Bluetooth™ Wireless USB Adapter

User Manual (GBU221 / GBU321)

ⓘ IOGEAR®

Thank you for purchasing one of the most feature-rich Bluetooth™ to USB adapters available. IOGEAR's Bluetooth™ to USB adapters are first-rate wireless connectivity accessories designed to help reduce the frustration of dealing with cable glut in your home or office. These adapters allow computers with USB connections to become Bluetooth™ enabled computers. They comply to Bluetooth 2.0 and USB 1.1 specifications, and provide users with a 2.1Mbps data rate. They also enable wireless Personal Area Network (PAN) connectivity to Bluetooth™ enabled devices such as PDA's, printers, cellular phones, computers, etc.

We hope you enjoy using your IOGEAR Bluetooth™ to USB adapter, another connectivity solution from IOGEAR.

Table of Contents

This package contains:

GBU221
1 Bluetooth to USB adapter
1 Driver CD
1 Quick Start Guide
1 Warranty/Registration card

GBU321
1 Bluetooth to USB adapter
1 USB extension cable
1 Driver CD
1 User manual
1 Warranty registration card

The Bluetooth™ Installation CD contains the following:

• Bluetooth drivers for Windows 2000/XP
• User Manual for IOGEAR Bluetooth Adapter

If any items are damaged or missing please contact your dealer.

Overview

Bluetooth™ is a low-power wireless networking standard which uses short radio waves to allow electronic devices to communicate with each other without using cables.

The following applications are supported by Bluetooth™ technology:

- Synchronize your Bluetooth™ PDA with your computer.
- Send your business card to anyone who has a Bluetooth™ device.
- Send or receive files to or from anyone who has a Bluetooth™ enabled device.
- Chat with anyone who has a Bluetooth™ enabled computer.
- Play a one-on-one serial game without a cable.
- Send an e-mail without being wired to the network.
- Dial up to the Internet on your computer over your Bluetooth cellular phone.
- Send a fax from your computer over your Bluetooth™ cellular phone.

Most Bluetooth-enabled devices have the capability to act as:

- A **Bluetooth server** - these devices provide one or more services, such as access to the Internet, or to other Bluetooth devices.

- A **Bluetooth client** - these devices use the service(s) provided by Bluetooth servers.

Most Bluetooth devices that can act as both server and client, and can often do both at the same time.

Overview Continued

Bluetooth™ technology is supported under the following operating systems.

• Windows 2000
• Windows XP

• Mac OS X 10.3.9 or greater

Features

- Eliminates cables between your computers
- Controlls and communicates with Bluetooth™ enabled devices
- Enables wireless Personal Area Network (PAN) connectivity
- Bluetooth™ specification 2.0 compliant
- USB specification 1.1 compliant
- Up to 20 meter (66 feet) wireless working distance for GBU221, up to 100 meter (330 feet) for GBU321
- Up to 2.1 Mbps data rate
- Small form factor makes it easy to carry and place
- Crisp, easy, and fast installation and setup
- Built-in security to assure the privacy of your communication – Pairing, Encryption, and Authentication
- PC and Mac compatible

System Requirement:

Hardware Requirement:
· Available USB port

Operating System:

For PCs: Windows 2000/XP
For Macs: OS X v10.3.9 or later

Introduction

IOGEAR®'s Wireless Bluetooth™ to USB Adapter is a Class 1 (for GBU321) device with a wireless working distance of 330 feet (100 meters). This device allows any computer with USB connections to become a Bluetooth™ enabled computer. It complies with Bluetooth 2.0 and USB 1.1 specifications, and provides users with a 2.1 Mbps data transfer rate at ranges up to 330 feet. It also enables wireless Personal Area Network (PAN) connectivity to Bluetooth™ enabled devices such as PDA's, printers, cellular phones, computers, etc.

The Wireless Bluetooth™ to USB adapter is compatible with both PC and Mac. It is easy to install and use, and very portable. Another great solution from IOGEAR® for home and mobile networking needs.

GBU221 is a class 2 device with a wireless working distance of 60 feet (20 meters).

Windows XP Service Pack 2

The Microsoft Bluetooth stack comes included with Service Pack 2 for Windows XP. If you already have Service Pack 2 installed, you may choose not to install drivers from the installation CD and instead use the Microsoft Bluetooth drivers. Please see Page 34 on the manual for more details.

1. Make sure that the IOGEAR Bluetooth adapter is **NOT** plugged into the computer before installing the software. Insert the IOGEAR installation CD into your CD-ROM drive. The auto-start feature will bring up the installation window to begin the driver installation. If the installation CD does not auto-start, simply browse to your CD drive and run the setup file. Please follow the on-screen instructions to install the drivers.

2. If you accept the license agreement, click **Next.**

3. When you approach the end of the installation process, the Driver Signature Notice may appear. Simply click OK to proceed with the installation.

Driver Signature Notice

Currently Microsoft does not have a certification program in place for Bluetooth devices. As a result, at this time it is not possible to provide certified drivers for Bluetooth devices. In the event that Microsoft implements a Windows Logo certification process for Bluetooth devices, signed drivers will be made available.

To avoid receiving several prompts for signed drivers during the installation process, select OK to disable unsigned driver warnings, and proceed with the installation. The default warning option will be re-enabled at the completion of the installation of the Bluetooth drivers. This option is an effort to provide the best customer experience while using this product. If you select Cancel, the installation will continue without disabling the warnings and you will be required to select Continue at each prompt to proceed with the installation.

OK   Cancel

4. During the install, a "Bluetooth Device not Found" window will appear. **DO NOT** plug in the Bluetooth adapter at this time, simply click **Cancel** to proceed with the driver installation without connecting the Bluetooth device.

5. Once the driver installation has completed, click Finish and **RESTART** your computer

6. After restarting the computer, proceed to plug in the Bluetooth USB Adapter, and wait a few seconds while Windows recognizes the device.
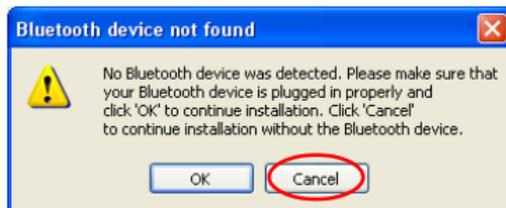
1. Now double click the Bluetooth™ icon in the system tray. This will start the "Initial Bluetooth Configuration Wizard."

2. Once the Initial Bluetooth™ Configuration Wizard has started, click **Next.**
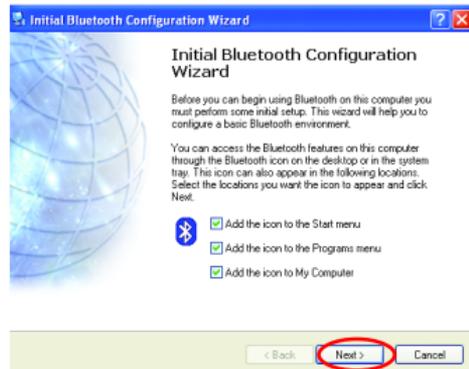
3. Next, enter a unique name for this computer.
This name will be displayed to other Bluetooth™
devices. Select a computer type from the drop-
down menu and click **Next.**

4. Click **Next** to configure the services this
computer will offer to other Bluetooth™
devices.

5. Choose the services that this computer will offer to other Bluetooth™ devices by placing a check in the box. To display the properties, click on the configure button.
Click **Next** to proceed.

6. At this point, Windows will install the software necessary for the services you selected.

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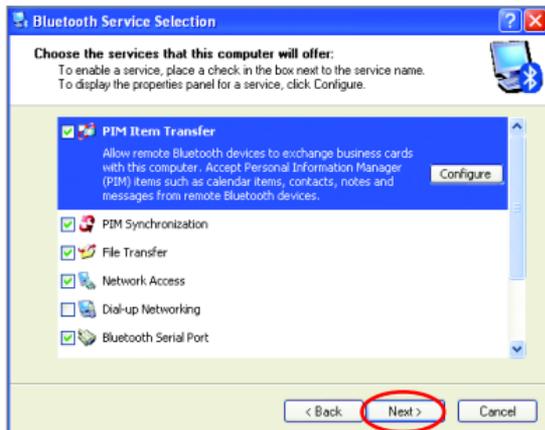
7. Once Windows is finished installing the software, the following window will appear. This window will allow you to configure your computer to use the service of another Bluetooth Device.

If you do not have any additional devices you wish to connect to at this time, click **Skip,** click **Finish** on the final screen.
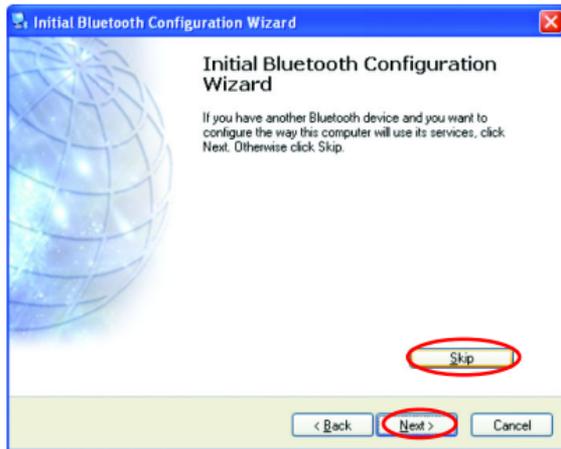
Windows

1. First, unplug the IOGEAR USB Bluetooth adapter from your computer
2. Go to Control Panel (Start > Settings > Control Panel)
3. Click on *Add or Remove Programs*
4. Click on **IOGEAR Bluetooth Software** and click on [Remove]
5. When the uninstall is complete, restart your computer

Installation – MAC OS X

1. Use of the IOGEAR Bluetooth adapter requires
MAC OS X v10.3.9 or later. There is no need
to install any additional drivers, as Apple
provides all required Bluetooth drivers under
MAC OS X v10.3.9.

Simply plug in your Bluetooth adapter into an available USB port on your computer, and go to *System Preferences*.

2. Double-click on the Bluetooth icon and under the Settings tab, make sure Bluetooth Power is ON and that the box next to *Discoverable* is checked.
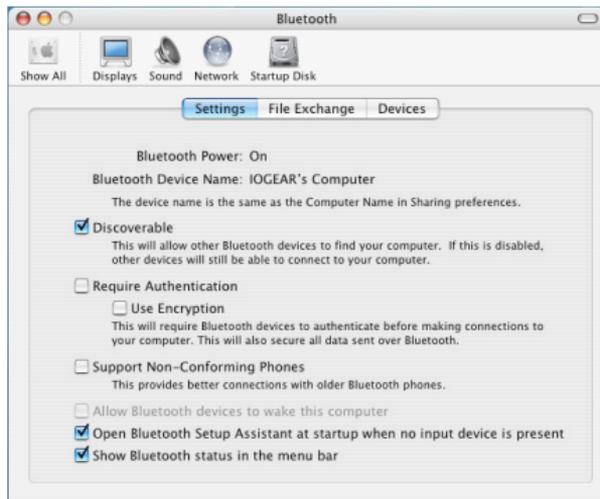
3. To begin setting up your Bluetooth device, select the *Devices* tab and click on **Set Up New Device**.
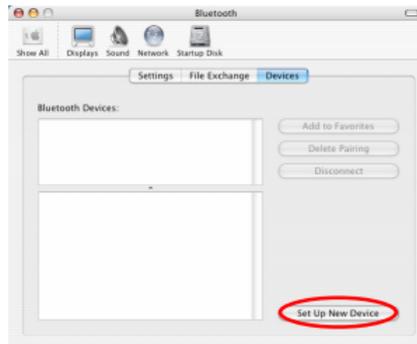
4. This will initiate the Bluetooth Setup Assistant; click **Continue** to proceed.
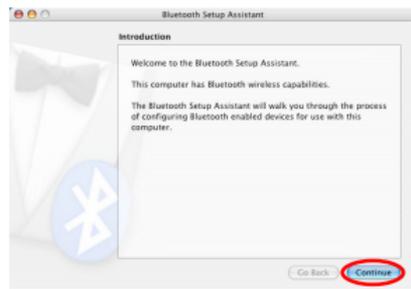
5. On this window, you can select what type of Bluetooth device you want to setup. Please make your choice below and then click **Continue.**

6. Your computer will search Bluetooth devices in your area and display them under the window below. Select the device you wish to communicate with and then click **Continue** to pair/connect to your device.

7. Please refer to the Apple website for further information on Apple Bluetooth support at www.apple.com.
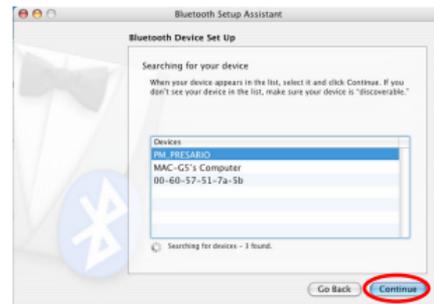
How to connect to a Cellular Phone (Bluetooth Enabled)

1. Double-click on the IOGEAR® Bluetooth ™ icon
in the system tray.
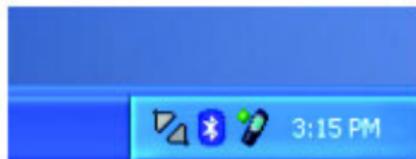
2. Next, click on Search for devices in range. As
illustrated below, the Bluetooth-enabled cell
phone is detected.
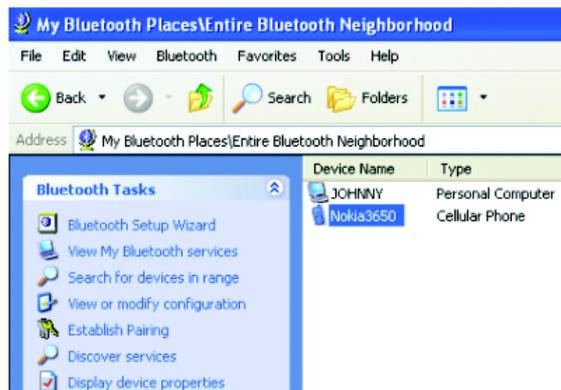
3. Right-click on the cell phone, and select Pair Device. When prompted for passkey, simply type any four digits and click OK. On the phone, you will also be prompted to enter a passkey. Make sure you enter the same passkey as on the computer. Your devices should now be paired.

4. In our example, we used a Nokia 3650 cell phone. Double-click on the phone to see the available services. The services offered by your cell phone may depend on the features supported by your specific model and may or may not require additional software by the phone manufacturer.
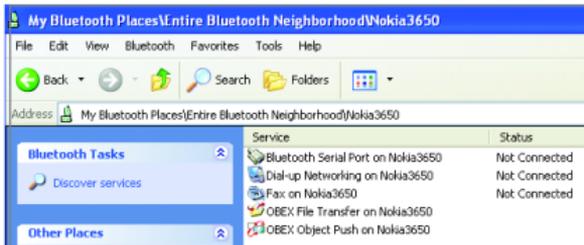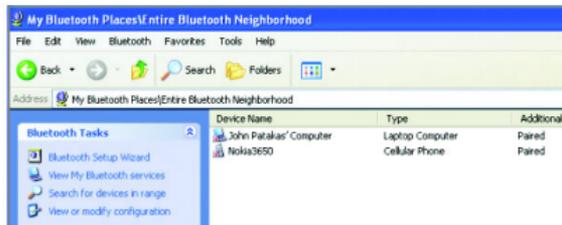
In the case of Nokia phones, you can take full advantage of your Bluetooth phone by using the Nokia PC Suite software. Please check www.nokia.com to see the version of the software supported by your Nokia phone. Once you have the Nokia PC Suite software installed on your system, please proceed with the instructions below.

Operation

**How to Connect to Network Access (Bluetooth -
Enabled Computer)**

1. Double-click on the IOGEAR Bluetooth Icon in the
   system tray.

2. Next, click on Search for devices in range. As
   illustrated below, the Bluetooth-enabled computer
   is found.
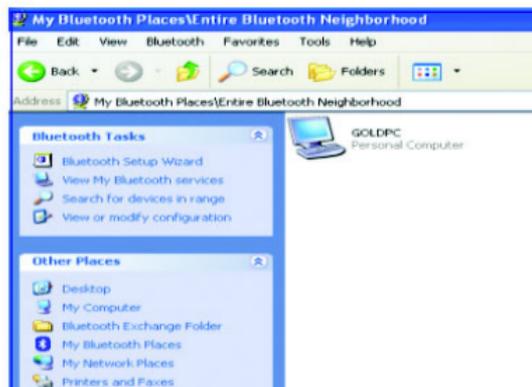
3. Double click on the device to display a list of its
services. To establish a network connection, right
click on Network Access and select Connect to
Network Access Point.
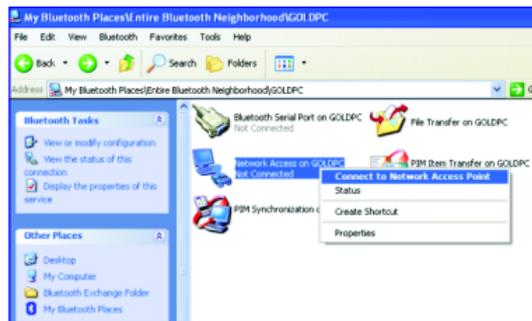
4. When the connection is being established, you will
be prompted to accept/deny the connection on your
other computer. To allow access, click OK.

5. Once you establish the connection, the Network Access icon will turn green and say "Connected." Your device will be able to share its Internet connection (if the device has Internet access) and files. If a pass key has been set by either device, the pass key is required to connect both Bluetooth™ enabled devices.
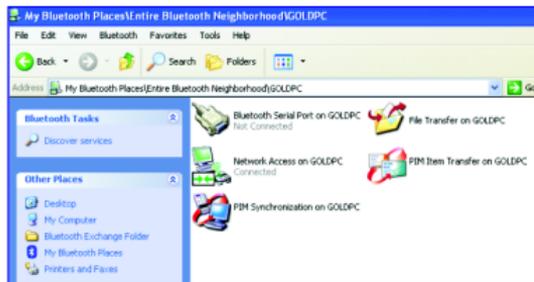
6. At any time, when service requests are made from or to another Bluetooth™ device (e.g. File Transfer, Network Access, Serial Port Connection, etc.), a pass key is required to connect the devices. This authentication is not required once devices are paired (see *Chapter: What's Pairing?*).

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How to connect to a Bluetooth™ Enabled Printer

1. Double-click on the IOGEAR® Bluetooth™ icon in the system tray.

2. Next double click on "**Find Bluetooth™ Devices**".
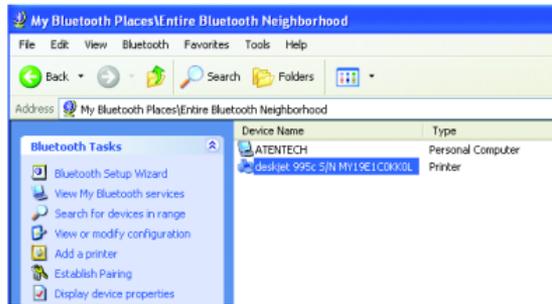
3. Double click on the printer you wish to connect to.
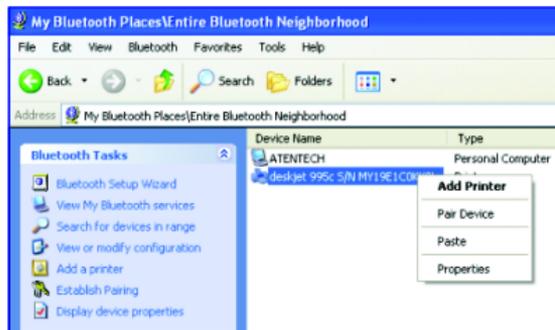
4. Click OK to install the printer. If your printer is already installed, the printer properties window will appear.
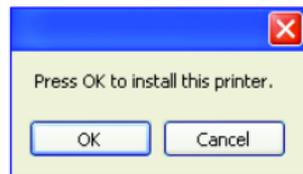
5. If your printer is already installed, the printer properties window will appear. Click on **Print Test Page** to print a test page.
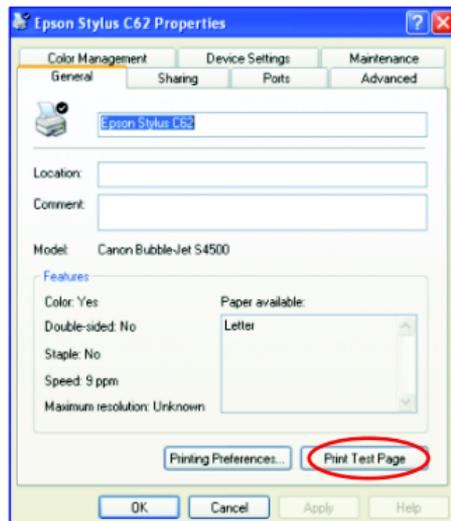
Operation

How to connect to a PDA (Personal Digital Assistant)

1. Double-click on the IOGEAR® Bluetooth™ icon in the system tray.

2. Next double click on "Find Bluetooth™ Devices".
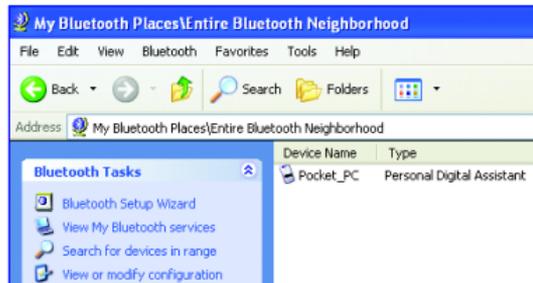
3. Once the search is finished, double click on the PDA to view the services it offers.

4. At any time, when service requests are made from or to another Bluetooth™ device (e.g. File Transfer, Network Access, Serial Port Connection, etc.), a pass key is required to connect the devices.This authentication is not required once devices are paired (see *Chapter: What's Pairing?*).

What is "Pairing ?"

Pairing is a Bluetooth™ function that enables Bluetooth™ devices to remain permanently linked to another.

What "Pairing" means in terms of security?

As mentioned, Pairing allows devices to permanently link with each other. The pass key authentication will also be perpetuated in Pairing, meaning that devices will not ask for a pass key once they are paired. Paired devices will remain linked, even if other paired devices are turned off. Once a paired device turns back on, it is ready to be used and service requests will not ask for the pass key again. The built-in 128 bit security encryption of Bluetooth™ assures the privacy of your paired devices.
Note: If devices are unpaired, it is necessary to enter a pass key each time a service request is made from or to another Bluetooth™ device.

Pairing Devices

1. Right-click on the Bluetooth™ device and select on "Pair device".

2. Enter a **Pass Key** when asked.

> <u>Note:</u> **The Pass Key on both devices must be the same!**

> <u>Example:</u> If Device 1 tries to pair with Device 2, Device 1 will prompt for a Pass Key. Enter any Pass Key. Device 2 will then ask for a Pass Key. Enter the Pass Key, which has been set for Device 1. Done!

3. The device is now paired with your computer.

Unpairing Devices

1. Right-click on the paired Bluetooth™ device in the list and select on "Unpair Device".

2. The device is now unpaired

Windows XP Service Pack 2 - Bluetooth Stack

If you are running Windows XP with Service Pack 2, you may use the Bluetooth drivers provided by Microsoft. Keep in mind, however, that this Bluetooth stack has limited Bluetooth profiles support. For more information, please visit the Microsoft website at www.microsoft.com.

1. To use the Microsoft Bluetooth stack, simply plug in your IOGEAR Bluetooth adapter into an available USB port on your computer. Windows will automatically detect the Bluetooth device and install all necessary drivers.

2. You will then see a Bluetooth icon on your traybar that allows you to perform all Bluetooth operations, as shown below:

3. Optionally, you can find this in *Control Panel > Bluetooth Devices*.
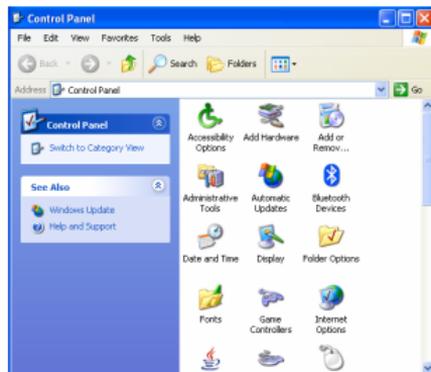
4. To connect with your Bluetooth device, simply right-click on the Bluetooth icon on the traybar and select *Add a Bluetooth Device*.
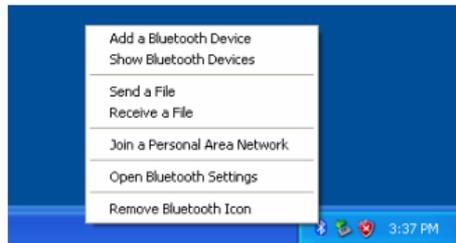
5. Make sure to set your Bluetooth device in "discoverable" mode and check the box as shown on the picture.

6. Your computer will search for all the Bluetooth devices in your area and list them. Select the desired device, and click **Next.**

7. Please consult the user manual for your
   Bluetooth device to see if you need a Passkey
   to pair/establish a connection.
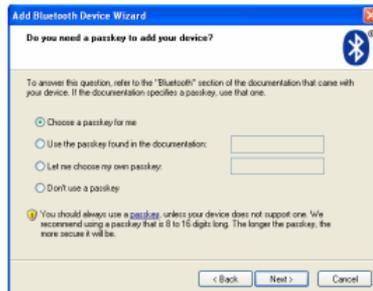
8. Your Bluetooth device will then connect to the
   IOGEAR Bluetooth adapter. To finish the
   process, simply click **Finish**.

Specification

Function	GBU221/GBU321
Connectors	USB Type A 1
Data Rate	2.1 Mbps
Frenquency Band	2.402 GHz - 2.4835 GHz Unlicensed ISM band
Humidity	10% - 90% non-condensing
Interface	USB
Modulation	GFSK (Gaussian Frenquency Shift Keying)
Operating Temperature	0˚C - 50˚C
Security	Pairing, Encryption, Authentication
Sensitivity	Minimum - 76dB
Transmission Power	20 dBm max with power control (Class 1)
Weight	0.4 oz.

If you need technical support, please check out our IOGEAR® Tech Info Library (T.I.L.) at **www.iogear.com/support** for the latest tips, tricks, and troubleshooting. The IOGEAR® T.I.L. was designed to provide you with the latest technical information about our products. Most of the answers to your questions can be found here, so please try it out before contacting technical support.

Technical support is available Monday through Friday from 8:00 am to 5:00 pm PST and can be reached at (949) 453-8782 and (866) 946-4327 or by email **support@iogear.com**.

Radio & TV Interference Statement

WARNING!!! This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION EXCEED THE PRICE PAID FOR THE PRODUCT.

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The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or updates. For further inquires please contact your direct vendor.

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