

WL5020i

WLAN Cardbus Adapter

User's Manual

Version 1.0

TECOM CO., LTD.

March 2003

©2003 by TECOM CO., LTD. All rights reserved.

Printed in Taiwan

Table of Contents

Package Contents and Trademark(s) 3		
Software Installation 3		
TECOM WLAN Utility Tool4		
1. General 4		
2. Advanced 5		
3. Statistics 6		
4. Site Survey7		
5. Encryption 8		
Troubleshooting9		
Specifications 10		
Technical Support 10		

Package Contents

The package you have received should contain the following items:

- Wireless LAN PC Card
- CD ROM containing Driver, Utility Software and User's Manual
- Quick Installation Guide

 $Trademark(s)^{TM}$ and Registered $Trademark(s)^{$ [®]}

TECOM and the TECOM logo are trademarks of TECOM CO., LTD.

Microsoft, Windows are registered trademarks of Microsoft Corporation. Other brand and product names may be registered trademarks or trademarks of their respective holders.

Software Installation

- 1. Insert the original CD (packed with the product) into CD-ROM reader, wait for automatic pop-up window and then double-click "setup" to proceed with the installation.
- 2. After the installation process is complete, re-start your notebook PC. Insert TECOM WLAN PC card into Cardbus slot. A new hardware wizard will pop up and guide you to install drivers in your system.
- 3. A tray icon shown as below should be seen at this time.



4. The icon of WL5020i should be in green when the PC card is connecting to a 802.11b Access Point. Double click the icon first from right to bring up TECOM WLAN Utility Tool.



TECOM WLAN Utility Tool

After clicking the icon second from left on the above icon-tray, TECOM WLAN Utility Tool window will be shown as following,

TECOM Wireless LAN Configuration U	tility 🛛	
General Statistics Site Survey Encryption Advanced About		
Network Type Infrastructure SSID TECOM Channel 1	Profile Name Save Delete	
Status Connected: 00-60-B3-16-F6-A1 Tx Link Speed: 11 Mbps	MAC 00-08-22-FF-02-00 DHCP Disabled	
Signal Strength 47 % Link Quality 95 %	IP Subnet Gateway DNS	

Please click on the tabs on the top of the screen to configure.

1. General Tab

<u>Network Type</u>: There are two types of Network you can set **Infrastructure** (Access Point) – this will work only with an existing AP **Ad-hoc** (Peer-to-Peer) – this is an 802.11 compatible ad-hoc mode. All stations with the same SSID are connected peer-to-peer. No AP is needed.

SSID: Stations which link together should be set to the same SSID

<u>Desired Rate</u>: Unless you definitely know the rate you can get, always select "Automatic Rate".

<u>Profile</u>: To save the above setting into a profile, change the profile name and click "Save" button. Or press "Delete" button to delete a profile.

Status: This section shows the current link information of Network, Signal Strength and

Link Quality

<u>Network Address</u>: This section shows the current Network status such as MAC address (Wireless Card), DHCP (Enable or not), IP address, Subnet Mask address, Gateway Address and DNS server address.

Advanced Tab: Choosing the *Advanced* option, you can change advanced configuration settings, such as the **Power Saving mode**, **Preamble Type**, **Fragmentation Threshold**, and **RTS/CTS Threshold**. The following figure shows the recommended configuration for the advanced settings.

TECOM Wireless LAN Configuration	Utility 🛛
General Statistics Site Survey Er	ncryption Advanced About
Power Saving	Disable
Preamble Type	Long
Fragment Threshold	2346
RTS/CTS	2347
Environment Condition	Normal
ТЕСОМ	OK Cancel Apply

3. Statistics Tab: This option enables you to view the available statistic information (Total Packet Number, Error Packet Number, FER-Frame Error Rate, Throughput). In order to reset or update this statistics list, press the **"Reset"** button.

TECOM Wir	eless LAN Configuration Utility		×
General	Statistics Site Survey Encryptic	on Advanced About	1
	Tx Statistics		-
	Tx Success	45	
	Tx Error	1	
	Tx Throughput (Kbps)	0.00	
	- Rx Statistics		
	Rx Success	0	
	Rx CRC Success	1059	
	Rx CRC Error	193	
	Rx Throughput (Kbps)	0.00	
		Re	eset
7		K Cancel	Apply

4. Site Survey Tab: By choosing the *Site Survey* option, you can scan all channels to find all access points within the range of your card. In order to update this list, press the "**Rescan**" button. If you want to link to an AP in this list, Double-click on it. The application will jump over to *General* screen and show all the parameters of the connection newly established.

TECOM Wireless LAN Configuration Utility	×
General Statistics Site Survey Encryption Advanced About	1
BSSID SSID Ch Mode W Signal 00-60-b3-16-f6-a1 TECOM 1 Infrastructure On 50 % 1M*, 2	
▲	
TECOM OK Cancel Apply	

5. Encryptions Tab: This section let you set specify one WEP key to use. If you decide to use encryption, choose one of the available 4 WEP keys and the "Encryption Key Length". You also have the option to select the "Authentication Type (Open system/Shared key)". To activate the change, press "Apply" button at the bottom of the screen.

_		
Т	ECOM Wireless LAN Configuration Utility	×
	General Statistics Site Survey Encryption Advanced About	1
	Encryption Mode	
	Authentication Type Shared key 💌	
	WEP Key Entry (hex)	
	 The radio button selected next to the Key ID is the default key Keyin the key in heredecimal value, range from 0.6, the 4 	
	sets of key should be in the same length	
	Key 1: hint	
	Key 2: Key 2:	
	C Key 3: remain	
	O Key 4:	
	Encryption Key Length	
	● 40-bits ● 104-bits Advanced	
		-

Troubleshooting

1. Adapter Installation Problems

If your computer cannot find the TECOM Wireless Cardbus Adapter or the network driver is not installed correctly, check the followings,

- Make sure the adapter is securely inserted in the 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 CardBus slot. If this also fails, test your computer with another TECOM wireless LAN cardbus that is known to operate 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.
- Check for a defective computer Cardbus slot. Try the adapter in another computer Cardbus slot that is known to operate correctly.

Specifications

Data Rate	11, 5.5, 2 and 1 Mbps, Auto Fallback
Standard	IEEE 802.11b
Operating Range	Up to 100m indoors Up to 350m outdoors
Radio Signal Type	CCK – 11, 5.5 Mbps DQPSK – 2Mbps DBPSK – 1Mbps
Input Voltage	3.3 V
Antenna	Built-in side-stem antenna
LED Indicator	Connection
Host Interface	68-pin connector to Cardbus slot
Operating Temperature	0-50 C (32 – 140 F)
Storage Temperature	0-70 C (32 – 158 F)
Humility	5 to 80% (non-condensing)

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: <u>support@tecom.com.tw</u>.

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.

IMPORTANT NOTE: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.