Jameco Part Number 527822

User's Manual

USB 2.0 DOCK

Index

Introduction

Thank you for ordering the USB 2.0 DOCK.   The USB 2.0 DOCK is an intelligent expansion module, which connects to a PC or notebook via Universal Serial Bus (USB) port, providing one high-speed RS-232 serial port, one printer port, one PS/2 keyboard & mouse and 4 downstream USB ports.   The USB 2.0 DOCK features easy connectivity for traditional serial devices, keyboards, mice and other USB devices and provides up to 480Mbps USB2.0 High Speed capability.

By simply plugging in a USB 2.0 DOCK, you will:

- Add one high-speed serial port, one printer port, one PS/2 keyboard & mouse and 4 downstream USB ports to your PC or notebook in seconds.
- Three USB High Speed downstream ports and one USB Full/Low Speed downstream Port.
- Improve the inconvenience of configuring old PC solutions like card extension solutions, which require adjusting IRQ or jumper settings and the incompatibility of various brands of docking solutions or bus repeaters.
- Avoid the hassle of removing your PC case, or rebooting the operating system during installation.

System Requirements

- A PC with a minimum of a 75MHz Pentium, or equivalent
- A minimum of 16M bytes of RAM.
- One available USB type A downstream port. (UHCI, OHCI, or EHCI)
- Windows 98 or later.

Package Contents

The product you purchased should contain the equipment and accessories shown as follows:

- USB 2.0 DOCK
- One 6' USB AB type cable
- One 2A switching power adapter (optional)
- One USB 2.0 DOCK driver and User's manual CD

Connectors

● One DB-9 RS-232 serial interface connector supports baud rates from 1,200 to 115.2K.

● One DB-25 parallel connector supports IEEE-1284 bi-directional printer port.

● One Mini-din for PS/2 keyboard, mouse.

● Four USB receptacle type A downstream ports.

● One USB type B upstream connector.

Figure 1

USB 2.0 DOCK Functions

The available functions of USB 2.0 DOCK depend on the status of power supplied:

● **Bus powered**

1. Connect USB cable to PC to provide bus power.
2. When you provide bus power only, the PS/2 mouse & keyboard, RS232 and printer functions will be enabled. However, the USB Downstream Ports can also work under low power mode.

● **Externally powered**

1. Connect power adapter to provide external power.
2. When you provide external power, the USB Downstream Ports can support all USB devices, and you can use all the functions of USB 2.0 DOCK.

LED Indicator

● Power Indicator

The Power Indicator will turn **ON** when bus power is supplied.

● USB Indicators

There are four USB indicators to show if the USB Downstream Ports are ready for use.

1. If the USB 2.0 DOCK is not ready for use, the USB Indicators will turn **OFF,** and the USB Downstream Ports cannot be used.
2. If the USB 2.0 DOCK is ready for use, the USB Indicators will turn **ON**, and you can use all the functions of the USB 2.0 DOCK.
3. If over-current happens for certain USB Downstream Ports, the corresponding USB Indicator will turn **OFF** to indicate that this port is not working now.
4. When over-current situation is resolved, the USB Indicator will turn **ON** again.
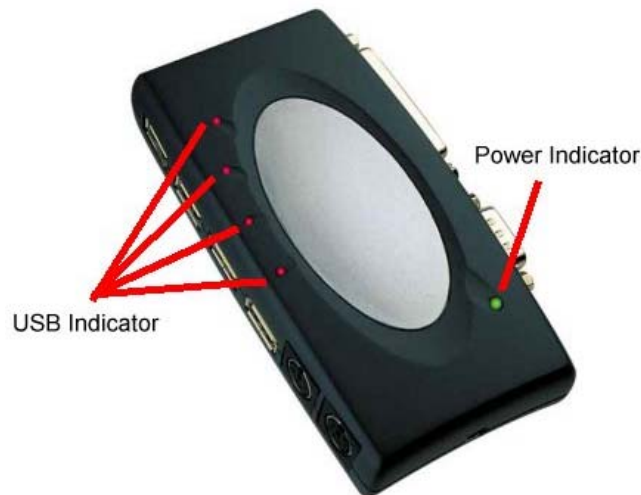

Figure 2

Installing USB 2.0 DOCK

1. This installation guide is written in accordance with different operation systems. Including Windows 98/98SE/Me, Windows 2000, and Windows XP.

2. Power on your computer and make sure that the USB port is enabled and working properly.

3. Connect the power adapter into USB 2.0 DOCK.

4. Connect the USB cable into the USB 2.0 DOCK and the USB port of your PC.

5. Windows will start detecting USB devices.   Please follow the related section to install your USB 2.0 DOCK.

Win98/98SE/Me Driver Installation

The driver installation is divided into 5 steps. For **Win98/98SE** installation should include all 5 steps (A-E). For **Win Me** installation should only need to perform Step B and D.

Please install USB 2.0 DOCK step by step by following the instructions.

Step A: USB Hub Installation (This step for Windows 98 only)

Figure A-1

A1. Click "Next" to Continue installing the USB2.0 Hub
(Ref Figure A-1)

Figure A-2

A2. Click "Next" to initiate a search for the best driver for your device (Ref Figure A-2)

Figure A-3

A3. Please insert the "Windows 98" CD into CD-ROM. Click "Next" to continue
(Ref Figure A-3)

Figure A-4

A4. Click "Next" to continue
(Ref Figure A-4)

Figure A-5

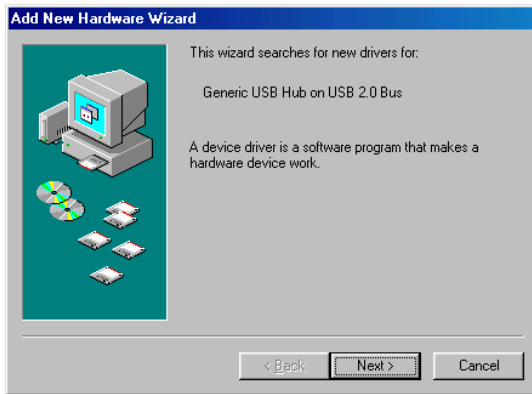A5. Click "Finish", Windows has finished installing USB 2.0 Hub driver
(Ref Figure A-5)

Figure A-6

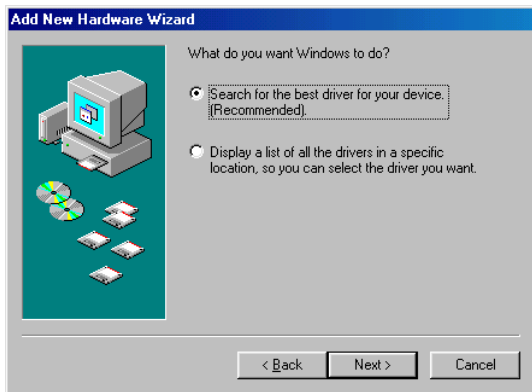A6. Click "Next" to continue installing a USB 1.1 Hub
(Ref Figure A-6)

Figure A-7

A7. Click "Next" to continue
(Ref Figure A-5)

USB 2.0 DOCK User's Manual

Figure A-8

A8. Click "Next" to continue
(Ref Figure A-5)

Figure A-9

A9. Click "Next" to continue
(Ref Figure A-5)

Figure A-10

A10. Click "Finish", Windows has finished installing USB 1.1 Hub
(Ref Figure A-10)

Step B: Printer Adapter Installation (This section for Windows98/98SE/Me)

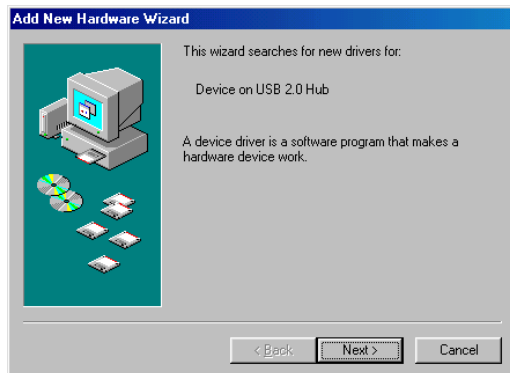To install the software for USB to Printer Converter of the USB 2.0 DOCK:

Figure B-1

B1. Insert the "USB 2.0 DOCK driver CD" into CD ROM. Click "Next" to continue
(Ref Figure B-1)

Figure B-2

B2. Click "Next" to initiate the search for the best driver for your device
(Ref Figure B-2).

Figure B-3

B3. Select "Specify a location" and the location of the USB2.0 DOCK driver CD.
Click "Next" to start and search.
(Ref Figure B-3).

B4. Click "Next" to continue
(Ref Figure B-4)

Figure B-4

B5. Click "Finish". Windows has finished installing the printer driver (Ref Figure B-5)

Figure B-5

Before connecting the printer on the parallel port of USB 2.0 DOCK, the printer driver must be installed in advance, or it might print unknown format of characters.

Please refer to "Setting Up the Printer Device" section to connect your printer to the USB 2.0 DOCK.

Step C.   USB Composite Device for PS/2 keyboard & mouse Installation
          (This section for Windows98/98SE only)

To install the USB Composite Device driver of USB 2.0 DOCK:

Figure C-1

C1. Click "Next" to continue
(Ref Figure C-1)

Figure C-2

C2. Click "Next" to initiate search for the best driver for your device
(Ref Figure C-2)

Figure C-3

C3. Click "Next" to continue
(Ref Figure C-3)

Figure C-4

C4. Click "Next" to continue
(Ref Figure C-4)

Figure C-5

C5. Click "Finish". Windows has finished installing the USB Composite device driver for PS/2 keyboard & mouse.
(Ref Figure C-5)

Step D: Serial Converter Installation (Required for 98/98SE/Me Windows System)

To install the USB to serial port driver of the USB 2.0 DOCK, please make sure the driver diskette is inserted:

Figure D-1

D1. Click "Next" to continue
(Ref Figure D-1)

Figure D-2

D2. Click "Next" to initiate a search for the best driver for your device
(Ref Figure D-2)

Figure D-3

D3. Select "Specify a location" and the location of the USB 2.0 DOCK driver CD.
Click "Next" to start and search.
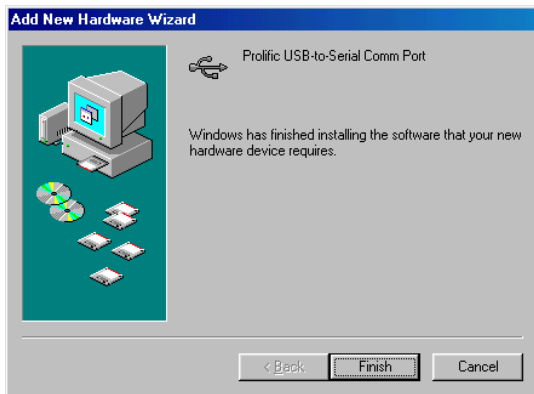(Ref Figure D-3)

D4. Click "Next" to continue
(Ref Figure D-4)

Figure D-4

D5. Click "Finish". Windows has
finished installing RS-232 Serial
port driver
(Ref Figure D-5)

Figure D-5

Step E. USB HID Device for PS/2 keyboard & mouse Installation

(This section for Windows98/98SE only)

To install the USB HID device PS/2 keyboard & mouse driver of USB 2.0 DOCK:

Figure E-1

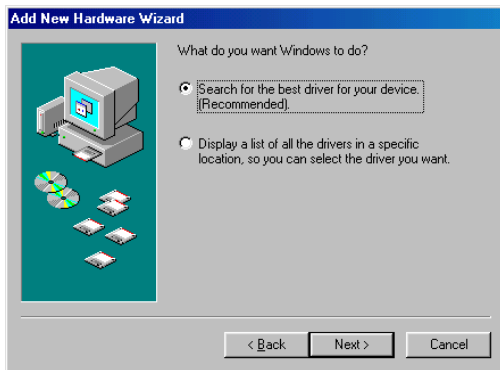E1. Click "Next" to continue
(Ref Figure E-1)

Figure E-2

E2. Click "Next" to initiate search for the best driver for your device (Ref Figure E-2)

Figure E-3

E3. Click "Next" to continue
(Ref Figure E-3)

Figure E-4

E4. Click "Next" to continue
(Ref Figure E-4)

Figure E-5

E5. A warning message window will show up. Please insert the Windows 98 CD and Click "OK" to continue or specify the location of the 98 system installation files. (Ref Figure E-5)

Figure E-5

E5. Click "Finish". Windows has finished installing the USB HID driver for PS/2 keyboard & mouse.
(Ref Figure E-5)

Win2000 Driver Installation

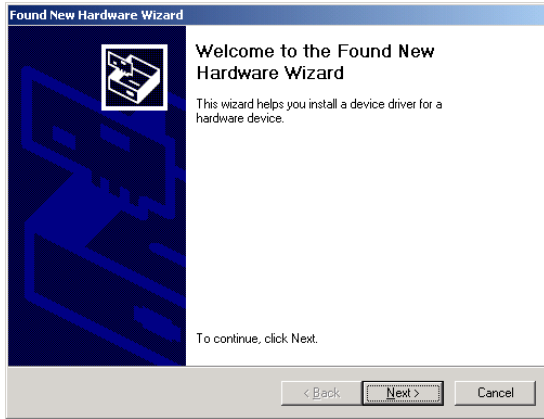To install the driver of the USB 2.0 DOCK, please make sure the driver CD is inserted.

Figure Win2k-1

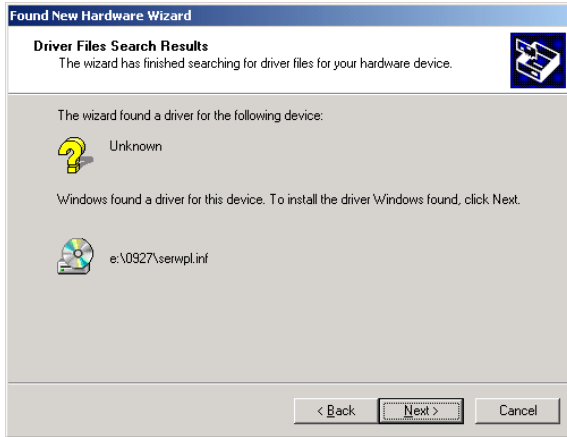Step1. Click "Next" to
continue
(Ref Figure Win2k -1)

Figure Win2k -2

Step2. Click "Next" to
initiate search for the best
driver for your device
(Ref Figure Win2k -2)

Figure Win2k -3

Step3. Please insert "USB 2.0
DOCK Driver" CD into
CD-ROM. Click "Next" to
continue
(Ref Figure Win2k -3)

Figure Win2k -4

Step4. Click "Next" to continue (Ref Figure Win2k -4)

Figure Win2k -5

Step5. Click "Finish", Windows has finished installing Serial port driver. (Ref Figure Win2k -5)

● Before connecting the modem on the serial port of USB 2.0 DOCK, the modem driver must be installed in advance. Otherwise it might operate unexpectedly.

● Please refer to "Setting Up the HyperTerminal with USB to serial port" section as an example of routing your COM port setting.
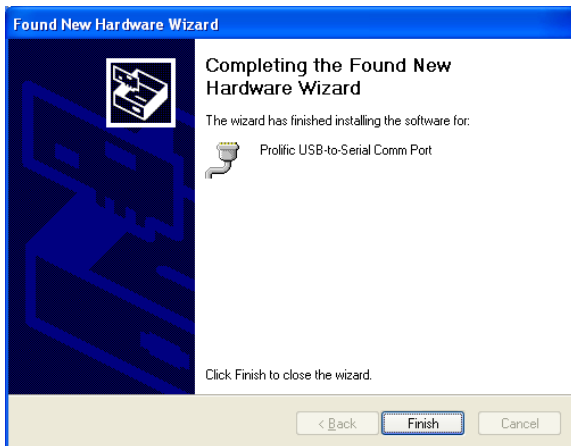
WinXP Driver Installation

To install the USB to serial port driver of the USB 2.0 DOCK, please make sure the driver diskette/CD is inserted:

Step1. Click "Next" to continue
(Ref Figure WinXP-1)

Figure WinXP-1

Step2. Click "Finish", Windows has finished installing Serial port driver. (Ref Figure WinXP-2)

Figure WinXP-2

- Before connecting the modem on the serial port of USB 2.0 DOCK, the modem driver must be installed in advance. Otherwise it might operate unexpectedly.
- Please refer to "Setting Up the HyperTerminal with USB to serial port" section as an example of routing your COM port setting.

Congratulations!! You have finished installing USB 2.0 DOCK.

Please click on **Start**>> **Settings>> Control Panel,** and double click **System**, and **Device Manager**.   Please double check the Human Interface Devices, Keyboard, Mouse, Ports, and Universal serial bus controller of the dialog box to see if they work properly.
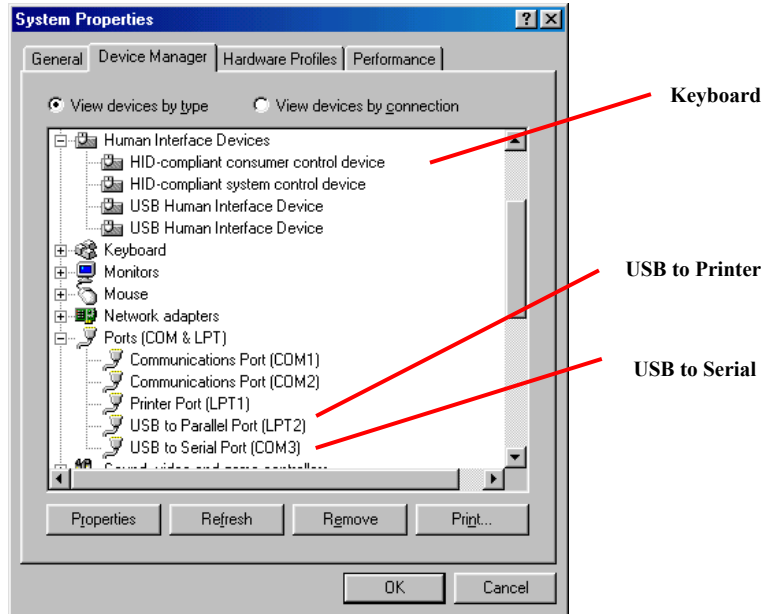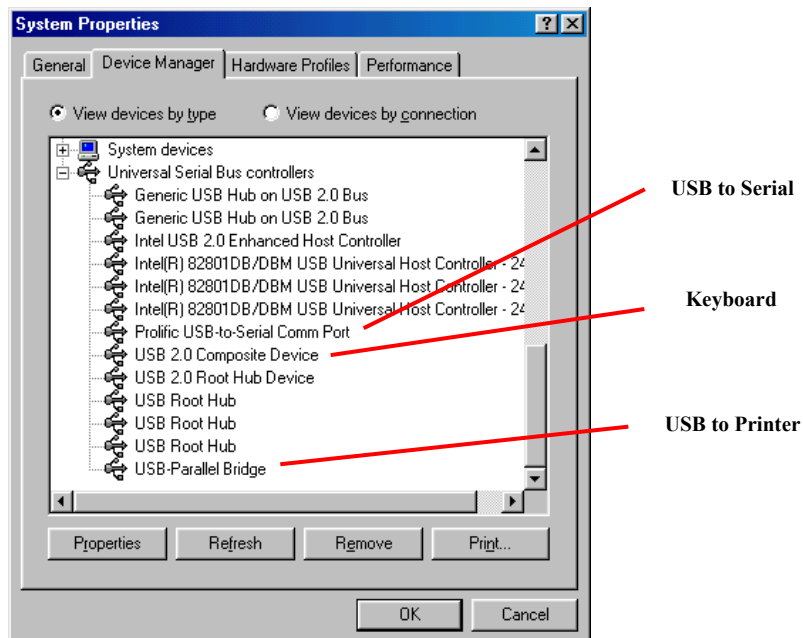

Figure 3

Figure 4

Set Up the Printer Device

Follow the steps below to connect your printer to the USB 2.0 DOCK with your PC:

For Windows 98/98SE and Me:

1. Turn off your printer. Plug in the cable to connect USB 2.0 DOCK parallel port and printer. Turn on the printer afterwards.

2. Turn on your computer and plug in the USB cable to connect the USB 2.0 DOCK and the USB port of PC.

3. Please click on **Start**, **Settings**, **Control Panel**, double click **System**, and click on **Device Manager**. Check which printer port is located by USB to parallel port. The following example is located as LPT2.
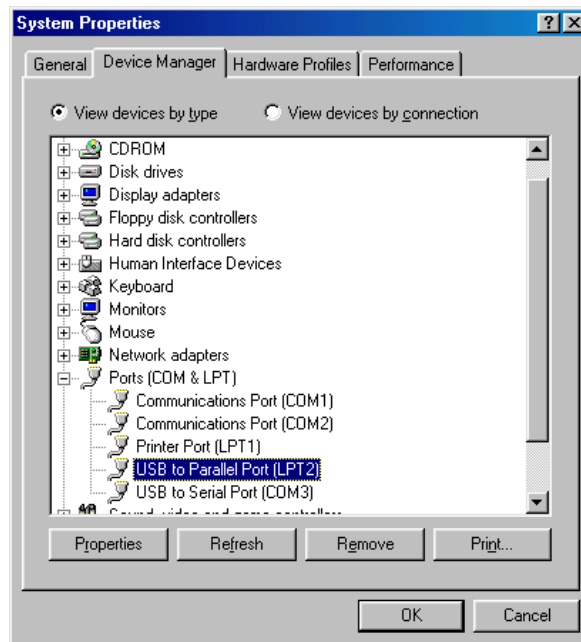

Figure 5

4. If you have installed a printer device before, click **Start**, **Settings**, **Printers**. Right-click the default installed printer and click on **Properties**. The Properties dialog box of the installed printer will appear on your screen.

5. Click the **Details** folder tab and change the printer port to **LPT2: (USB to Parallel Port)**.
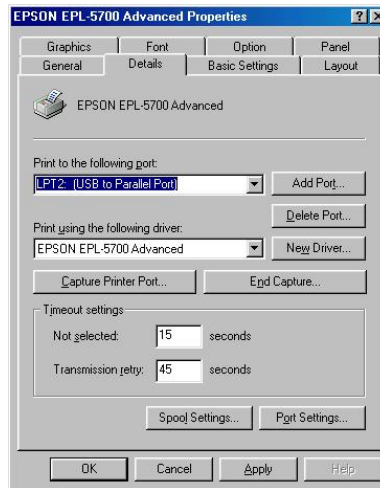
Figure 6

6. If you do not have a printer installed yet, click on **Start**, **Settings**, **Printers**, **Add Printer**. The **Add Printer Wizard** will start and assist you in installing a new printer device. Select the printer manufacturer and model name from the list provided by the wizard or use the printer driver diskette supplied by your printer.

7. When prompted which port the printer will use, click on **LPT2: USB to Parallel Port**.
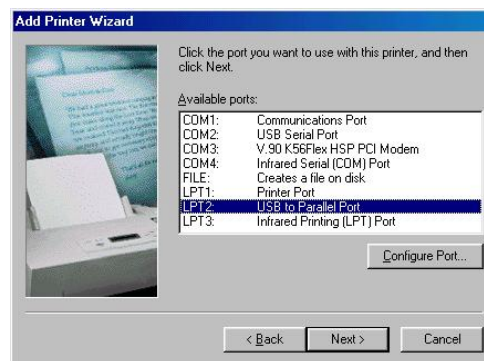

Figure 7

8. Follow the succeeding instructions to complete the installation and run **Print Test Page** to see if it can print without problems.

For WINDOWS 2000 and XP:

1. Turn off your printer. Plug in the cable to connect USB 2.0 DOCK parallel port and printer. Turn on the printer afterwards.
2. Turn on your computer and plug in the USB cable to connect the USB 2.0 USB and the USB port of PC.
3. If you have installed a printer device before, click **Start**, **Settings**, **Printers**. Right-click the default installed printer and click on **Properties**. The Properties dialog box of the installed printer will appear on your screen.
4. Click the **Ports** tab and change the printer port to **USB001 (Virtual printer port to USB)**.
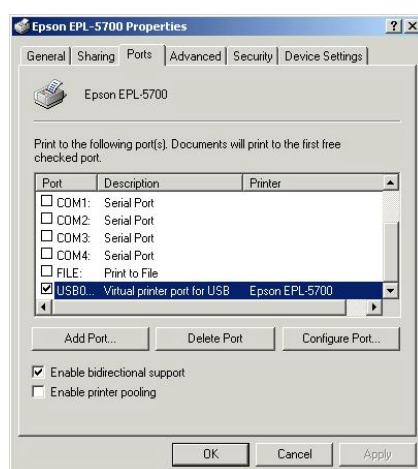
Figure 17

5. If you do not have a printer installed yet, click on **Start**, **Settings**, **Printers**, **Add Printer**. The **Add Printer Wizard** will start and assist you in installing a new printer device. Select the printer manufacturer and model name from the list provided by the wizard or use the printer driver diskette supplied by your printer.
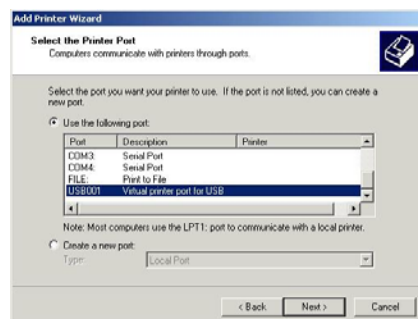6. When prompted which port the printer will use, click on **USB001 (Virtual printer port to USB)**.

Figure 18

Set up the HyperTerminal with USB to serial port

Follow the steps below to configure your HyperTerminal with USB to serial COM port setting:

1. Make sure that HyperTerminal is installed in your system. If not, please click **Start, Settings, Control Panel**, double click **Add/Remove Programs**, choose **Windows Setup** page, **Communications,** click **Details** button, enable **HyperTerminal** to install the program to your Windows system.

2. Please click on **Start, Settings, Control Panel**, double click **System**, and click on **Device Manager**. Check which COM port is located by USB to serial port.
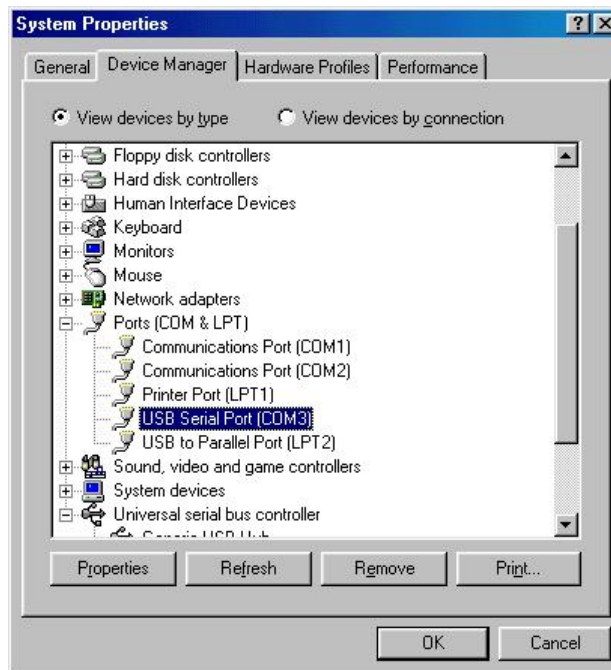

Figure 8

3. If you have setup HyperTerminal before, please run **Start, Programs, Accessories, Communications, HyperTerminal, HyperTrm.exe**. Click **File**, **Properties**. The Properties dialog page will appear on your screen. If it is your first time to setup HyperTerminal, you will see this page during the setup procedure.
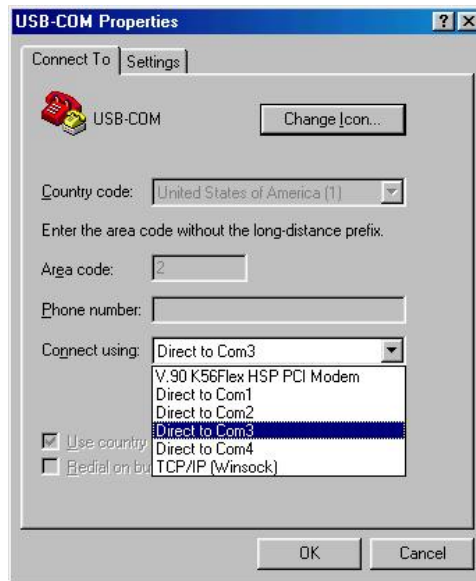
Figure 9

4. Click the **"Connect using"** item to indicate the proper COM port which appeared in step 1, and follow the succeeding instructions to complete the setup.
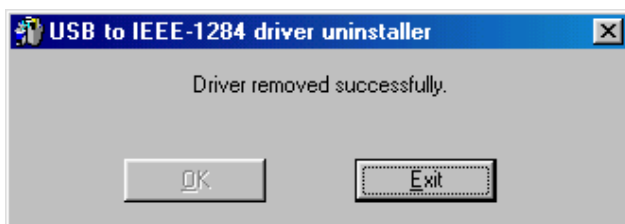
Uninstalling the Driver Program

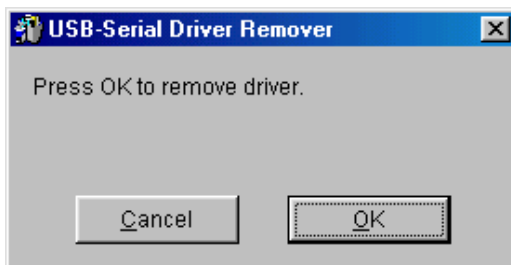If you want to remove the USB 2.0 DOCK driver program, you can uninstall it by following the steps below:

a. Unplug the USB cable from your PC.
b. Run the **Un20DOCK.exe** program from the USB 2.0 DOCK driver CD.
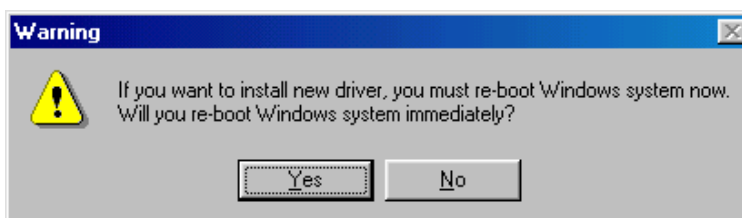c. For **WIN98/SE/ME**:

Please Press **OK** to remove Printer Convertor.

Printer Convertor had been removed.   Please press **Exit** to continue.

Please Press **OK** to remove Serial Convertor.

System will require to restart to complete the un-installation.   Please press **Yes** to continue.

d. For **WIN2000/XP**:
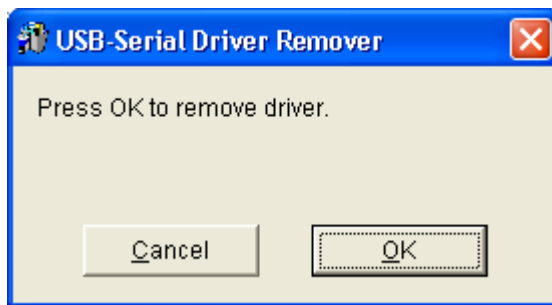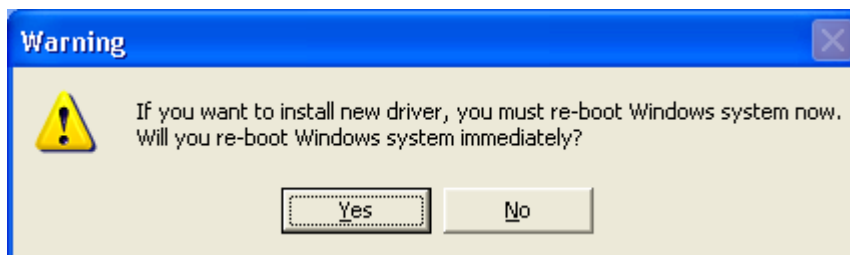

Please Press **OK** to remove Serial Convertor.

System will require to restart to complete the un-installation.　Please press **Yes** to continue.

APPLICATION NOTE

1. USB 2.0 DOCK normally derives its own power from PC Host. When system power plugged in to the USB port of PC or notebook, the Large LED will turn green, and the serial, parallel, keyboard, mouse, and 4 downstream ports can operate without the switching adapter.

2. Please note that the 4 downstream ports may not function normally if no external power applied and heavy power consumption USB device connected.   An external power will be highly recommended.   You may use the external power by connecting an external 5 voltage, 2A DC power that is UL, CE, T-mark or locally approved.   For Polarity, see the following:

$$+ \underline{\quad 5\,V\quad} (\bullet \underline{\quad\quad} -$$

3. Unknown Device:
   If the installation process has been completed and some of the devices still don't work, please go to: My Computer/Property/Device Manager/USB, check COM port, printer, keyboard, mouse or Hub to see if "Unknown device" appears on the screen. You need to "Remove" and "Refresh", and start the installation processes again.   After trying the processes mentioned above and your device still cannot work, please contact technical support at your local distributor.

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FCC Statement

This device generates and uses radio frequency and may cause interference to radio and television reception if not installed and used properly. This has been tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Part 15 of the FCC Rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by plugging the device in and out, the user can try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the computer into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.