

Bluetooth™ wireless printing

hp deskjet 450 mobile printer



i n v e n t

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Bluetooth wireless printing with the hp deskjet 450 mobile printer

The Bluetooth™ feature allows you to print without a cable connection between the printer and a Bluetooth-enabled device.

printing requirements

printer requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom™ CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

device requirements

Most wireless devices require a Bluetooth CompactFlash card to establish a Bluetooth wireless connection with the printer. For specific device printing requirements, select the device you are using from the [printing instructions](#) section below.

printing instructions

For Bluetooth wireless printing instructions, select the device you are using:

- [notebook and desktop printing](#)
- [Pocket PC printing](#)
- [Palm OS printing](#)
- [mobile phone printing](#)
- [digital camera printing](#)

updates

Because Bluetooth wireless communication is an emerging technology, the information in this document is subject to change.

To provide the most up-to-date information possible, this document will be revised and posted on HP's website (www.hp.com/support/dj450) as needed.

notebook and desktop printing

The printing instructions in this section apply to:

- notebooks using a 3Com[®] Wireless Bluetooth PC card
- notebooks and desktops using a 3Com Wireless Bluetooth USB adapter.

If you are using a Bluetooth wireless PC card made by another manufacturer, consult the documentation that came with the PC card or contact the manufacturer for printing instructions.

printing requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

Before you can print, your notebook or desktop will need a 3Com Wireless Bluetooth PC card or a 3Com Wireless Bluetooth USB adapter. Visit 3Com's website at <http://www.3com.com> or the hp business store at <http://www.bstore.hp.com>.

printing instructions

Follow these steps to print using a Bluetooth wireless connection:

1. [installing a 3Com Wireless Bluetooth PC card, or a 3Com Wireless Bluetooth USB adapter](#)
2. [configuring the printer](#)
3. [printing a file](#)

installing a 3Com Wireless Bluetooth PC card, or a 3Com Wireless Bluetooth USB adapter

To install a 3Com Wireless Bluetooth PC card in a notebook, or a 3Com Wireless Bluetooth USB adapter in a notebook or desktop, consult the documentation that came with the product.

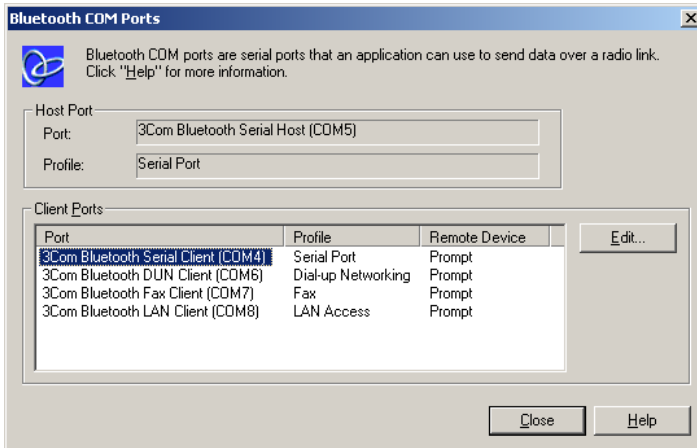
configuring the printer

1. Click **Start > Programs > 3Com Mobile > Bluetooth Connection Manager**.

The Bluetooth Connection Manager opens.

2. Go to **Tools > COM Ports...**

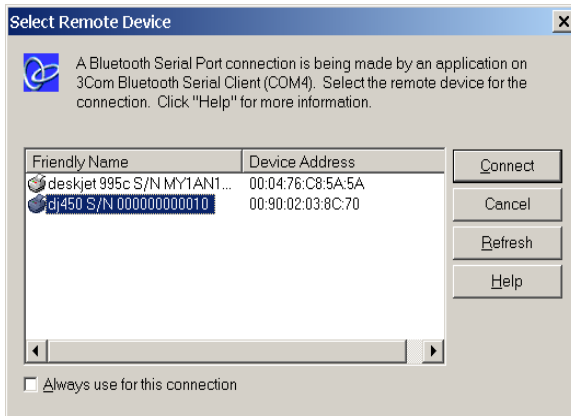
The Bluetooth COM Ports dialog box appears.



3. Note the COM port number of the 3Com Bluetooth Serial Client port. For instance, in the above example, the 3Com Bluetooth Serial Client port is COM4.
4. Click **Close** to close the Bluetooth COM Ports dialog box.
5. Make sure you have installed the printer driver. Then click **Start > Settings > Printers**.
6. Right-click the **hp deskjet 450** printer icon and select **Properties**.
7. Click the **Ports** tab.
8. Select the COM port used for Bluetooth wireless connection, as identified in step 3.
9. Click **Apply**, and then click **OK**.

printing a file

1. Open the file that you wish to print.
2. Select **File > Print**.
The Print dialog box appears.
3. Click **Print**.
The Select Remote Device dialog box appears.



4. Select the printer.
The printer is identified by its [Bluetooth device name](#) (see page 43).
To always use this specific printer, select **Always Use for this Connection**.
5. Click the **Connect** button.
When the notebook or desktop establishes a Bluetooth wireless connection with the printer, the Bluetooth LED flashes.
After the computer has sent the file to the printer, the computer disconnects from the printer and the Bluetooth LED on the CompactFlash card stops flashing.

Pocket PC printing

The printing instructions in this section apply to iPaq Pocket PCs with built-in Bluetooth and Jornada Pocket PCs with a Bluetooth CompactFlash card.

With HP Mobile Printing for Pocket PC, you can print e-mail, Pocket Word, RTF, TXT, calendar, contacts, tasks, and images (BMP, JPG, PNG). Download HP Mobile Printing for Pocket PC software and documentation from www.hp.com/go/pocketpcprint, and then follow the instructions below to print.

If Westtek® ClearVue™ Suite is loaded on your Pocket PC, then you also can view and print local files with HP Mobile Printing for Pocket PC, such as desktop PowerPoint®, Word, Excel, and PDF files. Visit www.westtek.com for more information.

printing instructions

Follow these instructions when using an iPaq or a Jornada:

- [iPaq printing](#)
- [hp jornada printing](#)

iPaq printing

iPaqs with built-in Bluetooth support support Bluetooth wireless printing.

printing requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

printing instructions

To print using an iPaq:

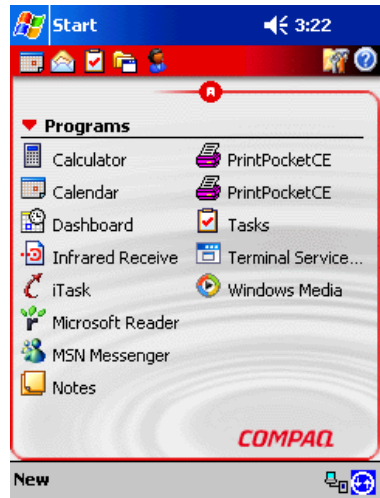
1. Tap the Bluetooth status indicator.



Bluetooth status indicator



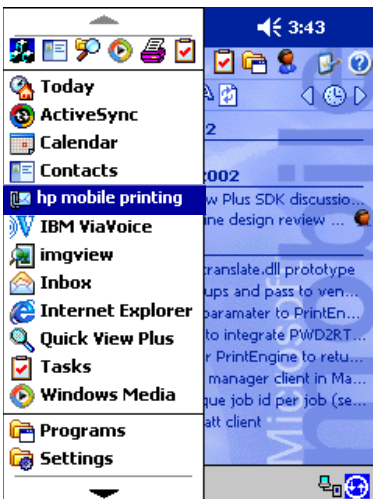
2. On the pop-up menu, select **Turn radio ON** to turn on the Bluetooth radio.



Bluetooth radio is ON.



3. Tap **Start > hp mobile printing**.



4. Follow the HP Mobile Printing for Pocket PC instructions that you downloaded from www.hp.com/go/pocketpcprint.

hp jornada printing

Both the [hp jornada 500 series](#) and [hp jornada 700 series](#) support Bluetooth wireless printing.



hp jornada 500 series



hp jornada 700 series

printing requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

In addition, the Jornada will need:

Device	What you need
hp jornada 700 series	A Socket Bluetooth CompactFlash card and software. Visit the Socket Communications website at www.socketcom.com for more information.
hp jornada 500 series	An Anycom CF-2001 Bluetooth card and software. Visit www.anycom.com/dj450 for more information. —or— A Socket Bluetooth CompactFlash card and software. Visit the Socket Communications website at www.socketcom.com for more information.
hp jornada 500 and 700 series	(Recommended) HP Mobile Printing for Pocket PC installed on your Jornada. Visit www.hp.com/go/pocketpcprint to download the software and documentation.

printing instructions

hp jornada 500 series

Follow these instructions when using the hp jornada 500 series:

1. [installing an Anycom CF-2001 Bluetooth card](#)
—or—
[installing a Socket Bluetooth CompactFlash card](#)
2. [discovering the printer \(Anycom CF-2001 Bluetooth card\)](#)
—or—
[discovering the printer \(Socket Bluetooth CompactFlash card\)](#)
3. [printing a file using the hp jornada 500 series](#)

hp jornada 700 series

Follow these instructions when using the hp jornada 700 series:

1. [installing a Socket Bluetooth CompactFlash card](#)
2. [installing applications for printing](#)
3. [discovering the printer \(Socket Bluetooth CompactFlash card\)](#)
4. [printing a file using the hp jornada 700 series](#)

hp jornada 500 series

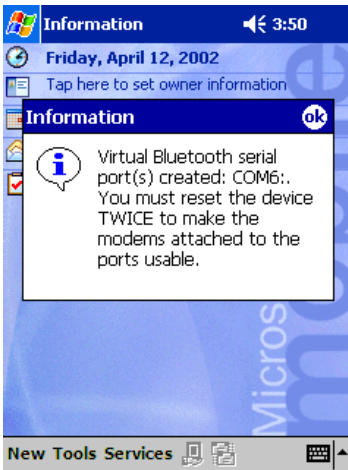
installing an Anycom CF-2001 Bluetooth card

To install the card:

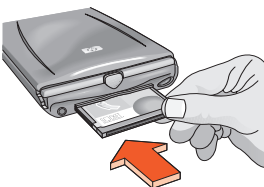
1. Place the Jornada in its cradle.
2. Insert the card's software CD into the computer's CD-ROM drive.
3. Follow the onscreen instructions to install the software.
4. After the software has been installed, remove the Jornada from its cradle.
5. Press the **Reset** button with the stylus. The **Reset** button is located on the back of the Jornada.
6. Wait for the Jornada to reboot, and then press the **Reset** button again.

Caution! Failure to reset the hp jornada 500 series twice after installing an Anycom CF-2001 Bluetooth card prevents the Jornada from printing correctly over a Bluetooth connection.

After reset, the following message appears:



7. Insert the Bluetooth card into the expansion slot of the Jornada.

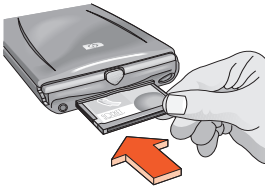


hp jornada 500 series expansion slot

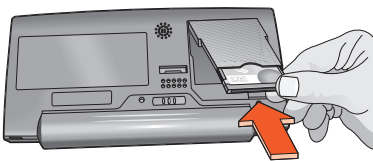
installing a Socket Bluetooth CompactFlash card

To install the card:

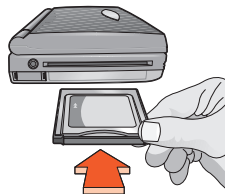
1. Place the Jornada in its cradle.
2. Insert the card's software CD into the computer's CD-ROM drive.
3. Follow the onscreen instructions to install the software.
4. After the software has been installed, remove the Jornada from its cradle.
5. Press the **Reset** button once with the stylus. The **Reset** button is located on the back of the Jornada.
6. After reset, insert the Bluetooth card into the expansion slot or port of the Jornada.



hp jornada 500 series expansion slot



hp jornada 700 series expansion port

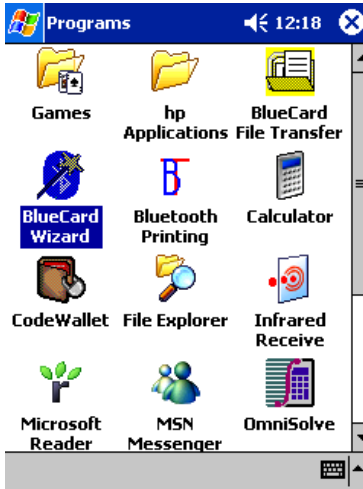


hp jornada 700 series expansion slot with PC card adapter

discovering the printer (Anycom CF-2001 Bluetooth card)

Before the Jornada can print, it must discover the printer. Once the printer is discovered, it does not need to be discovered again unless the Jornada is reset or the printer is changed.

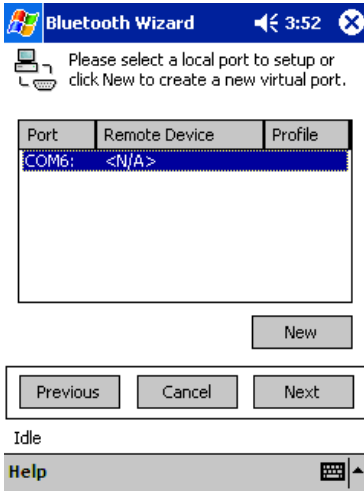
1. Tap **Start** > **Programs**.
2. Tap the **BlueCard Wizard** icon.



3. Select **Serial Port Connection** and tap **Next**.



4. Tap the **<N/A>** port that is not in use (in this example the **COM6** port), and then tap **Next**.

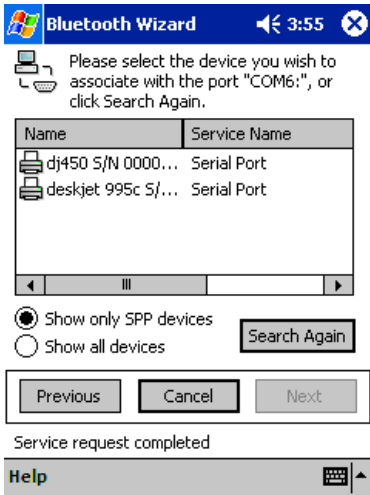


5. Tap **OK**. The device discovery starts automatically.

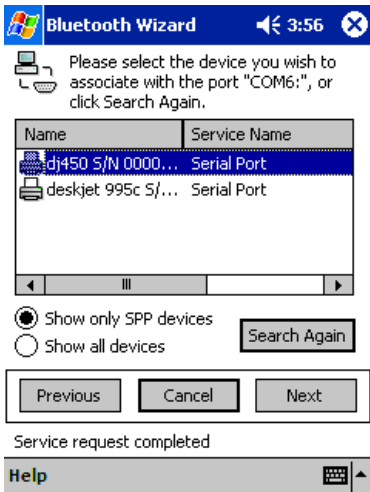


The Jornada searches for any Bluetooth-enabled devices within range. It displays the Bluetooth device names and the Service Names.

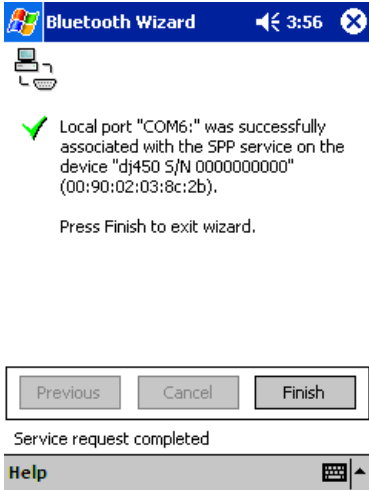
6. If you need to update the list of devices searched, tap **Search Again**.



7. Select a printer from the list and tap **Next**.



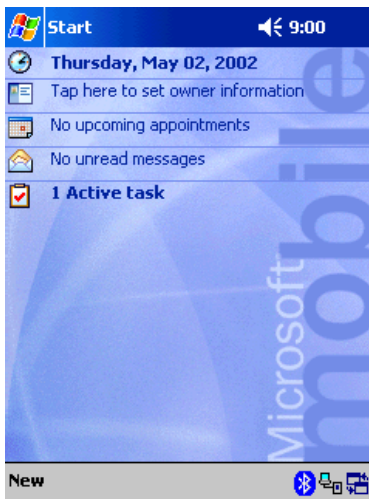
8. A confirmation message appears, indicating success or failure. Tap **Finish** to return to the main wizard start screen, and then tap **Exit** to close the program.



9. Use **COM6** (for this example) when sending print jobs.

discovering the printer (Socket Bluetooth CompactFlash card)

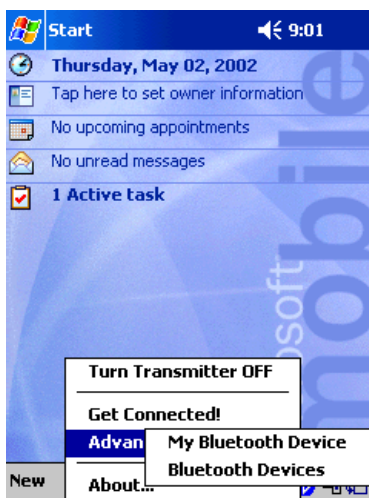
1. Tap the **Bluetooth** icon at the bottom of the screen.



Bluetooth icon



2. Tap **Advanced Features** > **Bluetooth Devices**.

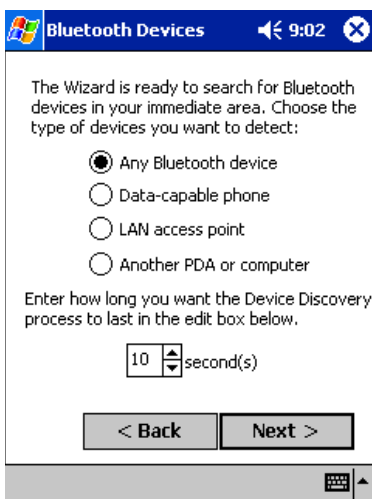


3. For the hp jornada 700 series, open the **Bluetooth Devices** folder.

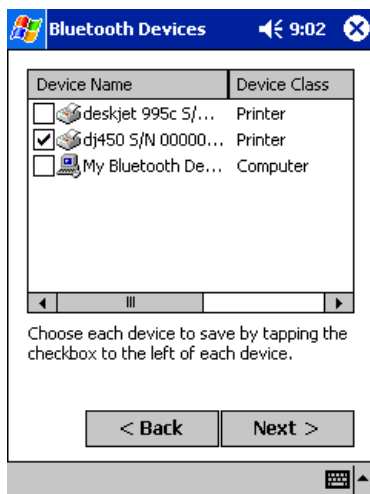
- Do one of the following to launch the Bluetooth Device Discovery wizard:
 - Tap the **eyeballs** icon.
—or—
 - Tap **Tools > Device Discovery**.



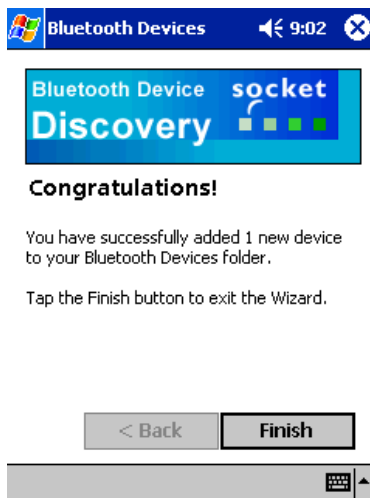
- Tap **Next**.
- Select **Any Bluetooth Device** and tap **Next**.



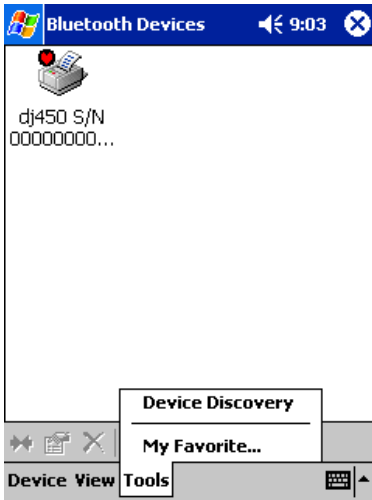
7. Tap the check box next to the printer's Bluetooth device name, and then tap **Next**.



8. Tap **Finish**.



9. Tap **Tools** > **My Favorite**.



10. Tap the **My Favorite Device** drop-down arrow to view a list of printers.



11. Select the printer and tap **OK**.

printing a file using the hp jornada 500 series

applications for printing

You need to install a printing application before you can print. HP Mobile Printing for Pocket PC is the recommended application. Download the software and documentation from www.hp.com/go/pocketpcprint.

For other applications, refer to the software's documentation for details.

finding the Bluetooth COM port

When you install a Bluetooth card in a Jornada, the Jornada assigns it to one of the available COM ports. Some printing applications may require you to know the COM port for the Bluetooth card. To find the Bluetooth COM port, consult the documentation that came with the card.

hp jornada 700 series

installing a Socket Bluetooth CompactFlash card

For instructions, see [installing a Socket Bluetooth CompactFlash card](#) on page 11.

installing applications for printing

You need to install a printing application before you can print. HP Mobile Printing for Pocket PC is the recommended application. Download the software and documentation from www.hp.com/go/pocketpcprint.

For other applications, refer to the software's documentation for details.

discovering the printer

For discovery instructions, see [discovering the printer \(Socket Bluetooth CompactFlash card\)](#) on page 16.

printing a file using the hp jornada 700 series

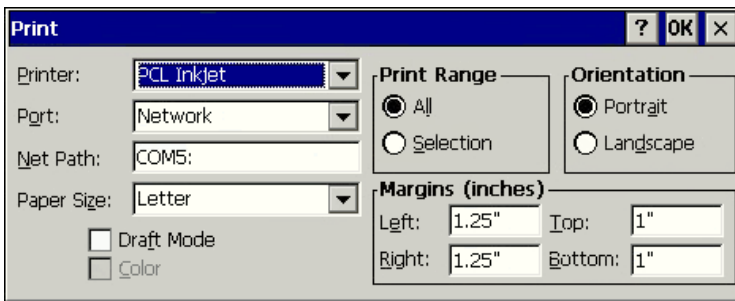


The hp jornada 700 series does not support the Anycom CF-2001 Bluetooth card. To print using a Bluetooth wireless connection, use a Socket Bluetooth CompactFlash card.

To print using a Bluetooth wireless connection:

1. Open the file that you wish to print.
2. Tap **File** > **Print**.

The Print dialog box appears.



3. Select **PCL Inkjet** from the Printer menu.
4. Select **COMx:Bluetooth** from the Port menu.
5. Tap **OK**.
6. If you are prompted to enter a PIN code, enter the printer's PIN code (see page 43) and tap **OK**.

The Jornada connects to the printer and the file prints.

Palm OS printing

devices supported

Device	Communication
Palm III series	Infrared (IR) only
Palm V, Vx	IR only
Palm VII, VIIx	IR only
Palm m100 series with Palm Bluetooth SDI/O card	IR and Bluetooth
Palm m500 series with Palm Bluetooth SDI/O card	IR and Bluetooth
Palm i700 series	IR and Bluetooth
HandSpring Visor	IR only
HandSpring Visor Deluxe	IR only
HandSpring Visor Prism	IR only
HandSpring Visor Platinum	IR only
IBM WorkPad Companion	IR only
IBM WorkPad C3 PC Companion	IR only
Sony Clie Series	IR only

printing requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

In addition, the Palm OS® PDA will need:

- A Bluetooth Secure Digital Input/Output (SDI/O) expansion card and software. Visit Palm's website at www.palm.com for more information.

- (Optional) BtPrint™ Pro. Find BtPrint Pro on the Starter CD that came with the printer, or visit the IS/Complete website at www.iscomplete.com. Also visit www.btprint.com.



If your Palm OS PDA is not Bluetooth-enabled, or if you do not have a Bluetooth card, you can print using infrared (IR).

BtPrint Pro will install infrared printing for Palm OS 3.0, and Bluetooth and infrared printing for OS 4.0 or later.

- (Optional) Documents To Go®. Find Documents To Go on the CD that came with your Palm OS PDA, or visit the DataViz® website at www.dataviz.com.

printing instructions

Follow these instructions when using a Palm OS PDA:

1. [install a Bluetooth SDI/O expansion card](#)
2. [print a document](#)
 - Print unformatted documents in the Date Book, Address, To Do List, and Memo Pad options using the [send file](#) method.
 - Print formatted documents in the Date Book, Address, To Do List, Memo Pad, and Mail options using the [\(optional\) BtPrint Pro](#).
 - View and edit formatted Microsoft® Word and Excel documents using [\(optional\) Documents To Go](#). Print the documents using DocToPrint, which is included with BtPrint Pro.

install a Bluetooth SDI/O expansion card

Warning: You must install the software files before inserting the Bluetooth card in the Palm OS PDA. Otherwise, the card will not function properly.

To install a Bluetooth SDI/O card:

1. Verify that the Bluetooth SDI/O card software has been installed on your computer.
2. Place the Palm OS PDA in its cradle.
3. Verify that the HotSync[®] Manager is running on your computer.



To start the HotSync Manager, click **Start > Programs > Palm Desktop > HotSync Manager**.

4. Press the HotSync button on the base of the cradle.

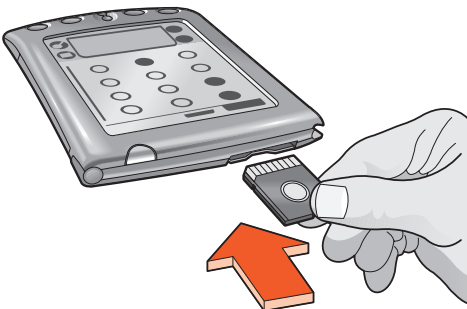


If this is the first time you are performing a HotSync operation, a new user dialog box appears. Enter a user name and click **OK**.

The HotSync operation starts. A message appears on the PDA indicating that it is connecting to the computer.

A message appears on the PDA after the HotSync operation is complete.

5. Insert the SDI/O card into the expansion slot of the Palm OS PDA.



print a document

Print a document using one of the following methods:

- [send file](#)
- [\(optional\) BtPrint Pro](#)

send file

Sending is a Bluetooth wireless communication method that is included as part of Palm OS 4.0. The printed output is unformatted.

To send an item to print:

1. Tap the **Home** icon until the Main menu appears.
2. Tap one of the following options:
 - Address
 - Memo Pad
 - Date Book
 - To Do List

The screen for the selected program appears.

3. Select an item to print.
4. Tap the **Menu** icon.
5. Tap **Send**.

The Palm OS PDA searches for and then displays a list of available Bluetooth devices.
6. Tap the check box next to the printer's Bluetooth device name, and then tap **OK**.
7. If you are prompted to enter a PIN code, enter the printer's PIN code and tap **OK**.

The default PIN code is 0.

The Palm OS PDA connects to the printer and the file prints.

(optional) BtPrint Pro

BtPrint Pro is a print utility for printing from your Palm OS PDA to the printer via the printer's Bluetooth or infrared port. It enhances the formatting for documents printed from the Address, Memo Pad, To Do List, Date Book, and Mail options.

BtPrint Pro also includes the DocToPrint utility. You can view and edit formatted Microsoft Word and Excel documents using [\(optional\) Documents To Go](#), and then use DocToPrint to print them.

installing

1. Insert the Starter CD that came with the printer into the CD-ROM drive.
2. Click the **Additional Software** button on the CD browser menu, and then select **BtPrint Pro**.
3. If you are redirected to a website, download the software from the website.
Otherwise, you will be directed to a folder on the CD. Select the appropriate language, open the folder, and then copy the files to your hard disk.
4. Install BtPrint Pro on your computer.
5. Verify that the Palm OS PDA cradle is attached to your computer, and then place the PDA in its cradle.
6. Verify that the HotSync Manager is running on your computer.



To start the HotSync Manager, click **Start > Programs > Palm Desktop > HotSync Manager**.

7. Press the HotSync button on the base of the cradle.



If this is the first time you are performing a HotSync operation, a new user dialog box appears. Enter a user name and click **OK**.

The HotSync operation starts. A message appears on the PDA indicating that it is connecting to the computer.

A message appears on the PDA after the HotSync operation is complete.

printing

1. Tap the **Home** icon until the **All** menu appears.



2. Tap the **BtPrint Pro** icon.
The BtPrint Pro screen appears.



3. Tap the **Advanced** icon to switch between **Infrared** or **Bluetooth**.



4. Tap the **BTDiscover** icon. Device discovery starts automatically. The discovery results are shown. Select the printer that you wish to use.
5. Tap the icon of the BtPrint Pro application that you wish to use:
 - Date Book
 - Address
 - To Do List
 - Memo Pad
 - Mail

The screen for the selected program appears.

6. Select the category or view for the program.
7. Tap the drop-down menu, and then tap **BtPrint Pro**. If you are printing the To Do List, tap **Today**, **Tomorrow**, or **All** to select the records to print. The BtPrint Pro Setup screen appears.



If the BtPrint Pro command does not appear in the menu, BtPrint Pro does not support the selected category or view.

8. Select the appropriate options:
 - **Copies**: number of pages to be printed
 - **Paper Size**: appropriate paper size

9. Select one of the following print options:
 - If you have selected a default printer, tap **OK** and proceed to step 11. For more information on selecting a default printer, see [\(optional\) choose default printer](#) on page 30.
 - To select a Bluetooth printer, tap **Select Printer**. The Palm OS PDA searches for Bluetooth devices. When the list of available devices is displayed, proceed to step 10.
 - To cancel printing, tap **Cancel** to exit the printing function.
10. Tap the check box next to the printer's Bluetooth device name, and then tap **OK**.
11. If you are prompted to enter a [PIN code](#), enter the printer's PIN code and tap **OK**.

The default PIN code is 0.

The Palm OS PDA connects to the printer and the file prints.

(optional) choose default printer

You can select a default printer to use for all your printing.

To select the hp deskjet 450 printer as the default printer:

1. Tap **BiPrint Pro**.
2. Tap **BTDiscover**.

The Palm OS PDA searches for Bluetooth-enabled printers within 30 feet (10 meters).
3. Tap **Find More**.
4. Tap **hp deskjet 450**.
5. Tap **OK**.

(optional) Documents To Go

Documents To Go enables you to view and edit Microsoft Word and Excel files with complete formatting, including color, bold, italic, underline, bullets, outlines, and tables. It is included on the Palm OS PDA installation CD in the Bonus Software section. Print the documents using DocToPrint, which is included with [\(optional\) BtPrint Pro](#).

installing

Install Documents To Go from the CD that originally came with your Palm OS PDA, or visit the DataViz website at www.dataviz.com for more information.

To install BtPrint Pro, see [\(optional\) BtPrint Pro](#).

printing

1. Tap the **Home** icon until the **All** menu appears.
2. Tap the **BtPrint Pro** icon.
3. Tap the **DocToPrint** icon.
The DocToPrint screen appears.
4. Tap the arrow next to Document Type to select one of the following options:
 - All Types
 - DocFile
 - Sheet To Go
 - Word To Go

The screen for the selected document type appears, displaying a list of applications that can be printed.

5. Select a file and tap **Print**.
6. Select one of the following options:
 - If you have selected a default printer, tap **OK** and then proceed to step 8. For more information on selecting a default printer, see [\(optional\) choose default printer](#) on page 30.
 - To select a Bluetooth printer, tap **Select Printer**. The Palm OS PDA searches for Bluetooth devices. When the list of available devices is displayed, proceed to step 8.
 - To cancel printing, tap **Cancel** to exit the printing function.

7. Tap the printer's Bluetooth device name to select it, and then tap **OK**.
The BtPrint Pro screen appears.
8. Select the appropriate print options and tap **OK** to print the document.
The Palm OS PDA connects to the printer and the file prints.

mobile phone printing

If your mobile phone is equipped with Bluetooth or infrared technology, you can establish a wireless connection with the printer to send a print job.

printing requirements

You need to insert a Bluetooth CompactFlash card into the printer before you can establish a Bluetooth wireless connection with the printer to send a print job. The recommended card for use with the printer is the Anycom CF-2001 Bluetooth card. Visit www.anycom.com/dj450 for more information.

printing instructions

1. Discover the printer.
2. Send an item on the phone to print.

Refer to your phone's documentation to find out which items on the phone can be printed and how to print.

digital camera printing

If your digital camera uses a Type I CompactFlash (CF) card, you can insert the card into the printer to print your photos.

Your camera must support DPOF (Digital Print Order Format) version 1 or 1.1 in order to print directly from the CF card. Review your digital camera's documentation to see if it supports DPOF files.

printing instructions

When you take pictures using your digital camera, they are stored as image files in the CF card.

1. Set DPOF for the images you wish to print. Refer to your digital camera's documentation for details.
2. Remove the CF card from the digital camera and insert it into the CF card slot at the back of the printer.



Your printer should be turned on before you insert the CF card. The Resume LED on the printer's control panel will blink if it detects DPOF images in the CF card.

3. Press the **Resume** button to print the DPOF images, or press the **Cancel** button if you decide not to print.

When you press the **Resume** button, the printer will process the images. This may take some time, about 60 seconds on average, and the printer will appear idle before it starts printing.

troubleshooting

This section covers Bluetooth wireless printing only. For other troubleshooting material, see the onscreen *User's Guide* on the HP Deskjet 450 printer Starter CD.

Select the topic that best describes the problem you are having:

printer:

- [Bluetooth card LED is flashing, is on, or is off](#)
- [printer cannot be discovered](#)
- [more than one printer is discovered](#)
- [printer is discovered but will not print](#)

notebook:

- [print to file error message appears](#)

Bluetooth card LED is flashing, is on, or is off

This table explains the status of the green LED on the Anycom CF-2001 Bluetooth card:

LED of Anycom CF-2001 Bluetooth card is...	This means	What you should do
Flashing	The printer could be busy receiving data over a Bluetooth wireless connection. While the printer is busy, other devices may not be able to discover it.	Wait until the light stops flashing before trying to discover the printer.
On persistently	The Anycom CF-2001 Bluetooth card has encountered an error.	Remove the Bluetooth card, and then reinsert it. Alternatively, follow the steps on page 37.
Off	There is no Bluetooth communication.	Establish Bluetooth communication with active devices. See discovering the printer (Anycom CF-2001 Bluetooth card) on page 12.
	The printer may not be plugged in or turned on.	Ensure that the printer is plugged in and turned on.

printer cannot be discovered

Ensure the following, and then try to discover the printer again:

- The printer is plugged in.
- The Bluetooth LED is not on persistently.

If the printer cannot be discovered, try moving the sending device closer to the printer.

If the Bluetooth LED is flashing, is on, or is off, see [Bluetooth card LED is flashing, is on, or is off](#) on page 36.

printer is discovered but will not print

Ensure the following:

- Paper is in the printer.
- The print cartridges are not empty.
- There is no paper jam in the printer.

See the onscreen *User's Guide* on the HP Deskjet 450 Starter CD for more printer troubleshooting information.

If the printer will not print but no error appears, then ensure the following:

- The Bluetooth LED is not on persistently.
- The Bluetooth LED is not flashing.

If the Bluetooth LED is flashing, is on, or is off, see [Bluetooth card LED is flashing, is on, or is off](#) on page 36.

If the Bluetooth LED is on persistently, then follow these steps:

1. Press the **Power** button to turn off the printer.
2. Disconnect the power cord from the printer.
3. Reconnect the power cord to the printer.
4. Press the **Power** button to turn on the printer.
5. Try to print the document again.

If the printer will not print, then press and hold the **Power** button while tapping the **Cancel** (X) button 4 times to print a Configuration page. If the Bluetooth connectivity status indicates "not installed", then contact HP Customer Care. See *Customer Support* in the *HP Deskjet 450 Reference Guide*, or see the onscreen *User's Guide* on the Starter CD.

more than one printer is discovered

If two or more printers are within range, the sending device will display multiple printer icons.

Each printer icon displays the printer's Bluetooth device name (see page 43) or the model name appended by its serial number.

You can change the Bluetooth device name to a name that you can identify easily. See changing the printer's Bluetooth device name on page 48.

To find the Bluetooth device name of a specific printer:

1. Press and hold the **Power** button while tapping the **Cancel (X)** button 4 times to print a Configuration page.
2. Identify the Bluetooth device name as highlighted in the following example:

```
HP deskjet 450 Configuration Information

Default Page Settings
PCL Default Symbol Set: 341      PCL Default Orientation: 0
PCL Default VMI:1200           PCL Default Font Width:720
PCL Default Font Height:1200

Direct Printing
Printer Media Settings
Default Paper Type:0           Default Paper Size:2
Default Print Quality:0       Default Photo Size:11

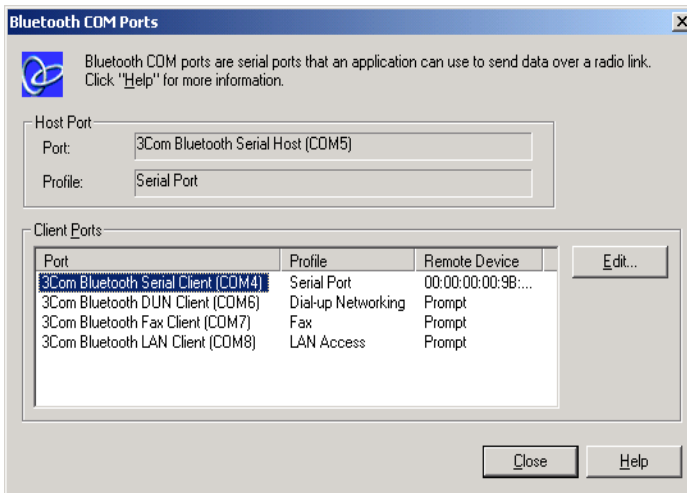
Bluetooth Connectivity:
BT Device Name: This is my printer.
Status: Not Installed
BT Device Address:
PIN :
Mode:
```

print to file error message appears

1. Click **Cancel** on the Print to File error message, and then close the application.
2. Start the appropriate application and print a document.

If the problem persists, follow these steps to locate the COM port number:

1. Click **Cancel** in the Print to File error message, and then close the application.
2. Click **Start > Programs > 3Com Mobile > Bluetooth Connection Manager**.
The Bluetooth Connection Manager opens.
3. Click **Tools > Com Port**.
The Bluetooth COM Ports dialog box appears.



4. Note the COM port number of the 3Com Bluetooth Serial Client port.
In the above example, it is COM4.
5. Click **Close**.

Follow these steps to select the appropriate printer and Bluetooth wireless port:

1. Click **Start > Settings > Printers**.
2. Right-click the **hp deskjet 450 printer** icon and select **Properties**.
3. Click the **Ports** tab.
4. Select the Bluetooth wireless port, click **Apply**, and then click **OK**.
5. Open an application, and then print a document.

If the problem persists, uninstall and reinstall the printer software:

1. Click **Cancel** in the Print to File error message, and then close the application.
2. Click **Start > Programs > hp deskjet 450 printer > hp deskjet 450 printer Uninstaller**.
3. Follow the onscreen instructions.
4. Insert the Starter CD that came with the printer into the computer's CD-ROM drive, and then reinstall the printer software.

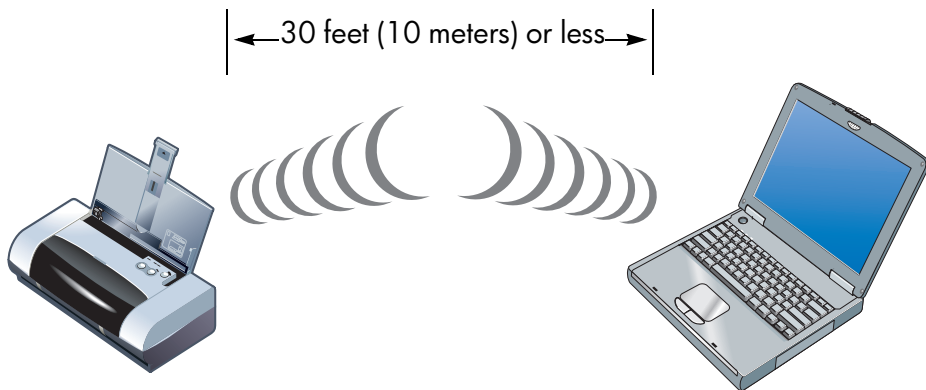
the printer's Bluetooth wireless feature

This section explains some basic elements of the printer's Bluetooth wireless feature.

Bluetooth wireless basics

30 feet (10 meters) or less

Bluetooth wireless technology allows devices, such as printers and notebooks, to communicate over short distances of up to 30 feet (10 meters) or less using radio waves in the 2.4 GHz spectrum.



To be Bluetooth-enabled, a device must have a Bluetooth wireless radio module. The HP Deskjet 450 printer has an optional Bluetooth CompactFlash card accessory.

Unlike infrared communication, Bluetooth wireless technology does not require a direct line of sight between the sending device and the receiving device.

one device at a time

The Bluetooth CompactFlash card can only establish a Bluetooth wireless connection with one device at a time.

If the printer is busy with a Bluetooth wireless connection, the Bluetooth LED flashes. The printer ignores any other device that tries to establish a connection. The device must wait until the original connection is closed before it can establish a new connection.

Bluetooth discovery

Discovery is the process by which a Bluetooth-enabled device detects other Bluetooth-enabled devices that are within range.

When a device discovers the printer, it displays the printer's [Bluetooth device name](#) (see page 43) or the model name appended by its serial number.

The method of discovery varies according to the type of Bluetooth software used.

Configuration page

The Configuration page shows information you need when using the printer.

To print a Configuration page, press and hold the **Power** button while tapping the **Cancel (X)** button 4 times.

```
HP deskjet 450 Configuration Information

Default Page Settings
PCL Default Symbol Set: 341      PCL Default Orientation: 0
PCL Default VMI:1200           PCL Default Font Width:720
PCL Default Font Height:1200

Direct Printing
Printer Media Settings
Default Paper Type:0           Default Paper Size:2
Default Print Quality:0       Default Photo Size:11

Bluetooth Connectivity:
BT Device Name:      This is my printer.
Status: Not Installed
BT Device Address:
PIN :
Mode:
```

printer-specific Bluetooth information

Each hp deskjet 450 printer has the following items that are specific to the printer:

- [Bluetooth device name](#)
- [Bluetooth device address](#)
- [PIN code](#)

To see the Bluetooth-specific information for your printer, print a [Configuration page](#) (see page 42).

Bluetooth device name

When a device discovers the printer, it displays the printer's Bluetooth device name or the model name appended by its serial number.

The printer's default Bluetooth device name is: dj450/[serial number].

You can change the printer's Bluetooth device name by using the **Configure Bluetooth Settings** dialog box. See [changing wireless settings](#) on page 46.



The printer's Bluetooth device name appears in Bluetooth applications only. In the Windows Printers folder, the printer is identified as the hp deskjet 450 printer.

Bluetooth device address

Bluetooth devices exchange Bluetooth device addresses when they interact. You cannot change the printer's Bluetooth device address.

PIN code

When the printer is set to [encryption required](#) (see page 44), devices attempting to use the printer are prompted for a PIN code.

The default PIN code is **0**. You can change the PIN code by using the **Configure Bluetooth Settings** dialog box. See [changing wireless settings](#) on page 46.

access modes

Access modes determine the level of access that Bluetooth-enabled devices have to the printer.

The printer has four access modes:

- [public mode](#)
- [private mode](#)
- [turn off Bluetooth](#)
- [encryption required](#)

To set the access mode for the printer, use the **Configure Bluetooth Settings** dialog box. See [changing wireless settings](#) on page 46.

public mode

When the printer is in Public Mode:

- Any Bluetooth-enabled device within range can discover the printer.

private mode

When the printer is in Private Mode:

- Only devices that have stored its Bluetooth device address can discover it.
- The Bluetooth LED light is off when the printer is idle.

turn off Bluetooth

When the printer's Bluetooth feature is turned off:

- The printer cannot be discovered by other Bluetooth-enabled devices.

encryption required

The printer can be set to require encryption when it receives data over a Bluetooth wireless connection.

When the Encryption Required option is selected, the printer requires that:

- All data sent over a Bluetooth wireless connection be encrypted.
- All users enter a [PIN code](#) (see page 43) the first time they print.

changing the printer's Bluetooth wireless feature

USB or LPT cable and printer driver required

To change the printer's wireless settings, you must have the following:

- A notebook or desktop that is connected to the printer with a USB cable.
- The printer driver that has been installed to a USB port.

A USB cable is not required for Bluetooth printing.

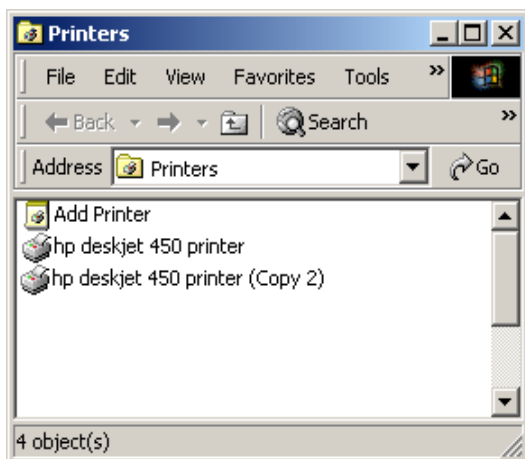
USB driver installation

To install a USB printer driver:

1. Insert the Starter CD into the computer's CD-ROM drive.
2. Follow the onscreen instructions.

To verify that the USB printer driver has been installed:

1. Click **Start > Settings > Printers**.
The Printers window appears.
2. Verify that two versions of the printer driver appear. One version is set to Bluetooth wireless printing. The other version, hp deskjet 450 printer (Copy 2), is set to the USB port.



changing wireless settings

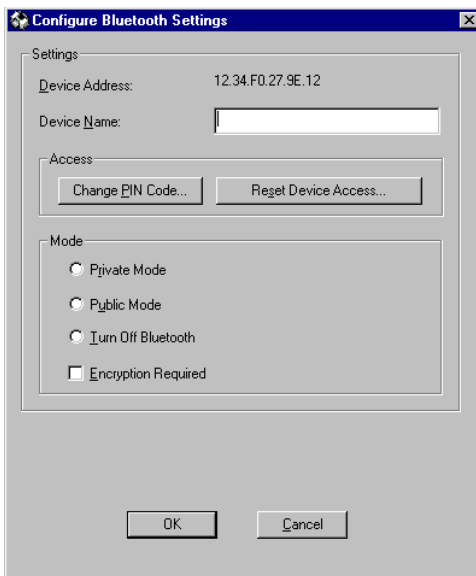
To change the printer's wireless settings, you must connect the printer to your computer with a USB cable.

1. Click **Start** > **Programs** > **hp deskjet 450 printer** > **hp deskjet 450 printer Toolbox**.

The hp deskjet 450 printer Toolbox appears.

2. Click the **Printer Services** tab.
3. Click the **Configure Bluetooth Settings** button.

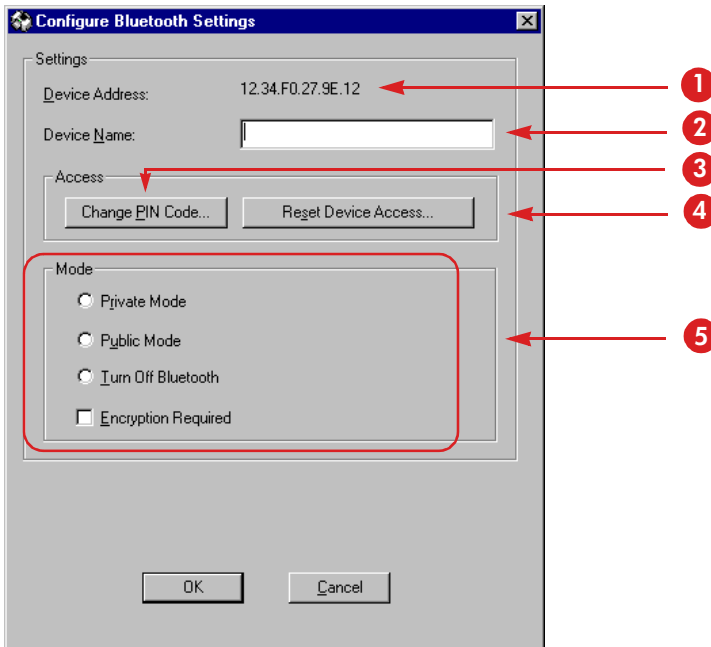
The Configure Bluetooth Settings dialog box appears.



4. Select the desired Bluetooth wireless options.
For a description of the Configure Bluetooth Settings dialog box, see [using the Configure Bluetooth Settings dialog box](#) on page 47.
5. After you have selected the desired options, click **OK**.
A warning dialog box appears.
6. Click **OK** to close the warning dialog box.
7. On the Toolbox, click the **Printer Services** tab and select the hp deskjet 450 Bluetooth driver in the drop-down box.
8. Click **Exit** to close the Toolbox, and then disconnect the USB cable from the printer and the computer.

using the Configure Bluetooth Settings dialog box

Use the Configure Bluetooth Settings dialog box to set the following options:



1. **Device Address:** Address by which Bluetooth devices identify the printer.
2. **Device Name:** Use for [changing the printer's Bluetooth device name](#) (see page 48).
3. **Change PIN Code:** Click for [changing the printer's PIN code](#) (see page 49).
4. **Reset Device Access:** Click for [resetting device access](#) (see page 50) from the printer's memory.
5. **Mode:** Set the [access modes](#) (see page 44):
 - **Private Mode:** The printer can be discovered only by devices that have stored its Bluetooth device address.
 - **Public Mode:** The printer can be discovered by all Bluetooth-enabled devices.
 - **Turn Off Bluetooth:** Disable Bluetooth wireless printing.
 - **Encryption Required:** When checked, all data sent to the printer is encrypted.

changing the printer's Bluetooth device name

When a Bluetooth device (such as a notebook) discovers the printer, the device identifies the printer to the user by its Bluetooth device name.

The printer ships with a default printer name. To change the printer's name, you must connect the printer to your computer with a USB cable.

1. Click **Start > Programs > hp deskjet 450 printer > hp deskjet 450 printer Toolbox**.

The hp deskjet 450 printer Toolbox appears.

2. Click the **Printer Services** tab.

3. Click the **Configure Bluetooth Settings** button.

The Configure Bluetooth Settings dialog box appears.

4. Enter a new printer name of up to 60 characters in the **Printer Name** box.

5. Click **OK**.



To restore the printer's default Bluetooth device name, follow the steps above and make the **Printer Name** box blank.

changing the printer's PIN code

When the Encryption Required check box is selected, all devices attempting to use the printer are prompted for a PIN code.

To set the PIN code, you must connect the printer to your computer with a USB cable.

1. Click **Start > Programs > hp deskjet 450 printer > hp deskjet 450 printer Toolbox**.

The hp deskjet 450 printer Toolbox appears.

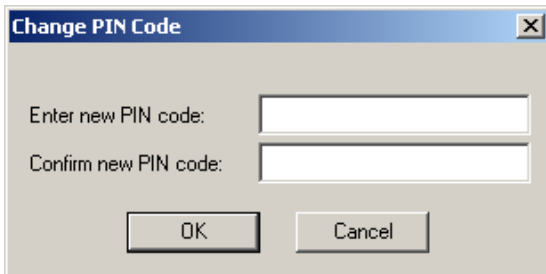
2. Click the **Printer Services** tab.

3. Click the **Configure Bluetooth Settings** button.

The Configure Bluetooth Settings dialog box appears.

4. Click the **Change PIN Code** button.

The Change PIN Code dialog box appears.



5. Enter the new PIN Code.

The default PIN Code is 0.

6. Re-enter the new PIN code.

7. Click **OK**.

The PIN code is changed.

resetting device access

To clear all devices from the printer's memory, you must connect the printer to your computer with a USB cable.

1. Click **Start > Programs > hp deskjet 450 printer > hp deskjet 450 printer Toolbox**.
The hp deskjet 450 printer Toolbox appears.
2. Click the **Printer Services** tab.
3. Click the **Configure Bluetooth Settings** button.
The Configure Bluetooth Settings dialog box appears.
4. Click the **Reset Device Access** button.
A warning dialog box appears.
5. Click **OK** to close the warning dialog box.
All devices are removed from the printer's memory.

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