

LINDY®

CONNECTION PERFECTION

Wireless N PCI Card

User Manual

English



LINDY No. 52013

www.lindy.com



2. Enter a profile name then click **"Next"**
3. Select the **"Network Type"** and click on the drop-down arrow and select **"Peer-to-Peer"**. Then use the up/down arrows to select the channel number and click **"Next"**
4. Select **"Authentication Mode"** to enable **"Encryption"** if you have any security concern. Once you enable the encryption function, then you should input the corresponding pass key. Click **"Next"**
5. In IP Setting select **"Enable"** or **"Disable"** to make use of it and click **"Complete"** to finish the configuration

Access Point: Connects to the network via an Access Point

1. Click the **"AP List"** tab
2. Select the wireless network you would like to join from the list shown
3. Click **"Connect"** to join the network
4. Input the password required to join the network

Note: You might need to configure a profile if the destination network has **"WEP KEY"** protection

Wi-Fi Protected Setup (WPS):

This is a standard for easy and secure establishment of a wireless home network, created by the Wi-Fi Alliance. The goal of the WPS protocol is to simplify the process of connecting any home device to the wireless network. To secure your wireless network, select the **"WPS"** button under user interface as below:



Introduction

Thank you for purchasing the LINDY Wireless N PCI Card. This product complies with IEEE 802.11n draft 2.0 wireless specifications and is also backward compatible with 802.11b/g. This PCI Card has integrated MIMO (multi in, multi out) technology which enhances coverage range and delivers 6x greater performance. With the ability to achieve incredible data rates of up to 300Mbps, you can enjoy high speed internet access for data, video and voice at the home or office. To ensure your wireless network is secure against hackers, the PCI Card incorporates the latest WPA2 encryption, WPA with AES and TKIP.

Installation

IMPORTANT

Do not install the PCI Card in your computer till you have installed the software.

1. Insert the driver CD in to your CD-Rom drive and follow the on screen instructions
2. Select WPIR-501 and then click next
3. Follow the on screen instructions and then shutdown your computer
4. Install the PCI card in to your computer and power on
5. Follow the on screen instructions and choose **"Install the software automatically (recommended)..."**
6. The configuration utility will appear on the taskbar when the installation is complete

Wireless Network Setup

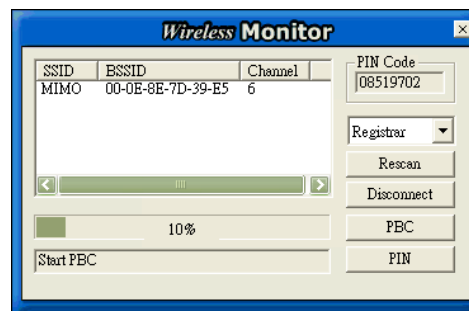
Peer-to-Peer: Connects with other wireless client(s)

This option does not require an Access Point. Please make sure the **"Network Name"** (SSID or ESSID) and **"Peer-to-Peer"** channel are the same for all clients in the same wireless network. Double click on the Configuration Utility icon to open the utility.

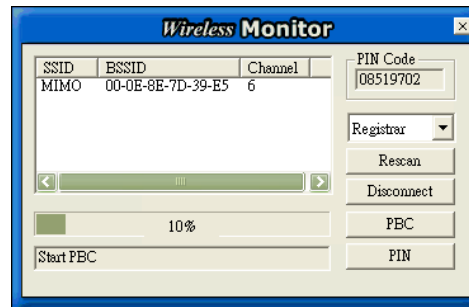
1. Click on **"Profile Setting"** tab and click **"Add"** to create a new profile

There are two ways to enable WPS connection:

1. PBC mode: Choose a Router in the list then click **"PBC"** button



2. PIN mode: Choose a Router in the list and check the PIN codes are the same between Router and Client then click **"PIN"** button



Product Specifications

- IEEE802.11n draft compliant
- Up to 300Mbps data transfer rate
- 6 x greater performance
- MIMO technology
- Backwards compatible with 802.11b/g
- Advanced security: 64/128bit WEP, WPA & WPA2
- Chipset: Ralink RT2860 (MAC/BBP) and RT2820(RF)
- Three external detachable RSMA dipole antenna

Standard: IEEE draft 802.11n, 802.11b/g

Frequency Band:

802.11b: ISM band 2.400 ~ 2.484GHz (subject to local regulations)
802.11g: ISM band 2.400 ~ 2.484GHz (subject to local regulations)
802.11n draft: ISM band 2422 – 2452MHz (channel BW=40MHz)
2400 – 2483.5MHz (channel BW=20MHz)

RF chain: 2T3R for HT20, HT40, 1T3R for 802.11b/g mode

Spreading:

802.11b: Direct Sequence Spread Spectrum (DSSS)
802.11g: Orthogonal Frequency Division Multiplexing (OFDM)
HT20: Orthogonal Frequency Division Multiplexing (OFDM)
multiple-input/multiple-output (MIMO)
HT40: Orthogonal Frequency Division Multiplexing (OFDM)
multiple-input/multiple-output (MIMO)

Modulation:

802.11g: G64 QAM, 16 QAM, QPSK, BPSK
802.11b: GCSK, DQPSK, DBPSK
HT20, HT40: 64 QAM, 16 QAM, QPSK, BPSK Data

Data Rate:

802.11b: 11, 5.5, 2, 1 Mbps per channel
802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps per channel
HT20: 144, 130, 115, 86, 57, 43, 28, 14 Mbps

HT40: 270, 240, 180, 120, 90, 60, 30Mbps

Receive sensitivity:

Nominal Temp Range
802.11g (3RX):
6Mbps @ -91dBm, typical, +/-2dBm
54Mbps @ -72dBm, typical, +/-2dBm
802.11b:
Typ. -85dBm @ 11Mbps, +/-2dBm
Typ. -92dBm @ 1Mbps, +/-2dBm
HT20 (3RX):
MCS=0 -87dBm, +/-2dBm
MCS=15 -67dBm, +/-2dBm
HT40 (3RX):
MCS=0 -85dBm, +/-2dBm
MCS=15 -64dBm, +/-2dBm

Power Consumption:

802.11b:
Continue TX: 620 @ 3.3V
Continue RX: 340 @ 3.3V
802.11g:
Continue TX: 640 @ 3.3V
Continue RX: 340 @ 3.3V
HT20:
Continue TX: 660 @ 3.3V
Continue RX: 340 @ 3.3V
HT40:
Continue TX: 680 @ 3.3V
Continue RX: 340 @ 3.3V

Output Power:

802.11g: 15dBm @ 54Mbps
802.11b: 17dBm @ 11Mbps
HT20: 13dBm @ 144Mbps
HT40: 11dBm @ 270Mbps

Certifications

FCC Certifications

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

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.

CE Certification

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55024 and EN55022 class A for ITE, EN61000-3-2/-3 the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Recycling Information



WEEE (Waste of Electrical and Electronic Equipment),
Recycling of Electronic Products

United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your

national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

Die Europäische Union hat mit der WEEE Richtlinie umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24. März 2006 an das Entsorgen von entsprechenden, auch alten, Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique. Chaque Etat membre de l' Union Européenne a mis en application la nouvelle réglementation (DEEE) de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate. Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico. Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

LINDY No. 52013

www.lindy.com

Date: 21/07/2009

