USB Bluetooth Dongle

User’s Manual

Safety Instructions

Always read the safety instructions carefully

- Keep this User's Manual for future reference
- Keep this equipment away from humidity
- If any of the following situation arises, get the equipment checked by a service technician:
  - The equipment has been exposed to moisture.
  - The equipment has been dropped and damaged.
  - The equipment has obvious sign of breakage.
  - The equipment has not been working well or you cannot get it work according to User's Manual.

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About User's Manual

This user's manual and the provided application on the CD are based on Skype 2.5. As Skype upgrades occasionally, for the application compatible with the latest Skype version, please contact your supplier.

July 2006, Rev1

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1. Introduction

This Bluetooth USB Dongle adds Bluetooth technology to your existing USB computers or notebook. Simply plug it into the USB port of your machine for seamless connectivity with other Bluetooth devices, such as phones, computers, peripherals and other devices. The dongle features the industry's most extensive range of profiles available, ensuring a common application between two Bluetooth-enabled devices.

The dongle is fully compliant with the Bluetooth 2.0 specification and backward-compatible with Bluetooth version 1.1 or 1.2-based system. Moreover, it supports the new Bluetooth Extended Data Rate (EDR), providing raw bandwidth of 3 Mbps for wireless applications. It also adopts dedicated interference avoidance technology to reduce possible disruption from nearby Wi-Fi® products, which operate in the same 2.4 GHz radio frequency as Bluetooth.

Features

- Supports Bluetooth 2.0 + EDR (Extended Data Rate), offering data rate of up to 3 Mbps
- Maximizes ranges and simplifies system integration by providing exceptional output power and receiver sensitivity
- Backward compatible with Bluetooth 1.1 and 1.2 standards
- Compliant with USB 1.1
- Uses 2.4Ghz ISM Frequency Band
- Automatic calibration and frequency detection of crystal frequency
- Supports up to 7 Bluetooth client devices
- Supports industry's most extensive range of applications
- Play & Play
- Transmission range of up to 100m (Class 1) / 10m (Class 2) in an open environment
- Features data encryption and user authentication to ensure secure communication

Package Contents

- USB Bluetooth Dongle x1
- Driver and Utility CD x1
- Quick Installation Guide x1

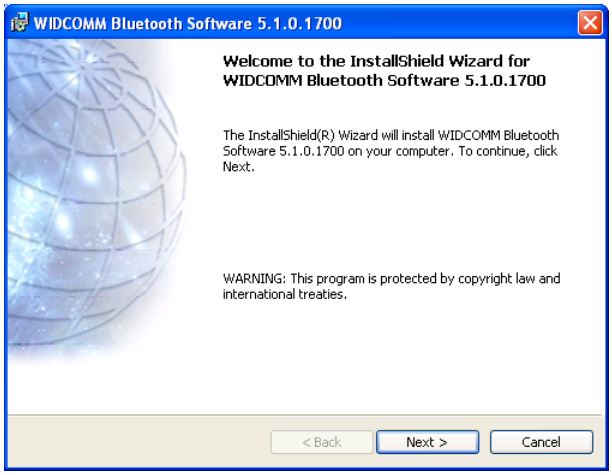
System Requirements

- Computer with an available USB port
- PC running Windows® XP, 2000, ME or 98SE

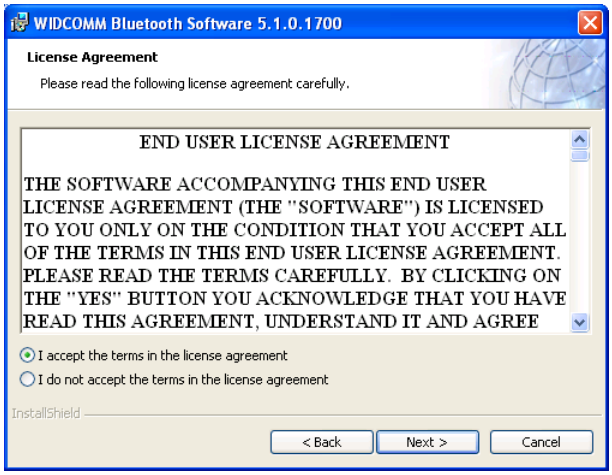
2. Installation

Note: Do not plug the USB Bluetooth dongle to your computer before you install the provided software. You will prompted to plug the device during the installation.

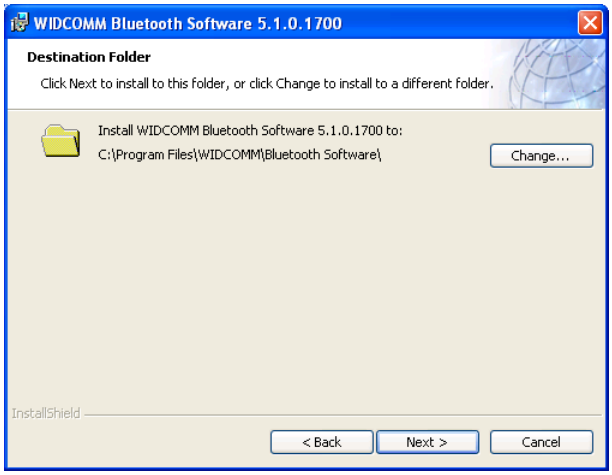
1. Insert the Bluetooth software installation CD into the CD drive of your computer. The setup program will start automatically. If not, locate and double-click the **Setup.exe** file in **Software** folder to launch the setup program.
2. When the welcome screen appears, click **Next**.



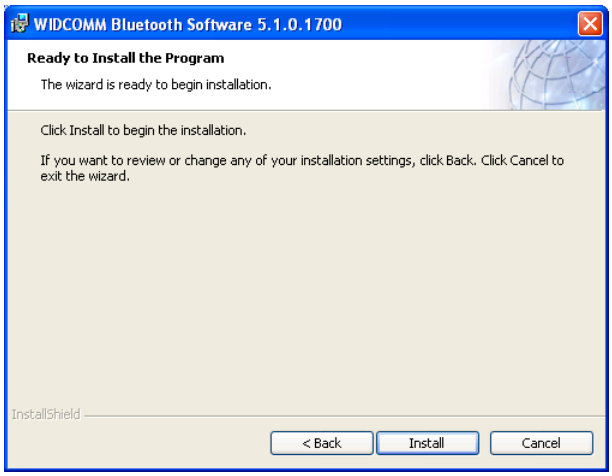
3. Select **I accept the terms in the license agreement** and click **Next**.



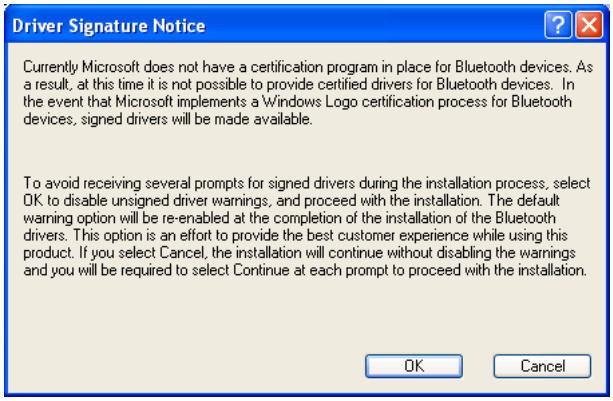
4. You can select to install the program in default directory or click **Change** to specify another directory. After specifying the location, click **Next**.



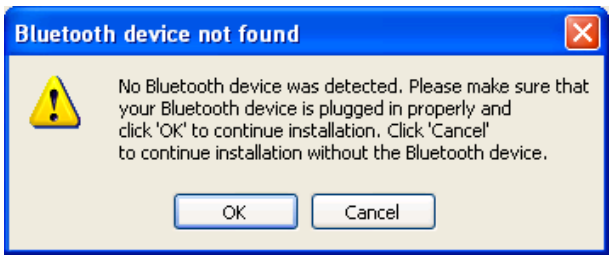
5. Click **Install** to begin the installation.



6. When the **Driver Signature Notice** window appears, click **OK**.



7. When prompted, plug your Bluetooth dongle to your computer and then click **OK**.



8. Click **Finish** to complete the installation.

3. Basic Operations

Bluetooth Tray Icon

The Bluetooth icon in the notification area, at the far right of the taskbar provides feedback about Bluetooth status as described in the table below.

Icon	Status
	Bluetooth dongle found and enabled.
	Bluetooth dongle not found or disabled.
	Connected to a service.

The Bluetooth tray also provides fast access to most Bluetooth operations. You can double-click it to access **My Bluetooth Places** or right-click it to pop up the shortcut menu and access the provided functions.

Starting or Stopping Bluetooth

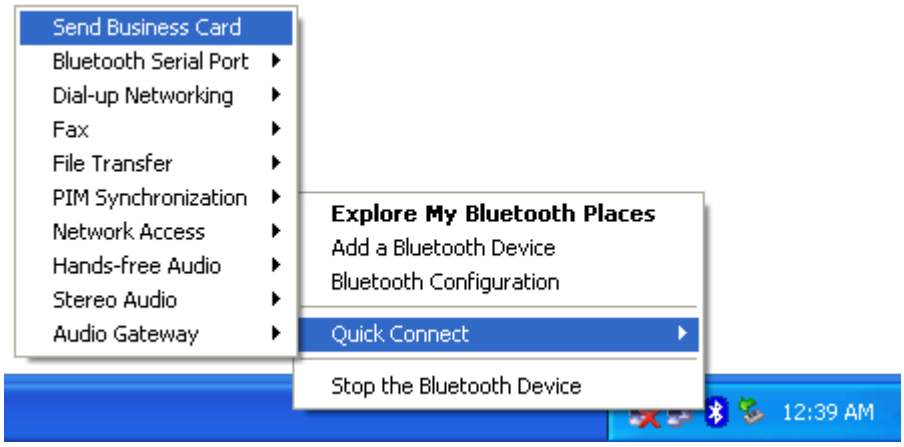
To start Bluetooth - Right-click the Bluetooth icon and select **Start the Bluetooth Device**. The Bluetooth icon is blue in color with a white insert when Bluetooth is running.

To stop Bluetooth - Right-click the Bluetooth icon and select **Stop the Bluetooth Device**.

Creating a Connection

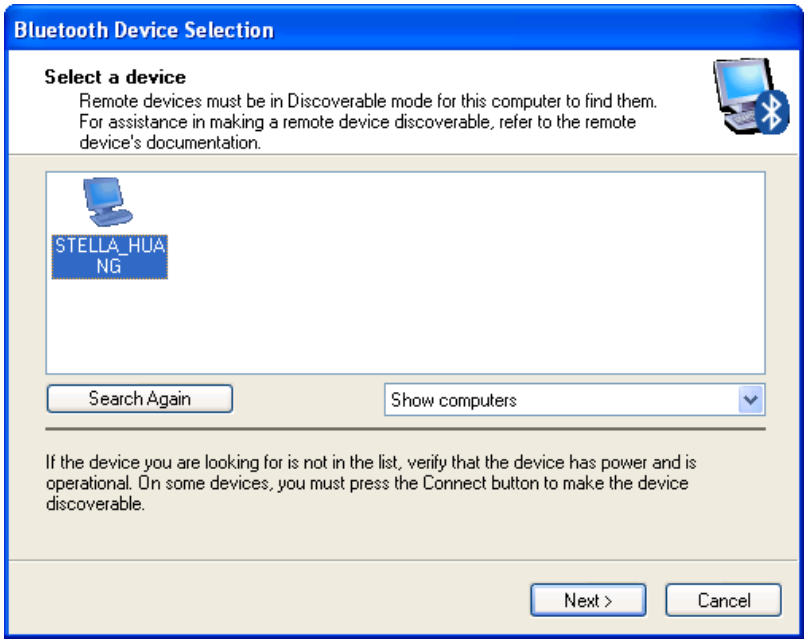
Option 1. Use Quick Connect via the Bluetooth Icon

Right-click the Bluetooth icon in the system tray and select **Quick Connect** and then select the desired Bluetooth service.



If selected service is never connected:

1. Select **Find Devices** on the shortcut menu.
2. The utility will search for devices that potentially provide the desired service. Highlight the desired one and click **Next**.



3. The succeeding steps vary according to the service you selected. Just follow the on-screen prompts to proceed.

If selected service has been connected in the past:

The options on the shortcut menu are:

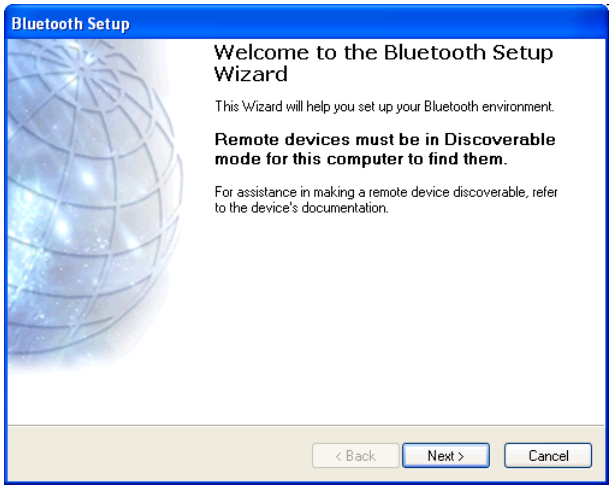
- The name(s) of any device(s) with which prior connections to this type of service have been established. Select a name from the list to re-establish the connection.
- Other Devices - select this option to search for additional devices that potentially provide the desired service, select a device from the list, and then click **Next** to proceed.

Option 2. Use the Bluetooth Setup Wizard

You can open the setup wizard by either of these methods:

- Right-click the Bluetooth icon and select **Add a Bluetooth Device**
- Double-click the Bluetooth icon to open **My Bluetooth Places** and select **Add a Bluetooth Device**.

When the wizard window pops up, follow the on-screen instructions to proceed:

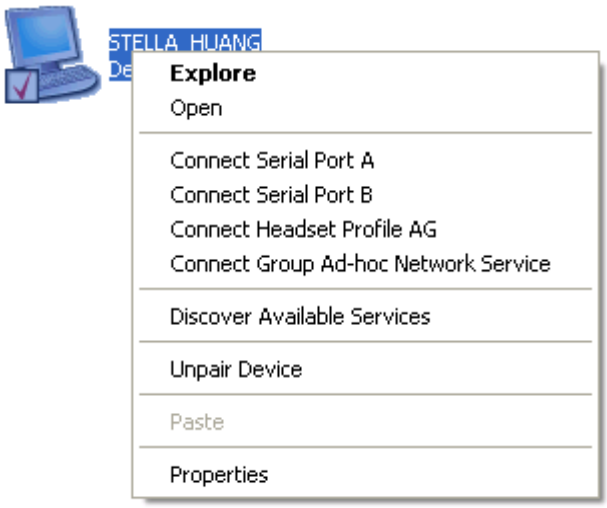


Option 3. From the Entire Bluetooth Neighborhood

1. Double-click the Bluetooth icon to open **My Bluetooth Places** and select **View Devices in Range**.
2. Available Bluetooth devices should appear in the right pane. If not, click **Search for devices in range** to start searching. Devices icons have three states. Refer to "Device and Service Icons" section on page 13 for details.
3. Right-click a desired Bluetooth device.

If a prior service discovery was performed on the selected device, the services that were found will be listed in the device's shortcut menu. You may just select to connect that service.

If the selected device has added or reconfigured a service, or if the desired service is not an option in the shortcut menu, select the **Discover Available Services** option to update the list of services offered by the device.



4. Available services will be displayed. Just double-click the service to make the connection.

Device and Service Icons

Device Icons

Devices are physical things, such as computers, cameras, headsets, etc. Device icons have three states:

- Normal - this unadorned icon indicates the presence of a device in the vicinity. Each type of device is represented by a different icon.
- Connected - devices that are connected to this computer are represented by an icon with a green tint and/or a small butting arrows box added to them.
- Paired - devices that are paired with this computer are represented by a normal icon with a small check box added to it.

For example, the following figure represents the three states of a Bluetooth desktop computer.

Normal **Connected** **Paired**

Service Icons

Services are what a Bluetooth device can do for other Bluetooth devices, such as provide access to a local area network, or the ability to send a fax. Some devices, such as headsets or network access points, may provide only a single service. Others, such as desktop and laptop computers, can potentially provide all of the Bluetooth services. Service icons have three states:

- Normal - this type of unadorned icon indicates that a specific service is potentially available from the selected device. For example, the icon to the right indicates that the Bluetooth serial port service may be available.
- Not Available - this type icon indicates that the service that it represents is not available. Services that are not available are represented by a normal icon with a small X box added to it.
- Connected - this type of icon indicates that this computer is connected to this service. The icon has a green tint and/or a small butting arrows box added to it.

For example, the following figure represents the three states of a headset service of the remote device.

Normal **Not Available** **Connected**

Note: There are some differences between the device and serice icons used by Windows 98SE, ME, and 2000, and those used by Windows XP.

4. Configuring Your Bluetooth

The Bluetooth Configuration Panel provides access to settings for Bluetooth services, client applications, hardware, security, discovery, accessibility, default paths, event notification, and other Bluetooth related items.

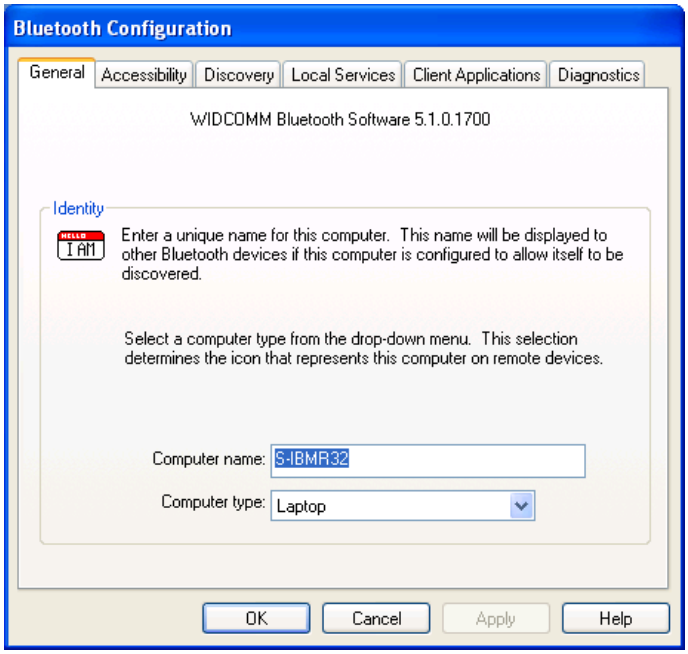
You can open the Bluetooth configuration panel by either of the following ways:

- Right-click the Bluetooth tray icon and select **Bluetooth Configuration**.
- Double-click the Bluetooth tray icon to open **My Bluetooth Places** and select **View or modify configuration**.

General Settings

The settings on the **General** tab determine information that is displayed to remote devices.

- **Computer name** - enter a unique name to identify this computer to other Bluetooth devices in the vicinity; this field cannot be left blank.
- **Computer type** - select either Desktop or Laptop from the shortcut menu to set the type of icon remote devices will use to represent this computer.



Accessibility Settings

The **Accessibility** tab lets you specify whether remote devices may access this computer, which remote devices have access, and whether an audio warning is played when a Personal Identification Number (PIN code) is required.

Allow Other Devices to Discover this Computer

Select Let other Bluetooth devices discover this computer to permit remote Bluetooth devices to find and report this computer. If Allow No devices (below) is selected, this option is not available.

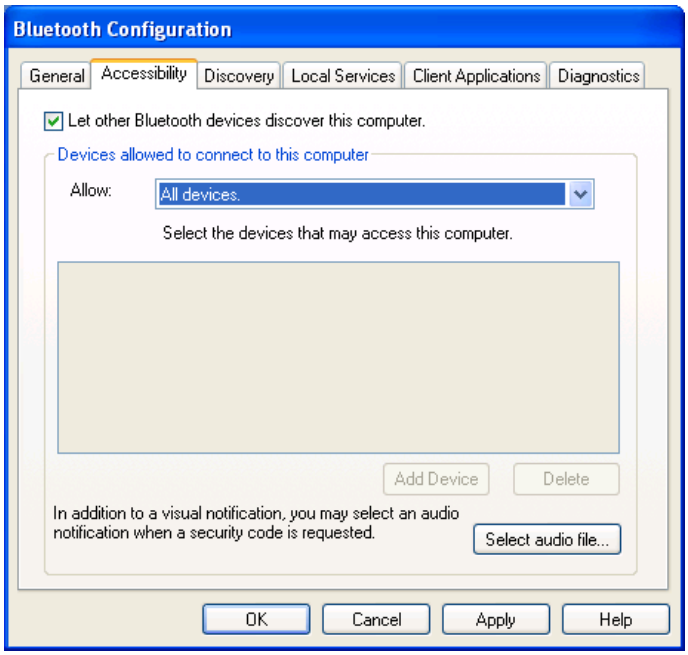
Control the Types of Devices that are Allowed to Connect to this Computer

From the **Devices allowed to connect to this computer** menu, select:

- **No devices** - no remote devices are permitted to initiate a connection with this computer. However, this computer can still initiate connections with remote Bluetooth devices.
- **All devices** - all remote devices are permitted to connect to this computer. Connections are subject to additional security restrictions, such as authentication and authorization, which may be required by the individual services provided by this computer.
- **Only devices listed below** - only the listed devices are allowed to connect to this computer. Use **Add Device** and **Delete** buttons to edit the list.

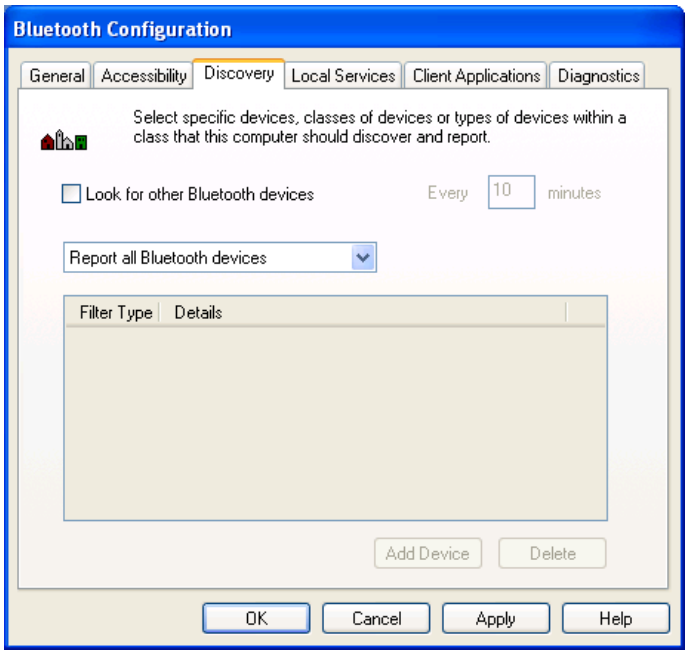
Choose an Audio Notification File

When **Secure Connection** is enabled for any of the Bluetooth services on this computer, a PIN code is required before that service can be accessed. To chose a notification sound that will play when a remote device attempts to access a service that requires a secure connection, click **Select audio file** and select the sound (*.wav) file to be played.



Discovery Settings

The **Discovery** tab determines whether this computer looks for other Bluetooth devices automatically, how often it looks for devices, and what type of devices it looks for.



Periodic Search for Devices

When **Look for other Bluetooth devices** is selected, Bluetooth automatically searches for devices every X minutes. X is a whole number between 1 and 60.

Determine the Devices that Will be Reported

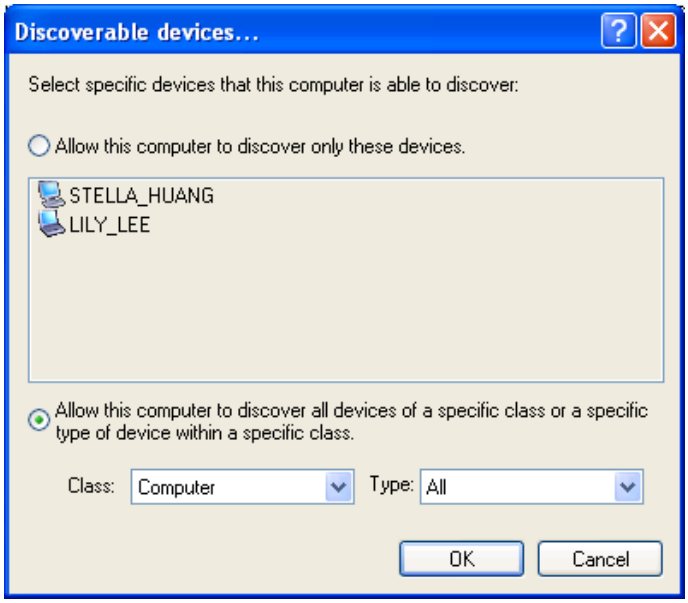
By default, this computer will discover and report all the Bluetooth services. Bluetooth can be configured to report only specific devices, specific classes of device, or specific types of device within a class.

To do this, select **Report only selected Bluetooth devices** from the drop-down list and click **Add Device**.

At the **Discoverable devices…** window, you can limit the remote devices reported.

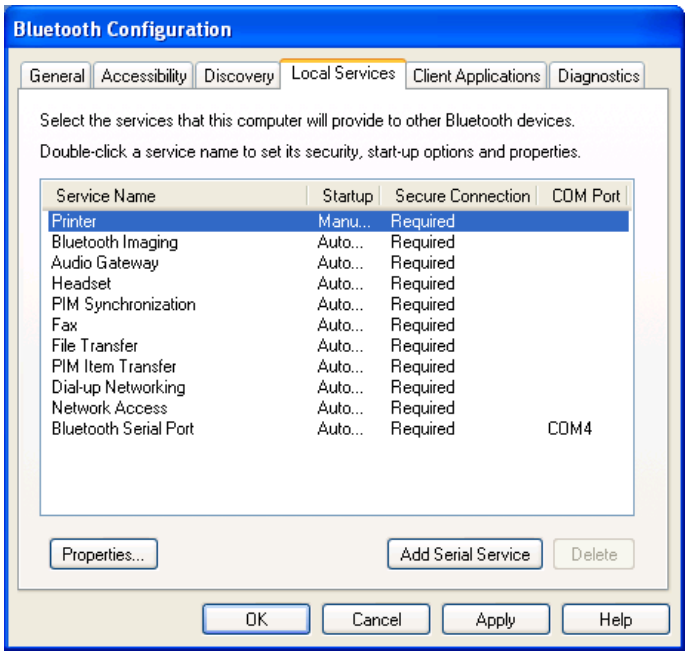
- Specific devices - an individual computer or Bluetooth cellular telephone are examples of specific devices.
- Specific class of device - computer is an example of a class of devices.
- Specific type of device within a class - laptop is an example of a specific type of device within the computer class of devices.

The devices to be discovered can be mixed and matched; you can discover one or more specific devices, classes of devices and types of devices within a class at the same time.



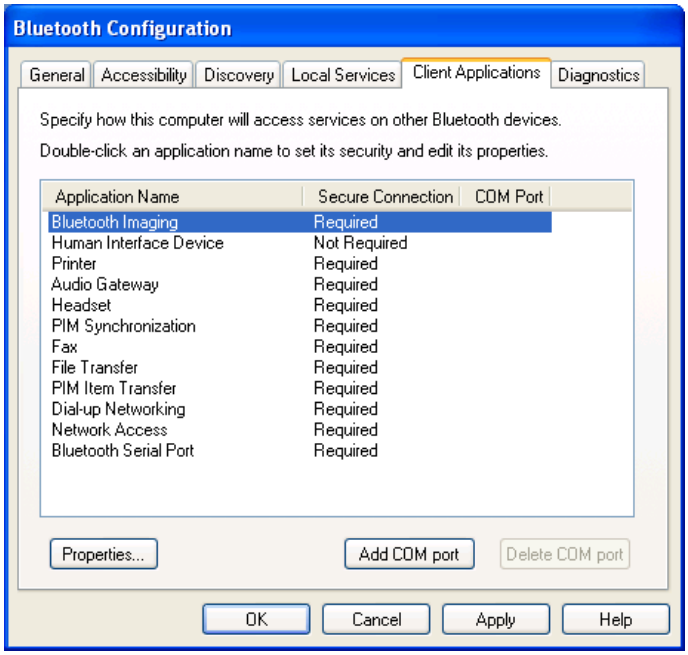
Local Services Settings

This tab allows you to select the services that your computer will provide to other Bluetooth devices. You can also double-click a service name to set its properties or click **Add Serial Service** to add serial service.



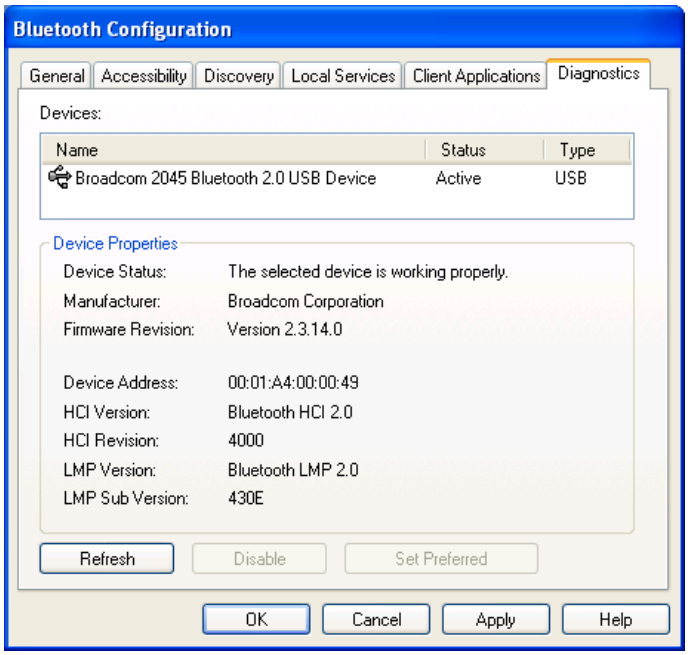
Client Applications

This tab specifies how your computer will access services on other Bluetooth devices.



Diagnostics

This tab allows you to refresh the Bluetooth dongle hardware information, disable the dongle and set the dongle as the preferred Bluetooth device on your computer.



Security and Pairing

By default, the properties of all Bluetooth services on this computer and the Bluetooth applications (except Human Interface Device) that this computer uses are set to require a secure connection. When **Secure Connection** is enabled for any of the Bluetooth services on this computer, the two devices that attempting to make a connection must exchange a PIN code upon the initial connection. After the exchange, the two Bluetooth devices are allowed to exchange data in a secure way.

5. Using Bluetooth Applications

Printer

The Bluetooth Printer application allows this computer to use a Bluetooth printer.

Configure

The **Bluetooth Configuration Panel** > **Client Applications** > **Printer** > **Properties** > **General** tab provides options to configure the application name and enable or disable secure connection.

Note: The secure connection depends on the Bluetooth printer you want to connect to. If the Bluetooth printer's paring function is in-activated, you should always disable the secure connection service.

Install a Bluetooth Printer

Option One:

1. Go to **My Bluetooth Places** > **View devices in range** and right-click a Bluetooth printer, select **Add Printer** from the shortcut menu and follow the on-screen instructions.
2. Select the printer manufacturer and model at the prompt. If your printer is not in the list of options, click **Have Disk…**, insert the driver disk for the printer, and then navigate to the drive and directory that contains the driver initiation file (*.inf) for the printer.
3. Follow the on-screen instructions to complete the installation.

Option Two:

1. From the Windows **Control Panel**, select **Printers and Faxes** > **Add a Printer** > **Next** > **Local printer** > **Next**.
2. On the **Select a Printer Port** window of the wizard:
   - Select **Create a new port**.

- In the **Type of port** menu, select **Bluetooth Printer Port**, and then click **Next**.

3. On the next screen, select the printer by name, and then click **Connect**.
4. Install the driver: Select the printer manufacturer and model at the prompt. If your printer is not in the list of options, click **Have Disk…**, insert the driver disk for the printer, and then navigate to the drive and directory that contain the driver initiation file (*.inf) for the printer.
5. Follow the on-screen instructions to complete the installation.

Imaging

The Bluetooth Imaging application allows this computer to ***send images to remote devices*** that provide the Bluetooth imaging service. Possible uses include the transfer of images to a Bluetooth camera, camera/phone, or any other device that offers the Bluetooth Imaging service. The supported image formats are:

- BMP
- GIF
- PNG
- JPG

Image Format Conversion

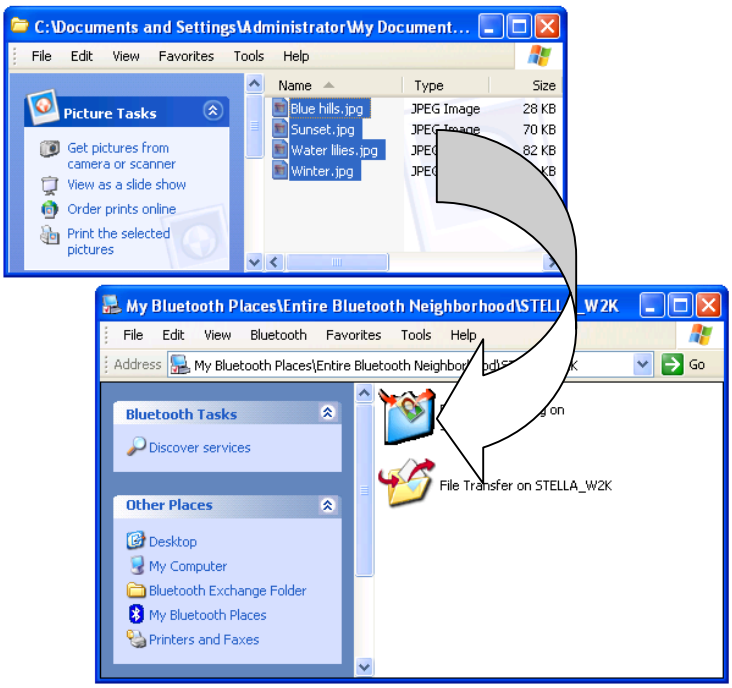
Some devices, particularly battery-powered devices such as phones and cameras, may only be able to accept images in one format and at a single fixed resolution. In that case, the image is converted to the required format and resolution before it is transferred to the remote device.

Sending Images to Remote Imaging Devices

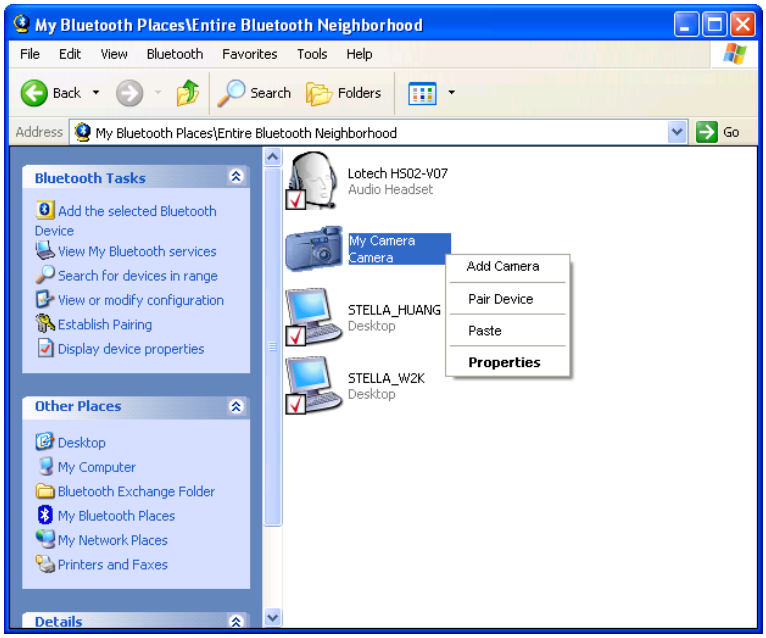
Imaging application connections are created automatically on an as-needed basis.

You can send an image to the remote imaging device by either of the methods:

- If a shortcut to the remote device's imaging service exists in **My Bluetooth Places**, drag and drop, or, copy and paste, to that shortcut.
- Go to **My Bluetooth Places** > **View devices in range** and drag and drop the image file onto the destination's device icon.



- After copying an image file in Windows Explorer, go to **My Bluetooth Places** > **View devices in range**, right-click the destination device and select **Paste**.



Note: Battery-powered remote devices, such as a cell phones or cameras, may require that Bluetooth be specifically enabled before they can accept an image; see the battery-powered device's documentation for more information.

Configure

To configure the application name and secure connection, go to **Bluetooth Configuration** > **Client Applications** > **Bluetooth Imaging** > **Properties** > **General** tab.

Audio Gateway

The **Audio Gateway** application allows a remote Bluetooth device to use this computer's microphone and speakers as the remote device's audio input and output devices.

Create an Audio Gateway Connection

Connect to an Audio Gateway service enabled device, following the instructions in "Creating a Connection" on page 11.

Headset

The Headset application allows this computer to use a Bluetooth headset as the audio input and output device for this computer. When a Bluetooth headset is connected to this computer, it functions as a wireless microphone and speaker for an audio application, such as an Internet soft phone or instant messenger software.

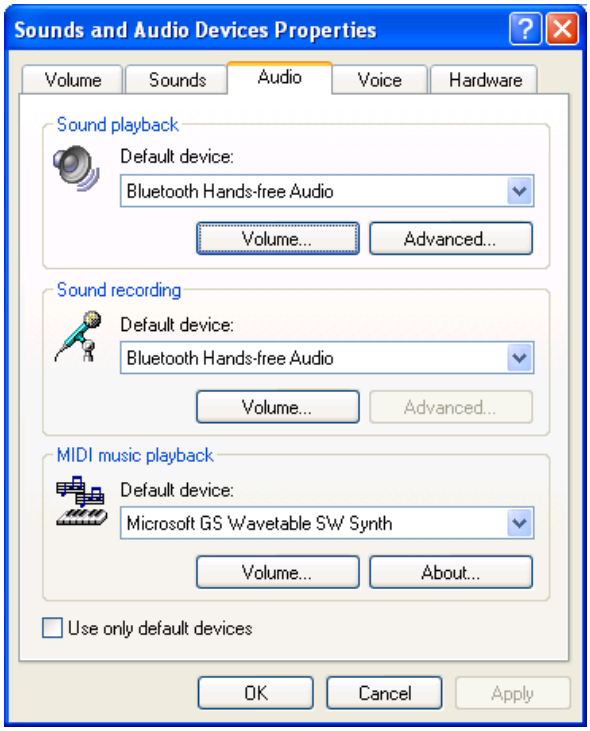
Connect to a Bluetooth Headset

Make a Bluetooth headset discoverable and connect to the headset, following the instructions in "Creating a Connection" on page 11.

Note: Refer to the manual that came with the headset for instructions about how to make the device discoverable.

Verifying Bluetooth Headset Installation

Once the Bluetooth headset is installed, it will automatically take over the function of microphone and speakers of your PC. To verify the installation, go to **Control Panel** > **Sounds and Audio Devices** (or **Sounds and Multimedia**) > **Audio**.



PIM Synchronization

The PIM Synchronization application is used to synchronize the Personal Information Manager (PIM) database of this computer with the PIM database of a remote Bluetooth device. The supported PIMs are:

- Microsoft Outlook
- Microsoft Outlook Express
- Lotus Notes

The supported data types are:

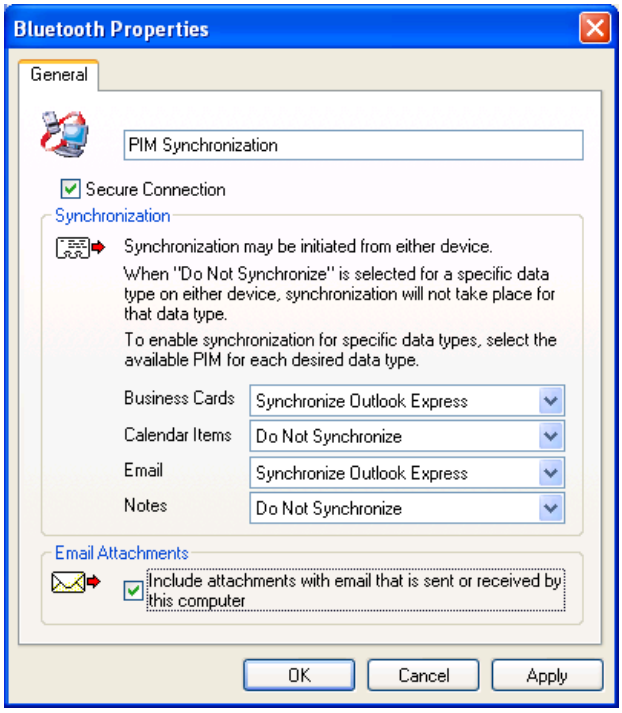
- Business cards
- Calendar items
- Email (with or without attachments)
- Notes

Configure PIM Synchronization

The **Bluetooth Configuration** > **Client Applications** > **PIM Synchronization** > **General** tab provides options to configure. Click the PIM you want to synchronize (if any) in each of the data type lists.

The data item types that can be synchronized are:

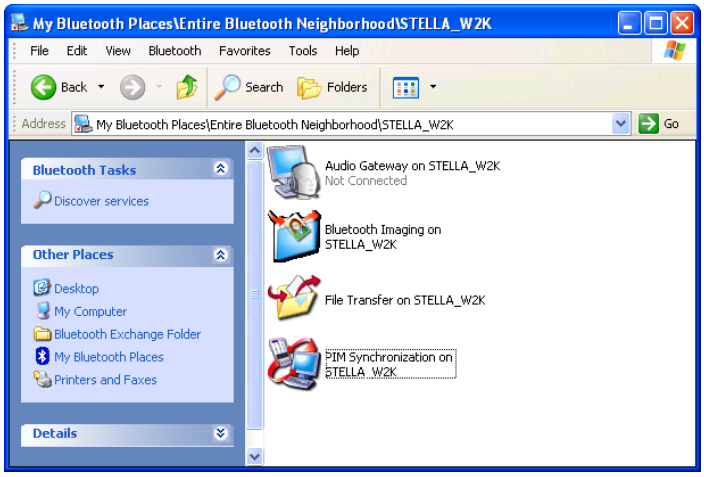
- Business cards
- Calendar items
- Email (with or without attachments-see below)
- Notes



To Synchronize the PIM Database

To synchronize the PIM database on this computer with the PIM database of another Bluetooth device:

1. Make a target Bluetooth computer discoverable and connect to the PIM service, following the instructions in "Creating a Connection" on page 11.
2. Respond to the **Bluetooth Service Authorization** message to allow access the PIM Synchronization service.



Fax

The Bluetooth Fax service allows this computer to send a fax using a Fax/Modem that is physically connected to a remote Bluetooth device. To send a Fax:

1. Open a connection to the Fax service that is provided by another Bluetooth device, following the instructions in “Creating a Connection” on page 11.
2. Open or create the document to be faxed, and then select the **Print**, **Send to Fax Recipient** or a similar command that is available in most applications.

Note: The fax application needs to use the Bluetooth Fax Modem.

File Transfer

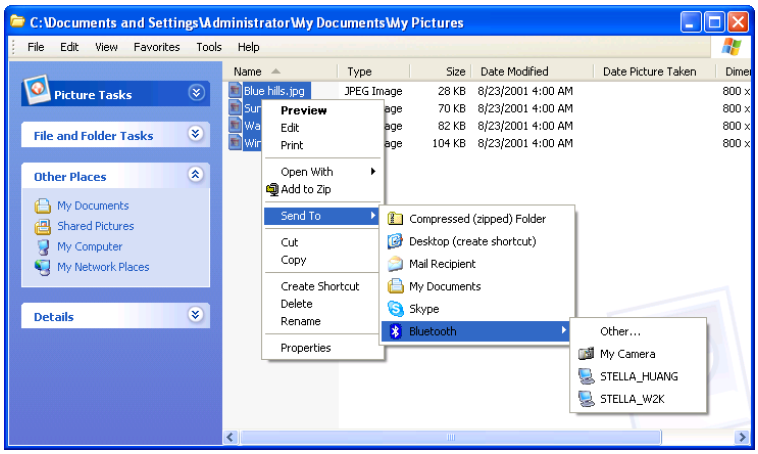
The Bluetooth File Transfer application allows this computer to access, send files to or copy files from another Bluetooth device.

Send Files on This Computer to Remote Bluetooth Device

To send files on this computer to another Bluetooth device:

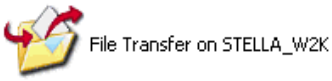
Option 1

1. In Windows Explorer, open the folder where the file or folder you want to send is located.
2. Right-click the file or folder name, point to **Send To**, point to **Bluetooth,** and then click the name of the destination Bluetooth device.



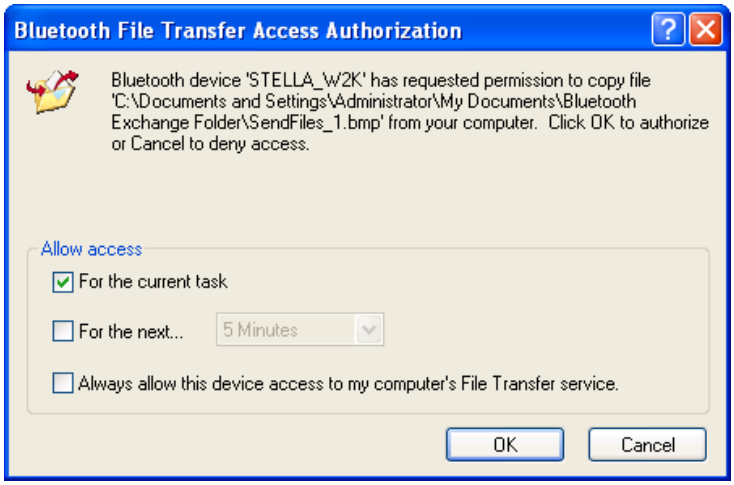
Option 2

1. Open **My Bluettoth Places** and discorver the **File Transfer** service on the destination Bluetooth device.



2. Double-click the **File Transfer** shortcut. The utlity will open the **Bluetooth Exchange Folder** on the other Bluetooth device and get its file list.
3. You can now explore the **Bluetooth Exchange Folder** of the other Bluetooth device. Just copy or drag-and-drop the file/folder to the desired location on the destination Bluetooth device.

Note: When you send folders to another Bluetooth device, If the **Secure Connection** property of the **File Transfer** service of the other Bluetooth device has been set, the operator of the other Bluetooth device must available to allow access unless the **Always allow this device access to my computer's File Transfer service** check box in **Bluetooth File Transfer Authorization** is selected. Otherwise, the file transfer fails.



PIM Item Transfer

The Bluetooth **PIM Item Transfer** application allows this computer to send and receive Personal Information Manager items between this computer and other Bluetooth device.

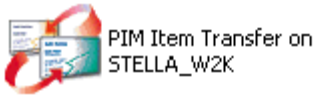
The supported items are:

- Business cards (*.vcf or *.vcd)
- Notes (*.vnt)
- Email (*.vmg) (with or without attachment)
- Calendar (*.vcs)

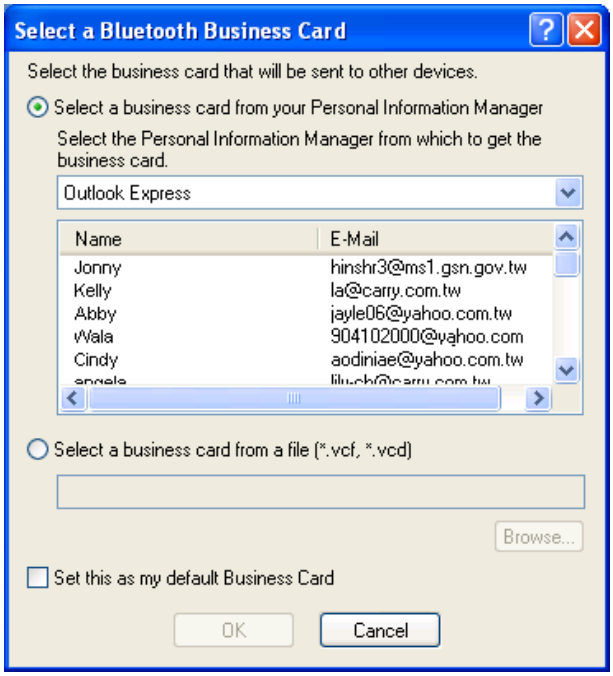
Electronic Business Cards Operations

To send a business card to remote Bluetooth device

- Double-click the **PIM Item Transfer** service on a remote device



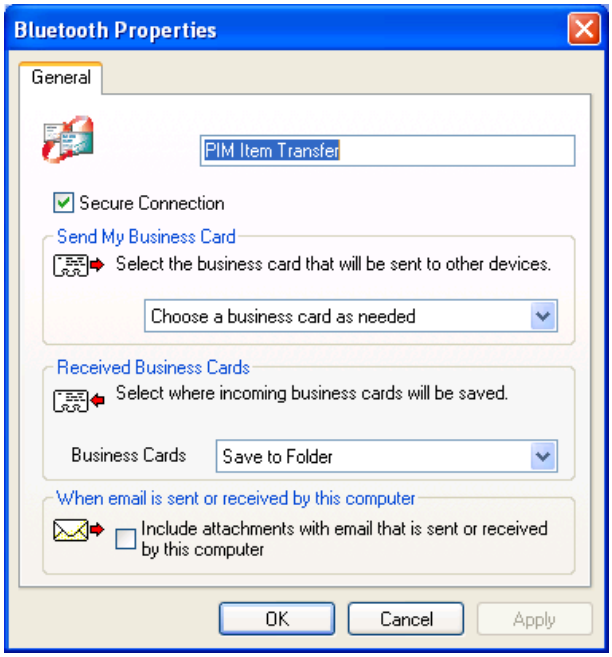
- Select a business card that will be sent to other device.



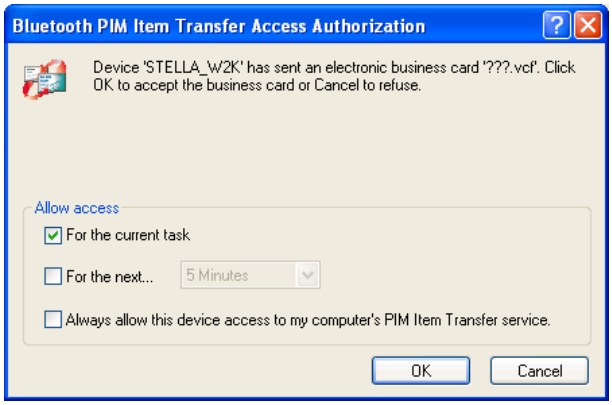
To configure business card settings

To configure which business card to send and where to store the received business card,

Go to **Bluetooth Configuration** > **Client Applications** > **PIM Item Transfer** to configure required settings.



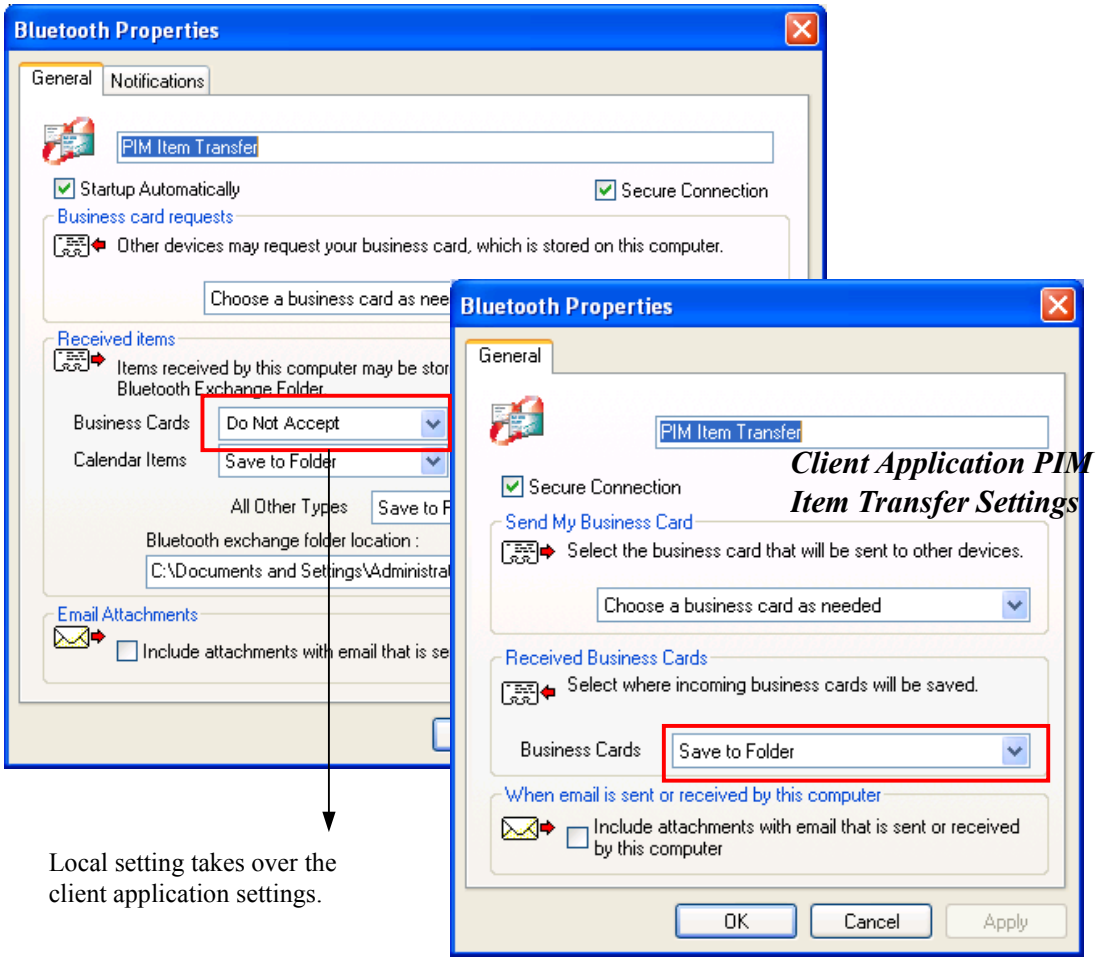
- **Secure Connection:** If the **Secure Connection** property is set on either device, the receiving party must be available to allow access when an access request is received. Otherwise, the PIM transfer fails.



- **Send My Business Card:** Specifies how your business card is handled when it is requested by a remote device.
- **Received Business Cards:** Specifies where to store received business cards.

Note: The selected **Received Business Cards** option is influenced by the local PIM Item Transfere settings. For example, if local setting is configured to **Do Not Accept** business cards, the sending request from remote Bluetooth device fails.

Local PIM Item Transfer Settings



- **Email attachments:** The only option is to include or not to include attachments with email that is sent or received on the computer using this service.

To Send Notes, Emails and Calender Entries

To send note, email or calender, just select one or moer target items and then, from the **File** menu of the PIM (e.g., Outlook), select **Send to Bluetooth**. You can also drag-and-drop a supported item directly from your PIM to the PIM Item Transfer service icon of a remote device.

Note: If synchronization is enabled for a specific item type, but is not enabled for that item type on the remote device, synchronization will not take place for that item.

Note: Not all choices are available for all items. For example, Note items can only be synchronized in Microsoft Outlook. Therefore Lotus Notes and Outlook Express are not displayed as options in the **Notes** item shortcut menu. Personal Information

Managers that are not installed on this computer are not displayed as options in the shortcut menus.

Dial-up Networking

The Bluetooth **Dial-up Networking** application allows this computer to use a modem that is physically connected to a remote device to access the Internet or log on to a remote network.

Open a connection to the **Dial-up Networking** service that is provided by another Bluetooth device, following the instructions in "Creating a Connection" on page 11.

After the Bluetooth dial-up networking connection is established it can be used the same way as any other networking connection. For example, you can open a browser and explore the World Wide Web, if the remote computer has Internet access.

To close a dial-up networking connection, just go to **My Bluetooth Places,** right-click the service name and select **Disconnect**.

Configure

The **Bluetooth Configuration** > **Client Applications** > **Dial-up Networking** > **General** tab provides options to configure.

Network Access

The Bluetooth **Network Access** application makes it possible for this computer:

- To connect to a Local Area Network (LAN) using the physical connection on a remote Bluetooth device.

  or

- To connect to an ad hoc network provided by a remote Bluetooth device. When joining an ad hoc network, it can take up to one minute after the connection is established to obtain an IP address and automatically self-configure.

The type of network connection that is available is determined by the configuration of the remote Bluetooth device.

Bluetooth Serial Port

The Bluetooth Serial Port application allows this computer to establish a wireless serial connection with a remote Bluetooth device.

The applications on both this computer and the remote device must be configured to send and receive data to and from the respective communications port (COM port) assigned to the Bluetooth serial port. The wireless serial connection may then be used by the applications as though a physical serial cable connected the devices.

To establish a virtual serial port connection between this computer and another Bluetooth device:

1. Open **My Bluettoth Places** and discorver the **Serial Port** service on the destination Bluetooth device.

2. Double-click the **Serial Port** shortcut to make the connection.
3. If secure option is enabled, the operator of the other Bluetooth device must be available to respond to any authorization requests.

4. Note the COM port name that is associated with the connection, and then configure programs to use that port.

Bluetooth Human Interface Device

The Bluetooth Human Interface Device application allows this computer to use a Bluetooth keyboard, mouse, or other human interface device

1. Verify that the keyboard, mouse or other human interface device (HID) contains batteries, that the batteries are inserted properly and are fully charged, and that you know where the Connect button is to make the device discoverable.
2. Open **My Bluettoth Places** and discorver the HID.
3. Double-click the **HID** shortcut to make the connection.
4. If the HID is a keyboard, using the keyboard, type the Bluetooth security code that is in the Bluetooth security code box, and then press **ENTER**.

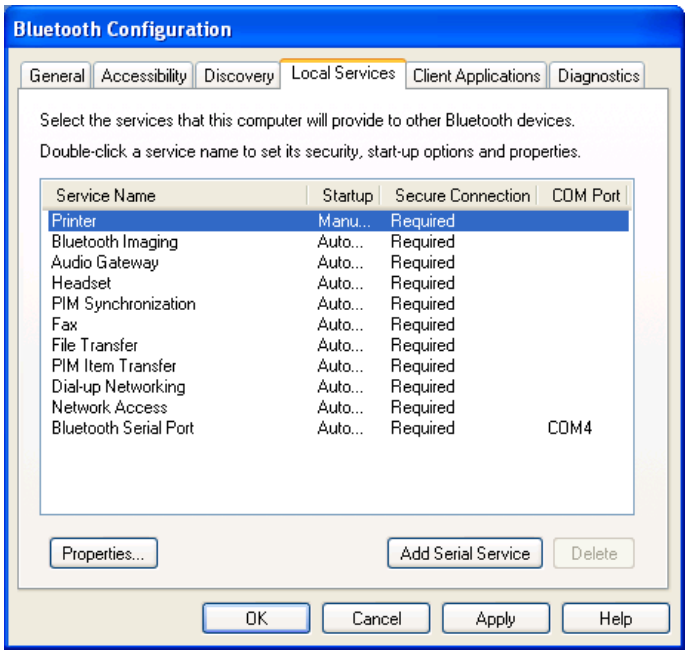
   -or-

   If the HID is a Bluetooth mouse or other Bluetooth pointing device, use the Bluetooth mouse or other Bluetooth pointing device to click Click here in Confirmation Required.

You can now use the Bluetooth HID.

6. Local Service

Local services are the services that your Bluetooth-enabled computer provides to other Bluetooth devices. Your computer can offer one or more services, which can be configured via the **Local Services** tab in the **Bluetooth Configuration** panel.



Common Configuration Settings

These properties can be set individually for each Bluetooth service:

- **Service Name** - the default name of each service can be changed.
- **Secure Connection** - requires that remote devices provide proof of identity and that all data be encrypted.
- **Startup Automatically** - starts the service automatically when Bluetooth is started.
- **Notifications** - provides visual and/or audio notification that a remote device is attempting to connect (or has connected) to a service on this computer.

Printer

The Printer service allows other Bluetooth devices to use a printer that is physically connected to your computer.

To provide this service, the local printer should be physically connected to this computer by a USB or parallel cable, is set as the default printer and is turned on.

Note if the Secure connection property for the printer has been set on either computer, the operators of both computers must be available to allow access and to supply the Bluetooth security code when requested. Thereafter, access is granted automatically and it is not necessary to supply the security code.

Bluetooth Image Transfer

The Bluetooth image transfer service allows this computer to ***accept*** images from remote devices that support Bluetooth image transfer.

The supported image formats are:

- BMP
- GIF
- PNG
- JPG

Received images are stored in **My Documents** > **Bluetooth Exchange Folder**.

Audio Gateway/Headset

The Audio Gateway/Headset service redirects this computer's audio to another Bluetooth device. For example, if this computer is connected to a Bluetooth audio device and other computer is connected to this computer's audio gateway service, the audio is directed to the Bluetooth audio device.

PIM Synchronization

The PIM Synchronization service can be used by a remote device to synchronize its Personal Information Manager (PIM) database with the PIM database of this computer.

Four data types are supported:

- Business cards

- Calendar items
- Email messages
- Notes

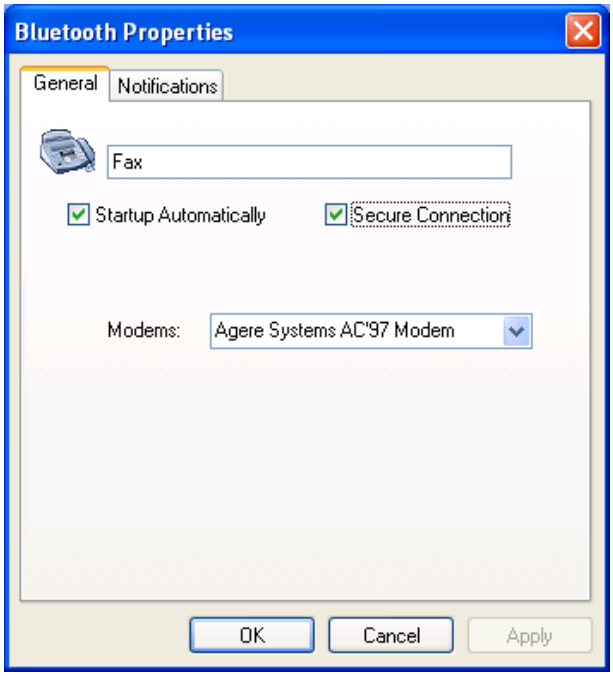
Whether an individual item is accepted and where it is stored, after it is accepted, is configured in the **PIM Item Transfer** service. If that service is not configured to store a particular data type in Outlook, then that data type cannot be synchronized.

Microsoft Outlook permits duplicate entries, so all duplicates may not be exchanged in the synchronization process.

Note: Only Outlook's default contacts folder is synchronized. Items in sub-folders are not synchronized. Items that are moved from the default folder to a sub-folder will not be displayed the next time synchronization takes place.

Fax

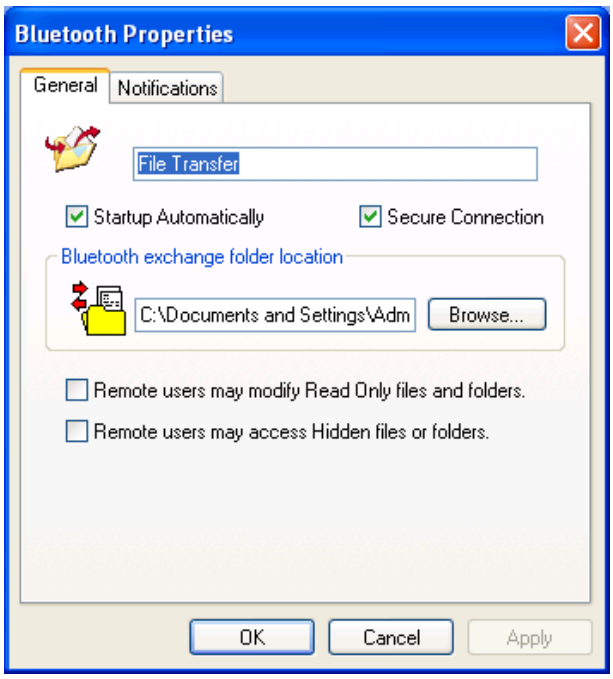
The Fax service allows other Bluetooth device to use this computer's Fax modem to send a fax. To provide this service, your computer must be physically connected to a modem offering fax function.



File Transfer

The File Transfer service allows other Bluetooth devices to explore this computer's Bluetooth exchange folder and send files to or copy from that folder.

To configure your local file transfer service, go to **Bluetooth Configuration** > **Local Services** > **File Transfer**. Here you can specify your defalut exchange folder location and remote user access permissions.



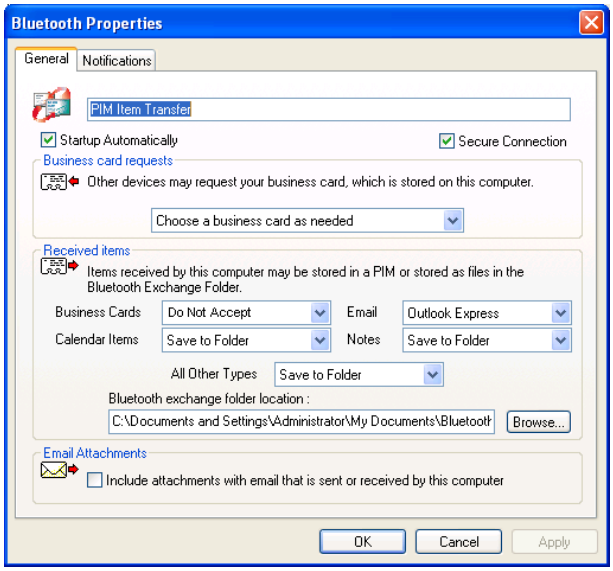
Note: If you set the **Secure Connection** property of the **File Transfer** service of this computer, you must be available to respond to the **Bluetooth Security Code Request** sent by the other device when the other device initially attempts to connect to this computer. Otherwise, the pairing process fails. After the two device are paired, the other device can access the files on this computer without having to obtain access permissions.

PIM Item Transfer

The PIM Item Transfer service allows to exchanges Personal Information Manager items between this computer and other Bluetooth devices.

In addition to the configuration options common to all Bluetooth services, this service also has settings that determine:

- How business card requests are handled.
- Where to store inbound data items, on an individual basis.
- Whether to send/receive attachments with email.



Dial-Up Networking

The Dial-Up Networking service allows other Bluetooth devices to use this computer's modem to access the Internet or a remote network. To provide this service, your computer must be physically connected to a modem offering fax function.

Network Access

The Network Access service allows other Bluetooth devices to:

- Create a private network with this computer. To establish the network connection, this computer and the remote Bluetooth computer must be configured to use the IP addresses within the same subnet. You can use the **Configure Network Adapter** button to make the configuration.

  -or-

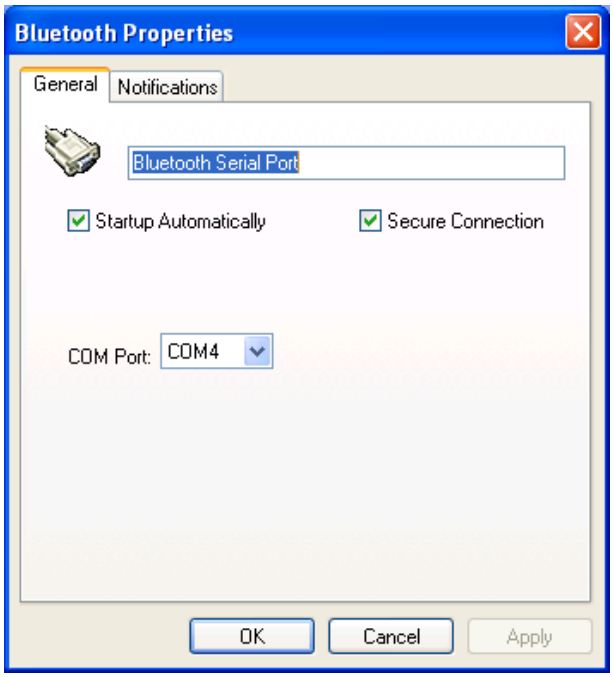
- Access a Local Area Network through this computer. To use this function, this computer must be configured to share the Internet connection. You can click the **Configure Connection Sharing** button and follow the prompts to proceed.

Bluetooth Serial Port

The Bluetooth Serial Port service allows other Bluetooth devices to establish a wireless serial connection with this computer.

In addition to the configuration options common to all Bluetooth services, this service also has setting for specifying a COM port.

Note: Unless you have a specific reason to do so, DO NOT CHANGE the default COM port setting.



7. Troubleshooting

Problem or Symptom	Possible Solution
I cannot connect to a paired device that is listed in Entire Bluetooth Neighborhood.	• Check to see if the device is turned on, in range, and in Discoverable mode (refer to the manual that came with the device for instructions for making the device discoverable). Devices that you have paired with are listed in Entire Bluetooth Neighborhood regardless of whether they are turned on, in range, or in Discoverable mode. • Check to see if the device Bluetooth radio is turned on (refer to the manual that came with the device for instructions). If the other device is a Bluetooth computer, check the appearance of the Bluetooth icon in the notification area. • If you have connected a Bluetooth device with another Bluetooth device besides this computer (for example, connecting a headset with a cellular phone), you must delete the existing connection to this computer, and then re-create the connection.
The device I want to connect to is not listed in Entire Bluetooth Neighborhood.	• Check to see if the device is turned on, in range, and in Discoverable mode.
I cannot print to the Bluetooth printer from this computer.	• If you have printed to the printer before, verify that the printer is in range, is turned on, is not malfunctioning, and is still paired with this computer. • If you have not printed to the printer before, did you install the printer? If not, install the printer according to the instructions provided in this manual. If you did install the printer, verify that the procedure you followed matches the instructions.
I cannot print Print from another Bluetooth computer	• If you have printed to the printer before, verify that you are in range of and paired with this computer, that both the printer and this computer are

to a standard printer that is physically connected to this computer.	powered on, that the printer is not malfunctioning, and that the printer is the default printer for this computer. • If you have not printed to the printer before, did you install the printer on your computer? If not, install the printer and try again.
I cannot send a fax using the fax capabilities of a Bluetooth telephone, modem, or other device that offers fax service.	• The device offering the fax service may be set to use another device instead of the fax modem.
I cannot adjust the headphone volume.	• Check to see if the volume on the headphones is set to minimum. • Adjust the volume using the volume control on the media player rather than the master volume control on the computer.
I cannot communicate with a cell phone or reconnect to a cell phone.	• Verify that the cell phone is in Discoverable mode, is in range, and that the Bluetooth radio is turned on.

7. Specifications

Item	Description
Interface	USB 1.1 compliant A type female connector
Supported OS	Windows XP, 2000, ME and 98SE
Frequency Band	2.400–2.483.5 GHz
Spreading	Frequency hopping spread spectrum (FHSS)
Data Rate	3 Mbit/s (EDR)
Transmit Power	0 dBm typical, Power Class 2 with dynamic power control
Receive Sensitivity	–86 dBm maximum
Antenna	Internal
Operating Range	100m (Class 1) / 10m (Class 2)
Operating Temperature	0°C to 85°C
Operating Humidity	95% maximum (no condensing allowed)
Storage Temperature	–20°C to 85°C
Storage Humidity	95% maximum (no condensing allowed)
Security	128-bit encryption
Standard	Bluetooth SIG Specification 2.0 + EDR
Compliance	FCC, CE, BQB

*Specifications are subject to change without notice.

8. Regulatory Compliance

FCC Compliance and Advisory 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, 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, according 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 correct the interference by one or more of the following measures:

1. Reorient the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

Any special accessories needed for compliance must be specified in the instruction manual.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used. Use only shielded cables to connect I/O devices to this equipment.

CAUSION: Any changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

CE

This equipment is in compliance with the requirements of the following regulations:
EN 55 022: CLASS B

WEEE Information

For EU (European Union) member users:
According to the WEEE (Waste electrical and electronic equipment) Directive, do not dispose of this product as household waste or commercial waste. Waste electrical and electronic equipment should be appropriately collected and recycled as required by practices established for your country. For information on recycling of this product, please contact your local authorities, your household waste disposal service or the shop where you purchased the product.

FCC RF Radiation Exposure Statement
This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This equipment must not be co-located or operating in conjunction with any other antenna or transmitter.