

# **Installation Guide**Bluetooth® Wireless USB Adapter

## Welcome

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**

Package Contents	5
Overview	6
Features	8
Requirements	9
Introduction	10
Installation-Windows XP	11
Initial Bluetooth Configuration Wizard	14
Installation-Windows Vista	17
Uninstall Drivers	22
Installation-Mac OS X	23
Connect to a Cellular Phone	26

Connect to Network Access	32
Connect to a Printer	41
Connect to a PDA	44
Pairing	49
Installation - Windows XP Service Pack2	51
Specification	55
Technical Support	56
Radio & TV Interference Statement	57
Limited Warranty	58
Contact	59

# **Package Contents**

This package contains:

#### GBU221/321

- 1 Bluetooth® to USB adapter
- 1 Driver CD
- 1 User Manual
- 1 Warranty/Registration card

#### The Bluetooth Installation CD contains the following:

- Bluetooth drivers for Windows 2000/XP/Vista
- User Manual for IOGEAR Bluetooth® Adapter

<sup>\*</sup> 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.
- Transfer data between your cell phone and PC.

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.

## **Features**

- Eliminates cables between your computers
- · Controls 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

# Requirements

## **System Requirements**

Hardware Requirements:

· Available USB port

## Operation System:

For PCs: Windows 2000/XP/Vista 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 up 330 feet (100 meters), and Class 2 (for GBU221) device with a wireless working distance of up to 66 feet (20 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).

### Installation-Windows XP

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 51 on the manual for more details

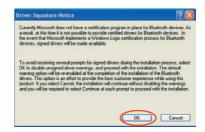
1. Make sure that the IOGEAR Bluetooth adapter is NOT plugged into the computer at this moment. Insert the IOGEAR installation CD into your CD-ROM drive. The auto-start feature will bring up the installation window to begin the driver installation. If the installation CD does not auto-start, simply browse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



If you accept the license agreement, click Next



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



 During the install, a "Bluetooth Device not Found" window will appear. Plug in the Bluetooth<sup>®</sup> adapter at this time to proceed with the driver installation.



 Once the driver installation has completed, click Finish and RESTART your computer. After restarting the computer, the IOGEAR Bluetooth<sup>®</sup> Adapter will function correctly.



## **Initial Bluetooth Configuration Wizard**

#### For Windows XP

 Now double click the Bluetooth icon in the system tray. This will start the "Initial Bluetooth Configuration Wizard."



Note: We suggest leaving everything as default to minimize mistaken configuration.

2. Once the Initial Bluetooth Configuration Wizard has started, click **Next**.



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.



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



- Choose the services that this computer will offer to the 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.



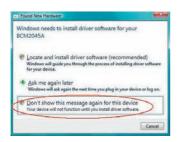
 Once Windows is finished installing the software, the following window will appear. This window will allow you to configure your computer to use the service of another Bluetooth Device

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



## **Installation-Windows Vista**

 Make sure the Bluetooth<sup>®</sup> Adapter is plugged into your computer before you install the Bluetooth software. After you plug in the Bluetooth<sup>®</sup> adapter, Found New Hardware screen will appear, simply click Don't show this message again for this device to proceed the software installation.



 Insert the IOGEAR installation CD into your CD-ROM drive. The auto-start feature will bring up the auto play options for the installation CD. Simply click on Open folder to view files to browse the CD.



 A Window will bring up the files that are in the installation CD. Simply double click on the setup.exe file to start the driver installation.



 If your IOGEAR Bluetooth® adapter was not plugged into the computer before you begin the setup, a window will popup and ask you to plug in the IOGEAR adapter to continue installation.



 The Driver Signature Notice may appear before getting into the installation window. Simply click Install this driver software anyway to proceed with the installation.



Installation window will be brought up and simply click **Next** to begin the driver installation.



7. If you accept the agreement, click Next.



8. Choose your destination folder to be installed to, and then click **Next**.



9. Click Install to begin the installation.



10.Once installation has completed, click Finish and RESTART your computer. After restarting the computer, the IOGEAR Bluetooth<sup>®</sup> adapter will be recognized and will function correctly.



## **Uninstall Drivers**

#### Windows XP Service Pack 2

- First, unplug the IOGEAR USB Bluetooth<sup>®</sup> 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

#### Windows Vista

- First, unplug the IOGEAR USB Bluetooth® adapter from your computer
- 2. Go to Control Panel (Start > Control Panel)
- Click on Uninstall a program under Programs or Click on Programs and Features (Control Panel Classic View)
- 4. Click on Widcomm Bluetooth Software and click on [Remove]
- 5. When the uninstall is complete, restart your computer

## Installation-Mac OS X

 Use of the IOGEAR Bluetooth<sup>®</sup> 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.

 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 Devices tab and click on **Set Up New Device**.



4. This will initiate the Bluetooth Setup Assistant; click **Continue** to proceed.



 On this window, you can select what type of Bluetooth device you want to setup. Please make your choice below and then click Continue.



- 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.
- Please refer to the Apple website for further information on Apple Bluetooth support at www.apple.com.



## **Connect to a Cellular Phone**

#### How to connect to a Cellular Phone (Bluetooth Enable)

#### For Windows XP

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



Next, click on Search for devices in range.
 As illustrated below, the Bluetooth-enabled cell phone is detected.



 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.



#### For Windows Vista

 Right-click on the Bluetooth icon in the system tray and select Add a Bluetooth Device



Make sure to set your Bluetooth cellular phone in "discoverable" mode and check the box as shown on the picture.



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



 Please consult the user manual for your cellular phone to see if you need a passkey to pair/establish a connection.



 Your Bluetooth cellular phone will then connect to the IOGEAR Bluetooth adapter.
 To finish the process, simply click Finish.



## **Connect to Network Access**

#### For Windows XP

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



Next, click on Search for devices in range. As illustrated below, the Bluetooth-enabled computer is found.



 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.



 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 passkey has been set by either device, the passkey is required to connect both Bluetooth enabled devices.
- 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 passkey is required to connect the devices. This authentication is not required once devices are paired (see Chapter: What's Pairing?).



#### For Windows Vista

 Right-click on the Bluetooth icon in the system tray and select Join Personal Area Network.



2. Click Add to add a new network device.



3. Make sure to set your Bluetooth enabled computer in "discoverable" mode and check the box as shown on the picture.



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



Decide if you use a passkey to add your device. Then click **Next** to proceed.



 When the connection is being established, you will be prompted to accept/deny the connection on your other computer. To allow access, click on the message.



 Enter the passkey that you have created or provided by the wizard to confirm the connection.



 Your Bluetooth enabled computer will then connect to the IOGEAR Bluetooth adapter. To finish the process, simply click Finish.



9. When you return to the Bluetooth Personal Area Network Device window by right-clicking on the Bluetooth icon in the system tray and select Join a Personal Area Network, now you can see the connection that has been established. Simply choose the desired connection and click Connect.



10. Window will be closed automatically after the connection has successfully been connected.



11.A Bluetooth connection is shown when you open Computer from the start menu. Now your device will be able to share its internet connection, printers, and files. (Make sure the desired share options' checkboxes are checked under Bluetooth setting by right-clicking on the Bluetooth icon in the system tray.



### **Connect to a Printer**

### How to connect to a Bluetooth Enabled Printer

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



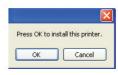
Next, double click on "Find Bluetooth Devices".



3. Double-click on the printer you wish to connect to.



 Click **OK** to install the printer. If your printer is already installed, the printer properties window will appear.



If your printer is already installed, the printer properties window will appear. Click on Print Test Page to print a test page.



### Connect to a PDA

### How to connect to a Bluetooth Enabled PDA

### For Windows XP

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



2. Next double click on "Find Bluetooth Devices"



 Once the search is finished, double click on the PDA to view the series 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?).

### How to connect to a Bluetooth Enabled PDA

### For Windows Vista

 Right-click on the Bluetooth icon in the system tray and select "Add" a Bluetooth Device



Make sure to set your Bluetooth enabled PDA in "discoverable" mode and check the box as shown on the picture.



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



 Please consult the user manual for your PDA to see if you need a passkey to pair/establish a connection.



 Our Bluetooth PDA will then connect to the IOGEAR Bluetooth adapter. To finish the process, simply click **Finish**.



# **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**

- Right-click on the Bluetooth device and select on "Pair device".
- 2. Enter a Pass Key when asked.

Note: The Pass Key on both devices must be the same!

Example: 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

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**

- Right-click on the paired Bluetooth device in the list and select on "Unpair Device".
- 2. The device is now unpaired

### **Installation-Windows XP Service Pack 2**

### Windows XP Service Pack-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.

- 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
- You will then see a Bluetooth icon on your tray bar that allows you to perform all Bluetooth operations, as shown below:



3. Optionally, you can find this in Control Panel >Bluetooth Devices.



 To connect with your Bluetooth devices, simply right-click on the Bluetooth icon on the tray bar 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.



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



 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**.



# Specifications

# GBU221/GBU321

Connectors	USB Type A1
Data Rate	2.1Mbps
Frequency Band	2.402GHz – 2.480GHz Unlicensed ISM band
Humidity	10% - 90% non-condensing
Interface	USB
Modulation	GFSK (Gaussian Frenquency Shift Keying)
<b>Qperating Temperature</b>	0°C -50°C
Security	Pairing, Encrption, Authentication
Sensitivity	Minimum – 76dB
Transmission Power	5mW max with power control (Class 1)
Weight	0.4 oz

# **Technical Support**

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.

### **Limited Warranty**

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.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

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.

### Contact

### IOGEAR, INC.

23 Hubble Irvine, CA 92618

**P** 949.453.8782 **F** 949.453.8785

Visit us at: www.iogear.com

#### ©2007 IOGEAR, All Rights Reserved, PKG-M0345

IOGEAR and the IOGEAR logo are trademarks or registered trademarks of IOGEAR, Inc. Microsoft and Windows are registered trademarks of Microsoft Corporation. IBM is a registered trademark of International Business Machines, Inc. IOGEAR makes no warranty of any kind with regards to the information presented in this document. All information furnished here is for informational purposes only and is subject to change without notice. IOGEAR, Inc. assumes no responsibility for any inaccuracies or errors that may appear in this document.

# FEDERAL COMMUNICATIONS COMMISSION 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 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.

## **CAUTION:**

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

# **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.

"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."



### About Us

■ FUN

IOGEAR offers connectivity solutions that are innovative, fun, and stylish helping people enjoy daily life using our high technology products.

**GREEN** 

IOGEAR is an environmentally conscious company that emphasizes the importance of conserving natural resources. The use of our technology solutions helps reduce electronic waste.

HEALTH

IOGEAR supports healthy and fit lifestyles. By integrating products with the latest scientific developments, IOGEAR's solutions enhance the life or end-users.