AIRVAST
AirVast Technology Inc.

802.11b WLAN Mini-USB Adapter

WN-210

User's Manual

Version 1.1

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Electronic Emission Notices

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.
(2)This device must accept any interference received, including interference that may cause undesired operation.

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 radiate 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 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.

The equipment is for home or office use.

R&TTE Compliance Statement

This equipment complies with all the requirements of the DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 9 March 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity(R&TTE).
The R&TTE Directive repeals and replaces in the directive 98/13/EEC(Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

IMPORTANT NOTE

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the antenna and your body and must not be co-located or operating in conjunction with any other antenna or transmitter.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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1. INTRODUCTION

This document describes how to install the WN-210, WLAN Mini-USB Adapter. WLAN is local area networking without wires, which uses radio frequencies to transmit and receive data between PC's or other network devices. WLAN is able to configure independent networks and infrastructure networks. The former is suitable for small or temporary peer-to-peer configurations, and the later is offering fully distributed data connectivity via micro cells and roaming.

1.1 Package Contents

Before starting installation, please make sure the package you purchased includes the following three items:

- One WLAN Mini-USB Adapter
- One Mini-USB cable
- One setup CD-ROM with User's Manual

Please contact your vendor if anything is missing or damaged.

1.2 System Requirements

To install the WN-210 successfully, your computer should meet the following minimum requirements:

- Pentium-Class 200MHz or faster Processor
- 64MB RAM Recommended
- Available USB port
- CD-ROM Driver
- Windows 98SE, Me, 2000, or XP operating system
- Minimum 5 Mbytes free disk space for installing the driver and the utility program

2. GETTING TO KNOW YOUR WLAN MINI-USB ADAPTER

2.1 The WLAN Mini-USB Adapter's USB Port

The WLAN Mini-USB Adapter's Mini-USB Port is located on the lower side of front panel.

USB Port The USB Port is a port installed in your PC, enabling you to connect to USB peripherals. To work with USB ports, your PC must be running Windows 98SE, Me, 2000, or XP.

2.2 Connect USB Cables

Note to users: You must install setup driver before the WLAN Mini-USB Adapter has not been connected to the computer yet.

Your WLAN Mini-USB Adapter comes with a Mini-USB cable. Insert the Mini-USB connector of the USB cable into WN-210 (Mini-USB port), and the other USB connector into your PC's USB port.

2.3 Check The LED Indicators

LED	Status	Function
Power	Red	The Power LED lights up when WLAN Mini-USB Adapter is powered on.
Link	Green	The Link LED lights up when the Adapter has an active connection. If the LED is not on, the Adapter is not connecting with the Network.

3. INSTALLATION OF THE WLAN MINI-USB ADAPTER FOR WINDOWS 98SE, ME, 2000, AND XP.

Please refer to the proper section corresponding with operating system you are using to install the WN-210.

3.1 Installation Procedure for Windows 98SE Users

a) Turn on your computer.
b) Make sure that WN-210 has not been connected to the computer yet.
c) Place the supplied CD-ROM to the CD-ROM drive. Please run d:\setup.exe manually, where d: is the letter of the CD-ROM drive.
d) A screen displays the important notice. Please read it and click the "Ok" button.

Figure 1: Information

e) Click the"Next" button after you see a welcome message.

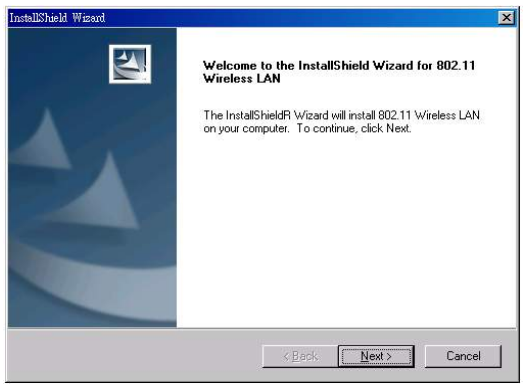

Figure 2: Welcome message

f) Choose the Destination Folder where the configuration utility will be stored by clicking the "Browse" button, or leave it as default, and then click the "Next" button.

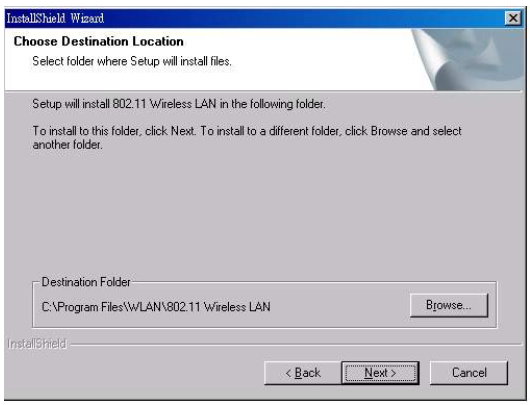

Figure 3: Choose Destination Location

g) Fill in the Program Folder Name or leave it as default, and then click the "Next" button.

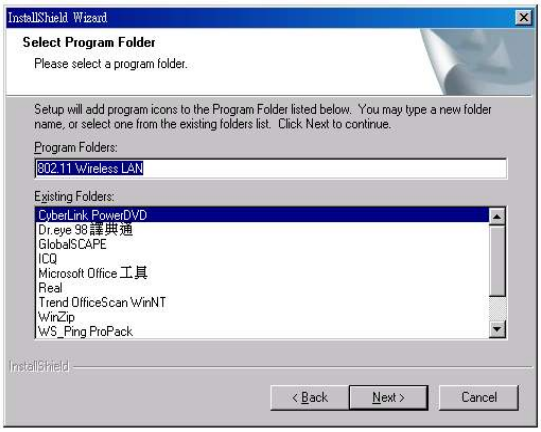

Figure 4 : Select Program Folder

h) On the InstallShield Wizard Complete screen, click the “Finish” button.

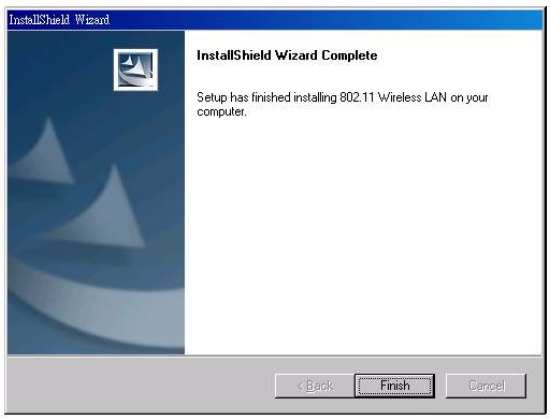

Figure 5: Complete screen

i) Insert the Mini-USB connector of the USB cable into WN-210 (Mini-USB port), and the other USB connector into your PC’s USB port.

j) Once connecting, Windows loads the driver automatically.

k) As soon as the driver is loaded, you need to configure WN-210 with the desired settings by clicking the icon of Wireless LAN Monitor at the task bar.

Note to users: Windows 98SE needs 1 minute to shown this icon at the task bar. If you could not see this icon, please restart your PC.

Figure 6: Task bar

3.2 Installation Procedure for Windows Me Users

a) Turn on your computer.

b) Make sure that WN-210 has not been connected to the computer yet.

c) Place the supplied CD-ROM to the CD-ROM drive. Please run d:\setup.exe manually, where d: is the letter of the CD-ROM drive.

d) Click the ”Next” button after you see a welcome message.

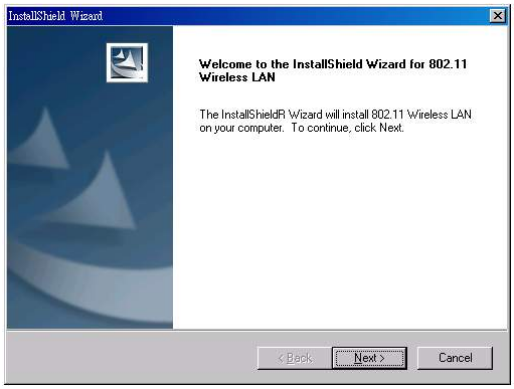

Figure 7: Welcome message

e) Choose the Destination Folder where the configuration utility will be stored by clicking the “Browse” button, or leave it as default, and then click the “Next” button.

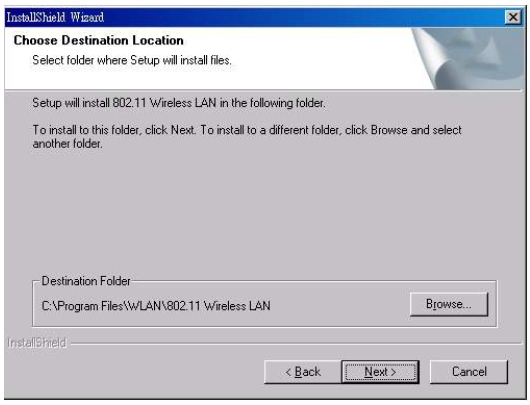

Figure 8: Choose Destination Location

f) Fill in the Program Folder Name or leave it as default, and then click the “Next” button.

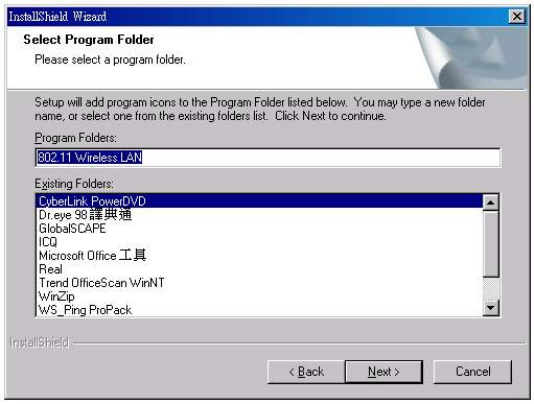

Figure 9: Select Program Folder

g) On the InstallShield Wizard Complete screen, click the “Finish” button.

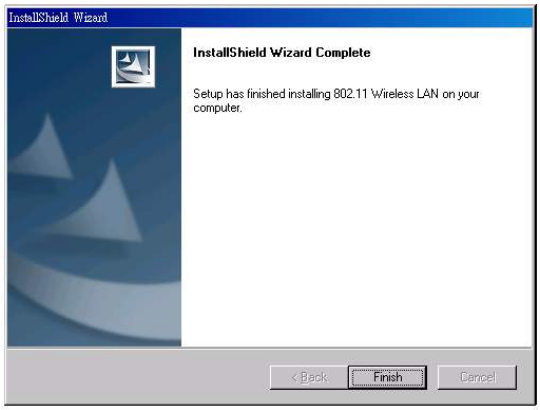

Figure 10:Complete screen

h) Insert the Mini-USB connector of the USB cable into WN-210 (Mini-USB port), and the other USB connector into your PC’s USB port.
i) Once connecting, Windows loads the driver automatically.
j) As soon as the driver is loaded, you need to configure WN-210 with the desired settings by clicking the icon of Wireless LAN Monitor at the task bar.

Figure 11: task bar

3.3 Installation Procedure for Windows 2000 Users

a) Turn on your computer.
b) Make sure that WN-210 has not been connected to the computer yet.
c) Place the supplied CD-ROM to the CD-ROM drive. Please run d:\setup.exe manually, where d: is the letter of the CD-ROM drive.
d) A screen displays the important notice. Please read it and click the “Ok” button.

Figure 12: Information

e) Click the “Next” button after seeing the welcome message.

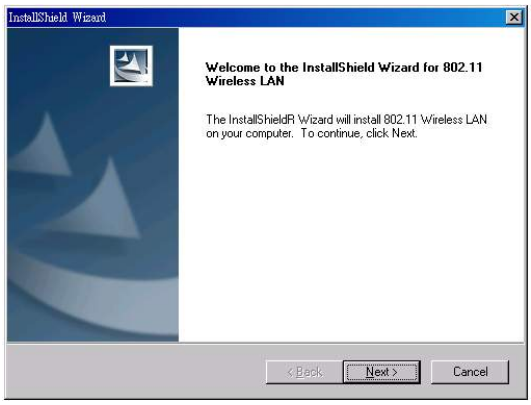

Figure 13: Welcome message

f) Choose the Destination Folder where the configuration utility will be stored by clicking the “Browse” button, or leave it as default, and then click the “Next” button.

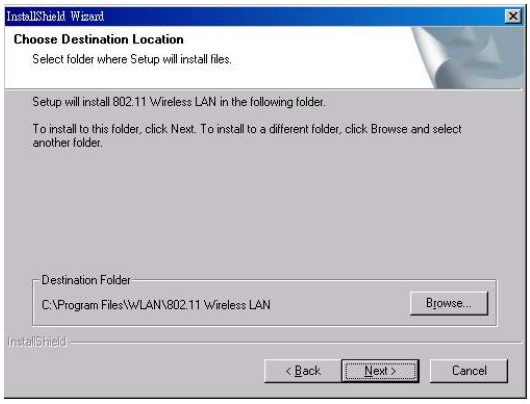

Figure 14: Choose Destination Location

g) Fill in the Program Folder Name or leave it as default, and then click the “Next” button.

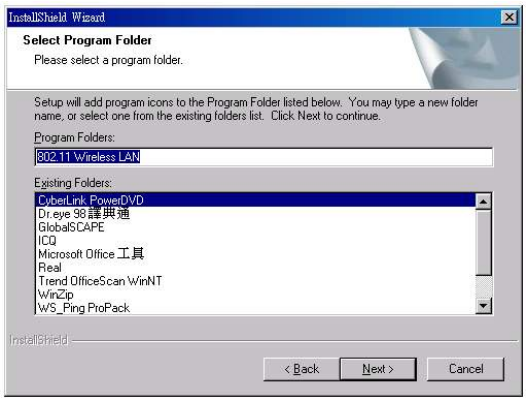

Figure 15: Select Program Folder

h) On the InstallShield Wizard Complete screen, click the “Finish” button.

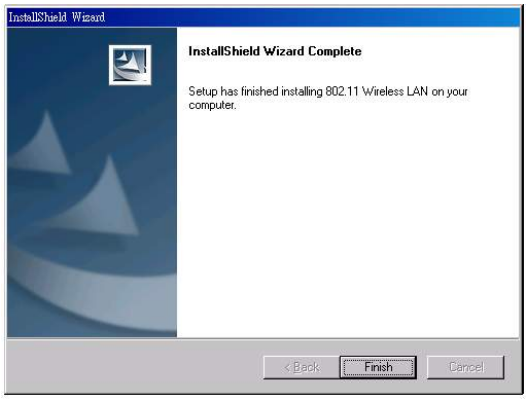

Figure 16: Complete screen

i) Insert the Mini-USB connector of the USB cable into WN-210 (Mini-USB port), and the other USB connector into your PC’s USB port.
j) Once connecting, Windows loads the driver automatically.
k) When Windows prompts you the message of “Digital Signature Not Found”, this is normal. Since WN-210 has been verified to run on Windows 2000, just click the “Yes” button.

Figure 17: Digital Signature Not Found

l) As soon as the driver is loaded, WN-210 can operate with the factory default settings. However, you may configure the desired settings by clicking the icon of Wireless LAN Monitor at the task bar.

Figure 18: Task bar

3.4 Installation Procedure for Windows XP Users

a) Turn on your computer.
b) Make sure that WN-210 has not been connected to the computer yet.

c) Place the supplied CD-ROM to the CD-ROM drive. Please run d:\setup.exe manually, where d: is the letter of the CD-ROM drive.

d) A screen displays the important notice. Please read it and click the “Ok” button.

Figure 19: Information

e) Click the “Next” button after seeing the welcome message.

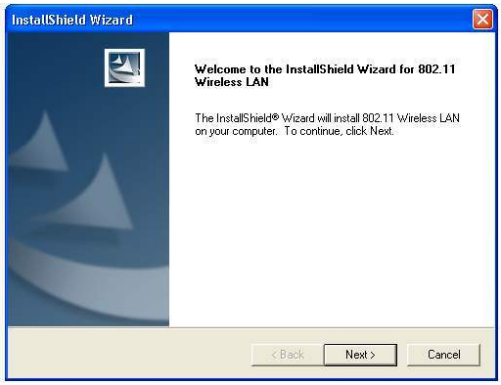

Figure 20: Welcome message

f) Choose the Destination Folder where the configuration utility will be stored by clicking the “Browse” button, or leave it as default, and then click the “Next” button.

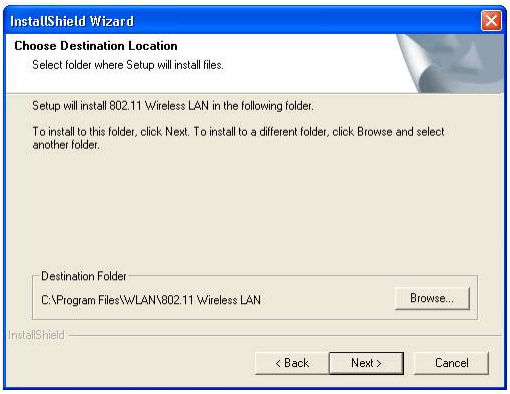

Figure 21: Choose Destination Location

g) Fill in the Program Folder Name or leave it as default, and then click the “Next” button.

Figure 22: Select Program Folder

h) On the InstallShield Wizard Complete screen, click the “Finish” button.

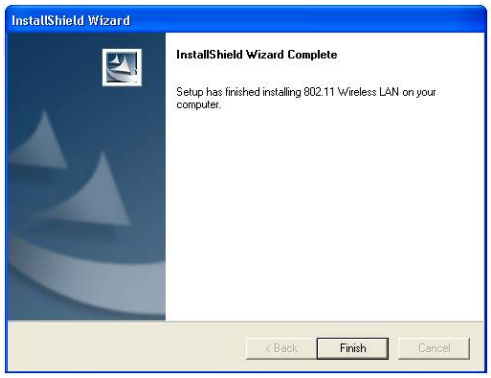

Figure 23: Complete screen

i) Insert the Mini-USB connector of the USB cable into WN-210 (Mini-USB port), and the other USB connector into your PC’s USB port.

j) Windows XP will automatically detect the presence of WN-210 and display the “Found New Hardware Wizard” screen. Make sure that you choose install the software automatically.（Recommended）Click “Next” to continue.

Figure 24: Found New Hardware Wizard

k) Windows will notify you that the driver has not passed Windows Logo testing. Because WN-210 has been tested to work with Windows XP, please click the "Continue Anyway" button.

Figure 25: Warning Message

l) Click the "Finish" button after seeing the "Completing the Found New Hardware Wizard" screen.

Figure 26: Completing the Found New Hardware Wizard

m) As soon as the driver is installed, you need to configure the desired settings by clicking the icon of Windows Wireless Zero Configuration at the task bar.

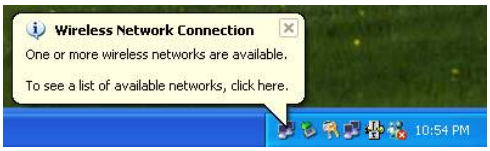

Figure 27: Task bar

n) By doing so, a screen will display along with all available wireless networks.

Figure 28: available wireless networks

o) Select a network from the list of Available networks, and then click the “Connect” button. You are now able to access the network.

Figure 29: Wireless Network Connection

APPENDIX A: SPECIFICATIONS

Product Name	11 Mbps WLAN Mini-USB Adapter
Model Number	WN-210
Host Interface	USB B-type to PC
Dimensions	72 x 53 x 11 mm
Weight	50g
Frequency Band	2.400 ~ 2.4835GHz (subject to local regulations)
Number of Channel	USA and Canada – 11 Most European countries – 13 France – 4 Japan – 14
Operating Voltage	5V ± 5%
Current Consumption	Typ. 240 mA , Max. 300mA
Spreading	DSSS (Direct Sequence Spread Spectrum)
Data rate	11Mbps, 5.5Mbps, 2Mbps, 1Mbps
Transmit Power	Typ. 17 dBm @ Nominal Temp Range
Receive Sensitivity	Nominal Temp Range: 11 Mbps 10^{-5} BER @ -85 dBm, Typical
Modulation	11Mbps and 5.5Mbps CCK; 2Mbps: DQPSK;1Mbps: DBPSK;
Security	64/128 bit WEP Encryption
Antenna	Sleeve Dipole Antenna
LED indicator	RF activity
Supplied Driver	Windows 98SE/2K/ME/XP
Standards	IEEE 802.11b, Wi-Fi compliant
Media Access Protocol	CSMA/CA with ACK
Warranty	1 year
Temperature Range	0 ~ 55°C (Operating), -20~70°C (Storage)
Humidity	Max. 95% Non-condensing
Operating Range	Open Space: 100 – 300m; Indoor: 30m – 100m The transmission speed varies in the surrounding environment.
Roaming	Full mobility and seamless roaming from cell to cell and across access points
Network Protocol	TCP/IP, IPX, NetBEUI
Management Utility	Link Configuration for network join and diagnostics
EMC certification	FCC, CE, Telec,
Packaging	Customer Define
CIS	Customer Define