



PROGRAMMING MANUAL

This manual is for 1036 models of the BetaBrite® sign.

To find the model of your BetaBrite® sign, turn it off and then on again. The model number appears as follows:



The first four numbers ("1036") are the model number.

ADAPTIVE

Form No. 9703-6001G
11/26/2001

NOTE: Due to continuing product innovation, specifications in this document are subject to change without notice.

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Visit our Internet World Wide Web sites:

<http://www.betabrite.com> and <http://www.adaptivedisplays.com>

or e-mail us at betabrite@ams-i.com or sales@ams-i.com

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WARNING FOR EUROPEAN USERS

This is a class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Warranty

Adaptive Micro Systems, Inc. warrants to the original purchaser that the sign, keyboard and power supply will be free of defects in workmanship and materials for a period of one year from the date of purchase.

Adaptive Micro Systems, Inc. will without charge, repair or replace, at its option, defective product or component parts upon delivery to the factory service department accompanied by proof of the date of purchase in the form of a sales receipt.

This warranty does not apply in the event of any misuse or abuse of the product, or as a result of any unauthorized repairs or alterations. This warranty does not apply if the serial number is altered, defaced or removed from the sign. Incandescent lamps used in incandescent products are not covered by this warranty.

The purchase price of this product does not include, from Adaptive Micro Systems, Inc., any on-site support, service or maintenance.

Local ordinances prohibiting the use of flashing signs may exist in some locations. Compliance with local ordinances is the sole responsibility of the customer.

To obtain warranty coverage, this product must be registered. Please complete the enclosed warranty registration card and mail it to Adaptive Micro Systems, Inc.

How to obtain warranty service

1. Contact Adaptive Micro Systems Customer Service at 414-357-2020.
2. Ask the Customer Account Specialist for a Return Merchandise Authorization (RMA) number. An RMA number is required to obtain warranty service.
3. Fill out the Return Merchandise Authorization (RMA) Form on the following page. To obtain warranty service, this form, including the RMA number, must accompany the product.
4. Follow the return instructions on the RMA Form to return to Adaptive Micro Systems, Inc.

Return Merchandise Authorization (RMA) Form

RMA Number: _____

Date of Purchase: _____

Company Name: _____

Contact Person: _____

Address: _____

Phone Number: _____

Fax Number: _____

Description of Problem: _____

Return Instructions

1. Obtain an RMA number from Adaptive Micro Systems at 414-357-2020. Ask for Customer Service.
2. Fill out this form and include proof of purchase receipt if product is under warranty.
3. Pack this form, the sign, keyboard and transformer in the original carton (or a suitable replacement). Please write the RMA number on the outside of the package. Any damage to the product during shipment is the responsibility of the freight company or the owner of the sign.
4. Ship the package, postage/shipping prepaid to:

Adaptive Micro Systems, Inc.

Attn: RMA No. _____

7840 North 86th Street

Milwaukee, WI 53224

PLEASE WRITE THE RMA NUMBER ON THE LABEL OF THE SHIPPING BOX. THANK YOU.

Introduction

Technical specifications

Weight (without power supply or keyboard):	2.55 pounds (1.16 kg)
Height:	3 13/16 inches (9.7 cm)
Length:	25 7/8 inches (65.7 cm)
Depth:	1 15/16 (3.4 cm)
Power:	7.5 VDC at 3.25A
Environmental requirements:	The display should be operated in an environment where the temperature is between 0° C and 45° C, and the humidity (non-condensing) does not exceed 95%.

EMI information

Electromagnetic interference (EMI) information follows:

United States

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la class A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

Installation

Your sign can be mounted on a wall, ceiling, or counter.

NOTE: This sign is intended for **indoor** use only.

NOTE:

- Do not mount or attach the power supply to anything.
- Do not let the power supply hang by the cord, or dangle.
- Place the power supply on a flat surface where no chemicals or liquid, such as water, will contact it.
- Plug the power supply into an easily-accessible electrical outlet no further than 15 feet away from the sign.

NOTE:

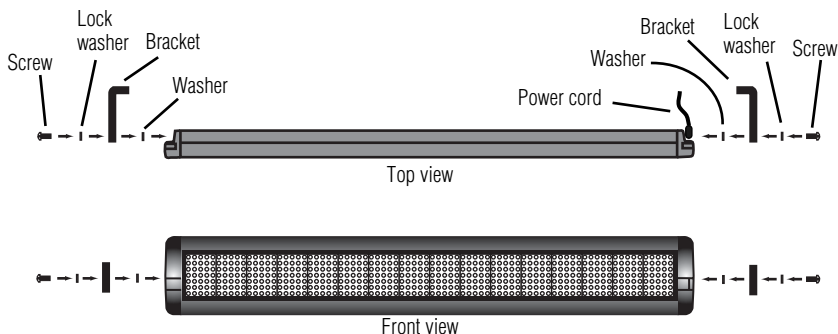
- Connecting a surge protector between the electrical outlet and the sign is highly recommended. Message data can be lost or the sign could be damaged by power fluctuations.

NOTE:

- Electrostatic discharge, or “carpet shocks”, can also cause data loss and damage to the sign. Avoid touching the sign after it’s been installed, especially in cold, dry winter air.

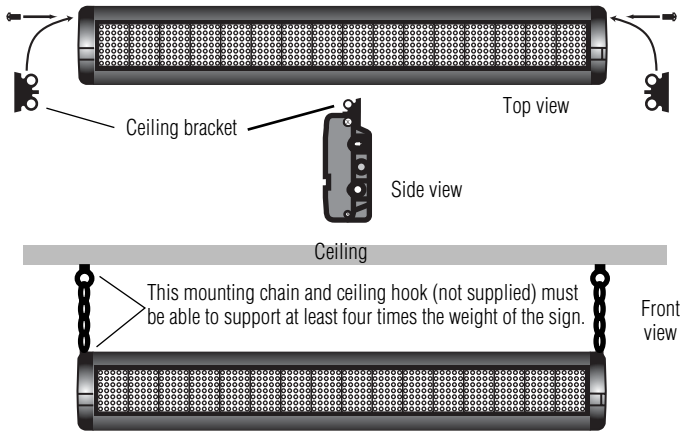
Wall mount

1. Attach the mounting brackets to the wall or surface, 24 5/8 inches (62.7 cm) on center.
2. Attach the sign to mounting brackets using hardware as shown.
3. Plug the power cord into the sign and into an outlet.



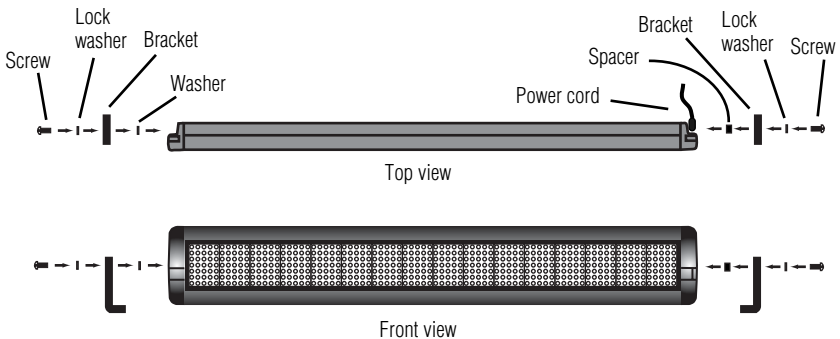
Ceiling mount

1. Attach the ceiling brackets to the sign using the screws supplied.
2. Hang the sign from the ceiling using mounting chains and ceiling hooks (not supplied). The chains and hooks must be able to support at least four times the weight of the sign.
3. Plug the power cord into the sign and into a nearby outlet.



Counter mount

1. Attach the mounting brackets to the counter, 24 5/8 inches (62.7 cm) on center.
2. Plug the power cord into the sign.
3. Attach the sign to mounting brackets using hardware as shown.
NOTE: On the end with the power cord, use the spacer provided, not a washer.
4. Plug the power cord into an outlet.



Operating a BetaBrite® sign

You can operate a BetaBrite® sign in two ways:

- by using a hand-held Remote Control for both basic setup and messaging, or
- by using a single computer connected to the sign for messaging. See “Using a computer to operate your sign” on page 6.

Using a Remote Control to operate your sign

A Remote Control is a hand-held keyboard used to operate a BetaBrite® sign. Most of this manual shows you how to set up a sign and program messages using a Remote Control.

A Remote Control needs two AA batteries to operate.

Point this end of the Remote Control at the front of your BetaBrite®.

Press **PROGRAM** to put the sign into one of these modes: (Use **BACK** to move from mode to mode and **ADV** to select a mode.)

- PROG TEXT A – for entering text messages. (“A” is a file name, from A to Z.)
- PROG DOTS A – for creating graphics. (“A” is a file name, from A to Z.)
- SET TIME – changes the sign's time.
- SET DATE – changes the sign's date.
- SET PASSWORD – used to prevent someone from changing your messages.
- CLEAR MEMORY – deletes all text and graphic files.

Hold down **FCN** and then press **PROGRAM** to turn the sign off and on.

Press **RUN** twice to exit programming mode.

These keys with red triangles are used in PROG DOTS to draw graphics. (Press **SELECT** to turn drawing on and off.)

Use **SPACE** to insert a blank space between characters. (To insert just a half space, press **SELECT**.)

HOW TO ENTER A MESSAGE:

1. POINT THIS REMOTE CONTROL KEYBOARD AT THE DISPLAY.
2. PRESS THE [PROGRAM] KEY. THE WORDS “PROG TEXT” WILL APPEAR ON THE DISPLAY.
3. ENTER THE MESSAGE YOU WANT TO BE DISPLAYED. (USE THE [] AND [SELECT] KEYS FOR PUNCTUATION).
4. PRESS THE [RUN] KEY TWICE.

SEE YOUR PROGRAMMING MANUAL FOR ADDITIONAL INSTRUCTIONS AND DISPLAY FEATURES.

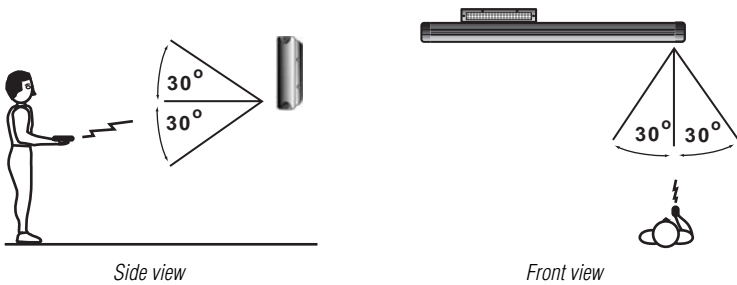
BETAbrite®

To select a special character (like ? or !) or a graphic symbol, Press **SYMBOL** or !.

Then press **SELECT** to choose a special character or graphic.

To program a sign with a Remote Control:

- Stand at least 5 feet and no more than 30 feet from the sign.
- Make sure nothing reflective is in front of the sign. (Light from the sign's display that is reflected back can interfere with the Remote Control.)
- If nearby fluorescent lights interfere with the Remote Control, you may have to relocate either the lights or the sign.

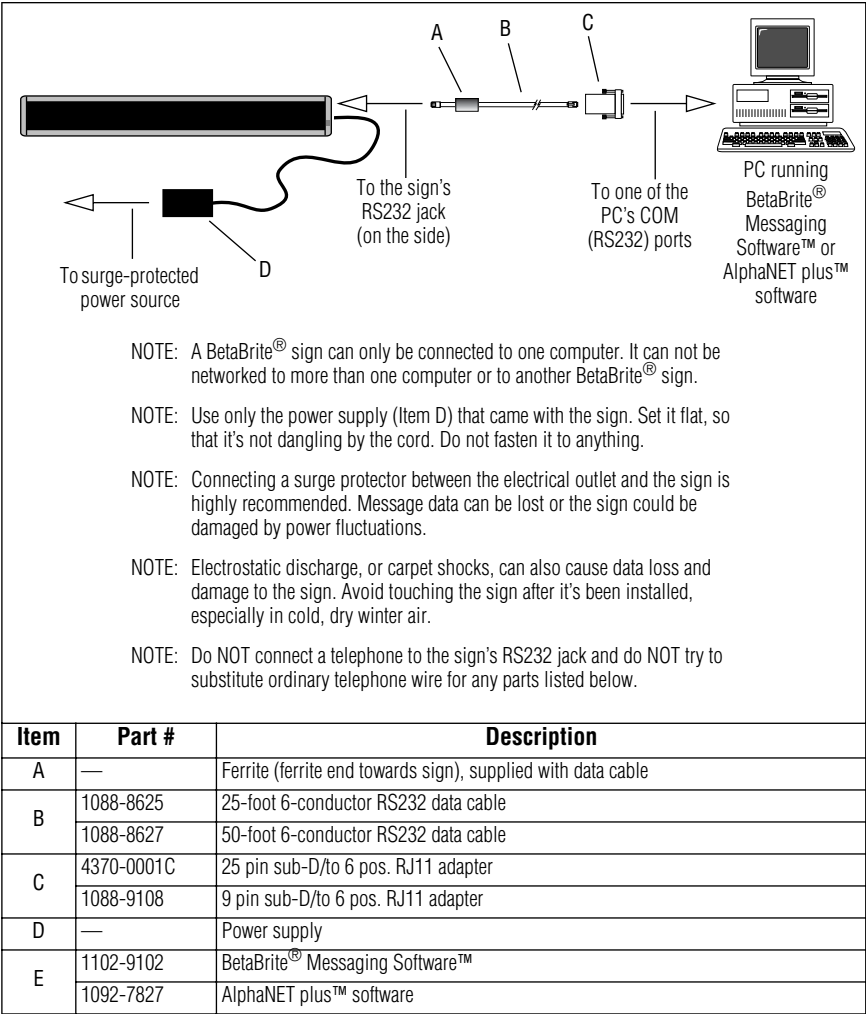


If a sign is this far from the floor...	...then hold a Remote Control this far away:
10 feet	from 10 to 30 feet
15 feet	from 19 to 30 feet
20 feet	from 25 to 30 feet

Figure 1: Using a Remote Control with a sign

Using a computer to operate your sign

Messages can also be programmed into the sign using a computer. To do this, you'll need special connectors and computer software, either AlphaNET plus™ or BetaBrite® Messaging Software™. Follow the instructions that come with the software CD to program messages.



NOTE: BetaBrite® Messaging Software™ is available for online purchase through <http://www.BetaBrite.com>. Click on "Shop @ BetaBriteDirect" to submit an order.

Basic sign operation

Turning a sign on and off

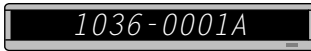
When you plug in the sign's power supply, the sign starts up automatically, and unplugging the power supply turns the sign off.

However, instead of unplugging a sign, there is another way to turn the sign off:

*Hold down **FCN** and then press **PROGRAM** to turn a sign off and on.*

NOTE: Messages that you have programmed into the sign will *not* be lost when you turn a sign off. Messages will be retained for up to 30 days if the sign is not powered.

When a sign starts up, the following will be displayed:



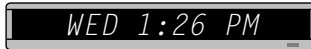
The software (or "firmware") version inside the sign.

THEN



The amount of memory inside the sign.

THEN



The time and date of the sign.




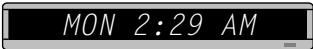



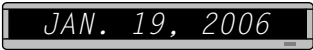

Setting a sign’s time and date

Both time and date can be set using either a Remote Control or messaging software.

Once the time is set, the sign will keep accurate time unless the sign loses power. If this happens, then the time must be reset.





However, the sign will NOT change the date automatically. The date must be set EACH DAY using either a Remote Control, as below, or messaging software. If the sign loses power, then the date must be reset.

NOTE: Adaptive recommends using messaging software (like Betabrite Messaging software) to set the time and date.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until <i>SET TIME</i> appears.	
3	Press ADV .	 THEN 
4	Press D to set the day of the week. Press H to set the hour. Press M to set the minute. NOTE: Press SELECT to change from 12-hour (AM/PM) to 24-hour mode (0 - 23).	
5	Press BACK until <i>SET DATE</i> appears.	
6	Press ADV .	 THEN 
7	Press D to set the day. Press M to set the month. Press Y to set the year. NOTE: Press SELECT to display the date in different formats—for example, <i>JAN 19, 2006</i> or <i>1/19/06</i> , or <i>19/1/06</i> , etc.	
8	After setting the date and time, press RUN twice to return to normal operation. NOTE: Date and Time will not appear on the screen after you have returned to normal operation.	

Clearing a sign's memory












Clearing a sign's memory erases all messages and graphics that have been programmed into the sign — also, the sign's password (if any) will be deleted.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until <i>CLEAR MEMORY</i> appears.	
3	Press ADV .	 THEN 
4	Press Y to clear the sign's memory. The sign will return to normal operation and display a series of demo messages.	





Setting a sign’s password

You can set a personal password to protect your messages and graphics from tampering by others.

If you forget the password, see “What to do when you forget a sign’s password” on page 11.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until <i>SET PASSWORD</i> appears.	
3	Press ADV .	
4	Press Y to set a password.	
5	Type a 6-character password. (Only asterisks will appear on the sign as you type.)	
	Re-type the password when prompted.	 THEN
		 THEN
	<i>CORRECT</i> will appear if you entered the same password.	 THEN
	If you failed to type the same password, <i>ERROR</i> will appear, and you'll have to start over from Step 1.	
6	Press RUN twice.	
7	Press Y to password protect the sign. NOTE: If you select N , then a password will not be needed when you press PROGRAM .	 The sign will return to normal operation. Now, whenever you press PROGRAM , you'll have to type the password you just entered.

What to do when you forget a sign's password

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press Shift and L six times.	  THEN 
3	Enter a new password.	

How to delete a sign's password

If you no longer want to be prompted to password protect a sign, you must clear the sign's memory in order to delete the password. To do this, see "Clearing a sign's memory" on page 9.

Sound control

Normally, when you press a Remote Control key while programming a sign, the sign will beep.

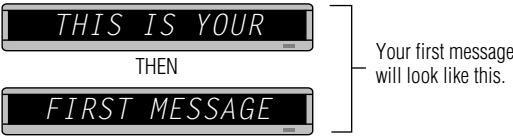
If you want to turn the beeping off, hold down **FCN** and then press **FONT**. (To turn the beeping on again, repeat this.)

Beginning text messaging

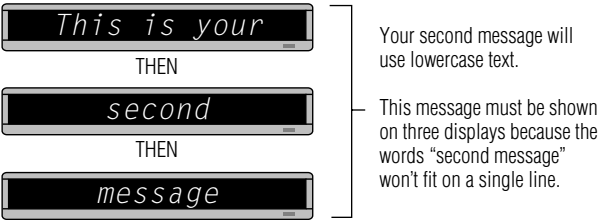
This section shows you how to start creating messages on your sign.

Example 1 — Using upper and lowercase in messages










In this first example, you'll display the text *THIS IS YOUR FIRST MESSAGE* like this:



...and then the text *This is your second message*:












Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press ADV .	<p>"A" is the file name of your message</p>
3	Type <i>THIS IS YOUR FIRST MESSAGE</i> Note: If you make a mistake while typing, press DELETE to erase a letter.	<p>[AUT], which stands for Automode, will appear as you type your first character. Automode automatically displays your message in different formats.</p> <p>Your message should look like this when you're done typing.</p>



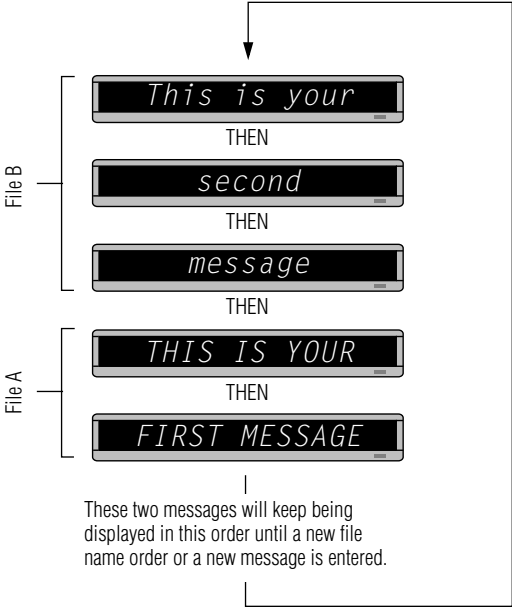
4	Press RUN twice.	 <p>THEN</p>  <p>Because Automode [AUT] was used in your message (see Step 3), the text of your message will be displayed in a variety of formats. For example, one of the formats (or modes) called Scroll moves your message from the bottom to the top of the sign.</p>
Now that the first message is done, we'll enter a second message which contains upper and lowercase characters.		
5	Press PROGRAM again.	
6	Press SELECT .	 <p>The A changes to a question mark (?) after pressing SELECT.</p>
7	Press B .	 <p>"B" is now the file name of your second message. If you pressed A instead of B, you would have written over the first message.</p>
8	<p>Type <i>T</i></p> <p>Hold down FCN and then press MODE to switch to lowercase letters.</p> <p>Type <i>this is your second message</i></p>	 <p>Your message should look like this when you're done typing.</p>
9	Press RUN twice.	 <p>THEN</p>  <p>THEN</p>  <p>You should notice that...</p> <ul style="list-style-type: none"> The first message doesn't appear at all. (We'll fix this in the following example.)

Example 2 — Displaying messages in file name order (A, B, C, etc.)

Once you’ve programmed messages into the sign, you may want to set the order or sequence in which messages appear.

In this example, we’ll display messages by their file name (A, B, C, etc.) or in alphabetical order.

Step	When you do this...	You see this...
This example continues where Example 1 left off. This example assumes that there are two messages (files A and B) in the sign: File A = <i>THIS IS YOUR FIRST MESSAGE</i> File B = <i>This is your second message</i>		
1	Press PROGRAM .	
2	Press RUN .	 TIME or DEMO may also appear here.
3	If <i>RUN</i> appears on the sign, go to the next step. Otherwise, press SELECT until <i>RUN</i> appears.	
4	Press B .	
5	Press RUN .	 THEN  THEN 
You have just programmed the sign to run <i>only</i> message file B. Next, we'll program the sign to display message B <i>and</i> then message A.		
6	Press PROGRAM .	
7	Press RUN .	







8	If <i>RUN</i> appears on the sign, go to the next step. Press SELECT until <i>RUN</i> appears.	
9	Press B , then A .	 <p>The order of these letters determines the order in which messages will appear on a sign. (In this case, message B will appear first, then message A.)</p>
10	Press RUN .	 <p>These two messages will keep being displayed in this order until a new file name order or a new message is entered.</p>
Using this method, you can program the order of some or all of the messages you've entered on a sign.		







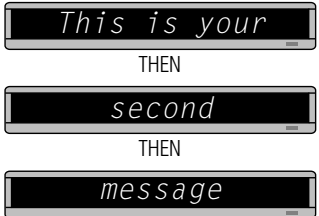

Example 3 — Displaying messages in time order

In Example 2, you set the order of messages by file name. However, that method could not specify an exact time when a message would appear.

In this example, we'll show you how to make a message appear and disappear at times you specify.









NOTE: Displaying messages in time order will work only as long as the sign has power. When your sign loses power, its internal clock becomes inaccurate and must be reset (see "Setting a sign's time and date" on page 8).












Step	When you do this...	You see this...
<p>For this example, make sure that your sign's internal clock has been accurately set. (See "Setting a sign's time and date" on page 8.)</p> <p>This example continues where Example 1 left off.</p> <p>This example assumes that there are two messages (files A and B) in the sign:</p> <p>File A = <i>THIS IS YOUR FIRST MESSAGE</i></p> <p>File B = <i>This is your second message</i></p> <p>In this example, we'll program the sign to display File A from Monday through Friday from 1:10 PM to 2:30 PM. We'll program the sign to always display File B.</p>		
1	Press PROGRAM .	
2	Press SELECT until <i>B</i> appears.	
3	Press TIME/DATE .	<div><p>— <i>ON ALWAYS</i> is the default setting for a message. A message set to <i>ON ALWAYS</i> will run</p></div> <p>Since file B is already set up, we'll go on to file A.</p>
4	Press PROGRAM .	
5	Press SELECT until <i>A</i> appears.	
6	Press TIME/DATE .	<div><p>First, we'll select the <i>ON</i> time or when the message <u>starts</u>.</p></div>

7	Press D (for day) until <i>M-F</i> (Monday through Friday) appears.	 <p>Press D to set the day, H for hour, and M for minute (in 10-minute increments).</p>
8	Press H (for hour) until <i>13:00</i> appears.	 <p>Hours must be represented in 24-hour or military style. So 1:00 PM = 13:00, 2:00 PM = 14:00, etc.</p>
9	Press M (for minute) until <i>13:10</i> appears.	 <p>Minutes are set in increments of 10.</p>
10	Press SELECT .	 <p>After setting the <i>ON</i> time, select the <i>OFF</i> time or when the message <u>stops</u>.</p>
11	Repeat Steps 7, 8, and 9 to set the <i>OFF</i> time (2:30 or 14:30 in this example.)	
12	Press RUN once. (If TIME does not appear, press SELECT until it does.)	 <p><i>RUN</i> or <i>DEMO</i> may also appear here.</p>
13	Press AB .	
14	Press RUN once.	<p>This message should appear continuously.</p> <p>File B</p>  <p>THEN</p> <p>THEN</p> <p>THEN</p> <p>This message should only appear <u>between</u> the <i>ON</i> and <i>OFF</i> times you set.</p> <p>File A</p>  <p>THEN</p>

Example 4 — Changing the text of an existing message

After typing in a message, you may want to add or remove text from it. The following is an example of this common situation:

Step	When you do this...	You see this...
<p>This example continues where Example 2 left off.</p> <p>This example assumes that there are two messages (files A and B) in the sign:</p> <p>File A = <i>THIS IS YOUR FIRST MESSAGE</i></p> <p>File B = <i>This is your second message</i></p> <p>and</p> <p>that File A, then File B is displayed.</p> <p>In this example, we'll change File A and File B to the following:</p> <p>File A = <i>THIS IS YOUR FIRST MESSAGE, BUT NOW IT'S LONGER</i></p> <p>File B = <i>This is the second message (your changed to the)</i></p>		
1	Press PROGRAM .	
2	Press SELECT until <i>B</i> appears.	
3	Press ADV until the space after <i>your</i> appears.	 <p>We're going to delete <i>your</i> and replace it with <i>the</i>.</p>
4	Press DELETE until <i>your</i> (and the space after it) are erased.	
5	Press INSERT .	 <p>Text you type now will be inserted here—after the space following <i>is</i>.</p>
6	Type <i>the</i> (and then SPACE).	
7	Press INSERT to turn text insertion off.	
8	Press ADV until the first few letters of <i>second</i> appear.	 <p><i>the</i> has replaced <i>your</i></p>









9	Press APPEND to go to the end of the message. DON'T OMIT THIS STEP. If you do, the last part of the message will be automatically deleted.	
10	Press RUN twice.	<div style="display: flex; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg); margin-right: 10px;">File B</div> <div style="margin-left: 10px;">  THEN  THEN  </div> </div>
Next, we'll add text to the end of File A.		
11	Press PROGRAM .	
12	Press SELECT until A appears on the sign.	
13	Press APPEND .	 <div style="margin-top: 10px;"> APPEND takes you to the <u>end</u> of a message. </div>
14	To type a comma, press ! and then SELECT until a comma appears.	
15	Press SPACE and then type BUT NOW IT.	
16	Press ! and then SELECT until an apostrophe appears.	
17	Type <i>S LONGER</i> .	

18	Press RUN twice.	<div>File A</div> <div><div>THIS IS YOUR</div><div>THEN</div><div>FIRST MESSAGE</div><div>THEN</div><div>BUT NOW IT'S</div><div>THEN</div><div>LONGER</div></div>
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Example 5 — Deleting messages

To delete all the messages in a sign, see “Clearing a sign’s memory” on page 9.

However, if you only want to delete selected messages, then use the method shown in this example.

Step	When you do this...	You see this...
<p>This example continues where Example 4 left off.</p> <p>This example assumes that there are two messages (files A and B) in the sign:</p> <p>File A = <i>THIS IS YOUR FIRST MESSAGE, BUT NOW IT'S LONGER</i></p> <p>File B = <i>This is the second message</i></p> <p>In this example, we'll delete File B.</p>		
1	Press PROGRAM .	
2	Press SELECT until <i>B</i> appears on the sign.	
3	Press DELETE .	
4	Press Y to delete the file.	
5	Press RUN twice.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">File A</div> <div style="margin-right: 10px;">{</div> <div style="text-align: center;">  <small>THEN</small>  <small>THEN</small>  <small>THEN</small>  </div> </div>

Advanced text messaging

Before attempting the following, make sure you’re familiar with the previous examples in the “Beginning text messaging” section of this manual.

Example 6 — Displaying the time and date

NOTE: Because the time and date are not updated when the sign is off, the time and date must be re-programmed each time the sign is turned off and on.

Step	When you do this...	You see this...
In this example, we'll create a message that continuously displays the current time and date: <div><div>Rosco</div><div>THEN</div><div>Advertising</div><div>THEN</div><div>3:26 PM</div><div>THEN</div><div>Jan. 19, 2006</div></div> <p>The time will be displayed in wide letters.</p>		
1	Delete all the messages currently stored in the sign. (See "Example 5 — Deleting messages" on page 21.)	
2	Press PROGRAM .	<div>PROG TEXT A</div>
3	Press SELECT .	<div>PROG TEXT ?</div>
4	Press A .	<div>A]</div>
5	Press MODE to select a "mode". (Modes are used to change the way a message appears. See Appendix A for a list of the modes available.)	<div>A] [HLD]</div> <p>This stands for Hold mode.</p>
6	Press SELECT until the Roll Down — [RL ↓] — mode appears.	<div>A] [RL↓]</div> <p>This stands for Roll Down mode.</p>

7	Type <i>R</i>	
8	Hold down FCN and then press MODE to switch between uppercase and lowercase letters, type the following: <i>osco Advertising</i>	
We'll Roll the time in from the bottom to the top of the sign.		
9	Press MODE and then SELECT until the Roll Up mode appears: <i>[RL ↑]</i>	
10	Press FONT and then SELECT until <i>[WD7]</i> appears.	 [WD7] means that the time will be displayed in wide letters.
11	Press TIME/DATE to include the time in the message.	 This inserts the current time (in wide characters).
Next, we'll Roll the date in from the left to the right of the sign.		
NOTE: Make sure that the date is set correctly before using the date in a message.		
12	Press MODE and then SELECT until the Roll Left mode appears: <i>[RL ←]</i>	 We'll make the <u>date</u> will roll to the left.
13	Press FONT and then SELECT until <i>[SS7]</i> appears. ([SS7] is the default or normal font.)	 [SS7] means the following characters won't be wide.
14	Press TIME/DATE and then SELECT to display the date.	

15	Press RUN twice to see the message.	<div>Rosco</div> <div>THEN</div> <div>Advertising</div> <div>THEN</div> <div>3:26 PM</div> <div>THEN</div> <div>JAN. 19, 2006</div>
----	--	---

Example 7 — Using fonts and colors

Fonts

Fonts are the way characters are displayed on a sign. In the world of printing and publishing, fonts are given names like Times or Helvetica and qualities like serif or sans serif, font size (like 12 point or 14 point), bold or italic, etc.:

This is Times — a serif font.

This is Helvetica — a sans serif font.





The fonts available for your sign are in “Appendix A — Modes, fonts, colors, and graphics available” on page 41.











Colors





Your sign can display up to eight colors — [GRN] for green, [RED] for red, etc. — plus four special color combinations.

To determine what colors are available on your sign, see “Appendix A — Modes, fonts, colors, and graphics available” on page 41.

The following examples demonstrate how to use fonts and colors on your sign:

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the sign. (See “Example 5 — Deleting messages” on page 21.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Press MODE until [HLD] appears.	 Hold mode turns off Automode.
5	Press COLOR and then SELECT until [GRN] (green) appears.	 We'll make the first part of the message appear in green.

6	Press FONT and then SELECT to select <i>[SRF]</i> (a serif font).	
7	Using FCN and PROGRAM when needed, type <i>This is SRF</i>	 <p>As you type, the font you selected will appear as it will actually be displayed on the sign.</p>
8	Press RETURN to start a new line of text.	 <p>This symbol indicates RETURN.</p>
9	Press COLOR and then SELECT until <i>[AMB]</i> appears.	 <p>All the text after [AMB] will be amber colored.</p>
10	Press FONT and then SELECT until <i>[WDF]</i> (<i>wide text</i>) appears.	 <p>[WDF] = wide serif font</p>
11	Using FCN and MODE when needed, type <i>Wide Wide</i>	
12	Press RETURN to start a new line of text.	
13	Press COLOR and SELECT until <i>[RB1]</i> (Rainbow 1) appears.	
14	Press FONT and then SELECT to select the <i>[SS5]</i> font.	 <p>[SS5] = the smallest font</p>
15	Type <i>THIS IS SS5</i> NOTE: Only uppercase character can be used with this font.	

16	Press RUN twice to see what you've typed.	<div data-bbox="404 219 718 267"></div> <div data-bbox="537 272 579 295">THEN</div> <div data-bbox="404 308 718 357"></div> <div data-bbox="537 362 579 384">THEN</div> <div data-bbox="404 397 718 446"></div> <div data-bbox="537 451 579 474">THEN</div> <div data-bbox="404 479 718 527"></div> <div data-bbox="795 214 918 261">This text should appear in green.</div> <div data-bbox="795 345 923 393">This text should appear in amber.</div> <div data-bbox="795 469 950 516">This text should appear in rainbow 1.</div>
----	--	--




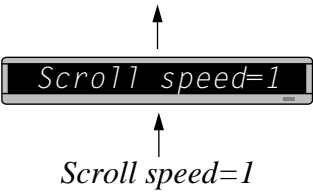
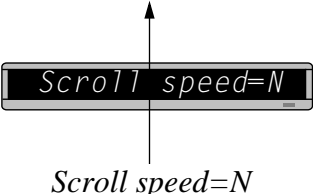
Example 8 — Speeding up and slowing down messages

Messages can be speeded up or slowed down using the **SPEED** mode. Once you pick a mode, like **ROTATE**, a speed can be selected by selecting **SPEED** on the Remote Control. Then press **SELECT** to change the speed:



Here’s an example of how to vary the speed of the **SCROLL** mode of a message:







Step	When you do this...	You see this...
1	Delete all the messages currently stored in the sign. (See "Example 5 — Deleting messages" on page 21.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Select the SCROLL mode. (Press MODE and then press SELECT until [SCR] appears.)	 [SCR] = Scroll mode, which we'll use to demonstrate message speed.
5	Press SPEED .	 [SP4] is the default speed setting.
6	Press SELECT until [SP1] (very slow) appears.	 [SP1] = very slow
7	Type <i>Scroll speed=1</i> (Press SYMBOL and then SELECT to get the "=" sign.)	
8	Select SCROLL again.	

9	Select SPEED again.	
10	Press SELECT until <i>[NHL]</i> appears. (No Hold = very fast)	
11	Type <i>Scroll speed=N</i>	
12	<p>Press RUN twice to see your message.</p> <p>The message <i>Scroll speed=1</i> should scroll up very slowly.</p> <p>However, the message <i>Scroll speed=N</i> should scroll up without pausing at all.</p>	<div><p>Using <i>[SP1]</i>, slow speed, the message scrolls up into the sign, pauses, then scrolls off the sign.</p></div> <div><p>Using <i>[NHL]</i>, fastest speed, the message scrolls into and off the sign without pausing.</p></div>

Example 9 — Special effects with modes (Trailing modes)

Modes, like **ROTATE** and **ROLL**, are used to create special effects with messages. Typically modes are used once at the beginning of a message. However, a mode can also be placed at the end of a message (called a “trailing mode”) to create a special effect.

NOTE: The following can not be used as a trailing mode: **CONDENSED**
ROTATE, **SCROLL**, **SLIDE**, **SNOW**, and **SPRAY**.

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the sign. (See “Example 5 — Deleting messages” on page 21.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Press MODE and then SELECT until <i>[FLS]</i> (Flash) appears.	
5	Type <i>ATTENTION!</i> (Press ! and then SELECT to get “!”)	
6	Press MODE and then SELECT until <i>[RF↑]</i> (Roll Up) appears.	 <div>This is the trailing mode. The Roll mode “trails” the first mode, Flash.</div>
7	Type <i>Trailing mode</i>	
8	Press RUN twice to see trailing mode in action. <i>ATTENTION!</i> should flash and then roll off the display followed by <i>Trailing mode</i> .	

Example 10 — International characters

International characters — like ü and é — can be included in messages. Also, the **!** and **SYMBOL** keys can produce special characters (see “Using a Remote Control to operate your sign” on page 4).







NOTE: International characters can not be used with the small fonts (like [SS5]).

The following international characters can be used:

	<div><div>A]</div><div>A</div></div> <div>Type a Base Character, like A. Then press SELECT to choose an international character.</div>												
Base Characters	(Hold down FCN and then press MODE on the Remote Control to switch between uppercase and lowercase letters.)												
	A	B	C	D	E	I	N	O	S	U	Y	Z	!
International Characters	A	B	C	D	E	I	N	O	S	U	y	Z	Both the ! and SYMBOL keys can produce a variety of specialized symbols.
	Ä	ß	Ç	D	É	Í	Ñ	Ö	S	Ü	ÿ	Z	
	Ã		C	d	Ê	i	n	Õ	ß	u		z	
	Æ		C	d	e	î	ñ	o	s	ü		z	
	Á		c		é	ï		ô	s	û			
	À		ç		ê	ì		ö	ß	ù			
	Ã		c		ë	í		ò		ú			
	a		c		è			ó					
	æ							õ					
	â							ö					
	ä												
	á												
	à												
	â												
	ä												
	ã												

The following example shows how to use international characters in a message:

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the sign. (See “Example 5 — Deleting messages” on page 21.)	<div>DEL TEXT B? Y/N</div>

2	Press PROGRAM .	
3	Press ADV .	
4	Using FCN and MODE when needed, type <i>Submit your re</i>	
5	Press SELECT until <i>é</i> appears.	
6	Type <i>sume</i>	
7	Press SELECT until <i>é</i> appears.	
8	Press RUN twice to see your message.	

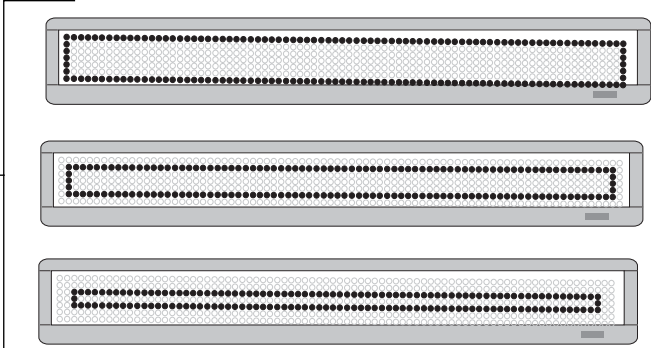
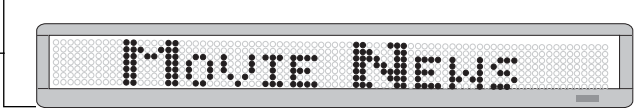


Graphics in messages

In addition to pre-programmed or “canned” graphics (see “Graphics available” on page 45), you can create your own custom graphics using DOTS files.

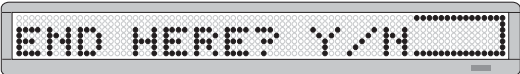



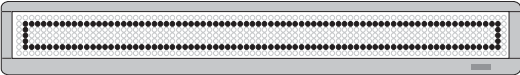
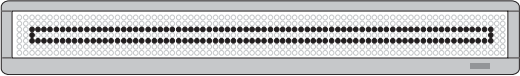






You can display a DOTS graphic that you create either by itself or with text.

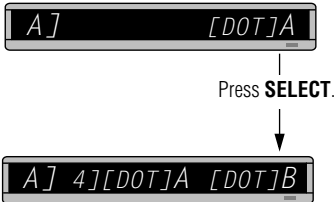
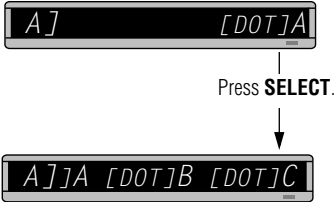








NOTE: After you create a DOTS graphic, *to display it on your sign*, the DOTS graphic *must* be placed in a text file—even if you just want to display the graphic all by itself.

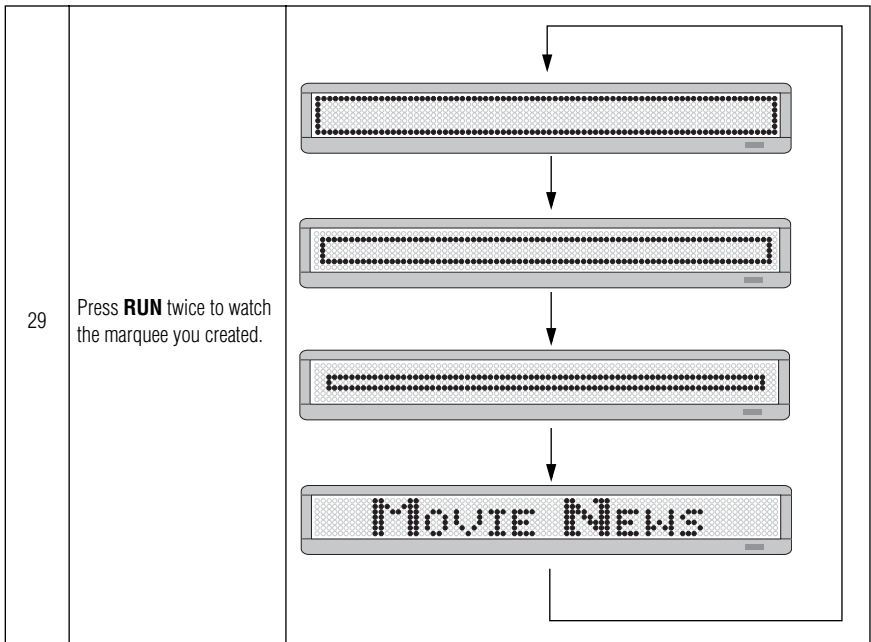
Example 11 — Creating a movie marquee

Step	When you do this...	You see this...
<p>In this example, we'll create three graphics (or DOTS files) and combine them with text to make a flashing marquee:</p> <div><p>First you'll create these three graphics files (called DOTS files A, B, C).</p><p>Then this text will be added after the three graphic files.</p></div>		
1	Delete all the messages currently stored in the sign. (See “Example 5 — Deleting messages” on page 21.)	
2	Press PROGRAM .	
3	Press BACK .	<div><p>The name of your first DOTS graphics is A. (The second one will be named B and the third one C.)</p></div>

4	Press ADV.	<p>The blinking DOTS cursor keeps track of where you're drawing.</p>
5	Press I until the DOTS cursor is on the bottom.	<div><p>Keep pressing I until the DOTS cursor moves here.</p></div> <p>These keys <i>move</i> the DOTS cursor.</p> <p>Also, you can <i>draw</i> dots when you press SELECT.</p> <p>(Press SELECT again to turn drawing off.)</p>
6	Press E to draw a line across the entire bottom of the display.	
7	Complete DOTS graphic <i>A</i> by using 9 , C , and I keys.	




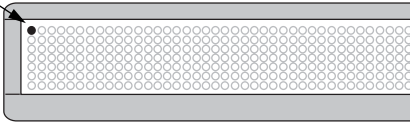
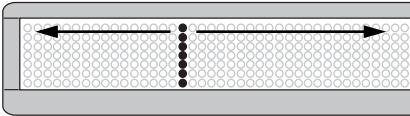
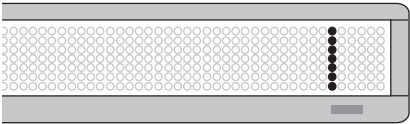
8	Press RUN .	
9	Then press Y to save graphic A.	
10	Press SELECT until a question mark appears.	
11	Type <i>B</i> as the name of the next graphics file.	
12	Repeat the previous steps to draw graphics <i>B</i> and <i>C</i> . (Both are just smaller versions of graphic <i>A</i>) Use the COLOR key to make all the dots in graphic <i>B</i> green, and all the dots in graphic <i>C</i> amber.	<p>DOTS graphic <i>B</i></p>  <p>DOTS graphic <i>C</i></p> 
<p>NOTE:</p> <p>In order to display a DOTS graphic, it must be placed in a text message. In the following steps, we'll create a text message and add the three DOTS graphics just created.</p>		
13	Press BACK until <i>PROG TEXT A</i> appears.	
14	Press SELECT until a question mark appears.	
15	Press A .	
16	Press MODE and then SELECT until <i>[FLS]</i> (Flash) appears.	
17	Press SPEED and then SELECT until <i>[SP5]</i> appears.	 <p><i>[SP5]</i> is a fast message speed.</p>
18	Insert the first DOTS graphic you created (file <i>A</i>) by pressing DOTS .	 <p>The letter <i>A</i> is the name of the graphic file.</p>

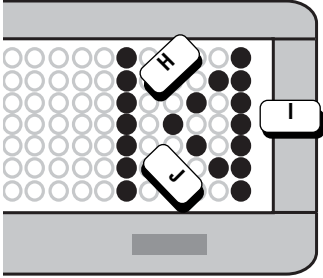







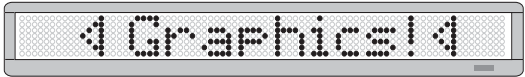
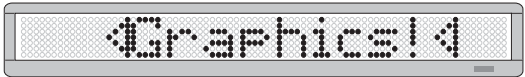
19	Insert the second DOTS graphic by pressing DOTS again. Then press SELECT until the letter <i>B</i> appears.	
20	Insert the third and final DOTS by pressing DOTS again. Then press SELECT until the letter <i>C</i> appears.	
Now we'll add the message <i>Movie News</i> after the three graphics:		
21	Press FONT and then SELECT until <i>[SRF]</i> appears.	
22	Type the letter <i>M</i>	
23	Press FONT again. Then press SELECT until <i>[SS5]</i> appears.	 <p>[SS5] is the <u>smallest</u> character font.</p>
24	Type <i>ovie</i> and then press SPACE .	
25	Press FONT and then SELECT until <i>[SRF]</i> appears again.	
26	Type the letter <i>N</i>	
27	Press FONT and then SELECT until <i>[SS5]</i> appears again.	
28	Type <i>ews</i>	



Example 12 — Mixing text with graphics

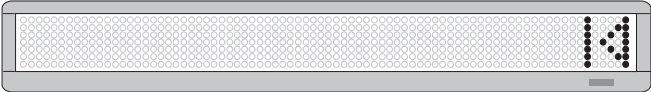



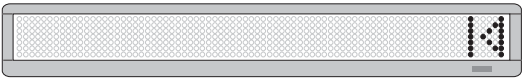
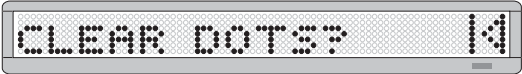
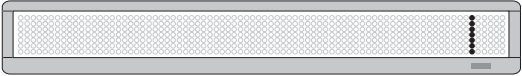
In this example, we'll create a graphic and combine it with text:

Step	When you do this...	You see this...
	These triangle graphics (which is just a single DOTS file) will be combined with the text <i>Graphics!</i>	
1	Delete all the messages currently stored in the sign. (See "Example 5 — Deleting messages" on page 21.)	
2	Press PROGRAM .	
3	Press BACK .	 <p>The name of your DOTS graphics file will be A.</p>
4	Press ADV .	 <p>The blinking DOTS cursor keeps track of where you're drawing.</p>
5	Press X to move a vertical line across the sign. This reduces the size of the drawing area. Keep pressing X until there are 5 dots between the vertical line and the end of the sign. NOTE: If you don't reduce the graphic area, the graphic would take up the entire area of the sign.	<p>W moves this line left (increases drawing area) X moves this line right (reduces drawing area)</p>  <p>The line should end up 5 dots from the end. So our drawing area will be 5 dots wide by 7 dots high.</p> 

6	Draw the following graphic using the keys indicated.		<p>Remember:</p> <p>Use SELECT to turn drawing on or off.</p>
7	Press RUN twice.		
8	Press BACK until <i>PROG TEXT A</i> appears.		
9	Press ADV.		
10	Press MODE and press SELECT until <i>[ROT]</i> (Rotate) appears.		
11	Press DOTS to insert your DOTS graphic.	 <p>The A is the file name of your DOTS graphic.</p>	
12	Using FCN and MODE when necessary, type <i>Graphics!</i> (Place a space before <i>Graphics!</i>)	 <p>Place a space before the word <i>Graphics!</i> (Otherwise, the first triangle will appear too close.)</p>	
13	Press DOTS to insert your DOTS graphic again.		
14	Press RUN twice to see your graphic and text message move across the screen.	 <p>NOTE: If you had <u>not</u> placed a space after the first triangle graphic, the message would look like the following:</p> 	

Example 13 — Deleting a graphic

If you want to delete an entire DOTS graphic file, use this example as a guide:

Step	When you do this...	You see this...
<p>This is a continuation of the previous example.</p> <p>This example assumes that the following graphic is in DOTS file A:</p> 		
1	Press PROGRAM .	
2	Press BACK .	
3	Press SELECT .	
4	Type the letter of the graphic you want to delete. (In this case, type <i>A</i> .)	
5	Press Z .	
6	Press Y to delete the graphic. (Or N if you don't want to delete it.)	
7	Press RUN four times to return to normal operation.	

Appendixes

Appendix A — Modes, fonts, colors, and graphics available

Modes determine the way text and graphics move on a sign. For example, the **ROTATE** mode moves a message across a sign from right to left. Fonts are the size and shape of text characters.

The letters in brackets — like [AUT] and [RED] — are what will appear on the sign:

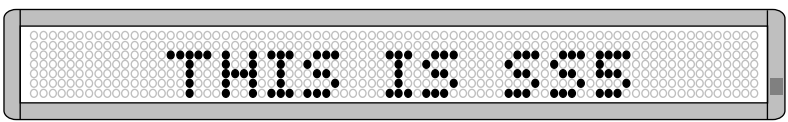
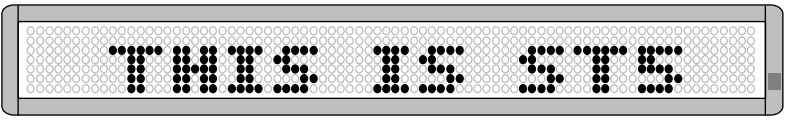
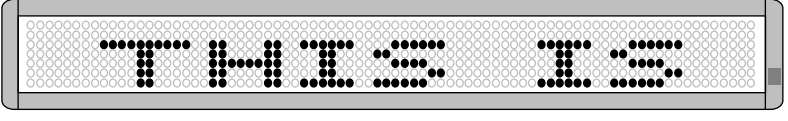
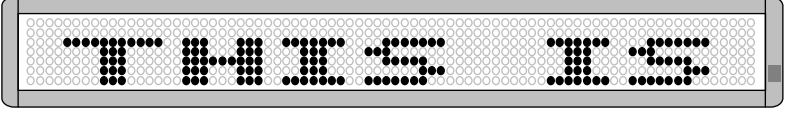
Modes available

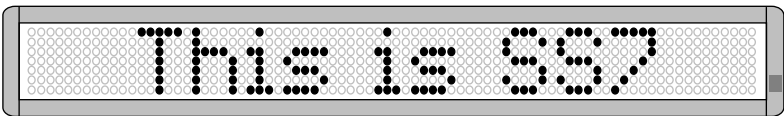
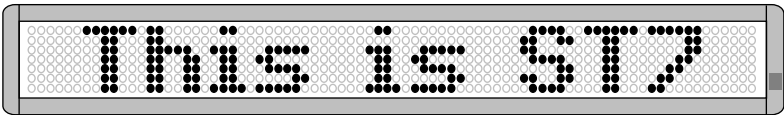
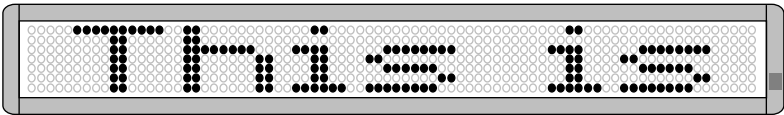
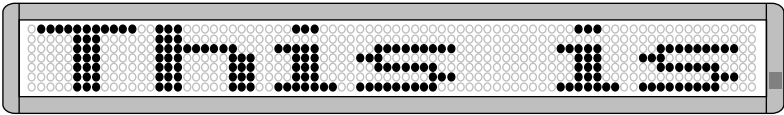
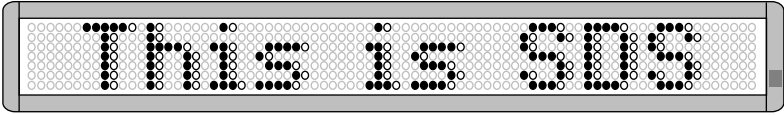
Use the **MODE** key to select one of the following:

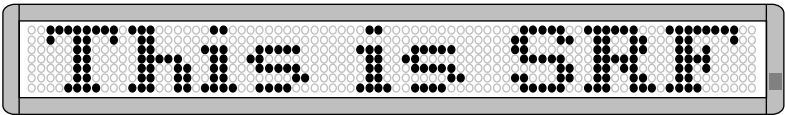
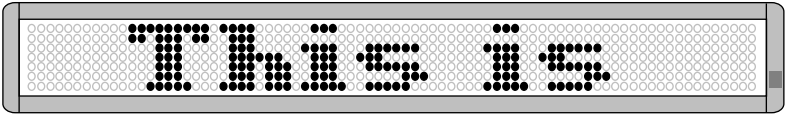
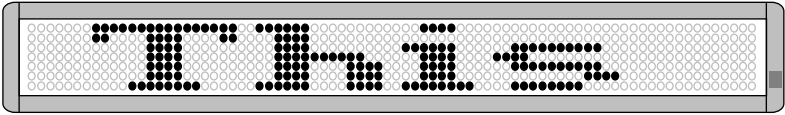
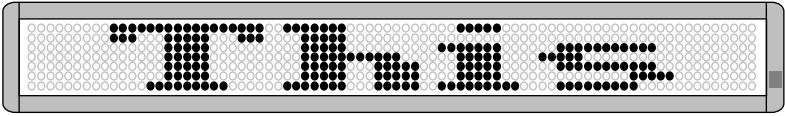
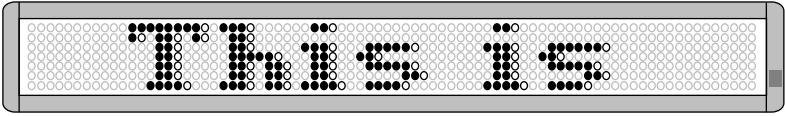
- Automode — [AUT]
- Cycle colors — [SPC]5
- Flash — [FLS]
- Hold — [HLD]
- Interlock — [SPC]3
- Roll — [RL↑] — Use **SELECT** to change the roll direction.
- Rotate or Condensed Rotate — [ROT] or [CRT] — Use **SELECT** to change between the two.
- Scroll — [SCR]
- Snow — [SPC]2
- Sparkle — [SPC]1
- Spray — [SPC]6
- Starburst — [SPC]7
- Switch — [SPC]4
- Twinkle — [SPC]0
- Wipe — [WI↑] — Use **SELECT** to change the wipe direction.

Fonts available

Fonts are selected by using the **FONT** and **SELECT** keys. An example of each font is shown in the table below:

5-HIGH SANS SERIF FONT (= 5 LED pixels high)	
Name	Example
[SS5]	
[ST5]	
[WD5]	
[WS5]	

7-HIGH SANS SERIF FONT (= 7 LED pixels high)	
Name	Example
[SS7]	
[ST7]	
[WD7]	
[WS7]	
[SDS]	 <p>[SDS] is a "shadow" font because each letter is composed of two colors — foreground and shadow — like red and green, amber and red, etc.</p>

7-HIGH SERIF FONT (= 7 LED pixels high)	
Name	Example
[SRF]	
[STF]	
[WDF]	
[WSF]	
[SDF]	 <p>[SDF] is a “shadow” font because each letter is composed of two colors — foreground and shadow — like red and green, amber and red, etc.</p>

Colors available

Use the **COLOR** and **SELECT** keys (or just **COLOR**) to select one of the following:

- Red — [RED]
- Light red — [LRD]
- Green — [GRN]
- Light green — [LGN]
- Amber — [AMB]
- Brown — [BRN]
- Orange — [ORG]
- Yellow — [YEL]
- Rainbow 1 — [RB1]
- Rainbow 2 — [RB2]
- Mixed colors — [MIX]
- Autocolor — [ACL]




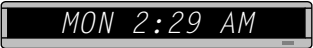

Graphics available

Use the **MODE** and **SELECT** keys to select one of the following:

- “Welcome” — [SPC]8
- “Thank you” — [SPC]S
- “No smoking” — [SPC]U
- “Don’t drink and drive” — [SPC]V
- Slot machine animation — [SPC]9
- News flash animation — [SPC]A
- Trumpet animation — [SPC]B
- Party balloons animation — [SPC]Y
- Fish animation — [SPC]W
- Fireworks — [SPC]X
- Cherry bomb — [SPC]Z

Appendix B — Sign diagnostic test

Your sign can do a self test to determine if all the LEDs are working properly:

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until SET TIME appears.	
3	Press ADV .	 THEN 
4	Type <i>TEST</i> NOTE: This test <u>deletes</u> all messages in the sign. However, if you type the letter <i>R</i> immediately after typing <i>TEST</i> , your messages will be preserved.	 THEN A series of test displays will appear.
5	Press PROGRAM to exit the self-test mode.	