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Matrix System Messenger Software Manual

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Messenger

Software Manual

This manual describes Messenger -- EDI's Software application to control the Matrix System family of signs.

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Version 1.0

Messenger

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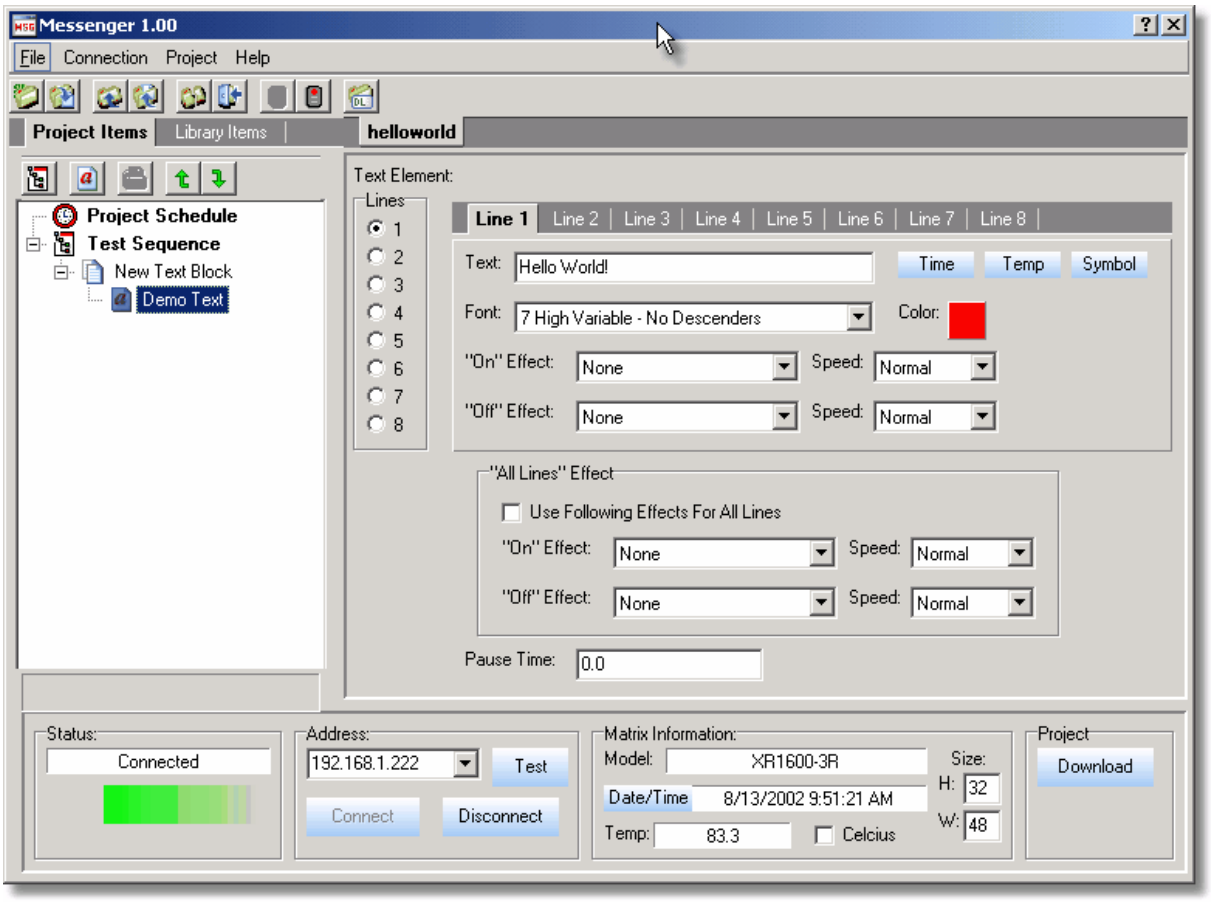
Part I

1 Introduction

1.1 Overview



Messenger is a windows application that controls EDI's Matrix Sign System. The following features are available:

- **Create and edit multiple messages containing text and symbols with various different fonts**
- **Each item can have different effects within a message.**
- **Create and edit schedules to show messages at different times of day.**
- **Multiple projects. Cut and Paste between different projects.**
- **A Library to have one central location to keep items and paste them into projects.**
- **Automatic connection and upgrading to the matrix sign.**
- **Download messages only when needed, no need to have a PC running all the time.**
- **Symbol editor to create and edit symbols.**
- **Time and Temperature support.**

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1.2 Requirements

The following requirements are needed to be able to run Messenger:

- A Pentium-class PC running at 300MHZ or higher.
- Windows 98SE, Windows ME, Windows 2000, Windows NT 4.0 SP6, Windows XP.
- Minimum of 50MB of hard drive space.
- Minimum RAM is 32MB, more (128MB) is reccommended.
- Ethernet Network Interface Card supporting 10BaseT. This can be a 10/100 baseT card.
- TCP/IP Protocol Installed.
- SVGA Video card with a resolution of at least 800 by 600. 16 bit color or higher reccommended.

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1.3 Software Installation

Installing Messenger Software on your computer

Before you start the install process, make sure all Windows Applications are closed and Virus detection is disabled on your computer.

Installing the Software from a CD

The following application and utility programs will be loaded on your computer's hard drive when you install the Messenger software.

-

Messenger
-

IP Utility
-

Symbol Editor
-

Script Editor

Place the Messenger application disk into the PC's CD drive (assumed D:).
The Install program may AUTOSTART depending on your Windows configuration settings.
If not, click on START, click on RUN, and type D:\SETUP.EXE in the RUN dialog box.
Click OK to start installation.

Follow instructions until installation process is completed, then re-enable your PC's Virus Detection program.

Launching Messenger

Click Start then Messenger->Messenger to run the application.

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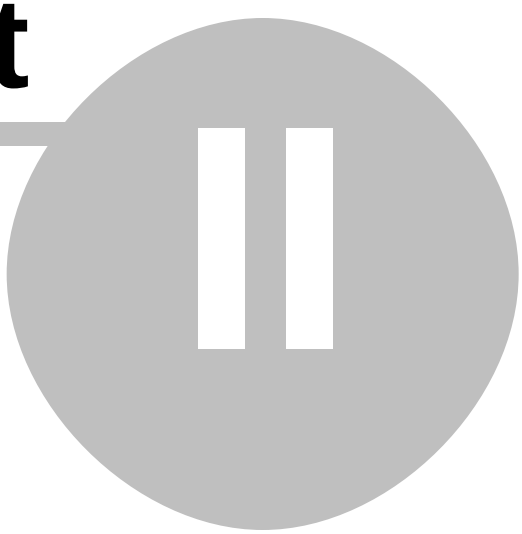
Part



2 Configuration

2.1 Local PC Configuration

Messenger uses standard Ethernet network communications. On top of this the system uses the TCP/IP protocol to communicate directly to the sign.

Your local pc that is used to run Messenger must be setup correctly in order to use the sign.

If you are unfamiliar in setting up TCP/IP on your system, please consult your IT department for details.

The procedures typically used are outlined below.

1. Install a 10/100 base T Ethernet card. Follow the directions given with the card.
2. Add the TCP/IP protocol under "Networks" via the Control Panel.
3. Set the TCP/IP Properties for a fixed address. (Typically set to 192.168.1.100, if no other computers are on the network.)

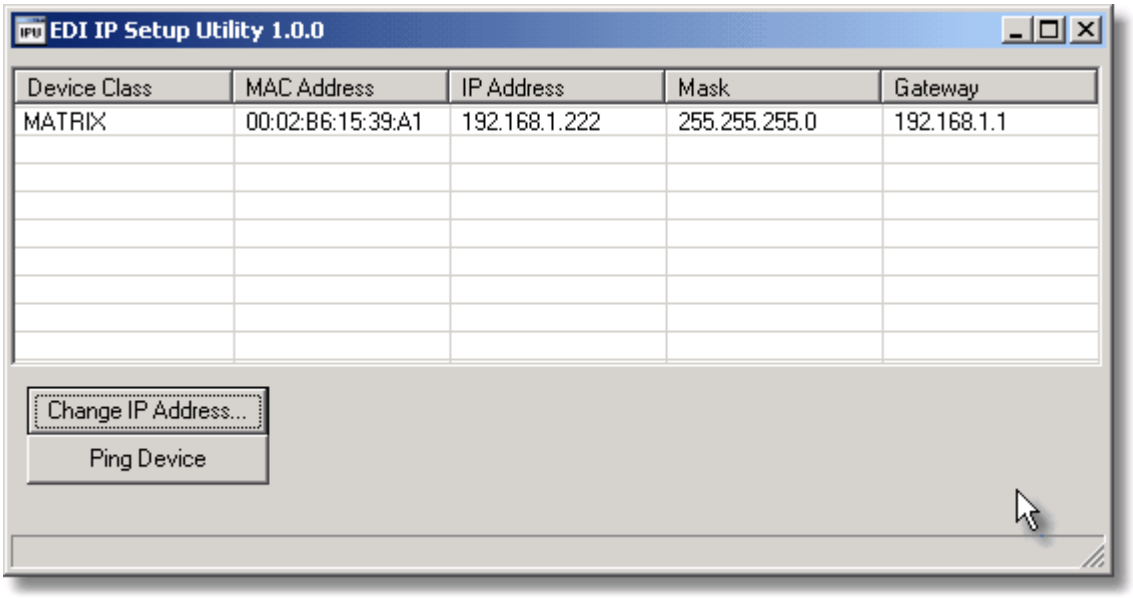
Once the PC is setup properly, you can proceed to configure the sign.

2.2 Sign Configuration

In order for Messenger to communicate with the sign, the sign will need an IP address as well.

As a default, the sign has been setup for ip address 192.168.1.222. This will work if you have setup your Local PC using the default ip address listed under Local PC Configuration.

If you need to set the IP address of the sign to a different one, run the IP Utility by clicking Start|Messenger|IP Utility. The following form will be presented:



You should see the MATRIX line as above, although the actual values will be different.

To change the IP Address:

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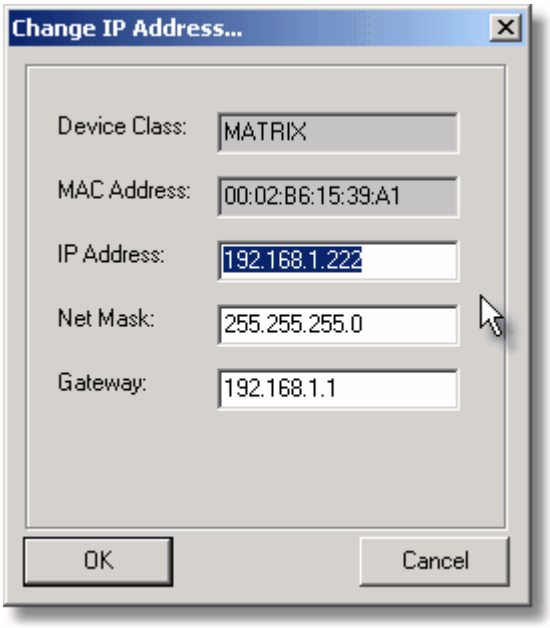
Click on the MATRIX line within the form to highlight it, then click Change IP Address..., the following dialog will appear:



Enter your desired IP address, mask, and gateway. Please contact your IT department if you do not know what these values should be.

When finished, click OK to change the ip address. The IP utility main screen should show the reflected changes.

Close out the IP utility.

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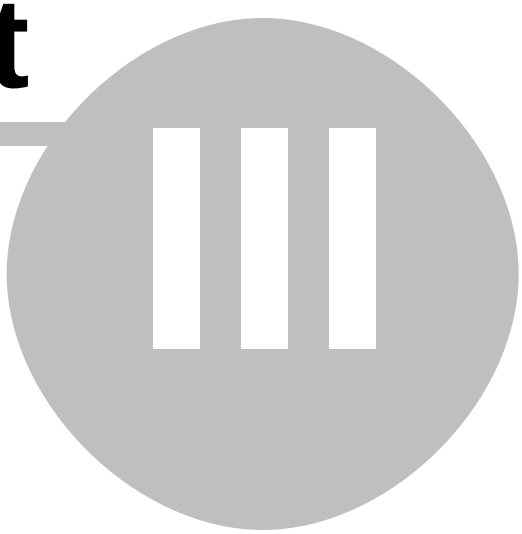

3 Understanding Messenger

3.1 Projects

Projects are what you will work with while using Messenger. Only one project can be stored in the sign. Once the project is downloaded to the sign, Messenger can be closed and the sign will execute the project.

Projects contain the following items:

- **Sequences**
  Sequences contain the actual items to display.
- **Schedule**
  Schedule. A project contains one schedule that tells the sign what sequence to display and when.

You can work with many projects at a time along with cutting and pasting items across projects.

3.2 Sequences

Sequences are actual messages that are executed by the sign. The sign can store hundreds of sequences, but only one can execute at any one time. Executing sequences can be changed only by schedule contained within that project.

Sequences contain the following items:

- **Text Blocks and Elements**
  Text blocks contain text elements that display text in a variety of effects and speed.

3.3 Library Groups

Library groups are place holders to group elements. Library groups are only applicable when working with the Library.

3.4 Blocks

Blocks are contained within a sequence. Currently only the text block is defined. Future updates will contain animation and drawing blocks.

- **Text Blocks**
  Text blocks are text messages that are displayed in order within the sequence. Each text block can contain many text elements that are executed in order with a variety of effects.

3.5 Elements

Currently, only the text element is available.

- **Text Element**
  Text elements are part of text blocks and describe how and what to display. There are various effects and multiple line effects that can be used. In addition, symbols can be shown with this

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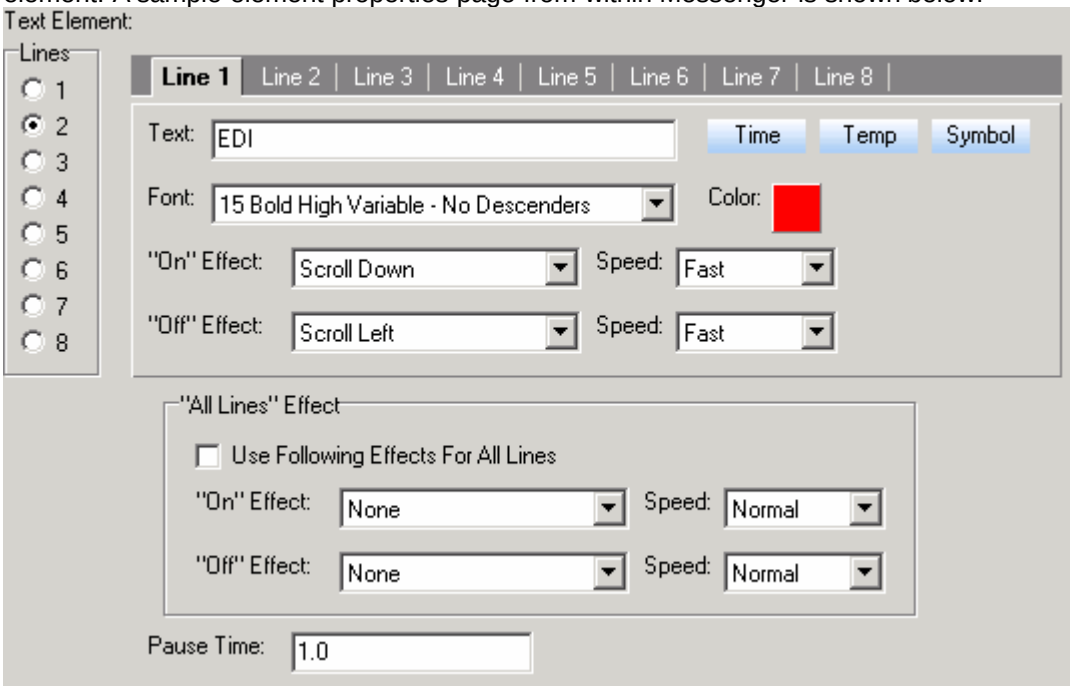
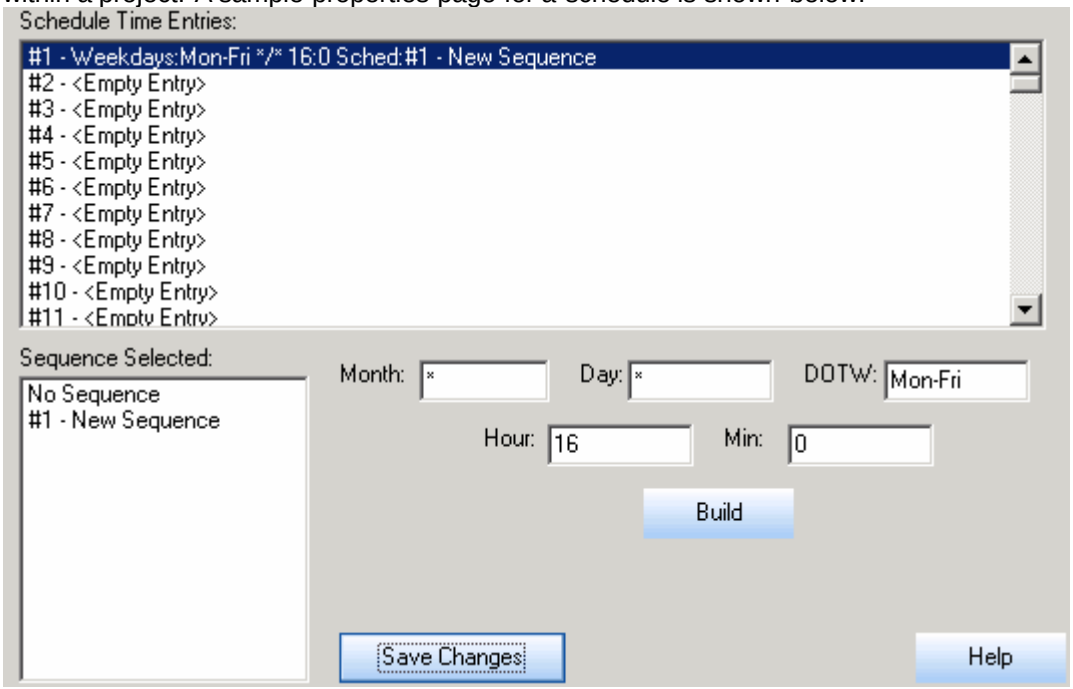
element. A sample element properties page from within Messenger is shown below:



3.6 Schedules

Schedules tell the sign what sequence to display at what time or date. There can be only one schedule within a project. A sample properties page for a schedule is shown below:



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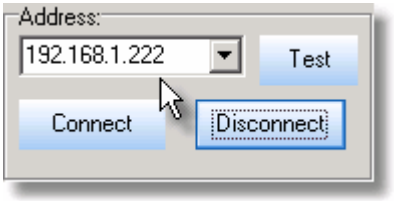
3.7 Starting Messenger

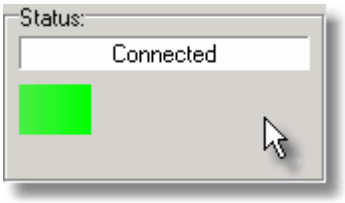
To start Messenger, click Start|Messenger|Messenger.

Entering the IP Address of the sign:

As soon as Messenger starts, it will try to connect to the sign using the default IP address of 192.168.1.222. If the sign address is different that the default, click on the address list box at the bottom of the screen as shown below, and type in the new address. Once the new address is in, click Connect to connect to that sign.



The status area at the bottom left will show you the connection status:



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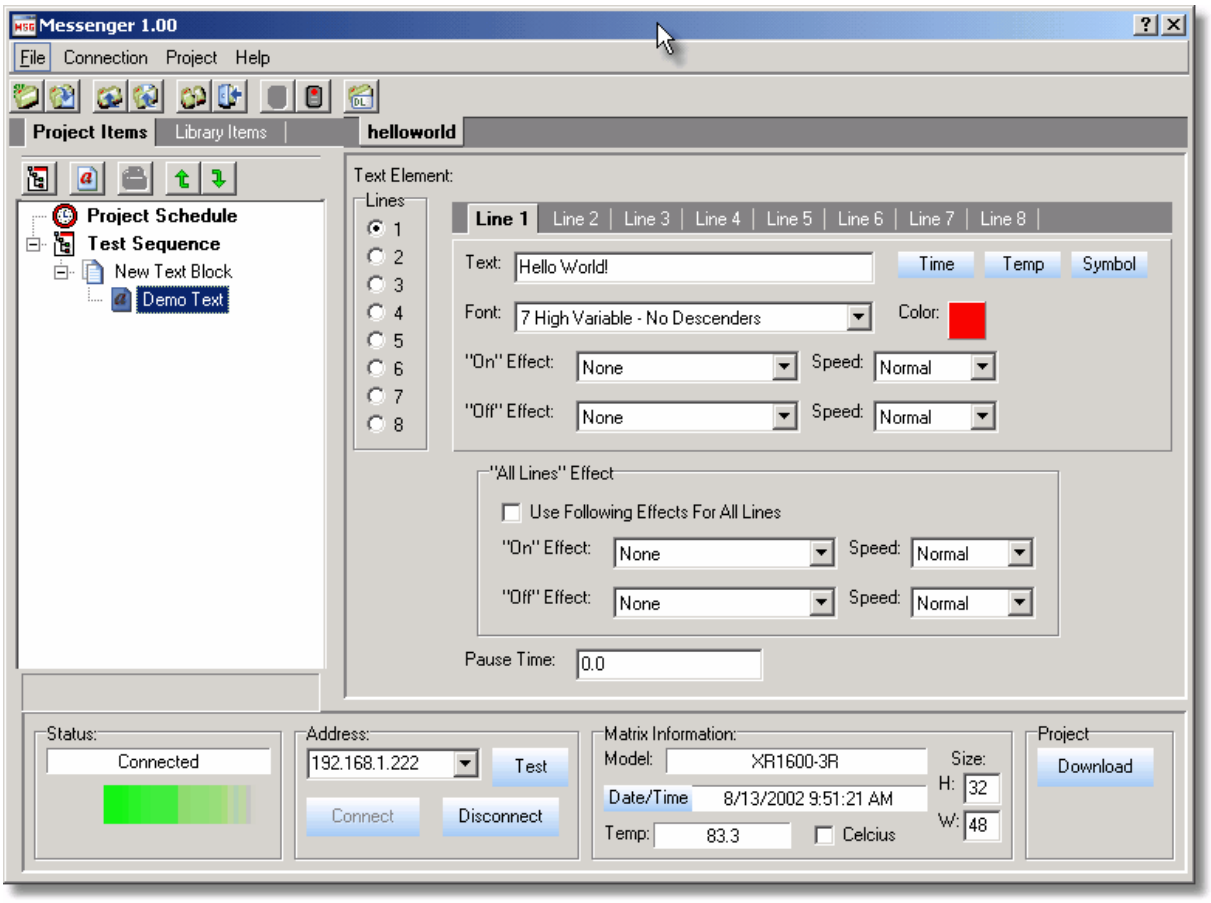
Part IV

4 Main Screen



Click on an area above for more help

4.1 Main Menu

The main menu allows you to load and save projects, connect and disconnect, recover, and other actions.

4.2 Toolbar

The toolbar contains quick access buttons for commonly used actions.

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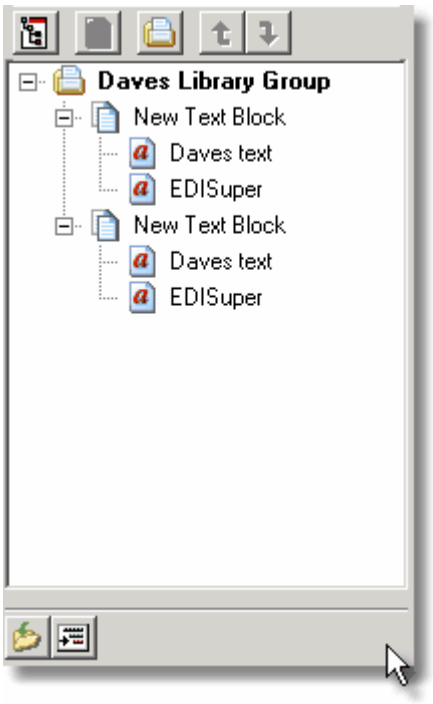
4.3 Project/Library Tab

This tab allows to select which area you wish to work in. You can work in the current project ("Project Items") or in the library ("Library Items").

4.4 Project/Library Tree



This area shows the current list of items based on the current tab selected; Project Items or Library Items (see Project/Library Tab).

The top area has quick buttons to:

- Add a sequence
- Add a text element
- Add a library group
- Move up
- Move down

The bottom area has quick buttons (only shown when the library is selected) for:

- Saving the library
- Copying a library Item into a project

You can also do the following:

- Rename items
- Cut and Paste Items
- Delete Items

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4.4.1 Renaming Items

To rename items, right-click on the item in the tree to select it and bring up the pop-up menu. Click rename and enter a new name.

4.4.2 Adding Sequences

Clicking on the Add Sequence button will add a sequence immediately after the selected item in the tree.

This button will only be available when it is possible to add the sequence.

Once this item is added, you can immediately rename the item.

4.4.3 Adding Text Elements

Clicking on the Add Text Element button will add a text element immediately after the selected item in the tree.

This button will only be available when it is possible to add the text element.

Once this item is added, you can immediately rename the item.

4.4.4 Adding Library Groups

Clicking on the Add Library Group button will add a library group immediately after the selected item in the tree.

This button will only be available when it is possible to add the group.

Once this item is added, you can immediately rename the item.

4.4.5 Moving Items Up

Clicking on the Move Up button will move the selected item up within the tree.

4.4.6 Moving Items Down

Clicking on the Move Down button will move the selected item down within the tree.

4.4.7 Saving the Library

Clicking the Save Library button will save the library immediately. The library is also saved when exiting Messenger.

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4.4.8 Copying Library Items

Clicking the Copy Library Item to Project button will copy the selected item in the library to a place after the selected item within the current project. The item is inserted into the project.

4.4.9 Cutting and Pasting Items

To Cut or Copy and item:

1. Select the item by clicking once on it.
2. Right click the item and select Cut or Copy.

To Paste the item:

1. Select the item just before where you want the cut/copied item to be inserted.
2. Right click that item and select Paste.

4.4.10 Deleting Items

To delete an item, select the item by clicking on it then right click and select Delete.

4.5 Projects Tab

You can select the project to currently work on by selecting it's tab. If a project has not been saved yet, an asterik (*) will appear after the name of the project.

4.6 Properties Page

The properties page shows the properties of the current item selected in the Project/Library Tree.

These are the current possible property pages:

No Properties Page
Text Properties Page
Schedule Properties Page

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4.6.1 No Properties Page

This page is displayed when the selected item has no properties associated with it.

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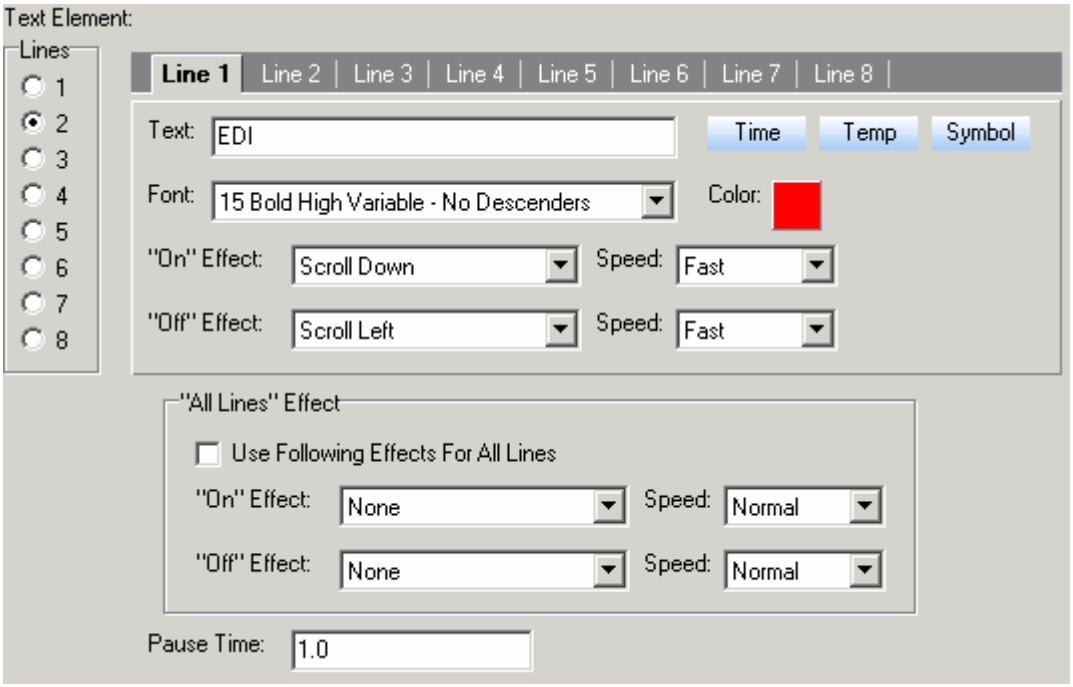
4.6.2 Text Properties Page



This property page shows the properties when a text element is selected.

Many different combinations are possible. See the effect guide for details.

Click on an area above for more details.

4.6.2.1 Number of Lines

Select the number of lines total to display here.

4.6.2.2 Line Selection

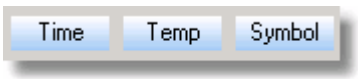
Select which line to edit here. Each line can have different text, font, color, and effects.

If the line selected is greater than the Number of Lines, that line's controls will be disabled.

4.6.2.3 Line Text

Enter the text to display here.

4.6.2.4 Line Text Buttons



Click on Time to insert a time code. The sign will display the current time here when executed.

Click on Temp to insert a time code. The sign will display the current temperature here when executed.

Click on Symbol to bring up the symbol dialog.

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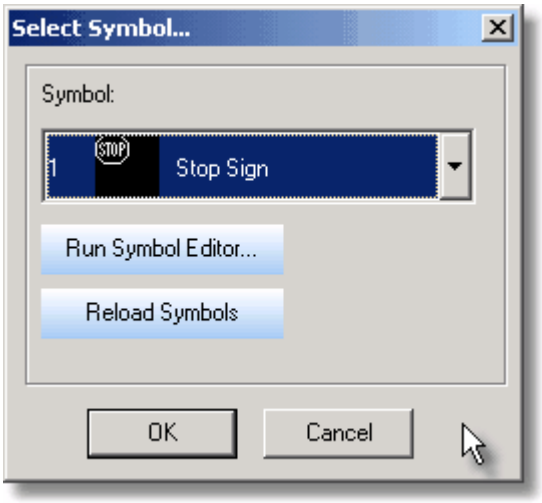
4.6.2.4.1 Symbol Dialog



To select a symbol:
Click on the symbol in the drop down box.
Click OK to insert it. The symbol will be displayed when the sign executes it.

To Edit Symbols:
Click on Run Symbol Editor to bring up the Symbol Editor.

To reload symbols after editing:
Click on Reload Symbols.

4.6.2.5 Line Font

Click in the drop down box to select the font.

Fonts are described as the height in pixels, bold or not bolded, and with or without descenders.

If you are using only upper case, select without descenders for a more fuller look of the font.

4.6.2.6 Line Color

Click the color box to bring up the color dialog.

The color dialog will reflect the colors available for the sign that Messenger is connected to.

A typical dialog is shown below:

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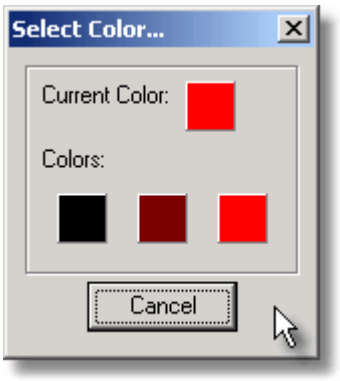

Click on the desired color to select it and close the dialog.

4.6.2.7 Line On Effect and Speed

This area chooses the desired effect as the text APPEARS on the display. The speed of the effect is also selectable.

The effect and speed only applies for the select line.

See the effect guide for more details.

4.6.2.8 Line Off Effect and Speed

This area chooses the desired effect as the text DISAPPEARS on the display. The speed of the effect is also selectable.

The effect and speed only applies for the select line.

See the effect guide for more details.

4.6.2.9 All Lines Effect Enable

Enabling the "Use Following Effects For All Lines" causes the listed effects underneath the box to be used on all lines.

This will produce a different effect by which the ENTIRE text element is moved on/off the display at once versus using individual effects.

See the effect guide for details.

4.6.2.10 All Lines On Effect and Speed

This area chooses the desired effect as the text element APPEARS on the display. The speed of the effect is also selectable.

The effect and speed applies for the ENTIRE text element.

See the effect guide for more details.

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4.6.2.11 All Lines Off Effect and Speed

This area chooses the desired effect as the text element DISAPPEARS on the display. The speed of the effect is also selectable.

The effect and speed applies for the ENTIRE text element.

See the effect guide for more details.

4.6.2.12 Pause Time

Enter the pause time in seconds. Tenths of seconds can be used. For example, to pause for 3 1/2 seconds, enter 3.5.

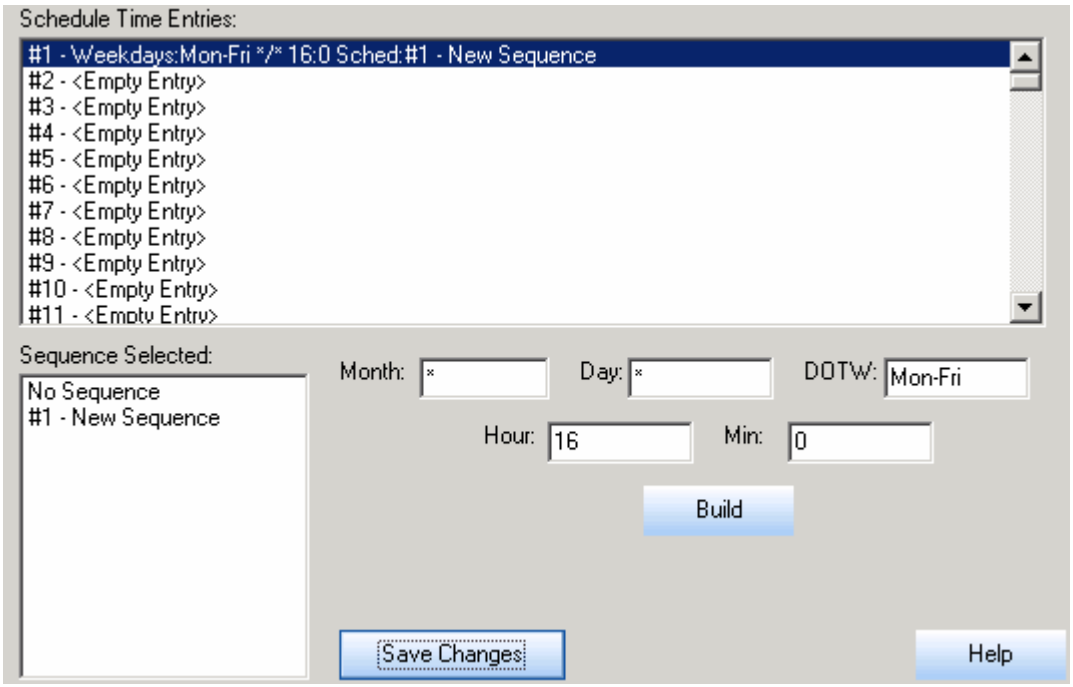
The pause time is used to hold the text element on the display after it APPEARS and before it DISAPPEARS.

The pause time will not start until each line is finished with its line effect.

This is very useful for static only (no effect) text elements.

See the effect guide for more details.

4.6.3 Schedule Properties Page



The schedule properties page is shown when the Project Schedule is selected in the project tree.

Click on an area above for more details.

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4.6.3.1 Schedule Time Entries

This list box shows each scheduled time entry. It shows the date/time and the sequence to execute at that date/time.

4.6.3.2 Sequence Selected

Use this list box to select the sequence to execute at the date/time specified.

4.6.3.3 Date/Time Fields

Each field here identifies what month, day, day of the week (DOTW), hour and minute for the scheduled time entry.

An asterick (*) in a field means "any".

Each field can have an entry as described below:

Month:

A numeric month	"In this month only"	
A 3-character month	"In this month only"	Jan,Feb,Mar, etc.
A numeric or character month range.	"In these months only"	1-4 or Jan-Apr.
Selected numeric or character months.	"In these months only"	1,3,5 or Jan,Mar,May

Day:

A numeric day	"On this day only"	
A numeric day range.	"On these days only"	3-10
Selected numeric days.	"On these days only"	5,10,15

DOTW:

A numeric day (0-6, 0=Sunday)	"On this day only"	
A 3-character day	"On this day only"	Sun,Mon,Tue, etc.
A numeric or character day range.	"On these days only"	0-2 or Sun-Tue
Selected numeric or character days.	"On these days only"	0,2,4 or Sun,Tue,Thu

Hour: (24 hour format only, 13 = 1PM, etc)

A numeric hour	"On this hour only"	
A numeric hour range.	"On these hours only"	3-10
Selected numeric hour.	"On these hours only"	5,10,15

Minute:

A numeric minute	"On this hour only"	
A numeric minute range.	"On these hours only"	3-10
Selected numeric minutes.	"On these hours only"	5,10,15

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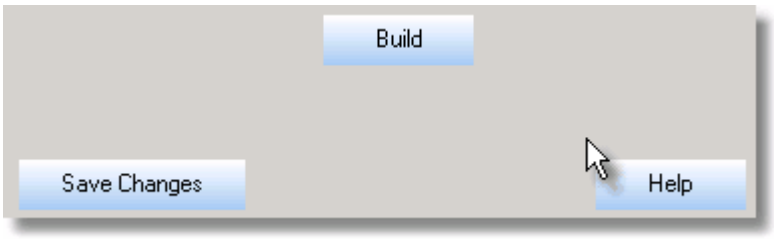
You can use the Build Schedule Dialog to help creating these by clicking on the Build button.

4.6.3.4 Schedule Page Buttons

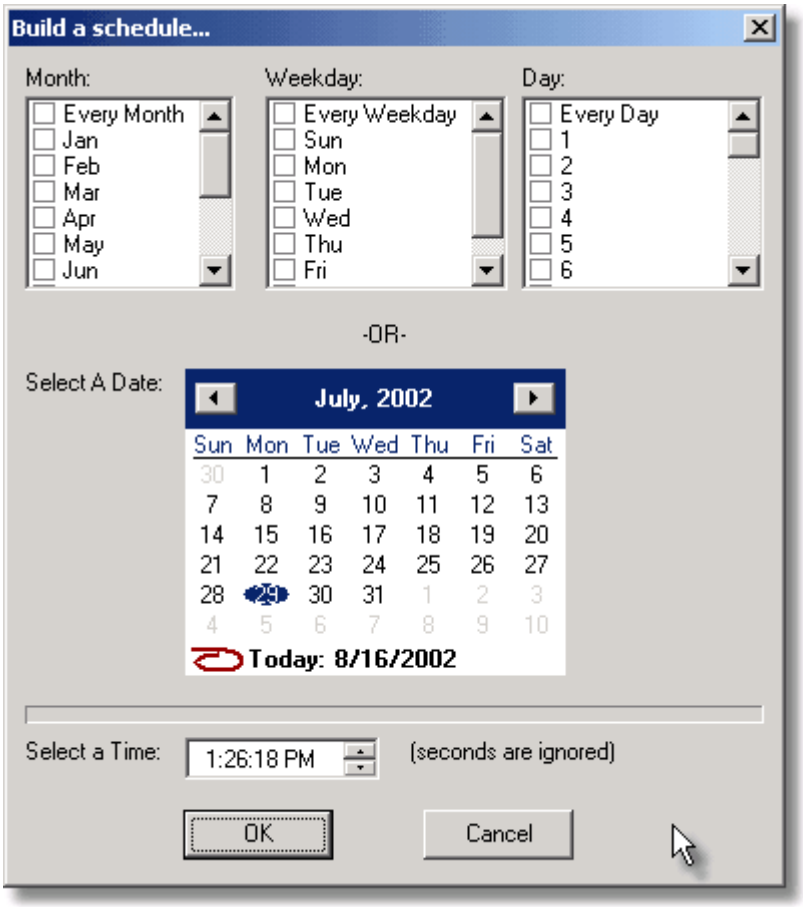


Click on Build to bring up the Build Schedule Dialog.

Click on Save Changes to save the changes made to the currently selected schedule time entry.

Click on Help for help.

4.6.3.4.1 Build Schedule Dialog



This dialog helps with correctly building times/days to create the schedule time entry.

Click on specific months, days, days of the week for the scheduled sequence or click on a specific

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date.

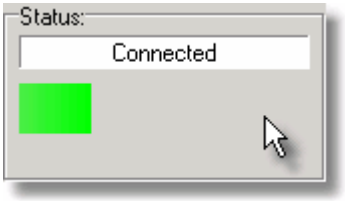
Enter the time the scheduled sequence is to execute.

An example:

If you want to run a sequence on Monday thru Friday at 4 pm:

Click Every Month.
Click Every Day.
Click Mon-Fri for the Weekday.
Set the time to 4:00:00 pm.

4.7 Status Area



This area shows the current status of the connection to the sign.

There are three statuses:

Connected
Shown by a green bar.

Not Connected
Shown by a red bar.

Connecting...
Shown by a yellow bar.

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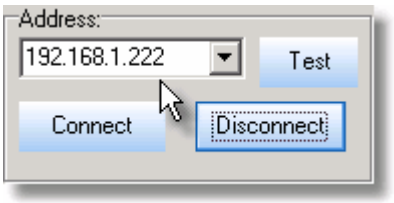
4.8 Address Area



This area allows you to connect and disconnect from a sign. You can also test the connection.

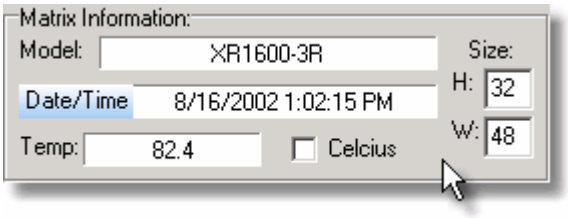
The address drop down box allows you to enter an address in or view a history of addresses.

Click Connect to connect to the sign via the address shown.

Click Disconnect to disconnect from a sign.

Click Test to test the connection (you must be connected first).

4.9 Matrix Info Area



This area describes the sign that Messenger is connected to. If you are not connected, the fields will show "N/A".

Model describes the model of the sign.

Date/Time shows the current time on the sign. To change the date/time, click on the Date/Time button to show the Change Date/Time Dialog

Temp shows the current temperature that the sign is reading. Click Celcius to show the temperature in Celcius.

Size shows the size of the sign in LEDs.

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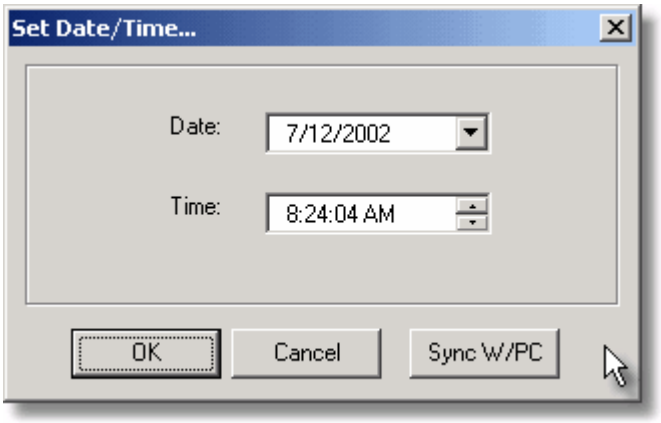
4.9.1 Change Date/Time



This dialog allows you to set the date and time on the sign.

Enter the new time to change to and click OK.

If you wish to synchronize the sign's time with the PC's time, click Sync W/PC.

4.10 Project Area

This area shows buttons than can be used to Download or Simulate a project.

Currently the Download button is implemented. Click on Download to download and execute the project to the sign.

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Part V

5 Tutorial

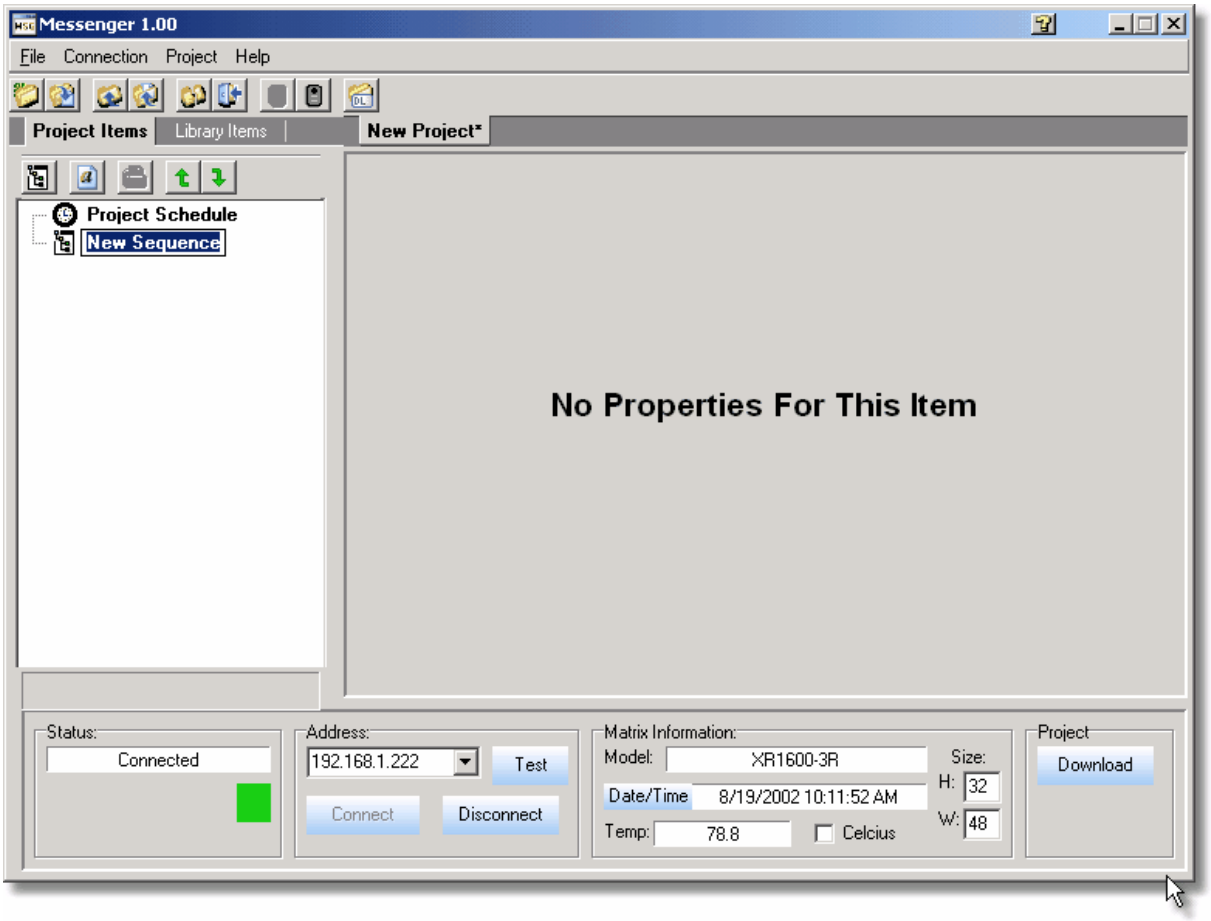
5.1 Step 1: Start Messenger

To start Messenger, view the Start Messenger Topic. Once Messenger has started, verify that it is connected (Status Area).

5.2 Step 2: Create a new sequence

Click on the icon located above the Project/Library tree.

This will create a sequence. Your screen will look like below:



5.3 Step 3: Create a new text element

Click on the text element icon above the project tree to add a new text element. Your screen will look like this:

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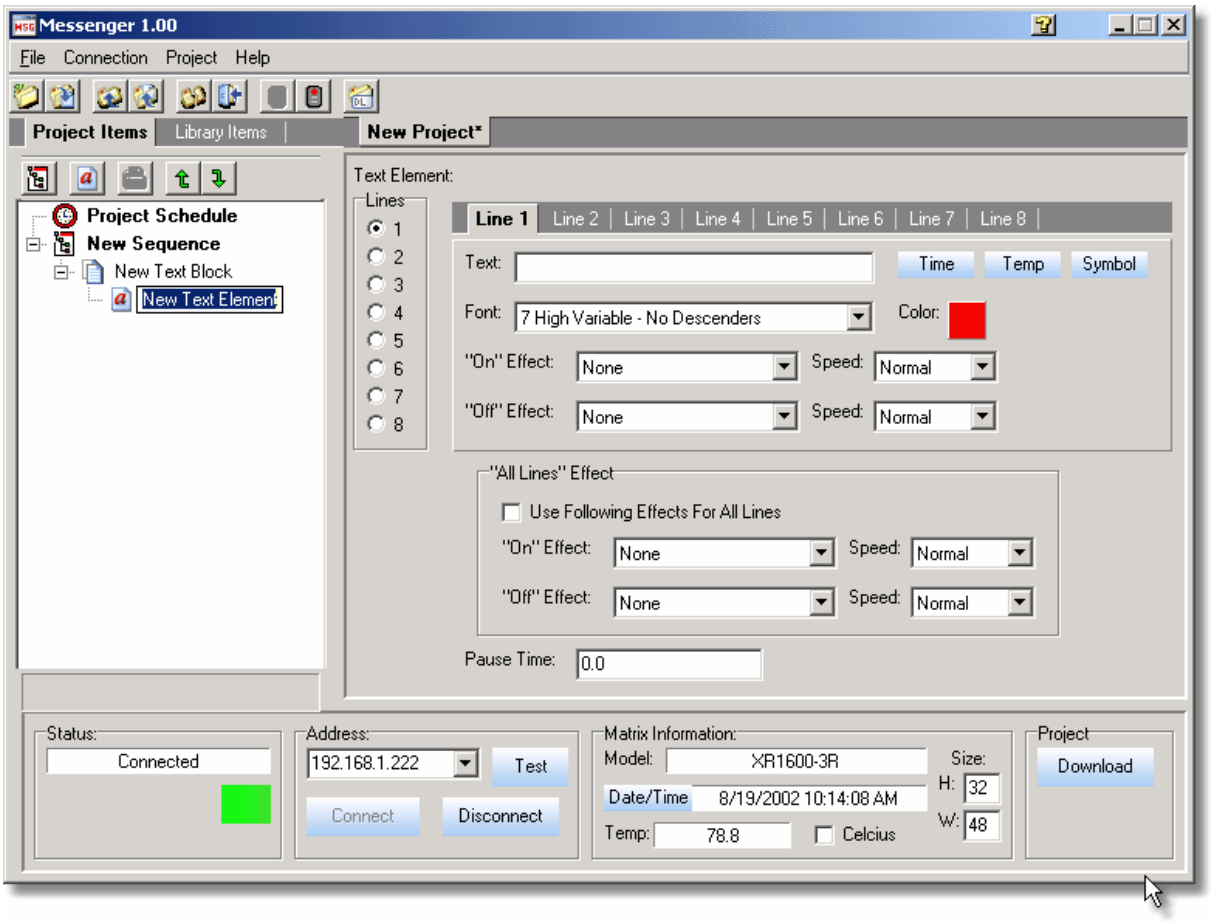

Now within the Text Properties Page, click in the Text box and type "Hello".

Under the On Effect, select Scroll Left.
Under the Off Effect, select Scroll Left.

5.4 Step 4: Save the project

To save the project, click File on the menu then click Save.

Enter a name for the project ("helloworld") will work.

5.5 Step 5: Download the project

Within the Project Area, click Download and the project will be downloaded.

Immediately the sign should start scrolling "Hello" from right to left.

You can now experiment with different sizes of text and effects.

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Software Manual

Part VI

6 Menus and Buttons

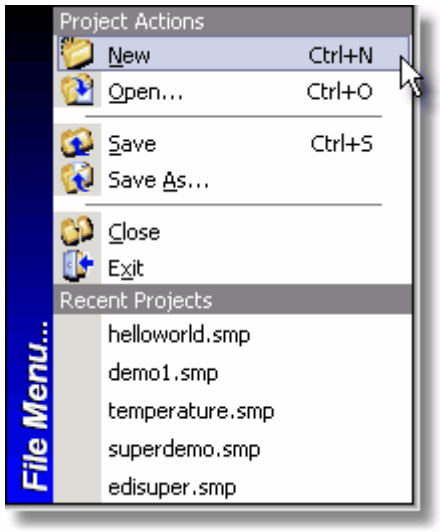
6.1 Menus

These are the categories of menus:

File Menu
Connection Menu
Project Menu
Help Menu

6.1.1 File Menu

This menu contains actions for opening, saving, and closing projects.



New
Open
Save
Save As
Close
Exit
Recent Projects

6.1.1.1 New

This menu action will create a new blank project.

6.1.1.2 Open

This menu action will open a project. A dialog will appear to prompt you for the name.

6.1.1.3 Save

This menu action will save the currently selected project.

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If it does not have a name (just created with New), a dialog will prompt you for a name.

6.1.1.4 Save As

This menu action will save the current project under a different name. A dialog box will appear asking for the new name.

6.1.1.5 Close

This menu action will close the current project. You will be prompted to save it if any changes have been made but not yet saved.

6.1.1.6 Exit

This menu action will exit Messenger. You will be prompted to save each project if there are any changes not saved.

6.1.1.7 Recent Projects

These menu items list the most recent projects. Clicking on one will instantly load it up into Messenger.

6.1.2 Connection Menu

This menu contains actions relating to the connection.

Connect
Disconnect
Test
Date/Time
Recover Unit

6.1.2.1 Connect

This menu action connects to the sign. It acts the same as the Connect button in the Address Area.

6.1.2.2 Disconnect

This menu action disconnects from the sign. It acts the same as the Disconnect button in the Address Area.

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6.1.2.3 Test

This menu action tests the connection to the sign. It acts the same as the Test button in the Address Area.

6.1.2.4 Date/Time

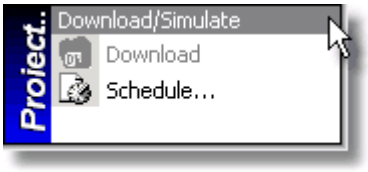
This menu action allows you to change the date/time on the sign. It will bring up the Change Date/Time Dialog.

6.1.2.5 Recover Unit

This menu action initiates recovery of the unit. Please see Initiating Recovery for details.

6.1.3 Project Menu

This menu contains actions related to the current project.



Download
Schedule

6.1.3.1 Download

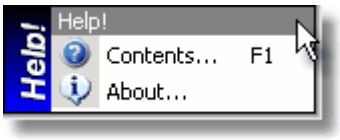
This menu action downloads the current project to the sign. It acts the same as the Download button in the Project Area.

6.1.3.2 Schedule

This menu action selects the schedule within the project and brings up the Schedule Properties Page.

6.1.4 Help Menu

This menu brings up actions related to Help.



Contents
About

6.1.4.1 Contents

This menu action brings up the Table of Contents for this help file.

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6.1.4.2 About

This menu action shows an about box displaying the version and contact information for Messenger.

6.2 Buttons

There are various buttons throughout Messenger:

Quick Buttons are used just underneath the main menu and within the project tree.
Regular Buttons are used all over and have text on them.

6.2.1 Quick Buttons

These are the quick buttons and what their actions are:

This creates a new project. See File|New.

This opens a project. See File|Open.

This saves the current project. See File|Save.

This saves the current project under a different name. See File|Save As.

This closes the current project. See File|Close.

This exits Messenger. See File|Exit.

This connects to the sign. See Connection|Connect.

This disconnects from the sign. See Connection|Disconnect.

This adds a new sequence. See Adding Sequences.

This adds a new text element. See Adding Text Elements.

This adds a new library group. See Adding Library Groups.

This moves up the current item. See Moving Items Up.

This moves down the current item. See Moving Items Down.

This saves the current library. See Saving the Library.

This inserts the library item into the current project. See Copying Library Items.

6.2.2 Regular Buttons

These are the regular buttons found in Messenger and have text on them:

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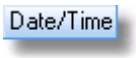
Connects to sign. Connect.

Disconnects from sign. Disconnect

Tests communication with sign. Test



Sets date/time on sign. Change Date/Time

Downloads current project to sign. Download

Inserts time into the text field. Line Text Buttons

Inserts temperature into the text field. Line Text Buttons

Inserts symbol into the text field. Line Text Buttons

Helps build a schedule entry. Build Schedule Dialog

Saves current schedule entry. Schedule Page Buttons

Opens help in various locations.

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Part VII

7 Effect Guide

There are many different effects that can used for text elements. This section describes those effects and how the sign behaves with those effects.

Overview
Scrolling Effects
Line vs All Effects

7.1 Overview

For each text element there can be an "On" and an "Off" Effect. Each one can be different and each line of text within the element can have a different effect.

The sign will perform the "On" effect, then pause with the text statically displayed for the pause time set, then perform the "Off" Effect.

All text is centered Left to Right and Top to Bottom.

If the text is too large for the sign, clipping will occur. For this reason, messages should be viewed or simulated to see the desired message.

7.2 Scrolling Effects

These are the scrolling effects:

None	No effect, shows the text statically.
Scroll Left	Scrolls right to left.
Scroll Right	Scrolls left to right.
Scroll Up	Scrolls down to up.
Scroll Down	Scrolls up to down.

7.3 Line vs All Effects

When using individual line effects for each line of text in an element, the following occurs:

- Each line is effected "on" per the desired effect until the text is centered, then statically held there.
- The sign will not start the off effects until each one of the lines is completed with the On effect and the pause time has elapsed.

When using All Lines effect:

- All lines are shown with the desired "on" effect as a group until all the text is centered, then statically held there.
- The sign will wait for the pause time set and start the "off" effect as a group.

All kinds of neat effects can be accomplished by varying the effect and speed.

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Part VIII

8 Recovery

8.1 Overview

Messages within the matrix system are a series of scripts that are executed on the sign. Since we provide the tools to actually write and compile scripts (See the Script Editor and Script Compiler for details) there may be cases where errors in the script causes the sign not to communicate or display garbage. At this point you can use the Recover Unit action to recover the unit.

Recovering the unit requires access to remove power from the sign.

Initiating Recovery

8.2 Initiating Recovery

To initiate recovery:

Click on Connection|Recover Unit.

Follow the directions to recover the sign.

The sign will recover with no messages stored, ready for use.

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Part IX

9 FAQ's

9.1 I cannot connect to sign...

- Verify that TCP/IP Networking has been correctly configured by going to Control Panel and clicking Network. This information is obtained from your IT department.
- Verify that the sign has the correct IP Address. This IP Address (in most cases) should be on the same network as your computer. Talk to your IT department for details or use the defaults that were listed under Sign Configuration.
- Verify the physical cable between the network and the sign. You can try to ping other devices on the network.
- If the sign cable is not directly connected to your PC, connect it to your PC using a crossover adapter and try connecting.

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Part

10 Example Messages

10.1 Examples

There are a few example messages supplied with the software. These projects are in the Examples directory under where Messenger was installed.

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Part XI

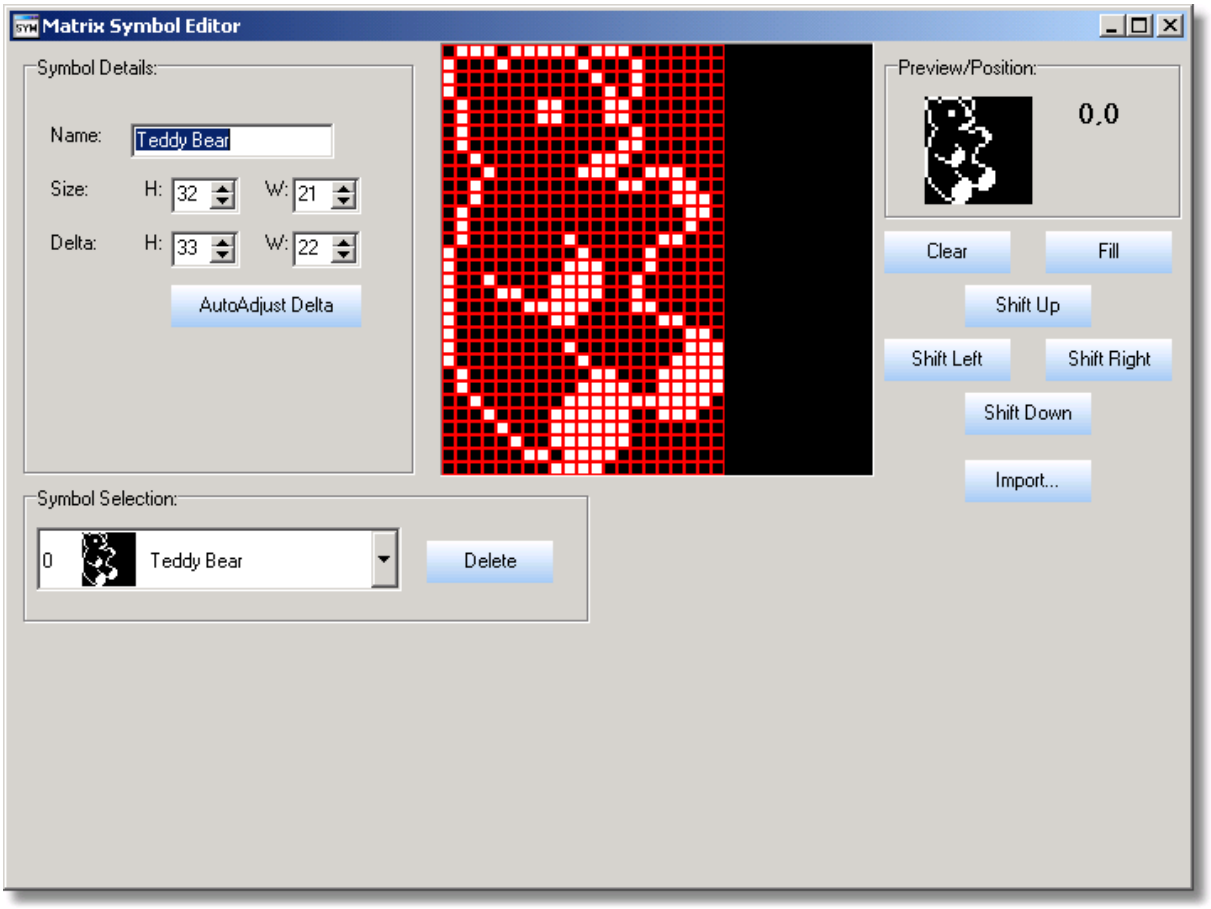
11 Symbol Editor

The symbol editor is a separate application to create symbols to be shown on the display.

Symbols are global through all projects and are automatically saved and loaded when editing them.

11.1 Main Screen

When the Symbol Editor starts, the following screen appears:



These are the areas of the Symbol Editor:

Symbol Details

This area shows the name of the symbol, the size in pixels, and the delta. The delta describes the number of pixels to move to the next character after this symbol is displayed. The delta can be automatically set for the size of the symbol by clicking AutoAdjust Delta.

Symbol Selection

This area allows you to select the symbol to edit, select an empty symbol to create, or delete an existing symbol.

Work Area (Red Grid)

This area shows a zoom of the symbol being editted. To set a pixel, left click the mouse on a grid spot.

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To clear a pixel, right click.

Preview/Position

This area shows a smaller version of the symbol for previewing. It also shows the current grid reference position when the mouse is moved over the grid area.

Work Buttons

These buttons perform actions to change the symbol:

- **Clear** - Clears the symbol to all pixels off.
- **Fill** - Fills the symbol to all pixels on.
- **Shift Up/Left/Right/Down** - Shifts the symbol in the desired direction one pixel.
- **Import...** - Imports a bitmap into the symbol. See Importing a Bitmap.

11.2 Creating A Symbol

To create a symbol:

1. In the Symbol Selection Area, click the drop down box and select an <empty> location.
2. In the Symbol Details Area, enter the name for the symbol. **You must give the symbol a name before you can work with it.**
3. Set the size of the desired symbol and start working on it in the work area.

About Sizing...

Ideally, the height of the symbol should match the height of any text you are going to use next to it. The reason is because the symbol is embedded in line text fields. You can create taller symbols to create some neat displays, but they may clip depending on the text used. You may need to pad some lines of text with spaces to achieve the desired result.

11.3 Editing An Existing Symbol

To edit an existing symbol:

In the Symbol Selection area, click the drop down box and select the symbol to edit. The symbol that was previously shown is automatically saved.

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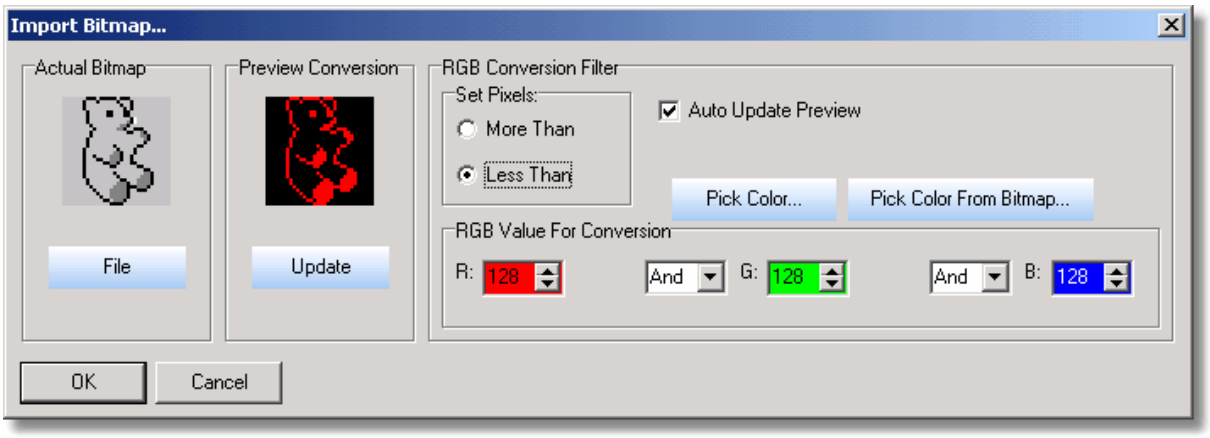
11.4 Importing a Bitmap



Importing a bitmap allows you to take a standard bitmap file and convert it for use as a symbol. You can select a color for use to compare each pixel and whether or not to set that pixel.

Selecting a File:

Click on File and browse to the file you wish to import. It will be scaled and shown in the Actual Bitmap Area.

Preview Area:

This area shows what the symbol will look like after applying the RGB filter. You can manually update the preview by clicking Update.

RGB Conversion Filter:

Each pixel in the original bitmap has 3 color values, one for each: red, green, blue (RGB). Pixels in the symbol are set when the pixels in the bitmap are "More Than" or "Less Than" the RGB value set. Color values range from 0 (black) ro 255 (solid color).

You can set the value directly and use "and" or "or" conditions for the conversion.

You can also pick a color directly or pick a color from the original bitmap.

Typically, you would pick a color from the bitmap that represents the outline of the symbol.

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Part XII

12 Script Editor

12.1 Overview

The script editor is an advanced tool that allows you to create your own scripts for controlling the sign.

It allows for detailed pixel-level addressing.

This will be documented at a future time.

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Part XIII

13 Script Compiler

13.1 Overview

The script compiler is a DOS application that takes output from the Script Editor and compiles it into a compressed format that the sign can execute.

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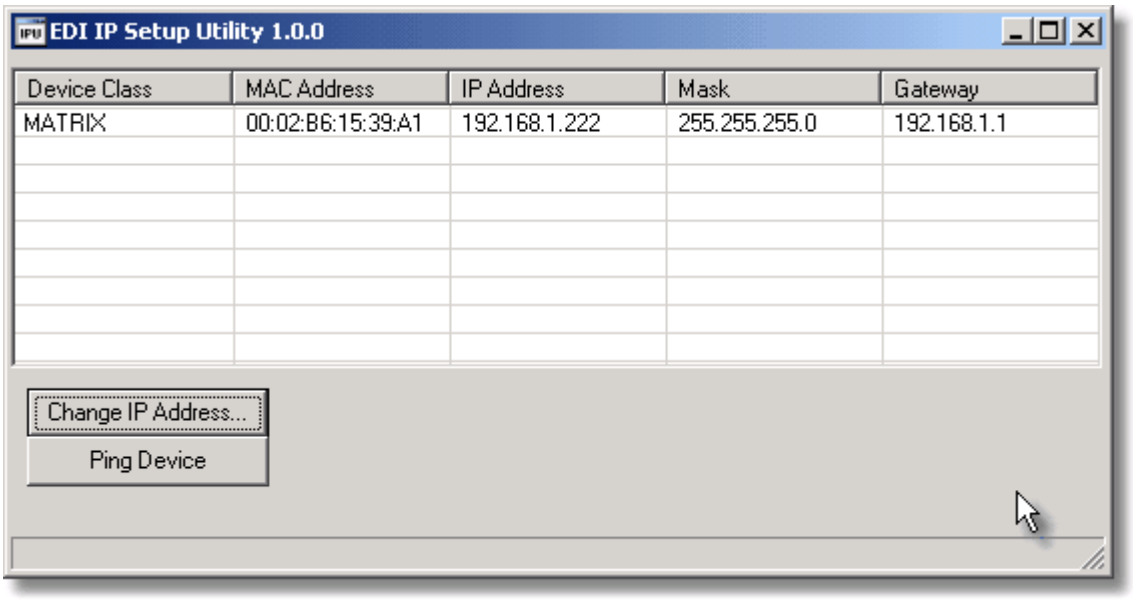
Part XIV

14 IP Utility

14.1 Overview



The IP Utility allows you to change the IP Address of any EDI Ethernet Enabled Sign.

To change the ip address:

Click on the desired unit to change in the list box and click Change IP Address. Enter the information required and click OK. Most units will reboot and show the new information.

Pinging:

Pinging is used to verify connection to the desired unit. Click on the desired unit to ping and click Ping Device.

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