

LED SIGN
REMOTE CONTROL
OPERATION MANUAL

Version 1.0

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SECTION 1
GENERAL INFORMATION

SECTION 1 - GENERAL INFORMATION

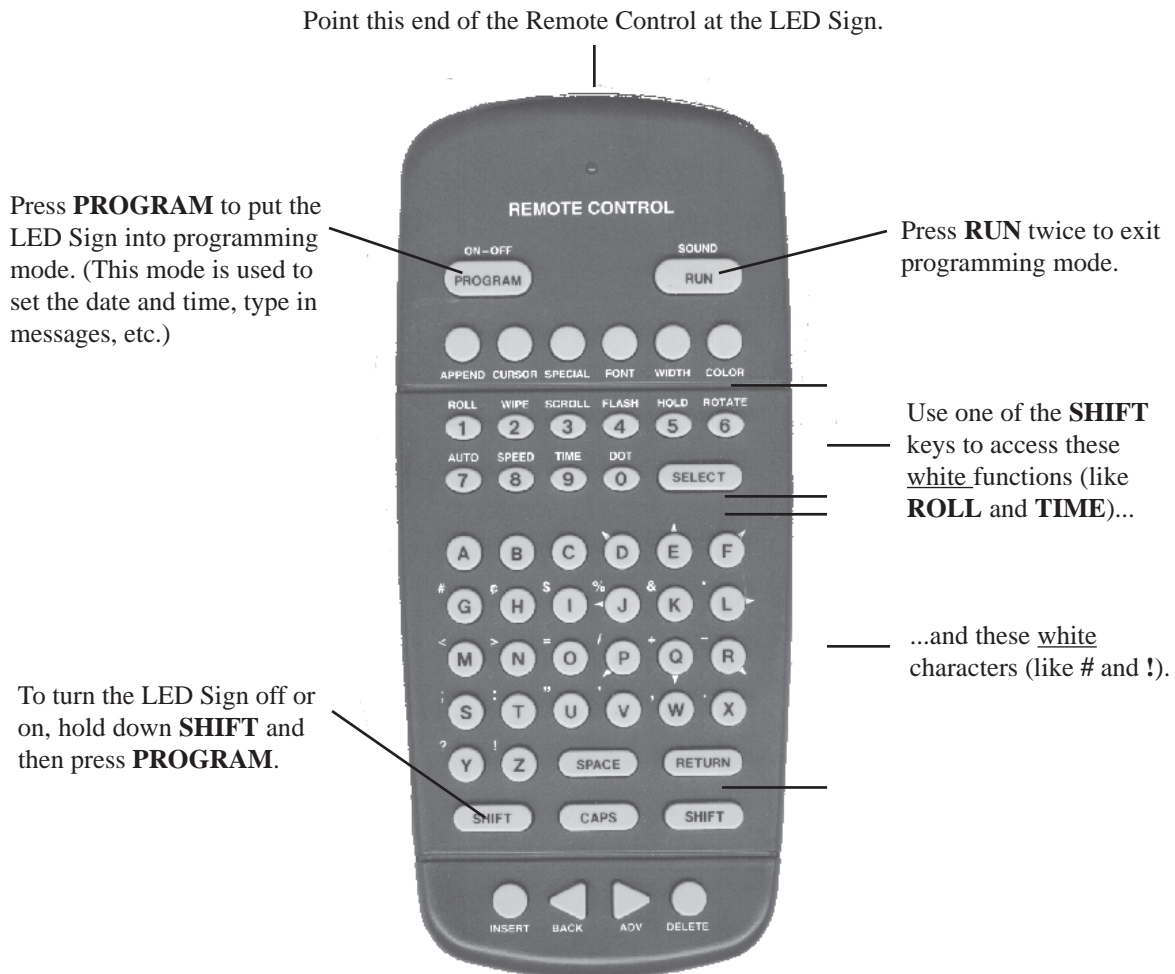
The Remote Control can be used to turn the LED Sign off and on, to clear its internal memory, and to set the sign's time and date. However, the most important purpose of the Remote Control is to *create messages for the LED Sign*.

This manual will show you how to use the Remote Control, using a series of step-by-step procedures and everyday examples.

REMOTE CONTROL DESCRIPTION

The Remote Control is a hand-held keyboard used to operate the LED Sign. From its front, the Remote Control emits an infrared signal which can control many of the functions of the LED Sign. The Remote Control requires four AAA batteries to operate.

The general layout of the Remote Control keyboard is shown here:



SECTION 1 - GENERAL INFORMATION

USING THE REMOTE CONTROL

To operate the LED Sign with the Remote Control:

- Stand at least 5 feet (but no more than 30 feet) away from the LED Sign.
- Make sure nothing reflective is in front of the LED Sign (light from the LED Sign's display that is reflected back can interfere with the Remote Control).
- If nearby fluorescent lights interfere with the Remote Control, it may be necessary to relocate either the lights or the terminal.

Although the LED Sign can respond to Remote Control signals directed at it from either side, or above and below the level of the sign, for best operation always stand directly in front of the LED Sign and point the Remote Control directly at the unit.

SECTION 1 - GENERAL INFORMATION

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SECTION 2
BASIC LED SIGN OPERATION

SECTION 2 - BASIC LED SIGN OPERATION

TURNING THE LED SIGN ON AND OFF

Because the LED Sign receives power from the terminal, it will turn on automatically when terminal power is applied, and turn off when terminal power is removed. If you wish to turn the LED Sign off or on while terminal power is still applied, perform the following action:

While holding down the **SHIFT** key, press the **PROGRAM** key to turn the LED Sign OFF or ON.




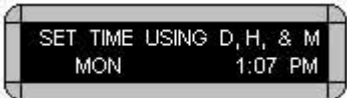

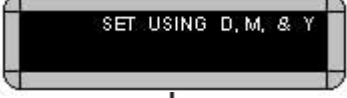


This procedure has no affect *once terminal power is removed*. If the LED Sign was turned off prior to removal of terminal power, when power is reapplied the LED Sign will turn on automatically.

NOTE: Messages that you have programmed into the LED Sign will not be lost when you turn it off, either by using the Remote Control or by removing terminal power. Messages will be retained in the LED Sign's memory for up to 30 days with no power applied.

SECTION 2 - BASIC LED SIGN OPERATION

SETTING THE TIME AND DATE

Once set, the LED Sign will remember the time and date until power is removed.






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.	
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.	 ↓ 
7	Press D to set the correct 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, JAN 26, 1994, 1/26/94, or 26/1/94, etc.	
8	After setting the date and time, press RUN twice to return to normal operation.	

SECTION 2 - BASIC LED SIGN OPERATION

CLEARING THE LED SIGN'S MEMORY

WARNING!



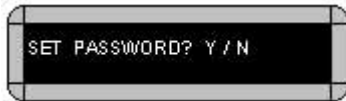




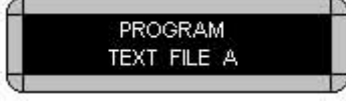
Clearing the LED Sign's memory will erase the password and **ALL** of the messages and graphics that have been programmed into the unit!

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 LED Sign's memory. The unit will return to normal operation and display a series of demo messages.	



SECTION 2 - BASIC LED SIGN OPERATION

SETTING THE LED SIGN'S PASSWORD




Use this procedure to establish a personal password, which can be used to protect your messages and graphics from modification by others. **Don't forget your password! Without it, you won't be able to operate the LED Sign!** However, *if you do forget your password*, see the procedure, "What to do When you Forget the LED Sign Password" later in this section.

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	Type a 6-character password. (Only asterisks will appear on the LED Sign as you type.) Re-type the password when prompted. CORRECT will appear if you entered the same password. If you failed to type the same password, ERROR will appear, and you'll have to start over from Step 1.	 ↓  ↓  ↓ 

SECTION 2 - BASIC LED SIGN OPERATION

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

WHAT TO DO WHEN YOU FORGET THE LED SIGN PASSWORD

Step	When you do this...	You see this...
1	Press PROGRAM	
2	Hold down SHIFT and press L six times.	 <p style="text-align: center;">↓</p> 
3	Enter a new password. (See the procedure "Setting the LED Sign's Password" on page 8.)	

HOW TO DELETE THE LED SIGN PASSWORD

If you no longer want to be prompted to enter a password to access the LED Sign, you must clear the sign's memory in order to delete the password. To do this, see the procedure, "Clearing the LED Sign's Memory" on page 7.







SECTION 2 - BASIC LED SIGN OPERATION

SOUND CONTROL

When you press a Remote Control key, the LED Sign will beep. To turn this feature off (or on again), do the following:

While holding down the **SHIFT** key, press the **RUN** key to turn the LED Sign beep feature off or on.

You can also place sounds in a message, as demonstrated in the following example:

Step	When you do this...	You see this...
1	Press PROGRAM	
2	Press ADV.	
3	Type <i>THIS IS 1 BEEP</i>	 The [AUT], which stands for Automode, will appear automatically when you start typing.
4	To add a beep, press SPECIAL.	
5	Then press B.	 [BP3] means that you'll hear 3 beeps when this message is displayed. Press SELECT to change to [BP1] for a single beep.
6	Press RUN twice. The message will be displayed and 1 beep will sound.	

SECTION 2 - BASIC LED SIGN OPERATION

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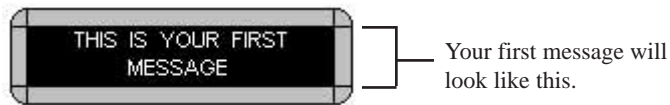
SECTION 3
BEGINNING TEXT MESSAGING

SECTION 3 - BEGINNING TEXT MESSAGING

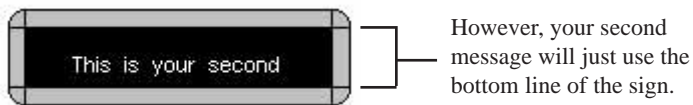
This section shows you how to use the Remote Control to create messages for the LED Sign. For more information, see Appendix A - Understanding the Cursor and Line Positions.

EXAMPLE 1 - USING UPPER AND LOWERCASE IN 1 AND 2-LINE DISPLAYS

In this first example, you'll display the text *THIS IS YOUR FIRST MESSAGE* on both lines of the LED Sign display. Your first message will look like this:




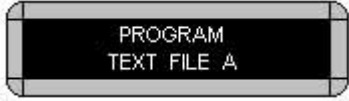




The text *This is your second message* will appear on the bottom line of the display:

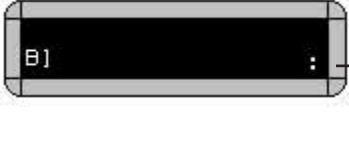

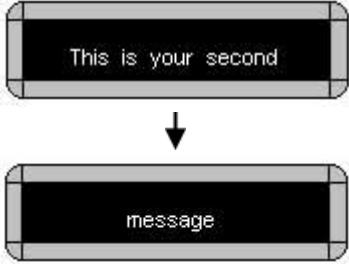


Step	When you do this...	You see this...
1	Press PROGRAM .	
2	Press ADV .	<p>"A" is the file name of your message.</p> <p>These dots are called the cursor. When the cursor is on both lines (like here), it means that the LED Sign will try to display your entire message on both lines of the display.</p>

SECTION 3 - BEGINNING TEXT MESSAGING

<p>3</p>	<p>Type <i>THIS IS YOUR FIRST MESSAGE</i></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 displays your message in different formats.</p> <p>Your message should look like this when you're done typing.</p> 
<p>4</p>	<p>Press RUN twice.</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 LED Sign display.</p>
<p>Now that the first message is completed, we'll enter a second message which contains upper and lowercase characters.</p>		
<p>5</p>	<p>Press PROGRAM again.</p>	
<p>6</p>	<p>Press SELECT.</p>	 <p>The A changes to a question mark (?) after pressing SELECT.</p>
<p>7</p>	<p>Press B.</p>	 <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>





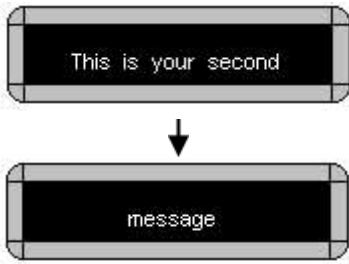

SECTION 3 - BEGINNING TEXT MESSAGING

<p>8</p>	<p>Press CURSOR until the LED Sign's cursor is on the bottom line.</p>	 <p>The cursor should end up here.</p>
<p>9</p>	<p>Type <i>T</i></p> <p>Press CAPS to switch to lowercase letters.</p> <p>Type <i>his is your second message.</i></p>	 <p>Your message should look like this when you're done typing.</p>
<p>10</p>	<p>Press RUN twice.</p>	 <p>You should notice two things:</p> <ul style="list-style-type: none"> • This message only appears on one line. (This is because the cursor was positioned on the bottom line in Step 8.) • The first message doesn't appear at all. (We'll fix this in the following example.)




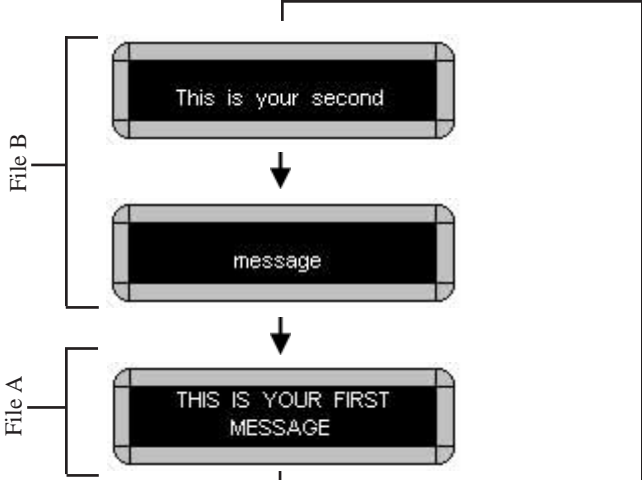
SECTION 3 - BEGINNING TEXT MESSAGING

EXAMPLE 2 - DISPLAYING MESSAGES IN FILE NAME ORDER (A, B, C, ETC.)

Once you've programmed messages into the LED Sign, you may want to set the order or sequence in which messages appear. This method will 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> and File B = <i>This is your second message</i> .		
1	Press PROGRAM	
2	Press RUN .	 TIME (or TIM) or DEMO (or CAN) may also appear here.
3	If <i>RUN</i> appears on the LED Sign, go to the next step. Otherwise, press SELECT until <i>RUN</i> appears.	
4	Press B .	
5	Press RUN .	
You have just programmed the LED Sign to run only message B. Next, we'll program the unit to display message B first, then A.		
6	Press PROGRAM .	

SECTION 3 - BEGINNING TEXT MESSAGING

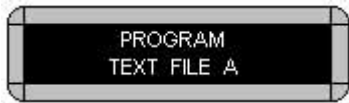




7	Press RUN	
8	If <i>RUN</i> appears on the LED Sign, go to the next step. Otherwise, press SELECT until <i>RUN</i> appears.	
9	Press B , then A .	 <p data-bbox="678 695 1382 785">The order of these letters determines the order in which messages will appear on the LED Sign. (In this case, message B will appear first, then message A.)</p>
10	Press RUN .	 <p data-bbox="659 1314 1295 1373">These two messages will keep being displayed 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 into the LED Sign.</p>		

SECTION 3 - BEGINNING TEXT MESSAGING






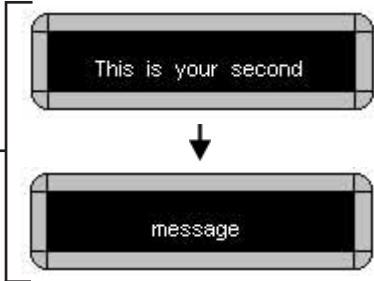

EXAMPLE 3 - DISPLAYING MESSAGES IN TIME ORDER

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 only work as long as power is applied to the LED Sign. When the LED Sign loses power, its internal clock becomes inaccurate and must be reset (see "Setting the Time and Date" in Section 2).

Step	When you do this...	You see this...
<p>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> and File B = <i>This is your second message</i>.</p> <p>In this example, we'll program the LED Sign to display File A on Monday through Friday from 1:10 PM to 2:30 PM. We'll program the LED Sign to always display File B.</p>		
1	Press PROGRAM	
2	Press SELECT until B appears on the LED Sign.	
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><i>ON ALWAYS</i> is the default setting for a message. A message set to <i>ON ALWAYS</i> will run continuously.</p>
4	Press PROGRAM .	
5	Press SELECT until A appears on the LED Sign.	

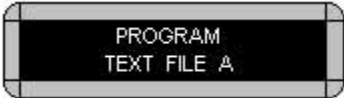




SECTION 3 - BEGINNING TEXT MESSAGING

6	Hold down SHIFT and press 9 for TIME .	 <p>First, we'll select the <i>ON</i> time or when the message <u>starts</u>.</p>
7	Press D (for day) until <i>MO-FR</i> 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 (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 in increments of 10.</p>
10	Press SELECT .	 <p>After setting the <i>ON</i> time, we'll select the <i>OFF</i> time or when the message <u>stops</u>.</p>
11	Repeat Steps 7, 8, and 9 to set an <i>OFF</i> time (a time like 13:20, 13:30, etc.)	
12	Press RUN twice.	<p>This message should appear continuously. — File B</p>  <p>This message should only appear <u>between</u> the ON and OFF times you set. — File A</p> 





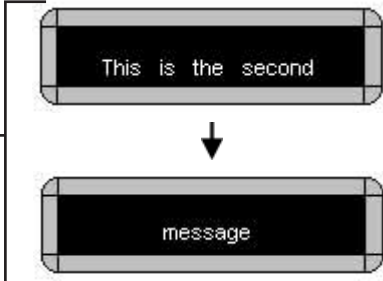
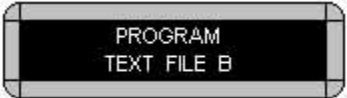


SECTION 3 - BEGINNING TEXT MESSAGING

EXAMPLE 4 - CHANGING THE TEXT OF AN EXISTING MESSAGE





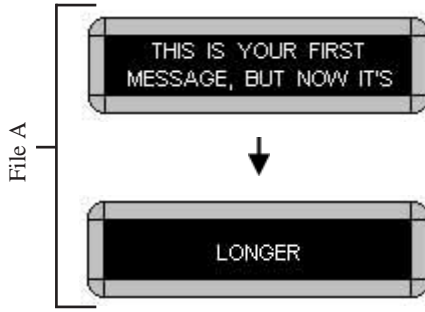
After typing in a message, you may want to add or remove text from it. The following is an example of this common situation.

Step	When you do this...	You see this...
<p>This example continues where Example 2 left off. This example assumes that there are two messages (files A and B) in the LED Sign: File A = <i>THIS IS YOUR FIRST MESSAGE</i>, and File B = <i>This is your second message</i>. It is also assumed that File A is displayed first, then File B is displayed.</p> <p>In this example, we'll change File A and File B to the following: File A = <i>THIS IS YOUR FIRST MESSAGE, BUT NOW IT'S LONGER</i>, and File B = <i>This is the second message</i></p>		
1	Press PROGRAM .	
2	Press SELECT until <i>B</i> appears on the LED Sign.	
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>

SECTION 3 - BEGINNING TEXT MESSAGING

6	Type <i>the</i> (and then press SPACE).	
7	Press INSERT to turn text insertion off..	
8	Press ADV until the first few letters of <i>second</i> appear.	 <p style="text-align: center;"><i>the has replaced your</i></p>
9	Press APPEND to go to the end of the message. DON'T OMIT THIS STEP!	
10	Press RUN twice.	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">File B</div> <div style="text-align: center;">  </div> </div>
Next, we'll add text to the end of File A.		
11	Press PROGRAM .	
12	Press SELECT until <i>A</i> appears on the LED Sign	
13	Press APPEND .	 <p style="text-align: center;">APPEND takes you to the end of a message.</p>

SECTION 3 - BEGINNING TEXT MESSAGING

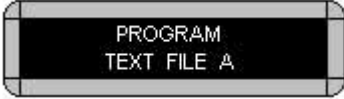
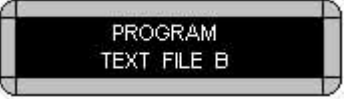

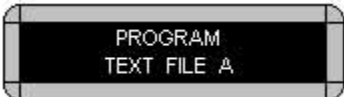
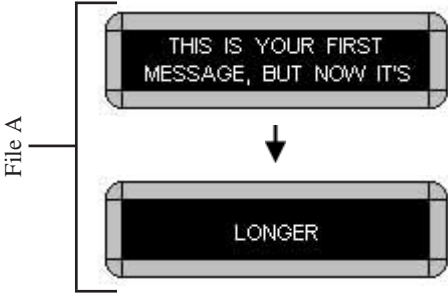
14	To type a comma, hold down SHIFT and press W .	
15	Press SPACE and then type <i>BUT NOW IT</i> .	
16	To type an apostrophe, hold down SHIFT and press V .	
17	Type <i>S LONGER</i> .	
18	Press RUN twice.	

SECTION 3 - BEGINNING TEXT MESSAGING

EXAMPLE 5 - DELETING MESSAGES

To delete all of the messages in the LED Sign, see “Clearing the LED Sign’s Memory” in Section 2, Basic LED Sign Operation.

If you want to delete selected messages, use the procedure 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 LED Sign: File A = <i>THIS IS YOUR FIRST MESSAGE, BUT NOW IT'S LONGER</i>, and 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 LED Sign.	
3	Press DELETE .	
4	Press Y to delete the file.	
5	Press RUN twice.	


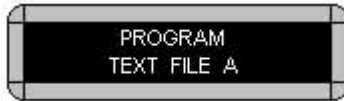



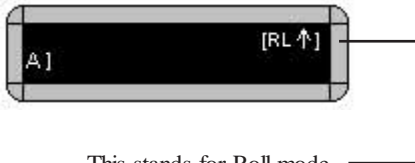
SECTION 4
ADVANCED TEXT MESSAGING

SECTION 4 - ADVANCED TEXT MESSAGING






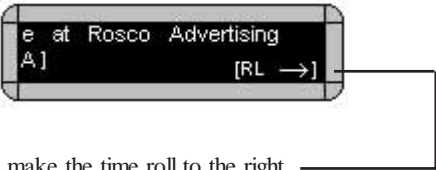
Before attempting the following procedures, make sure you are familiar with the examples given in the Section 3, Beginning Text Messaging.

EXAMPLE 1 - DISPLAYING THE TIME AND DATE



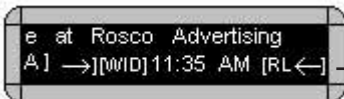



NOTE: Remember that the clock in the LED Sign will become inaccurate after power is removed, and will have to be set once again.

Step	When you do this...	You see this...
<p>In this example, we'll create a message that continuously displays the current time and date:</p> <div style="text-align: center;">  </div>		
1	Delete all the messages currently stored in the LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Operation, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.	
2	Press PROGRAM .	
3	Press SELECT .	
4	Press A .	
5	Press CURSOR to set the cursor on the top line.	
6	Hold down SHIFT and press 1 for ROLL .	 <p style="text-align: right;">This stands for Roll mode. —</p>

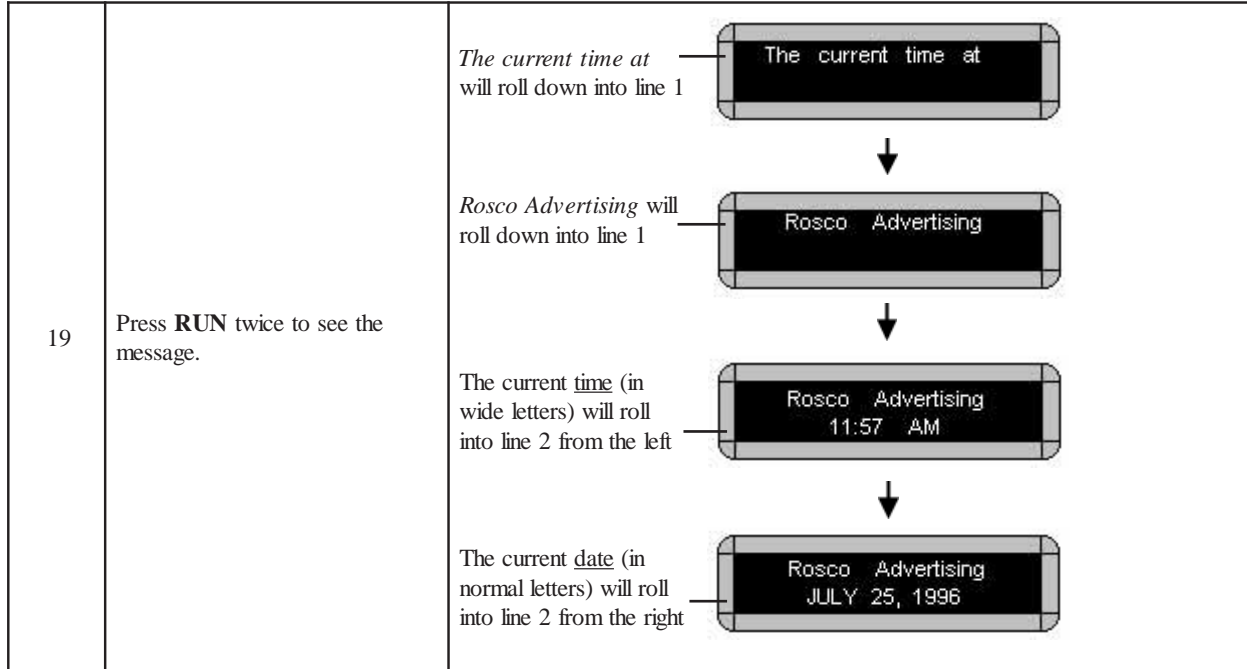
SECTION 4 - ADVANCED TEXT MESSAGING

7	Press SELECT to change the Roll direction to ↓	 <p>Press SELECT to change the Roll direction: _____</p> <p>[RL ↑] = Roll up a message. [RL ↓] = Roll down a message. [RL ←] = Roll a message to the left. [RL →] = Roll a message to the right. [RL <>] = Roll a message in from both sides of the LED Sign. [RL ><] = Roll a message out from the middle of the LED Sign.</p>
8	Type <i>T</i> .	
9	<p>Using CAPS to switch between uppercase and lowercase letters, type the following:</p> <p><i>he current time at Rosco Advertising</i></p> <p>NOTE: This message is <u>one line</u> of text. Don't use RETURN to put carriage returns in the message.</p>	
10	Press CURSOR until the cursor appears on the bottom line.	
11	Hold down SHIFT and press 1 for ROLL .	
12	Press SELECT until the Roll direction changes to →	 <p>We'll make the <u>time</u> roll to the right. _____</p>

SECTION 4 - ADVANCED TEXT MESSAGING

13	Press WIDTH to make wide characters for the time.	 <p>This will display the time in wide letters.</p>
14	Hold down SHIFT and press 9 for TIME .	 <p>This inserts the current time.</p>
15	Hold down SHIFT and press 1 for ROLL . Then press SELECT until the Roll direction changes to ←	 <p>We'll make the <u>date</u> roll to the left.</p>
16	Press WIDTH to turn off wide characters.	 <p>[SLM] means the following characters won't be wide.</p>
Now we'll put the date into our message.		
17	Press SPECIAL .	
18	Press M .	 <p>Pressing SPECIAL and M inserts the current date into a message.</p>


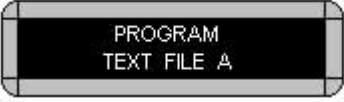


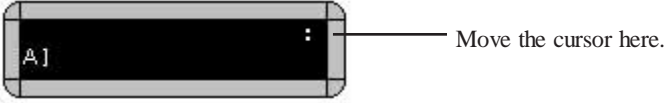


SECTION 4 - ADVANCED TEXT MESSAGING



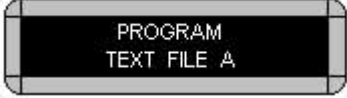
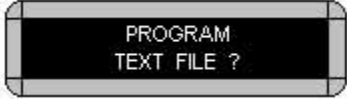




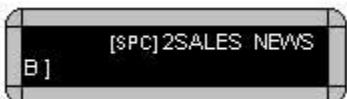
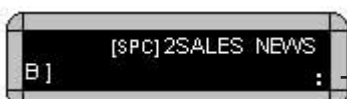
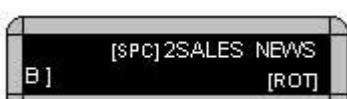
SECTION 4 - ADVANCED TEXT MESSAGING

EXAMPLE 2 - CREATING A NEWS MESSAGE ON THE LED SIGN





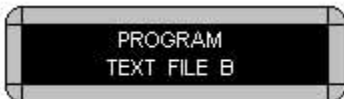
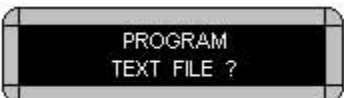



The LED Sign can serve as an electronic bulletin board, providing company news on a more timely basis than a traditional printed newsletter.

Step	When you do this...	You see this...
<p>In this example, we'll create a sample company news program using the following format:</p> <div style="text-align: center;">  </div>		
1	Delete all the messages currently stored in the LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.)	
2	Press PROGRAM .	<div style="text-align: center;">  </div>
3	Press SELECT .	<div style="text-align: center;">  </div>
4	Press A .	<div style="text-align: center;">  </div>
5	Press CURSOR to set the cursor on the top line.	<div style="text-align: center;">  </div>
<p style="text-align: center;">First, we'll place a fireworks graphic in message file A:</p>		
6	Press SPECIAL .	<div style="text-align: center;">  </div>
7	Press X .	<div style="text-align: center;">  </div>
8	<p>Press RUN twice to see the fireworks graphic.</p> <p>NOTE: In addition to the fireworks graphic, there are several others that you can use in messages. See "LED Sign Graphics" in Appendix C - Quick Reference.</p>	


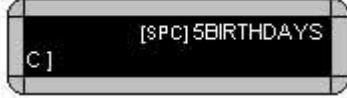


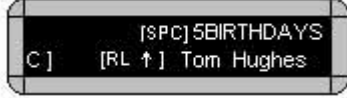


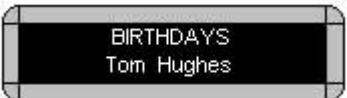
SECTION 4 - ADVANCED TEXT MESSAGING

Next we'll create sales news in message file B:		
9	Press PROGRAM .	
10	Press SELECT .	
11	Press B .	
12	Press CURSOR to set the cursor on the top line.	
13	Press SPECIAL .	
14	Press 2 .	 [SPC]2 = Snow mode
15	Type <i>SALES NEWS</i>	
16	Press CURSOR .	 The cursor should now be on line 2.
17	Hold down SHIFT and then press 6 for ROTATE .	





SECTION 4 - ADVANCED TEXT MESSAGING

18	Using CAPS and SHIFT when needed, type <i>Record July sales--Widget orders reached 2.5 million this month.</i>	
19	Hold down SHIFT and then press 6 for ROTATE .	
20	Using CAPS and SHIFT when needed, type <i>New manager--Mary Jones promoted to Eastern Region Sales VP.</i>	
21	Press RUN twice to see what message B looks like.	 <p data-bbox="1036 726 1333 835">SALES NEWS remains on the top line while the rest of the message rotates across the bottom line.</p>
Next, we'll create birthday announcements in message file C:		
22	Press PROGRAM .	
23	Press SELECT .	
24	Press C .	
25	Press CURSOR to set the cursor on the top line.	
26	Press SPECIAL .	

SECTION 4 - ADVANCED TEXT MESSAGING

27	Press 5 .	 <p>[SPC]5 = Slide across mode</p>
28	Type <i>BIRTHDAYS</i>	
29	Press CURSOR .	 <p>The cursor should now be on line 2.</p>
30	Hold down SHIFT and then press 1 for ROLL .	
31	Using CAPS and SHIFT when needed, type the first name: <i>Tom Hughes</i>	
32	Hold down SHIFT and then press 1 for ROLL .	
33	Using CAPS and SHIFT when needed, type the first name: <i>Mary Furdek</i>	
34	Press RUN twice to see the message.	 <p><i>BIRTHDAYS</i> remains on the top line while the names roll up.</p>

SECTION 4 - ADVANCED TEXT MESSAGING

<p>Finally, we'll create the news program by making the message files display one after the other.</p> <p>We'll start the news program with the fireworks (message file A), display people's birthdays (message file C), and then the sales news (message file B).</p>		
35	Press PROGRAM .	
36	Press RUN .	 <p>TIME (or TIM) or DEMO (or CAN) may also appear here.</p>
37	<p>If <i>RUN</i> appears on the LED Sign, go to the next step.</p> <p>Otherwise, press SELECT until <i>RUN</i> appears.</p>	
38	Type the order of the message files: <i>A, C, B</i> .	
39	<p>Press RUN to see the completed news program.</p> <p>First you should see the fireworks (file A), then the BIRTHDAYS (file C), and finally the SALES NEWS (file B). These three message files will keep repeating until you enter a new message or reset their order.</p> <p>NOTE: You can also schedule a message to run at a particular time. For example, you may want to display a message only during lunch time. In this case you might schedule it to run from 11:00 AM to 1:00 PM. See Example 3 - "Displaying Messages in Time Order", in Section 3, Beginning Text Messaging.</p>	

SECTION 4 - ADVANCED TEXT MESSAGING

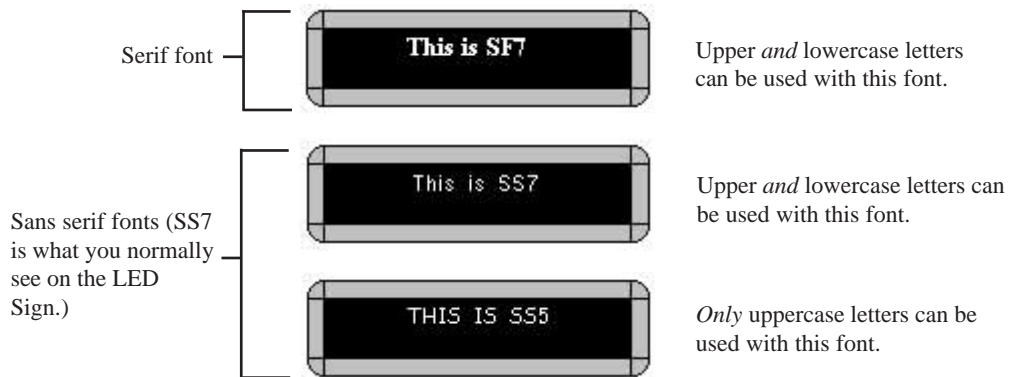
EXAMPLE 3 - USING FONTS

The way characters are displayed on the LED Sign represents the *font*. In the world of printing and publishing, fonts are given names like *Times* or *Arial*, and qualities like *serif* or *sans serif*, font size (like 12 point or 14 point), and bold or italic. For example:



This is Time - a serif font.

This is Arial - a sans serif font.

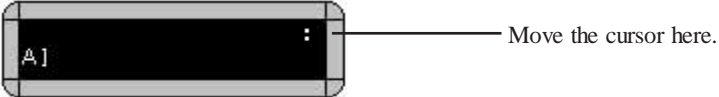






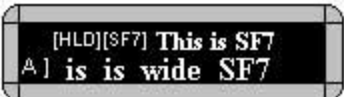
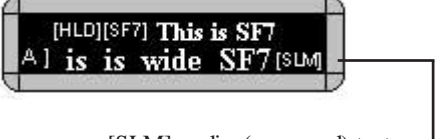
The LED Sign has one serif font, called [SF7], and two sans serif fonts, called [SS5] and [SS7]:




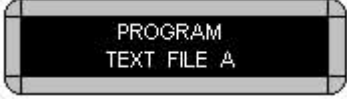

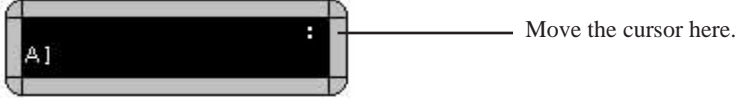


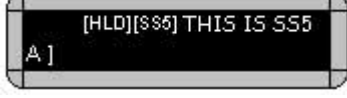
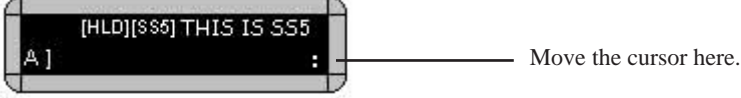
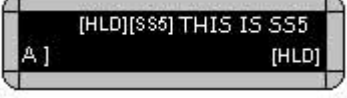
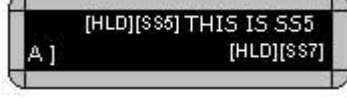
Also, any of the LED Sign's fonts can be made bold (or wider) by using the **WIDTH** button. The following examples demonstrate how to use fonts on the LED Sign.

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.	
2	Press PROGRAM .	
3	Press ADV .	

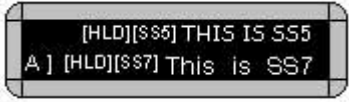
SECTION 4 - ADVANCED TEXT MESSAGING

4	Press CURSOR to set the cursor on the top line.	
5	Hold down SHIFT and press 5 for HOLD .	
6	Press FONT .	
7	Using CAPS and SHIFT when needed, type <i>This is SF7</i>	
8	Press CURSOR to set the cursor on the bottom line.	
9	Hold down SHIFT and press 5 for HOLD .	
10	Press WIDTH .	
11	Using CAPS and SHIFT when needed, type <i>This is wide SF7</i>	
12	Press WIDTH again.	

SECTION 4 - ADVANCED TEXT MESSAGING

13	Using CAPS and SHIFT when needed, type <i>Normal SF7</i>	
14	Press RUN twice to see what you've typed.	
Now we'll demonstrate the two sans serif fonts: [SS5] and [SS7]:		
15	Press PROGRAM .	
16	Press ADV .	
17	Press CURSOR to set the cursor on the top line.	
18	Hold down SHIFT and press 5 for HOLD .	
19	Press FONT until [SS5] appears.	
20	Type <i>THIS IS SS5</i> (Only uppercase letters can be used with the SS5 font.)	
21	Press CURSOR to set the cursor on the bottom line.	
22	Hold down SHIFT and press 5 for HOLD .	
23	Press FONT until [SS7] appears.	

SECTION 4 - ADVANCED TEXT MESSAGING

24	Using CAPS and SHIFT when needed, type <i>This is SS7</i>	
25	Press RUN twice to see what you've typed.	

SECTION 4 - ADVANCED TEXT MESSAGING

EXAMPLE 4 - SPEEDING UP AND SLOWING DOWN MESSAGES





The LED Sign has the option of speeding up or slowing down how fast messages move. Once you pick a mode, like Rotate, a speed can be selected by choosing **SPEED** on the Remote Control., then pressing **SELECT** to change the speed:



Here's an example of how to vary the speed of the Scrolling mode of a message:

Step	When you do this...	You see this...
1	Delete all the messages currently stored in the LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.)	
2	Press PROGRAM .	
3	Press ADV .	
4	Select SCROLL . (Hold down SHIFT and press 3.)	
5	Select SPEED . (Hold down SHIFT and press 8.)	
6	Press SELECT until [SP5] (very slow) appears.	
7	Type <i>SCROLL = SPEED 5</i>	

SECTION 4 - ADVANCED TEXT MESSAGING

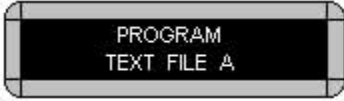



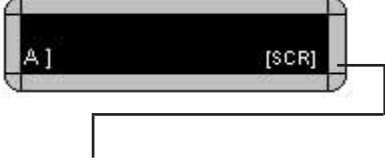

8	Select SCROLL again.	
9	Select SPEED again.	
10	Press SELECT until [NHL] (No Hold = very fast) appears.	
11	Type <i>SCROLL = NO HOLD</i>	
12	Press RUN twice to see your message. The first part of the message should scroll up slowly, and the second part of the message should scroll up without pausing at all.	

SECTION 4 - ADVANCED TEXT MESSAGING

EXAMPLE 5 - 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 modes 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 LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.	
2	Press PROGRAM .	
3	Press ADV .	
4	Hold down SHIFT and press 4 for FLASH .	
5	Type <i>ATTENTION!</i>	
6	Hold down SHIFT and press 3 for SCROLL .	
		This is the trailing mode. Scroll "trails" the first mode, Flash.
7	Type <i>THIS IS TRAILING MODE</i>	
8	Press RUN twice to see trailing mode in action. <i>ATTENTION!</i> should flash and then rotate off the screen.	


SECTION 4 - ADVANCED TEXT MESSAGING

EXAMPLE 6 - INTERNATIONAL CHARACTERS

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

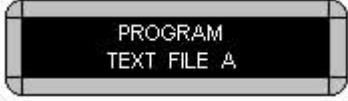





NOTE: International characters cannot be used with the small [SS5] font.

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

	 <p>Type a Base Character, like A. Then press SELECT to choose an international character.</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		·	Ø		æ				¿	ı	¢
			Œ				ß	Ÿ	?	!	£
		Ç	°		Ñ			ŷ			¥
	~	ç	ł	ł	ñ		œ				
	-			ı			U				\$
			E			o	u				
	˘		e			O					
	Æ					o					
	á										
	À										
à											

SECTION 4 - ADVANCED TEXT MESSAGING

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 LED Sign. (See "Clearing the LED Sign's Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.	
2	Press PROGRAM .	
3	Press ADV .	
4	Using CAPS and SHIFT when needed, type <i>Submit your re</i>	
5	Press SELECT until Ø appears.	
6	Type <i>sume</i>	
7	Press SELECT until Ø appears.	
8	Press RUN twice to see your message.	

SECTION 4 - ADVANCED TEXT MESSAGING

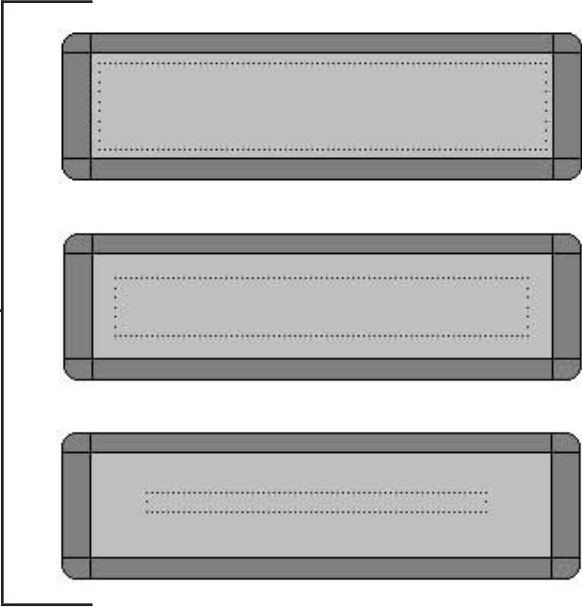


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SECTION 5
GRAPHICS

SECTION 5 - GRAPHICS

In addition to “canned” graphics (see “LED Sign Graphics” in Appendix C, Quick Reference), you can create custom graphics using *DOTS* files. You can display a DOTS graphic that you create either by itself or with text. The LED Sign allows you to create single-line graphics only. By default, these will be created on the top line of the display. However, once created, the graphics can be displayed on either the top or bottom lines of the display. In order to display a DOTS graphic you’ve created the graphic must first be saved in a text file—even if the graphic will be displayed without text.

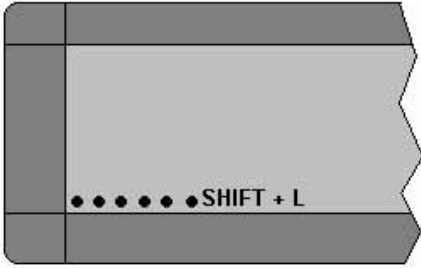
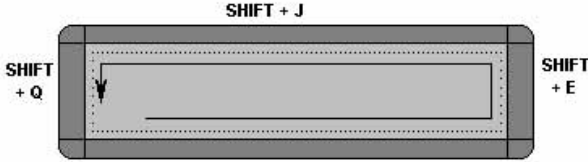



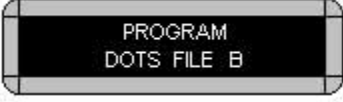
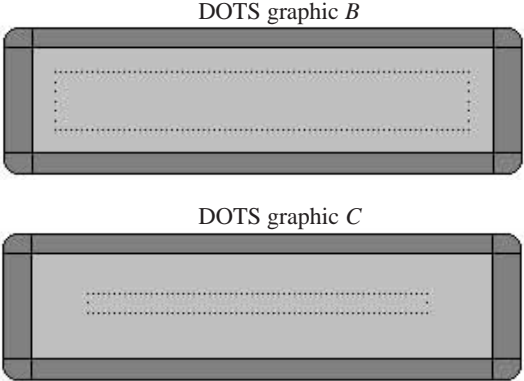
EXAMPLE 1 - CREATING A MOVIE MARQUEE

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> <p>NOTE: The LED Display allows you to create single-line graphics only. In the following example, the graphics will be created on the top line of the LED Sign display.</p> <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 style="display: flex; justify-content: space-around; align-items: center;">   </div>		
1	Delete all the messages currently stored in the LED Sign. (See "Clearing the LED Sign’s Memory", in Section 2, Basic LED Sign Control, or "Example 5 - Deleting Messages", in Section 3, Beginning Text Messaging.	
2	Press PROGRAM .	

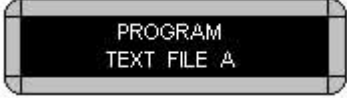
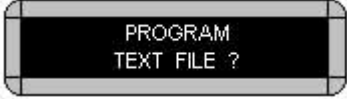






SECTION 5 - GRAPHICS

<p>3</p>	<p>Press BACK.</p>	<div data-bbox="852 289 1198 394" data-label="Image"> </div> <p>The name of your first DOTS graphic is A. (The second one will be named B and the third one C.)</p>
<p>4</p>	<p>Press ADV.</p>	<div data-bbox="651 535 1073 800" data-label="Image"> </div> <p>The blinking DOTS cursor keeps track of where you're drawing.</p>
<p>5</p>	<p>Press Q until the DOTS cursor is on the bottom.</p>	<div data-bbox="667 877 1003 1640" data-label="Image"> </div> <div data-bbox="1073 1003 1409 1276" data-label="Image"> </div> <p>Press Q to move the DOTS cursor here.</p> <p>These keys <i>move</i> the DOTS cursor.</p> <p>Also, you can <i>draw</i> (or erase) dots when you hold down the SHIFT and press one of these keys.</p>

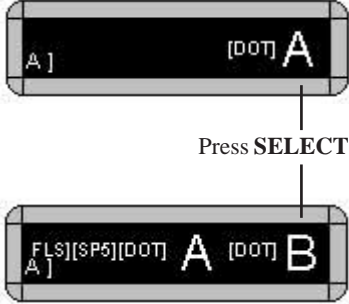
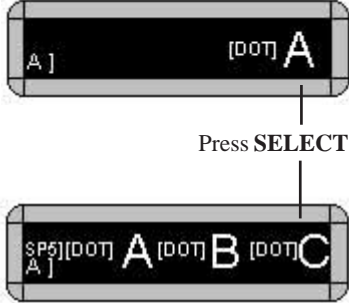
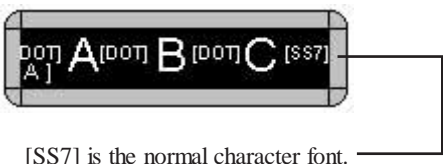

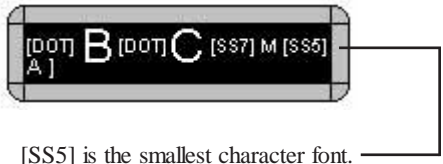

SECTION 5 - GRAPHICS

<p>6</p>	<p>Hold down SHIFT and press L to draw a line across the entire bottom of the display.</p>	
<p>7</p>	<p>Complete DOTS graphic A by using E, J, and Q. NOTE: Remember: hold down SHIFT with these keys to actually draw.</p>	
<p>8</p>	<p>Press RUN.</p>	
<p>9</p>	<p>Then press Y to save graphic A.</p>	
<p>10</p>	<p>Press SELECT until a question mark appears.</p>	
<p>11</p>	<p>Type <i>B</i> as the name of the next graphics file.</p>	
<p>12</p>	<p>Repeat the previous steps to draw graphics <i>B</i> and <i>C</i>. (Both are just smaller versions of graphic <i>A</i>.)</p>	





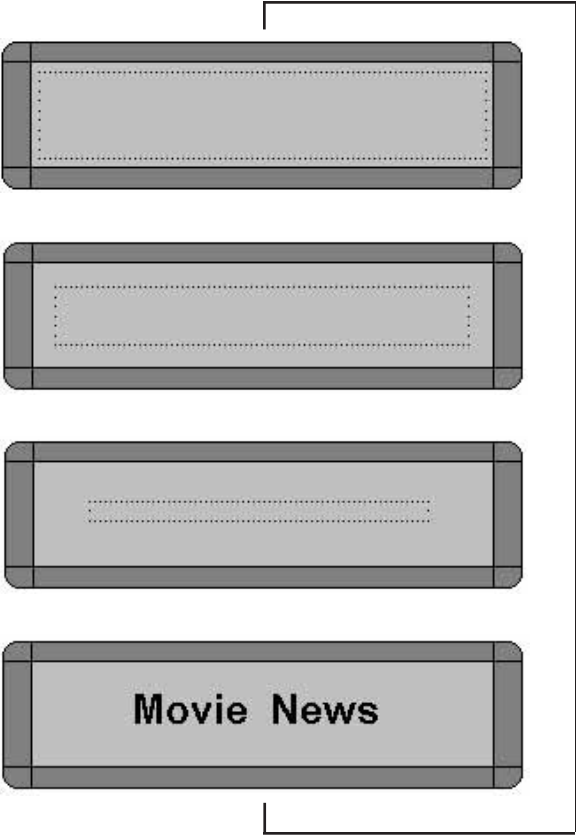
SECTION 5 - GRAPHICS

NOTE: 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.		
13	Return to the PROGRAM TEXT FILE display. (Press BACK .)	
14	Press SELECT until a question mark appears..	
15	Press A .	
16	Press CURSOR until the cursor is on the top line of the display. NOTE: If you wanted the text and graphics to be displayed on the bottom line of the display, you would place the cursor on the bottom line instead.	
17	Hold down SHIFT and press 4 for FLASH.	
18	Hold down SHIFT and press 8 for SPEED.	
19	Press SELECT until [SP5] appears. (This is the slowest speed.)	
20	Insert the first DOTS graphic you created (file A) by holding down SHIFT and pressing 0 .	 <p>The letter A is the name of the graphic file. (Don't worry if it's a large letter like this.)</p>

SECTION 5 - GRAPHICS

<p>21</p>	<p>Insert the second DOTS graphic by holding down SHIFT and pressing 0 again.</p> <p>Then press SELECT until the letter <i>B</i> appears.</p>	 <p>Press SELECT.</p>
<p>22</p>	<p>Insert the final DOTS graphic by holding down SHIFT and pressing 0 again.</p> <p>Then press SELECT until the letter <i>C</i> appears.</p>	 <p>Press SELECT.</p>
<p>Now we'll add the message <i>Movie News</i> after the three graphics:</p>		
<p>23</p>	<p>Press FONT until [SS7] appears.</p>	 <p>[SS7] is the <u>normal</u> character font.</p>
<p>24</p>	<p>Type the letter <i>M</i></p>	
<p>25</p>	<p>Press FONT until [SS5] appears.</p>	 <p>[SS5] is the <u>smallest</u> character font.</p>
<p>26</p>	<p>Type <i>ovie</i> and then press SPACE.</p>	


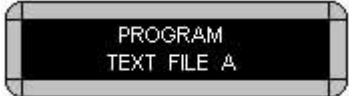

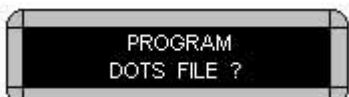



SECTION 5 - GRAPHICS

27	Press FONT until [SS7] appears.	
28	Type the letter <i>N</i>	
29	Press FONT until [SS5] appears.	
30	Type <i>ews</i>	
31	Press RUN twice to watch the marquee you created.	

SECTION 5 - GRAPHICS

EXAMPLE 2 - 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. It assumes that the following is a graphic in DOTS file A:</p>  <p>This is the DOTS graphic used in the previous example, "Creating a Movie Marquee".</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.	

APPENDIX A




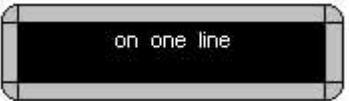

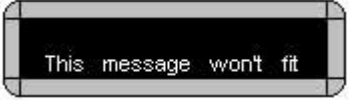

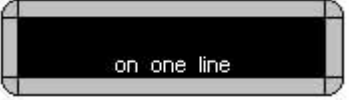

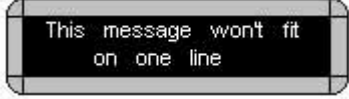
UNDERSTANDING THE CURSOR AND LINE POSITIONS

APPENDIX A

UNDERSTANDING THE CURSOR AND LINE POSITIONS

The cursor indicates the point where text or graphics will appear on the LED Sign and is represented by a colon (:) on the display. Press the CURSOR key to change the cursor position.

The following table shows how the cursor position affects *text*:





	Cursor Position	How Text Will Appear
Top		  
Bottom		  
Fill		

APPENDIX B
LED SIGN DIAGNOSTIC TEST

APPENDIX B

LED SIGN DIAGNOSTIC TEST

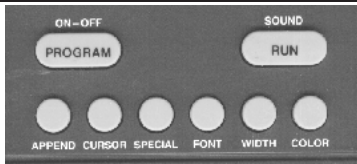
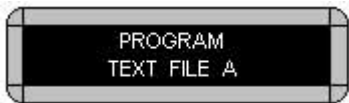
The LED Sign can perform a self test to determine if all the Light Emitting Diodes in the display are working properly.

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 .	
4	Type <i>TEST</i> NOTE: This test deletes all messages in the LED Sign. However, if you type the letter R immediately after typing <i>TEST</i> , your messages will be preserved.	 ↓ A series of test displays will appear.
5	Press PROGRAM to exit the self-test mode.	

APPENDIX C
QUICK REFERENCE

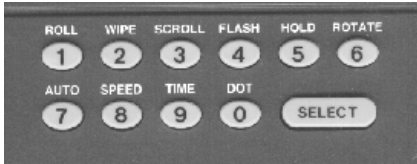
APPENDIX C

MESSAGE CONTROL KEYS

	
PROGRAM	<p>To turn the LED Sign on or off, hold down SHIFT and then press PROGRAM.</p> <p>To enter messages, set the date and time, clear memory, etc., 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>DOTS FILE A - Press ADV to create a graphic. SET TIME AND DAY - Press ADV to set time and day. SET DATE - Press ADV to set the date. SET PASSWORD - Press ADV to set a password. CLEAR MEMORY - Press ADV to erase all messages.</p> </div> <div style="width: 45%; text-align: right;"> <p>Press ADV to enter a message in file A.</p> </div> </div>
RUN	Press twice to exit PROGRAM mode.
APPEND	When editing text, this takes you to the end of a message.
CURSOR	See Appendix A - Understanding the Cursor and Line Positions.
SPECIAL	Use to set various text modes. See Display Modes and Special Keys.
FONT	Changes the font - [SF7, [SS5], or [SS7] - used in a message.
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 3 - Using Fonts", in Section 4.
COLOR	Changes the color of text. (Not applicable to the LED Sign at this time.)

APPENDIX C

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 roll direction.
WIPE	Hold down SHIFT and press 2 to use the Wipe mode in a message. Use SELECT to change the wipe direction.
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, SP5 = 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 .

APPENDIX C

DISPLAY MODES AND SPECIAL KEYS (CONTINUED)

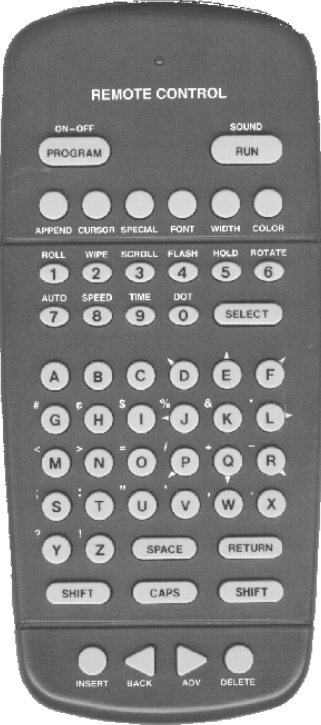
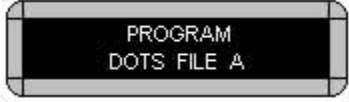
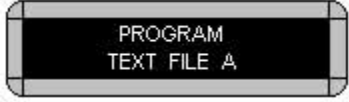


Slide Across	Press SPECIAL . Then Press 5 .
Spray	Press SPECIAL . Then Press 6 .
Starburst	Press SPECIAL . Then Press 7 .
Carriage Return	Press RETURN .
Half space	Hold down SHIFT and then press SPACE .

LED SIGN 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 .

APPENDIX C

HOW TO CREATE A GRAPHIC

	1	<p>Press PROGRAM and then BACK:</p> 
	2	<p>Next, press ADV. The DOTS cursor will be in the upper left hand corner of the the top line of the LED Sign display.</p>
	3	<p>Use the direction keys (D, E, F, etc.) to move the DOTS cursor in the direction indicated by the white arrows.</p>
	4	<p>To draw a line, hold down SHIFT while pressing one of the direction keys. For example, to draw a diagonal line, hold down SHIFT while pressing R.</p>
	5	<p>When you're done, press RUN twice.</p>
	6	<p>Press BACK until this display appears:</p> 
	7	<p>Press SELECT and then a letter, like A:</p> 
	8	<p>Enter the DOTS file. For example, hold down SHIFT and press 6 for ROTATE. Then hold down SHIFT and press 0 for DOT:</p> 
	9	<p>Press RUN twice to display the graphic.</p>

APPENDIX C

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