



Exēba™

E-SWIPE

Version 2.0

USER'S GUIDE

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CHAPTER 1 - Introducing *E-swipe*

E-swipe is the ultimate Windows serial communication software for the IBC smart readers. *E-swipe* provides all the features you need to communicate with the reader easily and efficiently.

E-swipe Features

Briefly, *E-swipe* allows you to:

- ✓ Configure the communication port and communication settings to the settings that best suit the hardware you are using.
- ✓ Define the poll and delay settings such as time-outs, and poll delay.
- ✓ Define the protocol parameters such as turning the protocol on and off and defining the range of addresses to be polled.
- ✓ Create the schedules and employee files to download to the reader and view the data files uploaded from the reader using the built-in text editor.
- ✓ Download a schedules file and an employee file to the reader and view the reader's response instantly.
- ✓ Upload the access control list (employee and schedules data) stored in the reader and save the data to a file if required.

- ✓ Poll the reader to get the clock in and out data. If the readers are networked, you can poll a single address or a range of addresses.
- ✓ Add the computer's date and time when polling a J reader.
- ✓ Program the reader by sending the appropriate commands. If the readers are networked, these commands can be sent to any address you enter. The software will automatically add the command prefixes and terminating characters. The response that comes back from the reader can be viewed in the response text box.
- ✓ Set the barcode options for every symbology that the reader supports. These options include: enabling and disabling the symbology, setting the length of the barcode read, and specifying the barcode prefix.
- ✓ Set the magstripe options for track 1, 2 and multitrack readers. These options include: enabling and disabling the track, specifying the prefix and delimiter characters, setting the magstripe length, etc...
- ✓ Set the relay options, speaker options and LEDs' options to your preferences.

Using this Guide

Organization of the guide

Chapter 2 – explains in details the process of installing the software.

Chapter 3 – provides specific information that you will use to configure *E-swipe*.

Chapter 4 – provides detailed information on the communication port.

Chapter 5 – if you have never used a text editor before, you should read this chapter to become familiar with the procedures used in manipulating a file.

Chapter 6 – explains what a log file is and how to save data to it.

Chapter 7 - if you have purchased a SA/STA reader, pay close attention to chapter 7. This chapter illustrates how to download and upload the access control list.

Chapter 8 – each section of this chapter describes the polling process of the transactional data from a certain type of reader. You should read the section addressing the polling process of the type of reader you purchased.

Chapter 9 – explains how to change and program the reader to the options required.

Appendix I – describes the warning and error messages of *E-swipe*.

Appendix II – explains how to get technical support and help on *E-swipe*.

CHAPTER 2 – Installing *E-swipe*

The installation program allows you to install Exeba *E-swipe* from either a CD or floppy disks. But, before you install it, you should verify that your computer meets certain requirements.

System Requirements

E-swipe has the following system requirements:

- ❑ An IBM PC or compatible computer.
- ❑ Microsoft Windows 95/98, or NT.
- ❑ An 80486 or higher processor.
- ❑ A minimum of 8 MB of RAM.
- ❑ Approximately 10 MB of available disk space.

Installing *E-swipe*

1. Start Microsoft Windows.
2. Close other applications
3. Insert the *E-swipe* CD-ROM into your CD-ROM drive.
4. Choose Run from the Start menu.

5. When the Run dialog box appears, type `x:\setup` (substitute the letter of your CD-ROM for x) and press Enter.
6. Follow the on-screen instructions.

CHAPTER 3 – Customizing *E-swipe*

E-swipe Main Screen

When you start *E-swipe*, the main window will appear. From this window, you can access all of the application's features.

Main Menu

There are six main menus:



Setup – contains menu commands to customize the communication parameters used in the software.

Terminal Data – contains menu commands to view and

save the data sent and received to and from the reader.

Download – contains menu commands to download data files to the reader.

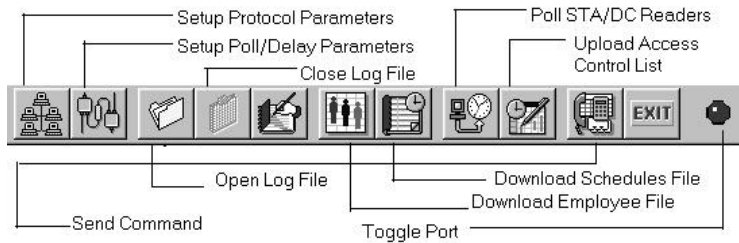
Upload – contains menu commands to poll transactional data and upload the access control list from the different readers.

Reader Commands – contains menu commands to program the reader.

Help – contains menu commands to access the on-line help.

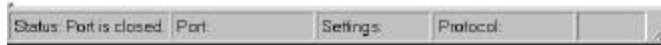
Button Bar

The button bar, which is located under the main menu, contains buttons that you can use to easily access some of the frequently used commands of *E-swipe*.



Status Bar

The status bar displays messages on the communication status and the current settings in *E-swipe*. It is divided into 5 panels. These panels are:



Status – displays the communication messages.

Port – displays the number of the port used in communication.

Settings – displays the settings of the port set up in the software.

Protocol – displays the setting of the protocol as it is set up in *E-swipe*.

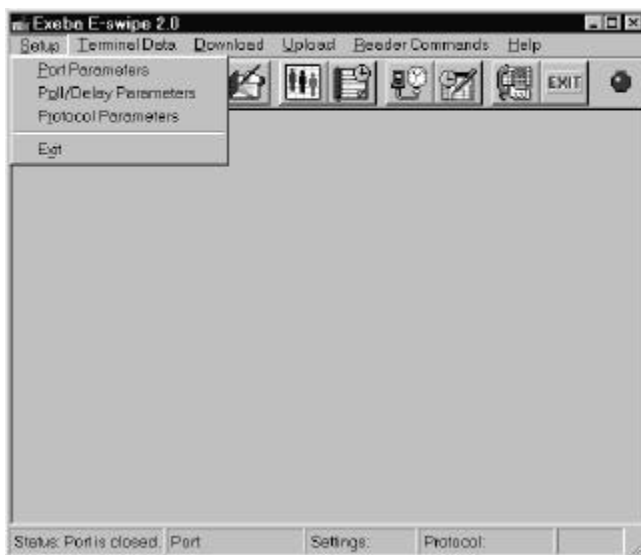
Connect Time – displays the duration the port has been opened.

Set up *E-swipe* Options

Before you start communicating with the reader you need to change the default settings in the software to the settings that best suit your hardware. The Setup menu provides commands for setting up options for the application. Whereas, the Reader Commands menu provides commands for setting up the reader.

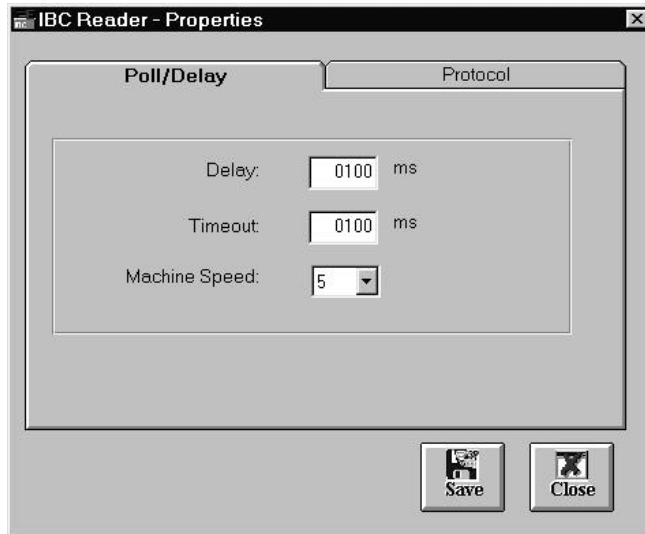
In order for the software to communicate properly with the reader, both the reader and the software should have the same settings. It is very imperative that when you change the setting on one, to change them on the other.

Commands available under the Setup menu are as follows: **Port Parameters** (described in the next chapter), **Poll/Delay Parameters** , **Protocol Parameters**.



Poll/Delay Parameters

The Poll/Delay Parameters command can be accessed from the Setup menu. The settings of the poll and delay parameters affect the commands that send and receive data to and from the reader. You may need to try different settings until you find the correct configuration for your hardware.



These settings are:

Delay

Used by the polling commands only (polling STA, SA, DC and J reader). The delay is the number of milliseconds (0000-9999) the polling function should wait between polls. The default is 100 millisecond.

Time Out

The number of milliseconds (0000-9999) the software should wait, after sending a command, for a response from the reader before timing out. The default is 100 millisecond.

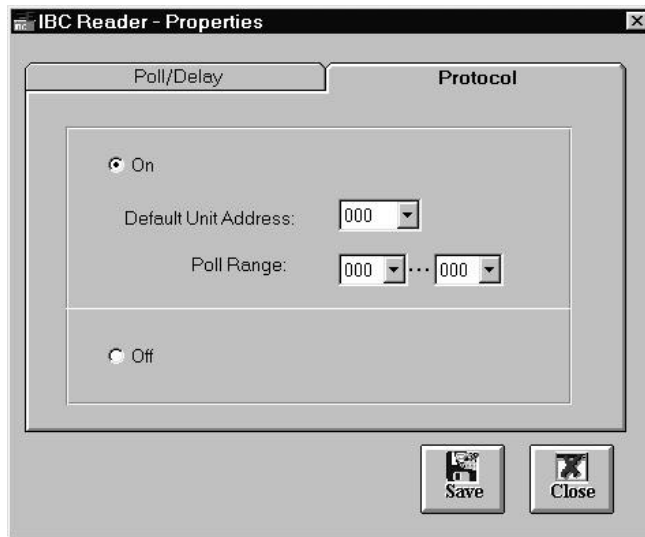
Machine Speed

The amount of time *E-swipe* should wait after sending a command and before receiving data from the reader. You can select any number from 1 to 50. The number you select is represented as a multiple of 10th of a millisecond. So if you select 1, the wait time will be 10 millisecond. The larger the number, the slower the data will be sent and received. However, a small value may result in receiving fragmented data.

Protocol Parameters


The reader can communicate with the software in protocol (network) or non protocol mode. The protocol command under the Setup menu allows you to specify the mode that the software will be using when communicating with the reader.

To access this command, select **Setup** ⇒ **Protocol Parameters**.




 To turn off the protocol on the reader, refer to the following topics: **Set Reader Options**, and **Send Command**.

How to turn the protocol off?


1. First, turn the protocol off on the reader by using one of the commands mentioned above.
2. Select the *Protocol* tab on this window if it not already selected.
3. Select the *Off* radio button.
4. Click on the Save button .


How to turn the protocol on?

1. If the readers are not set to protocol, then while the protocol is turned off in *E-swipe*, turn on the protocol on all of the readers.
2. Select the *Protocol* tab on this window if it is not already selected.
3. Select the *On* radio button to turn on the protocol in the software.
4. Then select the default address from the *Default Unit Address* list. This address can be between 000 and 126 and will be used as a default address when downloading, uploading or programming the reader.
5. Finally select the range of addresses that the polling functions should poll. Valid values range from 000 to 126. Make sure the value you select for the *Range From* is lower than the value you select for the *Range To*.
6. Click on the Save Button .

Command Buttons

Once you change the settings of the Poll/Delay parameters or the Protocol parameters you need to save and close.

Click on the Save button  after you make the required changes to the settings.

Click on the Close button  to close the window. This button closes the window without warning of any unsaved changes. So make sure you save before you exit.



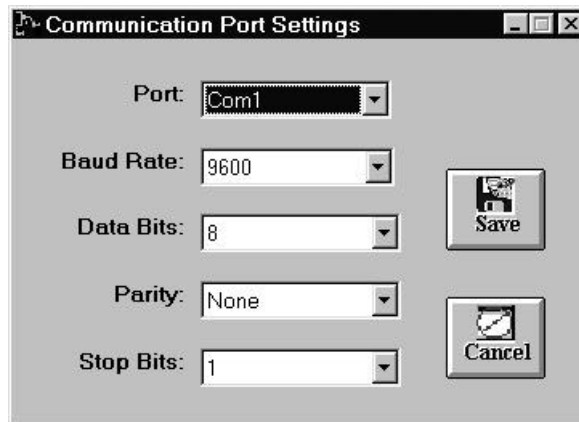
CHAPTER 4 – The Communication Port

This chapters describes in details the process of changing the port parameters, opening and closing the port.

Port Parameters

This command allows you to select the communication port settings that *E-swipe* should use when communicating with the reader.

To access the Port Parameters command, select **Setup** ⇒ **Port Parameters**.



Then change the following parameters if necessary.

Port

Select the port that the reader will be connected to. You can choose from COM1 to COM16.

Baud Rate

Select the baud rate. The selectable range is 300 to 256000.

Data Bit

Select 5, 6, 7 or 8.

Parity

Select even, odd, none, mark or space.

Stop Bits

Select 1, 1.5, or 2.

In protocol mode, the allowable settings for these parameters are as follows: Baud Rate between 1200 and 19200, Data Bits = 8, Parity = None, Stop Bits = 1.




If the communication port was open before you changed these setting, the changes will not take effect until the port is reopened.

This command will only change the port parameters in the software. To change the settings on the reader, use the Set Reader Options command or the Send Command.

Command Buttons

When you change any of the settings you need to save and close the window.

Click on the Save button  to save the changes made.

Click on the Close button  to close the window. This button closes the window without warning of any unsaved changes. So make sure you save before you exit.

Open / Close the port

Eventhough there is no specific command under the main menu that opens the port, *E-swipe* provides several ways to open it both automatically and manually.

When you select any of the commands under the following menus the port will be opened automatically. These menus are:

Download
Upload
Reader Commands

The commands under these menus will open the port only if it is closed. They will reopen it only if they were accessed after changing the settings for the port and port parameters.



Changing the settings under the port parameters will not reopen the port.

To open the port manually, click on the light bulb icon of the button toolbar.

The light bulb icon also serves as an indicator for the status of the port. A green bulb icon indicates that the port is open. A red bulb icon indicates that the port is closed.

The status bar for the main window displays the status and settings for the communication port.

Once the port is opened it cannot be automatically closed. To close the port, you should click on the light

bulb icon of the button bar. The port is closed when you exit *E-swipe*.



The port will fail to open if it is occupied by another hardware such as a mouse.

CHAPTER 5 – *E-swipe* Text Editor

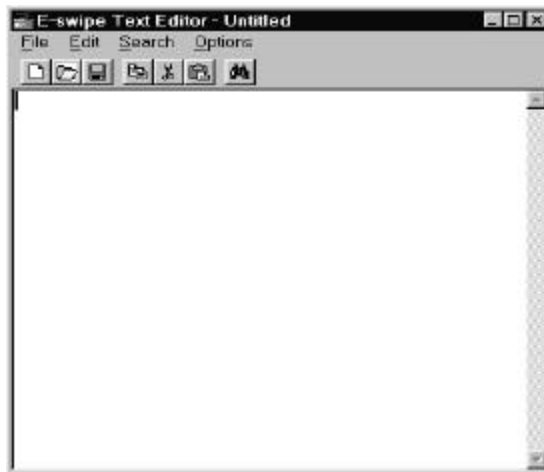
Introduction

The *E-swipe* text editor is a small editor that allows you to create and save a text file. You may want to use this feature to create the schedules and employee files that need to be downloaded to the reader. Or you may want to use it to view the log or polled data files uploaded from the reader.

Opening the Text Editor

To open the text editor, follow the steps below.

1. From *E-swipe*'s main menu, select **Terminal Data**.
2. Then select *E-swipe* **Text Editor**.



E-swipe's Editor's Main Screen

Main Menu

File – contains commands to create, open and save a file.

Edit – contains commands to edit the text in an open file.

Search – contains commands to search for text in an open file.

Options – contains commands to show or hide the editor's toolbar.

Tool bar

The tool bar has buttons that allows you to access the editor's features quickly. These buttons are:

New File - use to create a new file.

Open File - use to open an existing file.

Save File - use to save a new or existing file.

Copy - use to copy text.

Cut - use to cut text.

Paste - use to paste text.

Find - use to search for text.

The tool bar can be made invisible by selecting **Toolbar** from the **Options** menu. When the toolbar is visible a check mark will appear next to the Toolbar option.

Working with Files

Create a New File

To create a new text file, follow the steps below.

1. From the *E-swipe* text editor's main menu select **File**.
2. Then select **New** or click on the **New File** button of the toolbar.

If you have made changes to an open file, *E-swipe* will ask you if you want to save the changes. Save the file if necessary and continue with the next step.

3. Once created, you can begin typing.



When you first open *E-swipe*'s text editor, a new file will be automatically created for you.

Open a File

To open a file in *E-swipe* text editor,

1. From the **File** menu, select **Open** or click on the **Open File** button of the toolbar.
2. In the *Look In* list box, select the drive and folder where the file is.
3. Double-click on the file name, or highlight it and click on the **Open** button.



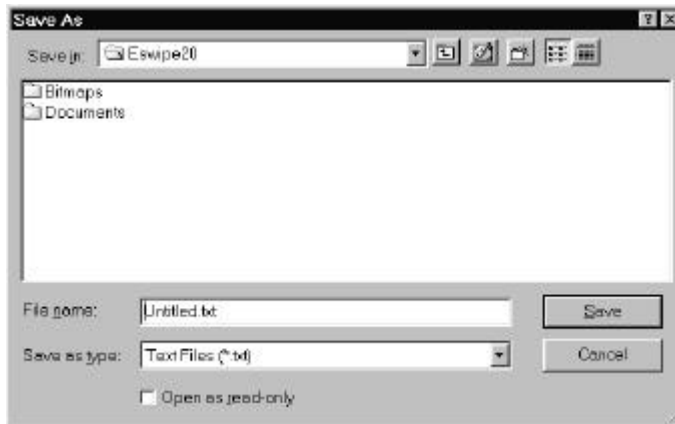
The editor cannot open files that are larger than 65K.

Save a File

After you make changes to a file using *E-swipe's* text editor, you may want to save it.

To save a new file,

1. From the **File** menu, select **Save As**. The *Save As* dialog window will appear.



2. In the *File name* text box, type a name for the file.
3. In the *Save As Type* list box, select the type of the file.
4. In the *Save In* list box, select the path (drive name and folder) where you want the file to be placed. The default is the application path.
5. Then click on the **Save** button to save the file. The **Cancel** button on this dialog box cancels the save operation.

To save the changes to an existing file,

1. From the **File** menu, select **Save**. The file will automatically be saved under the path and name that appears in the title bar. If you want to change the name or location of the file use the Save As command as described above.

Close a File

E-swipe cannot upload or download to and from a file if it is being used by any application including its text editor.

There are two ways in which an open file in the text editor can be closed.

1. By opening another file or by creating a new file.
2. By closing the text editor.

Work with Text

E-swipe's text editor allows you to cut, copy, paste and search for text. All these options are located under its Edit menu. But before you use any of them you need to select the text. Under the Edit menu, the Select All option allows you to select all the text at once.

Cut Text

To cut text,

1. Select the text you want to cut.
2. Select **Edit** and then select **Cut**, or click on the **Cut** button in *E-swipe* text editor's toolbar.

Now you can paste the text you cut anywhere in the document.

Copy Text

To copy text using *E-swipe*'s text editor,

1. Select the text you want to copy.
2. Select **Edit** and then select **Copy**, or click on the **Copy** button in the *E-swipe* text editor's toolbar.

The copied text can be pasted in another location in the document using the paste command.

Paste Text

The text should be copied or cut before you can paste it.

To paste text,

1. Place the insertion point where you want to paste the text.
2. From the **Edit** menu, select **Paste**.

Search for Text

From *E-swipe*'s text editor Search menu, you can access commands that help you locate specific words or characters quickly and easily.

To locate text,

1. In the document, click where you want to start searching.
2. From the **Search** menu select **Find**. The *Find Text* window will appear.



3. In the *Find What* text box type the text you want the text editor to look for.
4. Check the *Match Case* box if you want to find the text that matches the upper and lower case of the text you typed.
5. The text editor will start searching the document from the insertion point and in the direction you specify in the **Find** dialog box.
6. Click on the **Find** button.
7. If you want to find additional instance of the same text, select **Search** and then select **Find Next**.

CHAPTER 6 – The Log File

The data received from the reader can be saved in a file using the Open Log File command. Once you open a log file, all the data coming from the reader will be saved in it.

In this file all types of data will be saved. Such as transactional data, access control data, responses etc... Whereas, the data files that you open when uploading data will only save the uploaded or polled data and will be closed automatically when the operation ends. When you open a log file and an upload file, you will have two copies of the same data.

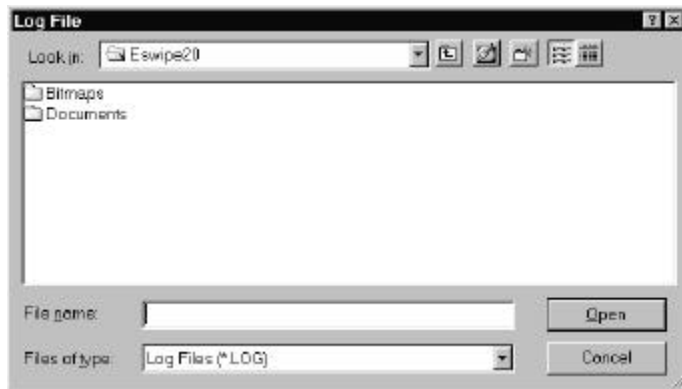


Open Log File

To open a log file,

1. Select **Terminal Data**.
2. Select **Open Log File**.

The *Open Log File* dialog window will appear.



3. In the *Look In* list box, select the drive and folder where you want the file to be placed.
4. In the *File Name* text box, type a name for the file. If that name already exists, you will be asked if you want to overwrite it.
5. Click on the **Open** button of the *Open Log File* dialog window.
6. The file will remain open until you close it using the Close Log File command under the Terminal Data menu or you exit *E-swipe*.



E-swipe starts saving the data in the log file the moment you open it. However any data received before the file was opened will be lost.

Close Log File

The Close Log File command is enabled only if a log file is open.

As mentioned in the Open Log File topic, the log file is closed automatically once the application is closed. However, if you want to be able to view the contents of this file while *E-swipe* is running you need to close it.

To close a log file,

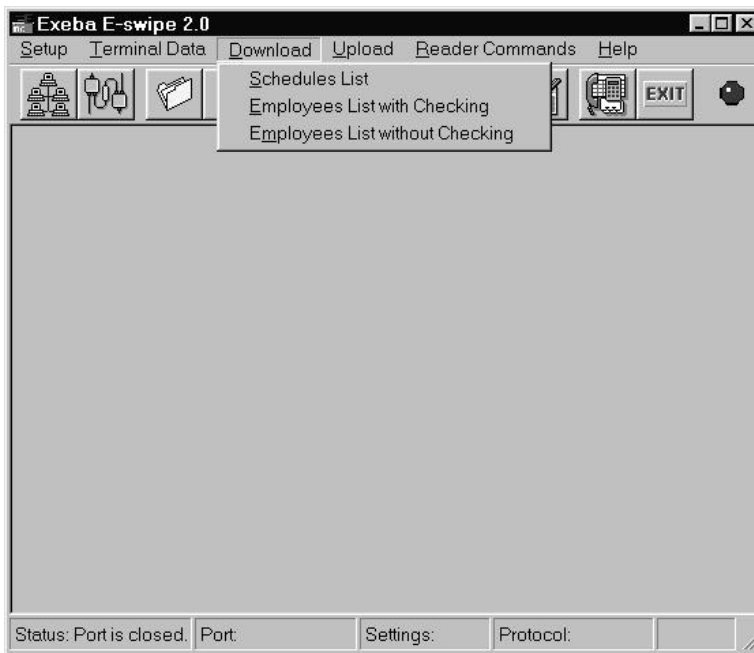
1. Select **Terminal Data**.
2. The select **Close Log File**.



Do not close the file until all the data you want to be saved in it is received from the reader.

CHAPTER 7 Access Control List

In order to take advantage of the access control capabilities of the SA and STA readers you need to download schedule and employee data to them. Once you download these lists you may want to upload and view the data stored on the reader. This chapter describes the download and upload process of the access control list.



As you can see in the figure above, the Download menu contains three commands to download the access control list. These commands are described in the following sections.

Download Schedules List

The download schedules list allows you to download a schedules' file to the reader.

Before you access this utility you should create the schedule list and save it in a text file. You can create the list using any text editor or using *E-swipe's* text editor. If you have the data available try exporting it to an ASCII format.

The data contained in the file should be in the following format:

sss, hh:mm, hh:mm, d where

Field	Description
sss	a 3-digit schedule# (001-100)
d	the day of the week (Monday=1, ..., Sunday = 7)
hh:mm	the schedule's start time (e.g. 13:00)
hh:mm	the schedule's end time (e.g. 08:00)

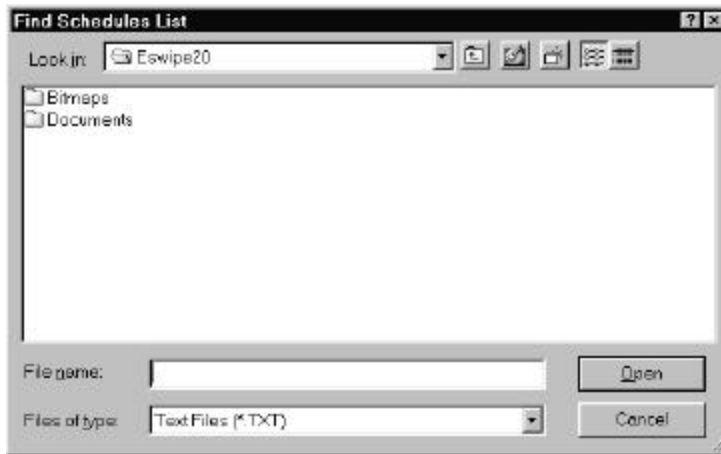


The time should be in 24-hour format. For example, 1 PM should be entered as 13:00. This file should not contain a header.

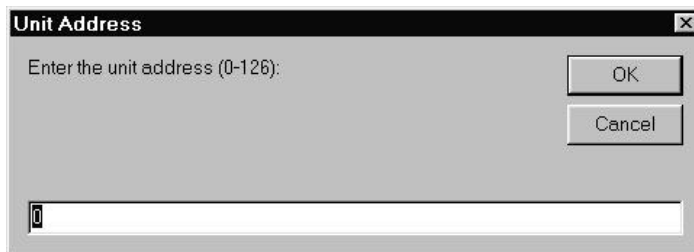
To download a schedules' list,

1. Select **Download**.
2. Select **Download Schedules List**.

The *Open Download Schedules File* dialog window will appear.



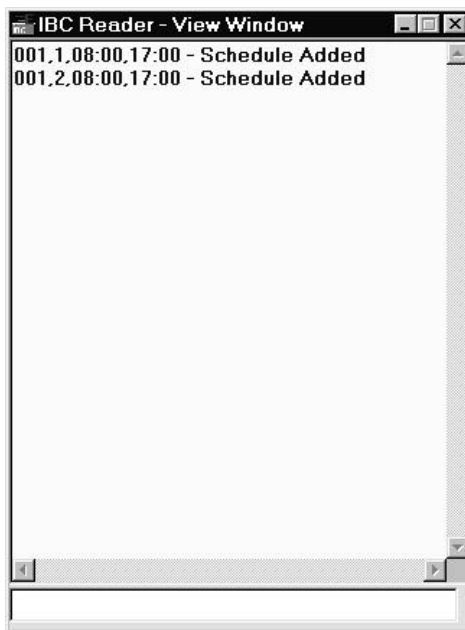
3. Select the file you want to download.
4. Click on the **Open** button. If you click on the **Cancel** button the download operation will be cancelled.
5. If the protocol is enabled in the software, the *Unit Address* window will appear.



If you want to download to an address other than the default address, enter a new address. This address can be between 0 and 126.

6. The *Cancel Send/Receive* window will appear to allow you to cancel the download operation at anytime.

The responses coming from the reader will appear in the *View* window.



For more information, consult the IBC SA/STA product user's guide on the Add Schedule programming command.

Download Employees List

The download Employee List utility allows you to download a file of employee IDs and schedule numbers to the SA and STA reader.

You should download the schedule list to the reader before you download the employee list, unless all the schedules in the employee list exist in the reader or no schedule check is required.

Before you download the file you should create it using any text editor, including *E-swipe's* text editor. The data in the file should be in the following format:

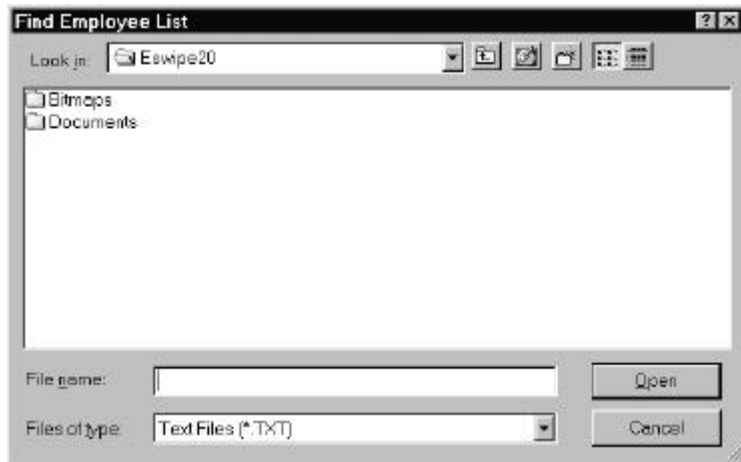
sss,iiii.... where

Field	Description
sss	A 3-digit schedule# (000-100). Enter 000 if you want to allow the employee to clock in and out anytime.
iiii....	The employee ID.

To download an employee list,

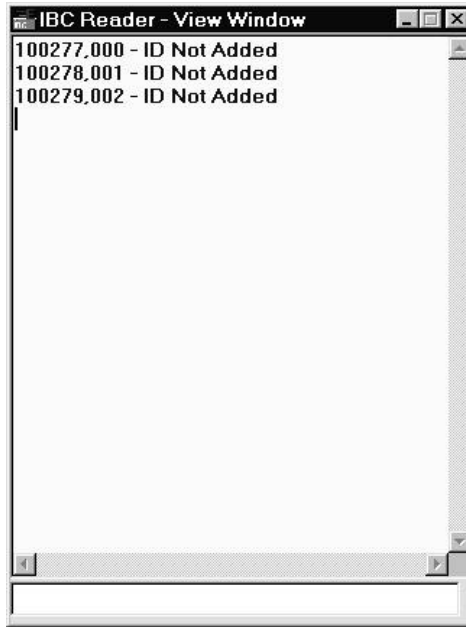
1. Select **Download**.
2. Select **Employee List with Checking** if you want the reader to check if the ID exists before adding it,
3. Select **Employees List without Checking** if you want the reader to add the ID without checking if it exists.

The *Open Download Employee File* dialog window will appear.



4. Select the file you want to download.
5. Click on the **Open** button to download the file.
6. If the protocol is enabled in the software, the *Unit Address* window will appear. If you want to download to an address other than the default address, enter a new address. This address can be between 0 and 126. Click on the **OK** button of this window.
7. The *Cancel Send/Receive* window will appear. This window allows you to cancel the download process at any time by clicking the **Cancel** button.

Responses from the reader will be sent to the *View* window. The reader returns one of three responses: ID is added, ID is not added, or Schedule is invalid.



For more information, consult the IBC SA/STA product user's guide on the Add Employee into list programming command.

Upload Access Control List

The Access Control List allows you to upload the control list from the reader. Use this command if you want to know the list of employee IDs and the schedules stored on the reader.

To upload the access control list, follow the steps below:

1. Select **Upload** from *E-swipe* 's main menu.
2. Then select **Upload Access Control List**.
3. The *Upload File* dialog window will appear.

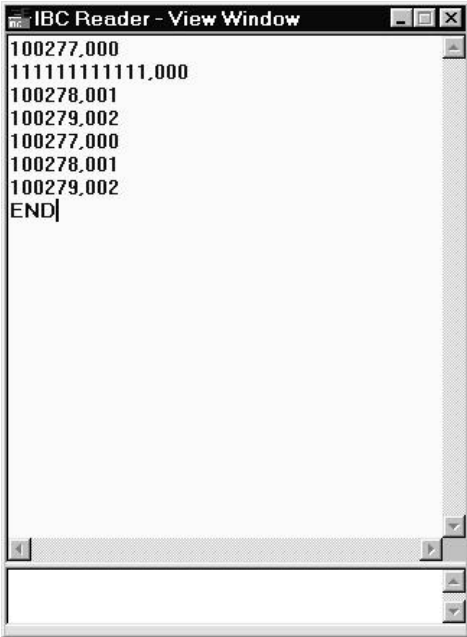
If you want to save the data in a file, select the folder from the *Look In* list and enter the name of the file in the *File Name* text box. Then click on the **Open** button.

If you do not want to save the data, click on the **Cancel** button of this window.

4. If the protocol is enabled the *Unit Address* window will appear. Enter the address (0 - 126) from which you want to upload the data. Then click on the **OK** button. If you click on the **Cancel** button of the Unit Address window the upload operation will be cancelled.

5. Next, the *Cancel Send/Receive* window will appear. The Cancel button of this window allows you to cancel the upload operation at any moment.

The data coming from the reader will be sent to the *View* window. It will appear as follows:



iii...,sss where

Field	Description
iii...	The employee ID.
Sss	The schedule#.

CHAPTER 8 – Polling Data

There are two types of data that can be uploaded from the reader. These two types are: transactional data and access control data.



Depending on the type and operating mode of the reader, you can upload transactional data using the following commands that are available under the Upload menu:

Poll STA, DC Reader

Poll and Purge STA, DC Reader
Poll SA Reader
Poll J Reader

The access control list can be uploaded from an SA or STA reader using the following command which is also available under the Upload menu:

Upload Access Control List (described in the previous chapter).

Poll STA/DC Readers

Readers such as an STA, and DC store the transactional data. From *E-swipe* you can upload this data as follows:

1. Select **Upload** from *E-swipe*'s main menu.
2. Select **Poll STA/DC Reader** if you want to poll the data and keep it in the reader.

Select **Poll and Purge STA/DC Reader** if you want to poll the data and then clear the reader's memory.

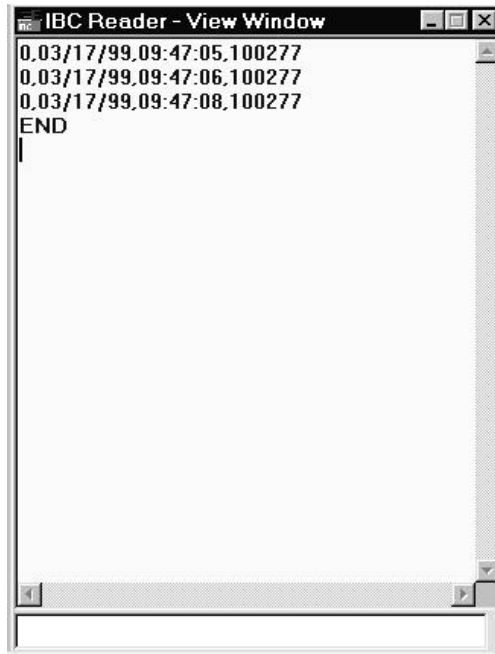
The *Upload Data File* dialog window will appear.

3. If you want to save the polled data in a file, enter a path and name for it and click on the **Open** button. Otherwise, click on the **Cancel** button.
4. If the protocol is not enabled, the reader connected to the serial port will be polled until an "END" is received.

If the readers are networked, the poll command will poll each reader whose address falls in the range of addresses set up in *E-swipe*. Each address will be polled until an "END" is received. Then the next address in the range will be polled and so on.

If you have selected a Poll data file, then all the data except for the "END" will be saved in it.

The data received will appear in the *View* window as follows:



s,mm/dd/yy,hh:mm:ss,iii..... where

Field	Description
S	The status of the transaction 0 – Access is granted. 1 – Bad employee ID. 2 – Employee is not clocking in/out within the scheduled time.
Mm/dd/yy	The date.
Hh:mm:ss	The time of clock in / out.
iii.....	The employee id.



The Poll and Purge STA/DC Reader command polls the data from the reader until an “END” is received. It then sends the purge command to purge the contents of

the transactional data file. If you cancelled the polling process at any time before the "END" is received the data on the reader will not be purged.

Poll SA Reader

Like the J reader, the SA reader does not store the transactional data. It should be connected to your PC during operation, otherwise, the data will be lost. Unlike the J reader, the SA reader stamps the data with a time and date.

To poll an STA reader, follow the steps below:

1. Select **Upload** from *E-swipe*'s main menu.
2. Select **Poll SA Reader**.

The *Upload Data File* dialog window will appear.

If you want to save the polled data in a file, enter a path and name for it and click on the **Open** button.

Otherwise, click on the **Cancel** button.

In protocol as well as in non protocol mode, the data will appear in the View window once scanned.



This data will appear as follows:

mm/dd/yy hh:mm:ss iii... Granted
or
mm/dd/yy hh:mm:ss iii... Denied

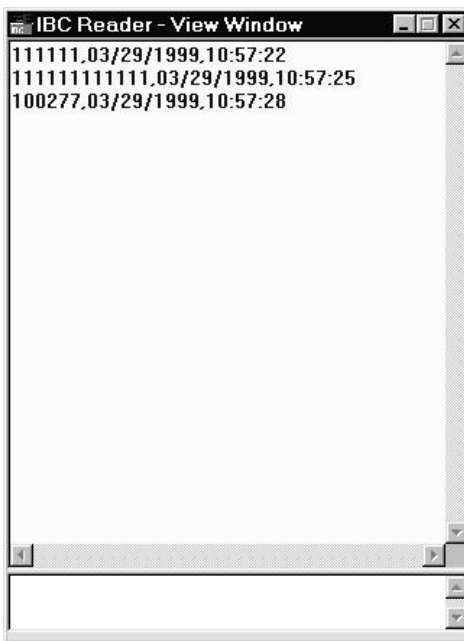
Poll J Reader

Polling a J reader differs from polling an STA and DC readers. Since the reader does not store the data, it should be connected to your PC and the polling function should be running as long as the employees are scanning their ID's.

Precisely, you can poll a J reader as follows:

1. From the *E-swipe*'s main menu, select **Upload**.
2. Then select **Poll J Reader**.
3. The *Upload Data File* dialog window will appear. If you want to save the uploaded data in a separate file, enter a path and name for it in the *File Name* text box. Then click on the **Open** button. If you don't want to save the data click on the **Cancel** button.
4. The *Cancel Send/Receive* window will appear.
5. If the protocol is disabled, the upload command will poll the single reader that is connected to the serial port. If the readers are networked, the upload command will poll each reader in the range one at a time.

The data coming from the reader will not contain a date or time. The Poll command adds the system's time and date to the data at the time of polling. The polled data will appear in the View window as follows:



iii...,mm/dd/yy,hh:mm:ss where

Field	Description
iii...	The employee ID.
Mm/dd/yy	The system Date at the time of scanning.
Hh:mm:ss	The system Time at the time of scanning.

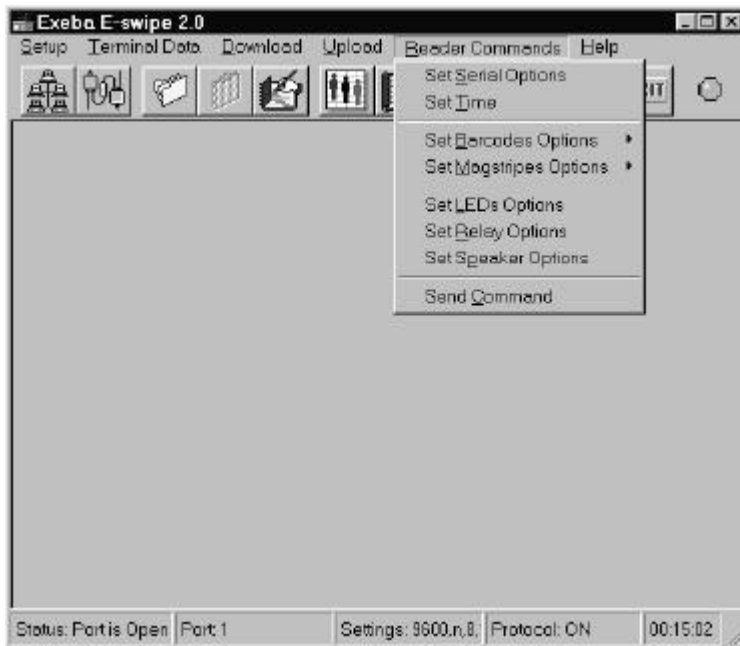
6. To end the polling process, you should click on the **Cancel** button of the Cancel Send/Receive window.



The reader will not accept an ID until the previous data is polled.

CHAPTER 9 – Reader Commands

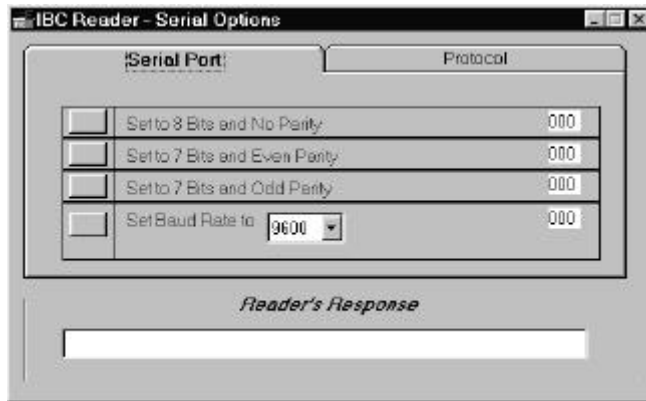
This chapter describes in details the menu commands that program the reader. All of these commands are available under the Reader Commands menu.



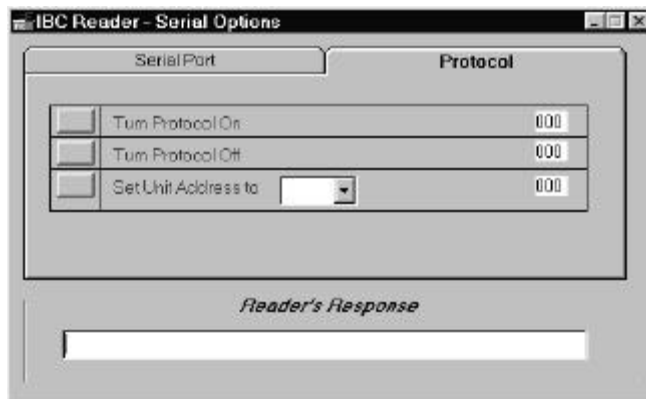
Commands such as Set Time, Set Reader Options, Set Relay Options, Set Speaker Options, Set LEDs Options, Set Barcodes Options, and Set Magstripe Options allows the user to program the reader by clicking on the button next to the commands. Whereas, the Send Command requires the user to enter the programming command and to send it to the reader.

Set Serial Options

Use the Set Reader Options to change the serial port settings on the reader such as the baud rate, parity and data bits.



Also, use this command to change the protocol settings on the reader.



To change the settings on the reader,

1. If the protocol is enabled, enter the address of the reader in the address text box at the right of the command.
2. If the comand has a selection box, select the required setting from the list. For example, the 'Set Baud Rate to' command has a selection box from which you can select the baud rate.
3. Click on the command button at the left of the command.

The use of these commands should be done carefully. When you change any of these settings on the reader, you need to change them in the software as well. Otherwise, the software will not be able to communicate properly with the reader.

For example, if you click on the button next to "Set to 8 bits and no parity. " command you will reset the port settings on the reader. To communicate with the reader afterwards, you should change the data bits to 8 and the parity to none in the software.

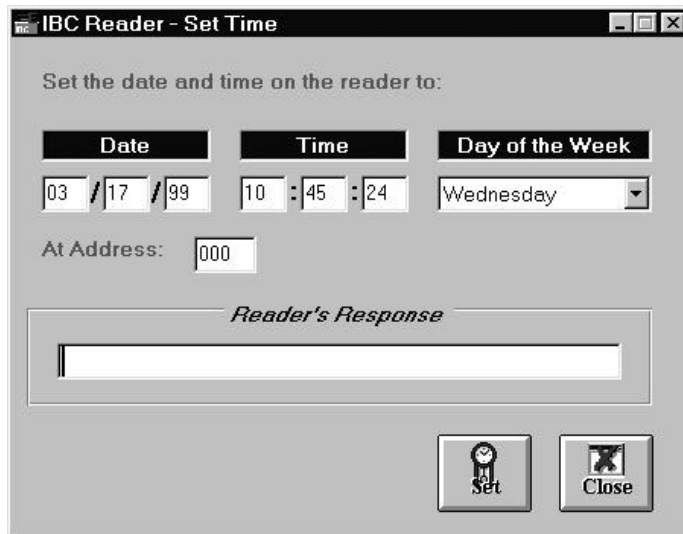
Set Time

After you receive the reader from the factory, you need to reset the date and time set in it.

The Set Time command provides an easy way to set the date and time on the reader.

To reset the time, follow the steps below:

1. From the **Reader Commands** menu, select **Set Time**.
2. The *Set Time* window will appear.



The screenshot shows a dialog box titled "IBC Reader - Set Time". The dialog box has a title bar with standard window controls (minimize, maximize, close). The main content area contains the text "Set the date and time on the reader to:". Below this text are three input fields: "Date" (03 / 17 / 99), "Time" (10 : 45 : 24), and "Day of the Week" (Wednesday). Below these fields is an "At Address:" label followed by a text box containing "000". Below the address field is a large empty text box labeled "Reader's Response". At the bottom right of the dialog box are two buttons: "Set" (with a clock icon) and "Close" (with a close icon).

If the communication port is not already open, this command will open it. When this window appears, the

date, time and day of the week boxes will display the computer's date and time.

3. If you do not want to set the time on the reader to your system's time, change the settings as follows.

The *Date* should be entered as follows: mm/dd/yy. For example, 02/09/99.

The *Time* should be in 24-hour format (i.e. the valid entries for *Hour* are 00- 23). The time should be entered as follows: hh:mm:ss. For example, 13:01:30.

The *Day of the Week* can be selected from the list.

4. If the reader is networked, enter its address in the *Unit Address* text box.

5. Click on the **Send** button to reset the reader to the date and time that appears in this window.

Responses coming back from the reader will appear in the Reader's response text box and they could be one of the following:

Response	Description
Reader is not responding	No response came back from the reader
Invalid Time	The date or time entered is not valid.
Time is Set	The reader received the command and it set the time and date.

Set Barcodes Options

All the symbologies that the reader can read can be configured using the Set Barcodes Options command.

To access this command, select the **Set Barcodes Options** from the **Reader Commands** menu. Once selected, a submenu will appear from which you can select the symbology you want to configure on the reader.

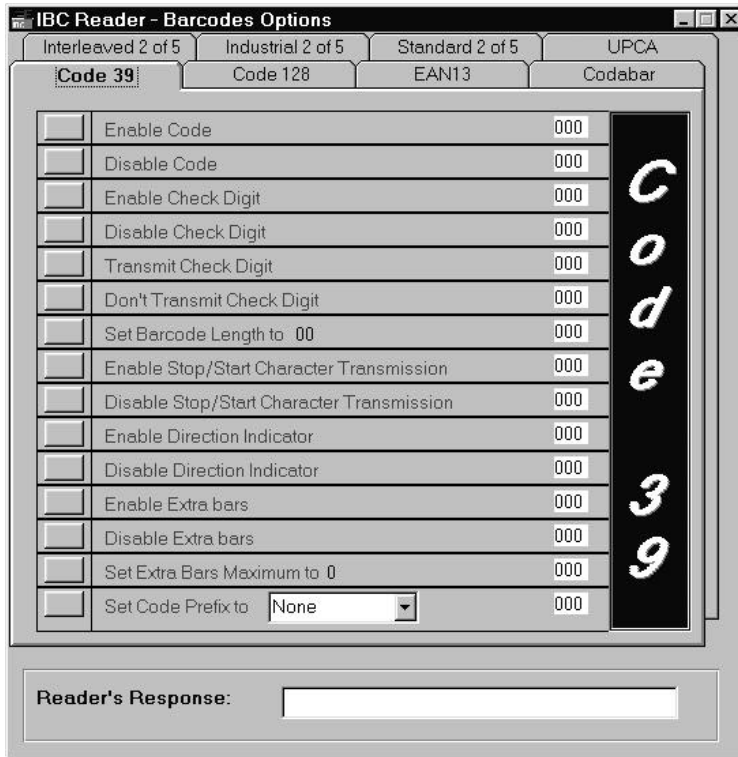


Most of the symbologies can be programmed using the following commands:

- Enable/Disable the symbology.
- Enable/Disable the check digit.
- Transmit/ don't transmit the check digit.

- Set the barcode length.
- Enable/ Disable the direction indicator.
- Enable/ Disable the extra bars.
- Set the barcode prefix.

The figure below shows all the commands you can program the Code 39 symbology to.



To program the symbologies follow the steps below,

1. If the protocol is enabled, enter the address of the reader in the address text box at the right of the command.
2. If the comand has a selection box, select the required setting from the list.

For example, the 'Set Barcode Prefix to' command has a selection box from which you can select the prefix character you want. You can enter the character in the list box provided or you can select the character from the list. However, there are certain characters that you should always select instead of typing. These characters are:

None disable the prefix
Space space character
Tab tab character

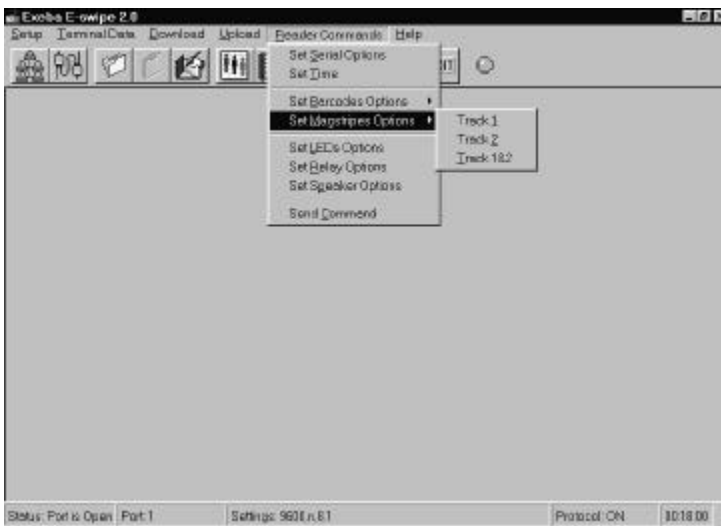
Other commands such as 'Set Barcode Length to 00' requires you to change the '00' in the command to the length you want.

3. Click on the command button at the left of the command.

The reader will respond with an ACK (Command Acknowledge) or a NAK (Command Not Acknowledge) if operating in protocol mode. This response is displayed in the Response text box.

Set Magstripes Options

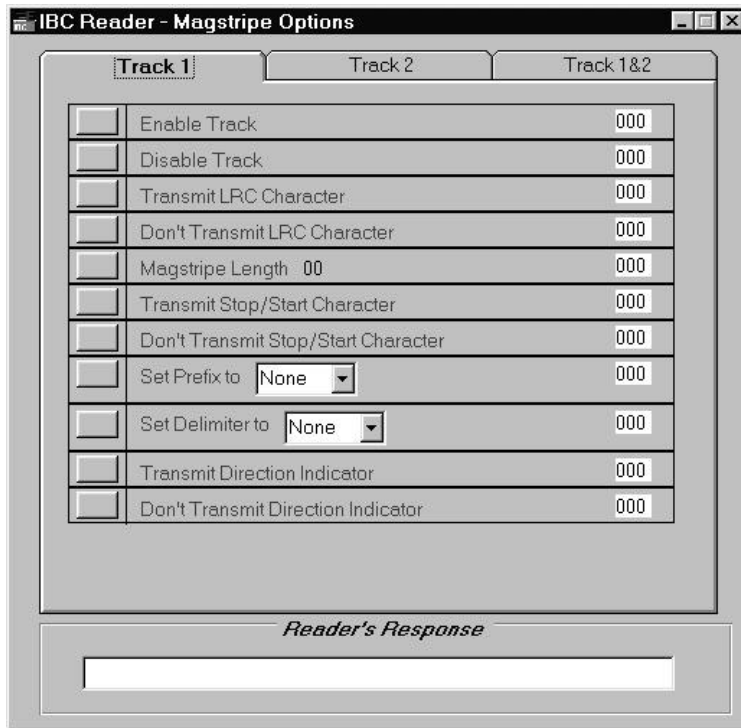
The Set Magstripes Options command allows you to program every track that the reader can read. It is available under the Reader Commands menu. Once selected, a submenu will appear from which you can select to program: Track 1, Track 2, Track 1 & 2.



Programming track1 is equivalent to programming track 3 on readers that read track 2 and 3.

For each track you can program the reader as follows:

- Enable or disable track.
- Transmit /Don't transmit the LRC character.
- Set the magstripe length.
- Transmit /Don't transmit stop and start character.
- Select the prefix character.
- Select the delimiter character.
- Transmit /Don't transmit the direction indicator.
- For multitrack readers, each track can be programmed to:
 - Use the standard character set for the track, or another character set.
 - Transmit before the other track.
 - Set intertrack delimiter.



The figure above shows all the commands in which you can program Track 1.

To program the magstripe tracks follow the steps below,

1. If the protocol is enabled, enter the address of the reader in the address text box at the right of the command.
2. If the command has a selection box, select the required setting from the list.

For example, the 'Set Prefix to' command has a selection box from which you can select the prefix

character you want. You can enter the character in the list box provided or you can select the character from the list. However, there are certain characters that you should always select instead of typing. These characters are:

None disable the prefix
Space space character
Tab tab character

Other commands such as 'Set Magstripe Length to 00' requires you to change the '00' in the command to the length you want.

3. Click on the command button at the left of the command.

The reader will return one of two responses,

Command Acknowledged – when the command is recognized by the reader.

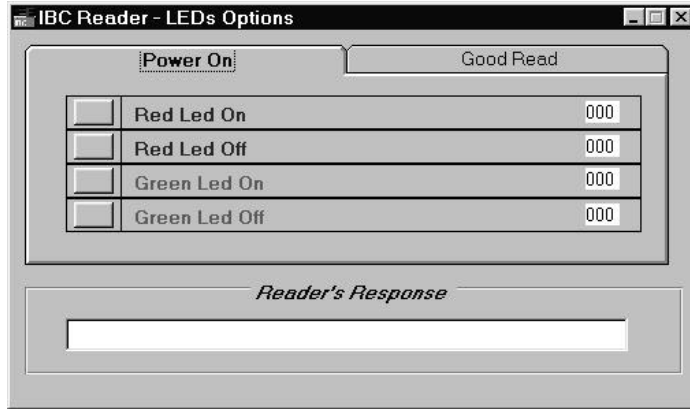
Command Not Acknowledged – when the command is not recognized by the reader.

Both responses will appear in the *Response* text box.

Set LEDs Options

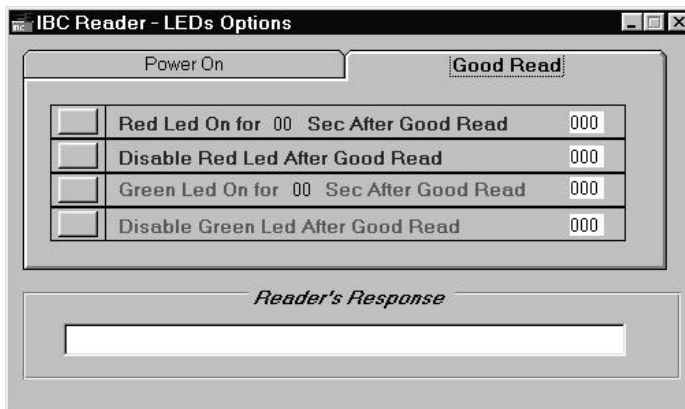
Some readers can have their LEDs programmed to function as follows:

When the reader is powered on,



- You can program it to have the red LED turned on or the red LED turned off.
- You can also program it to have the green LED turned on or the green LED turned off.

And after a good read,



- You can program the reader to turn the red LED on for xx second or the to turn the red LED off.
- You can also program it to turn the green LED on for xx second or to turn the green LED off.

The LED Options command is accessible from the **Reader Commands** menu. After you select the Set LEDs options command the port will be opened if not already opened.

To program the LEDs follow the steps below,

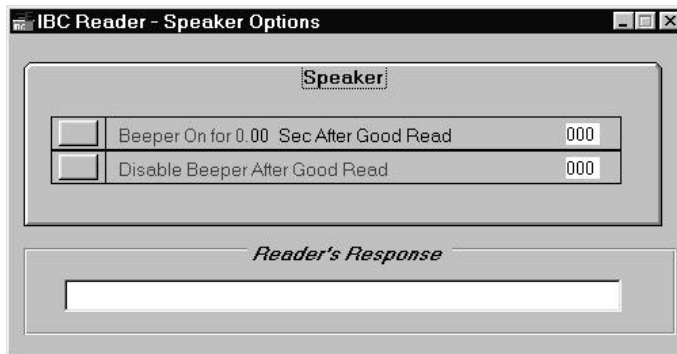
1. If the protocol is enabled, enter the address of the reader in the address text box at the right of the command.
2. Some commands require replace the '00' value in the command to the value you want. Such as "Red Light on for 00 Sec After Good Read".

3. Click on the command button at the left of the command.

Set Speaker Options

The speaker available on the reader can be programmed to beep for a number of seconds after a good read or to be turned off after a good read.

You can access this command from the Reader Commands menu. There is no need to open the port before executing this command because it will be opened automatically.



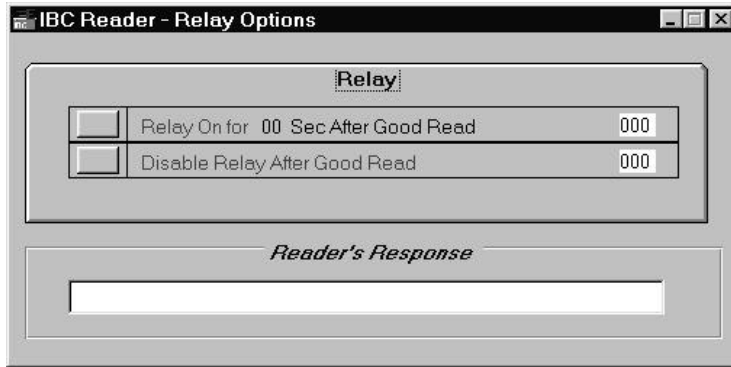
To program the speaker to be turned on for a certain amount of time after a good read, enter the number of seconds desired. Then enter the address if the protocol is on. Then click on the button next to this command.

To disable the beeper after a good read, enter the address of the reader if networked and then click on the button next to this command.

Set Relay Options

The Set Relay Options command is available under the Reader Commands menu. If the reader has a relay, you may want to program it as follows:

After a good read,



- Turn on the relay for xx seconds.
- Turn the relay off.

Like all the reader commands, the Set Relay Options command opens the communication port automatically.

To program the relay you need to click on the button next to each command. But before you click on the button, if the reader is networked, enter its address in the text box provided for the address. Also, enter the number of seconds required if you are programming it to be turned on for a certain amount of time.

Send Command

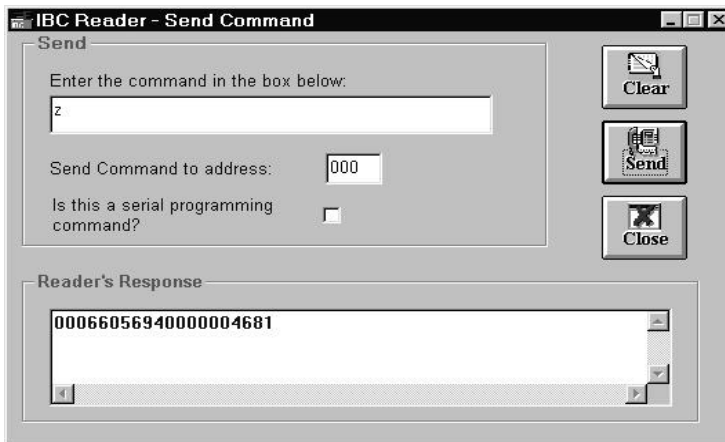
The IBC reader can be easily programmed through any of the options available under the Reader Commands menu. For example, the Set Speaker Options command sends messages to the reader to program the speaker.

However, these options do not cover all of the programming commands. Any other command can be typed in the Send Command window and sent to the reader. In other words, the Send Command allows you to program the reader by sending the appropriate command.

To send a command to the reader follow the steps below:

1. Select **Reader Commands** then select **Send command**.

The *Send Command* window will appear, as show in the figure below.





2. Type the command in the text box provided.
3. Enter the address to send the command to if the reader is networked.
4. Check the serial command option if the command is a serial programming command. All the commands in the J series user's guide are serial programming commands (except the serial control commands)
5. Click on the **Send** button.


The Send command will automatically add the command prefix and terminating characters. The responses coming back from the reader (if any) are sent to the *Reader's Response* box. Responses will appear in the format that they are received. However, the software eliminates the ACK, NAK, ETX and STX characters from the string of data received when the protocol is enabled.

If the reader is set to protocol mode, a response of ACK will appear as "Command Acknowledged" and of NAK will appear as "Command Not Acknowledged".

Command Buttons

The Clear button  erases the contents of the send and receive boxes.

The Send button  sends the command to the reader.

The Close button  simply closes the Send Command window.

For further information on the reader commands, consult the IBC User's Guides.

APPENDIX I – *E-swipe* Messages

While working with *E-swipe* you will receive different messages. Some messages will inform you about the status of a certain operation. This kind of messages are explained throughout the manual. This appendix explains in details the warning and error messages received.

E-swipe Messages

"Command Acknowledged", "Command Not Acknowledged"

The above messages are displayed by the software in the response box when an ACK or a NAK is received from the reader. When the command is acknowledged by the reader it means that the reader received the command and recognized it as a valid command. It does not mean however that the reader is programmed according to the command. When the command is not acknowledged by the reader it means that the reader received the command but did not recognize it.

"Invalid character."

This message is received when you enter an invalid character (such as typing a space instead of selecting 'Space' from the list) in the Set Prefix or Delimiter commands of the Set Barcodes Options and the Set Magstripes Options windows.

"Invalid address."

Upload and download commands accept address that range between 0 and 126. The Reader Commands accept address that range from 0 to 127. This message

is received when you enter invalid characters (e.g. alphabets) or address that fall off the range.

Files that are opened by another application or by *E-swipe* cannot be opened with the text editor. For example, if you opened a log file to save the data in, you cannot reopen the file using the text editor.

“Operation valid only when the port is opened”

If the communication port failed to open, you will receive this message when you try to send or receive data to and from the reader.

“Reader is not responding!”, “NO RESPONSE”

This message is received when the reader does not send any response back when *E-swipe* is expecting one. The reader will not send a response if:

- the port is not opened or an invalid port number is selected.
- the reader is not connected to the selected port.
- the settings in the software do not match the settings on the reader. For example, the protocol in the software is enabled and on the reader is disabled.
- the address selected does not match the address on the reader.
- the reader did not recognize the command. For example, polling an STA reader with the Poll J command.

“Reader is not responding! Make sure it is set to

When the protocol is enabled in the software, a response is expected from the reader for every command sent. If no response is received, *E-swipe* displays this message. You need to either enable the protocol in the reader or disable it in the software.

“The file is too large to open.”

E-swipe's text editor can only open files that are < 65 K in size.

"Unable to open the communication port!"

This message is received when the selected port is occupied by another hardware or the port is already opened by this hardware and cannot be reopened.

“Unable to purge data at address xxx”

E-swipe failed to send the command that purges the contents of the transactional data file on the reader. This would be due to communication problems.

“Unable to send command.”

This message is received when the software is trying to communicate with the reader by sending a command while the port is not open or a communication problem occurred.

APPENDIX II – Getting Help on *E-swipe*

Resources

A variety of resources are available to help you use *E-swipe*. These resources are:

On-line help

E-swipe has a comprehensive on-line help system which allows you to locate information quickly and easily. On-line help can be accessed from the Start menu. You can also access it while you are working with *E-swipe*, by selecting Help from the main menu.

User documentation

This manual contains detailed information on how to use *E-swipe*. For commands and questions related to the hardware, you should consult the manufacture's User's Guide that comes with the software when you purchase it.

For additional information and answers to frequently asked questions please visit our world wide web as described in the next section.

Customer Support

If you have a question, a comment or a suggestion Escan Technologies Corp. welcomes your inputs regarding improvements to *E-swipe* and/or this manual. These comments can be mailed to Escan Technologies Corp., or sent electronically via e-mail or via our World Wide Web (WWW) site. If you have a bug report that requires immediate attention, please contact us as soon as possible.

If you would like to purchase any of the hardware described in this manual, you may contact us for the current price and availability.

In order to be eligible for technical support, you must register your version of *E-swipe* with Escan Technologies Corp. In addition to technical support, you will receive updates as to what is new in the upcoming versions of *E-swipe*.

When reporting a problem, please include the following information:

- Company
- Mailing Address
- Phone Number
- Your Name/Contact Person
- E-mail Address (if available)
- E-swipe* Serial Number
- Date of Purchase
- Version of Windows

Where to send your registration/correspondence:

Email Address: techsupport@e-scan.com
(Putting "E-swipe" in the subject header will ensure a quick response.)

Telephone: (909) 270-0043
(9:00 am - 4:00 PM PST)

Fax: (909) 270-0920
(24 hours - 7 days a week)

Standard Mailing Address: Escan Technologies Corp.
12140 Severn Way
Riverside, CA 92503

As an alternative to mailing your registration, you may contact our WWW site. In addition to online registration, you will find an area to post comments or suggestions, look at what is upcoming for *E-swipe* and related software, and download up-to-date files. Our WWW site is at the following addresses:

<http://www.e-scan.com>
<http://www.exeba.com>

Notes...