

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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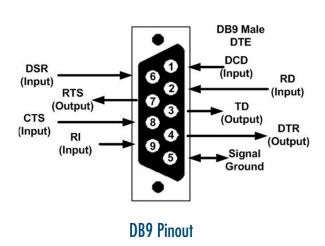
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## Install the Drivers

To prevent installation errors, do not plug in the hardware until you have already installed the drivers.

INSERT THE DRIVER CD INTO YOUR CD-ROM AND INSTALL THE DRIVERS BEFORE PLUGGING THE HARDWARE INTO THE PC.

If you have inserted the hardware first and the Found New Hardware Wizard launched, click cancel to exit the wizard.

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#### Connect the Converter

Connect the converter's USB Port to a USB port on your computer or USB hub.

When the installation is complete the converter will appear in Windows Device Manager as an additional COM port.

Most of the time a DB9 male will be a DTE. A DB9 female will usually be a DCE.

A DTE device is "Data Terminal Equipment." This includes computers, PLCs, and most devices that are not used to extend communications. (Think COMPUTER for DTE.)

A DCE device is "Data Communications Equipment." This includes modems and other devices that extend communications like RS-422/485, fiber optic converters or radio modems. (Think "MODEM" for DCE.)

If both devices have a DB9 male connection you will need a crossover cable. If both devices have a DB9 female connection you will need a crossover cable.

When one device is male and one device is female, use a straight-through cable.



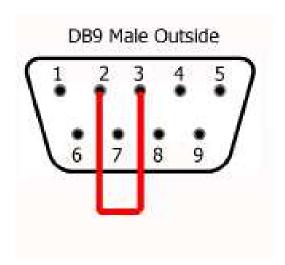
#### **Check LEDs**

When everything is installed and connected the LED will blink to let you know that data traffic is passing through the converter.



### **Loopback Test**

Loopback pins 2 and 3. Using Hyper Terminal or a similar program, connect to the COM port. Set the desired baud rate. Ensure that Hyper Terminal local echo is OFF. Transmit data. If the same data is returned the test is successful.



## **Troubleshooting**

Are My Devices Wired As DTE or DCE? (How to Check)

1. Use Rule of Thumb

If the device plugs into the computer serial
port and works normally, the device is wired
as DCE (or the connection cable is a crossover
type that makes it work as a DCE). If the device
connects to the computer port using a "null
modem" crossover cable, it is wired as DTE.

2. Use an RS-232 Line Tester
A quick and easy way to determine the
DTE/DCE port type is to use a RS-232 line
tester such as the 9PMTT. The tester can show
the signal state of any active RS-232 data lines
using LEDs. Active data lines are output from
a device. They may be either High or Low.

### **Model Numbers**

The converter comes in two formats: "Standard" and "Locked Serial Number." With the standard format, each unit has a unique USB serial number. In the locked serial number format all units with the same model number use the same USB serial number. The version you select depends on your application.

Standard - Every unit is assigned a unique COM port and a driver must be installed for each unit. Ideal application: fixed locations.

Locked Serial Number - Units with the same model number share the same COM port. The driver only needs to be installed once for each model number. Ideal application: field service.

Note: The locked serial versions, USO9ML2-LS, share a common serial number and will install using the same COM port each time. The standard versions, USO9ML2, have unique serial numbers. Drivers must be installed for each unit, and a unique COM port will be assigned each time.

PPAMF6
6ft DB9 to DB9 Cable
Male to Female

USBAMBM-6F
6 ft. USB Cable



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