User's Manual

CF Card

XI-835C

....

11Mbps Wireless LAN CF Card

Quick Start Guide

I. Network Configuration

11Mbps Wireless LAN CF Card is an IEEE802.11/802.11b compliant CF Type I DSSS wireless LAN adapter. It fully supports wireless networking under Windows 2000/XP/CE.

11Mbps Wireless CF Card can be operated in Ad-Hoc or Infrastructure network configurations. *Ad-Hoc mode* allows 11Mbps Wireless LAN CF Card users to join a Basic Service Set (i.e., peer-to-peer mode, without access point). *Infrastructure mode* allows 11Mbps Wireless LAN CF Card users to join an Extended Basic Service Set (i.e., connect to access point)



Wired

II. Package Content

11Mbps Wireless LAN CF Card x 1 Quick Installation Guide x 1 Product CD-ROM x 1

III. Wireless LAN CF Card and Utility Installation under Pocket PC/Handheld PC

Installation of the 11Mbps Wireless LAN CF Card under CE 3.0/Pocket PC 2002

- 1. Establish a connection between host PC and PDA (only for hand-held) device by *Microsoft Active Sync* program.
- 2. Insert and run **SanDisk AutoRun Program Source CD-ROM/Pocket PC 2002** to install the driver and utility.
- 3. Once SanDisk ConnectPlus Front Page appears, click on 'Installation'
- Following the necessary prompts. Once SanDisk ConnectPlus Front Page re-appears, click 'Exit'
- 5. Click 'OK' and reset your Pocket PC accordingly.
- 6. Insert the 11Mbps Wireless LAN Compact Flash Card into the compact flash slot of your PDA (only for hand-held). The PDA (only for hand-held) will auto-detect the Wireless LAN Compact Flash Card and automatically install the corresponding driver.

- 7. Assign an IP address to your Wireless LAN Compact Flash Card. You may either choose to give a fixed IP address or have the Wireless LAN Compact Flash Card automatically obtain an IP address from your DHCP server. Set the Proxy server, DNS, WINS if needed (Most of IP addresses are automatically assigned.)
- 8. Reset your PDA (only for hand-held) to complete the installation.

Ø

<u>Caveat</u>

- **n** When the Pocket PC is idle (not in use) without A/C power being present, it is highly advised to remove the 11Mbps Wireless LAN CF Card in order to prevent from complete battery drain.
- **n** Due to WinCE's nature of the first application at power-on resuming to that at power-off, if you are stuck at the utility program, you may use the PDA's (only for hand-held) reset bottom to terminate it. And activate it again when needed.
- **n** Sometimes, your wireless connection to AP may disconnect for any reason. You can reset and force a connection request by going to utility program, then select "Configuration", check parameters, then select "Apply" to force a re-scan.
- **n** If your device roams to a new AP which is in a different subnet, you may need the following two actions: (1) Unplug and re-insert the Wireless LAN Compact Flash Card, or (2) Hard reset your device to force an execution of "release and renew" of an re-assignment of IP address in a DHCP Access Point environment.

IV. Wireless LAN CF Card and Utility Installation under Windows XP/2000/NT/98/ME

Installation of the11Mbps Wireless LAN CF Card under Windows XP

- 1. If your PC has a compact flash type I slot, simply insert the Wireless LAN CF Card into the CF slot. If not, use a CF/PCMCIA Adapter as described in the next procedure.
- Firmly insert the 11Mbps Wireless LAN CF Card into the CF/PCMCIA Adapter, figured as below. Then insert the 11Mbps Wireless LAN CF Card into the PCMCIA slot and start Windows.



CF/PCMCIA Adapter

CF Card

- 3. Windows will auto-detect the Wireless LAN CF Card and a "Found New Hardware Wizard" window will show up.
- Select "Install from a list or specific (Advanced)" and insert the SanDisk AutoRun Program CD-ROM into the CD-ROM drive. Check the CD-ROM drive item and click on Next to install the driver.
- 5. Once SanDisk Connect Plus Front Page appears, click on Installation
- 6. Select Windows/92/ME/2000/XP
- Select the necessary prompts, especially click 'Yes' to proceed to insert Microsoft Hotfix for Windows XP
- 8. The windows will find "IEEE 802.11 Wireless LAN/CF Card". Click on Next to continue.
- 9. Click **Finish** to complete the installation.

After installing the Wireless LAN CF Card, the Windows XP will display a "Wireless Network Connection #" message.



Click on the message and the "Automatic Wireless Network Configuration" will then appear automatically and allow users to connect a wireless infrastructure network (Access Point), shown as follows:

Com	nect to Wireless Network	? 🛛
The it fro Ava	 following network(s) are available. To one the list, and then click Connect. ailable networks: 	access a network, select
Ĩ	WLAN	
i	hschung demolab	
Thi this	s network requires the use of a network network, type the key, and then click (key (WEP). To access Connect
Net	twork key:	1
lf ye	ou are having difficulty connecting to a	network, click Advanced.
A	dvanced	nect Cancel

You may click the **Advanced** button to make advanced configuration for the 11Mbp Wireless LAN CF Card, shown as below.

neral V	/ireless Networks	Authentication	Advanced
] <mark>Use W</mark> Available To copr	indows to configur e networks:	re my wireless net	work settings
🗼 Wi	relessLAN		Configure
🕻 ma	rty		
Referred Automat	ert d networks: ically connect to a	wailable network:	s in the order listed
Automat	ert d networks: ically connect to a	vailable network:	in the order listed
Automat	d networks: ically connect to a	vailable network:	Hetresh
Automat below:	ert d networks: ically connect to a d	wailable networks	in the order listed Move up Move down
Add	d networks: ically connect to a d Remo out setting up wire	wailable networks	s in the order listed Move up Move down tties

For more information on using the automatic wireless network configuration please refer to Windows XP **Help** file.

However, the WLAN Utility, which comes with the Wireless LAN CF Card, provides you more tools to configure the 11Mbps Wireless LAN CF Card and monitor the wireless connection. For more information on installing and using the WLAN utility, please refer to the following sections *"Installation of the Wireless LAN Utility"* and *"Usage of the WLAN Utility"*.

Note: To use the WLAN utility under Windows XP, you need to disable the *Automatic Wireless Network Configuration* first. Steps are described as follows:

- n Right click the Network Connections icon. Select Properties.
- n Go to the Wireless Networks tab.
- **n** Uncheck the "**Use Windows to configure my wireless network settings**" check box and click the **OK** button (see the above picture).

FCC Information

This device, CF Card (model no.: XI-835C), 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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.



FCC RF Radiation Exposure Statement:

- 1. The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment, under 47 CFR 2.1093 paragraph (d)(2).
- 2. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

The CF Card has been tested to the FCC exposure requirements (Specific Absorbtion Rate).

Service Centre: COMPANY NAME: ZCOMAX TECHNOLOGIES, INC. ADDRESS: 13850 CERRITOS CORPORATE DR., SUITE C CERRITOS, CA 90703 TEL: (562) 926-4588

802.11b+128Mb Memory CompactFlash Card Specification					
Protocol Standard	Compliant to IEEE 802.11b, WI-FI certified				
Host Interface	CompatFlash V1.4, CF+I/O Interface, Type I				
Standard					
Operation Voltage	$3.3v \pm 5\%$, 5V tolerant				
Link Indtorica	Green LED 3-state indication:				
	Off: Power off				
	Blinking: Power on, not connected				
	Stable: Power on, connected				
Data Rate	1, 2, 5.5, 11Mbps, Auto Fall-back				
Cover Range (Open	11Mbps: 450 feet				
Space)	5.5Mbps: 650 feet				
	2Mbps: 800 feet				
	1Mbps: 1200 feet				
Power Consumption	Tx: <330mA				
	Rx: <260				
	Standby: <(80mA) Sleep current: <4.0mA				
	Software Power Management: Automatically disable 802.11b				
	I/O function according to user selectable battery level in				
Mara DE Oradanard	POCKETPC NOSTS.(IBD)				
Max KF Output	130BIII 11Mbpo: 80dBm				
(DED < 80())	F EMbaci 82dBm				
$(\mathbf{\Gamma}\mathbf{E}\mathbf{K} < 0 \ 0)$	2 Mbps: 92dBm				
	1 Mbps: -85dBm				
Network	Infrastructure Ad-boc Roaming				
Architecture	innastructure, / a noc, realining				
Operating Channels	2400-2483 MHz				
operating enalities	North America: Channel 1-11				
	Europe: Channel 1-14				
	France: Channel 10-13				
	Spain: Channel 10-11				
	Japan: Channel 1-14				
Software Support	Pocket PC: Windows CE3.0, , Pocket PC 2002, Boingo UI				
	Laptop/desktop: Windows 2000/XP/ME				
Memory Capacity	1Gbit(128Mbyte) MLC NAND Flash				
	Card should function as a single-function CompactFlash memory				
	card when host 802.11b I/O driver in absence				
Memory Function	Read: >3Mbyte/sec				
Performance	Write: >1Mbyte/sec				
Weight	< 25g				
Operating	0 ~ 55C				
Temperature Range					
Storage Temperature	-20 ~ 80C				
Kange					
Operating Humidity	5 ~ 90% (non-condensing)				
Kange					
EMC Certification	FUU, ETSI, U-TICK, TELEU				