

PRIORITY:	Normal
DATE:	July 31, 2001
TITLE:	Installing a USB-to-DB9 adapter to connect a sign to a PC
ECO REFERENCE:	N/A
PRODUCT(S) AFFECTED:	All Alpha® and BetaBrite® electronic signs
SUMMARY:	If you have an available Universal Serial Bus (USB) port on your computer, you can install a USB-to-DB9 adapter to connect Alpha® or BetaBrite® signs.

Introduction

Purpose

This document shows you how to connect an Alpha® or BetaBrite® sign to a computer using a Universal Serial Bus (USB) port and a USB-to-DB9 cable adapter. The adapter provides an additional connection for computers that do not have enough RS232 serial COM ports.

USB-to-DB9 adapters are available at a variety of manufacturers and suppliers. This document discusses only the Xircom® PortGear™ USB to DB9 serial adapter.

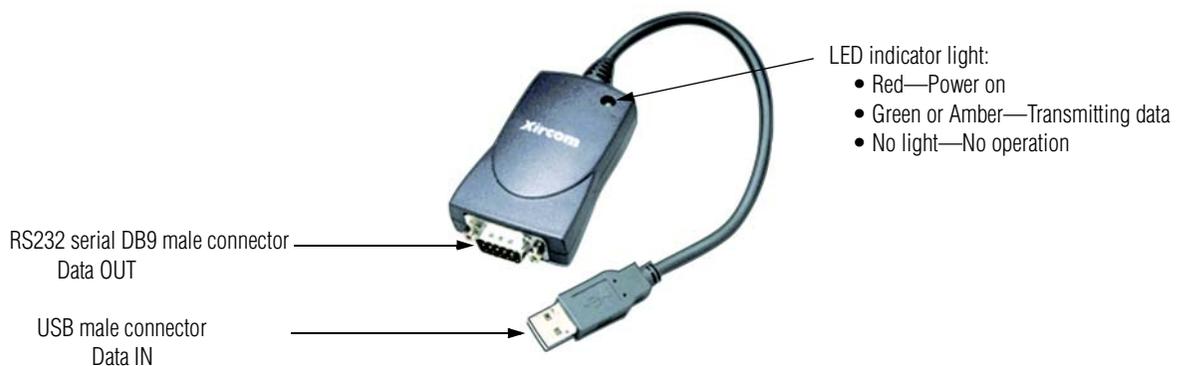


Figure 1: Xircom® PortGear™ USB to DB9 serial adapter

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

System Requirements

Hardware (minimum requirements)

- USB installed port or USB installed expansion hub
- CD-ROM drive
- 486-66 MHz processor or higher
- 1 MB minimum available hard disk space

Operating Systems

Supported

- Windows[®] 98
- Windows[®] 2000
- Windows[®] ME
- Windows[®] 95 OSR2.1 (4.00.950B or later, with USB Supplement)

NOT supported

- Windows[®] NT service pack 3 and service pack 4
- All Windows[®] 95 prior to OSR2.1

Upgradable

- All Windows[®] 95 prior to OSR2.1

NOTE: To verify that the version of Windows[®] 95 software installed on your computer supports USB, connect to <http://www.usb.org> and open the Frequently Asked Questions list. Under the Installation heading, select the USBReady link.

Material Requirements

Qty	Description
1	Xircom [®] PortGear [™] USB to DB9 serial adapter
1	Alpha [®] or BetaBrite [®] LED electronic sign
1	25- or 50- foot 6-conductor RS232 data cable
1	Adaptive [®] messaging software, such as Alpha [®] or BetaBrite [®] Messaging Software [™] , AlphaNet <i>plus</i> [™] for Windows, SmartAlec [®] software, Alpha [®] Marquee ActiveX [®] control, or other messaging software.

Related documentation

Document name	Part number	Description
AlphaNET plus [™] for Windows [®] Software User Manual	9708-8081	Windows [®] software compatible messaging software with Ethernet and ActiveX support
Alpha [®] Messaging Software	9701-0202	Basic messaging with a computer
ActiveX [®] Developer's Reference	9709-2054	Programmer's reference for creating an ActiveX [®] application
Smart Alec [®] User Manual	9709-2030	Intelligent messaging software with OPC Client
Alpha [®] Sign Communications Protocol Manual	9708-8061	Adaptive [®] Alpha [®] protocol reference
Network Configurations manual	9708-8046	Basic reference for networking Alpha [®] signs to a computer network

Installation

Installing the software

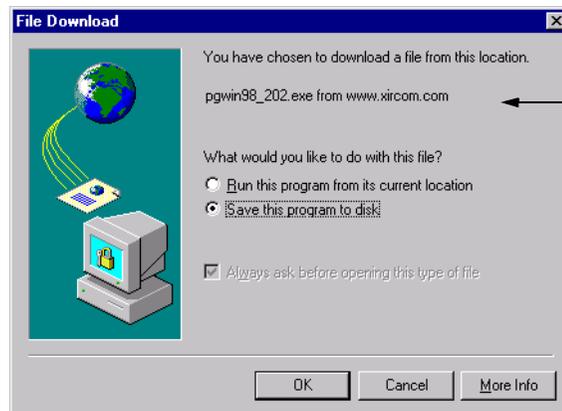
1. Close any running applications on your PC to minimize the possibility of a conflict during the installation.
2. Insert the Xircom® PortGear™ adapter software installation guide CD into the CD-ROM drive.
3. Open Windows® Explorer and double-click the CD-ROM drive.
4. Double-click *Setup.exe*.
5. Double-click *Install USB to USB Adapter*.
6. Complete the setup information, clicking *Next* or *Yes* to advance to the next window.
7. At the *Choose Destination Location* window, make sure the path name is C:\Program Files\Xircom\USBNet, and click *Next*.
8. At the *Select Device* window, choose *Xircom Inc* under *Manufacturer* and *Portgear USB to USB Adapter* under *Models*, and click *OK*.
9. At the appropriate prompt, remove the installation CD and choose to restart your computer.

NOTE: If any windows open automatically once your computer restarts, close them.

Installing the software driver

Specific software drivers are required to use the Xircom® adapter, which are included on your CD-ROM. However, if you have Internet access, and to make sure you have the most recent version of the software drivers, the manufacturer recommends checking the Xircom® website. If you do not have Internet access, skip to *Windows® 98/2000/ME* or *Windows® 95* later in this document.

1. Connect to <http://www.Xircom.com> and go to *Products > USB Port Expansion > PortGear > USB to 9 Pin Serial*.
2. Click *Software Downloads*.
3. Scroll through the list of available software drivers specific to each operating system and select one. They are listed by version number and the date they were uploaded.
4. The *File Download* window appears. Click *Save this program to disk*, and then *OK*.



Software driver filenames include the operating system and version number.

5. Change the path name to your desktop and click *Save*.

6. Close your Internet connection and then double-click the file you just downloaded to your desktop.
7. Choose to unzip the file to C:\Xircom\Portgear\PGWinXX, where XX is your version of Windows®.
8. Click *Close*.

Windows® 98/2000/ME

1. Plug the USB male connector from the Xircom® PortGear™ adapter into an available USB port. For additional information, see *Connecting the sign* later in this document.
2. The *New Hardware Found* window appears briefly on your screen, followed by the *Add New Hardware Wizard* window:



3. Insert the Xircom® PortGear™ adapter software installation guide CD into the CD-ROM drive.
4. Click *Next* to accept the defaults until you are asked to specify a driver location.
 - If you are pulling the driver from the CD-ROM, type D:\Win98, and click *Next*.
 - If you are using the driver you downloaded from the Internet, click *Browse*, specify a pathname of C:\Xircom\Portgear\PGWin98, and click *Next*.

NOTE: If a window appears indicating the driver cannot be found, click *Back* and try drilling down further when specifying a driver location. Windows® will only look within the immediate folder and not inside a folder within a folder. If you continue to receive this message, the driver may not be compatible with your version of Windows® or may have been selected incorrectly or downloaded with errors. Begin this section again with step 1 of *Installing the software*.

5. A window appears letting you know that the etisera.inf driver has been found and Windows® is ready to install it:



6. Continue to click *Next* to advance to the next window.
7. When you click *Finish* to complete the New Hardware Wizard, a *New Hardware Found* window briefly appears indicating that Windows® needs another software driver, followed by the *Add New Hardware Wizard* window for the PGSDDB9 device.
8. Repeat steps 4–6 (in step 5, the driver found is etisere.inf).
9. Click *Finish*.
10. Close the *New Serial Port Found* window that appears, if it does not automatically close:



11. Go to *Verifying the installation* later in this document to confirm the installation was done correctly.

Windows® 95

1. Plug the USB male connector from the PortGear adapter into an available USB port. For additional information, see *Connecting the sign* later in this document.
2. Click the *Start* button.
3. Select *Settings > Control Panel*.
4. Double-click the *Add New Hardware* icon.



5. Continue to click *Next* to advance to the next windows.
6. Since your adapter is already connected to a USB port, direct Windows® software to search for the new hardware by clicking *Yes* on this window:



7. Click *Finish* when the following window appears:



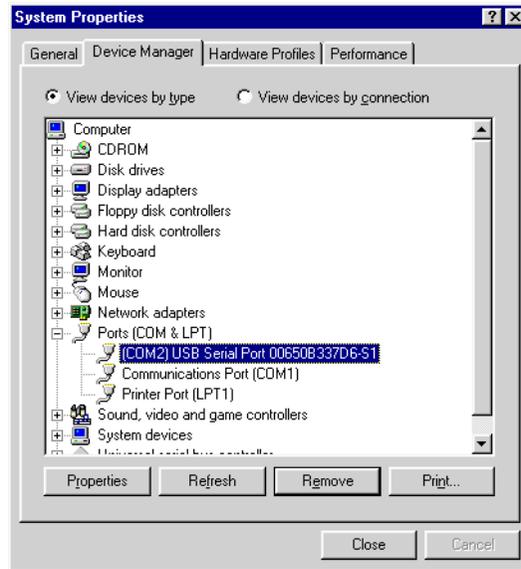
Verifying the installation

1. Click *Start > Settings > Control Panel*.
2. Double-click the *System* icon.



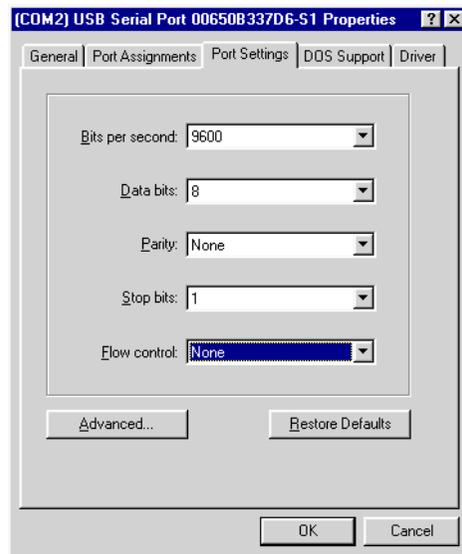
3. Click the *Device Manager* tab. In the list that appears, double-click *Ports* to view the installed serial connections. The USB serial port appears, indicating that the serial adapter has been recognized, successfully installed on your computer, and set up as a specific,

numbered COM port:



NOTE: If a new USB serial port is not listed, go to *Troubleshooting* later in this document.

4. In the window above, click the USB serial port and then click *Properties*.
5. Select the *Port Settings* tab. The values shown are the standard default for connections to most Alpha[®] or BetaBrite[®] signs.



6. Close the *System Properties* window and open your messaging software.
7. Check the communication settings. You should re-configure the settings set for your adapter, sign, or software if they do not all match. To reconfigure settings in Alpha[®] and BetaBrite[®] messaging software, you must uninstall and reinstall the software.

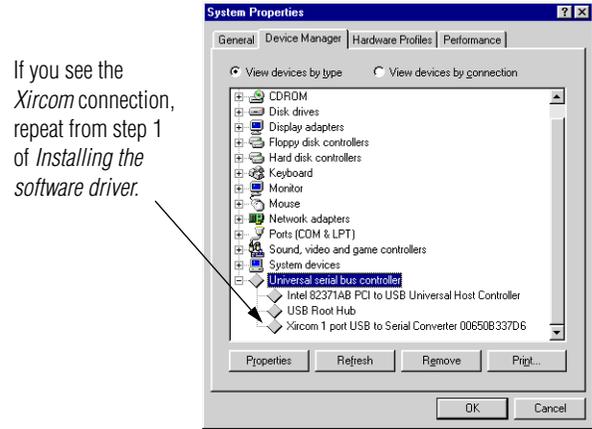
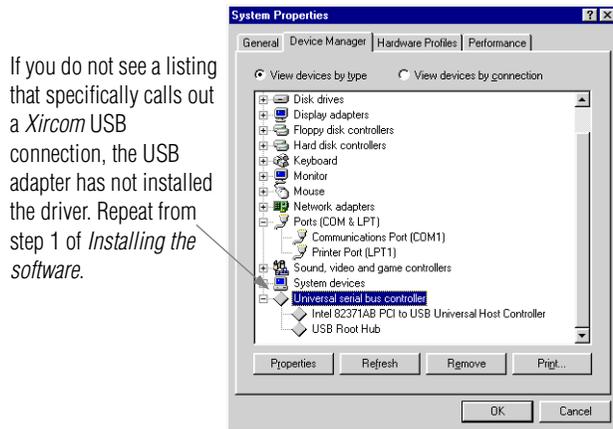
NOTE: Signs that are configured for serial communication properties through DIP switches do not have a standard default. Make sure the serial communication through the USB adapter matches the communication settings actually set by DIP switches in the sign.

Troubleshooting

If you did not find a new USB serial port listed, scroll down in the *Device Manager* window to *Universal serial bus controller*. You may see a new listing for the *Xircom*[®] USB adapter. This indicates that installation was only partially completed and the new device has not been set up to a specific COM port.

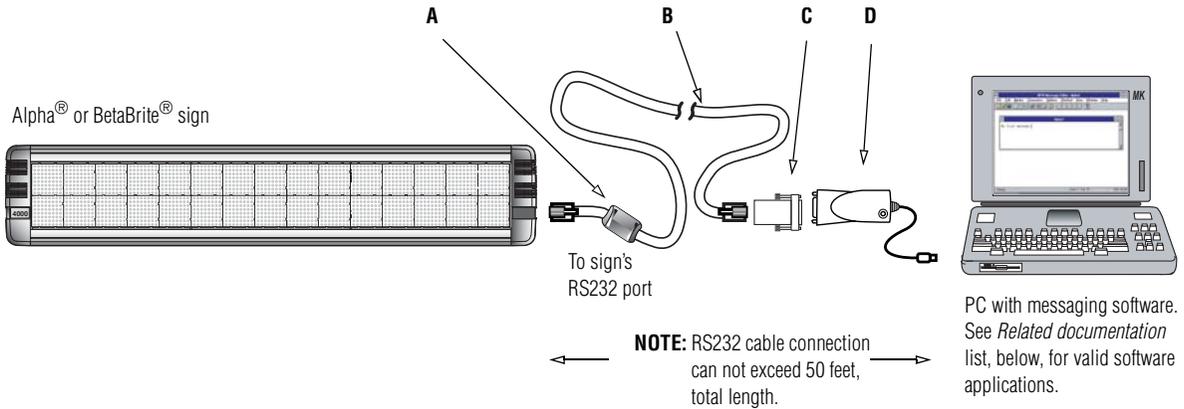
The USB adapter is installed as a Xircom USB serial port and automatically assigned a COM port designation that numbers it as the next available COM port. For example, if you have already installed two serial devices, the Xircom USB serial port installs itself as COM port 3.

- If all four COM ports have already been set up for other devices, the *Xircom USB serial port* becomes COM port 5.
- To connect an Alpha[®] or BetaBrite[®] sign, you may need to make a COM port re-assignment by uninstalling one or more serial devices. The default software configuration in some Adaptive[®] messaging software only allows serial connection to ports that the messaging software can identify as Local Wired Com 1, Local Wired Com 2, Local Wired Com 3, or Local Wired Com 4.



Connecting the sign to a PC

The diagram below shows how to connect a sign to your PC using the USB to DB9 serial adapter and a DB9-to-RJ11 jack. The PC can not be separated from the sign by more than 50 feet of cable because of signal loss.



Item	Part #	Description
A	—	Ferrite (ferrite end towards sign)
B	1088-8625	25-foot 6-conductor RS232 data cable
	1088-8627	50-foot 6-conductor RS232 data cable
C	1088-9108	9 pin sub-D/to 6 pos. RJ11 adapter
D	—	Xircom® PortGear™ USB to DB9 serial adapter