Introduction

When a new computer doesn’t have the COM port that your equipment needs, the Shielded USB-to-Serial Adapter from SocketSerial™ is your best solution.

This rugged adapter works with more computers and in more environments.

- Adds one serial port
- Works with USB 1.1 or USB 2.0
- Connect multiple adapters through a USB hub
- Up to 921,600 baud
- USB bus powered
- Status LED
- Impact resistant housing
- 17-inch permanently affixed shielded USB cable with stress relief
- Fully shielded four-layer PCB for EMI and ESD immunity
- FCC, C-Tick, & CE certified

Operating Systems

- Windows® Vista (32-bit)
- Windows XP (32-bit)
- Windows Server 2003 (32-bit)
- Windows 2000
- Windows 98 & Me
- Mac OS X
- Linux
- Windows Mobile on Socket SoMo® 650
- Windows CE 4.2-5.0 (compatibility varies by brand and model)
- Check www.socketserial.com for the most current operating system list

Installation Overview

It is necessary to install driver software in order to use the USB-to-Serial adapter. The driver installation process for Windows Vista, XP, Server 2003, 2000, or Windows CE can be started by loading this CD-ROM.

Drivers for additional operating systems are included on this CD-ROM. These drivers must be located and installed manually according to the instructions in this document and any notes in their respective folders on the CD-ROM.

Please check www.socketserial.com for the latest driver updates and the most recent version of this document.
Windows Setup


IMPORTANT: To ensure loading the right driver, Socket Mobile recommends that you do not connect your USB-to-Serial Adapter before installing the software from the CD-ROM. If the adapter is already connected, disconnect it now.

INSTALLATION

Follow these steps to install the driver for Microsoft® Windows

1. Make sure your Windows computer is running and that you are logged in with Administrator rights. Close any open applications and insert the CD-ROM. If the installation program does not start then run setup.exe from the CD-ROM.

2. From the Installation Menu, click Install to continue to the Setup Wizard
3. When the Setup Wizard starts click **Next** to begin driver installation.

4. Read the on-screen license agreement and click **Agree** if you accept the terms.
5. Select the checkbox for **Windows Drivers** and click **Next** to continue.

6. Type a destination folder path or accept the default. Click **Install** to continue.
7. Click **Finish** when the installation is done.

8. Plug your USB-to-Serial Adapter into your computer’s USB port or into a USB hub that is connected to your computer.

**CONFIGURATION**

Your USB-to-Serial Adapter may not need further configuration. If, however, your software or connected devices require, you can use Windows Device Manager to make configuration changes.

**NOTE:** See Windows Help or the documentation that came with your computer for information about using Windows Device Manager. For information about RS-232 (EIA-232) communication parameters, see [www.SocketSerial.com/support/support.htm](http://www.SocketSerial.com/support/support.htm).

**How to change baud rate, data bits, parity, or flow control**

- **Note:** Most software programs set these parameters before using the USB-to-Serial Adapter. Only change these settings if you need to set system-wide defaults. Individual applications usually override these settings.

1. From the Windows Desktop, open Windows Device Manager by clicking **Start - Control Panel - System - Device Manager**.
2. Click to expand the **Ports (COM & LPT)** section. You should see something like this:

   ![Ports (COM & LPT)
   Socket USB-Serial Adapter (COM8)]

3. Double-click the entry for your USB-to-Serial Adapter to open its **Properties** dialog. Click the **Port**

**How to change COM port number**

1. From the Windows Desktop, open Windows Device Manager by clicking **Start** – **Control Panel** – **System** – **Device Manager**

2. Click to expand the **Ports (COM & LPT)** section. You should see something like this:

   ![Ports (COM & LPT)
   Socket USB-Serial Adapter (COM8)]

3. Double-click the entry for your USB-to-Serial Adapter to open its **Properties** dialog. Click the **Port Settings** tab. Then click the **Advanced** button.

4. Use the drop down box control to change the COM port to an unused number

**UNINSTALL THE DRIVER**

Follow these steps if you want to uninstall the driver for your USB-to-Serial Adapter.

**Caution:** Do not use Windows Device Manager to uninstall the COM port associated with the Shielded USB-to-Serial Adapter. Deleting the COM port in this way will leave files on your computer and entries in the Windows registry, and the Adapter will still enumerate upon re-connect and display a green LED instead of triggering the Windows “New Hardware Found” wizard. Instead, use the uninstall procedure described below.

1. Disconnect the Shielded USB-to-Serial Adapter from your computer

2. Open Windows Control Panel by clicking the **Start** button, then click **Control Panel**

3. Launch the uninstaller

   a. If you are running Windows Vista with the Control Panel in default view, click **Programs**, then **Programs and Features**. Select **SocketSerial USB-to-Serial Adapter Drivers** to start the uninstaller

   b. If you are running Windows Vista with the Control Panel in classic view, click **Programs and Features**. Select **SocketSerial USB-to-Serial Adapter Drivers** to start the uninstaller
c. If you are running Windows XP with the Control Panel in default view, select **Add/Remove Programs.** Select **SocketSerial USB-to-Serial Adapter Drivers** to start the uninstaller.

d. If you are running either Windows XP with the Control Panel in classic view, or Windows 2000, select **Add/Remove Programs.** Select **SocketSerial USB-to-Serial Adapter Drivers** to start the uninstaller.

4. Click **Uninstall**, then click **Close**
Windows Mobile & Windows CE Setup

You can install driver software by running the CD-ROM setup program on your Windows computer (desktop or notebook) and it will be queued for automatic transfer to your Windows Mobile device during the next sync operation. Advanced users may optionally skip this installation method and install the driver from a CAB file.

IMPORTANT: Your Windows Mobile device must have a USB host controller (the SoMo™ 650 Handheld Computer from Socket Mobile has a USB host controller). Your device also needs a way to connect to the USB Type A connector on the USB-to-Serial Adapter (the SoMo™ 650 docking cradle has two USB Type A ports). Other compatible mobile devices may need a mini-USB to USB Type A connector adapter.

INSTALLATION

Follow these steps to install the driver for Microsoft® Windows Mobile or Windows CE

1. Do not connect the USB-to-Serial Adapter to your mobile device until after the driver has been installed, otherwise you will see a dialog box for “Unidentified USB Device”. If this happens simply disconnect your USB-to-Serial adapter and dismiss the dialog

2. Connect your mobile device to your Windows computer

Note: If your mobile device is a Socket SoMo 650 we recommend using the docking cradle, which has two USB ports on the back that are compatible with the USB-to-Serial Adapter. Connect the external power supply to the cradle to ensure sufficient power for the cradle’s USB ports. Alternately, you may use Socket Y-Cable HC1617-797.

![USB-to-Serial Adapter diagram]

- SoMo 650 in cradle
- USB-to-Serial Adapter (don’t connect until after installing driver)
- Sync cable to computer
3. Make sure your Windows computer is running. Close any open applications and insert the CD-ROM. If the installation program does not start then run setup.exe from the CD-ROM. Select **Install** and click the **Next** button to continue to the Setup Wizard.

4. When the Setup Wizard starts click **Next** to begin driver installation.
5. Read the on-screen license agreement and click **Agree** if you accept the terms.

6. Select the checkbox for **Windows Mobile Drivers** and click **Next** to continue.

   Note: The checkbox for Windows Mobile Drivers will always work in Windows Vista, but will be disabled in other versions of Windows unless ActiveSync has been installed.
7. Type a destination folder path or accept the default. Click **Install** to continue.

8. Click **Finish** when the installation to your Windows computer is done

9. Sync your Windows Mobile device to your Windows computer to transfer the driver, then follow the instructions, if any, that are displayed on your Windows Mobile device to complete the installation

10. Connect your USB-to-Serial Adapter to your mobile device

   **Note:** Your mobile device may not deliver sufficient power to drive the USB-to-Serial Adapter when connecting through a USB hub (some cradles have internal USB hubs). Use an external power supply if necessary.

**CONFIGURATION**

Your USB-to-Serial Adapter may not need further configuration, except that your software applications will need to know which COM port to use. The COM port assigned to the USB-to-Serial adapter will have a name similar to this example:

**COM2:(Socket_USB-Serial)**

**Note:** Your mobile device may assign a different COM port number to the USB-to-Serial Adapter

**UNINSTALL THE DRIVER**

If you want to uninstall the driver first disconnect the adapter. Then tap **Start**, tap **Settings**, tap **System**, tap **Remove Programs**, select **Socket Serial USB-to-Serial Adapter** and tap **Remove**.
Windows 98 & Me Setup

Note: For Windows 98 and Me, two drivers must be installed: a Bus driver and a Port driver.

1. Connect the Socket USB-Serial cable to your computer. This will start the Add New Hardware Wizard. Click the Next button to continue.

2. Make sure "Search for the best driver for your device." is selected and click the Next button to continue.
3. Unselect all checkboxes except for "Specify a location:". For the location enter "E:\ drivers\ 98Driver" with "E" being the drive letter of your CD-ROM. If you don’t know the drive letter then use the **Browse** button to find and select your CD-ROM drive. Click the **Next** button to continue.

![Add New Hardware Wizard](image)

4. If the driver is located you should see the following screen. Click the **Next** button to proceed with driver installation.

![Add New Hardware Wizard](image)
5. Proceed through the next several screens by clicking the Next button until you see the screen confirming successful installation of the driver. Click the Next button to finish installing the BUS driver.

![Add New Hardware Wizard](image)

6. Repeat Steps 1-5 to install the Port driver. After the port driver is installed your USB-to-Serial Adapter will be ready for use.

**UNINSTALL THE DRIVER**

Follow these steps if you want to uninstall the driver for your USB-to-Serial Adapter.

**Note:** Disconnect the adapter before uninstalling. After you uninstall the driver your USB-to-Serial Adapter will no longer function with your computer.

1. Open Windows Control Panel by clicking the Start button, then click Control Panel
2. Select Add/Remove Programs. Select Socket USB-to-Serial Adapter to start the uninstaller. Click Add/Remove
Mac OS X Setup

The driver is in disk image (.dmg) format on the USB-to-Serial Adapter CD-ROM. Find it in the Mac OS X folder. Double clicking the .dmg file mounts an image to the desktop, you must then find that icon, double click it, and there will be a single package installer file inside.

**Note:** There are 2 installers, one PowerPC based Macs running OS X v10.2.8-v10.3, and one for PowerPC & Intel based Macs running OS X v10.4-v10.5. To find out what processor you have in your Mac, click on the Apple icon in the top left corner and choose "About this Mac".

**INSTALLATION**

Follow these steps to install the driver for Mac OS X

1. Identify the correct installer (see note above), then run the installer by double clicking on the icon for `SocketSerialInstaller-10_3-PPC.dmg` or `SocketSerialInstaller-10_4.dmg`. When the introduction screen appears, click Continue to proceed with the installation and follow the instructions on screen.

2. When the installation is complete, reboot the computer.
3. When the computer has rebooted, plug in the device (see picture page 7 for cable connection example based on Socket SoMo 650 handheld computer).

4. Verify the installation by using the Terminal application to view the /dev directory.

   Select **Go > Applications > Utilities > Terminal**. Type the following lines in the Terminal window:

   ```
   cd /dev
   ls-l
   ```

   If the device is installed properly, you will see two entries:

   ```
   /dev/cu.usbserial-xxxxxxx
   /dev/tty.usbserial-xxxxxxx
   ```

   where xxxxxxxx is a location string that depends on which USB port your device is connected to.

   Note that port A is denoted by a number appended with "A" and port B is designated by a number appended with "B".

   /dev can be accessed through the Terminal application. The Terminal application can be launched by selecting **Go > Applications > Utilities > Terminal**. Type the following lines in the Terminal window to produce the file list:

   ```
   cd /dev ls-l
   ```

5. Activate the new port.

   Run the application “System Preferences” and select Network (**Go > Applications > System Preferences > Network**), you should see the text "New Port Detected".

   ![New Port Detected](image)

   Click **OK** and select **Network Port Configurations** from the Show list. The new port can be enabled from this screen by checking the **On** box and clicking **Apply Now**

6. At this point, it is possible to exit Network and use the device as a COM port.
**CONFIGURATION**

1. If you want to open a Window to configure the device as a modem for an Internet connection, select the new port from the Show list.

![Configuration Window](image1)

2. Enter the specific details for to the Internet account for each user. If you do not know the required details, contact your Internet service provider.

![Configuration Window](image2)
OSX DRIVER REMOVAL

Note: To remove the drivers from Mac OS X, the user must be logged on as root. Root is a reserved username that has the privileges required to access all files.

1. Remove the driver

   Start a Terminal session (Go > Applications > Utilities > Terminal) and enter the following commands at the command prompt:
   ```
cd /System/Library/Extensions
rm -r FTDIUSBSerialDriver.kext
cd /Library/Receipts
rm -r FTDIUSBSerialDriver.kext
   ```

   The driver will then be removed from the system

2. To remove the port from the system, run the application System Preferences and select Network. Selecting Network Port Configurations from the Show menu will display the port as grayed out. Select the uninstalled port and click Delete. Confirm the deletion to remove the port.
Hardware Setup & Specs

These are the parts of your USB-to-Serial Adapter.

Hardware Setup

1. Install the driver for your operating system before connecting the USB-to-Serial Adapter. See the appropriate section of this document for driver installation instructions.

2. Connect the Adapter to a powered USB port. If connecting through a USB hub, the hub should be powered.

3. Check status LED

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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Power ON, driver loaded</td>
</tr>
<tr>
<td>Orange</td>
<td>Data transmitting / receiving</td>
</tr>
<tr>
<td>Red (one blink then OFF)</td>
<td>Driver did not load or is waiting for input</td>
</tr>
<tr>
<td>OFF</td>
<td>Adapter not enumerated, or does not have power</td>
</tr>
</tbody>
</table>

4. Connect an RS-232 (EIA-232) cable from this connector to your serial device.

Specifications

- **Environmental**:
  - Storage Temperature: -10°C to 45°C
  - Ambient Temperature (powered): 0°C to 40°C
  - Humidity: 85% (non condensing)

- **Cable length**: approx 17-inches.

- **USB Connector**: The USB Type A connector may be plugged directly into a computer or through a compatible powered USB hub.

- **Serial Connector**: The DB9M connector is configured the same as the 9-pin RS-232 connectors found on the back of desktop PCs. Connect an RS-232 cable from this connector to your serial device.

Troubleshooting

Here are some common questions and answers intended to help you resolve any problems you may have with the USB-to-Serial Adapter. For additional information please check the support section at www.socketserial.com.

WHAT IF I HAVE A DIFFERENT OPERATING SYSTEM?
As we develop support for additional operating systems we will post drivers for download at www.socketserial.com.

MY RS-232 CABLE DOESN'T FIT TO THE USB-TO-SERIAL ADAPTER
Serial RS-232 (EIA-232) cables usually have either 25-in or 9-pin connectors. The USB-to-Serial Adapter has a male DB9 connector (sometimes called “DB9M” or more accurately “DE-9 male”). It is designed to connect to RS-232 cables that have a female DB9 connector. If your cable does not fit the USB-to-Serial Adapter it may require either a 25pin-to-9pin adapter or a gender adapter. Adapters are commonly available at consumer electronic stores.

THE STATUS LED FLICKERS
This is normal; it indicates that data is moving through the USB-to-Serial Adapter.

THE STATUS LED DOES NOT COME ON
When you connect the USB-to-Serial Adapter to a USB port of a computer the status LED should come on. If you do not see the LED check these items:

1. Make sure the driver has been installed onto your computer. If the driver has not been installed some computers will not supply power to the USB-to-Serial Adapter
2. If the USB-to-Serial Adapter is connected to a USB hub, then try connecting it directly to your computer. Some USB hubs do not fully comply with the USB spec and may not have sufficient power to operate the USB-to-Serial Adapter

THE DRIVER INSTALLATION DOES NOT START WHEN I INSERT THE CD-ROM
Find and execute the setup.exe program on the CD-ROM

I'M UNABLE TO INSTALL THE DRIVER, OR THE DRIVER SETUP PROGRAM DOES NOT COMPLETE, OR THE DRIVER SETUP PROGRAM COMPLETES WITHOUT CREATING THE COM PORT
Here are some things to check before trying the setup program again.

1. Check if there is a more current version of the software on www.socketserial.com
2. Try connecting your USB-to-Serial Adapter to a different USB port
3. Check Windows Device Manager to see if the device “Socket USB-Serial Adapter” is present
Regulatory Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. This equipment is also IC ES-003, C E EN 55022, EN 55024, EN 60950, and C-TICK compliant. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user may try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna of the radio or television.
• Increase the distance separating the equipment and the receiver.
• Connect the equipment to an outlet on a different branch circuit than that of the receiver.
• Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet helpful: How to Identify and Resolve Radio-TV Interference Problems. This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402.

RoHS
This product is RoHS compliant.
SJ/T 11364-2006
The following contains information that relates to

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<tr>
<th>部件名称</th>
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0: 表示该有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下
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Socket Communications, Inc. dba Socket Mobile, Inc. warrants this SocketSerial™ brand product against defects in material and workmanship, under normal use and service, for one (1) year from the date of purchase.

EXCLUDES: Consumables such as batteries, removable cables, cases, straps, chargers, removable connector adapters, and CF-to-PC Card adapters (90 day coverage only). Non-branded items (not Socket Mobile or SocketSerial branded, 90 day coverage only).

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Socket Mobile may, at its option, replace or repair used products with new or reconditioned parts or products and the returned products become Socket Mobile’s property. Socket Mobile warrants the repaired or replaced products to be free from defects in material or workmanship for ninety (90) days after the return shipping date, or for the remainder of the original warranty period, whichever is greater.

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Limited Software Warranty

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