

WL5030 WLAN Access Point User's Manual

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#### **Package Contents**

The package you have received should contain the following items:

- Wireless LAN Access Point
- CD ROM containing Utility Software and User's Manual
- Quick Installation Guide

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#### **Software Installation Guide** For AP Configuration

- Run the "Setup.exe" in the folder of AP Configuration of the driver disk. Follow the guideline on the screen, and select the directory where the application will be installed, it will deploy all files that needed at that. At the end, windows will show a message that installation is completed.
- 2. Power on the Access point.
- 3. Plug the "**cross over**" type Ethernet cord into both port of host PC and AP. (If you don't have "cross over" type Ethernet cord and have a hub, then you can use normal type Ethernet cable to connect both host PC and AP to hub.)
- 4. You can run the program of "AP Configuration", which you can find in "start" → "program" → "TECOM" → "SNMPManager"
- 5. Make sure that the IP address of your host PC and AP are in the same sub-net, because this program is based on SNMP. The default setting of IP address of AP is 10.170.254.37

# Utilities Using Guide For AP Configuration

When you run the AP Configuration, you will see a dialog box pop up like below. Of course, the AP is already connected to your host PC by Ethernet port.



1. Press "File"→"Find Access Point", it will show a dialog box like below to show you how many Access Points it found on the net.

Available Access Points	×
Marce 302 11 AF (Fec. 1463) A2588	10.170.254.37
Counter	Caucel

2. Choose the one you want to configure and press "Connect", it shows another dialog box like below. Enter your community and choose your Authority. (The default settings of community are all "public".) Press "OK", After then, if both of you are in the same sub-net, it will get the Access point you choose, and turn into a configuration dialog box.

Connect to Acces	es Point	<u>×</u>
IP Address	10.170.254.37	
Community	211112	
Authority	User	•
OK	Cancel	

 Press "Setup" →"Bridge" →"IP Configuration", a Bridge IP Configuration dialog box will pop up. Here, you can set the IP address and IP mask.

👌 Bridge 17 Config	puration
MAC Address	00 00 22 22 22 60
IP Adduess	10.170.254.37
IP Mask	255.255.255.0
Gateway	0.0.0.0
DHCP Enable	
- Primary Port	
@ Ethemet	C Wireless
OK	Cancel

- Press "Setup" → "Wireless LAN" → "Operational Settings", a Wireless Operational Settings dialog box will pop up. Here, you can set the ESSID and the channel you want.
- 5. Press "File" → "Download Changes" to make all you change download to AP.

👌 WireLess Operatio	onal Settings	LI X
Access Foint Name	A2588	
B221D abods	Chen	nel Cheunel6
Programmation Thresho	M 2346 - Reg	alatory Domain FCC
RTS Threshold	2346	Auto Rate Fell Back 🗂
Authentication Type Open System C Shared Key C Both	— Prescable Type — Short Prescable G Long Prescable	Rater (Mipp) Supported Basic 1 17 17 2 17 17 5.5 17 17 11 17 17
		Advanced
		ucel

After done the above setting, the AP should work properly.

#### **Configuration for Optional function ---Wireless Bridge**

Wireless Bridge function is somewhat like a repeater in the Ethernet world. It can make 2 remote Ethernet LANs just like to be one, which both LANs must got an individual AP connected with. (in another word, 2 remote Ethernet LANs can connected with each other by APs working under the mode.) There are 2 type of bridge mode, point-to-point and point-to-multipoint. You can see from below.



# Point-to-Point Wireless Bridge: This mode allows one wireless bridge communicate with a specific remote one only.

- 1. Run the "AP Configuration" and make a connection with your AP.
- 2. Press "Advanced" button in the right lower Conner of "Setup" →"Wireless LAN" →"Operational Settings", then you will see a pop-up dialog like this.



- 3. click on "Point to Point" and fill in the remote MAC address of the other side of AP in this field.
- Press "File" → "Download Changes" to make all you change download to AP.
- 5. On the other side, do as the same, but only the field of "Remote MAC Address" is that of this side of AP.

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,		2	,

6. Make both APs working on the same channel, then you should have an wireless bridge working now.

Point-to-Multipoint Wireless Bridge: This mode allows wireless bridge communicate with any bridge on the same channel.

- 1. Like in "Point-to-Point" mode, just clicks on "Point-to-MultiPoint", do the same step to all AP you want to work in bridge mode.
- 2. Make sure that all bridge mode AP on the same channel.

Then you can connect with each other.

If you want to allow only AP with authentication to connect, then you can start up authorization algorithm.

- Make an authorized MAC list---just put all the MAC address of AP you want to connect in a text file. For example, if you want AP which MAC address is 00-00-22-22-22-50 in your MAC list, then you just put "000022222250" in your list file.
- Run "AP Configuration". Clicks on "Setup" → "Wireless LAN" → "Authorized Mac Addresses", you will see a pop-up dialog box as below, except the content is blank.



- Clicks on "Load file" button, and choose the authorized MAC list file that you did in last step.
- 4. Clicks on "Dowload" button to download the list into AP.
- 5. Check on "Authorization Table Enable" to make authorization function enabled.
- 6. Press "File"  $\rightarrow$  "Download Changes" to make all you change download to AP.
- 7. Then, only Access Point which MAC address is listed on the table can communicate with.

### Troubleshooting

## 1. AP Installation Problems

## If your network adapter cannot find the TECOM Wireless Access-Point, check the followings,

- Make sure the adapter is securely inserted in the PCMCIA/Cardbus slot. when you insert the wireless adapter into the notebook's slot, a click should be heard if the adapter is properly inserted. Check for any hardware problems, such as physical damage to the card connector.
- Try the card in another slot. If this also fails, test your computer with another wireless LAN adapter (ex: TECOM WL5020i) that is known to operate correctly.
- Check the power of AP is on without problem, or re-configure the network environment setting is correctly.

# 2. Diagnostics utility

- Make sure your computer is using the latest BIOS.
- If there are other network adapters in the computer, they may be causing conflict, remove all other adapters from the computer and test the wireless adapter separately.

Wireless LAN	802.11b Al	P – TECOM WL5030
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Product Name	Wireless LAN 802.11b AP
Model Number	WL5030
Host Interface	1 WAN port
Frequency	2.400 ~ 2.4835GHz (subject to local
Band	regulations)
	<ul> <li>USA and Canada – 11</li> </ul>
	<ul> <li>Most European countries – 13</li> </ul>
	Number of Channel
	<ul> <li>France – 4 Japan – 13</li> </ul>
	(optional – 14)
Power Adaptor	AC 100 ~ 240V, 0.35A
Input	
Input Power	DC 5V, 1.0A
Spreading	DSSS (Direct Sequence Spread
	Spectrum)
Data rate	11Mbps, 5.5Mbps, 2Mbps, 1Mbps
Output Power	Typical: 15 dBm, maximal : 17dBm
Receive	Nominal Temp Range:
Sensitivity	<ul> <li>11 Mbps 10-5 BER @ -83 dBm,</li> </ul>
	Typical
Modulation	<ul> <li>11Mbps and 5.5Mbps CCK</li> </ul>
	<ul> <li>2Mbps: DQPSK</li> </ul>
	1Mbps: DBPSK;
Security	64-bit and 128-bit WEP Encryption
Antenna	Dual antenna diversity system

LED indicator	Power, WAN Link/Act, RF Activity
Standards	IEEE 802.11b compliant for wireless
	LAN, IEEE 802.3 for wired LAN
Temperature	<ul> <li>0 ~ 55°C (Operating)</li> </ul>
Range	<ul> <li>-20~65°C (Storing)</li> </ul>
Humidity	Max. 95% Non-condensing
Operating	<ul> <li>Open Space: 100 – 300m</li> </ul>
Range	<ul> <li>Indoor: 30m – 100m</li> </ul>
-	The transmission speed varies in the
	surrounding environment.
Network	TCP/IP, IPX, NetBEUI
Protocol	
Physical	150mmx107mmx34mm
Dimension	

## **Technical Support**

If you are still experiencing problems after reading Product User's Guide and the Troubleshooting section, you may either contact our technical support at: <a href="mailto:support@tecom.com.tw">support@tecom.com.tw</a>.

OR, simply click our URL address <u>www.tecomproduct.com</u> to go to our company website and check the latest version and other information about the product and/or software.

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

#### **FCC INFORMATION**

The Federal Communication Commission Radio Frequency Interference Statement includes the following paragraph:

The 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 rediate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment dose 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 receier.
- --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.

The user should not modify or change this equipment without written approval form TECOM CO., LTD .Modification could void authority to use this equipment.

#### **RF exposure statement:**

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.