# ADAPTIVE®

IR Message Loader Instructions

Introduction

The IR (InfraRed) Message Loader is a hand-held device used to transfer messages from:

- one sign to another or
- a computer to a sign using AlphaNet plus™ for Windows® software.

NOTE: *To transfer messages to AlphaEclipse™ signs, the IR Message Loader must have version H firmware installed. (See "Updating the firmware in an IR Message Loader" on page 6.)*

Description
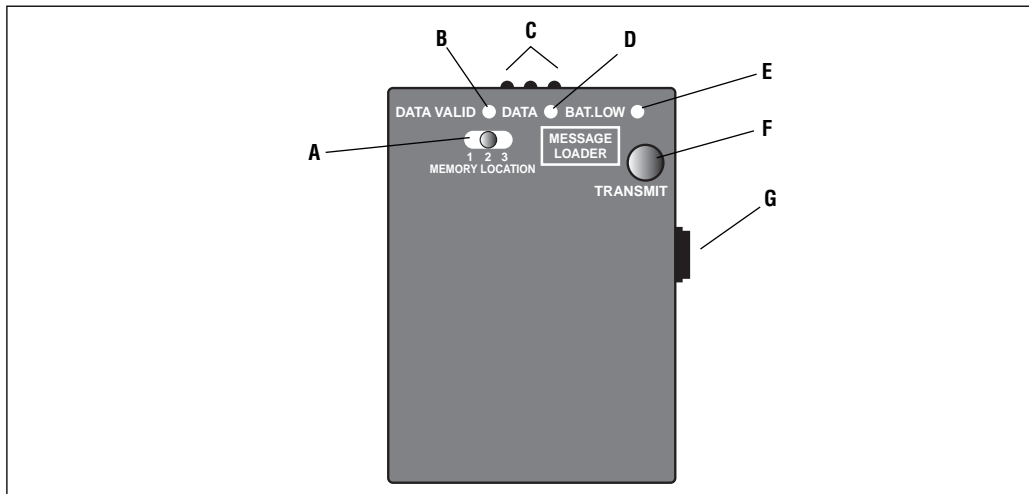
Item	Name	Description
A	*MEMORY LOCATION* switch	Selects into which memory location (1, 2, or 3) messages will be stored. Each memory location can store up to 10,000 bytes.
B	*DATA VALID* light	Typically indicates when messages have been successfully sent or received.
C	Infrared transmitter	Sends messages to a sign that is not connected by cable to the IR Message Loader.
D	*DATA* light	When lit, indicates when data is sent to or received from the IR Message Loader.
E	*BAT. LOW* light	When lit, indicates that the IR Message Loader'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.

Related documentation

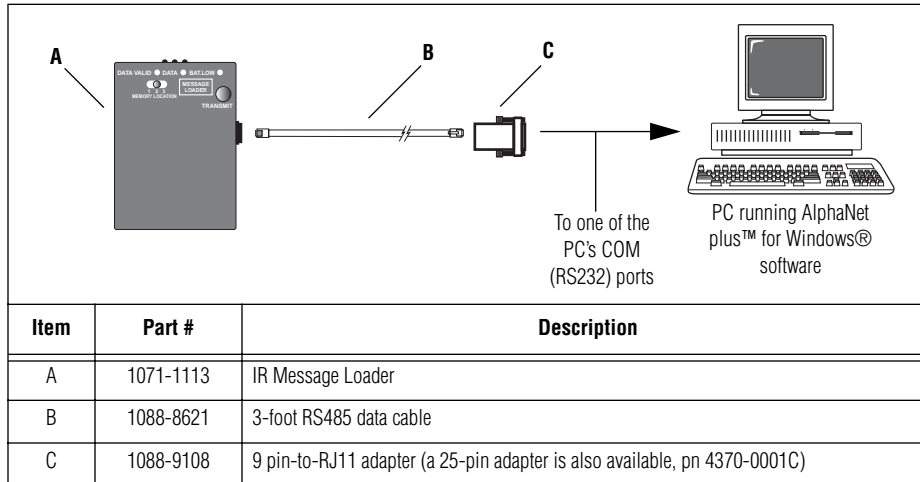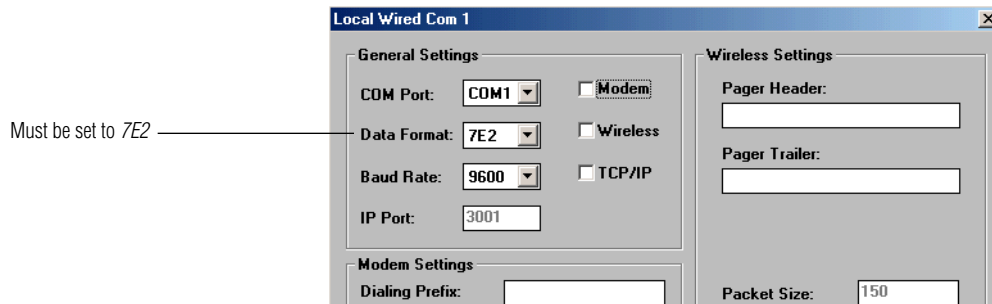| Document name	Part #	Description
AlphaNet plus™ for Windows® User Manual	9708-8081	How to use the messaging software
TechMemo #01-0004	–	How to use the IR Message Loader with an AlphaEclipse™ sign

Transferring messages from a computer to an IR Message Loader

Messages created on AlphaNet plus™ for Windows® software can be transferred to a sign using the IR Message Loader:
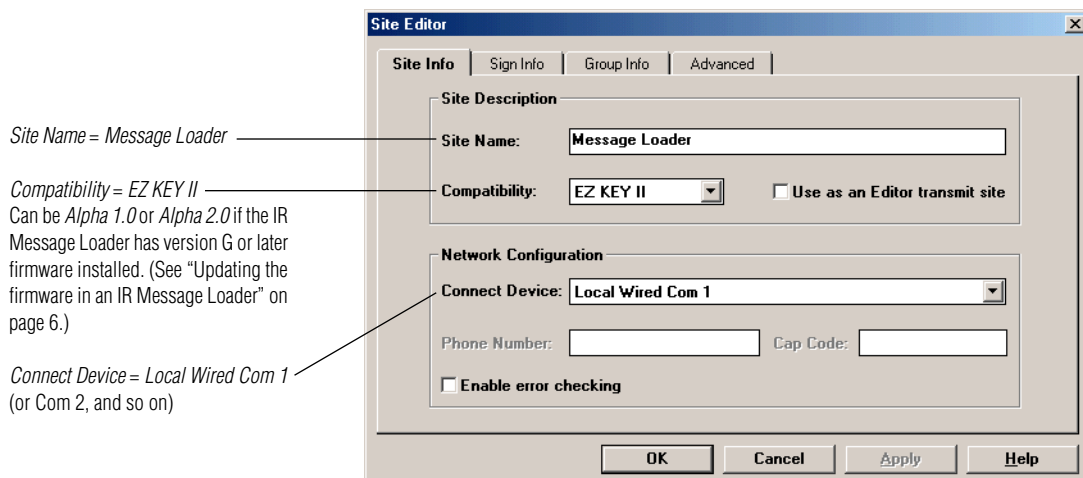
1. Connect the IR Message Loader to one of your computer's COM ports:

Item	Part #	Description
A	1071-1113	IR Message Loader
B	1088-8621	3-foot RS485 data cable
C	1088-9108	9 pin-to-RJ11 adapter (a 25-pin adapter is also available, pn 4370-0001C)

2. Set the *MEMORY LOCATION* switch to 1, 2, or 3 to select where to store the AlphaNet plus™ for Windows® software messages.

3. In the *Site Editor* of AlphaNet plus™ for Windows® software, select *Edit > Device*. Then set up the *Local Wired Com 1* device (or Com 2, and so on, depending on which COM port you are using):

Must be set to *7E2*

4. Create a site named Message Loader:

Site Name = *Message Loader*

Compatibility = *EZ KEY II*
Can be *Alpha 1.0* or *Alpha 2.0* if the IR Message Loader has version G or later firmware installed. (See "Updating the firmware in an IR Message Loader" on page 6.)

Connect Device = *Local Wired Com 1* (or Com 2, and so on)

5. Select the new *Message Loader* site. Then attach messages to this site by selecting *Messages > Add*:

In this example, these two messages have been attached to the *Message Loader* site.
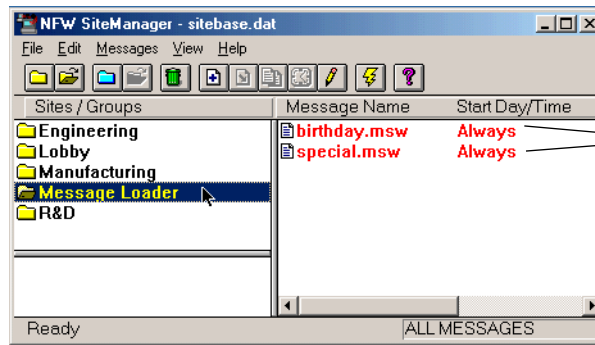
6. Press and then release the *TRANSMIT* button.

7. Wait at least two seconds. Select the *Message Loader* site and then choose *File > Transmit*.

   NOTE: When a site is selected (like *Message Loader*), <u>all</u> the messages that appear under *Message Name* will be sent to the IR Message Loader.

8. The *DATA* light will turn on while the messages are sent to the IR Message Loader.

9. When the *DATA VALID* light turns on, the message transfer is complete. If this light does <u>not</u> turn on, repeat from step 5.

Transferring messages from an IR Message Loader to a sign

NOTE: The messages transmitted from the IR Message Loader will replace messages currently stored in a sign.

Method 1: Using the infrared transmitter

NOTE: Only signs equipped with infrared receivers can use this method. If a sign has an infrared receiver, the receiver will be located on the sign's front under a small, clear or red window.

1. Move the *MEMORY LOCATION* switch to 1, 2, or 3 to select where your messages are stored.

2. Stand 5 - 30 feet from the sign and point the IR Message Loader at the sign's infrared receiver.

3. Press and hold the *TRANSMIT* button. The *DATA VALID* light will turn on, followed by the *DATA* light.

4. When the *DATA* light turns off, release the *TRANSMIT* button. The transfer is complete.

5. RECEIVED OK will appear on the sign. If it does not, or an error message appears, repeat from step 2.

Method 2: Using a cable connection

NOTE: To use this method, the IR Message Loader must have version G or later (version H or later for AlphaEclipse™ signs) internal firmware installed.

1. Connect an IR Message Loader to a sign:

BetaBrite® sign:

A   B

to RS232
jack on sign

AlphaEclipse™ sign:

A   C   D   E

to AlphaEclipse™ sign
(Must be set to baud rate of
2400 and data format of 7E2.
See TechMemo 01-0004.)

All other Alpha® signs:

A   C

to RS485
jack on
sign

NOTE: Signs that have internal RS232/RS485
switches (or jumpers) must be set to
RS485.

Item	Part #	Description
A	1071-1113	IR Message Loader
B	1088-8628	3-foot BetaBrite® cable
C	1088-8621	3-foot RS485 data cable
D	4331-0602	Modular Network Adapter (enclose in a waterproof housing)
E	7122-0284	RS485 outdoor-rated cable

2. Set the *MEMORY LOCATION* switch to 1, 2, or 3 to select where your messages are stored.

3. Use your hand to cover the IR Message Loader's infrared transmitters.

4. Press and hold the *TRANSMIT* button. The *DATA VALID* light will turn on, followed by the *DATA* light.

5. When the *DATA* light turns off, release the *TRANSMIT* button. The transfer is complete.

6. RECEIVED OK will appear on the sign. If it does not, or an error message appears, repeat from step 3.

Transferring messages from a sign into the IR Message Loader

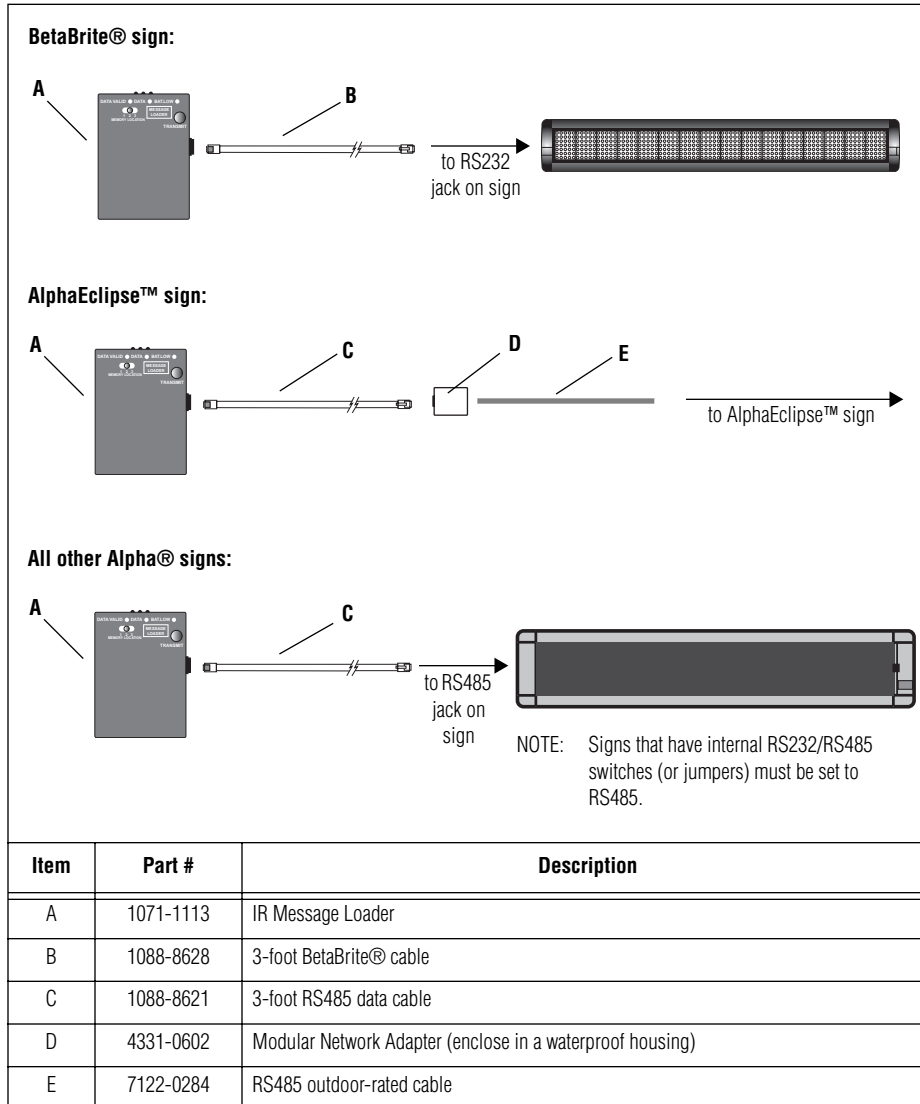NOTE: The messages transmitted from a sign will replace messages currently stored in an IR Message Loader.

1. Connect the IR Message Loader to a sign:

BetaBrite® sign:

A   B

to RS232
jack on sign

AlphaEclipse™ sign:

A   C   D   E

to AlphaEclipse™ sign

All other Alpha® signs:

A   C

to RS485
jack on
sign

NOTE: Signs that have internal RS232/RS485 switches (or jumpers) must be set to RS485.

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2. Set the *MEMORY LOCATION* switch to 1, 2, or 3 to select where the messages will be stored.

3. Use your hand to cover the IR Message Loader's infrared transmitters.

4. Press and release the *TRANSMIT* button. PROG TEXT A or PROGRAM TEXT FILE A will appear on the sign, and the *DATA* light will turn on.

5. When the *DATA* light turns off and the *DATA VALID* light turns on, the transfer is complete.

6. If the *DATA VALID* light does not turn on, repeat from step 3.

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 for you to update the firmware by replacing this chip.

To update the firmware (or to see what version of firmware you currently have), follow these steps:

1. Disconnect the battery from the IR Message Loader.

2. Remove the four screws from the back of the unit.

3. Pull the top of the unit off to expose the firmware chip:

Firmware version ("F" in this case)
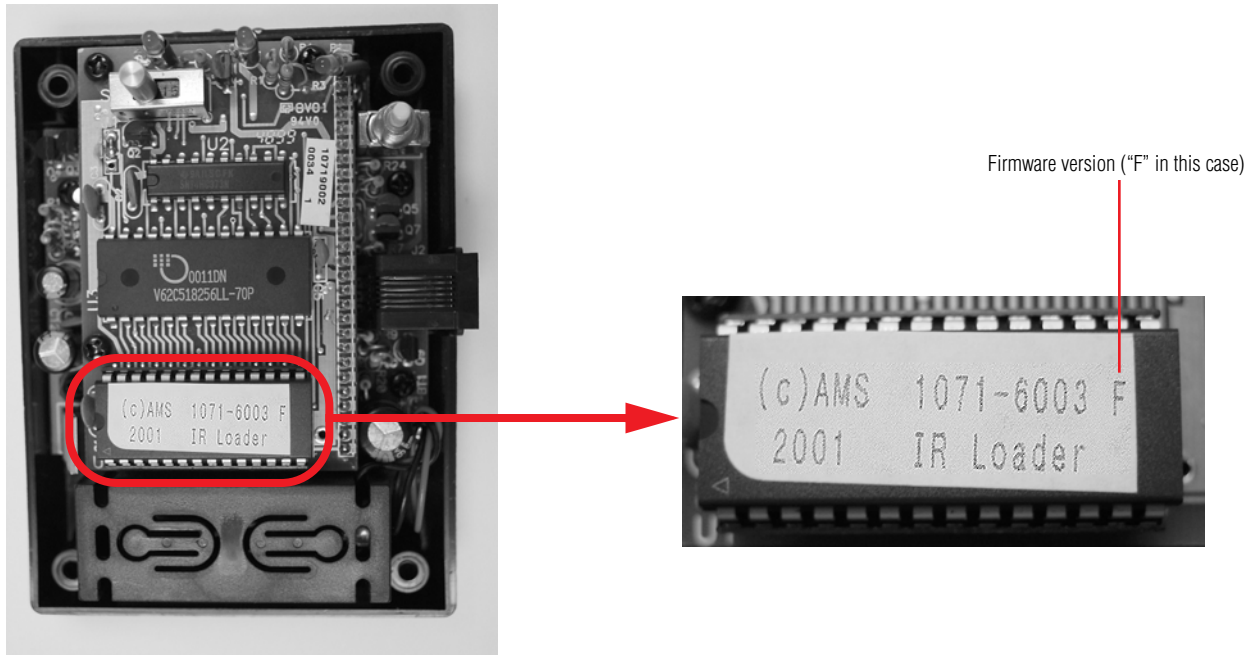
4. Place the tip of a small screwdriver under the firmware chip and gently pry the chip out of its socket.

5. Place the new firmware chip in the socket and press it into place.

6. Reattach the unit's cover.

7. Connect the unit's battery.