



Bluetooth Interface Unit

Operating Instructions

-
- 1 Printing with Bluetooth Connection
 - 2 Product Information

TABLE OF CONTENTS

- Printing with Bluetooth Connection.....2
 - Install.....2
 - Confirming the Status and Settings Using the telnet Commands.....5
 - Troubleshooting.....7
- Product Information.....9
 - Specifications for Bluetooth Unit.....9
 - Trademarks.....9
- INDEX**..... 11

Printing with Bluetooth Connection

Install

Important

- The Bluetooth unit and the optional wireless LAN unit cannot be used simultaneously.

Supported profiles and restrictions

Supported Profiles

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

Restrictions on SPP, HCRP

- A maximum of two Bluetooth adaptor or Bluetooth-equipped computers can be connected at the same time using the Bluetooth interface: one by SPP, one by HCRP.
- When connecting more than one Bluetooth adaptor or Bluetooth-equipped computer at the same time, the first device that establishes connection is selected. When selecting the connection between the other devices, cancel the first established connection.
- SPP connection does not support bidirectional communications.
- HCRP connection supports bidirectional communications.
- Depending on the machine, additional printer option may be required to use SPP, HCRP. To see if your machine requires additional printer option, see the manual provided with the machine.

Restrictions on BIP

- PostScript 3 must be installed on the printer to connect via BIP. For information about PostScript 3, see the manual provided with the printer.
- Only one Bluetooth adaptor or Bluetooth-equipped computer can be connected via BIP.
- Only JPEG images can be printed using BIP.
- User codes are disabled for BIP.
- You cannot print if print functions are restricted.
- Some printers do not support BIP.

Instructions in this manual relate to printing via HCRP. To print using SPP or BIP, see the Help supplied with the Bluetooth adaptor you want to use, or the Microsoft Web site.

Adding a Bluetooth Printer

The following procedures explain how to install a Bluetooth printer on a computer that is running Windows XP or Windows Vista.

If your computer is running SP1 or an earlier version of Windows XP, there are additional applications that you must install. For details about these, see the Help supplied with your Bluetooth device.

Important

- To perform a printer installation, your account must have **Manage Printers** permission. Log on as an **Administrators** or **Power Users** group member.
- To connect to a Bluetooth printer, your computer must have a Bluetooth device installed. Make sure a Bluetooth device is installed on your computer.

Windows XP

1. On the [Start] menu, click [Printers and Faxes].

The [Printers and Faxes] window appears.

2. Click [Add a printer].

The [Add Printer Wizard] window opens.

3. Click [Next >].

4. Click [Bluetooth Printer], and then click [Next >].

The computer begins searching for available Bluetooth printers.

If a new printer is discovered, the [Found New Hardware Wizard] window appears. To ignore a discovered device and continue searching, click [Cancel]. The computer resumes searching for other available Bluetooth printers.

5. Click [No, I will not connect], and then click [Next >].

6. Click [Install from a list or specific location (Advanced)], and then click [Next >].

7. Insert the CD-ROM provided with this machine into your computer's CD-ROM drive, select the [Search removable media (floppy, CD-ROM...)] check box, and then click [Next >].

8. If the [Hardware Installation] window appears, click [Continue].

9. If the installation was successful, click [Finish].

10. Select [Test Print], and then click [Next >].

11. Click [Finish].

Note

- Actual Bluetooth printer operations will vary according to your Bluetooth device and/or Bluetooth-installed computer. For details, see the Help supplied with your Bluetooth device and/or Bluetooth-equipped computer.
- After printing the test page, check it, and then click [Close] to close the window.

-
- If there is a problem with the test page, click [Troubleshooting] in the test print window.

Windows Vista

1. On the [Start] menu, click [Control Panel].
2. In the "Hardware and Sound" area, click [Printers].
3. In the top part of the window, click [Add a printer].
4. In the [Add Printer] window, select [Add a network, wireless or Bluetooth printer], and then click [Next].

The computer begins searching for available Bluetooth devices.

5. From the list of discovered devices, select the printer you want to use, and then click [Next >].

All discovered wireless printers appear in the list of discovered printers, not only Bluetooth printers.

Make sure the printer you select is a Bluetooth printer.

6. Insert the CD-ROM provided with this machine into your computer's CD-ROM drive, and then click [Browse my computer for driver software (advanced)] on the [Found New Hardware] display.
7. In the [Found New Hardware] window, select the printer driver you want to use, and then click [Next].

The printer driver installation starts.

8. If the [Windows Security] window appears, click [Install this driver software anyway].
9. Click [Close].
10. If you want to change the printer name, enter the new name in the [Printer Name Settings] window.
11. If you want to print a test page, click [Printing Test Page] on the "Test Print" page.
Otherwise, click [Finish].

↓ Note

- If you print the test page, after checking it, click [Close] to close the test print window.
- If there is a problem with the test page, click [Troubleshooting Printer Problems] in the test print window.

Windows 7

1. On the [Start] menu, click [Devices and Printers].
2. Click [Add a printer].
3. Click [Add a network, wireless or Bluetooth printer].

The computer begins searching for available Bluetooth devices.

4. From the list of discovered devices, select the printer you want to use, and then click [Next].

-
5. If you want to change the printer name, enter the new name in the [Printer Name:], and then click [Next].
 6. To share the printer, configure the necessary settings, and then click [Next].
 7. If you want to print a test page, click [Print a test page] on the "Test Print" page.
Otherwise, click [Finish].

↓ Note

- If you print the test page, after checking it, click [Close] to close the test print window.
- If there is a problem with the test page, click [Get help with printing] in the test print window.

Confirming the Status and Settings Using the telnet Commands

You can view the Bluetooth related settings and status using the telnet commands.

btconfig

Use the "btconfig" command to make Bluetooth settings.

View settings

Bluetooth settings are displayed.

```
msh> btconfig
```

Mode settings

You can set the Bluetooth operation mode to {private} or {public}.

```
msh> btconfig {private|public}
```

- The default is {public}.

set

Use the "set" command to set the protocol information display "active" or "inactive".

View settings

The following command displays protocol information (active/inactive).

```
msh> set bluetooth
```

Configuration

- Enter "up" enable protocol, and enter "down" to disable protocol.

You can set the protocol to "active" or "inactive".

```
msh> set bluetooth {up|down}
```

status

Use the "status" command to display the Bluetooth status.

Messages

```
msh> status
```

The Bluetooth unit status

```
Error: Wireless Card
```

Bluetooth unit is not inserted during start up, or the Bluetooth unit is taken out after start up.

show

Use the "show" command to display network interface board configuration settings.

View settings

```
msh> show
```

- If "-p" is added, you can view settings one by one.

The setting status display of the Bluetooth unit

Item	Description
Bluetooth	
Bluetooth mode	
SSDP	SSDP settings
UUID	
Profile	
TTL	

syslog

Use the syslog command to view the messages recorded as the system log information of the Bluetooth unit.

View message

```
msh> syslog
```

The Bluetooth unit messages

```
btd is disabled.
```

Communication via Bluetooth is unavailable because btd is disabled in the security mode.

Enable the btd in the security mode.

Troubleshooting

The following section provides the guides to resolve problems such as error messages appearing, documents not printed as desired, or printing not starting.

When error messages appear

Message	Causes	Solutions
"Cannot connect with the wireless card. Turn the main power switch off, then check the card."	<ul style="list-style-type: none">• The Bluetooth unit was connected while the device was turned on.• The Bluetooth unit was removed while the device was turned on.	<ul style="list-style-type: none">• Turn off the power of the printer, and then turn it on again.• Turn off the main power switch, and then check the Bluetooth unit. And then, turn on the main power switch again. <p>If the message appears again, contact your service representative.</p>
"Problems with the wireless card. Please call service."	The printer has detected a Bluetooth failure, or it could not detect a wireless card. It may be incorrectly installed.	Check that the Bluetooth unit is installed properly, or contact your sales or service representative.

Note

- The Bluetooth unit is referred to as "wireless card".

When documents cannot be printed as desired

Problem	Causes	Solutions
Printing using Bluetooth is slow.	Too many jobs have been sent.	Transmit fewer print jobs.

Problem	Causes	Solutions
Printing using Bluetooth is slow.	<ul style="list-style-type: none"> • Interference may occur with the wireless LAN interface board. Such interference may affect the transmission speed and other functions. • Transmissions between the client computer and the printer can be blocked by obstructions. • When you use a Bluetooth connection, print jobs are transmitted relatively slowly. 	<ul style="list-style-type: none"> • Make sure no wireless LAN or other Bluetooth devices are in use. • Move the printer or client computer if necessary.

When printing does not start

Confirmation	Solutions
How is the signal strength when using Bluetooth?	<p>Try the following:</p> <ul style="list-style-type: none"> • Check that the Bluetooth interface unit is installed properly. • Check that there are no obstructions between the computer, printer, and other devices. • Change the location of the computer. • Change the location of the printer.
Is the Bluetooth unit properly installed?	<p>Print the "Configuration Page", and confirm that Bluetooth is properly recognized.</p> <p>For details about how to print the "Configuration Page", see the manual provided with your machine.</p>
Is there a microwave oven or a wireless LAN access point near the device?	<p>Radio waves may be interfering with the Bluetooth's communication. Turn off the microwave oven and the wireless LAN access point, and then try printing again. If printing is successful, move the devices to a location where they do not interfere.</p>

Product Information

Specifications for Bluetooth Unit

This section describes specifications for the Bluetooth interface unit.

Supported Versions

- Bluetooth Version 2.0 + EDR

USB Interface

- USB 1.1

Supported profiles:

- SPP (Serial Port Profile)
- HCRP (Hardcopy Cable Replacement Profile)
- BIP (Basic Imaging Profile)

Frequency range:

2400 MHz - 2483.5 MHz

Transmission Method

- Frequency Hopping Spread Spectrum (FHSS) Modulation

Transmission Speed

- Asynchronous Communication : Approximately 2.1 Mbps (Max)
- Synchronous Communication : Approximately 1.3 Mbps (Max)

↓ Note

- The transmission speed may vary depending on the factors such as the distance and obstacles between devices, radio wave condition, and Bluetooth devices being used.

Trademarks

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Ricoh Company, Ltd. is under license.



INDEX

B

BIP.....	2
Bluetooth printer.....	3
btconfig.....	5

H

HCRP.....	2
-----------	---

I

Install.....	2
--------------	---

S

set.....	5
show.....	6
Specifications.....	9
SPP.....	2
status.....	6
syslog.....	6

T

telnet.....	5
Trademarks.....	9
Troubleshooting.....	7

MEMO

Bluetooth Interface Unit Operating Instructions

