either a permanent or temporary basis to others.

I agree that SINCORDER COMPANION remains the property of AADON. AADON has tested the software and reviewed the documentation, however, I understand that AADON MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR implied, With RESPECT TO THIS SOFTWARE OR DOCUMENTATION, THEIR QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. I AGREE THAT THIS 'SOFTWARE AND DOCUMENTATION ARE LICENSED 'AS IS' AND I, THE License, AM ASSUMING THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE

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I hereby acknowledge that I have read this agreement, understand it, and agree to be bound by its terms and conditions:

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

SIGNATURE: _____

Date: _____, 19

SERIAL #: _____

Return this Signed Original to: M.C. Miller Co., INC.. 341 Margaret King Ave. Ringwood, New Jersey 07456

PROGRAM LICENSE AGREEMENT User Copy

On the condition that you have paid the license fee and that you sign and return this license agreement to M.C. Miller Co., you are granted a nonexclusive license to use Sincorder COMPANION. Failure to sign and return this agreement and still use this software is illegal.

I understand that I may use SINCORDER COMPANION on a single CPU. I understand that I may not:

- A. provide use of the software in a computer service business, network, time-sharing, multiple CPU or multiple user arrangement to users who are not individually licensed;
- B. make copies of the User's Manual or the program disks;
- C. make alterations in the software;
- D. grant sub license, leases, or other rights in the software to others;
- E. make verbal or media translations of the User's Manual;
- F. make modifications for use with non-compatible hardware;
- G. make telecommunications data transmissions of the software;
- H. distribute or rent the software on either a permanent or temporary basis to others.

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I hereby acknowledge that I have read this agreement, understand it, and agree to be bound by its terms and conditions:

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

SIGNATURE: _____

Date: _____, 19

SERIAL #: _____

Keep this copy for your records.

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M. C. MILLER CO.

341 Margaret King Ave.

Ringwood, New Jersey 07456

PROBLEM REPORT

Use this form to report software problems, documentation errors, or suggested enhancements. Mail the form to:

M.C. Miller Co.
341 Margaret King Ave.
Ringwood, New Jersey 07456

Name _____

Address _____

City _____ State _____ Zip _____

Phone (____) - ____ - _____

Date _____

Serial No. _____ Version _____

PLEASE CHECK ONE OF THE FOLLOWING:

- _____ Software Problem
- _____ Software Suggestion
- _____ Documentation Error
- _____ Other

SYSTEM DESCRIPTION

Manufacturer_____

Model_____

Memory_____

Video Board

PROBLEM DESCRIPTION

Describe the problem, how to reproduce it, and any error codes reported. If you have any suggestions for correction or upgrades please include them.

This image shows a blank sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for writing. There are no margins, text, or other markings on the paper.