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XI-325/B Quick Installation Guide

I.   Network Configuration

XI-325/B is an IEEE802.11/802.11b-compliant PCMCIA Type II DSSS wireless LAN PC card. It fully supports wireless networking under Windows 95/98, and NT 4.0.

☐   XI-325/B can be operated in Ad-Hoc and Infrastructure network configurations.   *Ad-Hoc mode* allows XI-325/B users to join an Basic Service Set (i.e., peer-to-peer mode, without access point). *Infrastructure mode* allows XI-325/B users to join a Extended Basic Service Set (i.e., connect to access point)

Wireless Network

Ad-hoc Network

Infrastructure Network

Access Point

Wired Network
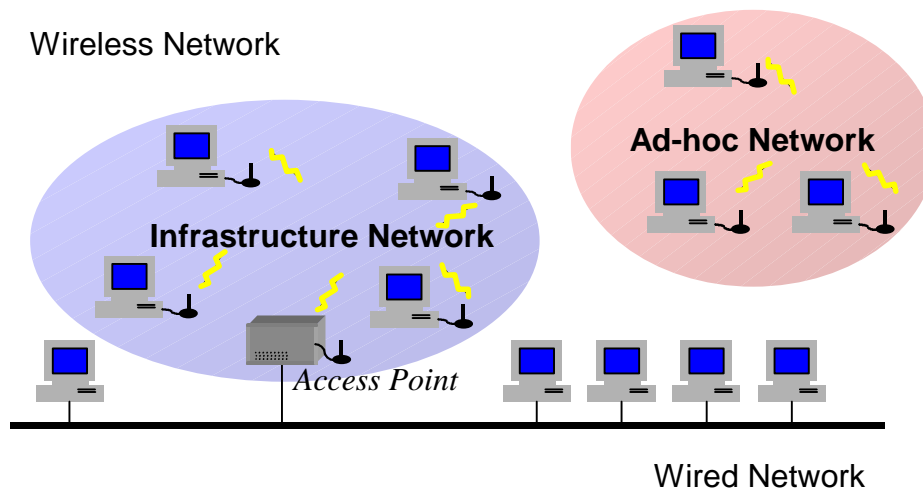
II.   Package Content

XI-325/B 11Mb PC x 1	CD-ROM or Driver and Utility Disk x 1
XI-325/B Detachable Antenna x 1	Quick Installation Guide x 1

III. XI-325/B and Utility Installation under Windows 95/98

1. Insert XI-325/B into the PCMCIA slot, then start Windows. Windows will auto-detect new hardware and Windows Wizard will display "New Hardware Found"
2. Click on 'Next', then insert the corresponding driver and utility CD-ROM into the CD-ROM drive, or the driver and utility disk into the floppy drive.   Click on 'Next'.
3. Once [Insert Win 95/98 CD-Rom into the appropriate drive, then click 'OK'] window appears, please follow by either inserting the Win 95/98 CD-Rom or finding the Win 95/98 source path within the appropriate drives, then click 'OK'.
4. Click 'Finish' to complete the installation.   Restart Win 95/98.
5. To install the XI-325/B Utility, insert the XI-325/B driver and utility disk once again, then execute **A: setup.exe**.
6. Follow the on-screen instructions to complete utility installation, then afterward double-click on

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the Utility icon.   Utility interface will then appear and configuration can be accomplished here.

IV. Using Utility to Set Up Ad-Hoc Network

If wireless LAN has already been set up, simply plug in XI-325/B.   Otherwise, set up a wireless network by taking the following steps:

1. On the main utility interface, click on **[Diagnostic tools]**, then click on **[Site Survey]**. This would disable wireless network links temporarily and display channel quality on all 14 channels. Please note that the blue bars indicate quality channels. Select such channel in Step 2' s Ad-Hoc network channel selection.

2. Back on the main utility interface, click on **[Network Configuration]** and "Configure the Adapter" window will appear.   Setup procedures are as follows:

   1) ESSID denotes the assigned name for the designated wireless LAN.   If ESSID differs, then wireless connection between wireless end devices will not be accomplished. Please note that selecting **[Use Non-Specified ESSID: ANY]** will possibly be connected to other wireless LAN.   Therefore, ESSID setup is highly recommended.
   Example: Specify ESSID as : ZCOM001.

   Notice: Once the ESSID is set on the initial XI-325/B, and while the rest of the ESSID remains as default value ANY, then the initial XI-325/B with the ESSID must be started first.

   2) Select **[Ad-Hoc]** under 'Network Type', select the Channel in step 1 for **[Ad-Hoc Default Channel]**.
   (Notice: Under Ad-Hoc, it would require a single uniform channel to enable a wireless networking group).

   3) Use WEP ** (will be available soon). The default is 'Disable'. If you require high security in transmission, please select the "Enable" item and select **[Encryption]**. When you enter encryption configuration, you can type keyword and press **[Generate]** to create 4 new encryption keys and select one of them to scramble your transmission data.

   Notice: When your use WEP to communicate with the other wireless clients, all the wireless devices in this network must have the same encryption key and keyword.

   4) Upon completing steps 1~3, click on **[Modify]** to save altered values.

V. Using Utility to set up Infrastructure Network

1. On the main Utility interface, click on **[Diagnostic Tools]**, then click on **[Access Point Browser]**. This would disable wireless connection temporarily and the subsequent display

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would show status for all available access points.   By using this tool, it is possible to find out ESSID for the connected wireless group.On the main Utility interface, click on **[Network Configuration]** and configuration screen will appear.   Setup procedures are as follows:

1) ESSID denotes the assigned name for the designated wireless LAN.   If ESSID differs, then wireless connection between wireless end devices will not be accomplished. Please note that selecting **[Use Non-Specified ESSID: ANY]** will possibly be connected to other wireless LAN with different ESSID.   Therefore, ESSID setup is highly recommended.
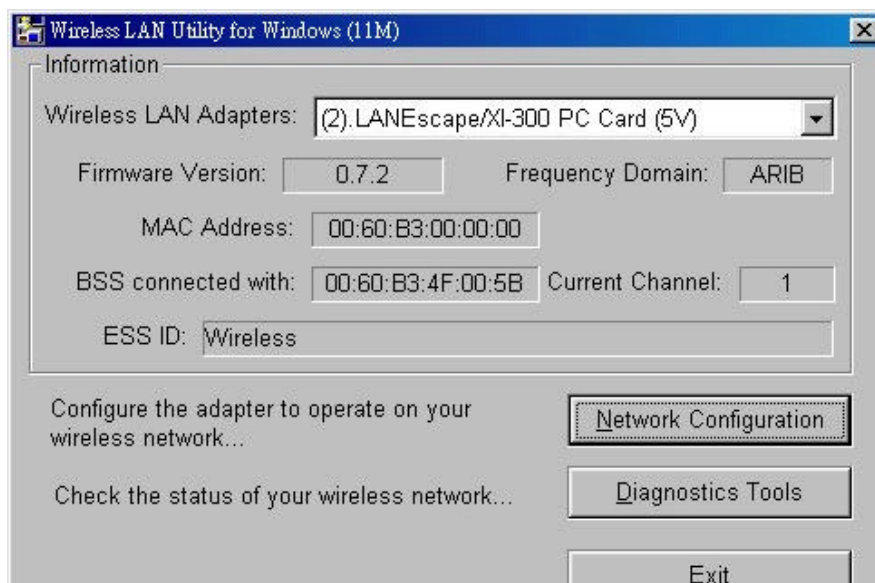Example : Specify ESSID as : ZCOM001.

Notice: If the ESSID of PC card remains as default value ANY, then the PC card is possible to be connected to all available Access Points.

2) Select **[Infrastructure]** under ' Network Type'

3) Use WEP ** (will be available soon).   The default is ' Disable'. If you require high security in transmission, please select the "Enable" item and select **[Encryption]**. When you enter encryption configuration. You can type keyword and press **[Generate]** to create 4 new encryption keys and select one of them to scramble your transmission data.

Notice: When your use WEP to communicate with the other wireless clients, all the wireless devices in this network must have the same Encryption Key and keyword.)

4) Upon completing steps 1~3, click on **[Modify]** to save altered values.

● Infrastructure network configuration provides roaming to mobile users.   Multiple (at least 2) AP connection allows LANEscape users to access seamless wireless connection while moving freely within the coverage area.   To enable Extended Service Sets (ESS), all LANEscape wireless end devices (XI-325/B, AP, etc.) will have to be under same ESSID.

Utility Information

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Network Configuration	ESSID	Select the wireless network group to join ("ANY" is default setting).	
	Network Type	Select the station operation mode, Ad-Hoc: (without Access Point) Infrastructure: (with Access Point, default setting).	
	RTS Threshold	To solve the "Hidden Node Problem" (Default setting : "Disable")	
	Frag Threshold	To obtain better performance if XI325/B always transmits large files in wireless LAN. (Default setting : "Disable")	
	Use WEP (will be available soon)	To have high security in transmission. (Default setting : "Disable")	
	Power Save	To make power management. (Default setting : "Disable")	
	Transmission Rate	Select the transmission rate (Default setting : "Fully Auto")	
Diagnostic Tools	Site Survey	Inspect channel quality for your site.	
	Link Quality Test	Inspect the point-to-point data transmission quality between two wireless LAN stations.	
	Access Point Browser	To browser all the active Access Points in this environment.	

Software Information:

The XI325/B's firmware Version is 1.2.0

Utility Version is 0.0.1

Users could download and upgrade most advance software version from Z-Com's web site.

http://www.zcom.com.tw

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FCC Information

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.

Federal Communications Commission (FCC) 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.

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LANEscape™XI-325(B) Wireless PC Card Specification

Description: One-piece, 2.4 GHz Direct Sequence Spread Spectrum (DSSS) 802.11b 11M wireless PC card

Interoperability: interoperable with Wi-Fi(WECA) certified products(AP, card etc.)

Host interface : 16-bit PCMCIA V2.1 I/O interface, type II, 5V key

Chipset : PRISM2.5 chipset on-board

Data Rate: 11, 5.5, 2 and 1 Mbps per channel, Auto Fall-Back

Memory Size: 128Kx16 SRAM, 128Kx8 flash ROM

Power Consumption: TX power consumption: <350 mA

RX power consumption <280 mA

Power Mode power consumption   (TBD)

Voltage: 5.0 VDC+-10%

LED : link status, power-on

Support OS: Windows 95/98/2000/NT/ME/CE3.0, Linux

Network Architecture Types:

Supports ad-hoc (peer-to-peer) and infrastructure (communications to wired networks via Access Points), roaming (standard IEEE 802.11b compliant)

RF Output Power: 14 dBm (typical)

Antenna : two on-board patch antenna , gain = 0 dBi(max.), support receiving diversity

Operating Channels: 11 for N. America, 14 Japan, 13 Europe (ETSI), 2 Spain, 4 France

Sensitivity: @PER< 8%

11Mbps   :   -85 dBm(max.)

5.5Mbps   :   -88 dBm(max.)

2 Mbps   :   -92 dBm(max.)

1 Mbps   :   -94 dBm(max.)

Operating Frequency: 2.412-2.462 GHz(N. America)

2.412-2.484 GHz(Japan)

2.412-2.472 GHz(Europe ETSI)

2.457-2.462 GHz(Spain)

2.457-2.472 GHz(France)

Modulation: CCK (11Mbps, 5.5Mbps), DQPSK (2Mbps), DBPSK (1Mbps)

Warranty: One Year Limited Warranty

Environmental Info

Operating Temperature: 0 ~ 55

Storage Temperature:	-20 ~ 80
Humidity (non-condensing):	5~80%
Size and Weight:	extended PCMCIA type II card
	112.6 mmL* 54.0 mmW* 5.0 mmH(± 0.2)
	Compact Size Weight < 50 g