

Kit Installation Instructions

Series B Alpha Ethernet Adapter II (pn 10881114B)

About the Series B Alpha Ethernet Adapter II Kit

The Series B Alpha Ethernet Adapter II connects a sign's RS232/RS485 port to a 10/100BASE-T Ethernet network.



Typical use



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Sign compatibility

The Alpha Ethernet Adapter II works with the following signs	The Alpha Ethernet Adapter II does <i>not</i> work with the following signs
215C, 215R	210C
220C (shipped after February 1, 2000)	220C (all shipped prior to February 1, 2000)
300C series	420
4000C, 4000R series (using RS232 jumper and jack)	790i
7000C series (using RS232 jumper and jack)	Solar
Alpha Big Dot	AlphaPremiere 9000 series
AlphaVision FS	AlphaVision CM, FM, 1.4", 2.1"
BetaBrite one-line displays (P1026, P1036 and P1040), including 213C and BetaBrite Window Display	AlphaVision InfoTracker (IT) (works with MSS485 only)
BetaBrite Director (all shipped after July 1, 2000)	AlphaTicker (works with MSS485 only)
Personal Priority Display (PPD)	BetaBrite Director (all shipped before July 1, 2000)
Alpha Serial Clock	AlphaEclipse 3600 series
*AlphaEclipse 2500/2600/3500 series	Signs with NEMA enclosures
Alpha Director	
Alpha Window	

For more information see "Specifications" on page 7.

*An AlphaEclipse 2500, 2600, or 3500 sign that is mounted on the side of a building can be connected to an Ethernet network using the Alpha Ethernet Adapter II. The cable used should be *no longer than 10 feet*. A cable longer than this may prevent the AEAII from operating properly. See TechMemo 04-0003 (Using an Alpha Ethernet Adapter II with an AlphaEclipse sign) for more information.

Installation instructions

WARNING! Hazardous voltage. Contact with high voltage may cause death or serious injury. Always disconnect power to unit prior to servicing.

NOTE: Observe appropriate precautions to prevent electrostatic discharge (ESD) or "static" damage to the replacement part. For safe handling of ESD-sensitive parts, see TechMemo #00-0005.

Setup the Series B Alpha Ethernet Adapter II

- 1. Log the Ethernet Adapter's MAC address and keep it with you. You will need it when you install the software and you may not be at the location of the Ethernet Adapter.
- 2. Disconnect all power to the sign at the power source.
- 3. Connect the Alpha Ethernet Adapter II as shown in "Typical use" on page 1.
- 4. Turn on the sign.
- 5. Check the Network side of the adapter and make sure the green LED is flashing.

Install and setup the Alpha Ethernet software

- 1. Insert the Alpha Ethernet Setup Software CD-ROM into the computer's CD-ROM drive.
- 2. Click **Next** and follow the prompts to install the software.

Alpha Ethernet Setup Install	X
	Welcome to the InstallShield Wizard for Alpha Ethernet Setup The InstallShield® Wizard will install Alpha Ethernet Setup on your computer. To continue, click Next.
	< Back Next > Cancel

3. Click Start > All Programs > Alpha Ethernet Setup.
Alpha Ethernet Setup

The Ethernet Adapter IP Configuration window opens.

4. Fill in the information and click **Setup** when done:

MAC 444 (00 002 C1 C2 44)		
MAC Address (ex. 00-80-a3-61-63-dd)		
IP Address (ex. 201.23.12.82)		
Subnet Mask (ex. 255.255.255.0)	255 255 255	0
Gateway (ex. 201.23.12.2)	0, 0, 0,	0
	Setup	Exit

- **MAC Address**—Located on the Ethernet Adapter. This is the address you logged before installing the adapter.
- **IP Address**, **Subnet Mask**, **Gateway**—Obtain these from your network administrator.

5. Read the status message at the bottom of the window and take the appropriate action:

If this message appears	Then do this
Setup IP address is successful, reboot adaptor to take effect.	• When the Test IP Address window appears, unplug the Alpha Ethernet Adapter from the sign.
	 Wait a few seconds and then plug the Alpha Ethernet Adapter back in.
	• Click No , because you will test the sign in the next section.
IP address already exists.	This indicates that the address you entered was already programmed in the Alpha Ethernet Adapter.
Setup IP Address failed.	 An address was not assigned to the Alpha Ethernet Adapter. Check the information entered in the previous step.
	 Shut down your computer and unplug the Alpha Ethernet Adapter from the sign.
	• Wait a full minute and then restart your computer and plug the Alpha Ethernet Adapter back into the sign.

Test the Alpha Ethernet Adapter

Before testing the adapter, make sure the sign is on and connected to the Alpha Ethernet Adapter and that an IP address was successfully assigned to the adapter.

In this section you will perform to tests:

- **Ping test**—During the ping test you will verify that you can communicate with the sign. You can test communication to the sign either by using AlphaNet or by using the ping command from a DOS prompt.
- **Message test**—The second test verifies that the sign displays the data you send. You can either use AlphaNet (explained in this document) or you can use the application you typically use to communicate with your sign.

Ping the sign

When you "ping" the sign, you are sending a signal to the sign asking for a reply back. This tests whether you are able to "see" the sign and whether it can reply back to you.

⇒ To ping the sign from the DOS prompt

1. To open the DOS prompt, select **Start>Run** and type cmd in the text field.



2. In the DOS window, type the following:

```
ping [your sign's IP address]
```

example: ping 207.46.232.182

If this message appears	Then do this
Reply from	The test was successful, go to the next test.
Request Timeout	The test failed. Contact your network administrator.

⇒ To ping the sign using AlphaNet

1. Start the AlphaNET diagnostics software.

AlphaNET	🔰 🐻 Alpha Web Updates
AlphaNET Training	AlphaNET Bar
	🖨 Communications Manager
	Diagnostics
	Message Editor
	📩 On-Line Manual
	🚆 Site Manager

Select Start > All Programs > AlphaNET > Diagnostics.

The Diagnostics window opens.

2. Select **TCP/IP** and click **Setup**.

ommunications	Actions		
Serial/Wireless	Connect to Modem	Broadcast Message	Continuous Read <u>T</u> emperature
	Connect TCPIP	Clear Memory	Веер
modoli	Read Information from Sign	<u>R</u> eset Sign	LED Lamp Test
• TCP/IP	<u>C</u> onfigure Sign	Network <u>Q</u> uery	Determine <u>S</u> ign Model
		Configure Replacement Modem	Send Custom Commands
esults			
esults			

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The TCP/IP Setup window opens.

3. In the TCP/IP Setup window, set the following:

CP/IP Setup	×
IP Address:	
Port:	
	Ping IP Address
	<u>O</u> K <u>C</u> ancel

- IP Address—Set this to the sign's IP address.
- Port—Set to 3001.

4. Click Ping Address:

If this message appears	Then do this
Reply from	The test was successful, go to the next test.
Request Timeout	The test failed. Contact your network administrator.

Send a test message to the sign

This diagnostic test message simply broadcasts a simple message to all the signs on the network. Once the message is sent, you will physically check the signs for the message.

1. In the Diagnostics window, click the Broadcast Message button.

Communications	Actions		
C Serial/Wireless	Connect to <u>M</u> odem	Broadcast Message	Continuous Read <u>T</u> emperature
	Connect TCPIP	Clear Memory	Beep
, modoli	Read Information from Sign	<u>R</u> eset Sign	LED Lamp Test
TCP/IP	<u>C</u> onfigure Sign	Network Query	Determine <u>S</u> ign Model
		Configure Replacement Modem	Send Custom Commands
esults			
tesults			

The Broadcast Message window opens.

2. In the Broadcast Message window, select Send Message to All Signs and click Send.

 Send Message to All Signs 	C Send Message	to Selected Addresses	C Continuous Trans
Enter Message To Send:			
Connection Test			
Transmission Collinsor			

The message should appear on the sign.

If the message does not appear on the sign, contact Adaptive Technical Support.

Specifications

LEDs

When the	then there is
left LED is off	no connection.
left LED is solid amber	10BASE-T connection.
left LED is solid green	100BASE-T connection.
right LED is off	no activity.
right LED is blinking amber	one-way communication.
right LED is blinking green	two-way communication.

Pinouts





Some Alpha products have 5 volt jumpers for RJ11 power. Refer to your sign's installation manual for more information.

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