Bluetooth™



BLUETOOTH MINI PCI CARD INSTALLATION GUIDE

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NOTE: USERS ARE NOT PERMITTED TO MAKE CHANGES OR MODIFY THE SYSTEM IN ANY WAY

About this guide

This Installation Guide will show you how to install the Bluetooth ${}^{\rm TM1}$ Mini PCI Card and Software Suite.

In addition, users who have a previous version of the Bluetooth Software Suite will find information on how to uninstall the old version before installing the new one.

Note: We recommend that you install the software before the hardware. This does not apply to **Windows NT**, where you must install the hardware first; refer to the section on hardware installation.

Note: When you have completed the installation, you must restart your computer before you can use the program.

The information in this document is furnished for information only, is subject to change without notice, may contain errors or inaccuracies, and represents no commitment whatsoever.

Additional documentation

In addition to this Installation Guide, the Bluetooth Software Suite CD-ROM includes the following documents:

- Bluetooth Introduction providing a general introduction to the Bluetooth wireless technology
- User's Manual covering all aspects of operating the Bluetooth Software Suite

Adobe Acrobat Reader

The documents accompanying the Bluetooth Software Suite are provided in PDF format. To view these documents, you will need Adobe Acrobat Reader. If that program is not already installed on your computer, you can install it from the CD-ROM:

- 1. Click Start.
- 2. Click Run.
- Type D:\Acrobat\ar405eng.exe (substitute the appropriate letter of your CD-ROM drive for D).
- 4. Follow the onscreen prompts to complete the installation of Adobe Acrobat Reader.

When Adobe Acrobat Reader is installed on your computer, open a PDF file by double-clicking on its icon.

System Requirements

- One of the following operating systems:
 - Windows 95 OSR2
 - Windows 98
 - Windows Me
 - Windows NT 4.0 Service Pack 5 or later
 - Windows 2000
- One available Mini PCI slot

Note: The Mini PCI Card is designed and approved by the relevant authorities to be used exclusively with approved **antenna types** (built into laptop computer or external). Any changes or modifications to this equipment not expressly approved by the manufacturer may void the authorization to operate this equipment.

¹ The Bluetooth trademarks are owned by their proprietor and used under license.

Software installation

Note: We recommend that you install the software before the hardware. This does not apply to **Windows NT**, where you must install the hardware first; refer to the section on hardware installation.

Note: If a previous version of the Bluetooth Software Suite is installed on your computer, this must be uninstalled before the installation of the new version can take place. The program will discover any previous versions and prompt you; refer to the section on uninstalling software.

To install the Bluetooth Software Suite on your computer, perform the following steps. (If Autorun is enabled on your computer, in some cases steps 3-5 may be skipped.)

- 1. Quit all programs.
- Insert the Bluetooth Software Suite CD-ROM in your CD-ROM drive.
- 3. Click Start.
- 4. Click Run.
- 5. Type **D:\setup.exe** (substitute the appropriate letter of your CD-ROM drive for **D**).
- 6. Follow the onscreen prompts to complete the installation of the software.

Adding new folders

During the installation, the program will ask where to install the Bluetooth Software Suite files. A destination folder is suggested that should suit most users: C:\...\... Bluetooth Software Suite ... Alternatively, you can browse for any destination you prefer.

Furthermore, the program will ask where to add the Bluetooth Software Suite icons. A program folder is suggested that should suit most users: C:\...\... Bluetooth Software Suite ... Alternatively, you can type a new folder name in Program Folders, or select one from Existing Folders.

Do not remove CD-ROM

Do not remove the Bluetooth Software Suite CD-ROM from the computer until you have installed the hardware.

Hardware installation

Note: We recommend that you install the software before the hardware. This does not apply to **Windows NT**, where you must install the hardware first.

Note: During the installation, the Bluetooth Software Suite CD-ROM must be present in your CD-ROM drive. To install the hardware, first turn off your computer. Then perform the following steps:

1. Remove the Mini PCI door at the back of your laptop computer.

On some computers, you may need an appropriate screwdriver for this.



 Insert the Bluetooth Mini PCI Card in the slot. Make sure to position the card as shown in the drawing below.



 Make sure the two antenna coax connectors are not caught under the Bluetooth Mini PCI Card. Then press down the Bluetooth Mini PCI Card until it clicks into place.



 Connect the two antenna coax connectors to the Mini PCI Card, and fasten the Mini PCI door again.



 Turn on your computer, and follow the onscreen instructions to complete the installation of the hardware.

Driver installation

Note: This section does not apply to Windows NT, where driver installation takes place automatically.

The first time your computer discovers the Bluetooth Mini PCI card, Windows indicates that it needs to find drivers for this new hardware. A driver is a software program needed for a piece of hardware to work.

When Windows asks you to specify the location of the drivers, type the following (substitute the appropriate letter of your CD-ROM drive for **D**):

- Windows 95, 98, and Me users: D:\drivers\win9x
- Windows 2000 users: D:\drivers\w2k

Found New Hardware Wizard

During the installation, the **Found New Hardware Wizard** will appear. The following drivers are found:

- Bluetooth Mini PCI Card
- Bluetooth Ethernet Adapter

Note: On Windows 2000, if told Digital Signature Not Found and asked whether you want to continue, click Yes.

In addition on **Windows 2000** the following drivers are found:

- Bluetooth RFCOMM Protocol
- Bluetooth SDP Protocol

Uninstalling software

If a previous version of the Bluetooth Software Suite is installed on your computer, this must be uninstalled before the installation of the new program can take place.

During the installation of the Bluetooth Software Suite (as described in the section on software installation), the installation program will discover any old versions of the Bluetooth Software Suite on your computer. The program will then ask if you want to uninstall previous versions automatically or manually.

Automatically uninstall

The program will suggest that you have the old version of the Bluetooth Software Suite uninstalled automatically. To do so, follow the onscreen instructions.

Note: When the old version of the Bluetooth Software Suite has been uninstalled automatically, the installation program will ask if you want to restart your computer. Whether you answer yes or no, the program will now begin installing the new version of the Bluetooth Software Suite.

Manually uninstall

Some users may prefer to uninstall previous versions of the Bluetooth Software Suite manually. To do so, when the program asks, select the manual procedure. Then, to uninstall:

- 1. Quit all programs.
- 2. Click Start.
- 3. Point to Programs.
- 4. Point to ... Bluetooth Software Suite v...
- 5. Click Uninstall.
- 6. Click ... Bluetooth Software Suite v...
- Follow the onscreen instructions to complete uninstalling the program.

When you have uninstalled the previous version of the Bluetooth Software Suite, install the new version as described in the section on software installation.

Operation

When you have installed the Bluetooth Software Suite and the Bluetooth Mini PCI Card, you must restart your computer before you can use the program.

On finishing the installation, you can remove the Bluetooth Software Suite CD-ROM from your computer. However, when operating the Bluetooth Software Suite, the Bluetooth Mini PCI card must always be present in your computer. If the card is removed, the Bluetooth radio cannot communicate with other Bluetooth devices. For detailed information on how to operate the Bluetooth Software Suite, please refer to the User's Manual or online help accompanying the program.

Diagnostics

After the installation, it is recommendable to check that the hardware has been properly installed. This is done from the **Diagnostics** dialog box, accessible from the **Bluetooth Configuration Tool** application. For detailed instructions, refer to the section **Diagnostics** in the Bluetooth Software Suite User's Manual or online help.

Technical specifications

- Card type form factor IIIA
- Meets Mini PCI specification 1.0
- Power consumption: Standby less than 40mA Active less than 150mA
- Class II (0dBm/1mW) Bluetooth radio designed in accordance with Bluetooth specification 1.1
- Two antenna connectors supporting diversity
- Working temperature range: *Recommended*: 0° to +65° C
- Storage temperature –30 to +85° C
- Condensation: Extreme temperature changes may cause condensation on the surface of the Mini PCI Card. If so, the card may not work properly until completely dry again.
- Software is Bluetooth specification 1.1 compliant

Regulatory statements

General

This product complies with any mandatory product specification in any country where the product is sold. In addition, the product complies with the following.

European Union (EU) and EFTA

This equipment complies with the R&TTE directive 1999/5/EC and has been provided with the CE mark accordingly.

United States of America and Canada

Tested to comply with FCC Standards FOR HOME OR OFFICE USE. See FCC 47CFR part 15.19(b)(2) This device complies with part 15 of the FCC rules and with RSS-210 / RSS-139 of the Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 try 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 receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Note that any changes or modifications to this equipment not expressly approved by the manufacturer may void the FCC authorization to operate this equipment.

Brazil

Este equipamento opera em caráter secundário, isto é, não tem direito a proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

Canada

Industry Canada Notice

To prevent radio interference to the licensed service, this device is intended to be operated indoors and away from windows to provide maximum shielding. Equipment that is installed outdoors is subject to licensing.

<In French>

Pour empêcher un brouillage radioélectrique au service faisant l'objet d'une licence, cet appareil doit être utilisé à l'interieur et loin des fenêtres afin de founir un écran de blindage maximal. Au cas aù un installation en plain air, le materiel doit faire l'objet d'une licence.

Singapore

This product complies with the standard Infocomm Development Authority of Singapore (IDA) TS SSS amended by the Guidance notes on Bluetooth Type Approval Framework and has been approved by the IDA under the Type Approval Certificate (TAC) number: YYYYY-xxxx-200x (OEM customer to insert correct TAC number!)

The supplier of this equipment is responsible that the equipment can be used as described in the accompanying documentation. Furthermore, the supplier is responsible for providing proper installation and after-sales maintance of the equipment to meet the user's needs.

Under no circumstances is the IDA liable for the use, installation, or aftersales maintenance of the equipment.

Japan

この機器の使用周波数帯では、電子レンジ等の産業・科学・医療用機器のほか工場の製造 ライン等で使用されている移動対識別用の構内無線局(免許を要する無線局)及び特定小 電力無線局(免許を要しない無線局)が運用されています。

1 この機器を使用する前に、近くで移動体識別用の構内無線局及び特定小電力無線局が運 用されていないことを確認してください。

2 万一、この機器から移動体識別用の構内無線局に対して電波干渉の事例が発生した場合 には、速やかに使用周波数を変更するか又は電波の発射を停止した上、下記連絡先にご連 絡頂き、混信回避のための処置等(例えば、パーティションの設置など)についてご相談し てください。

3 その他、この機器から移動体識別用の特定小電力無線局に対して電波干渉の事例が発生 した場合など何かお困りのことが起きたときは、次の連絡先へお問い合わせ下さい。

Company phone number in Japan: (OEM customer to insert phone number!)

Taiwan

臺灣

依據低功率射頻電機管理鏈法,製造、輸入或販賣低功率射頻電機者愈加印第十四條、第十七條及 第二十條之規定內容。

第十四條

經型式認證合格之低功率射頻量機,非經許可,公司、商號或使用者均不得擅自變更類率、加大功, 率或變更更設計之特性及功能。

第十七条

低功率射精電機之使用不得影響飛航安強及干擾合 透通信;超發現有干擾現象時,度立即停用,並 改善至無干擾時方得趨績使用,

前項合法通信,指依單信法規定作業之無限電信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干優。

第二十條

輸入、製造低功率射頻電機之公司、商號或其使用者違反本就法規定,擅自使用或感更無線電頻率 、電功率者、除休電信法規定成罰外,電信控局並得撤消其型式認識證明或型式認證際簽。