Wi-Fi and Bluetooth 2-in-1 Adapter User's Manual

Features:

- > Adds 802.11b/g and Bluetooth 2.0+EDR wireless capabilities to any desktop computer
- Programmable DSP based software radio technology
- > Easily upgrade to future standards such as Weber or UWB.
- > Bluetooth wireless access up to a radius of 100 Meters
- Supports most popular OS including Windows 2000/XP/2003/Vista
- Encryption and authentication ensure safe, secure communications
- Operating Temperature : 0-70'C
- Storage Temperature : -20-90'C

Bluetooth:

- Bluetooth 2.4GHz~2.4835GHz license-free ISM Band frequency hopping
- Connections within ranges up to 100 Meters
- Connect up to 7 devices in a Pacolet
- Data Rate : 2~3Mbps
- Class I Bluetooth radio
- RF module sensitivity : -85dbm at 0.1% Bit Error Rate (BER)
- Security : encrypted link, authentication Bluetooth profiles support includes: Generic access profile (GAP), Serial port profile (SPP), Object push profile (OPP), File transfer profile (FTP), Dial-up network profile (DUN), Fax profile (FAX), Synchronization Profile(SYNC), Personal Area Network(PAN) ,Basic image Profile(BIP),Headset Profile(HSP), Hardcopy Cable Replacement Profile(HCRP), A2DP (Advanced Audio Distribution Profile),HID Profile(HID)

Wireless LAN:

- > 2.4GHz ISM band, unlicensed operation
- IEEE 802.11b/g standard compliant
- Support of 64/128-bit WEP encryption and WPA2
- > Operating Frequency / Channel: 2.4-2.47GHz
- Emission type : Direct Sequence Spread Spectrum (DSSS) Technology
- RF Output Power: 802.11g 54M OFDM@25'C, 14dBm
- Data Rate: 802.11b: 1, 2, 5.5, 11Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbp
- Range: Indoors: Up to 328 feet (100 meters)
- Sensitivity: 54Mbps: Typical -74dBm @ 10% PER,R
- ➢ Working Mode: Infrastructure, Ad-Hoc

SOFTWARE SETUP

Notice: Before setup, please uninstall IVT Bluetooth software if a computer has it. Please finish the driver installation, restart computer then plug in the 2-in-1 USB Adapter.

Put CD-ROM into CD-ROM drive, and the system will pop Automatic operation of the interface. Click" USB Driver" of the interface as the following picture shows:



Or click "Browse CD" and double- click"setup.exe" to setup the drive. Then the interface as below will be popped out and show the necessary software before setup WiFi driver, the first one is Software WPA2 PATCH, the second is IVT Bluetooth software:

| Status | Requirement |
|--|---|
| ² ending ² ending | Microsoft WPA2 hoftx IVT BlueSoleil 2.7.0.13 |
| | |

Notice: Because this equipment can support both Wi-Fi and Bluetooth, Software setup procedures include: Installation of Bluetooth and WIFI USB adapter software.

1. Install Microsoft WPA2 patch:

(1) System will check whether there is this patch in this computer or not, before installation. If not, click <Install>, it will pop-up to install this patch:



Notice: This patch offer better service for Wi-Fi network, and boost the security. If the patch has been installed, this program will be not pop-up.

(2) Follow the installation steps till it's finished.

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2. Installing Bluetooth software:

(1) After install the patch, Installation program will indicate whether install IVT software or not.



Notice: Please make sure to install this software, because it's special software for this product.

(2) Follow the installation steps till it's finished.

3. Install Wi-Fi Device.

It will start to install WiFI device when the Bluetooth Software Setup completed:

| Choose | Setup Language | |
|--------|---|------------|
| ی | Select the language for this installation from the choi | ces below. |
| | English (United States) | ~ |
| | OK Cancel | |

(1)After preparing to install, it will go into Customer Information, select the Language of installation. Default Language is English. Then click "yes":

(2) Follow the installation steps till it's finished.

| ₩LAN and Bluetooth Card | |
|---|-----------|
| Regions Selection | 1 million |
| Select the region for which wireless. All is authorized to use. Selecting the incorrect region may cause violation of law. | |
| ©ण्ड | |
| China | |
| CEurope | |
| 🔘 Japan | |
| ORestOfWorld | |
| nstallShield | |
| Next > | Cancel |

Notice: Please select for other areas.

3. After restart your computer, an image **use** will come up in lower right hand corner, which is the function image of the facility.

Two working modes:

This USB adapter has two modes: Coexist mode, Unplug mode.

Coexist mode means set the USB adapter to coexistent mode for Bluetooth and wireless LAN USB adapter. select this mode, the USB adapter has both function of Bluetooth and wireless LAN. Unplug mode means set the USB adapter to forbidden mode. Select this mode, the USB adapter will stop

to work.

You can select the above modes by clicking the icon in lower right corner **11**. (Click by left button or right button are both ok):

Using method in different mode of Bluetooth and wireless LAN network:

A、 in Coexist mode

1. Setting and using of Bluetooth:

After starting this mode, it will popup the Bluetooth software (IVT) automatically. It will show you <Welcome to Bluetooth> in the first time. You can define name, type and security grade for the Bluetooth equipment.



After finishing the setup, click <confirm> to enter the main window of IVT software. If want to search Bluetooth equipments, please confirm Bluetooth function of other Bluetooth equipments start (some kind mobile phones need to setup their visibility), then click the ball button in the main window of IVT software to search. If finding any equipment, the name of these equipments will be showed in the orbit near to the ball. Here take phone communication for example:



(1) searching service:

Double-click the icon of the mobile phone, then it will show the Bluetooth support service, the service what be showed in the above diagram frame is the Bluetooth service that this mobile phone support, they are: Bluetooth dial-up network service, Bluetooth file transfer service, Bluetooth object exchange service. Bluetooth dial-up network service means after connecting between the computer and the mobile phone by Bluetooth, the mobile phone can be used as the modem of the computer, for network. Bluetooth file transfer service means transferring data between computers, what are connected by Bluetooth; Bluetooth object exchange service means sending name USB adapter to other connected Bluetooth equipment. Notice: There are three colors of the icon, about different Bluetooth services.

White – free mode. The services haven't been started.

Yellow – start mode. Local Bluetooth service has been started already.

Green - link mode. Some Bluetooth equipment have been linked this service.

(2) PAIR

Click right button of the mobile phone icon, and then select to pair in the menu:



After select "Pair Device", software will popup "Enter Bluetooth Passkey" please input the Bluetooth password here:

The passwords can be inputted by the user-defined. For example: input "0000", then click "yes", and then input the same code"0000" for pairing. If successfully, there will be a red tick in the left down of the mobile phone icon.



(3) File Transferring

Click Bluetooth file transfer service icon in this time, some mobile phones will be clewed to<Add to My devices?>, please click "Yes". It will popup the dialog box < Remote Shared Folder >, copy the file, and plaster in <Remote Shared Folder>, the file will be transferred to the mobile phone;

| Ve Edit Veн Go | | _ | |
|------------------------------|--------------|--------------------------|---------------|
| ++ + III Co III III | Carta Zalaty | - Vew | |
| Address \ | | 18.00 | 3 |
| Nane Isokard Rish | Size | Type Folder Folder | Date Modified |
| Haan Now Denotory Refresh | | | |
| | | | |
| | | | |

Notice: The Bluetooth function just can be as host computer, it means that can search other Bluetooth device here, but can not be searched by other Bluetooth device. For example, it is not available to transfer the data from the mobile phone to the host computer directly, in this case, it have to setup a relevant Mobile Phone Manage Software first, then the data can be transferred to the host computer by operate the Manage Software via the computer.

(4) Other Bluetooth service purpose:

- Bluetooth Serial Port Service: Offer personal computer, notebook, PDA, GPS receiver and other Bluetooth device with Virtual Serial port, and so on.

- Bluetooth Personal Area Network(PAN) service: Allow personal computer, Notebook, PDA or other Bluetooth Devices to build any Bluetooth Personal LAN Network.

- Bluetooth Dial-up Networking service (DUN): Allow user access wireless Internet via Mobile phone.

- Bluetooth Synchronize Data Service: Allow user to synchronization personal information data manage (PIM) among PC, PDA, Mobile and other Bluetooth Devices.

- Bluetooth Object Change service: Allow user to send and receive message, note, and name USB adapter from PDA or Mobile phone.

- Bluetooth Printer service: Allow computer connect with Bluetooth printer.

- Bluetooth Human Interface Input Device service: Work with Bluetooth Mouse, Bluetooth Keyboard or Bluetooth Game control remote.

- Bluetooth Fax service: Offer user with Fax service by connecting the Bluetooth Modem, Telephone or other Bluetooth Device with computer.

- Bluetooth Image Transfer service: Allow user receive picture and image from Bluetooth digital camera, telephone or other Bluetooth device.

- Bluetooth AV service: Allow user listen the stereo music via earphone build with Bluetooth function

- Bluetooth Headset service: User can enjoy the music via Bluetooth wireless headset as the normal wired earphone or speaker.

Notice: The Bluetooth purpose service up to what the Bluetooth device can offer.

2. Setting & Use of the wireless network:

After you finish the drive loading, the network connection sign under your right under corner of your system will be indicated that the wireless network have been found, if there are wireless router or wireless access point using in the inner environment:

Click this news, springs the wireless network connection dialog box, has listed the workable wireless network connection in this dialog box which searches by the wireless LAN USB adapter, if the wireless route or the wireless access point have encrypted, then in the network demonstrated on can appear this chart sign of "Security-enabled wireless network (WPA) Begins using Safely wireless Network", expressed if wants to join this wireless network you need the specific key, If the wireless network USB adapter discovered the wireless network connection haven't been encrypted (has not demonstrated <begins using safely wireless network), then only need to select this wireless network, clicks <connect> on the right under angle of the dialog box.

Then following we take connected begin using the safe wireless network as the example to be the explanation,

(1) Firstly we need to select the wireless networking requested connection, for example, we select the wireless network of <linksys-iton>:



(2) click <connect> on the right under angle of the dialog box. Because this network is a safety wireless network, have to input password:

| Wireless Network Cor | nection 🔀 |
|--|--|
| The network 'linksys-iton' in network key helps preven Type the key, and then di | equires a network key (also called a WEP key or WPA key). A t unknown intruders from connecting to this network. ck Connect. |
| Network key: | •••••• |
| Confirm network key: | •••••• |
| | Connect Cancel |

Notice: The password is setup by the wireless router or wireless access point, therefore password what input here, must be the same with what in the router or the wireless point. Besides, the password have to be input twice, please make sure they are same.

(3) After inputting the password, click<connect> to continue, it will connect the wireless network automatically, and system will inform when connect successfully.

| Wire | eless Network Connection 3 (linksys-iton) |
|------|---|
| Spe | ed: 36.0 Mbps |
| Sign | al Strength: Excellent |
| Stat | :us: Connected |
| Ň | 🔊 🔰 🈼 🌉 🧐 🔢 🦁 5:41 PM |

Notice; if connecting unsuccessful, please repeat to operation. It can access internet or LAN network by wireless network after connecting.

B Unplug mode

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After select this mode, the equipment will be closedown, it only have function icon in the lower right hand corner.