

How to use the IR Message Loader to Display Messages on Alpha Signs

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STEP 1: These instructions apply to the following signs:

- Alpha 200 Series (215, 220)
- Alpha 300 Series (320, 330)
- Alpha 4000 Series (4080, 4120, 4160, 4200, 4240)
- Alpha 7000 Series (7080, 7120, 7160, 7200)
- Alpha Big Dot sign
- Alpha Director sign
- Alpha Personal Priority Display
- AlphaPremiere 9000 Series (9080, 9120, 9160, 9200, 9240)
- Alpha Window Display
- · Betabrite one-line sign

These instructions are *not* for AlphaEclipse signs. For these signs, see "How to use the IR Message Loader to Display Messages on AlphaEclipse Signs" (pn 9707-1004).

STEP 2: Connect the IR Message Loader to a computer (page 5).

STEP 3:	Create a site using AlphaNET Site Manager (page 6).
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- **STEP 4:** Create messages for a sign using AlphaNET Message Editor (page 8).
- **STEP 5:** Store the messages in the IR Message Loader (page 10).
- **STEP 6:** Send messages from the IR Message Loader to a sign (page 11)

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Due to continuing product innovation, specifications in this manual are subject to change without notice.

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Introduction

Overview

These instructions explain how to use an IR Message Loader to display messages on the following signs:

- Alpha 200 Series (215, 220)
- Alpha 300 Series (320, 330)
- Alpha 4000 Series (4080, 4120, 4160, 4200, 4240)
- Alpha 7000 Series (7080, 7120, 7160, 7200)
- Alpha Big Dot sign
- Alpha Director sign
- Alpha Personal Priority Display
- AlphaPremiere 9000 Series (9080, 9120, 9160, 9200, 9240)
- Alpha Window Display
- Betabrite one-line sign

IR Message Loader description

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These instructions are *not* for AlphaEclipse signs. For these signs, see "How to use the IR Message Loader to Display Messages on AlphaEclipse Signs" (pn 9707-1004).

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Item	Naille	Description
Α	MEMORY LOCATION switch	Selects into which memory location (1, 2, or 3) messages will be stored. Each memory location can store up to 10,000 bytes.
R	DATA VALID light	Solid — messages successfully sent or received
		Blinking — messages being transferred
C	Infrared transmitter	Sends messages to a sign that is not connected by cable to the IR Message Loader.
D	DATA light	Blinks when data is sent to or received from the IR Message Loader.
E	BAT. LOW light	When lit, indicates that the unit's 9V battery should be replaced.
F	TRANSMIT button	Sends or receives messages.
G	Serial port	Connects to a computer to receive messages, or to a sign to send or receive messages.

Revision history

Part number	Date	Notes
9707-1003A	March 3, 1999	The manual was reformatted and references to obsolete software were removed.
9707-1003B	August 12, 1999	The following items were changed: (1) added COM port setup, (2) added a reference to the AlphaNET plus user manual, and (3) deleted a reference to the PrintPak manual.
9707-1003C	July 24, 2001	This revision of the manual describes IR Message Loader version "G" firmware which allows message transfer to a sign using a cable in place of an infrared connection.
9707-1003D	November 13, 2001	This revision of the manual describes IR Message Loader version "H" firmware which allows message transfer to AlphaEclipse signs.
9707-1003E	April 29, 2003	In this revision of the manual, AlphaEclipse sign information was added from TechMemo #01-0004A.
9707-1003F	November 4, 2003	In the revision, AlphaEclipse sign information was removed and used to create a new document "IR Message Loader Instructions for AlphaEclipse Signs" (pn 9707-1004). In addition, examples from AlphaNET 3.0 software are used throughout.

Related documentation

Document name	Part #	Description
AlphaNET User Manual	9708-8081	Explains how to use this software to create sign messages.
IR Message Loader Instructions for AlphaEclipse signs	9707-1004	Explains how to use the IR Message Loader with the AlphaEclipse 2500, 2600, and 3500 signs.

Connect the IR Message Loader to a computer



Turn off your computer before connecting the IR Message Loader.



Computer COM port

Create a site using AlphaNET Site Manager

1. Open the AlphaNET Site Manager software:

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		Windows Update			_								
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	1	Programs •	Ē	Accessories	•	Ali	AlphaNET Bar						
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2. Click *Edit* > *Connection Device*. Then click *Local Wired Com* 1 > *Edit*:

Tile Edit Message	Connection Device Editor	X	
	Default Connection Device	Add	
Sites / Groups		Edit	Time
	Available Connection Devices:	Remove	
		Rename	

- If you don't see *Local Wired Com 1*, then click *Add* and select the appropriate *Local Wired* device.
- If you connected the IR Message Loader to another COM port, then click *Add* and select the appropriate *Local Wired* device.
- 3. Set the COM Port, Data Format, and Baud Rate as shown below. Then click OK:

COM Port Set this to the computer COM	Local Wired Com 1	
port that is connected to the IR Message Loader.	General Settings	Wireless Settings Pager Header:
Data Format ————————————————————————————————————	Data Format: 7E2 Wireless Baud Rate: 9600 TCP/IP	Pager Trailer:
Baud Rate Set to 9600. (This is the speed that your computer sends messages to the IR Message Loader.)	IP Port: 3001 Modem Settings Dialing Prefix: Modem Init String:	Packet Size: 150 Packet Delay: 2
		OK Cancel

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4. Click *Make Default > Yes > OK*:

onnection I	Device Editor		×		
Default Con	nection Device	Add			
Local Wired	Com 1	Edit			
Available Con	nection Devices:	Remov	ve		
Local Wired	Lom I	Renan	ne		
		Make De	fault		
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	AlphaNET Site Manage	10F			6
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]	Make Local Wi	red Com 1 the Yes	new defa	ult connectio	n device
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	Default Connection Device			Add	
	Local Wired Com 1			Edit	
	Available Connection Devices	5:	Re	emove	
	Local Wired Lom I		Re	ename	
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5. From the AlphaNET Site Manager screen, click *File* > *New Site*. Enter the information as shown below. Then click *OK*.

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	nouhe	Message Name	Start Day / Time
	Site Editor		
	Site Info Sign Info Grou	up Info Advanced	
	- Site Description -		
	Site Name:	Message Loader Site	
	Site Maine.		
	Compatibility:	Alpha 1.0 (EZ95) 💌	Full Lolor (HGB) Lapable
vhee	Matural Carforn	ation	
eady	- Network Configure		
eady	Connection Device	e: Local Wired Com 1	-
eady	Connection Device	e: Local Wired Com 1	Cap Code:
eady	Connection Device Phone Number:	e: Local Wired Com 1	Cap Code:

Create messages for a sign using AlphaNET Message Editor

1. From the AlphaNET Site Manager screen, click the Message Editor icon 🥖 . Then enter a message:



A sign's time and date can *not* be updated using an IR Message Loader.

To change the time and date on a sign, see "Troubleshooting" on page 14.

2. Click *File > Save As*. Name this message "message1". Then click *Save*:

Save As			? 🗙
Save in: 障	Messages	• E (* 🖩 *
File name:	message1		Save
Save as type:	AlphaNET Msg (*.msw)	•	Cancel

- 3. Click *File > Close* to close the *message1* window.
- 4. From the AlphaNET Site Manager screen, click *Message Loader Site*:

🖀 Sitebase 32. dat – AlphaNET Si	te Manager	
File Edit Messages View Help		
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Sites / Groups	Message Name	Start Day / Time
🕞 Message Loader Site		
	<	
Ready		ALL MESSAGES

5. Click the add message icon **•** . Then select *message1*:

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File Edit Messages View He	lp.				Concession of the local division of the loca
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Sites / Groups	Mess	age Name	Start Day / T	ime	
🗁 Message Loader Site					
	Add Messag	es			? 🛛
	Look in: 📴	Messages	•	+ 🗈 🖻	* 💷 •
	message1			11.42	
Ready					
	File name:	message1			Open
	Files of type:	AlphaNET Msg (*	.msw)	•	Cancel

6. Click *Open*. This adds *message1* to the *Message Loader Site*:

🖀 Sitebase32. dat - AlphaNET Site Manager 📃			
File Edit Messages View Help			
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Sites / Groups	Message Name	Start Day / Time	
🗁 Message Loader Site	🖹 message1.msw	Always	
	<		
Ready		ALL MESSAGES	

7. Select *Message Loader Site*. Click the transmit icon $\frac{1}{12}$:



Multiple messages can be "attached" to a site.

All the messages that are attached to a site will be sent to the IR Message Loader.

Because IR Message Loader memory is limited, be careful of attaching too many messages to the Message Loader Site.

Do NOT click OK yet!

Store the messages in the IR Message Loader

1. On the IR Message Loader, move the *MEMORY LOCATION* switch to 1, 2, or 3 to select where to store your messages:



- 2. Press and release *TRANSMIT* on the IR Message Loader. When *DATA* blinks once, go to the next step. You only have 10 seconds.
- **3.** From the AlphaNET Site Manager screen, click *Selected Sites* > *OK*:



- 4. *DATA* will blink as messages are sent from the computer to the IR Message Loader.
- 5. When all messages have been sent to the IR Message Loader, both DATA VALID and DATA will go off.

Send messages from the IR Message Loader to a sign

Messages can be sent from the IR Message Loader to a sign in one of two ways:

- Using the infrared transmitter on the IR Message Loader (see below)
- Using a special cable to connect the IR Message Loader to the sign (see page 12)

Using just the IR Message Loader to display messages on a sign

- NOTE: Only signs with infrared receivers can use this method. If a sign has a infrared receiver, the receiver will be located on the sign's front under a small, clear or red window.
- **1.** On the IR Message Loader, move the *MEMORY LOCATION* switch to 1, 2, or 3 to select where your message are stored:



2. Stand 5 to 30 feet from the front of the sign. Point the IR Message Loader at the sign.



- **3.** Press and hold *TRANSMIT* on the IR Message Loader. Watch the *DATA* light. When it goes off, stop pressing *TRANSMIT*.
- **4.** If *RECEIVED OK* appears on the sign, then the transfer was successful and your message should appear on the sign. However, if an error message appears, then repeat from step 3.

Using a special cable with the IR Message Loader to display messages on a sign

1. Connect the IR Message Loader to a sign using the Loader-to-sign cable (pn 1088-8628):



- 2. On older Series 4000, 7000, and Director signs, an internal RS232/RS485 jumper must be set to RS485. If you are not sure if your sign has one of these jumpers, open the sign as shown:
 - Series 4000 and 7000 signs:



• Director sign:

Remove the sign's cap by removing these two screws.



<u> </u>

Lift the cap off.

Remove the plastic lens from the front of the sign by pulling it up. Then set the RS232/RS485 jumper as shown below.



Send messages from the IR Message Loader to a sign

3. On the IR Message Loader, move the *MEMORY LOCATION* switch to 1, 2, or 3 to select where your message are stored:

In this picture, *MEMORY LOCATION* has been set to 3.



- **4.** On the IR Message Loader, press and hold *TRANSMIT*. Watch the *DATA* light. When it goes off, stop pressing *TRANSMIT*.
- **5.** If *RECEIVED OK* appears on the sign, then the transfer was successful and your message should appear on the sign. However, if an error message appears, then repeat from step 4.

Troubleshooting

Problem	Solution		
No messages appear on sign	 Make sure the sign has power. Move the <i>MEMORY LOCATION</i> switch to a different number (1, 2, or 3). Then try sending messages to the sign again. Try storing messages in the IR Message Loader again. Then send these messages to the sign. Use the same <i>MEMORY LOCATION</i> number for storing and sending messages. Your message(s) may be too large. Create a short text message using AlphaNET software. Then try sending this message to the IR Message Loader and then to the sign. Check to see if the sign has an RS232/RS485 jumper and that it is set correctly. Try using a different Loader-to-PC cable. Replace the battery in IR Message Loader. 		
Time and date not correct on sign	 To change the time and date on an Alpha sign, set the sign's RS232/485 jumper to <i>RS232</i> (see "Using a special cable with the IR Message Loader to display messages on a sign" on page 12). Next, connect the sign to a computer running AlphaNET software: Use the Loader-to-PC cable (pn 1036-9010) to connect a computer COM port to the RS232 jack on the sign. Finally, send a message to the sign with the correct time and date: AlphaNET uses your computer's time and date , so make sure these are correct. 		

Appendix

Replacing the battery in an IR Message Loader

The IR Message Loader is powered by a 9-volt alkaline battery which should be replaced when

- BAT. LOW light remains on
- after repeated attempts, the IR Message Loader is unable to either receive or transmit messages

To replace the battery, slip off the battery cover on the back on the unit. Then replace the battery with a new one (as shown on the right).



Updating the firmware in an IR Message Loader

Firmware is the operating system for the IR Message Loader and is contained in a small chip inside the unit. From time to time, it may be necessary to update the firmware by replacing this chip.

To update the firmware, follow these steps:

- 1. Disconnect the battery from the IR Message Loader.
- 2. Remove the four screws from the back of the unit. Then pull the back off of the unit to expose the firmware chip:



- 3. Place the tip of a small screwdriver under the firmware chip. Then gently pry the chip out of its socket.
- 4. Place the new firmware chip in the socket and press it into place.
- 5. Reattach the unit's cover.
- **6.** Reconnect the unit's battery.