IBM

Multi-Port
USB Hub

User's Guide

> **Note:** Before using this information and the product it supports, be sure to read
> the information under Appendix C, "Product warranties and notices" on page 2-3.

Contents

Registering your option

Thank you for purchasing this IBM® product. Please take a few moments to register your product and provide us with information that will help IBM to better serve you in the future. Your feedback is valuable to us in developing products and services that are important to you, as well as in developing better ways to communicate with you. Register your option on the IBM Web site at:

http://www.ibm.com/pc/register

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About this book

This manual contains instructions for installing and using your IBM Multi-Port USB Hub. The manual is divided into two parts:

Part 1:   Installation and user's guide

This section contains the product description, installation instructions, and use information in the following languages:

- English
- German
- French
- Spanish
- Italian
- Brazilian Portuguese
- Japanese

Part 2:   Appendixes

This section contains problem-solving, help and service information, the product warranties, and notices.

Note: The illustrations in this manual might be slightly different from your hardware.

Part 1: Installation and user's guide

This guide contains the product description, installation instructions, and product use information.

Product description

The IBM Multi-Port USB Hub provides a quick and convenient connection to multiple devices through one simple connection to your IBM ThinkPad® computer. The nine ports on the hub enable you to connect the following devices to the computer while the computer is on:

- Up to five Universal Serial Bus (USB) devices
- Printer
- Serial device
  Note: The hub will not work with a serial mouse.
- Standard keyboard
- Standard mouse

In addition to this book, the option package includes:

- Multi-Port USB hub
- AC/DC power adapter
  Note: All power supplies are universal. However, for worldwide use, you must purchase the correct wall adapter or line cord for your country or region.
- USB cable, 2.0 ft (0.6 m)
- *IBM Multi-Port USB Hub Option Diskette*
  Note: The hub supports the Microsoft® Windows® 98 operating system only. You might need your Windows 98 installation CD or diskettes to install the device drivers on the Option Diskette.

Installing the hub

To install the hub:

1. Turn on the computer.

2. Insert the *IBM Multi-Port USB Hub Option Diskette* into the diskette drive. (Insert your Windows 98 installation CD into the CD-ROM drive if you are prompted to do so by the on-screen instructions. If you do not have a CD-ROM drive, insert the first Windows 98 installation diskette into the diskette drive.)

3. Insert the barrel connector at the end of the ac/dc power adapter into the power-adapter connector on the rear of the hub **1** ; then connect the other end of the cord to an electrical outlet.

1

4. Connect one end of the two-foot USB cable to the computer USB connector and the other end of the cable to the USB cable connector on the front of the hub **2** .

2

The Add New Hardware wizard window opens and displays a message that it detects a generic USB hub device driver.

To add the hub device driver:

1. Click **Next**.
2. Select **Search for the best driver for your device**.
3. Click **Next**.
4. Select **Floppy disk drives**.
5. Click **Next**.
6. Select **The updated driver (Recommended)**.
7. Click **Next** twice.
8. Click **Finish**.

   The Add New Hardware wizard window opens and displays a message that it
   detects the IBM USB-Parallel Converter.

To add the IBM USB-Parallel converter device driver:

1. Click **Next**.
2. Select **Search for the best driver for your device**.
3. Click **Next**.
4. Select **Floppy disk drives**.
5. Click **Next** twice.
6. Click **Finish**.

   The Add New Hardware wizard window opens and displays a message that it
   detects a USB Human Interface Device.

To add the USB human interface device driver:

1. Click **Next**.
2. Select **Search for the best driver for your device**.
3. Click **Next**.
4. Select **Floppy disk drives**.
5. Click **Next** twice.
6. Click **Finish**.

   The Add New Hardware wizard window opens and displays a message that it
   detects the IBM USB Serial Converter.

To add the IBM USB serial converter device driver:

1. Click **Next**.
2. Select **Search for the best driver for your device**.
3. Click **Next**.
4. Click **Floppy disk drives**.
5. Click **Next** twice.
6. Click **Finish**.

   If the Add New Hardware wizard window opens, complete the installation by
   using the following instructions.
   a. Click **Next** twice.
   b. Click **Finish**.

The device driver installation is complete. You can now use the hub. For more information on using the hub, go to "Using the hub" on page 1-5.

Uninstalling the hub software

To uninstall the hub device drivers:

1. Disconnect the hub from the computer. For information on disconnecting the hub, go to "Disconnecting and reconnecting the hub" on page 1-7.
2. Insert the *IBM Multi-Port USB Hub Option Diskette* into the diskette drive.
3. Click **Start**.
4. Select **Run**.
5. Click the **Browse...** button.
6. Select the diskette drive (a:\) from the **Look in** pull-down menu.
7. Double-click **Uninst.exe**.
8. Click **Yes** to confirm uninstallation.
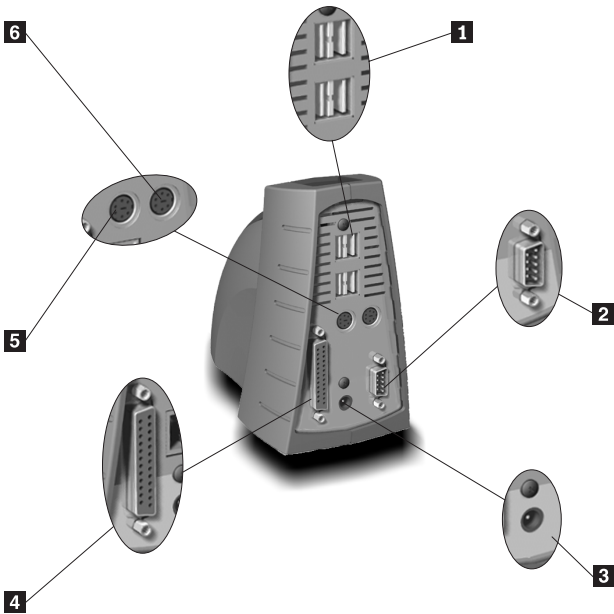9. Click **Yes** to restart your computer.

Using the hub

This section contains information on using the hub.

Locating the hub connectors

Use the following illustration to locate where to connect a device to the hub.

Note: For use guidelines on devices connected to the hub, refer to "Understanding device-usage guidelines" on page 1-8.

1 **USB connectors**

This is where you connect USB devices.

Note: You can also connect a USB device to the USB connector on the front of the hub.

2 **Serial port**

This is where you connect a serial device.

Note: You cannot use a serial mouse with the hub.

3 **Power-adapter connector**

This is where you connect the ac/dc power adapter.

4 **Bidirectional printer connector**

This is where you connect a printer. This connector does not work with other parallel port devices.

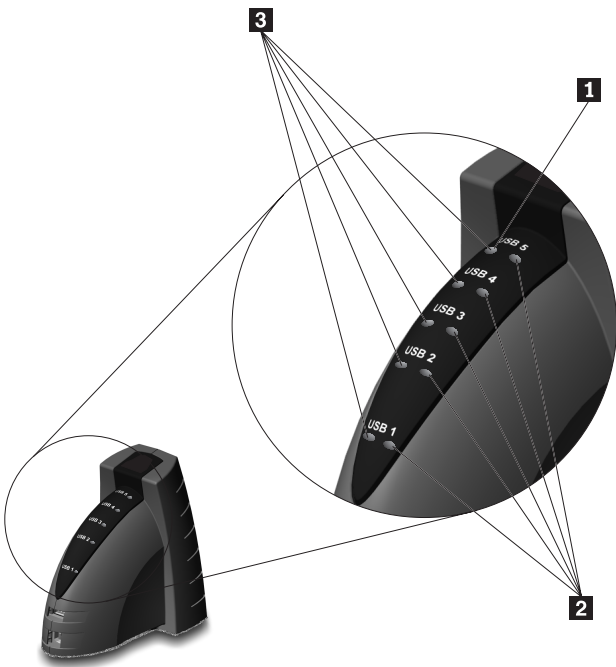**5** **Standard keyboard connector**

This is where you connect a standard keyboard.

6 **Standard mouse connector**

This is where you connect a standard mouse.

Locating the hub indicators

There are 11 LEDs on the front of the hub. When the hub is turned on, the LEDs light until the hub completes a verification of the attached devices. The green LEDs **3** light when high-speed USB devices are connected to the USB connectors. The yellow LEDs **2** light when low-speed USB devices are connected to the USB connectors. The power LED on the top of the unit **1** lights when the ac/dc power adapter is connected to the hub. The LED for a connected device flashes if the device is receiving data from or sending data to the computer.

Setting up a printer connected to the hub

If you have connected a printer to the hub, you must use the following instructions to give the hub printer connector an LPT assignment:

1. Click **Start**.
2. Select **Settings**.
3. Click **Printers**.
4. Double-click **Add Printer**. The Add Printer Wizard window opens.
5. Click **Next**.
6. Select **Local Printer**.
7. Click **Next**.
8. Select the manufacturer of your printer from the list on the left.
9. Select the printer model from the list on the right.

10. Click **Next**.

    If the device driver is already installed on your system and you are prompted to
    keep it or to replace it, select **Keep existing driver (recommended)**; then click
    Next.
11. Select **IBM USB-Parallel Port**. The wizard assigns this connector to LPT2.
12. Click **Next**.
13. Select **Yes** to make the printer that is connected to the hub the default printer.
14. Click **Finish**.
15. Click **OK** when the printer device driver installation completes.

Using a serial device

If the computer does not detect a device after you connect it to the hub, you have a
serial device that is not "plug-and-play." To install a serial device that is not
"plug-and-play":

1. Connect power to the device.
2. Connect the serial device to the hub serial port.
3. Click **Start**.
4. Select **Settings**.
5. Click **Control Panel**.
6. Double-click the **Add new hardware** icon.
7. Click **Next** twice.
8. Select **Yes (recommended)**; then click **Next**.
9. Select **Yes (recommended)** again; then click **Next**.
10. Click **Detail.....** Verify that the device is in the displayed list.
11. Click **Finish**.
12. Click **Next**.

If the operating system does not complete the installation, follow these instructions:

1. Select **Search for the best driver for your device**; then click **Next**.
2. Click **Next**.
3. Click **Finish**.

    The serial device installation is complete. You can now use the serial device.

Disconnecting and reconnecting the hub

You do not need to turn off your computer to disconnect or reconnect the USB hub.
To disconnect the hub from the computer, simply unplug the USB cable from the
computer. To reconnect the hub, reconnect the USB cable to the computer. The
devices and their device drivers are activated when you connect the cable.

Understanding device-usage guidelines

Before you begin using the devices connected to the hub, be sure to note the following device-usage guidelines:

- Do not activate resource-intensive devices at the same time because USB limitations might cause a degradation in the performance and the speed of the devices. For example, do not start a USB scanner while you are using a USB camera. Instead, close the application for the camera; then start the scanner.

- The hub printer port works only with printers; it does not work with other parallel devices. However, the printer port does support bidirectional communication between the printer and the computer.

- Use only a standard or USB mouse with the hub. USB limitations prevent the use of serial input devices, such as a mouse, through the serial port. Use a USB graphic tablet because a standard graphic tablet might work like a serial mouse.