

SETUP MANUAL

FOR ALPHA NUMERIC SCROLLING MESSAGE SIGNS

INTRODUCTION:

This document gives instructions to setup EDI's scrolling message signs. Please obtain your product's model number from an EDI invoice or the label on the back of the display. The product model number will be in the format EDXXX-YY11-N1/N2-SR1/SR2. If your model number includes the suffix ETH, see Appendix A on the documentation CD for Ethernet setup instructions.

XXX represents the height of the characters on the display.

YY represents the number of characters on the display.

N1/N2 denotes the NEMA rating of the display.

SR1/SR2 denotes the wiring of the display.

I SYSTEM OF TOOLS

Before starting setting up the sign collect these tools:

1. Desktop or Laptop computer with:
 - Windows operating system (98, 2000, or XP)
 - CD-ROM Drive
 - Comm. Port or USB Port with serial adapter installed
(See Appendix D on documentation CD for USB adapter setup instructions)
2. One flat head 1/8"x 8" screwdriver.

II INSPECTING CONTENTS OF THE SHIPPING BOX:

Inside the shipping box you will find these parts:

1. RS232-RS485 Converter with Power Adapter for SR2 models. SR1 model signs will not include this part. (See figure 1)
2. 3' long 9 to 25 pin serial cable. This part is not included unless ordered for your sign. (See figure 2)
3. The sign with a 6' long, three conductor line cord installed. (See figure 3)
4. CD ROM for the Customer Documentation and Software



Figure 1



Figure 2

III. INSPECTING THE CONTENTS OF THE CD

Insert the CD-ROM labeled “Customer Software & Documentation” in the CD tray of your computer and open it to see the files below:

1. User Manual
2. Wiring Diagram
3. EDI “Message Pro 2.62” software

Note: If, any of above items is missing, or damaged call EDI Tech Support, immediately, at 1-800-367-6056 ext 4.

IV. INSTALL THE MESSAGE PRO SOFTWARE APPLICATION

Install the EDI “Message Pro 2.62” software from the CD by double clicking on the setup file icon.

V. SETTING UP THE SIGN

1. Apply power to the sign(110vac):

The sign will power up in diagnostic mode displaying the configuration characters: A=XX; b=YYYY; L=ZZ moving from the left to the right of the sign until a data input is received. (See figures 4 to 6).

a=XX is the serial address of the sign where “XX” is a 2 digits number 0 to 63.

b=YYYY is the baud rate of the sign, where “YYYY” is a 4 digit number.

L=ZZ is the character length of the display

Note: If the configuration message does not run on power up, please call EDI Tech Support at 1-800-367-6056 ext 4.



Figure 3 - Scrolling Sign with Message



Figure 4 - Address 01



Figure 5 - 1200 Baud Rate



Figure 6 -

2. Open the right side endplate to access the terminal block.
3. Connect 2 wires (Gauge 22 or 18 AVG) to the terminals “RX +” and “RX –“in the terminal block. The other end of the wires should terminate in terminals 1 and 2 of the Data converter, respectively. (See figure 10)
4. Connect the RS232 - RS485 data converter to the communication port of your computer using the 25 to 9 pin adapter (See figure 2 and 11)

Note: For ED050-SR1 signs, see figure 12 to connect the sign with the computer,.

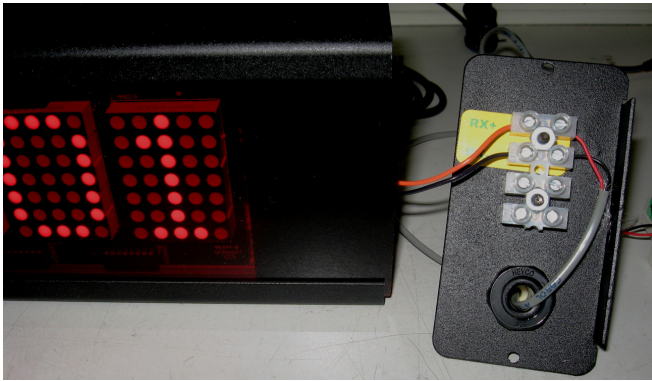


Figure 10 model ED050-SR2

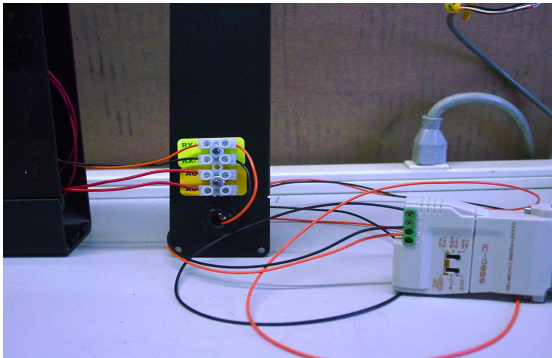


Figure 11 model ED050-SR2



Figure 12 model ED050-SR1

4. Connect the RS232 - RS485 data converter to the communication port of your computer using the 25 to 9 pin adapter. (See figures 2 and 8)

Note: For ED050-SR1 signs, see figure 9 to connect the sign with the computer.

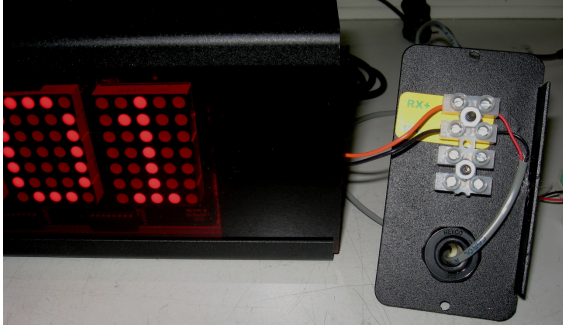


Figure 7 model ED050-SR2

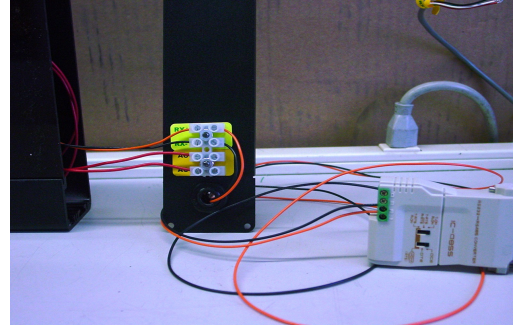


Figure 8 model ED050-SR2



Figure 9 model ED050-SR1

VI. SENDING DATA FROM MESSAGE PRO SOFTWARE

1. Activate the “Message Pro 2.62” software installed on your computer earlier by double clicking on the Message Pro icon (See figure 10).

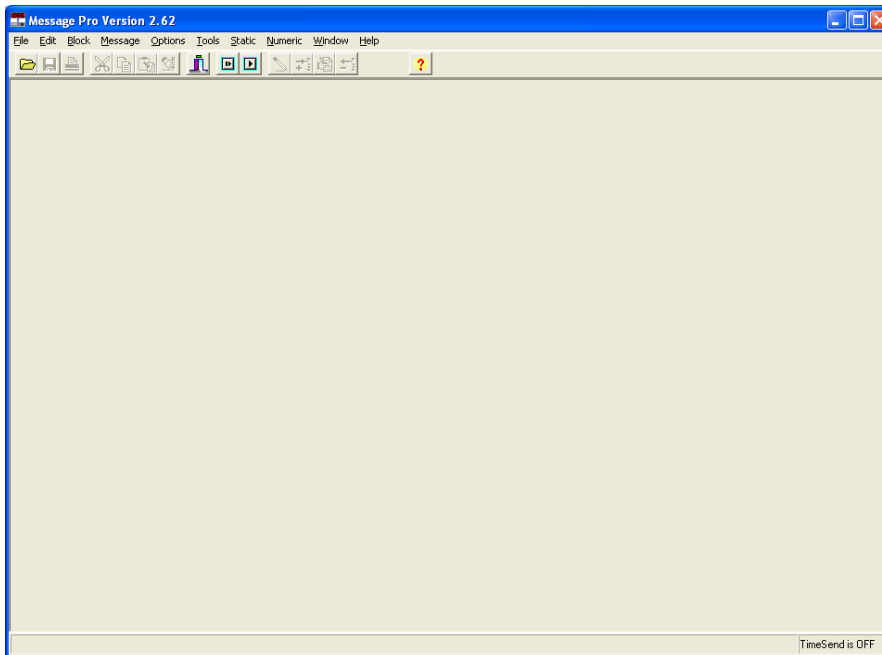


Figure 10

2. Select “Communication Setup” from the “Options” menu. (See figure 11)
3. Select the Comm. Port you will be using.

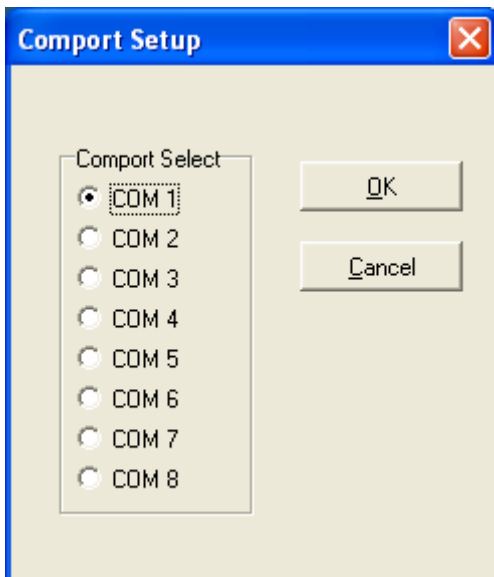


Figure 11

4. Click OK to accept the communication settings and close the window.
5. Select “Send Message” from the “Message” menu. (See figure 13)

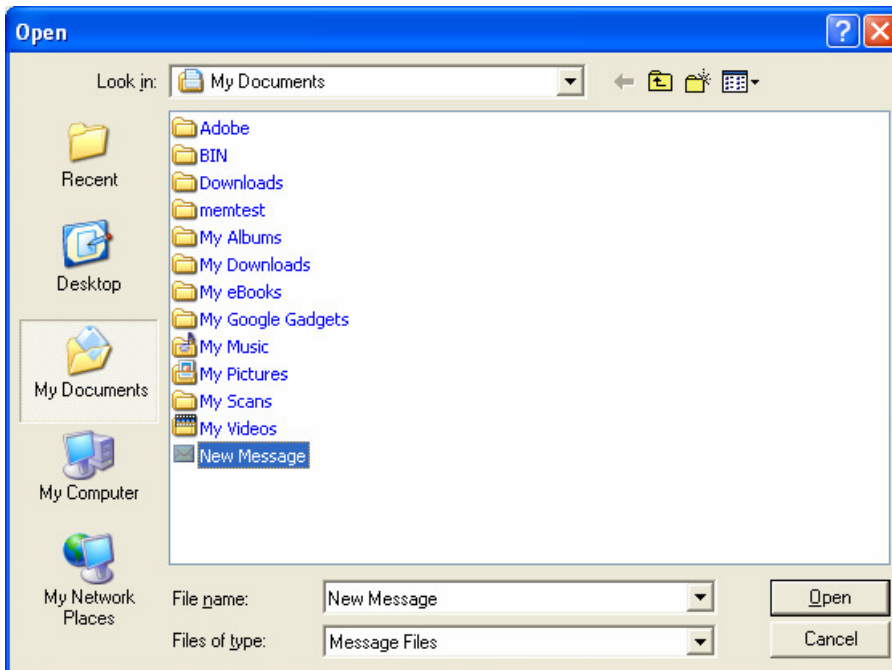


Figure 12

6. From “My Documents” folder, select your new message and click “Open” (See figure 13)

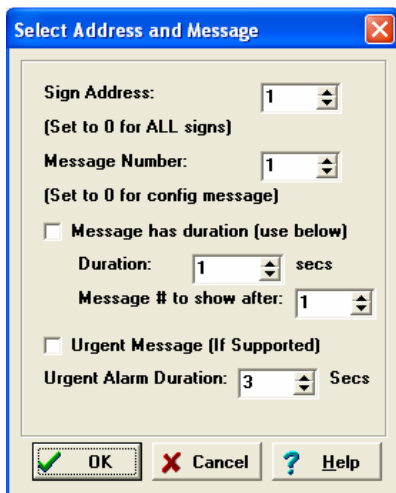


Figure 13

6. Click on the “OK” button to send the message to the sign. (See figure 14)



Figure 14

VII. SENDING MESSAGES WITH ASCII CODE

1. Select “Terminal Window” from the “Tools” Menu. (See figure 15)

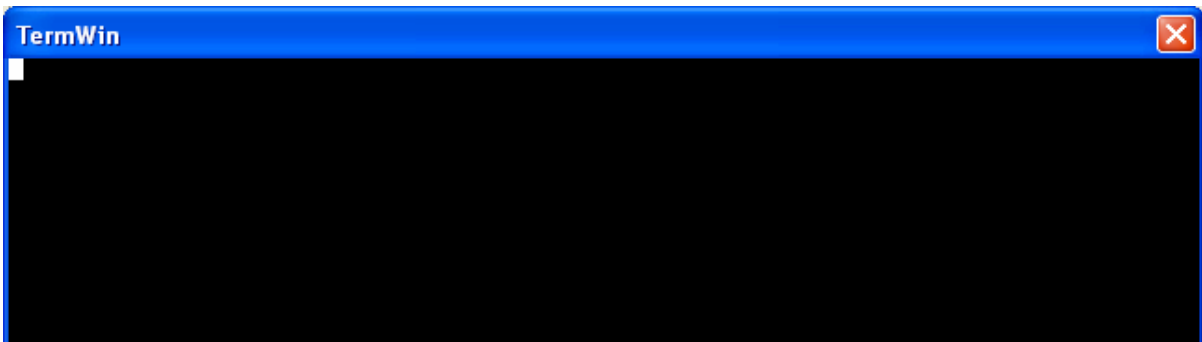


Figure 15

2. Type :< Ctrl+D> <Ctrl+G> <001> <Ctrl+J> <01> <XXXXXXXX> < Ctrl+R>
where:

- <Ctrl+D> <Ctrl+G> = STX (Start of text) command in ASCII code.
- <001> = 3 digits Address of the sign
- <Ctrl + J>
- <001> Number of the message
- <XXXX> = The Message Contents
- <Ctrl + R> = ETX (End of text) command in ASCII code. (See figure 16)

Example: to send the text “HELLO WORLD” type:

< Ctrl+D> <Ctrl+G > <001> <Ctrl+J> <HELLO WORLD> < Ctrl + R > (See figure 16).



Figure 16

Note: for more details on sending text messages using ASCII code see the “Protocol for Scrolling Signs.”

VI. BACK LABEL INFORMATION:

In the label on the back of the sign find this important information: (See figure 17 below)

Model Name: (example, ED050-XX11-N1- SRY) where “XX” = number of the characters; “Y” is 1 or 2 for RS232 and RS485, respectively.

Job #: YYMMXXXX (where YYMM = year and month of production, XXXX = 4 digit serial number. Example: 09030035-1

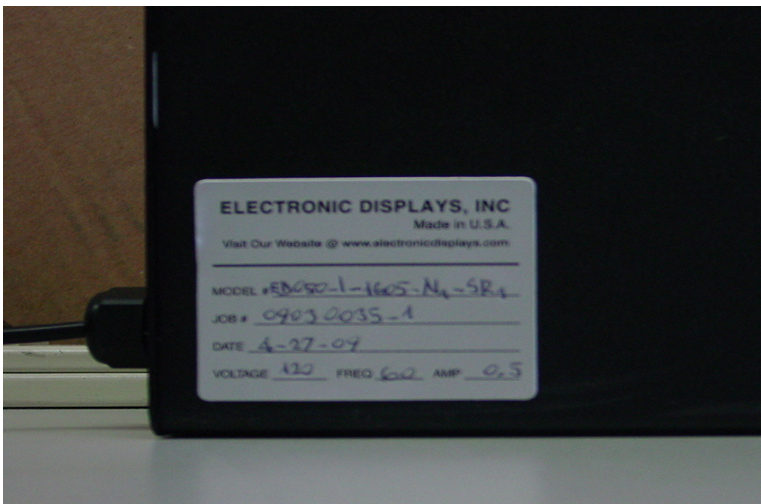


Figure 17

APPENDIXES

1. APPENDIX A: ETHERNET INSTRUCTIONS
2. APPENDIX B: CREATING AND SENDING A TEXT MESSAGE
3. APPENDIX D: USB/COMM. PORT SERIAL ADAPTER.
4. PROTOCOL FOR SCROLLING SIGNS

Protocol for the Single Line HC11 Scroller

This document outlines the serial protocol that the sign will accept. A message is in the format:

`^D^Gnnn^Jxx<message>^R` Where:

- `^D` - Gets the signs attention, must always be the first character.
- `^Gnnn` - Selects the address. Nnn is the 3-digit address that matches the address selected on the sign (dipswitches).
- `^Jnn` - Selects the message number within the sign to save the message under.
NOTE: This must not be sent if using any of the ESC codes listed below.
- `<message>` - Contains the string of characters or embedded block commands. If only strings of characters are sent, they will scroll from right to left. If using block commands (jump, open, wipe, up, etc) you must start it with the block command, the text, and then a block end character (`^B` or `^C`). Any characters outside of the block commands will scroll. You can also toggle between wide and flashing at any time by using the toggle flash and toggle wide codes. To add pauses, embed the pause command within a block command, or embed them directly in the characters to scroll.
- `^R` - Tells the sign to start running.

CODE	KEY	USE
00	<code>^@</code>	Not Used
01	<code>^A</code>	Block Done, ends a special block code (wipe,open, etc)
02	<code>^B</code>	Center Done, same as <code>^A</code> , but centers the special block
03	<code>^C</code>	Display Date at this location
04	<code>^D</code>	Start of any message sent to the display
05	<code>^E</code>	Not Used
06	<code>^F</code>	Not Used
07	<code>^G</code>	Select Sign Address, must be present.
08	<code>^H</code>	Not Used
09	<code>^I</code>	Jump Block
10	<code>^J</code>	Select Message, used only when setting messages
11	<code>^K</code>	Up Block
12	<code>^L</code>	Not Used
13	<code>^M</code>	Not Used
14	<code>^N</code>	Down Block
15	<code>^O</code>	Toggle Flash on/off
16	<code>^P</code>	Adds a 2-second pause
17	<code>^Q</code>	Not Used
18	<code>^R</code>	End of message, used to run the display
19	<code>^S</code>	Not Used
20	<code>^T</code>	Not Used

21	^U	Not Used
22	^V	Display time at this location
23	^W	Not Used
24	^X	Clear Message, ignored, not used
25	^Y	Not Used, use the escape commands to set scroll speed
26	^Z	Not Used
27	^[Start Escape code (see below)
28	^\\	Toggle wide characters on/off
29	^]	Blink Block
30	^^	Open Block
31	^_	Wipe Block

The following is a list of ESC codes that are used after the ESC key (code 27) is sent.

CODE(S)	DESCRIPTION
Cn	Set Flashing rate in HZ, where n is the HZ rate from 1 to 3
Ennnnnn	Set Time where nnnnnn is the time in hhmmss format, 24 hour time
Fnnnnnn	Set Date where nnnnnn is the date in mmddyy format.
Maa bb cc dd ee ff gg	Set a time event for a message. 'aa' is the slot number, from 00 to 31. 'bb' is the month of activation (99 for everyday), 'cc' is the day of activation, 'dd' is the year of activation, 'ee' is the hour of activation (99 to delete this slot), 'ff' is the minute of activation, 'gg' is the message number to activate (01 to 32)
Hn	Set Scroller speed, where n is 0 to 3, 0 being the fastest
Xaaa bb c	Set the configuration, where 'aaa' is the new sign address, 'bb' is the new width of sign in characters, 'c' is the baud rate from 0 to 7, representing 150,300,600,1200,2400,4800,9600,19200 baud. This configuration will not take place until the unit has power-cycled.

\\SERVER1\WORDDOCS\Protocol for the Single Line HC11 Scroller.doc