#### Edition

March 2002

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#### Revision History

 Version
 Revision History
 P/N
 Date

 V1.0
 First release
 G52-MA00592
 March 2002





#### FCC-B Radio Frequency Interference Statement

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 when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

#### Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Notice 2

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.

VOIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.



## 1. INTRODUCTION

### 1.1 MSITM PC2PC Bluetooth

MSI<sup>TM</sup> PC2PC Bluetooth provides wireless technology that revolutionizes personal connectivity. It is the solution for the seamless integration of Bluetooth technology into personal computers, enabling short-range wireless connections between desktop/laptop computers, Bluetooth-enabled peripherals (printers, faxes....), portable handheld devices, and connectivity to the Internet.

## 1.2 Bluetooth Technology

The term "Bluetooth" refers to a worldwide standard for the wireless exchange of data between two devices. In order to exchange data, two Bluetooth devices must establish a connection. Before a connection is established, one device must request a connection with another. The second device accepts (or rejects) the connection.

The originator of the request is known as the client. The device that accepts (or rejects) the request is known as the server. Many Bluetooth devices can act as both client and server.

A client Bluetooth device runs a software program that requests a connection to another device as part of its normal operation. For example, the program may request a connection to a remote computer, a printer, or a modem. Becoming a Bluetooth client normally requires an action by the device operator, such as an attempt to browse a remote computer, print a file, or dial out on a modem.

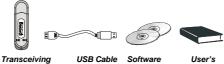
Every Bluetooth device that provides a service must be prepared to respond to a connection request. Bluetooth software is always running in the background on the server, ready to respond to connection requests.

## 2. HARDWARE SETUP

### 2.1 Package Checkup

Unpack the package and inspect all the items carefully. If any of the items is damaged or missing, please contact your local dealer as soon as possible. Also, keep the box and packing materials at hand, in case you need to ship the unit in the future. Your package content may vary depending on the items purchased. It can be package 1, package 2, or the combination of both as listed below:

# Package 1



### Package 2







Transceiving Module

Dipole Antenna

(Optiona

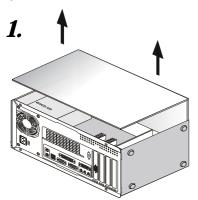
Gui

## 2.2 Hardware Specifications

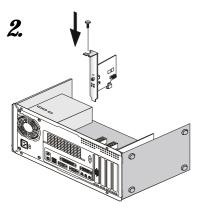
	Blueto eth Tunna acinina Ven
	Bluetooth Transceiving Key Bluetooth Transceiving Module
General	Discoon Transcering Mount
H/W Interface	USB
Bluetooth Spec.	Ver. 1.1
Compliance	
Throughput	About 723Kbps (data channels)
Operating Volt.	5V from USB interface
Operating Range	Up to 200M for open space
Regulatory Approval	FCC, CE, BQB (Bluetooth Qualified)
Temperature	Storage temp: -20°C~+100°C
	Operating temp: -20°C~+100°C
Radio	E H C LC (FMCC)
Spread Spectrum	Frequency Hopping Spread Spectrum (FHSS)
г в	Compliant with FCC part 15
Frequency Range RF Channels	2.4~2.4835GHz (2.4GHz ISM Band) 79-channel system for USA, Japan, and Europe
Iti Chameis	(except France, 23-channel system for France)
Modulation	GFSK, BT=0.5
Output Power Class	Bluetooth Power Class 1
Output Power	+18dBm (Max.)
Receiver Sensitivity	Better than -90dBm with BER < 0.1%
Max Input Level	-20dBm
Power Control	Yes
	ies
Base Band	C ACL II I
Physical Links	Support ACL link
Network Capabilities	Support piconet point-to-point and point-to- multipoint connections (Scatternet to be sup-
	ported soon)
Link Manager	
3-slot Packets	Yes
5-slot Packets	Yes
Slot Offset	Yes
Timing Accuracy	Yes
Switch	Yes
Hold Mode	Yes
Sniff Mode	Yes
Test Mode	Yes
Park Mode	Yes
RSSI	Yes
Power Control	Yes
Authentication	Yes
Encryption	Yes
Software	
System Support	Windows® 2000/ME/98/XP
Profile Support	Generic Access Profile/ Service Discovery Pro
	file/ Serial Port Profile/ Dial-Up Networking Profile/ Fax Profile/ LAN Access Profile/ Ge- neric Object Exchange Profile/ File Transfer Profile/ Object Push Profile/ Synchronization Profile

### 2.3 Hardware Installation

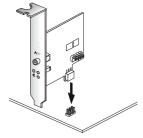
To integrate the PC2PC Bluetooth into your system, please follow the instructions below:



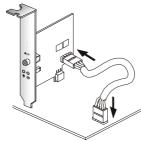
Remove the computer case.



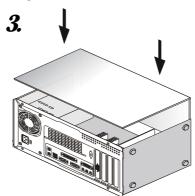
Install the transceiving module onto your mainboard. Procedures may differ depending on the location of the bluetooth pinheader on the mainboard. Please refer to the following:



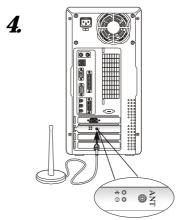
For mainboards with bluetooth pinheaders located near the PCI slots, ex: MS-6398E, secure the connector on the lower part of the transceiving module directly onto the bluetooth pinheader. Then, fasten the transceiving module to the mainboard with a bracket screw.



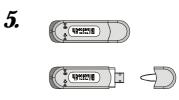
For mainboards with bluetooth pinheaders located elsewhere (not near the PCI slots), ex: MS-6380E, use the linking cable to secure the identical connector on the transceiving module to the bluetooth pinheader on the mainboard. Then, fasten the transceiving module to the mainboard with a bracket screw.



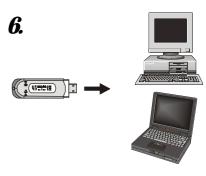
Install and screw up the computer case.



Locate the antenna connector on the transceiving module bracket at the back panel of the computer case. Secure the dipole antenna to this connector and fix the antenna to a location free from signal obstruction. Concrete walls, metal substances, paints with metal composites,... etc. will cause signal obstruction and disable the bluetooth function.



Uncap the transceiving key.



Plug the transceiving key to an available USB port of the target device with which you wish to establish a wireless bluetooth connection. The target device can be a desktop PC, a laptop PC, or any other types of PCs with Windows® OS & USB ports. Avoid installing the transceiving module and the transceiving key into the same PC. "Bluetooth" refers to a worldwide standard for the wireless exchange of services between two devices. In order to exchange services, two Bluetooth devices must establish a connection. Bluetooth function will not work if the transceiving module & the transceiving key are installed into the same device.

Note 1: The transceiving key and the transceiving module bracket both integrate one Green (Blue) LED & one Red LED. The Green (Blue) LED indicates the connection status. The Red LED indicates the power state.

Note 2: As the bluetooth pinheader shares the USB interface with blue-colored USB2.0 connector on the mainboard, utilization of PC2PC Bluetooth will disable the bottommost USB2.0 port.

# 3. SOFTWARE SETUP

# 3.1 Driver/Software Installation

To activate the Bluetooth service, driver/software installation is required for both the server end and the client end. Driver/software installation procedures may vary depending on the Bluetooth hardware installed. For the end with transceiving key, please follow the overall instructions starting from Step 1. For the end with transceiving module, please go directly to Step 2.

**1.** Plug the transceiving key into an available USB port of the target device. The following screen appears, indicating the detection of new hardware device by the system. Click **Next** to proceed.



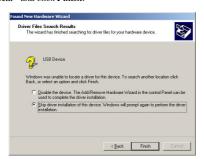
The following dialog box appears. Select "Search for a suitable driver for my device (recommended)."



In the next dialog box, clear all the check boxes and click Next.



Followingly, select "Skip driver installation of this device..." and click Finish.



**2.** Insert the MSI software CD. The auto-run option will start and the following dialog box appears. Click the MSI Bluetooth Software button to start Bluetooth software installation.



Click **Next** to continue and follow the on-screen instructions to install the application program.



After the system finishes installing the software, click **Yes** to reboot your system.



**3.**To make sure that the hardware & software have been successfully installed, go to Control Panel after restarting your system. Double-click System and click the Device Manager tab. If the hardware & software installation is complete, the MSI USB Bluetooth Device should appear.

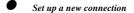


## 3.2 Basic Operations

After software installation, My Bluetooth Places icon will be shown on the desktop. Double-click the icon and the following window appears.



**1.** To enable Bluetooth services, you must at first set up a new Bluetooth connection with another device. The connection is not actually established; instead, a shortcut is placed in the right pane of My Bluetooth Places. To use the connection, double-click the shortcut.





- 1. Click Add Bluetooth Connection Add Bluetooth icon on the main screen.
- 2. On the first Connection Wizard screen:



a) In the Select a Service drop-down menu, select the

type of connection that will be established. (The specific service will be selected later, if necessary.)

- b) In the "Select a device that provides the service" drop-down menu, select the device that will provide the service. (To update the list of devices displayed, click the Search Devices... button.)
- c) Optional: select the "Require secure encrypted connection" option to enable Authentication and Encryption for this connection.

#### 3. Click the Next button:

- \* If more than one service of the type selected in the Select a Service drop-down menu (above) exists on the selected device, for example, multiple Bluetooth Serial Ports, then the Select Bluetooth Service dialog box appears. Select the specific service to be used, and then click the OK button to close the Select Bluetooth Service dialog box.
- \* If only one service of the type selected in the Select a Service drop-down menu (above) exists on the selected device, the next Connection Wizard screen
- 4. If "Require secure encrypted connection" was selected above, a security screen may appear:
  - \*To establish a paired relationship with the remote device while using this wizard, enter your Personal Identification Number in the PIN Code field of the security screen, and then click the Next button.
  - \*To establish the paired relationship with the remote device the first time this connection is used, leave the PIN Code field blank in the security screen, and click the Next button. The Security screen WILL NOT appear if the devices have been paired.
- 5. On the last Connection Wizard screen:
  - \* The top of the screen provides basic information about the new connection—the name of the device that will provide the service and the name of the service that will be provided. If this information is NOT correct, click the Back button to return to the previous screen, and from that screen select the correct service and device.
  - \* In the "Connection Name:" field, enter a descriptive name for the connection, for example, "Bluetooth Serial Connection to MSI Desktop."

2. After a connection has been established, right-click the device in connection and select Discover Available Services from the pop-up menu to determine the services provided by this device.



The services supported are:

\*Bluetooth Serial Port—establishes a Bluetooth wire

less connection between two devices. The connection may be used by applications as though a physical serial cable connected the devices.



\*Dial-up Networking—allows a Bluetooth client to use a modem that is physically attached to the Bluetooth server.



\*Fax—allows a Bluetooth client to wirelessly send a fax using a device that is physically attached to the Bluetooth server.



\*File Transfer—establishes a Bluetooth wireless connection that allows your computer to perform file system operations on another Bluetooth-enabled devicebrowse, drag/drop, open, print, cut/copy, paste, delete, rename, etc.



\*Information Exchange—establishes a Bluetooth wireless connection between two devices so that they can exchange personal information manager data such as business cards, calendar items, email messages, and notes.



\*Information Synchronization—establishes a Information Bluetooth wireless connection between two devices Synchroni... and uses the connection to synchronize Personal Information Manager data between the two devices.



\*Network Access—establishes a Bluetooth wireless connection between the client and a server that is physically connected to the Local Area Network. If the client has permission (user name and password for the LAN), the wireless connection can be used as if the client were hardwired to the LAN.

All Bluetooth servers do not necessarily provide all of these services. For example, network gateways only provide access to the Local Area Network (the Network Access service).



For advanced operations of the Bluetooth software, please double-click My Bluetooth Places icon on your desktop, open the Help menu on the menu bar, and click Help Topics. Detailed instructions for advanced applications are displayed as follows:



