

Alpha[®] Window Display User Manual



NOTE: For the BetaBrite Window Display, see the BetaBrite Window Display User Manual, PN 9703-8008.

ADAPTIVE[®]

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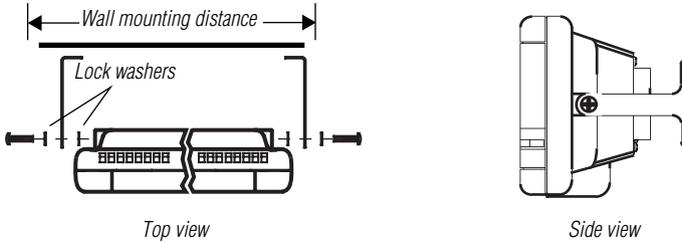
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Display installation

Wall mounting

1. Attach two wall brackets in the mounting kit (PN 1038-9003) to a wall 46-3/4" (118.7 cm) apart (measured from the center of each bracket.)
2. Attach the mounting brackets to the display as shown.



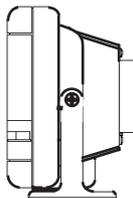
Ceiling mounting

Using the mounting kit (PN 1038-9003) and a chain (not supplied in the kit), mount the display from the ceiling as shown:



Counter mounting

The display will stand up if placed on a counter. However, for greater stability, use the mounting kit (PN 1038-9003.)



Programming messages into your display

You can operate an Alpha® Window Display in two ways:

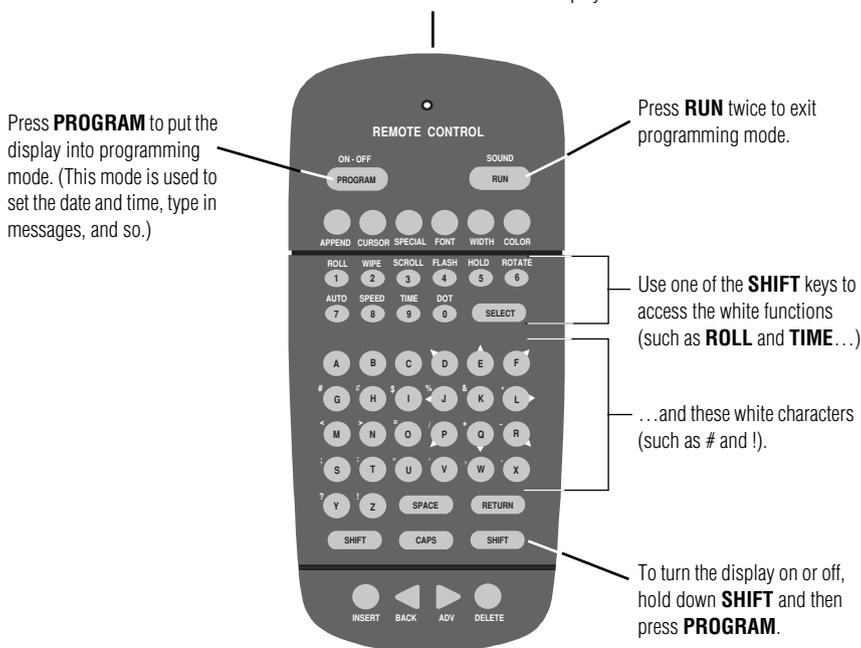
- by using a hand-held remote control
- by using a computer with appropriate software (See “Appendix C – Connecting a display to a computer” on page 44.)

Using a remote control to operate your display

A remote control is a hand-held keyboard used to operate an Alpha® Window Display. Most of this manual shows you how to program messages on your display using a remote control.

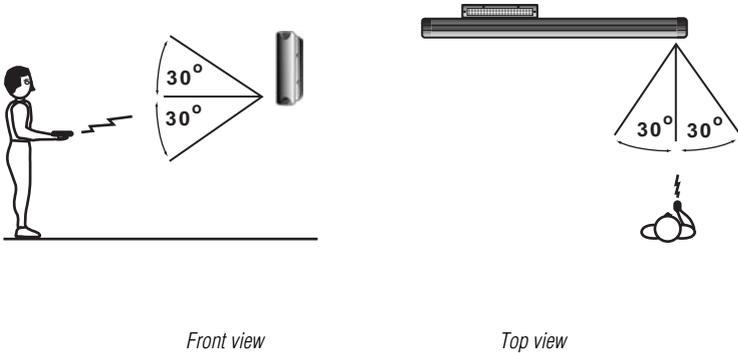
A remote control needs four AAA batteries to operate.

Point this end of the remote control at a display.



To program a display with a remote control:

- Stand at least 5 feet and no more than 30 feet from the display.
- Make sure nothing reflective is in front of the display. (Light from a display screen 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 display.



If a display 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 display

Using software

You can use Alpha® Messaging Software to send messages to the Alpha® Window Display. Refer to 9701-0202, **Messaging Software User Manual**, for additional information.

Basic display operation

Turning a display on and off

When you plug in the display's power supply, the display starts up automatically. Unplugging the power supply turns the display off.

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

Hold down SHIFT and then press PROGRAM to turn a display off and on.

NOTE: Messages you have programmed into the display will not be lost when you turn a display off or remove power. Messages are retained for up to 30 days if the display is not powered.

When the display is turned on, the following appears:



The software (firmware) inside the display.

THEN



Indicates the display is equipped with a real-time clock chip that can keep track of the date and time.

THEN



The amount of memory inside the display.

THEN



The current time.

THEN



The display's address, which can be used to identify individual displays on a network.

Setting a display's time and date

The display must be initially programmed for time and date. Occasionally, you may want to do this, e.g., for daylight savings time.

Once set, the Alpha® Window Display will remember the time and date, even if the display is unplugged or interrupted by a power loss, since the display includes a real-time clock chip.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until SET TIME appears.	
3	Press ADV .	 <i>then</i> 
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 SET DATE appears.	
6	Press ADV .	 <i>then</i> 
7	Press D to set the day. Press M to set the month. Press Y to set the year. NOTE: Press SELECT to show the date in different formats—for example, JAN 26, 2002, 1/26/02, 26/1/02, and so on.	
8	After setting the date and time, press RUN twice to return to normal operation.	

Setting a display's dimming

The display is initially programmed to never dim. You may want to change the time to dim or how much to dim.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until SET DIMMING appears.	
3	Press ADV .	
4	Press SELECT to set the time of day to <i>start</i> dimming the sign. Dimming is by whole hour increments. NOTE: Use Table 1, "Valid start and stop times for dimming," on page 7 to choose the correct start time.	
5	Press ADV .	
6	Press SELECT to set the time of day to <i>stop</i> dimming the sign, that is, to resume full brightness. NOTE: Use Table 1, "Valid start and stop times for dimming," on page 7 to choose the correct stop time. NOTE: If ON time is set to ALWAYS or NEVER, OFF time is irrelevant. If ON time is set to a specific hour, also set OFF time to a specific hour.	
7	Press ADV .	
8	Press SELECT to set the level of dimming (100%, 70%, 50%, or 30%).	
9	After setting the dimming features, press RUN twice to return to normal operation.	

Dimming start and stop times**Table 1: Valid start and stop times for dimming**

12:00 AM	12:00 PM	NEVER
1:00 AM	1:00 PM	Sign will never dim.
2:00 AM	2:00 PM	ALWAYS
3:00 AM	3:00 PM	Sign will always be
4:00 AM	4:00 PM	dimmed at the
5:00 AM	5:00 PM	percentage set for level.
6:00 AM	6:00 PM	
7:00 AM	7:00 PM	
8:00 AM	8:00 PM	
9:00 AM	9:00 PM	
10:00 AM	10:00 PM	
11:00 AM	11:00 PM	

Clearing a display's memory

NOTE: Clearing a display's memory erases all messages, graphics, and passwords that have been programmed into the display.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until CLEAR MEMORY appears.	
3	Press ADV .	
4	Press Y to clear the display's memory. The display will return to normal operation and this screen will appear.	
5	After setting the date and time, press RUN twice to return to normal operation.	

Setting a display's password

Some displays allow you to set a personal password to protect your messages and graphics from tampering by others.

NOTE: Don't forget your password. If you do, you will not be able to operate the display.

NOTE: However, if you do forget the password, see "What to do when you forget a password" on page 10.

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until SET PASSWORD appears.	
3	Press ADV .	
4	Press Y to set a password.	
5	<p>Type a 6-character password. (Only asterisks will appear on the display as you type.)</p> <p>Re-type the password when prompted.</p> <p>CORRECT will appear if you typed the same password.</p> <p>If you failed to type the same password, ERROR will appear, and you will have to start over from Step 1.</p>	 <i>then</i>  <i>then</i>  <i>then</i>  <i>then</i> 
6	Press RUN twice.	

7	<p>Press Y to password protect the display.</p> <p>NOTE: If you select N, then a password will not be needed when you press PROGRAM.</p>	 <p>The display will return to normal operation.</p> <p>Now, whenever you press PROGRAM, you'll have to type the password you just entered.</p>
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What to do when you forget a password

Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Hold down SHIFT and press L six times.	 <p>then</p>  <p>then</p> 
3	Type a new password. (See "Setting a display's password" on page 9.)	

How to delete a display's password

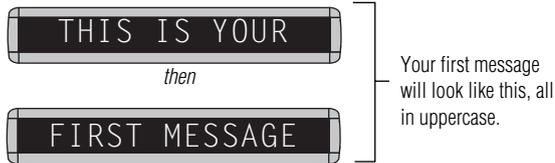
If you no longer want to be prompted to password protect a display, you must clear the display's memory in order to delete the password. To do this, see "Clearing a display's memory" on page 8.

Basic text messaging

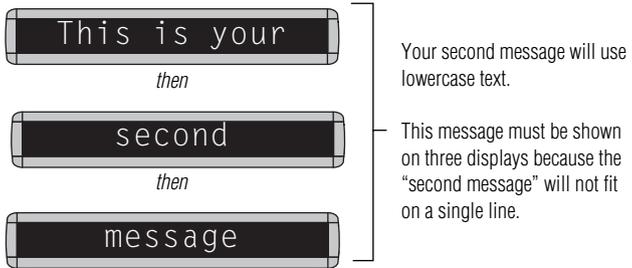
This section shows you how to create messages on your display.

Example 1 — Using upper and lowercase in messages

In this first example, the text “This is your first message” appears like this:

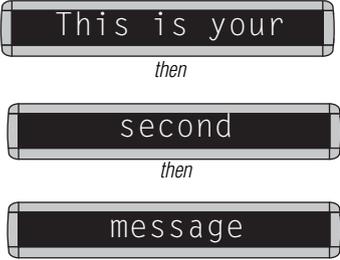


... and the text “This is your second message” like this:



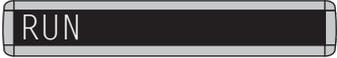
Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press ADV .	

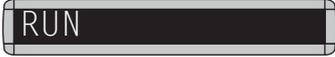
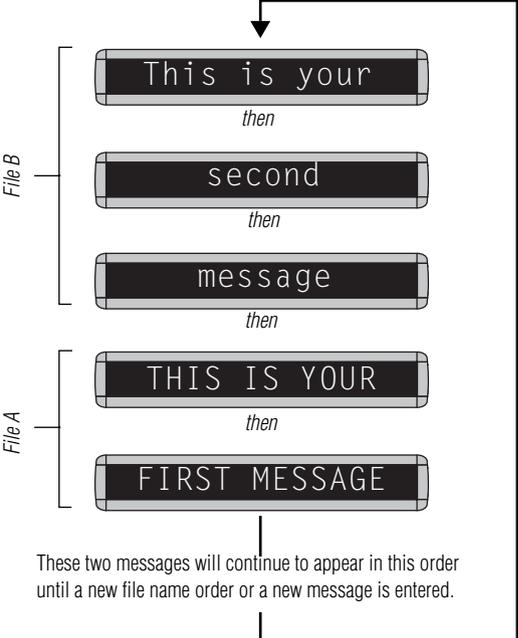
3	<p>Type "This is your first message".</p> <p>Note: If you make a mistake while typing, press DELETE to erase a letter.</p>	 <p>[AUT], which stands for automode, will appear as you type your first character. Automode automatically shows your message in different formats.</p> <p>Your message should look like this when you're done typing.</p> 
4	<p>Press RUN twice.</p>	  <p>Because automode [AUT] was used, the text of your message appears in a variety of formats. For example, the Scroll format (or mode) moves your message from the bottom to the top of the display.</p>
<p>Now that the first message is done, we'll enter a second message which contains upper and lowercase characters.</p>		
5	<p>Press PROGRAM again.</p>	
6	<p>Press SELECT.</p>	 <p>The "A" changes to a question mark (?) after SELECT is pressed.</p>
7	<p>Press B.</p>	 <p>"B" is now the file name of your second message. If you had pressed A instead of B, you would have written over the first message.</p>

8	<p>Type "T". Press CAPS to switch to lowercase letters.</p> <p>Type "This is your second message".</p>	 <p>Your message should look like this when you're done typing.</p>
9	<p>Press RUN twice.</p>	 <p>You will notice that the first message does not appear at all. (We'll fix this in the following example.)</p>

Example 2 — Showing messages in file name order (A, B, C, and so on.)

Once you've programmed messages into the display, you may want to set the order or sequence in which messages appear. This method will show messages by their file name (A, B, C, and so on) or in alphabetical order.

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

6	Press PROGRAM .	
7	Press RUN .	
8	If RUN appears on the display, go to the next step. Otherwise, press SELECT until it appears.	
9	Press B , then A .	 <p data-bbox="490 634 926 711"><i>The order of these letters determines the order in which messages will appear on a display. (In this case, message B will appear first, then message A.)</i></p>
10	Press RUN .	 <p data-bbox="455 1312 880 1360">These two messages will continue to appear in this order until a new file name order or a new message is entered.</p>
<p>Using this method, you can program the order of some or all of the messages you've entered on a display.</p>		

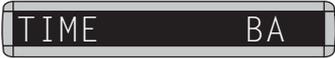
Example 3 — Showing messages in time order

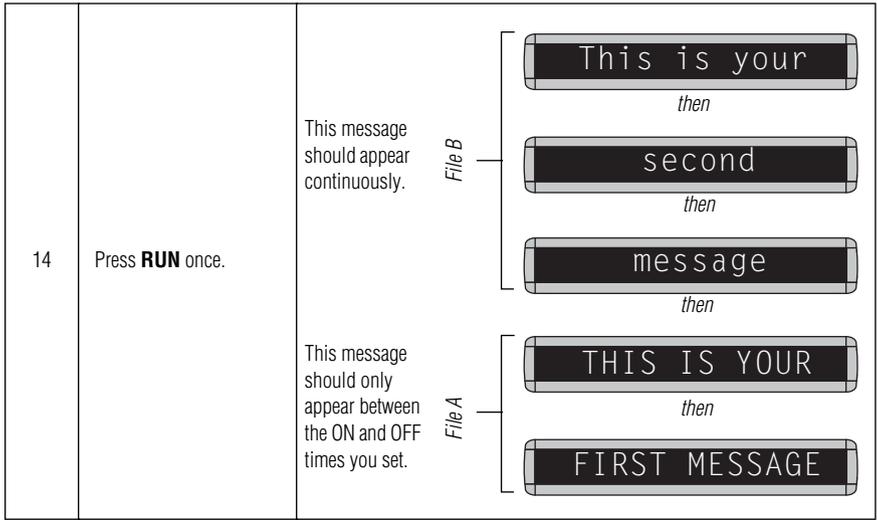
In Example 2, you set the order of messages by file name. However, that method could not specify an exact time when a message would appear.

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

NOTE: Unless a display has a battery-backed clock, showing messages in time order will only work as long as a display is powered. When a display without a battery-backed clock loses power, its internal clock becomes inaccurate and must be reset. (See "Setting a display's time and date" on page 5).

Step	When you do this...	You see this...
<p>For this example, make sure that your display's internal clock has been accurately set. (See "Setting a display's time and date" on page 5.)</p> <p>This example continues where Example 2 left off. This example assumes that there are two messages (files A and B) in the display: File A = THIS IS YOUR FIRST MESSAGE File B = This is your second message</p> <p>In this example, we'll program the display to show File A Monday through Friday from 1:10 PM to 2:30 PM. We'll program the display to always show File B.</p> <p>NOTE: Four default text files have been set up with specific run times for your convenience: Text File A = Always (Runs 24 hours.) Text File M = Morning (Runs 4 AM to 11 AM.) Text File N = Noon (Runs 11 AM to 5 PM.) Text File E = Evening (Runs 5 PM to 4 AM.)</p>		
1	Press PROGRAM .	
2	Press SELECT until B appears.	
3	Hold down SHIFT and press 9 for TIME .	 <p>Since file B is already set up, we'll go on to file A.</p> <p>ON ALWAYS is the default setting for a message. A message set to ON ALWAYS will run continuously.</p>
4	Press PROGRAM .	

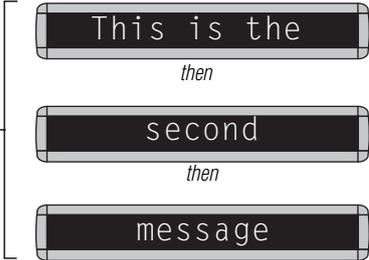
5	Press SELECT until A appears.	
6	Hold down SHIFT and press 9 for TIME .	 <p>First, we'll select the ON time (when the message starts).</p>
7	Press D (for day) until <i>M-F</i> (Monday through Friday) appears.	 <p>Press D to set the day, H for hour, and M for minute (in 10-minute increments).</p>
8	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, and so on.</p>
9	Press M (for minute) until <i>13:10</i> appears.	 <p>Minutes are in increments of 10.</p>
10	Press SELECT .	 <p>After setting the ON time, select the OFF time (when the message stops).</p>
11	Repeat Steps 7, 8, and/or 9 to set the OFF time (<i>2:30</i> or <i>14:30</i> 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 BA to set the display order of these two messages.	

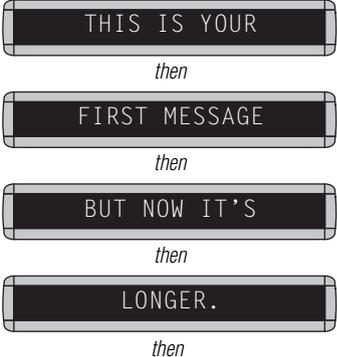


Example 4 — Changing the text of an existing message

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

8	Press ADV until the first few letters of "second" appear.	 <p>"the" has replaced "your".</p>
9	Press APPEND to go to the end of the message. Do not omit this step	 <p>APPEND takes you to the end of a message. This way, you won't accidentally cut off the end of it.</p>
10	Press RUN twice.	<p style="text-align: center;">File B</p> 
Next, we'll add text to the end of File A.		
11	Press PROGRAM .	
12	Press SELECT until A appears on the display.	
13	Press APPEND .	 <p>APPEND takes you to the end of a message so you can add more.</p>
14	To type a comma, hold down SHIFT and press W .	
15	Press SPACE and then type "BUT NOW IT".	
16	To type an apostrophe, hold down SHIFT and press V .	

17	Type "S LONGER".	
18	Press RUN twice.	<p data-bbox="396 345 503 423">This message should appear continuously.</p> <p data-bbox="535 367 556 407" style="text-align: center;"><i>File A</i></p> <div data-bbox="622 224 959 581">  </div> <p data-bbox="396 589 513 743">This message should only appear between the ON and OFF times you set in Example 3.</p> <p data-bbox="535 659 556 699" style="text-align: center;"><i>File A</i></p> <div data-bbox="622 597 959 755">  </div>

Example 5 — Deleting messages

To delete all messages in a display, see “Clearing a display’s memory” on page 8.

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. This example assumes that there are two messages (files A and B) in the display: File A = THIS IS YOUR FIRST MESSAGE, BUT NOW IT'S LONGER. File B = This is the second message.</p> <p>In this example, we'll delete File B.</p>		
1	Press PROGRAM .	
2	Press SELECT until B appears on the display.	
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="margin-right: 10px;">[</div> <div style="margin-right: 10px;">THIS IS YOUR</div> <div style="margin-right: 10px;">}</div> <div style="margin-right: 10px;">then</div> <div style="margin-right: 10px;">[</div> <div style="margin-right: 10px;">FIRST MESSAGE</div> <div style="margin-right: 10px;">}</div> <div style="margin-right: 10px;">then</div> <div style="margin-right: 10px;">[</div> <div style="margin-right: 10px;">BUT NOW IT'S</div> <div style="margin-right: 10px;">}</div> <div style="margin-right: 10px;">then</div> <div style="margin-right: 10px;">[</div> <div style="margin-right: 10px;">LONGER.</div> <div style="margin-right: 10px;">}</div> </div>

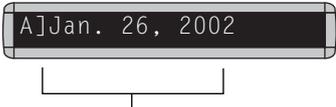
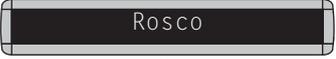
Advanced text messages

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

Example 6 — Showing the time and date

Step	When you do this...	You see this...
<p>In this example, we'll create a message that continuously shows the current time and date for Rosco Advertising.</p> <div style="text-align: center;">  <p><i>then</i></p>  <p><i>then</i></p>  <p><i>then</i></p>  </div> <p>The time will be shown in extra-wide letters.</p>		
1	Delete all the messages currently stored in the display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
2	Press PROGRAM .	
3	Press SELECT .	
4	Press A .	
5	Hold down SHIFT and press 1 for ROLL .	 <p>This stands for the roll mode.</p>

6	Press SELECT to change the roll direction to ↓ (down).	 <p>Press SELECT until the Roll direction changes to down:</p> <p>[RL↑] = Roll a message up [RL↓] = Roll a message down [RL ←] = Roll a message to the left [RL →] = Roll a message to the right [RL >] = Roll a message in from both sides of the display [RL <] = Roll a message out from the middle of the display</p>
7	Type "R".	
89	Using CAPS to switch between uppercase and lowercase letters, type "osco Advertising".	
We'll roll the time in from the bottom to the top of the display.		
9	Hold down SHIFT and press 1 for ROLL .	
10	Press WIDTH to show the time in wide characters.	 <p>This will show the time in wide letters.</p>
11	Hold down SHIFT and press 9 for TIME .	 <p>This will show the current time in wide characters.</p>
Next, we'll roll the date in from the right to the left of the display.		
12	Hold down SHIFT and press 1 for ROLL . Then press SELECT to until the roll direction changes to ←.	 <p>We'll make the date roll to the left.</p>
13	Press WIDTH to turn off wide characters.	 <p>[SLM] means the following characters won't be wide.</p>

14	Press SPECIAL .	
15	Press M	 <p>Pressing SPECIAL and M inserts the current date into a message.</p>
16	<p>Press RUN twice to see the message.</p> <p>Note: If you want the date in a different format, you must change the date format <u>before</u> including it in a message. The format of a date (time, also) is set in the message even if you change the date format in the sign later.</p>	 <p><i>then</i></p>  <p><i>then</i></p>  <p><i>then</i></p> 

Example 7 — Using fonts

Fonts are the way characters are shown on a display. In the world of printing and publishing, fonts are given names like Times or Helvetica and qualities like serif or sans serif, font size (such as 12 point or 14 point), bold or italic, and so on.

This is Times — a serif font.

This is Helvetica — a sans serif font.

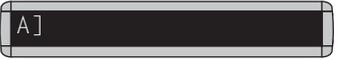
On this display, the following fonts — SS7, SS5, and SRF — are available:



Also, any of the display's fonts can be made bold (or wider) by using the **WIDTH** button.

To determine what fonts are available on your display, see "Appendix A – Modes and fonts available" on page 42.

The following examples demonstrate how to use fonts on your display.

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
2	Press PROGRAM .	
3	Press ADV .	

4	Hold down SHIFT and press 5 for the Hold mode.	 <p>Hold mode turns off automode.</p>
5	Press FONT to select SRF (the serif font).	
6	Using CAPS and SHIFT when needed, type "This is SRF".	 <p>As you type, the font you selected appears as it will on the display.</p>
7	Press RETURN to start a new line of text.	 <p>This symbol indicates a return.</p>
8	Press WIDTH to show wide text.	 <p>[WID] = wide text</p>
9	Using CAPS and SHIFT when needed, type "SRF Wide".	
10	Press RETURN to start a new line of text.	
11	Press WIDTH again to turn wide characters off.	
12	Press FONT to select the SS5 font.	
13	Type "THIS IS SS5". NOTE: Only uppercase character can be used with this font.	

14	Press RUN twice to see what you've typed.	
----	--	---

Example 8 — Speeding up and slowing down messages

Messages can be sped up or slowed down using the **SPEED** mode. Once you pick a mode, such as hold, a speed can be selected by choosing **SPEED** on the remote control and pressing **SELECT** to change the speed:



Here's an example of how to vary the speed of the **SCROLL** mode of a message.

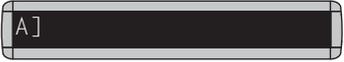
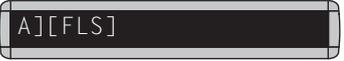
Step	When you do this...	You see this...
1	Delete all the messages currently stored in the display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Select SCROLL . (Hold down SHIFT and press 3 .)	 SCR = Scroll mode, which we'll use to demonstrate message speed.
5	Select SPEED . (Hold down SHIFT and press 8 .)	 SP4 is the default speed setting.
6	Press SELECT until SP1 (very slow) appears.	 SP1 = very slow
7	Type "Scroll speed = 1".	

8	Select SCROLL again.	
9	Select SPEED again.	
10	Press SELECT until NHL (No Hold) appears.	 <p data-bbox="641 423 769 451">[NHL] = very fast</p>
11	Type "Scroll speed = N"	
12	<p>Press RUN twice to see your message.</p> <p>The message Scroll speed = 1 should scroll up and pause.</p> <p>However, the message Scroll speed = N should scroll up without pausing at all.</p>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; align-items: center; margin-bottom: 20px;">  <div style="margin-left: 10px;">↑</div> </div> <p style="margin-left: 100px;"><i>then</i></p> <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">↑</div> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div data-bbox="785 618 937 776" style="width: 45%;"> <p>Using SP1, slow speed, the message scrolls up into the display, pauses, then scrolls off the display.</p> </div> <div data-bbox="785 805 937 930" style="width: 45%;"> <p>Using NHL, the fastest speed, the message scrolls into and off the display without pausing.</p> </div> </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 for the entire message. However, a mode can also be placed at or toward the end of a message (called a Trailing mode) to create a special effect when the first part of the message is leaving the screen.

NOTE: The following cannot 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 display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Hold down SHIFT and press 4 for flash.	
5	Type "ATTENTION!".	
6	Hold down SHIFT and press 1 for roll.	 This is the trailing mode. The roll mode trails the first mode, flash.
7	Type "Trailing mode".	
8	Press RUN twice to see trailing mode in action. ATTENTION! should flash and then roll off the display.	

Example 10 — International characters

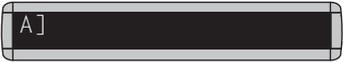
International characters — like ü and é — can be included in messages.

NOTE: International characters cannot be used with the small (SS5) font.

The following table summarizes all the international characters that can be used.

	 <p>Type a base character, like A.</p> <p>Then press SELECT to choose an international character, like Æ.</p>										
Base Characters	(Use the CAPS button on the remote control for the lowercase letters.)										
	A	C	E	I	N	O	U	Y	?	!	\$
International Characters	â	Ç	é	ï	ñ	ô	ü	ÿ	¿	¡	¢
	ä	ç	ê	î	Ñ	ö	û	ÿ	?	!	£
	ã	C	ë	ì	N	ò	Ü	y			¥
	À	c	è	l	n	Ö	ú				f
	Ä		É	i		ó	U				\$
	æ		E			o	u				
	Æ		e			O					
	á					o					
	à										
	A										
a											

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 display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Using CAPS and SHIFT when needed, type "Submit your re".	
5	Press SELECT until é appears.	
6	Type "sume".	
7	Press SELECT until é appears.	
8	Press RUN twice to see your message.	

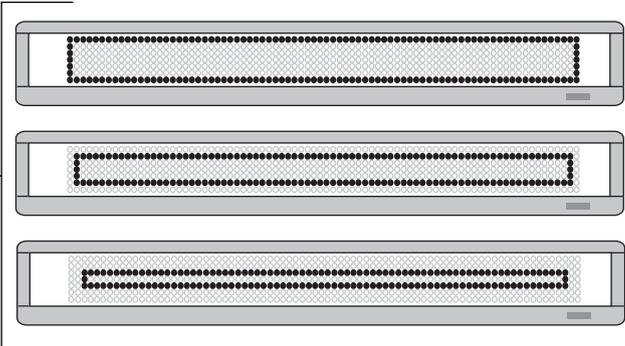
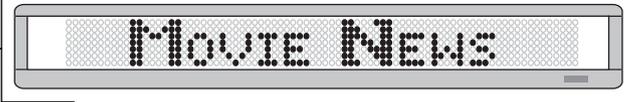
Graphics

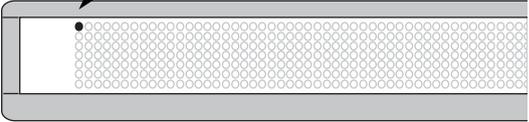
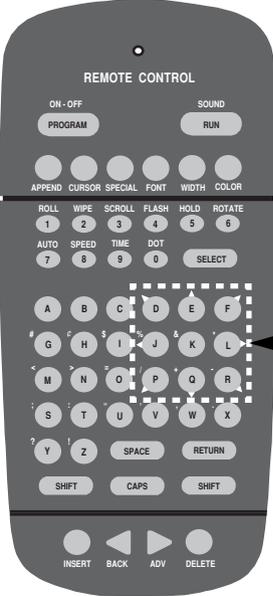
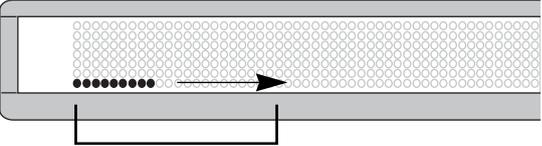
In addition to pre-programmed (or canned) graphics (see “Display graphics” on page 48), you can create your own custom graphics using DOTS files.

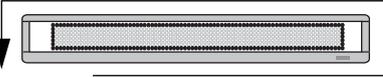
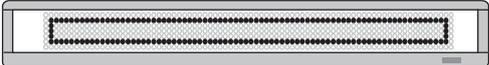
You can show a DOTS graphic created either by itself or with text.

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

Example 11 — Creating a movie marquee

Step	When you do this...	You see this...
<p data-bbox="317 581 745 630">In this example, we'll create three graphics (or DOTS files) and combine them with text to make a flashing marquee:</p> <div data-bbox="133 776 271 906"> <p>First you'll create these three graphics files (called DOTS files A, B, C).</p> </div>  <p data-bbox="125 1044 263 1122">Then this text will be added after the three graphic files.</p> 		
1	Delete all the messages currently stored in the display. (See “Clearing a display's memory” on page 8 or “Example 5 — Deleting messages” on page 22.)	
2	Press PROGRAM .	

3	<p>Press BACK.</p> <p>Note: If you don't see PROG DOTS A on the screen, follow the steps in "Clearing a display's memory" on page 8.</p>	 <p>The name of your first DOTS graphics is A. (The second one will be named B and the third one C.)</p>
4	<p>Press ADV.</p>	 <p>The blinking DOTS cursor keeps track of where you're drawing.</p>
5	<p>Press Q until the DOTS cursor is on the bottom.</p>	 <p>Keep pressing Q until the DOTS cursor moves here.</p> <p>These keys move the DOTS cursor.</p> <p>Also, you can draw (or erase) dots when you hold down SHIFT and press one of these keys.</p>
6	<p>Hold down SHIFT and press L to draw a line across the entire bottom of the display.</p>	 <p>SHIFT + L</p>

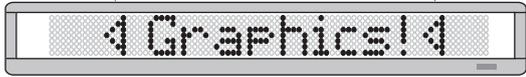
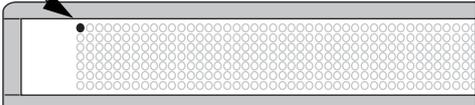
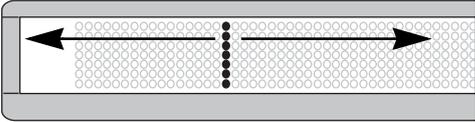
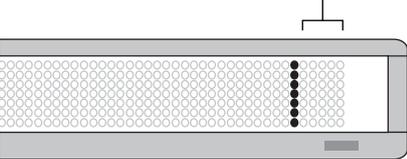
7	<p>Complete DOTS graphic A by using the E, J, and Q keys.</p> <p>NOTE: Remember to hold down SHIFT with the keys to actually draw.</p>	<p style="text-align: center;">SHIFT + J</p>  <p style="text-align: right;">SHIFT + E</p>
8	Press RUN .	
9	Press Y to save graphic A.	
10	Type "B" as the name of the next graphics file.	
11	Repeat the previous steps to draw graphics B and C. (Both are just smaller versions of graphic A.)	<p style="text-align: center;">DOTS graphic B</p>  <p style="text-align: center;">DOTS graphic C</p> 
<p>NOTE:</p> <p>In order to show a DOTS graphic, it must be placed in a text message.</p> <p>In the following steps, we'll create a text message and add the three DOTS graphics just created.</p>		
12	Press BACK to return to PROG TEXT.	
13	Press SELECT until a question mark appears.	
14	Press A .	
15	Hold down SHIFT and press 4 for flash.	
16	Hold down SHIFT and press 8 for speed.	

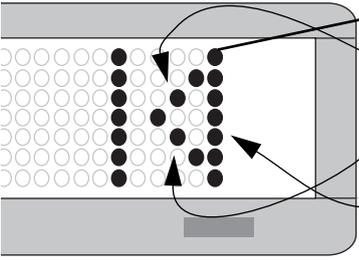
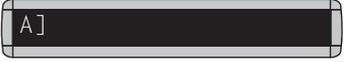
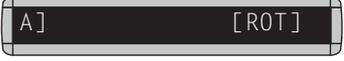
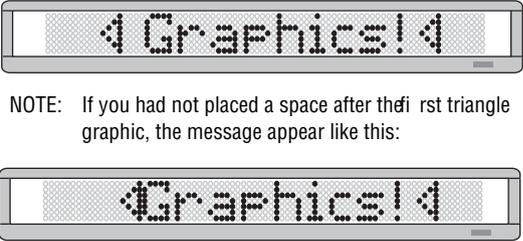
17	Press SELECT until NHL appears. (This is the fastest speed.)	
18	Insert the first DOTS graphic you created (file A) by holding down SHIFT and pressing Ø .	 <p data-bbox="504 347 820 370">The letter A is the name of the graphic file.</p>
19	Insert the second DOTS graphic by holding down SHIFT and pressing Ø again. Then press SELECT until the B appears.	 <p data-bbox="632 500 751 522">Press SELECT.</p>  
20	Insert the third and final DOTS graphic by holding down SHIFT and pressing Ø again. Then press SELECT until the C appears.	 <p data-bbox="632 769 751 792">Press SELECT.</p>  
Now we'll add the message "Movie News" after the three graphics:		
21	Press FONT until SRF appears.	
22	Type "M".	
23	Press FONT until SS5 appears.	 <p data-bbox="655 1308 910 1331">SS5 is the smallest character font.</p>
24	Type "ovie" and then press SPACE .	

25	Press FONT until SRF appears again.	
26	Type "N".	
27	Press FONT until SS5 appears again.	
28	Type "ews".	
29	Press RUN twice to watch the marquee you created.	

Example 12 — Mixing text and graphics

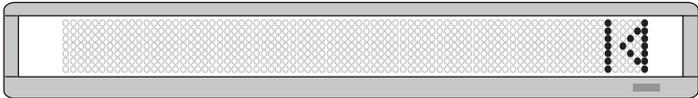
In this example, we'll create a graphic and combine it with text.

Step	When you do this...	You see this...
		<p>These triangle graphics (which is just a single DOTS file) will be combined with the text Graphics!.</p> 
1	Delete all the messages currently stored in the display. (See "Clearing a display's memory" on page 8 or "Example 5 — Deleting messages" on page 22.)	
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	<p>Press X to move a vertical line across the display. This reduces the size of the drawing area.</p> <p>Keep pressing X until there are 5 dots between the vertical line and the end of the display.</p> <p>NOTE: If you don't reduce the graphic area, the graphic will take up the entire area of the display.</p>	<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> 

<p>6</p>	<p>Draw the following graphic using the keys indicated.</p> <p>Remember, to just move the cursor, don't hold down SHIFT.</p>	 <p>Starting point.</p> <p>SHIFT + F</p> <p>SHIFT + D</p> <p>SHIFT + Q</p>
<p>7</p>	<p>Press RUN twice.</p>	
<p>8</p>	<p>Press BACK until PROG TEXT A appears.</p>	
<p>9</p>	<p>Press ADV.</p>	
<p>10</p>	<p>Hold down SHIFT and press 6 for rotate.</p>	
<p>11</p>	<p>Hold down SHIFT and press Ø to insert your DOTS graphic.</p>	 <p>The A is the file name of your DOTS graphic.</p>
<p>12</p>	<p>Using CAPS and SHIFT when necessary, type "Graphics!"</p> <p>(Place a space before "Graphics".)</p>	 <p>Place a space before Graphics! (Otherwise, the first triangle will appear too close.)</p>
<p>13</p>	<p>Hold down SHIFT and press Ø to insert your DOTS graphic again.</p>	
<p>14</p>	<p>Press RUN twice to see your graphic and text message move across the display.</p>	 <p>NOTE: If you had not placed a space after the first triangle graphic, the message appear like this:</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 "A".)	
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. This will run message file A, but the DOTS file A won't show because you just deleted it.	

Appendixes

Appendix A – Modes and fonts available

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

The letters in brackets — like [AUT] and [SS7] — are what will appear on the display:

Modes available

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

Fonts available

All these fonts can also be displayed wider using **WIDTH**:

- 7-row sans serif — [SS7]
- 7-row serif — [SRF]
- 5-row sans serif — [SS5]

Appendix B – Display diagnostic test

Your display can do a self test to determine if all the LEDs (or incandescent lights) are working properly.

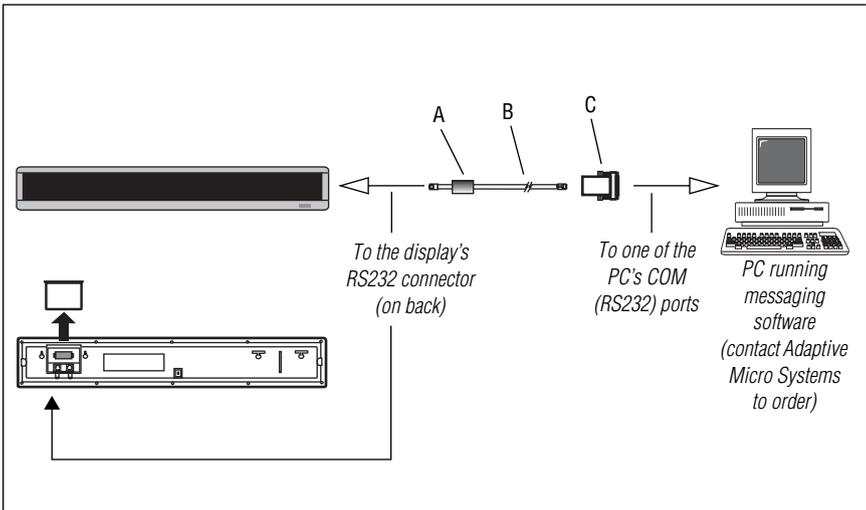
Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press BACK until SET TIME AND DAY or SET TIME appears.	
3	Press ADV .	 <i>then</i> 
4	Type "TEST". NOTE: This test deletes all messages in the display. However, if you type "R" immediately after typing "TEST", your messages will be preserved.	 <i>then</i> <i>a series of test screens will appear.</i>
5	Press PROGRAM to exit the self-test mode.	
6	Press RUN twice to return to normal mode.	

Appendix C – Connecting a display to a computer

Though messages can be programmed into the display using the hand-held remote control, a more convenient method is to connect the display to a computer and use special software to send messages.

NOTE: Contact Adaptive Micro Systems to order the software necessary to send messages to a display from your PC.

NOTE: These displays cannot be networked together. That is, you can connect a single display to a computer, but not multiple displays.

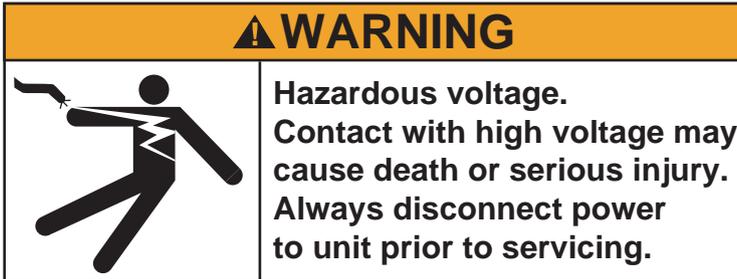


Item	Part #	Description
A	—	Ferrite (ferrite end towards display)
B	1088-8625	25-foot 6-conductor RS232 data cable
	1088-8627	50-foot 6-conductor RS232 data cable
C	4370-0001C	25 pin sub-D/to 6 pos. RJ11 adapter
	1088-9108	9 pin sub-D/to 6 pos. RJ11 adapter

Appendix D – Updating the display's firmware (EPROM)

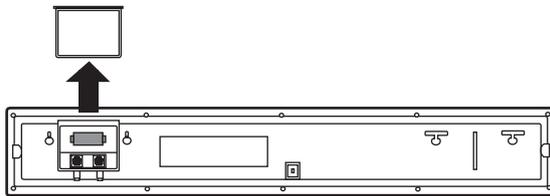
Your display has an internal chip, or EPROM, that is used to control the display. From time to time, the firmware in this EPROM is updated and the EPROM must be changed.

NOTE: Turn off the display's power before continuing.

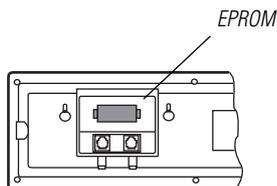


Refer to TechMemo 00-0005 for detailed information and guidelines for avoiding electrostatic discharge damage.

1. After removing power from the display, slide the access panel on the back of the display up:

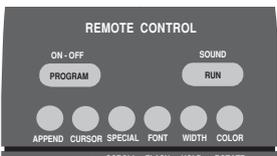


2. Using the top and bottom tabs on the EPROM socket, gently pull the EPROM out of the display. Then place the new EPROM in the empty socket and replace the access cover:



Quick Reference Card

Message control keys

	
PROGRAM	<p>To turn the display on or off, hold down SHIFT and then press PROGRAM.</p> <p>To enter messages, set the date and time, clear memory (and so on), press PROGRAM and then:</p> <div style="text-align: center;">  </div> <p style="text-align: center;">OR</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Press BACK to select one of the following:</p> <p>PROG DOTS A — press ADV to create a graphic.</p> <p>SET TIME — press ADV to set the time.</p> <p>SET DATE — press ADV to set the date.</p> <p>SET PASSWORD — press ADV to set a password to prevent someone from changing the display's text.</p> <p>CLEAR MEMORY — press ADV to erase all messages.</p> </div> <div style="width: 45%;"> <p>Press ADV to enter a message in file A.</p> </div> </div>
RUN	Press twice to exit PROGRAM mode.
APPEND	When editing text, takes you to the end of a message.
CURSOR	Not used.
SPECIAL	Used to set various text modes. (See "Display modes and special keys" on page 47.)
FONT	Changes the font—[SS7], [SRF], or [SS5]—used in a message. (See "Example 7 — Using fonts" on page 26.)
WIDTH	Changes the width of a font. Text that appears after [WID] will look bold. To return to normal text, press WIDTH again and [SLM] will appear. (See "Example 7 — Using fonts" on page 26.)

Display modes and special keys

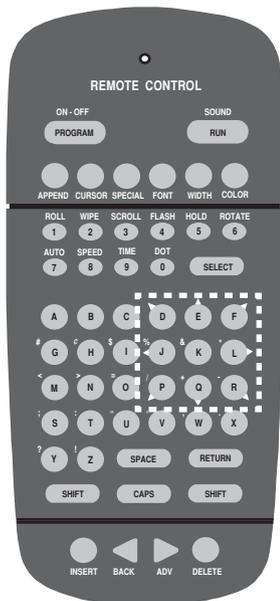


ROLL	Hold down SHIFT and press 1 to use the roll mode in a message. Use SELECT to change the direction of the roll.
WIPE	Hold down SHIFT and press 2 to use the wipe mode in a message. Use SELECT to change the direction of the wipe.
SCROLL	Hold down SHIFT and press 3 to use the scroll mode in a message.
FLASH	Hold down SHIFT and press 4 to use the flash mode in a message.
HOLD	Hold down SHIFT and press 5 to use the hold mode in a message.
ROTATE	Hold down SHIFT and press 6 to use the rotate mode in a message.
AUTO	Hold down SHIFT and press 7 to use the auto mode in a message.
SPEED	Hold down SHIFT and press 8 to use the speed mode in a message. Use SELECT to set the speed (NHL = fastest, SP1 = slowest).
TIME	Hold down SHIFT and press 9 to include the time in a message.
Date	Press SPECIAL and then M to include the date in a message.
Twinkle	Press SPECIAL . Then press 0 .
Sparkle	Press SPECIAL . Then press 1 .
Snow	Press SPECIAL . Then press 2 .
Interlock	Press SPECIAL . Then press 3 .
Switch	Press SPECIAL . Then press 4 .
Slide Across	Press SPECIAL . Then press 5 .
Spray	Press SPECIAL . Then press 6 .
Starburst	Press SPECIAL . Then press 7 .
Carriage return	Press RETURN .
Half space	Hold down SHIFT and then press SPACE .

Display graphics

"Thank You"	Press SPECIAL . Then press S .
"No Smoking"	Press SPECIAL . Then press U .
"Don't Drink and Drive"	Press SPECIAL . Then press V .
Running Animal	Press SPECIAL . Then press W .
Fireworks	Press SPECIAL . Then press X .
Turbo Car	Press SPECIAL . Then press Y .
Cherry Bomb	Press SPECIAL . Then press Z .
Welcome	Press SPECIAL . Then press 8 .
Slot Machine	Press SPECIAL . Then press 9 .

How to create a graphic



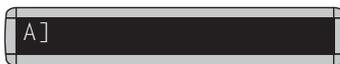
- 1 Press **PROGRAM** and then **BACK**:



- 2 Next, press **ADV**. The DOTS cursor will be in the upper left hand corner of the display.
- 3 Use the direction keys (**D**, **E**, **F**, and so on) to move the DOTS cursor in the direction indicated by the white arrows.
- 4 To draw a line, hold down **SHIFT** while pressing one of the direction keys. For example, to draw a diagonal line, hold down the **SHIFT** while pressing **R**.
- 5 When you're done, press **RUN** twice.
- 6 Press **BACK** until this screen appears:



- 7 Press **SELECT** and then a letter, like **A**:



- 8 Enter the DOTS file. For example, hold down **SHIFT** and press **6** for rotate. Then hold down **SHIFT** and press **0** for DOT:



- 9 Press **RUN** twice to show the graphic.