

DRAFT

**HP bt400 Bluetooth® Wireless Printer
Adapter**

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Publication Number: Q6399–90101

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Note Regulatory information can be found in the Technical Information section and the back section of this user guide.

Contents

1	Welcome to the HP bt400	3
	Bluetooth basics	3
	Installation and setup	4
	Bluetooth access modes	5
2	Print from your Bluetooth device	9
	General printing	9
	Camera phone	9
	PDA	10
	Camera	11
	Computer	11
3	Troubleshooting	13
4	Technical information	17
	Technical specifications	17
	Limited warranty statement	18
	Customer care	19
	Protecting the environment	19
	Regulatory Information	19
	Notice to users in the European Economic Area	20

1 Welcome to the HP bt400

The HP bt400 wireless printer adapter uses Bluetooth wireless technology to allow you to print without using a cable. In general, Bluetooth wireless technology is a short-range wireless technology that allows connection between devices without requiring a cable. By using your HP bt400, you can print from your camera phone, PDA, digital camera, or computer to selected HP printers and all in ones.

Note Check the documentation for your printer to verify the devices you can use to print to it.

Tip Check www.hp.com/go/bluetooth for a current list of supported printers and other valuable information concerning your Bluetooth adapter.

Bluetooth basics

The following concepts will help you use your HP bt400 with your particular printer.

Generally, the sending device (camera, PDA, computer, etc.) sends a signal and discovers the nearby Bluetooth printing devices and displays their Bluetooth device names. Then, you simply print or send to that printer name.

Tip For most devices, the default settings will allow you to print without making any changes. However, a Bluetooth device may be set to be visible or invisible and may have security settings established. If you have difficulty printing to your printer, consult *Bluetooth access modes* on page 5.

Bluetooth device name

When a sending device discovers the printer, it displays the printer's Bluetooth device name. The printer's default Bluetooth device name can be found and changed in the printer's Bluetooth control panel menu.

Installation and setup

Follow these instructions to install and set up your HP bt400. More detailed setup instructions can be found in the user guide for your printer.

Installing the HP bt400

1. Locate the host USB port on your printer or all-in-one. It will usually be located in the front and is shaped like the USB port on your computer. It may be called a camera or Pictbridge port on your printer.



2. Remove the cap from the HP bt400 and insert it into the port.



LED behavior

The LED on the HP bt400 tells you what is going on.

- **Blinking**—This is the default state and means the device is installed and has power.
- **Rapid blinking**—A sending device is “Discovering” the HP bt400.
- **On steady**—The HP bt400 is receiving data.

Bluetooth access modes

Access modes determine how easily a Bluetooth sending device can print to a printer. The access modes are defined by the following settings:

- Accessibility
- Security level

Accessibility mode

There are two available Accessibility modes for your printer. Follow the instructions in your device user guide to change the Accessibility mode.

- **Visible to all (public/shown to all) (default)**

When the printer's Accessibility setting is set to "Visible to all", any Bluetooth device within range can discover and use the printer. This is the default setting for your HP device.

- **Not visible (private/hidden)**

When the Accessibility setting is set to "Not visible", only sending devices that have stored the printer's Bluetooth device address can discover and use the printer.

Bluetooth device address

Bluetooth devices have a unique device address that cannot be changed.

The following are general instructions for finding your printer or all-in-one's Bluetooth device address. Consult the documentation for your printer or all-in-one for specific instructions.

1. Access the control panel menu and select the **Bluetooth** option.
2. Select **Device address** and press OK to display the Bluetooth adapter device address.

Security level

- **Low (default)**

When the printer's security level is set to "Low", the printer does not require a Passkey code. Any Bluetooth device may print to it.

- **High**

When the printer's security level is set to "High", you must enter the Passkey code in the sending device in order to print.

Passkey/PIN code

When the printer's Bluetooth security level is set to High, the sending device attempting to print is prompted for a Passkey. The Passkey is a 4-digit code that is set on the printer. The default Passkey is 0000.

The following are general instructions for finding your printer or all-in-one's Bluetooth passkey. Consult the documentation for your printer or all-in-one for specific instructions.

1. Access the control panel menu and select the **Bluetooth** option.
2. Select **Passkey** and press OK to display the printer's Passkey.

You can also change the Passkey from this menu.

2 Print from your Bluetooth device

This chapter contains sections on printing from different Bluetooth devices.

General printing

1. From your sending device, start the Discovery of available Bluetooth printers.
2. Select the printer and enter the Passkey if prompted.

Note Secure printing may require you to know the Passkey of your printer. Refer to *Passkey/PIN code* on page 7.

3. Print.

Camera phone

These are general instructions. Refer to the documentation for your camera phone for detailed instructions.

There are two techniques for printing from your camera phone—from the imaging software or from a printing application.

Follow these instructions to print from the imaging or camera software.

1. From the imaging application, select **Send via Bluetooth**.
2. The phone searches for Bluetooth devices. Select the printer you want to use.
3. If you are prompted for a Passkey, enter it.

The following method can be used if your camera phone has a printing application. Check your software CD or phone manufacturer's website for the latest software.

1. Press the **Menu** button.
2. Select the **Print** application.
3. Select the item to print.
4. Either select **Find Printer** or **Accept** the printer selected.

PDA

These are general instructions that apply to both Pocket PCs and Palm OS devices. Refer to the documentation for your PDA for detailed instructions.

1. From the application you want to use, select **Send** or **Print**.
2. A list of Bluetooth devices displays. Select the printing device you want to use.
3. If you are prompted to enter a Passkey, enter the printer's Passkey then tap **OK**.

If you have a Pocket PC with the HP Image Zone, use one of the following methods to print.

1. Tap **HP Image Zone**.
2. Select the image you want to print.
3. Tap **File**, then **Print**.
4. Select the printer you want to use and tap **Print**.

or

1. Tap the printer icon in the lower right corner of the screen.
2. Select **Mobile Printing**.
3. Select the printer you want to use and tap **Print**.

Note If the printer you want to use does not display, tap **Configure** to add a printer. Consult your Pocket PC documentation for directions.

Camera

Cameras vary a great deal. Refer to the documentation for your camera for instructions.

Computer

The method for printing from a computer depends on the Profile that your computer supports and the Bluetooth stack that is installed.

Check your computer documentation to verify supported profiles and for detailed instructions. These instructions are for Windows computers.

You must install the printer software driver on your computer before attempting to print using Bluetooth.

Note If your computer does not support either of these methods, consult your computer documentation for help printing with Bluetooth.

This procedure is for the HP or Widcomm stack.

1. Click the **My Bluetooth Places** icon on your desktop or in the Task Bar.
2. Click **Search for devices in range**.
3. Once the available printers are discovered, double-click the printer name.
4. Print to this printer name as you would any printer.

This procedure is for the Microsoft stack.

1. Go to **Start**, **Settings**, then **Printers** or **Start**, then **Printers and Faxes**.

2. Select **Add Printer**.
3. Click **Next**.
4. Select **A Wireless Printer**.
5. Follow the directions on the screen to finish the installation.

Note You may need to select a Bluetooth port.

6. Print to this printer name as you would any printer.

3 Troubleshooting

Tip Many issues you do not find mentioned here may be resolved by unplugging the adapter, turning the printer off, then on, and plugging the adapter back into the printer.

Bluetooth sending device cannot find printer

The HP bt400 is not plugged into the printer or the printer is turned off.	1. Turn on the printer. 2. Plug the adapter into the camera/Pictbridge/ host USB port on the printer. In many cases, this port will be on the front of the printer. 3. Verify that the LED on the HP bt400 is blinking.
Accessibility is set to "Not Visible".	1. Select Bluetooth from the printer's menu. 2. Select Accessibility. 3. Select Visible to All.
Security level is set to "High".	1. Select Bluetooth from the printer's menu. 2. Select Security Level. 3. Select Low.
Printer is too far away.	Move closer to the printer until contact is established.
The Device Name has been changed.	If the printer's device name has changed, you must Discover the printer again to select the new name.

No page came out or blank page is ejected

File type is not supported by the profile or the printer. For example, some profiles do not support gif, or you may have accidentally tried to send an audio file to your printer.	Verify that you are sending the correct file type to the printer.
Printer is out of range.	Move closer to the printer until contact is established.
Interference from a microwave or other device.	Try printing again after the other device is finished.
Too many active Bluetooth devices.	Only seven Bluetooth devices can be active at one time. You must turn something else off.
File is too large.	The file may be too large for the memory in your device. Modify the file to reduce its size.

Print quality is poor

Photo was taken in low resolution.	Change the setting in your camera to take pictures with the highest quality. Note VGA resolution (640 by 480) cameras may not produce a high-quality photo even at their highest resolution.
Print cartridge needs replacing.	Consult your printer documentation for information on checking and replacing print cartridges.

Plain paper is in the printer.	For the best print quality, use photo paper and a photo print cartridge. Consult your printer documentation for information.
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Photo printed with white borders

Bluetooth sending device does not support borderless printing.	Contact the device vendor or consult their website for the latest updates for the printing application.
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4 Technical information

Technical specifications

General • Bluetooth Specification 2.0 compliant • Power Requirement: Provided by the host • Power Consumption at 5V – 1mA at standby – 7mA at idle – 65mA (typical) at point-point operation – 75mA (max) at operation	Antenna • Internal Antenna • Peak Gain: +2dBi • VSWR: <2.0 : 1 • Polarization: Linear Temperature • Operating temperature: -10° to 85°C • Storage temperature: -40° C to 150°C Interface • Standard USB male Type A connector Profiles supported • OBEX • HCRP • BIP • SPP • BPP
Radio • Frequency Range: 2.402 -2.480GHz • Transmit Power (Tx): 2dBm (typical) • Receive Sensitivity (Rx): Better than -80dBm @ 0.1% BER • Range: Up to 30M	

Limited warranty statement

HP product	Duration of limited warranty
HP bt400 Bluetooth® printer adapter	90 days

A. extent of limited warranty

Hewlett-Packard (HP) warrants to the end-user customer that the HP products specified above will be free from defects in materials and workmanship for the duration specified above, which duration begins on the date of purchase by the customer. Customer is responsible for maintaining proof of date of purchase.

B. limitations of warranty

No other express warranty is given. The replacement of a product is your exclusive remedy. ANY OTHER IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS IS LIMITED TO THE 90 DAYS DURATION OF THIS WRITTEN WARRANTY. Some states, provinces, or countries/regions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. IN NO EVENT SHALL HEWLETT-PACKARD COMPANY BE LIABLE FOR CONSEQUENTIAL DAMAGES. Some states, provinces, or countries/regions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. Products are sold on the basis of specification application at the time of manufacture. Hewlett-Packard shall have no obligation to modify or update products, once sold.

Customer care

For assistance, call 1-800-HP-INVENT (North America only) or go to the Customer Care website at **www.hp.com/support**.

Protecting the environment

Hewlett-Packard is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

For more information, visit HP's Commitment to the Environment website at:

www.hp.com/hpinfo/globalcitizenship/environment/index.html

Regulatory Information

This section contains regulatory information. More regulatory information can be found before the back cover of this user guide.

Exposure to Radio Frequency Radiation

The radiated output power of the HP bt400 Bluetooth wireless radio Class 2 is far below the FCC, Industry Canada and European Union radio frequency exposure limits. Nevertheless, the wireless radio shall be used in such a manner that the potential for human contact during normal operation is minimized. The internal wireless radio operates within guidelines found in radio frequency safety standards and recommendations, which reflect the consensus of the scientific community.

The level of emitted energy emitted is far less than the electromagnetic energy emitted by wireless devices such as mobile phones. However, the use of wireless radios may be restricted in some situations or environments, such as aboard airplanes. If you are unsure of restrictions, you are encouraged to ask for authorization before turning on the wireless radio. The FCC, Industry Canada and European Union have set a general guideline of 20 cm (8 inches) from the body when wireless devices are on.

European Radio Approval Information

The HP bt400 is a low power, wireless communication devices, operating in the 2.4 GHz band, intended for home or office use. The power output of this device is well below the RF exposure limits as set by the European Commission through the R&TTE directive.

The HP bt400 can be operated in the following European Union and European Economic Area countries:

Austria, Belgium Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Notice to users in the European Economic Area



This product is designed to be connected to the analog Switched Telecommunication Networks (PSTN) of the European Economic Area (EEA) countries/regions.

Network compatibility depends on customer selected settings, which must be reset to use the equipment on a telephone network in a country/region other than where the product was purchased. Contact the vendor or Hewlett-Packard Company if additional product support is necessary.

This equipment has been certified by the manufacturer in accordance with Directive 1999/5/EC (annex II) for Pan-European single-terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance.

This equipment is designed for DTMF tone dialing and loop disconnect dialing. In the unlikely event of problems with loop disconnect dialing, it is recommended to use this equipment only with the DTMF tone dial setting.

FCC Part 15 Radio Frequency Interference Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Note 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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. 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 is encouraged to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet that is on a circuit different from the receiver.

- Consult the dealer or an experienced radio/TV technician for help.



Caution Pursuant to Part 15.21 of the FCC

Rules for intentional or unintentional radiators, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada ICES-003 Emission Compliance Statement

This Class B digital apparatus meets the requirement of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du règlement sur le matériel brouiller du Canada.