

DWR-510

HSPA USB Dongle Router

User Manual

I. Introduction

i. Overview

DWR-510 HSPA USB Dongle Router – is a highly integrated wireless solution for 3G and WiFi. The demands of data communication everywhere becomes more due to the great development of 3G HSPA system. DWR-510 adopts Qualcomm MSM6290 solution. It provides up to 7.2 Mbps HSDPA, up to 5.76 Mbps HSUPA, RX antenna diversity and wireless router etc. DWR-510 is fast, reliable and easy to operate. Therefore, user can experience the new features and surf the internet everywhere by DWR-510 dongle router.

ii. Features

- ◎HSUPA data rate up to 5.76 Mbps
- ◎HSDPA data rate up to 7.2 Mbps
- ◎UMTS PS domain data rate up to 384 kbps
- ◎EDGE packet data rate up to 236.8 kbps
- ◎GPRS packet data rate up to 115.2 kbps

- ◎WiFi 802.11 b/g/n
- ◎Share internet connection with 6 WiFi devices
- ◎A slide switch to select between WiFi router mode and PC USB modem mode

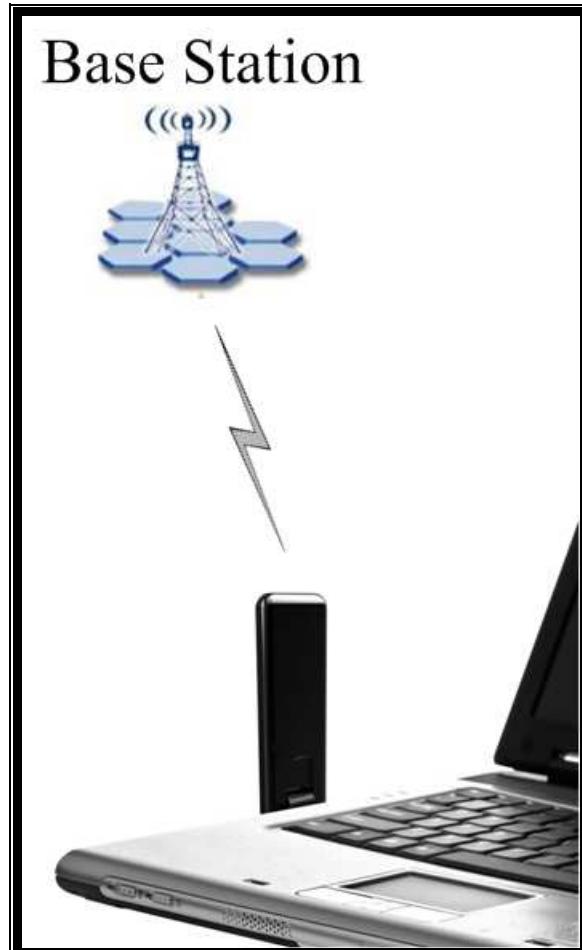
- ◎USB interface
- ◎Multi-color LED indicating status of network connection

- ◎Support Microsoft Windows XP / Vista / Windows 7
- ◎Support Linux (Router mode only)
- ◎Support Mac OS (Router mode only)

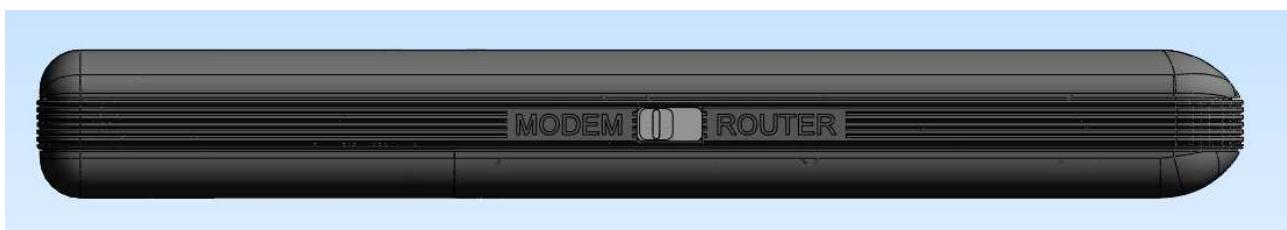
iii. Product Review

- ◎Modem mode

Modem mode provides the 3G access only from USB interface. User needs to set the slide switch to modem mode then device will operate in 3G USB modem mode. User needs to launch connection manager utility to access 3G data transaction.



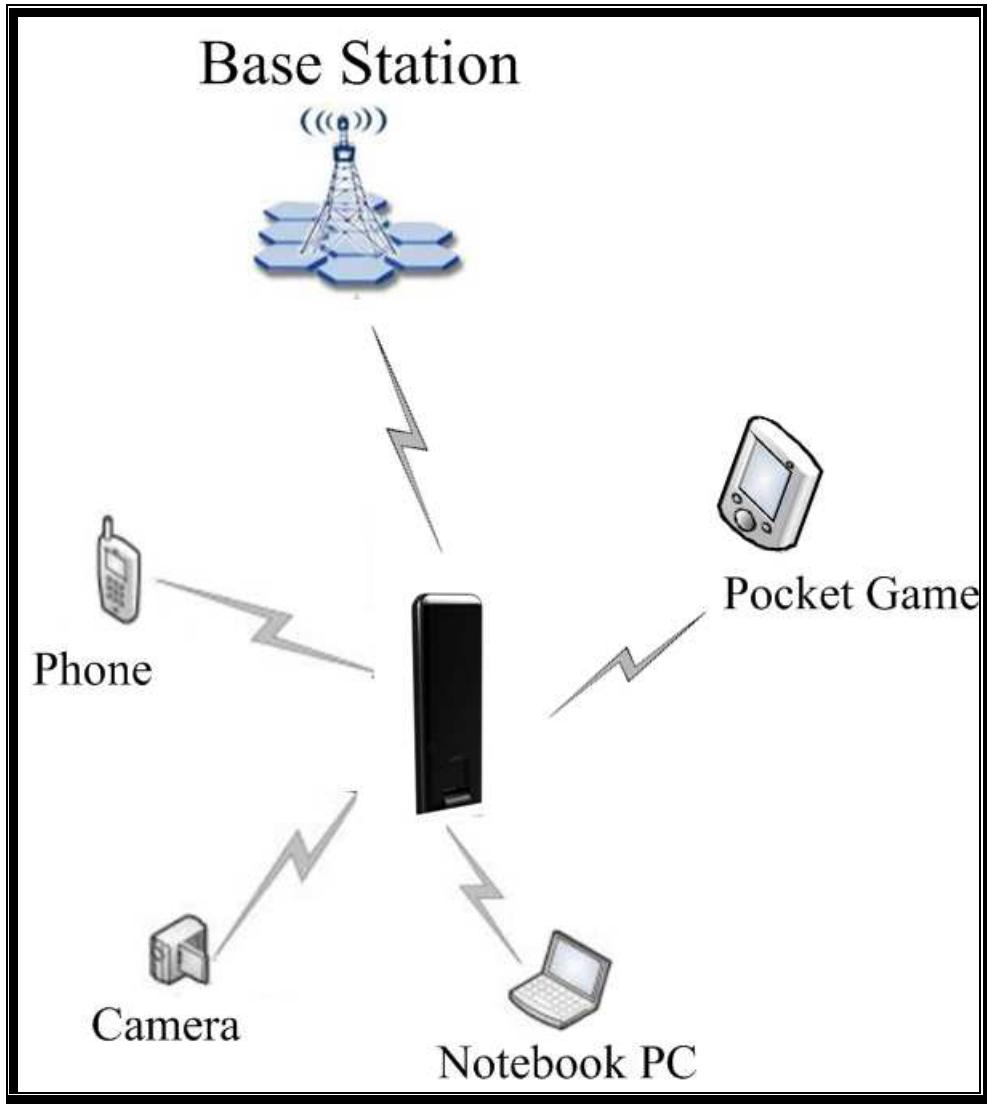
Modem Mode



Modem Mode Switch configuration

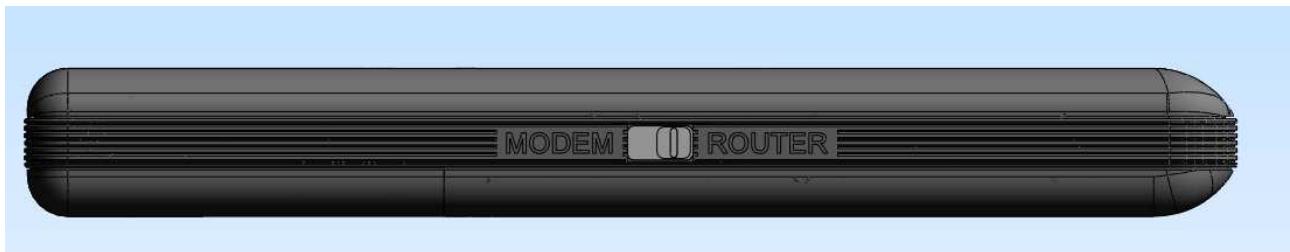
◎Router Mode

DWR-510 will become 3G / WiFi Router in this mode and can share 3G bandwidth to other devices that connect to DWR-510 by WiFi. DWR-510 allows up to 8 WiFi enabled devices to simultaneously connect to the Internet.



Router Mode

It is recommended to choose this mode when there is no access point showed in your wireless network.



Router Mode Switch configuration

II. Installation

i. System Requirements

Before you install DWR-510, please make sure your system meets the following requirements.

*Desktop or Laptop or applications with USB 1.1/2.0 port

*Minimum of 64MB system memory

*Operating system: XP/Vista/ Windows 7

ii. Hardware Installation

1. Find an available USB 1.1/2.0 port on your desktop or laptop or other applications.
2. Plug DWR-510 USB adapter into USB port of desktop or laptop or other applications.

iii. Setup: Windows XP OS

If your computer is running a Windows operating system, it will automatically detect the DWR-510 after device plug into the USB port, and OS displays a “Found New Hardware” window.



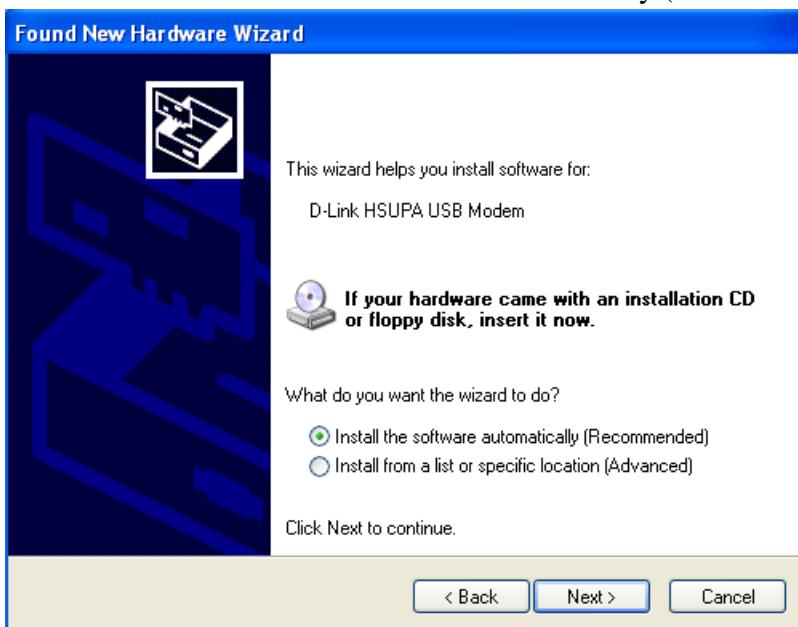
1. Find out the Driver, and launch the Hardware Wizard



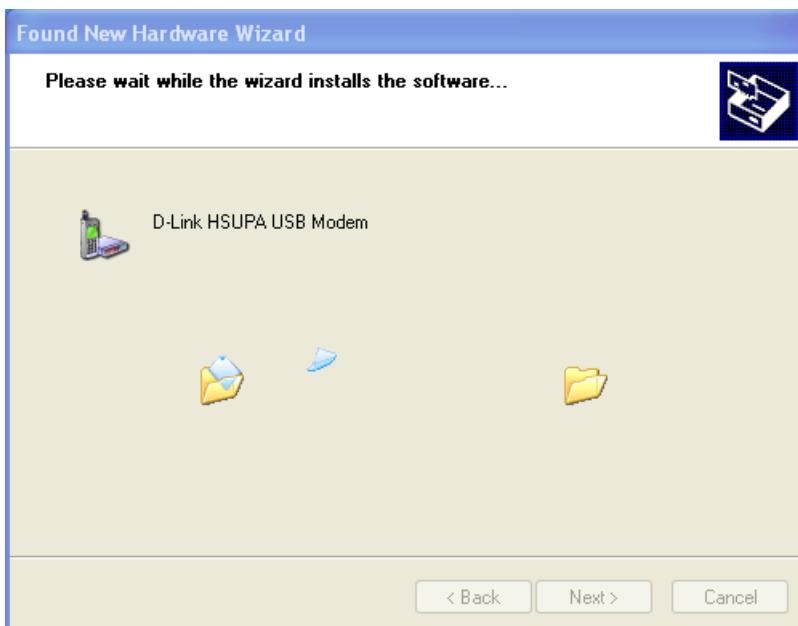
2. Please click “Yes, now and every time I connect a device” circle, and “Next>” button.



3. Please click “Install the software automatically (Recommended)”, and “Next>” button



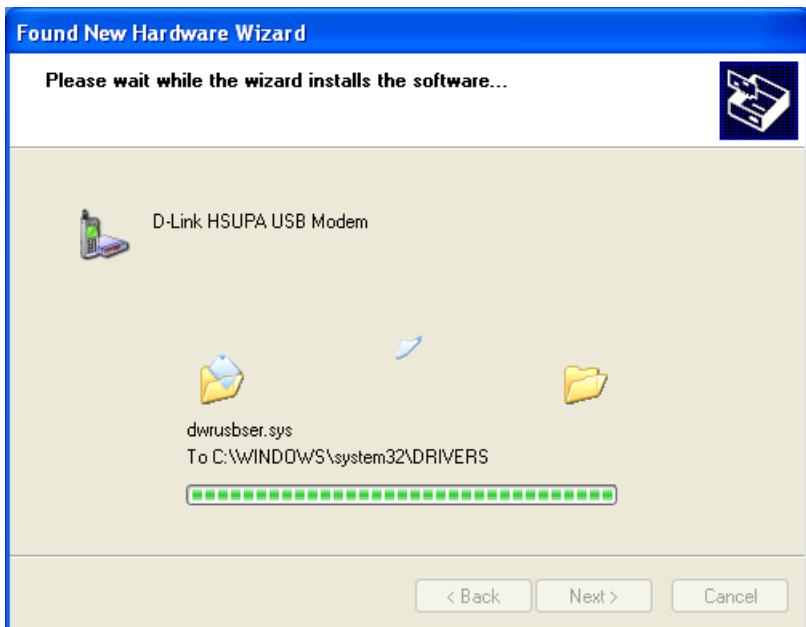
4. The Hardware Wizard will automatically install the software



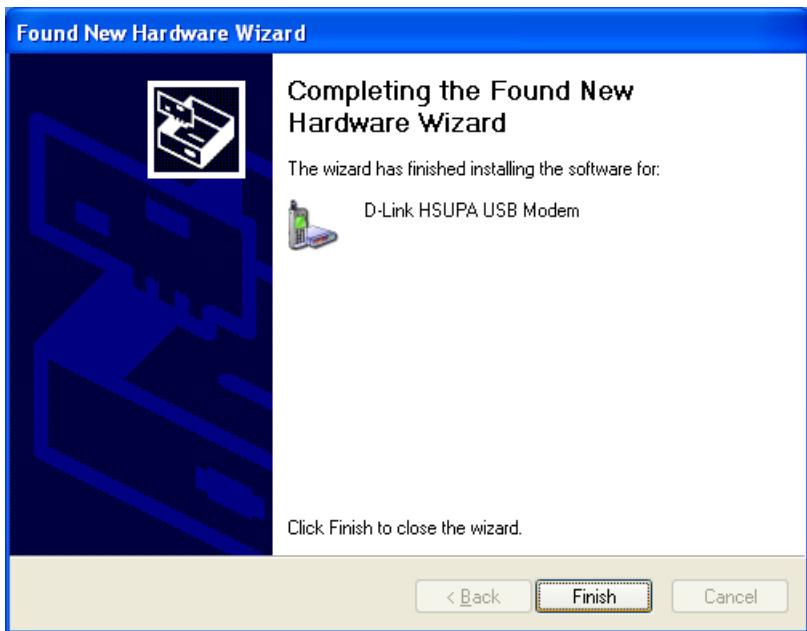
5. If you see the warning Windows Logo testing message, please click “Continue Anyway”



6. Please wait the software installation.



7. After the “Completing the Found New Hardware Wizard” windows appear, click “Finish” button.



III. Using

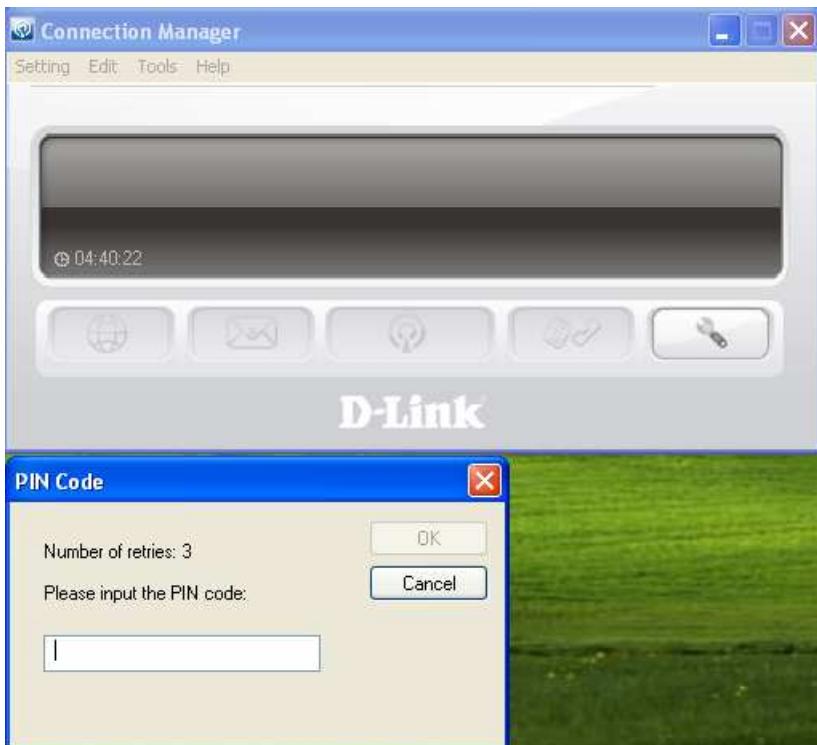
i. Modem mode

Please push slide switch to “Modem” position to configure device to “Modem mode”. Device will only enable WWAN function in “Modem mode”, WiFi function will be disabled. Steps to use device in “Modem mode”:

1. Please double click “D-Link HSUPA Connection Manager” Icon to launch utility.



2. Please input “PIN code”



3. After found WWAN Network information and signal bar, please click “connect” icon to connect to WWAN network.



4. The “Dial Up” window will appear, please wait this process to finish.



5. Now, your computer is connecting to WWAN network. You can use internet browser and other internet utility to surf the network.



6. Menu List:

6.1 Setting



6.1.1 New

6.1.1.1 Contact

It's used for the contact information management.

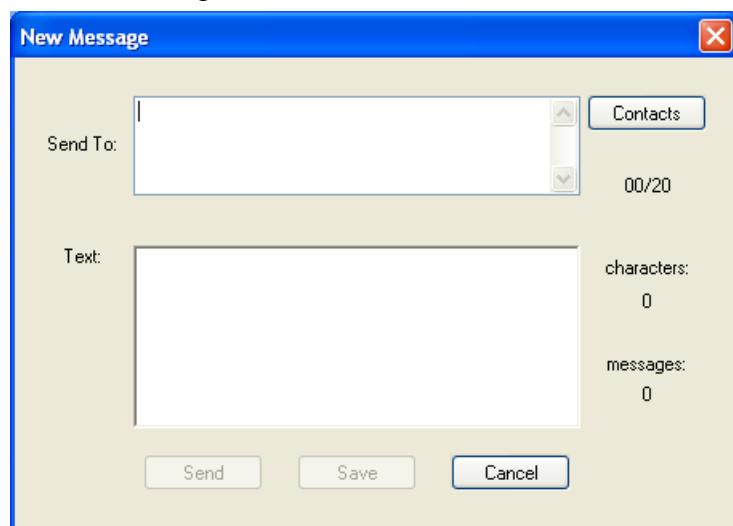
New -> Contact

The image contains two windows from the Connection Manager software. The top window is titled 'Contacts' and shows a table with one entry: #1, Name: ch, Phone No.: 0988505549. Below the table are buttons for 'New', 'Edit', 'Delete', 'Import', 'Export', and 'Quit'. The bottom window is a modal dialog titled 'New Contact' with fields for 'Name' (containing 'ch') and 'Phone Number' (empty), both with a character limit of 5. It has 'OK' and 'Cancel' buttons. The background of the entire image features a watermark of a green field and blue sky.

6.1.1.2 Message

It's used to edit and send short message.

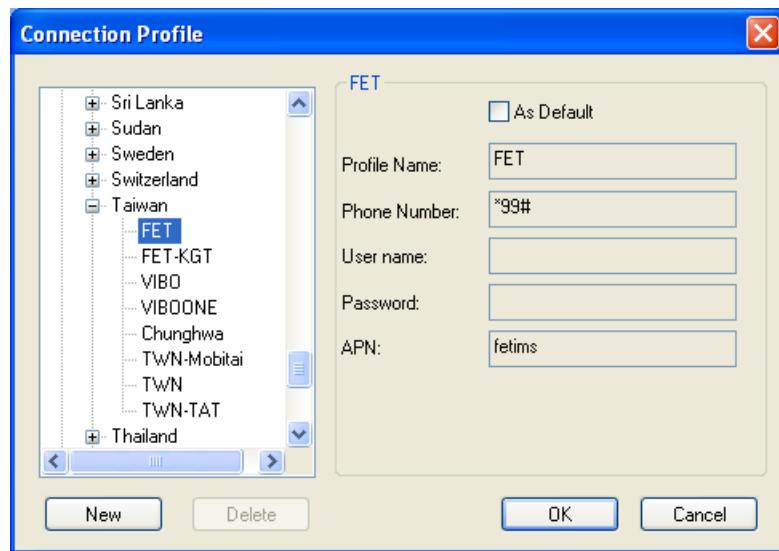
New -> Message



6.1.1.3 Connection Profile

It's used to select built-in APN or modify APN setting.

New -> Connection Profile



6.1.2 Connect / Disconnect

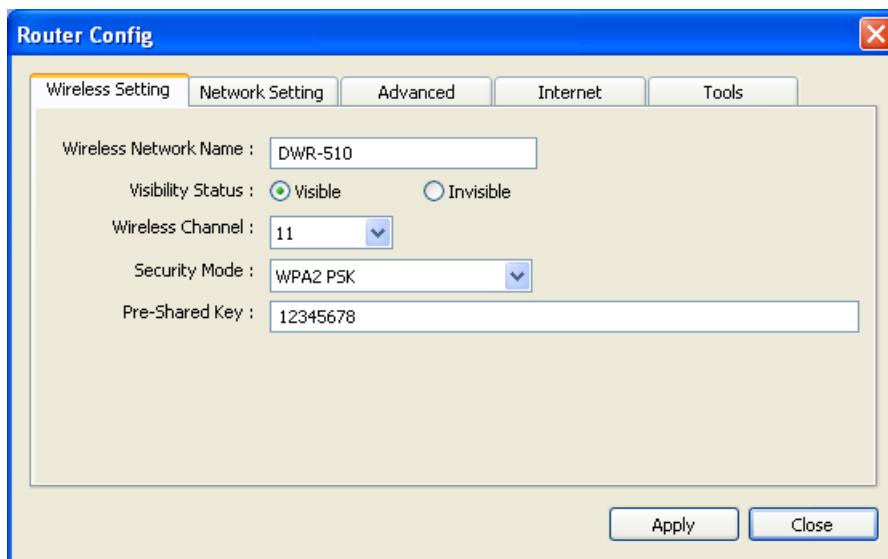
It's used to connect or disconnect to WWAN network.

6.1.3 Router Config

6.1.3.1 Wireless Setting

It's used to modify WiFi setting, including wireless network name (SSID) and security option.

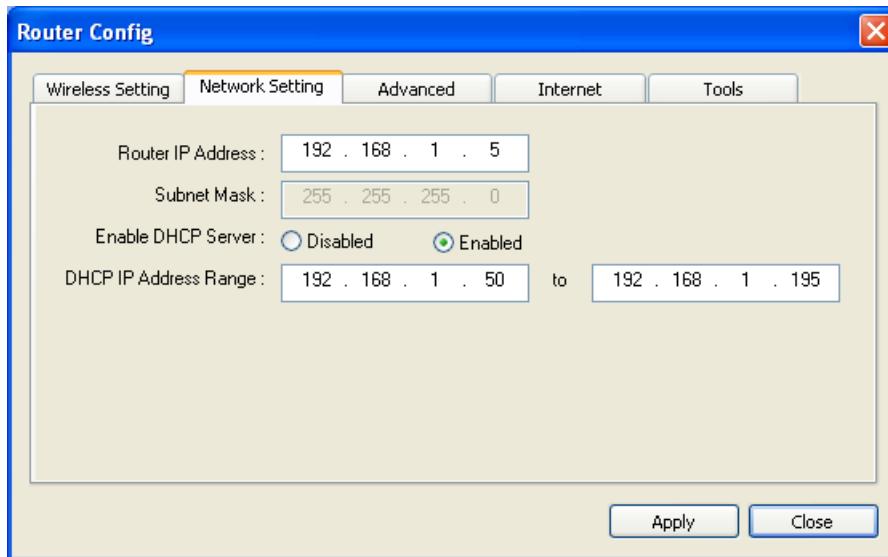
Router Config -> Wireless Setting



6.1.3.2 Network Setting

It's used to modify WiFi network setting, including IP and DHCP address.

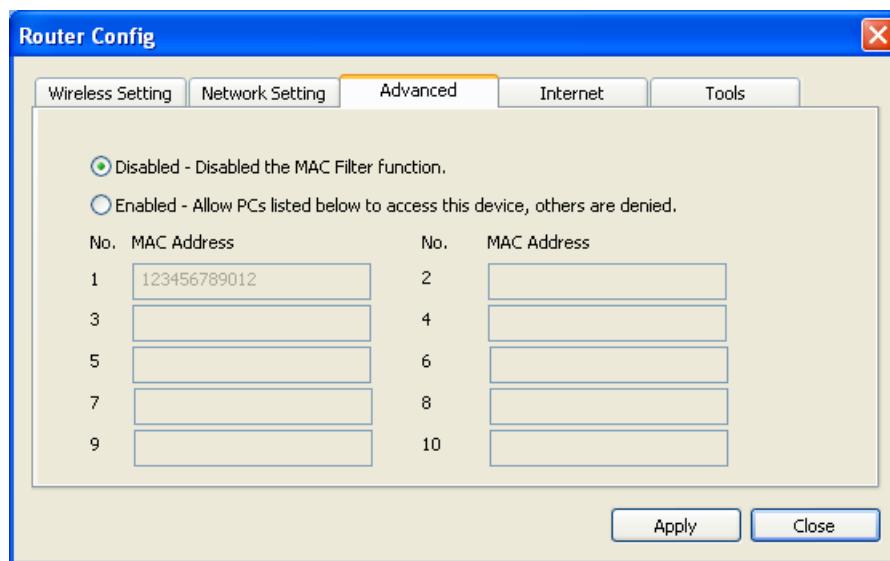
Router Config -> Network Setting



6.1.3.3 Advanced

It's used to modify WiFi MAC filter setting.

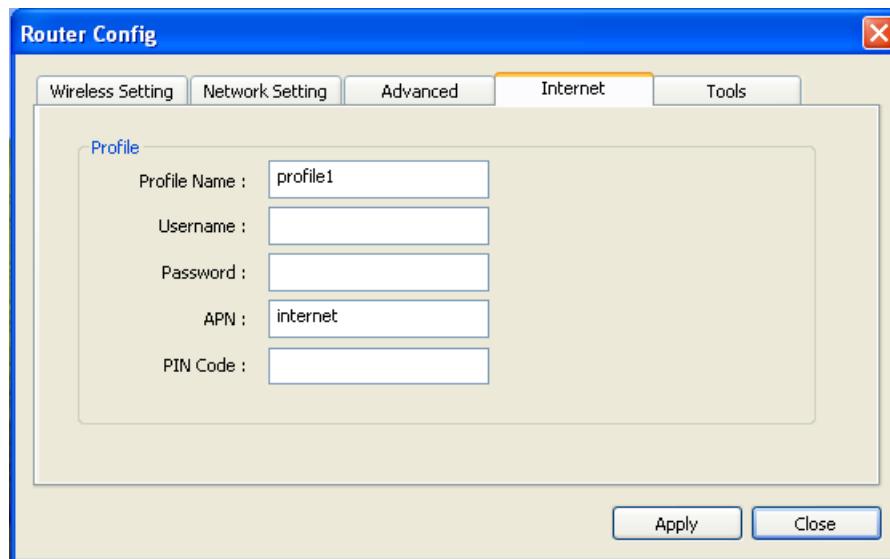
Router Config -> Advanced



6.1.3.4 Internet

It's used to modify APN setting for "Router mode" using condition.

Router Config -> Internet

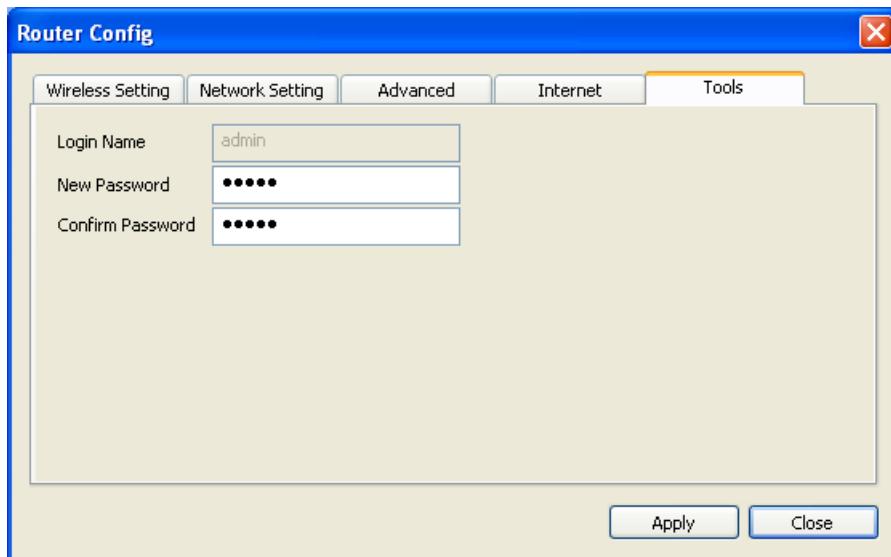


6.1.3.5 Tools

It's used to set password for the management web page in "Router mode" using condition.

The default login name and password is admin

Router Config -> Tools

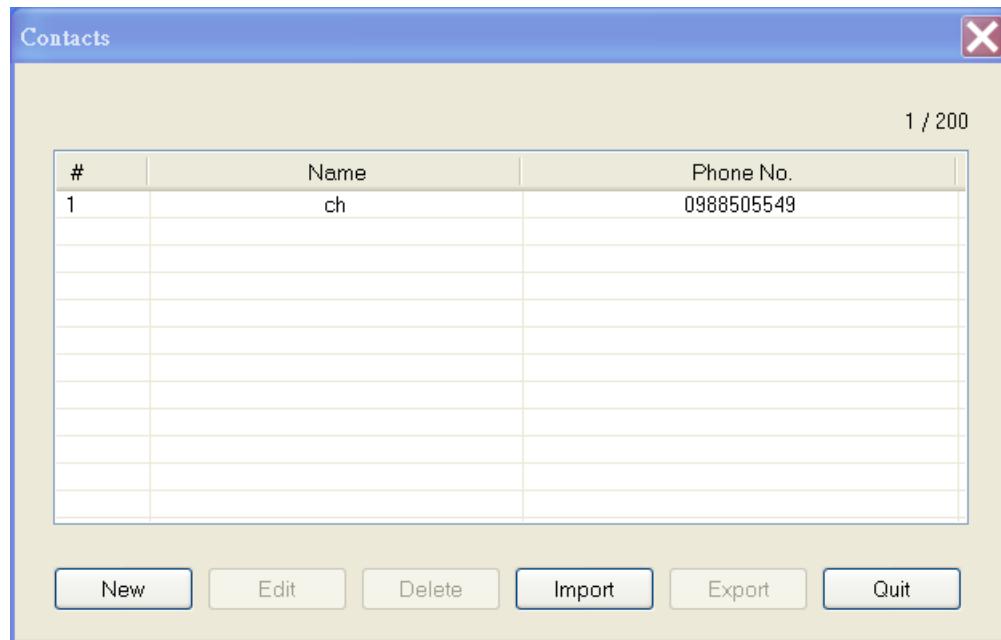


6.2 Edit



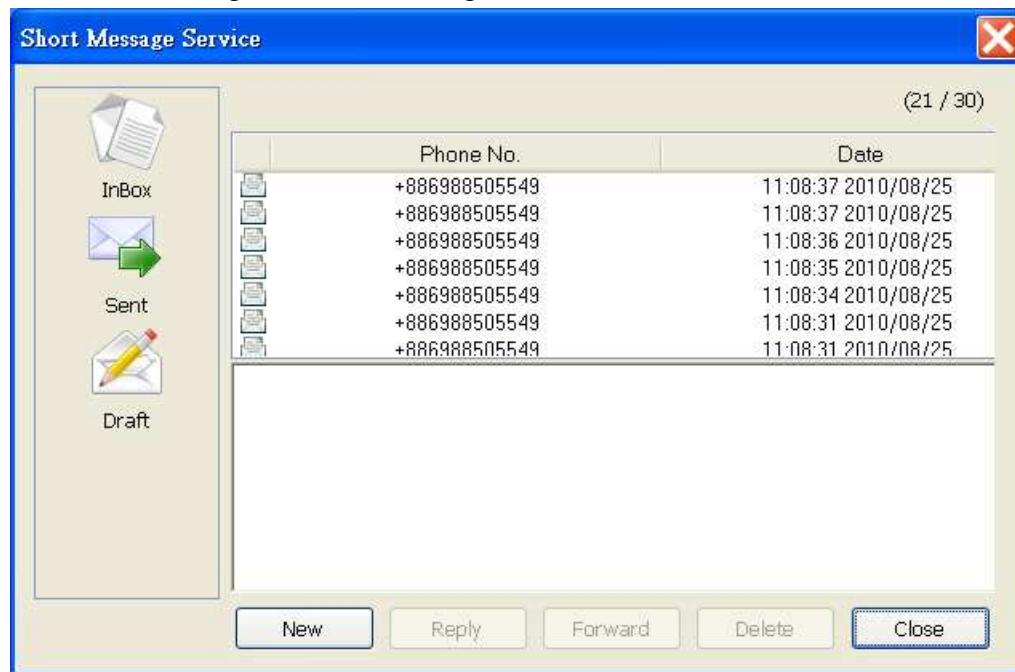
6.2.1 Contact

It's used to manage the contact information.



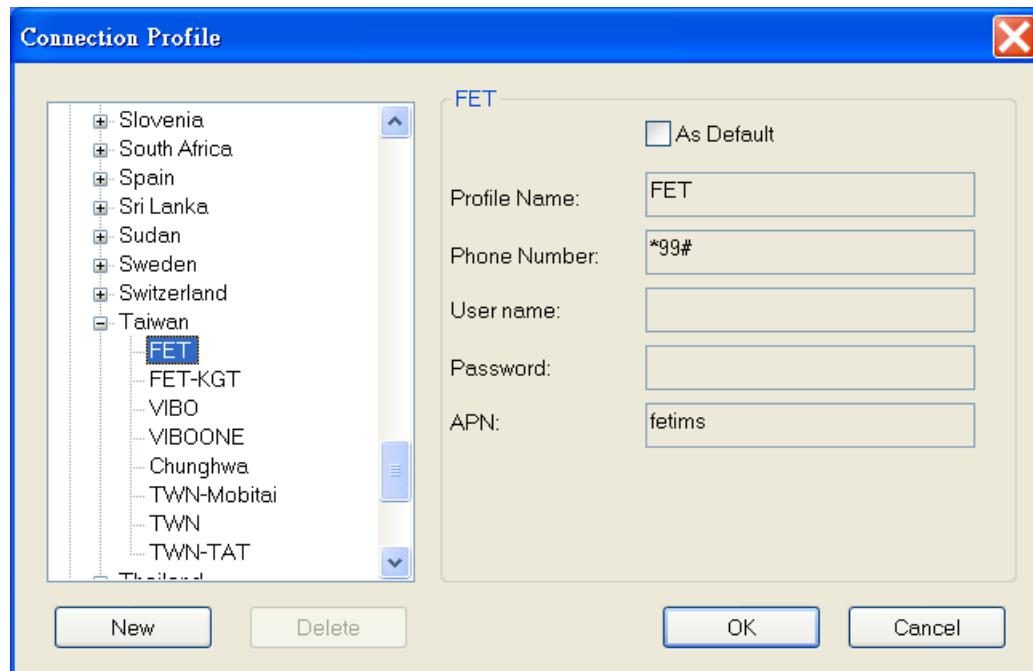
6.2.2 Message

It's used to manage the short message information.



6.2.3 Connection Profile

It's used to manage the connection profile in "Modem mode" using condition.



6.3 Tools



6.3.1 SIM Card Lock

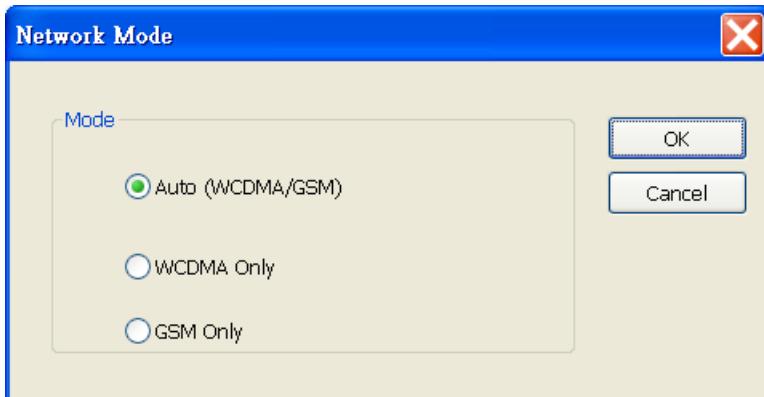
It's used to lock /unlock SIM card.

6.3.2 PIN Code Change

It's used to change PIN code.

6.3.3 Network Mode

It's used to configure the WWAN network to "Auto" or "WCDMA only" or "GSM only".



6.4 Help

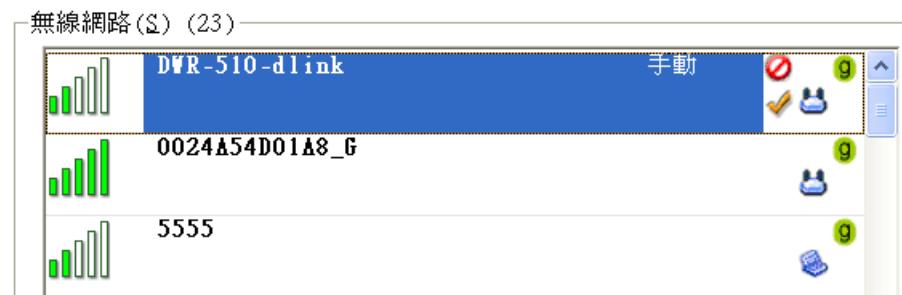
6.4.1 About



ii. Router mode

Please push slide switch to “Router” position to configure device to “Router mode”. Device will enable WWAN and WiFi router function in “Router mode”. Steps to use device in “Router mode”:

1. Push slide switch of device to “Router” position.
2. Enable WiFi function in your computer.
3. Turn on WiFi management tool in your computer, the default SSID of DWR-510 is DWR-510-dlnk. Please connect to it and you can start to surf the network.



4. Webpage for “Router mode” management

4.1 IP address to access management webpage

The default IP address is <http://192.168.0.1/>

4.2 SETUP

4.2.1 INTERNET

It's used to setup APN for 3G router.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT	
INTERNET	WAN Use this section to configure your Internet Connection type. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> WWAN INTERNET CONNECTION Enter the information provided by your Internet Service Provider (ISP). Auto APN : <input checked="" type="checkbox"/> Profile Name : <input type="text" value="profile1"/> Username : <input type="text"/> Password : <input type="text"/> APN : <input type="text" value="internet"/> Reconnect Mode : <input checked="" type="radio"/> Always on <input type="radio"/> On demand <input type="radio"/> Manual Maximum Idle Time : <input type="text" value="3"/> (minutes, 0=infinite)					Helpful Hints... When configuring the router to access the Internet, be sure to fill the correct information. If you are unsure of which option to choose, contact your Internet Service Provider (ISP).
WIRELESS SETTINGS						
NETWORK SETTINGS						
English <input type="button" value="▼"/>						

4.2.2 WIRELESS SETTINGS

It's used to set WiFi SSID, Country, Channel and Security Mode.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
INTERNET	WIRELESS Use this section to configure the wireless settings for your D-Link Router. Please note that changes made on this section may also need to be duplicated on your Wireless Client. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	WIRELESS NETWORK SETTINGS Wireless Network Name : <input type="text" value="DWR-510-dlink"/> (Also called the SSID) Max. Associated Number : <input type="text" value="6"/> Country : <input type="text" value="AUTO"/> Wireless Channel : <input type="text" value="6"/> Visibility Status : <input checked="" type="radio"/> Visible <input type="radio"/> Invisible				
NETWORK SETTINGS	WIRELESS SECURITY MODE To protect your privacy you can configure wireless security features. This device supports three wireless security modes, including WEP, and WPA-Personal. WEP is the original wireless encryption standard. WPA provides a higher level of security. WPA-Personal does not require an authentication server. Security Mode : <input type="text" value="None"/>				
English <input type="button" value="▼"/>	Helpful Hints... Changing your Wireless Network Name is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information. Enable Auto Channel Scan the router can select the best possible channel for your wireless network to operate on. Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they scan to see what's available. For your wireless devices to connect to your router,				

4.2.3 NETWORK SETTINGS

It's used to set the IP address of the management webpage.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
INTERNET	NETWORK SETTINGS Use this section to configure the internal network settings of your router and also to configure the built-in DHCP Server to assign IP addresses to the computers on your network. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	ROUTER SETTINGS Use this section to configure the internal network settings of your router. The IP Address that is configured here is the IP Address that you use to access the Web-based management interface. If you change the IP Address here, you may need to adjust your PC's network settings to access the network again. Router IP Address: <input type="text" value="192.168.0.1"/> Subnet Mask: <input type="text" value="255.255.255.0"/>				
NETWORK SETTINGS	DHCP SERVER SETTINGS Use this section to configure the built-in DHCP Server to assign IP addresses to the computers on your network. Enable DHCP Server: <input checked="" type="radio"/> Enabled <input type="radio"/> Disabled DHCP IP Address Range: <input type="text" value="192.168.0.100"/> to <input type="text" value="192.168.0.200"/>				
English <input type="button" value="▼"/>	Helpful Hints... If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck Enable DHCP Server to disable this feature.				

4.3 ADVANCED

It's used to set the MAC filtering rules for "Router mode" using case.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT																							
MAC FILTER	MAC ADDRESS FILTER <p>The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter.</p> <p><input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/></p>	10 -- MAC FILTERING RULES <p>Configure MAC Filtering below:</p> <p><input checked="" type="radio"/> Disabled - Disabled the MAC Filter function.</p> <p><input type="radio"/> Enabled - Allow PCs listed below to access this device, others are denied.</p> <table> <thead> <tr> <th>No.</th> <th>MAC Address</th> <th>No.</th> <th>MAC Address</th> </tr> </thead> <tbody> <tr><td>1</td><td><input type="text"/></td><td>2</td><td><input type="text"/></td></tr> <tr><td>3</td><td><input type="text"/></td><td>4</td><td><input type="text"/></td></tr> <tr><td>5</td><td><input type="text"/></td><td>6</td><td><input type="text"/></td></tr> <tr><td>7</td><td><input type="text"/></td><td>8</td><td><input type="text"/></td></tr> <tr><td>9</td><td><input type="text"/></td><td>10</td><td><input type="text"/></td></tr> </tbody> </table>	No.	MAC Address	No.	MAC Address	1	<input type="text"/>	2	<input type="text"/>	3	<input type="text"/>	4	<input type="text"/>	5	<input type="text"/>	6	<input type="text"/>	7	<input type="text"/>	8	<input type="text"/>	9	<input type="text"/>	10	<input type="text"/>		Helpful Hints... <p>Create a list of MAC addresses that you would either like to allow access to your network or disable this function.</p>
No.	MAC Address	No.	MAC Address																									
1	<input type="text"/>	2	<input type="text"/>																									
3	<input type="text"/>	4	<input type="text"/>																									
5	<input type="text"/>	6	<input type="text"/>																									
7	<input type="text"/>	8	<input type="text"/>																									
9	<input type="text"/>	10	<input type="text"/>																									

4.4 TOOLS

4.4.1 ADMIN

It's used to set the password for the management webpage.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	ADMINISTRATOR SETTINGS <p>The 'admin' accounts can access the management interface. The admin has read/write access and can change passwords.</p> <p>By default there is no password configured. It is highly recommended that you create a password to keep your router secure.</p> <p><input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/></p>	ADMIN PASSWORD <p>Please enter the same password into both boxes, for confirmation.</p> <p>Password : <input type="text"/> Verify Password : <input type="text"/></p>		Helpful Hints... <p>For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new and passwords to avoid having to reset the router in case they are forgotten.</p>	

4.4.2 SYSTEM

It's used to restore the factory default setting.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	SYSTEM SETTINGS The System Settings section allows you to restore the router to the factory default settings. Restoring the unit to the factory default settings will erase all settings, including any rules that you have created.				
SYSTEM	SYSTEM SETTINGS Restore To Factory Default: <input type="button" value="Restore Factory Defaults"/> Restore all settings to the factory defaults.				
English 					

4.5 STATUS

4.5.1 DEVICE INFO

It's used to show the device information.

	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
DEVICE INFO	DEVICE INFORMATION All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.				
WIRELESS	GENERAL Firmware Version : v0.0.6.5				
English 					
	WAN Connection Status : PIN_STATUS_NOT_INITIALIZED <input type="button" value="Connect"/> Network Type : NONE Current Profile : Connected Time : NA IP : 0.0.0.0 DNS : Received Packets : 0 Transmitted Packets : 0				
	LAN IP : 192.168.0.1 Subnet Mask : 255.255.255.0 DHCP Server : Enabled Address Range : 192.168.0.100 - 192.168.0.200 MAC Address : 74:f0:6d:9b:b6:1f SSID : DWR-510-dlink Channel : 6 Mode : 802.11 B/G/N Encryption : None				
	Helpful Hints... All of your WAN and LAN connection details are displayed here.				

4.5.2 WIRELESS

It's used to show the WiFi MAC address.

The screenshot shows the 'WIRELESS' section of the router's web interface. On the left sidebar, 'WIRELESS' is selected. The main content area displays a table titled 'NUMBER OF WIRELESS CLIENTS' with one entry:

No.	MAC Address
1	00:1B:77:B9:FB:82

To the right, a 'Helpful Hints...' box states: 'This is a list of all wireless clients that are currently connected to your wireless router.'

4.6 SUPPORT

It's the help information here.

The screenshot shows the 'TOOLS HELP' section for the 'WIRELESS' topic. The left sidebar has 'WIRELESS' selected. The main content area contains a bulleted list of links:

- [Wireless](#)
- [WAN](#)
- [Network Settings](#)

Below this, there is a detailed description of the wireless section and its security features:

Wireless Network Name
When you are browsing for available wireless networks, this is the name that will appear in the list (unless Visibility Status is set to Invisible, see below). This name is also referred to as the SSID. For security purposes, it is highly recommended to change from the pre-configured network name.

Federal Communication Commission Interference 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 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

IMPORTANT NOTE:**FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Products with 2.4–GHz Wireless LAN Devices France

L'utilisation de cet équipement (2.4GHz wireless LAN) est soumise à certaines restrictions: cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400 à 2483.5MHz (Chaîne 1–13). Pour une utilisation en environnement extérieur, les fréquences comprises entre 2400-2454 MHz (Chaîne 1-9) peuvent être utilisées. Pour les dernières restrictions, voir <http://www.art-telecom.fr>.

For 2.4–GHz wireless LAN operation of this product, certain restrictions apply. This equipment may use the entire 2400–MHz to 2483.5–MHz frequency band (channels 1 through 13) for indoor applications. For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see <http://www.art-telecom.fr>.

Wireless LAN Module's Maximum EIRP

Frequency Ranges (MHz)	Indoors	Outdoors
2400 MHz ~ 2446.5 MHz	10mW	Not Permitted
2446.5 MHz ~ 2483.5 MHz	100mW	100mW on private property with Ministry of Defense approval.

For Taiwan 警語：

✖ 第十二條

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

✖ 第十四條

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

Note:

1. 本模組於取得認證後將依規定於模組本體標示審驗合格標籤
2. 系統廠商應於平台上標示「本產品內含射頻模組：  CCXXXXYYyyZzW」字樣