USER MANUAL

DWR-510

VERSION 1.1

D-Link®

MOBILE

Preface

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Table of Contents

Package Contents

- D-Link DWR-510 Le Petit 3.75G Router
- Manual on the device

System Requirements

- A compatible (U)SIM card with service.*
- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer Version 6.0 or Netscape Navigator™ Version 6.0 and above (for configuration)

*Subject to services and service terms available from your carrier.

Introduction

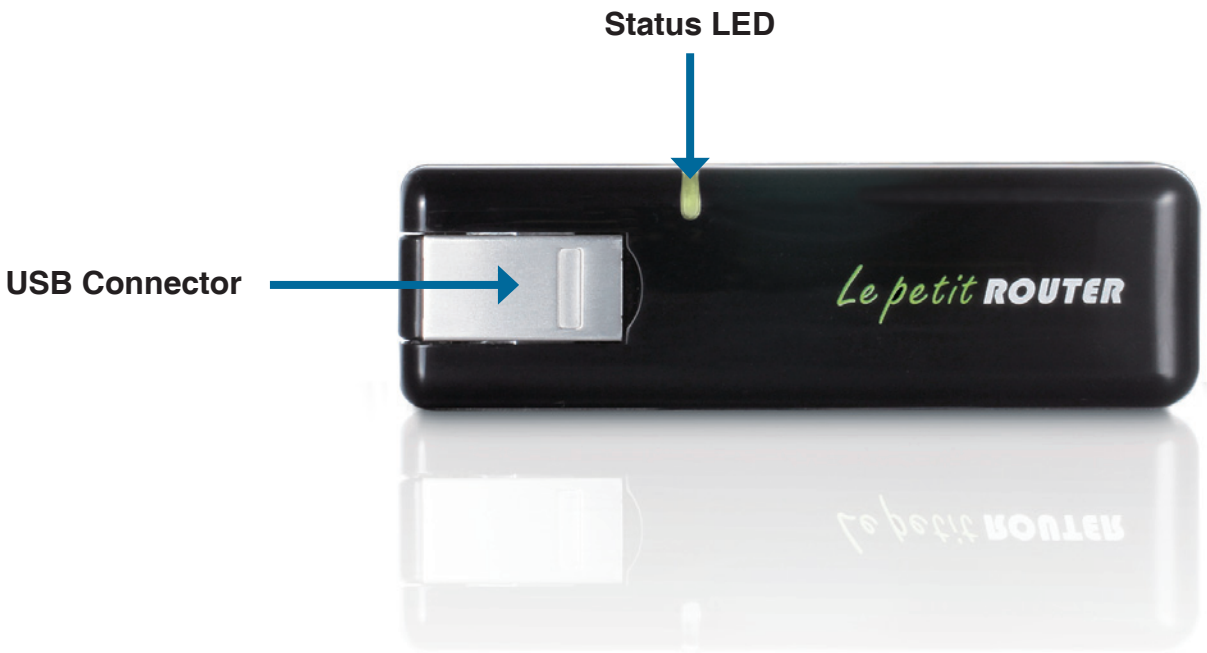
The D-Link DWR-510 Le Petit 3.75G Router is a very compact 3G router and dongle, slim and small enough to carry in a pocket. It allows users to take full advantage of HSUPA-compatible 3G networks for portable use anywhere or anytime while on the go.

The DWR-510 can function in either Wi-Fi router mode or 3G USB modem mode. When in Wi-Fi router mode, the device allows Wi-Fi capable devices like smart phones, portable gaming devices, notebooks, or digital cameras access to 3G networks via a wireless connection. The DWR-510 can share its 3G connection with up to 10 Wi-Fi clients.

When using the D-Link DWR-510 Le Petit 3.75G Router as a 3G USB modem, you can not only keep your PC connected to 3G network, but also turn off your PC's Wi-Fi radio in order to save battery power.

Hardware Overview

Side Panel



Port/LED	Function			
USB Connector	Connects to your computer's USB port.			
Status LED	Indicates the status of your network connection.			
	Color	**Solid**	**Blinking (Fast)**	**Blinking (Slow)***
	Blue	WCDMA/HSDPA/HSUPA Connected	Transmitting	Dial on demand
	Green	GSM/GPRS Connected	Transmitting	Dial on demand
	Red	SIM error/No service	-	-

* This applies when the device is in standby mode.

Wireless Installation Considerations

The DWR-510 can be accessed using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the quantity, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or office. The key to maximizing the wireless range is to follow these basic guidelines:

1. Minimize the number of walls and ceilings between the D-Link router and other network devices. Each wall or ceiling can reduce your adapter's range from 3 to 90 feet (1 to 30 meters).

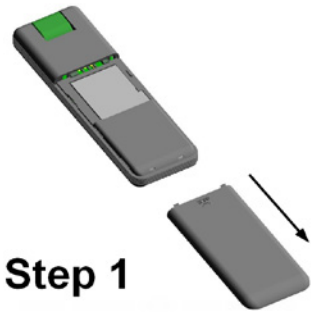
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (0.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick. Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.

3. Try to position access points, wireless routers, and computers so that the signal passes through open doorways and drywall. Materials such as glass, metal, brick, insulation, concrete and water can affect wireless performance. Large objects such as fish tanks, mirrors, file cabinets, metal doors and aluminum studs may also have a negative effect on range.

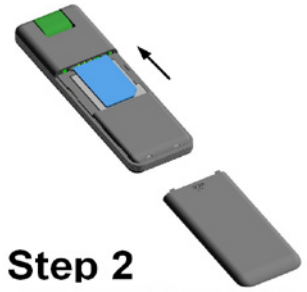
4. If you are using 2.4 GHz cordless phones, make sure that the 2.4 GHz phone base is as far away from your wireless device as possible. The base transmits a signal even if the phone in not in use. In some cases, cordless phones, X-10 wireless devices, and electronic equipment such as ceiling fans, fluorescent lights, and home security systems may dramatically degrade wireless connectivity.

Product Setup
Installing the SIM Card

1. Remove the back cover of the USB Dongle.



2. Insert the SIM card with the gold contacts facing down. Make sure that you insert the SIM card in the right direction, with the notched edge facing away from the DWR-510's contacts.



3. Replace the back cover.

Connection Setup

Modem Mode

1. Move the router/modem selection switch to modem mode.

2. Connect the Le Petit 3.75G Router to your computer, the LED will blink green.

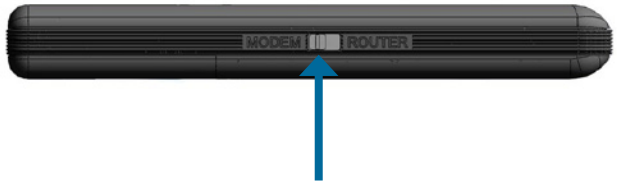
3. Follow the instructions to install the D-Link Connection Manager.

4. Enter the PIN code for the SIM card.

5. Click the “Connect” icon in the Connection Manager.

6. You can now use the DWR-510 Le Petit 3.75G Router as a 3G modem.

Note: You have to install the Connection Manager software when using the DWR-510 for the first time. After successful installation, you can configure USB modem and Wi-Fi router basic settings.



Modem/Router switch in modem position

Connection Setup

Router Mode

\1. Move the router/modem selection switch to router mode.

2. Connect the Le Petit 3.75G Router to your computer, the LED will blink green. Alternatively, you can connect the DWR-510 to a USB power adapter.

3. Find the Wi-Fi network with the SSID “dlink_DWR-510” and connect to it.

4. You can now use the DWR-510 Le Petit 3.75G Router as a 3G router.

Modem/Router switch in router position

Modem Mode: D-Link Connection Manager

When using Modem Mode, you will need to use the D-Link Connection Manager. It allows you to manage your 3G connection, and lets you send and receive SMS messages through a simple to use interface.

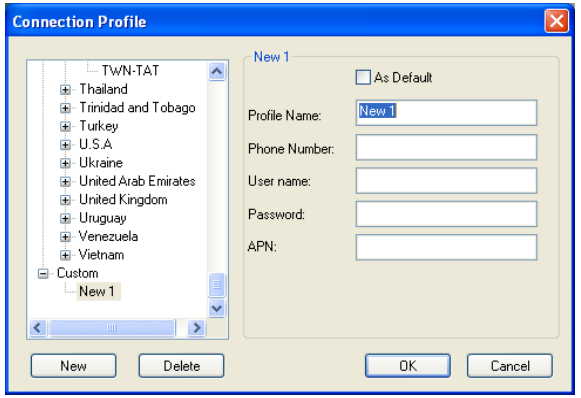
Note: These settings will only take effect when the DWR-510 is in Modem Mode.

New Profile

Before starting, if the mobile service provider associated with your SIM card is listed in the preset profile list, you can directly connect to the desired network using its pre-defined profile.

You also can create your own profile by following the steps below:

1. Click the **Edit** button, then go to **Connection Profile**.
2. Click the **New** button to create a new profile.
3. Choose a **Profile Name**, then type in the **Phone Number**, **User Name**, **Password**, **and APN**. If you want to make this your default profile, check **As Default**. Click **OK** to continue.



Windows

Mac

Establishing a Connection

You can click the Connect button to connect to the network via the default profile. Once connected, you can use the mobile service network to browse the Internet, send e-mail, send text messages, and perform other tasks online.

Connect

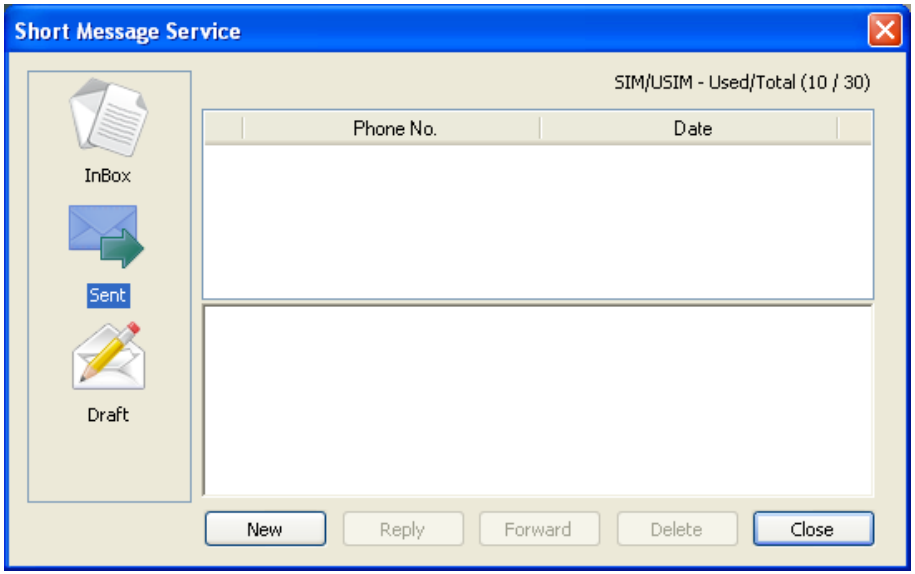
Ending a Connection

If you wish to disconnect, click the Connect button again.

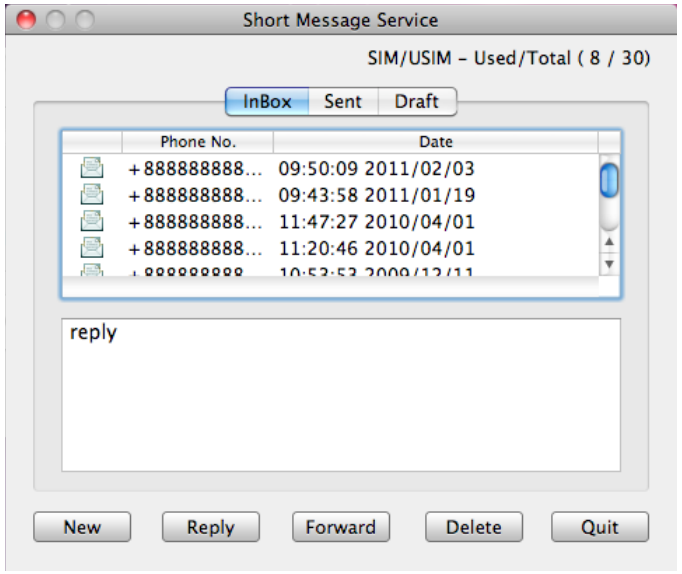
Disconnect

Text Messaging (SMS)

The DWR-510 can be used to perform all the text messaging functions that can be done on a mobile phone such as sending, receiving, replying, forwarding and deleting.



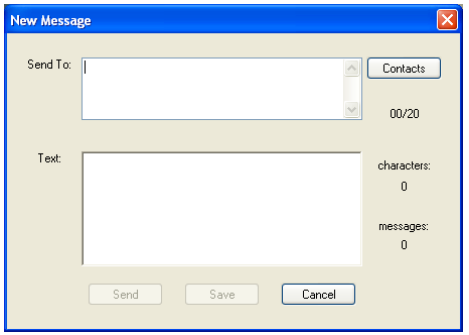
Windows



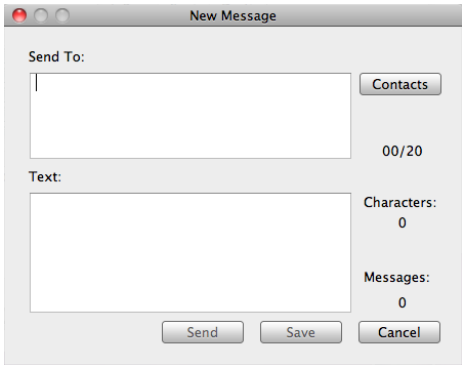
Mac

New/Reply/Forward Text Message

1. Click the **SMS** button.
2. Click **New**, **Reply**, or **Forward**.
3. Enter the recipient's phone number or click **Contacts** to see the contacts stored to the SIM card. In the contacts window, click the box next to the recipients name and click **Add** to return to the New SMS window.
4. Enter a message to send.
5. Click **Send** to send the message.



Windows



Mac

Deleting a Message

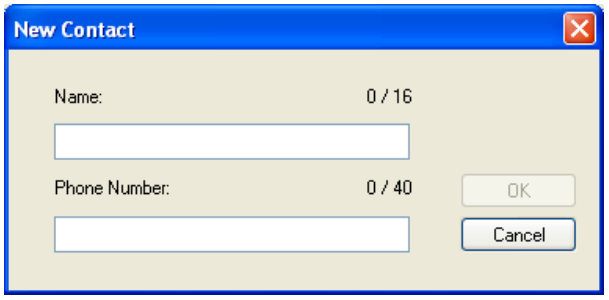
1. Click the **SMS** button.
2. Select the messages you want to delete and click **Delete**.
3. Click **Delete** to delete the selected messages.
4. Click **Yes** to confirm.

Contact Management

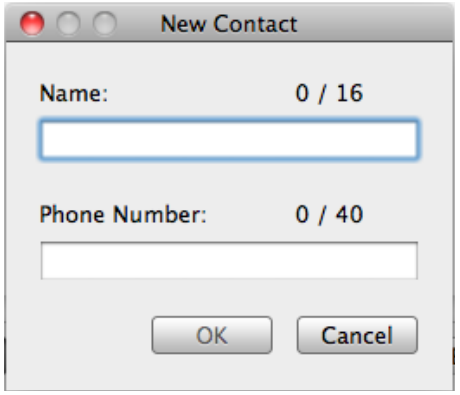
The DWR-510 contacts manager displays all the contacts on the SIM Card. Contacts can be added, edited, deleted and imported.

Adding Contacts

1. Click the **Contacts** button.
2. Click the **New** button.
3. In the Add Contact window, enter the contact name and telephone number.
4. Click **OK** to add the contact.



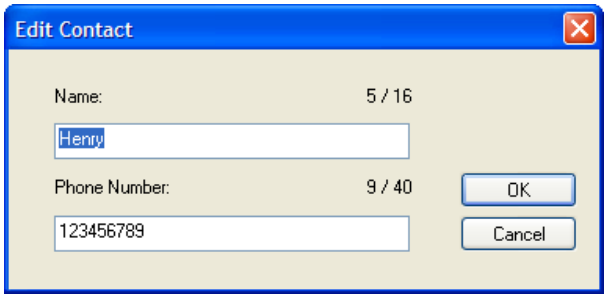
Windows



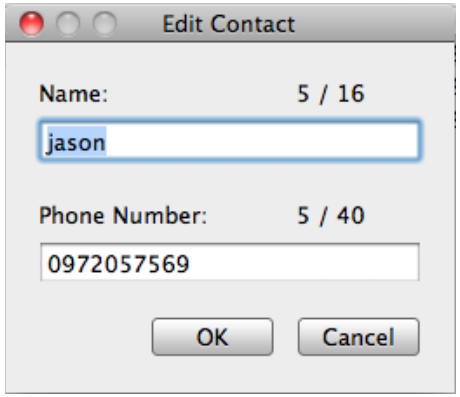
Mac

Editing Contacts

1. Click the **Contacts** button.
2. Select the contact to edit.
3. Click the **Edit** button.
4. Modify the contacts details.
5. Click **OK** to save the changes.



Windows



Mac

Deleting Contacts

1. Click the **Contacts** button.
2. Select the contact to delete and click the **Delete** button.
3. Click **Yes** to confirm the deletion.

Importing vCards to Contacts

1. Click the **Contacts** button.
2. Click the **Import** button.
3. Select the source of the vCard(s).
4. Click **Open** to import the card(s).
5. After the import, a message will display the import information. Click **OK** to close the window.

Exporting Contacts to vCards

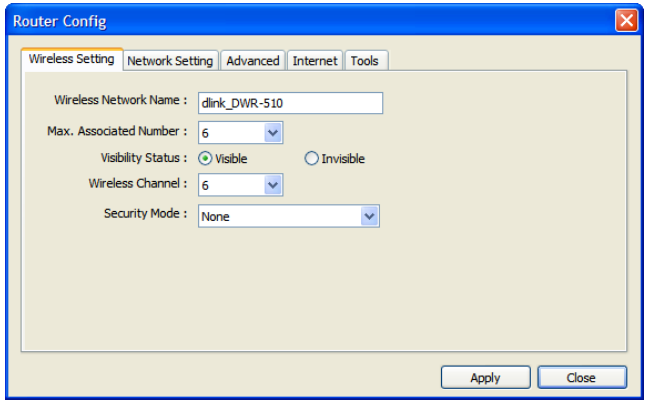
1. Click the **Contacts** button.
2. Click the **Export** button.
3. Select the destination to save the vCard(s).
4. Click **OK** to export the card(s).
5. After the export, a message will be displayed. Click OK to close.

Router Mode: D-Link Connection Manager (Windows only)

The D-Link Mobile Connection Manager allows you to conveniently adjust options such as the wireless or network settings for the DWR-510. You can also access these settings by using the web-based configuration utility(see page 18).

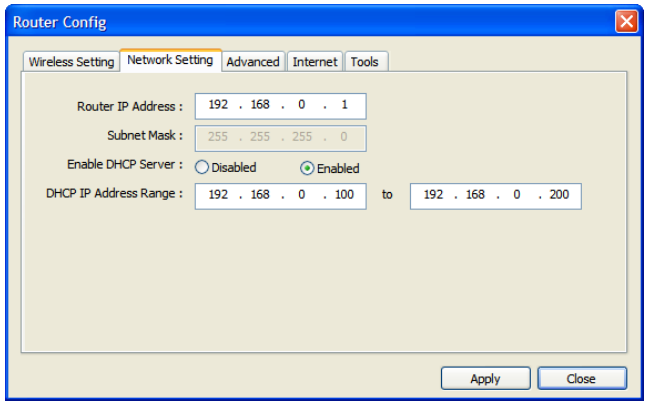
Wireless Settings

1. Enter a wireless network name. When connecting other devices to your wireless network, this is the name you will need to search for.
2. Select the maximum number of devices to allow to connect to your wireless network.
3. Set the visibility status to **Visible** or **Invisible**.
4. Choose the wireless channel and security mode.
5. Click **Apply** to save the settings.



Network Settings

1. Enter the router IP address and subnet mask.
2. If you want to enable DHCP Server, check **Enabled**. Otherwise, check **Disabled**.
3. Enter values for the DHCP IP address range.
4. Click **Apply** to save the settings.

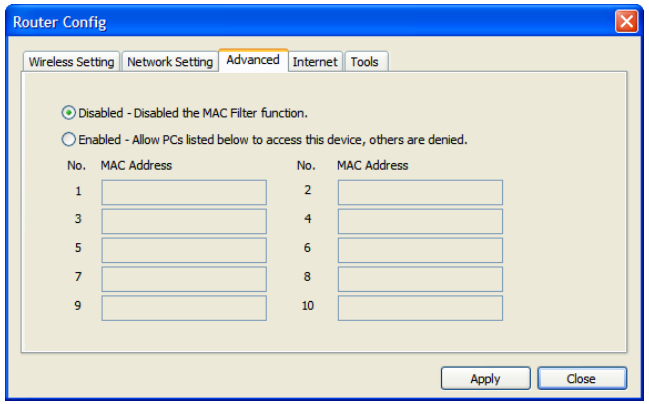


Advanced Settings

1. Check **Enabled**, if you want to enable MAC address filtering. Otherwise, check **Disabled**.

2. Enter up to 10 MAC addresses that can access the device. Only these devices will be allowed to access your wireless network; all other devices will be denied access.

3. Click **Apply** to save the settings.



Internet Settings

1. If you want to enable Auto APN, tick the check box.

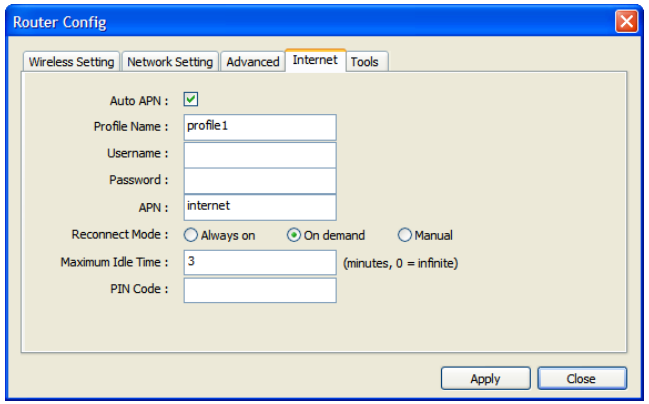
2. Enter a profile name, username, password, and APN description.

3. Set the Reconnect Mode to **Always On**, **On Demand**, or **Manual**.

4. Enter a maximum idle time in minutes or choose 0 for infinite.

5. Enter a PIN code.

6. Click **Apply** to save the settings.

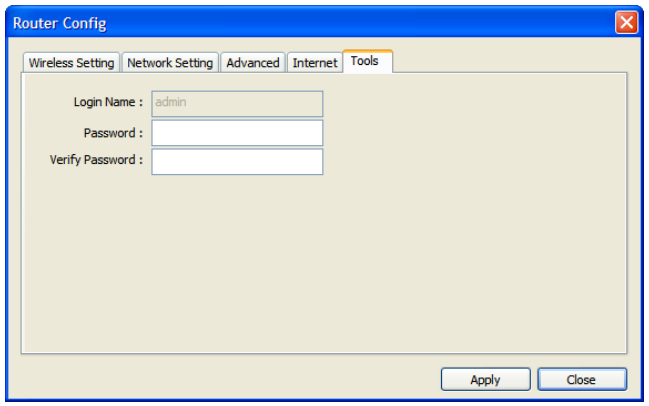


Tools

1. If you want to change the password for the DWR-510, enter a new password in the text box.

2. Enter the password again to verify it.

3. Click **Apply** to save the settings.

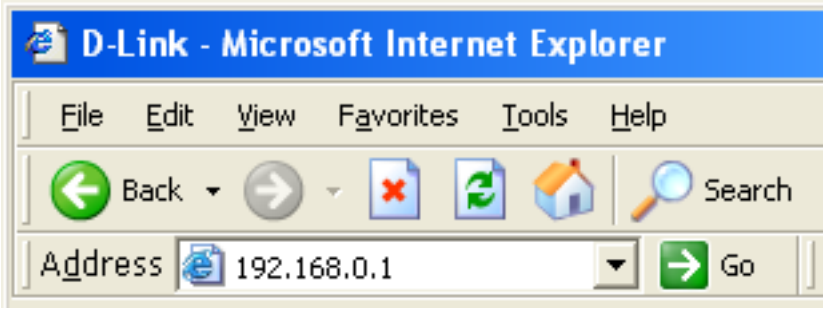


Router Mode: Web-based Configuration Utility

When using Router Mode, you can use the web-based configuration utility to manage your wireless network. It allows you to set wireless encryption, control access to the wireless network, set up an FTP server for file sharing, and more.

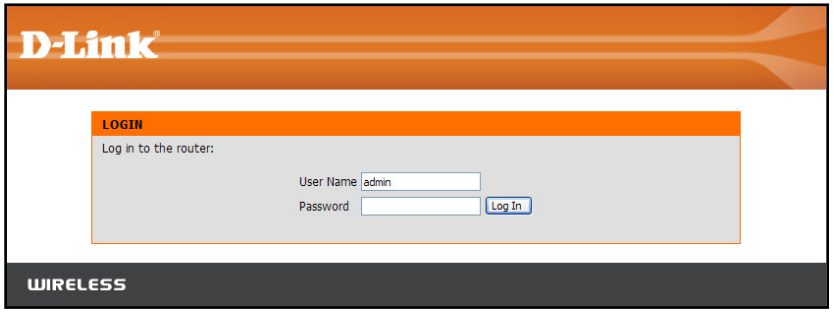
Note: The web-based configuration utility and its associated features are for Router Mode only.

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).



Type **admin** in the **User Name** field and then enter your password. Leave the password blank by default.

Click the **Login** button to log in to the router.

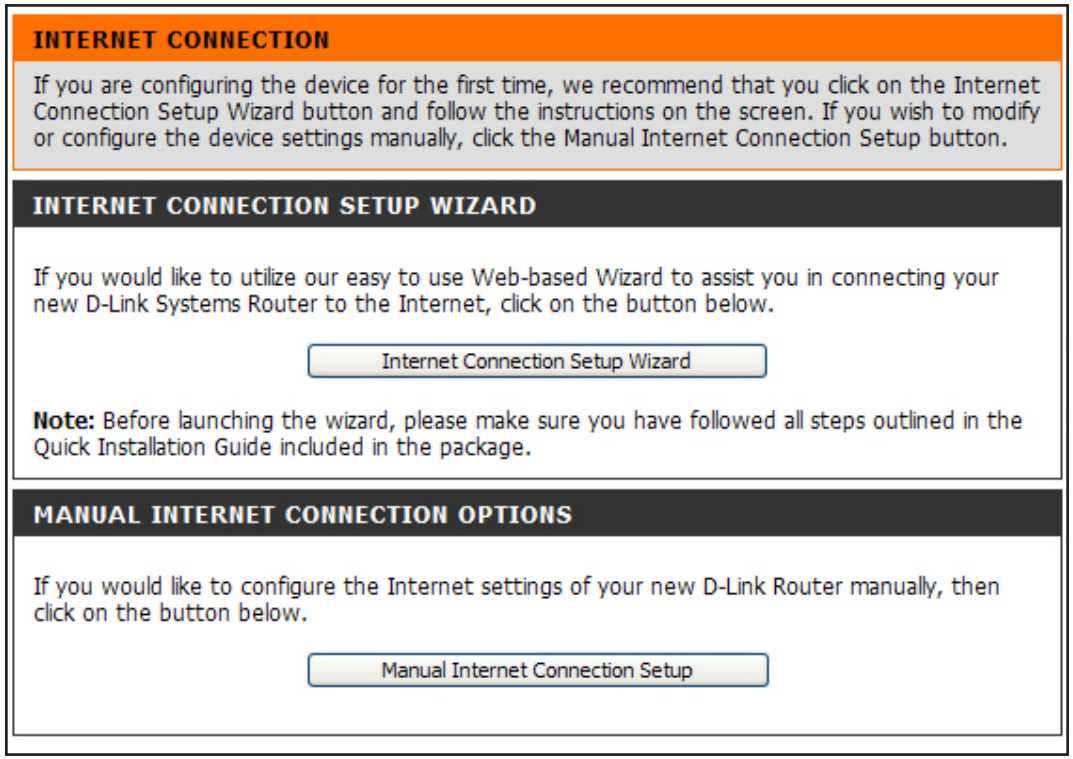


If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.

Internet Connection Setup Wizard

Once logged into the web interface of the router, the **Setup > Internet** page will appear. Click the **Internet Connection Setup Wizard** button to quickly configure your router using the setup wizard.

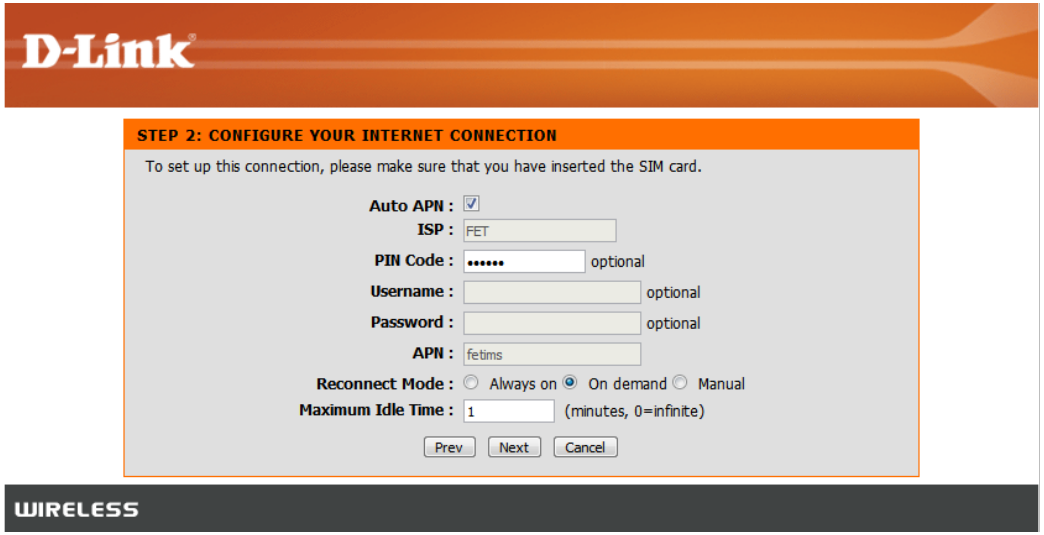
If you want to enter your settings without running the wizard, click **Manual Internet Connection Setup** and skip to "Manual Internet Configuration".



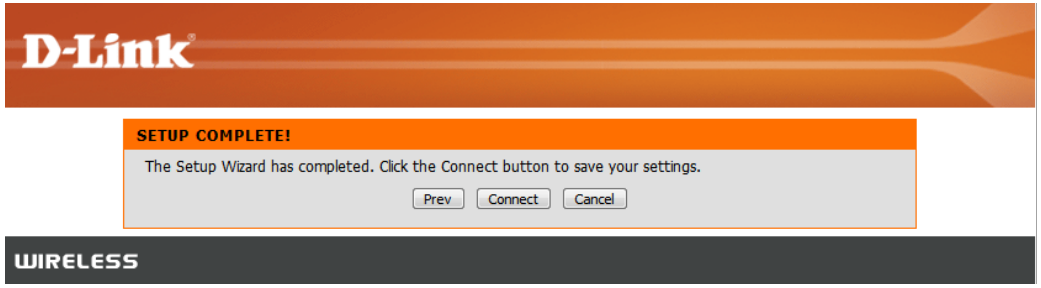
Click **Next** to continue.

Create a new password and then click **Next** to continue.

Configure your 3G Internet Connection settings and then click **Next** to continue.



Click **Connect** to save your settings. Once the router has finished rebooting, click **Continue**. Please allow 1-2 minutes to connect.



Internet Setup

This section lets you enter the Internet connection information provided by your Internet Service Provider (ISP).

Auto APN: If you want to enable Auto APN, tick the check box.

ISP: Enter the name of your ISP.

Username: Enter a username.

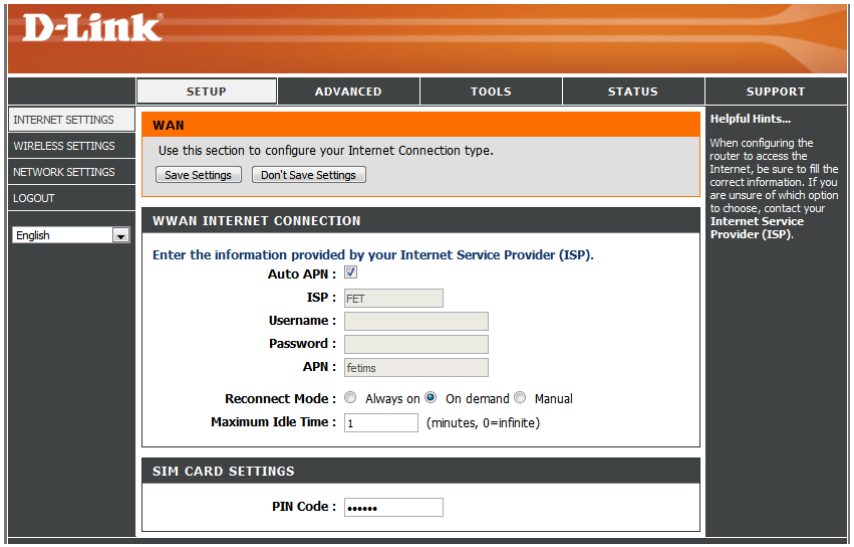
Password: Enter a password.

APN: Enter the APN description.

Reconnect Mode: Set to **Always On**, **On Demand**, or **Manual**.

Maximum Idle Time: Enter a maximum idle time in minutes. Choose 0 for infinite.

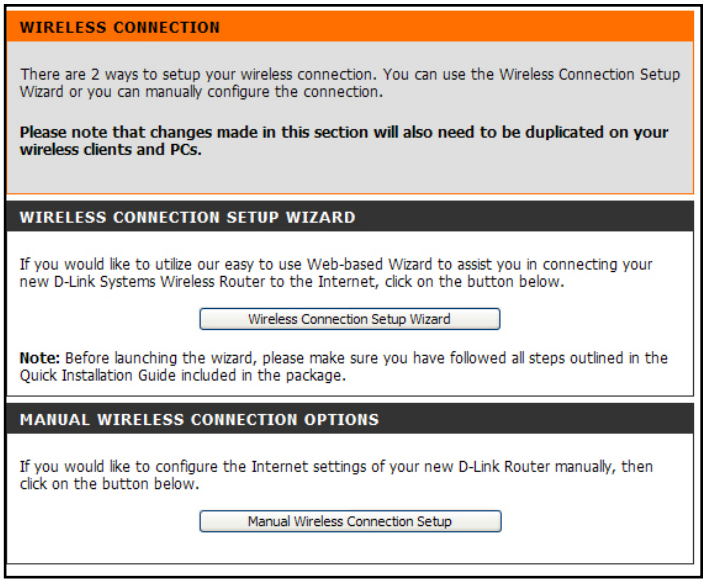
SIM Card Settings: Enter the PIN code for the SIM card.



Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Connection Setup Wizard**.

If you want to manually configure the wireless settings on your router click **Manual Wireless Connection Setup** and refer to "**Manual Wireless Connection Setup**".

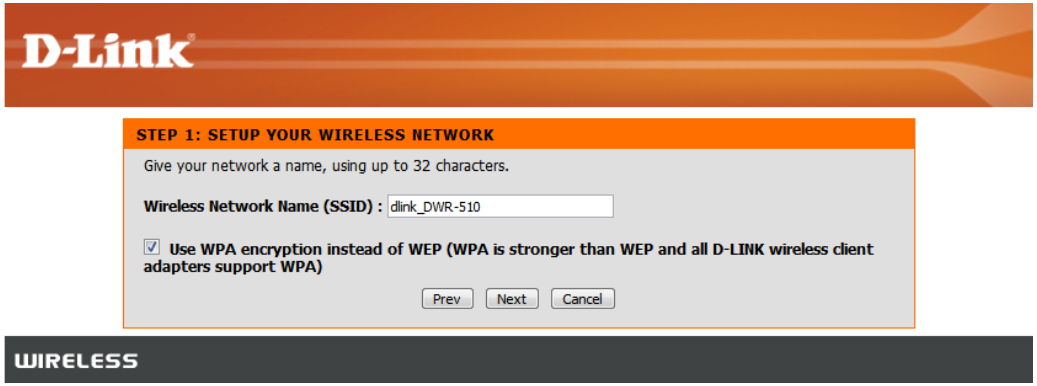


Click the **Wireless Connection Setup Wizard** button to view the **Wireless Security Setup Wizard** menu. The Welcome menu lists the steps used for setup. Click on the **Next** button to continue.

Enter the SSID (Service Set Identifier). The SSID is the name of your wireless network. Create a name using up to 20 characters. The SSID is case-sensitive.

It is recommended that you tick the checkbox to use WPA wireless encryption to secure your wireless network.

Click **Next** to continue.



Type a password that you would like to use for your wireless network in the **Network Key:** entry field.

Click **Next** to continue.

The final menu appears to indicate that setup is complete.

You should write down the **Wireless Network Name (SSID)** and **Network Key** for future reference when connecting other wireless devices to your wireless network.

Click **Save** to finish the Security Wizard.

Manual Wireless Setup

Use this section to configure the wireless settings for your D-Link router.

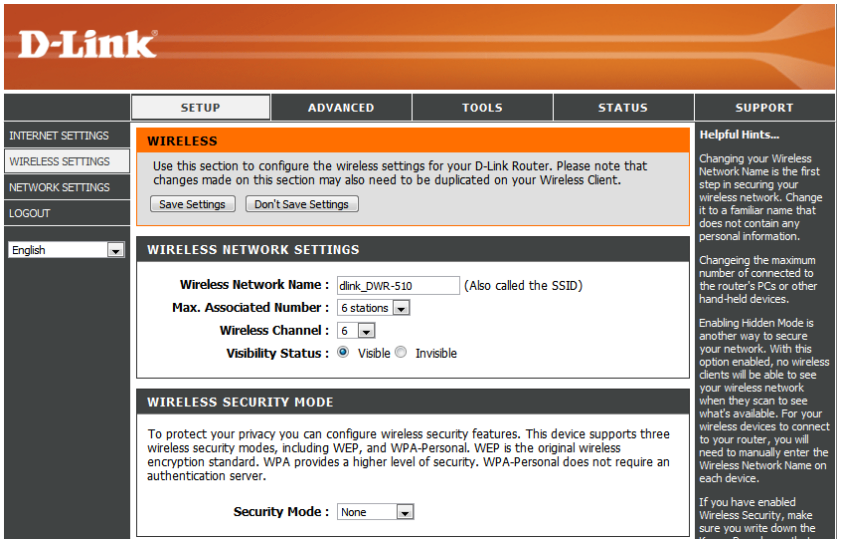
Wireless Network Name: Enter a wireless network name.

Max. Associated Number: Set the maximum number of clients that can connect wirelessly.

Wireless Channel: Choose the wireless channel.

Visibility Status: Set the visibility status to **Visible** or **Invisible**.

Security Mode: Choose the wireless security mode.



Network Setup

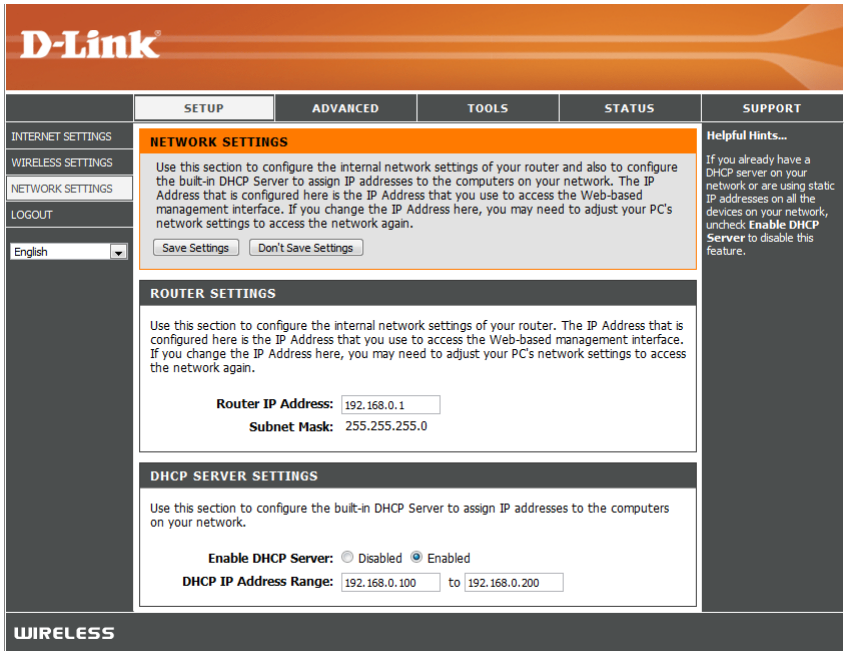
Use this section to configure the internal network settings of your router.

Router IP Address: Enter the router IP address.

Subnet Mask: Enter the subnet mask.

Enable DHCP Server: If you want to enable DHCP Server, check **Enabled**. Otherwise, check **Disabled**.

DHCP IP Address Range: Enter values for the DHCP IP address range.

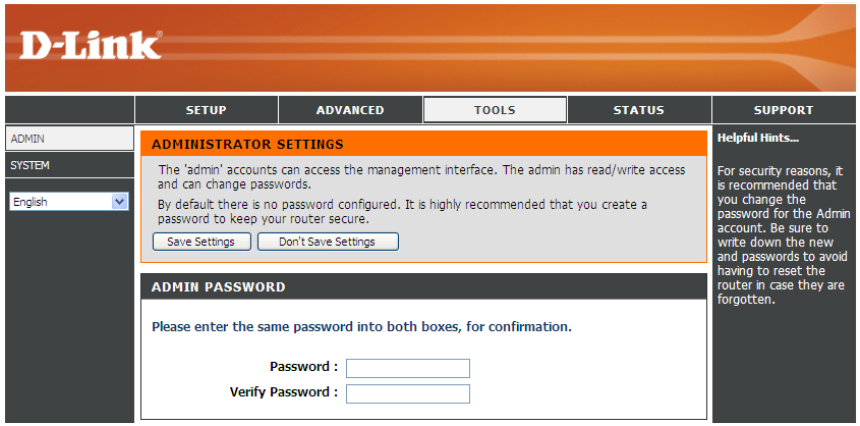


Administrator Settings

Use this section to change the password for the Administrator account.

Password: Enter a password.

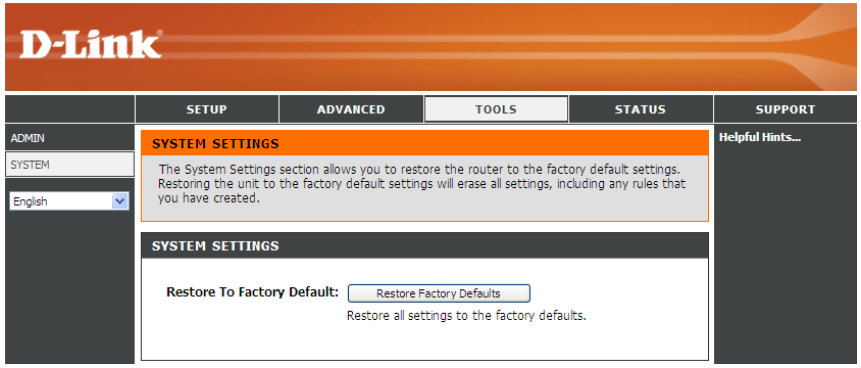
Verify Password: Verify the password.



Factory Reset

Use this section to restore the router to the factory default settings.

Restore To Factory Default: Click this button to restore all settings to the factory defaults.



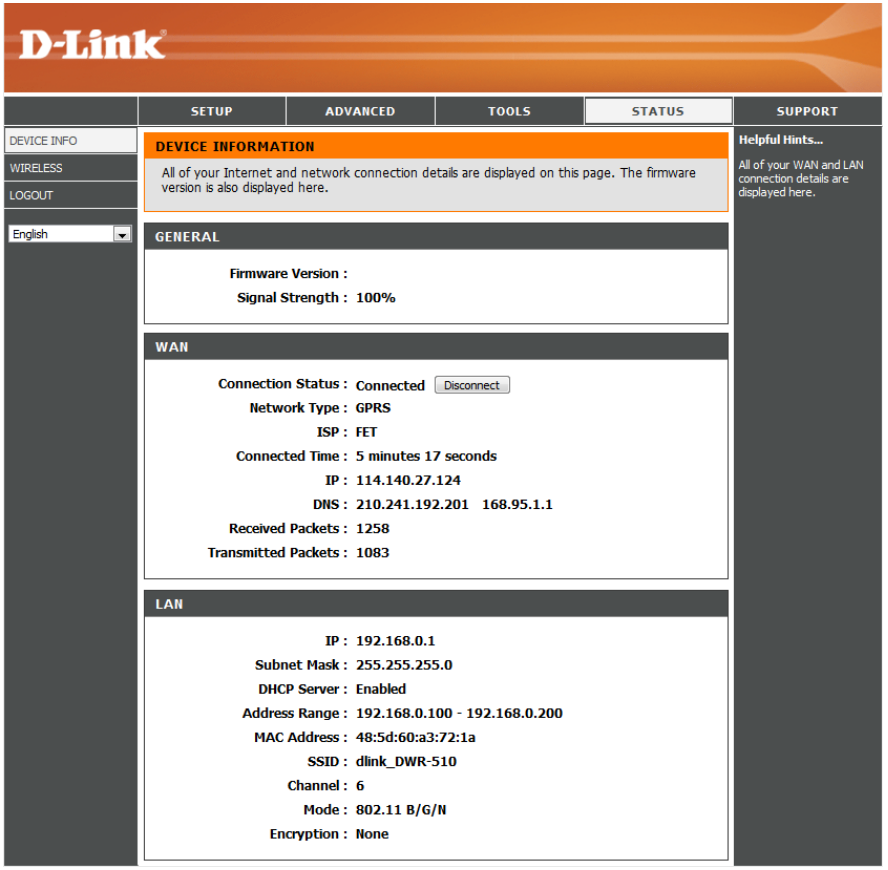
Device Information

All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.

General: Displays the firmware version.

WAN: Displays information about the WAN.

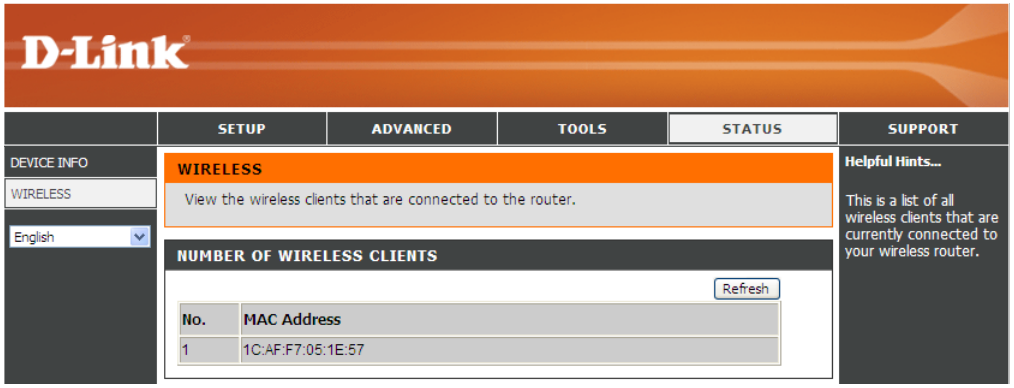
LAN: Displays information about the LAN.



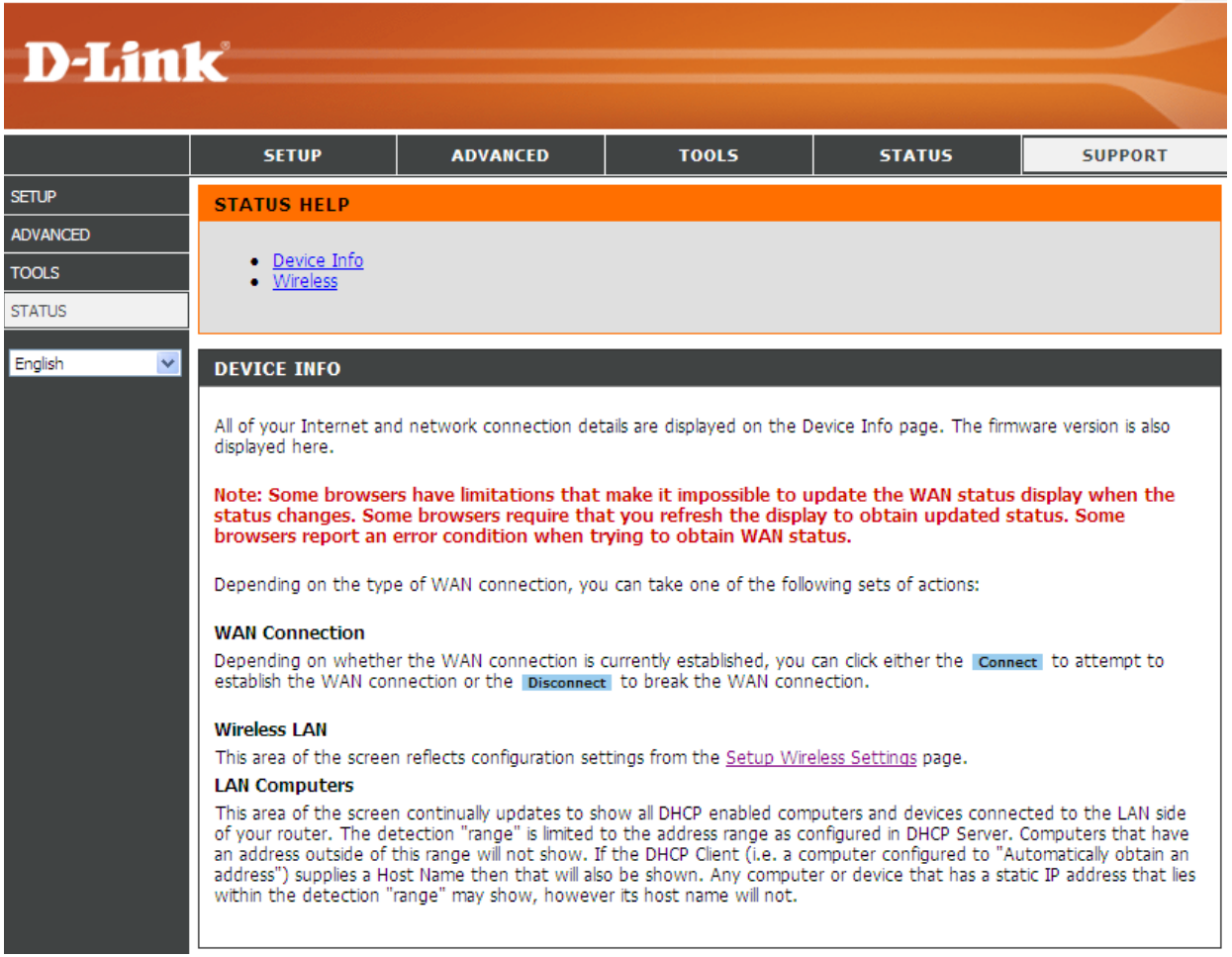
Wireless Information

All of your wireless connection details are displayed on this page.

Number of wireless clients: Displays the wireless clients and their MAC addresses.



Support


D-Link
SETUP
ADVANCED
TOOLS
STATUS
SUPPORT
SETUP
ADVANCED
TOOLS
STATUS
English
STATUS HELP
Device Info
Wireless
DEVICE INFO
All of your Internet and network connection details are displayed on the Device Info page. The firmware version is also displayed here.
Note: Some browsers have limitations that make it impossible to update the WAN status display when the status changes. Some browsers require that you refresh the display to obtain updated status. Some browsers report an error condition when trying to obtain WAN status.
Depending on the type of WAN connection, you can take one of the following sets of actions:
WAN Connection
Depending on whether the WAN connection is currently established, you can click either the Connect to attempt to establish the WAN connection or the Disconnect to break the WAN connection.
Wireless LAN
This area of the screen reflects configuration settings from the Setup Wireless Settings page.
LAN Computers
This area of the screen continually updates to show all DHCP enabled computers and devices connected to the LAN side of your router. The detection "range" is limited to the address range as configured in DHCP Server. Computers that have an address outside of this range will not show. If the DHCP Client (i.e. a computer configured to "Automatically obtain an address") supplies a Host Name then that will also be shown. Any computer or device that has a static IP address that lies within the detection "range" may show, however its host name will not.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The

DWR-510 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WEP (Wired Equivalent Privacy)
- WPA2-PSK (Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

What is WEP?

WEP stands for Wired Equivalent Privacy. It is based on the IEEE 802.11 standard and uses the RC4 encryption algorithm. WEP provides security by encrypting data over your wireless network so that it is protected as it is transmitted from one wireless device to another.

To gain access to a WEP network, you must know the key. The key is a string of characters that you create. When using WEP, you must determine the level of encryption. The type of encryption determines the key length. 128-bit encryption requires a longer key than 64-bit encryption. Keys are defined by entering in a string in HEX (hexadecimal - using characters 0-9, A-F) or ASCII (American Standard Code for Information Interchange – alphanumeric characters) format. ASCII format is provided so you can enter a string that is easier to remember. The ASCII string is converted to HEX for use over the network. Four keys can be defined so that you can change keys easily.

Configure WEP

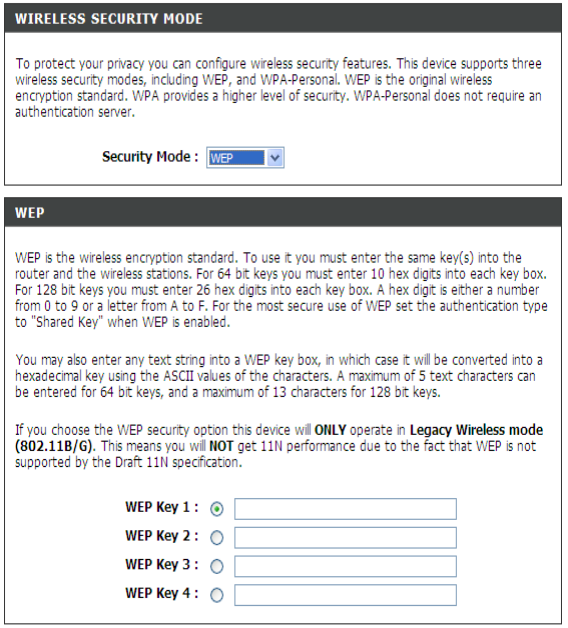
It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Settings** on the left side.

2. Next to *Security Mode*, select **WEP**.

3. Next to *WEP Key 1*, enter a WEP key that you create. Make sure you enter this key exactly on all your wireless devices. You may enter up to 4 different keys.

7. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WEP on your adapter and enter the same WEP key as you did on the router.



What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.

- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Configure WPA-PSK/WPA2-PSK

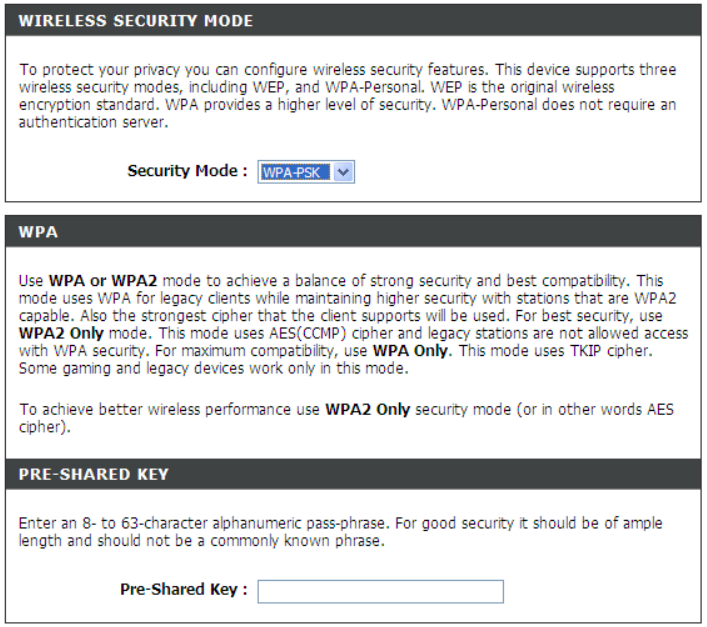
It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Wireless Settings** on the left side.

2. Next to *Security Mode*, select **WPA-PSK** or **WPA2-PSK**.

3. Next to *Pre-Shared Key*, enter a key (passphrase). The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?*&_) and spaces. Make sure you enter this key exactly the same on all other wireless clients.

4. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK (or WPA2-PSK) on your adapter and enter the same passphrase as you did on the router.



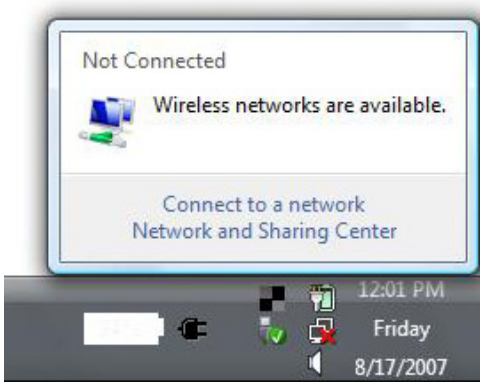
Connect to a Wireless Network
Using Windows Vista™

Windows® Vista™ users may use the built-in wireless utility. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® Vista™ utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

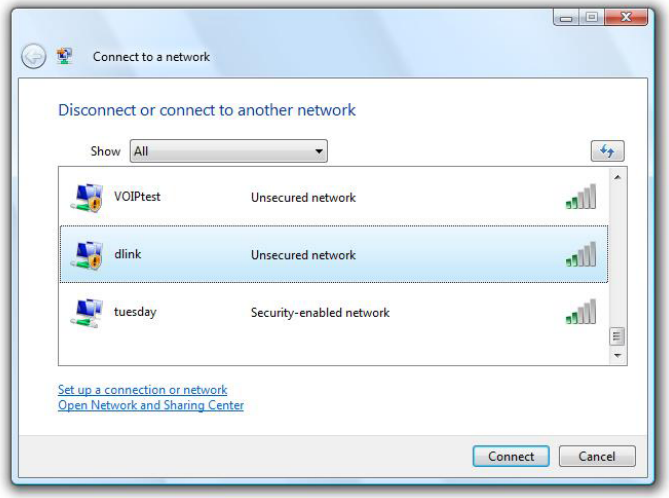
or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

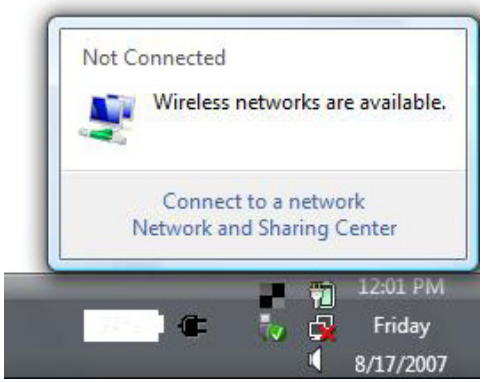
If you get a good signal but cannot access the Internet, check the TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



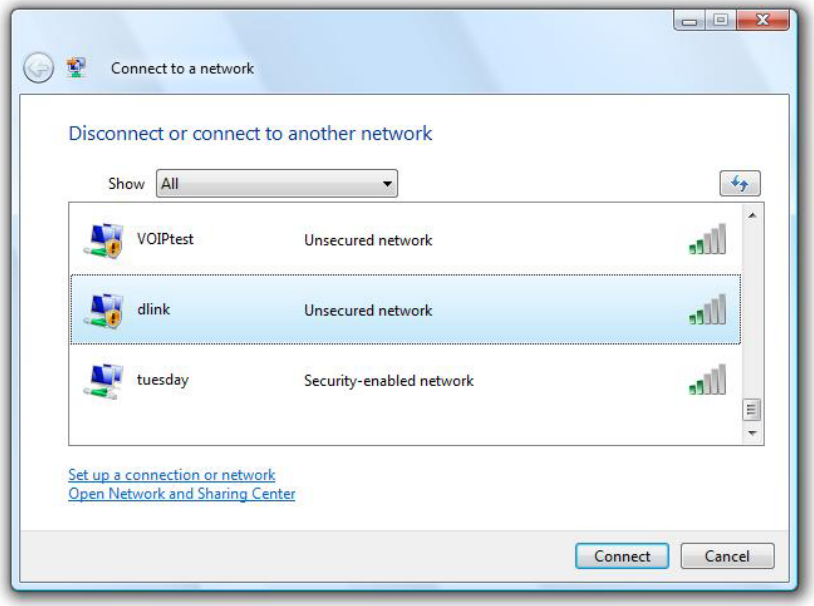
Configure Wireless Security

It is recommended to enable wireless security (WEP/WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows® Vista™ Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.



2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



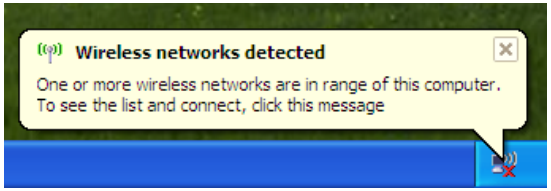
3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

Connect to a Wireless Network
Using Windows® XP

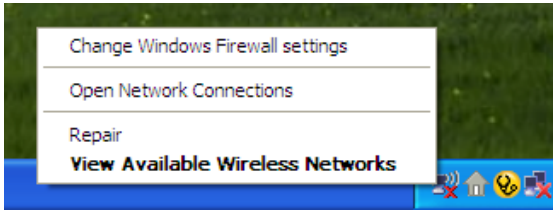
Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

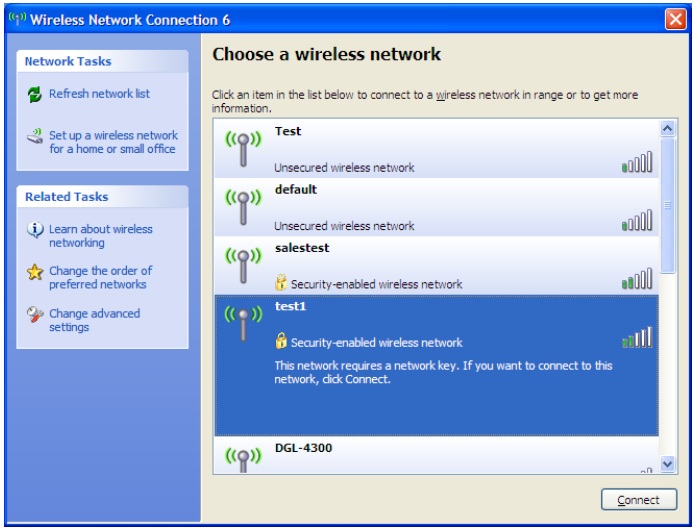


or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.



The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

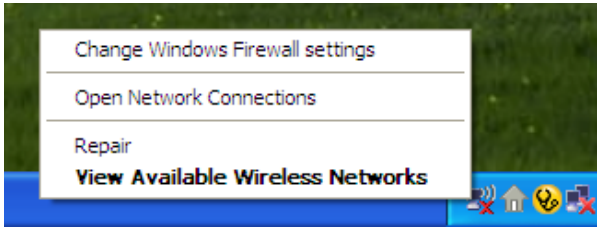


If you get a good signal but cannot access the Internet, check the TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.

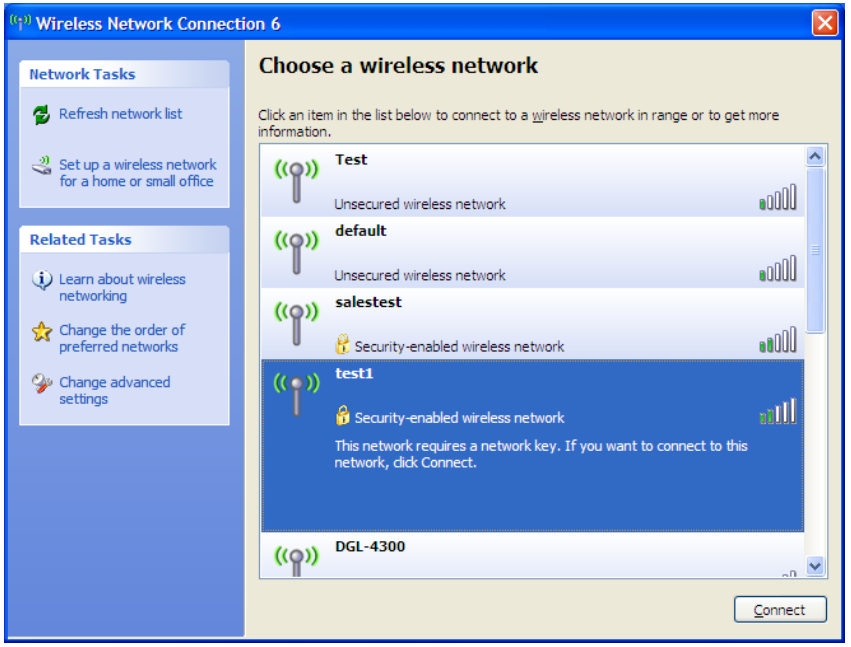
Configure WEP

It is recommended to enable WEP on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WEP key being used.

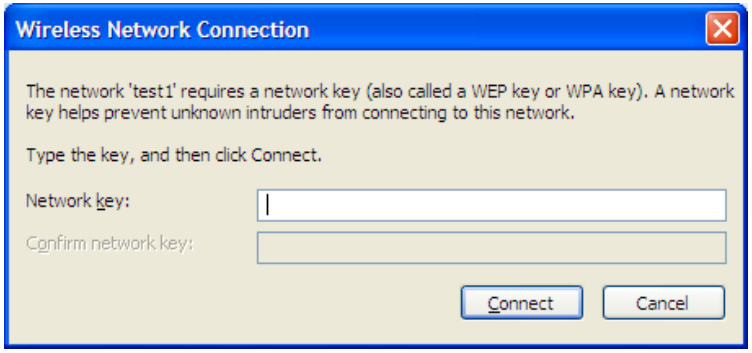
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.



2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the same WEP key that is on your router and click **Connect**.

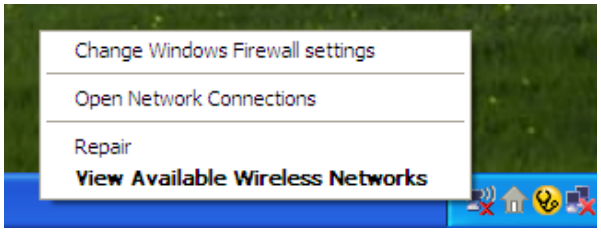


It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WEP settings are correct. The WEP key must be exactly the same as on the wireless router.

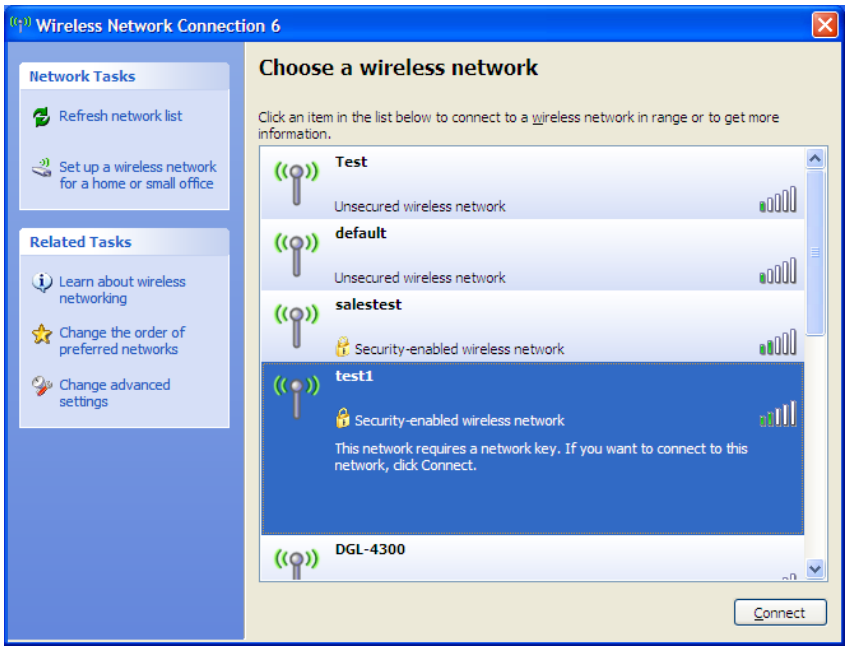
Configure WPA-PSK

It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

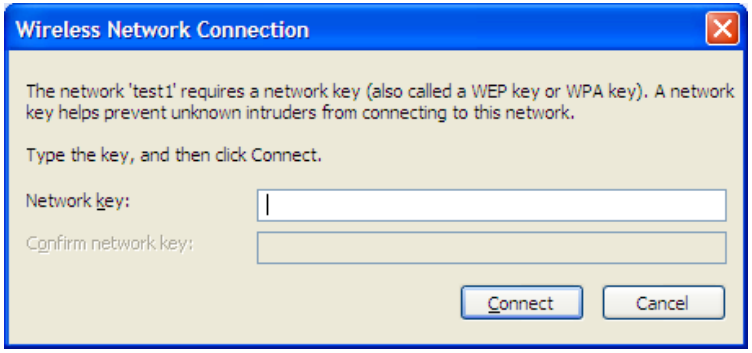
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.



2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.



It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DWR-510. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Netscape 8 or higher
  - Mozilla 1.7.12 (5.0) or higher
  - Opera 8.5 or higher
  - Safari 1.2 or higher (with Java 1.3.1 or higher)
  - Camino 0.8.4 or higher
  - Firefox 1.5 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:

    - Go to **Start** > **Settings** > **Control Panel**. Double-click the **Internet Options** Icon. From the **Security** tab, click the button to restore the settings to their defaults.

    - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.

    - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.

    - Close your web browser (if open) and open it.

- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.

- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

2. How can I upgrade the firmware on the device?

To update the firmware on the DWR-510, insert the device into an available USB port on your PC. Next, launch the firmware utility (FirmwareUpgrade.exe). Click the **Start** button to update the firmware. Please don't remove the DWR-510 while the upgrade is in progress. To finish the firmware update procedure, click the **OK** button.

Note: For update information, please follow the revision notice on the official web site.

3. I'm having problems installing the D-Link Connection Manager.

Your antivirus program may be preventing installation of the software. Try disabling your antivirus software temporarily while you install the D-Link Connection Manager.

Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology as become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check e-mail, instant message, and etc
- Gets rid of the cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

Tips

Here are a few things to keep in mind, when you install a wireless network.

Centralize your Router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more WNA-2330 wireless network Cardbus adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Networking Basics

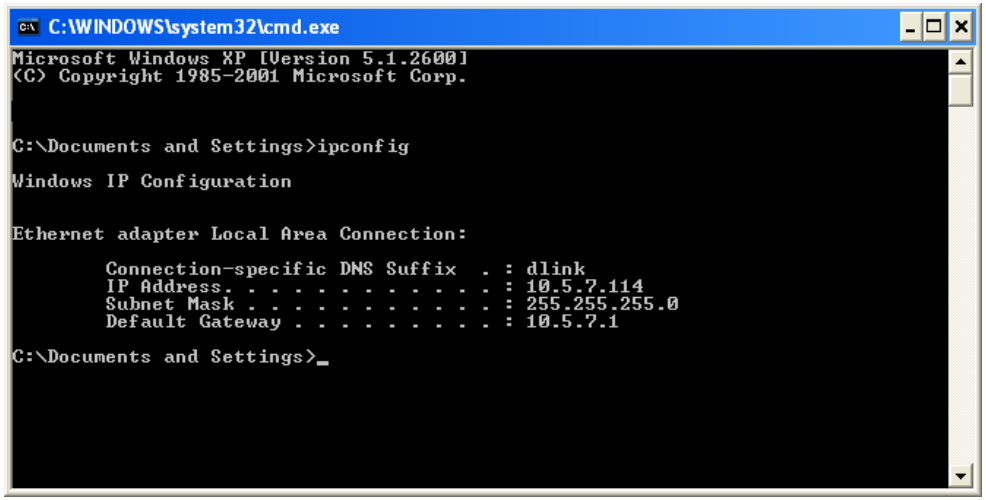
Check your IP address

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type ***cmd*** and click **OK.** (Windows® Vista™ users type *cmd* in the **Start Search** box.)

At the prompt, type ***ipconfig*** and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.



If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

Step 1

Windows® Vista™ - Click on **Start** > **Control Panel** > **Network and Internet** > **Network and Sharing Center** > **Manage Network Connections.**

Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.

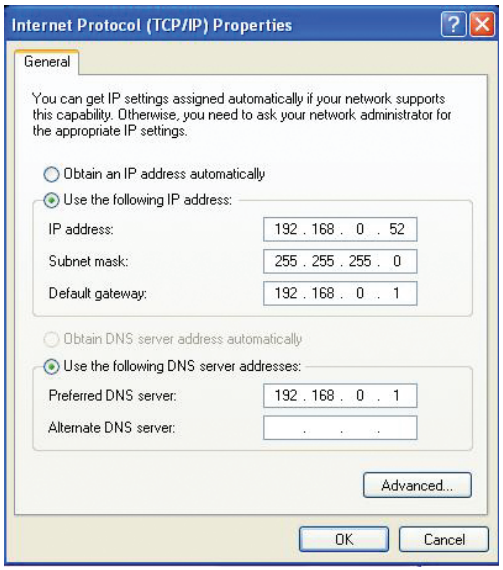
Windows® 2000 - From the desktop, right-click **My Network Places** > **Properties**.

Step 2

Right-click on the **Local Area Connection** which represents your network adapter and select **Properties**.

Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties**.



Step 4

Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

Example: If the router´s LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5

Click **OK** twice to save your settings.

Warnings and Declarations

FCC Regulations:

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.

This device 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 radiated 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user‘s authority to operate the equipment.

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The highest SAR value for the device as reported to the FCC is 1.52 W/kg when placed next to the body.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID: KA2WR530A1.

This device is compliance with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

Products with 2.4–GHz Wireless LAN Devices France

L'utilisation de cet equipement (2.4GHz wireless LAN) est soumise à certaines restrictions: cet equipement peut être utilisé à l'interieur d'un batiment en utilisant toutes les frequences de 2400 a 2483.5MHz (Chaine 1–13). Pour une utilisation en environement exterieur, les frequences comprises entre 2400-2454 MHz (Chaîne 1-9) peuvent être utilisé. 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.

Declaration of Conformity

1. Health (Article 3.1(a) of the R&TTE Directive)
Applied Standard(s):
EN62311: 2008/ IEC 62209-2:2010
2. Safety (Article 3.1(a) of the R&TTE Directive)
Applied Standard(s):
EN 60950-1:2006+A11:2009
3. Electromagnetic compatibility (Article 3.1 (b) of the R&TTE Directive)
Applied Standard(s):
EN 301 489-1 V1.8.1/-7 V1.3.1/-17 V2.1.1/-24 V1.4.1
4. Radio frequency spectrum usage (Article 3.2 of the R&TTE Directive)
Applied Standard(s):
EN 301 511 V9.0.2
EN 301 908-1 V4.2.1/-2 V4.2.1
EN 300 328 V1.7.1
5. EMC Directive (2004/108 /EC)
Applied Standard(s):
EN55024: 1998/A1:2001/A2:2003

Caution
-Users have to use the connection to USB interfaces with USB 2.0 version or higher.
-Risk of explosion if battery is replaced by an incorrect type.
-Dispose of used batteries according to the instructions.
-Please make sure the temperature for adapter will not be higher than 55 ˚C

Technical Specifications

GSM Band (GSM/GPRS/EDGE)
- 850/900/1800/1900 MHz
- Power Class 4 (850/900 MHz)
- Power Class 1 (1800/1900 MHz)

UMTS/HSDPA Band *
- 850/1900 MHz
- 850/2100 MHz
- 900/2100 MHz
- Power Class 3 (+24 dBm)

Data Rates **
- DL: 7.2 Mbps
- UL: 5.76 Mbps

Standards
- 802.11g/b, compatible with 802.11n devices

Wireless Security
- 64/128-bit WEP (Wired Equivalent Privacy)
- WPA & WPA2 (Wi-Fi Protected Access)

Firewall
- Built-in NAT
- Built-in firewall

Antenna
- Internal 3G and Wi-Fi antenna

LED Status Indicator
- Signal LED

Dimensions (L x W x H)
- 90 x 28 x 11 mm

Operating Temperature
- -10 to 55 ˚C (14 to 131 ˚F)

Operating Humidity
- 10% to 90% (Non-condensing)

Certifications
- CE
- FCC

* Supported frequency band is dependent upon regional hardware version.
** Maximum wireless signal rate derived from IEEE Standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

使用手冊

DWR-510

VERSION 1.10

D-Link®

WIRELESS

前言

D-Link 保留修改此產品出版的權利，且修改內容時，毋須負有通知任何人或組織此內容之相關修訂或更改之義務。

商標

D-Link 和 D-Link 的標誌皆為 D-Link 股份有限公司、或其在美國或其他國家子公司的商標或註冊商標。所有在此提及的其他公司或產品名稱，均為其各自公司的商標或註冊商標。

目錄

包裝內容

- D-Link DWR-510 Le Petit 3.75G 路由器
- 使用手冊（儲存於本裝置中）

注意：若供應電壓與 DWR-510 所設計接收的電壓不同，會損壞本裝置並使保固失效。

系統需求

- 相容的 (U)SIM 與門號。*
- 採用 Windows®、Macintosh® 或 Linux 作業系統的電腦，並安裝乙太網路卡
- Internet Explorer 6.0 或 Netscape Navigator™ 6.0 以上（設定用）

*依您的電信商與服務條款而定。

簡介

D-Link DWR-510 Le Petit 3.75G 路由器是輕巧玲瓏的 3G 路由器與傳輸器，可置於口袋中隨身攜帶。讓您隨時隨地，盡情享有 HSUPA 3G 網路的便利。

DWR-510 可採 Wi-Fi 路由器模式或 3G USB 數據機模式運作。採用 Wi-Fi 路由器模式時，本裝置可讓其他 Wi-Fi 相容裝置，如智慧型手機、掌上型電玩、筆記型電腦或數位相機等，經由無線方式連接 3G 網路。DWR-510 最多可讓 10 台 Wi-Fi 用戶端分享 3G 連線。

若把 D-Link DWR-510 Le Petit 3.75G 路由器當作 3G USB 數據機，那麼您甚至可以關掉 PC 上的 Wi-Fi 功能，直接以本裝置進行 3G 連線，以節省電池電力。

硬體概觀

側邊

接頭/LED	功能			
USB 接頭	插到電腦的 USB 連接埠。			
LED 狀態指示燈	表示網路連線狀態。			
	顏色	恆亮	快閃	慢閃*
	藍	WCDMA/HSDPA/HSUPA 連線	傳輸中	依需求撥號
	綠	GSM/GPRS 連線	傳輸中	依需求撥號
	紅	SIM 錯誤/無電信服務	-	-

* 表示本裝置進入待機模式。

無線網路安裝考量

DWR-510 可讓您隨時隨地用無線方式連上網路，只要您位在其運作涵蓋範圍內即可。但請注意，無線電訊號所穿過的牆壁、天花板或其他物件的數量、厚度與位置，都會限制其涵蓋之範圍。此範圍會隨家中或辦公室的建材與背景 RF（無線電波）雜訊而改變。若想盡量擴大此涵蓋範圍，請遵循以下基本原則：

1. 盡量減少 D-Link 路由器與其他網路裝置間的牆壁與天花板數量。每道牆壁或天花板都會減少涵蓋範圍 3-90 呎（1-30 公尺）左右。

2. 注意網路裝置之間的直線角度。比方說，一道 1.5 呎（0.5 公尺）厚的牆，若以 45 度角穿過，則穿透厚度為 3 呎（1 公尺）左右。若用 2 度角穿過，就會超過 42 呎（14 公尺）厚。請安置好其裝置之位置，讓訊號盡量以直線方式（而非以某個角度）穿過牆壁或天花板，如此收訊會比較好。

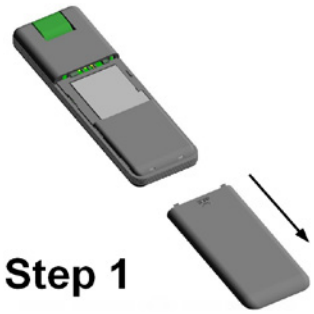
3. 請安置好存取點、無線路由器和電腦的位置，盡量讓訊號穿過石牆或開放的門口通道。玻璃、金屬、磚塊、隔熱設施、水泥與水都會使訊號衰減。大型物件如魚缸、鏡子、檔案櫃、金屬門或鋁門窗也會降低其涵蓋範圍。

4. 若您使用 2.4 GHz 無線電話，請讓 2.4GHz 電話基地台盡量遠離無線裝置。就算電話未使用仍會產生無線電波。在某些情況下，無線電話、X-10 無線裝置，以及如天花板風扇、燈具與居家保全系統等電子設備，會使無線網路訊號大幅衰減。

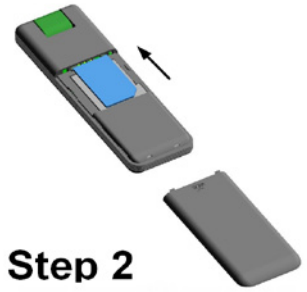
產品設定
硬體設定

安裝 SIM 卡

1. 拔下 USB 傳輸器背蓋。



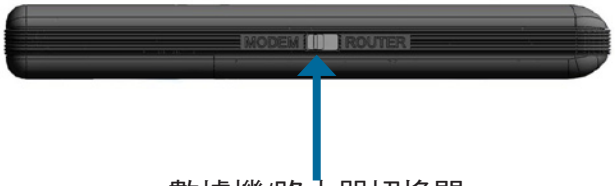
2. 插入 SIM 卡，有金屬的那面朝下。請以正確方向插入 SIM 卡，有缺角的那一端必須遠離 DWR-510 的插口。



3. 裝回背蓋。

連線設定

3G 數據機模式



數據機/路由器切換開關，數據機模式的位置

1. 將路由器/數據機切換開關調到數據機模式。

2. 把 Le Petit 3.75G 路由器插到電腦上，LED 會閃綠燈。

3. 依畫面指示安裝 D-Link 連線管理員。

4. 輸入 SIM 卡的 PIN 碼。

5. 按連線管理員上的「連線」圖示。

6. 這樣 DWR-510 Le Petit 3.75G 路由器便會成為 3G 數據機。

注意：第一次使用 DWR-510 時，必須安裝連線管理員軟體。安裝成功後，便可調整 USB 數據機與 Wi-Fi 路由器的基本設定。

連線設定

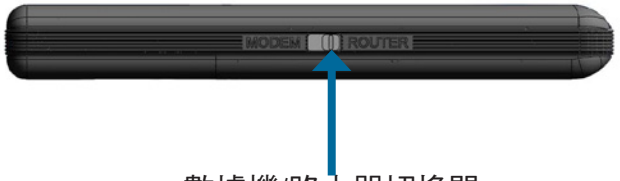
3G 路由器模式

1. 將路由器/數據機切換開關調到路由器模式。

2. 把 Le Petit 3.75G 路由器插到電腦上，LED 會閃綠燈。您也可以把 DWR-510 插到 USB 電源插座上。

3. 找出 SSID 是「dlink_DWR-510」的 Wi-Fi 網路，並連線上去。

4. 這樣 DWR-510 Le Petit 3.75G 路由器便會成為 3G 路由器。



數據機/路由器切換開關，路由器模式的位置

使用 D-Link 連線管理員進行裝置設定

DWR-510 提供兩種裝置設定方式。您可使用 D-Link 行動連線管理員，也可以用網頁設定介面來做設定。D-Link 行動連線管理員較為簡便，且能同時調整 3G 與 Wi-Fi 設定。下面便介紹 3G 連線的設定方式。

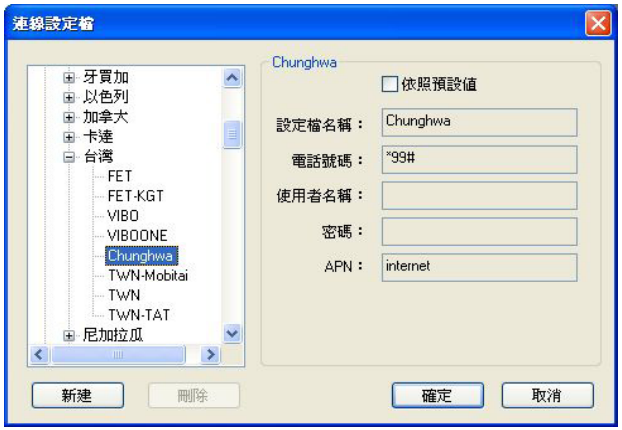
注意：只有在 DWR-510 採用 3G USB 數據機模式時，以下設定才有效。

新增設定檔

開始之前，若您的 SIM 卡電信商有列在清單中，就可直接用這些預先定義好的設定檔進行連線。

您也可以自行建立設定檔，步驟如下：

1. 按編輯鈕，再到連線設定檔。
2. 按新增鈕建立設定檔。
3. 選擇一個設定檔名稱，再輸入電話號碼、使用者名稱、密碼與 APN。若要把這個設定檔變成預設值，請勾選當作預設值。按確定繼續。



Windows

Mac

建立連線

您可按連線按鈕，連到預設設定檔定義的網路。連上之後，就可透過此行動網路服務來上網站、發E-mail、傳簡訊與進行網路工作。

連線

結束連線

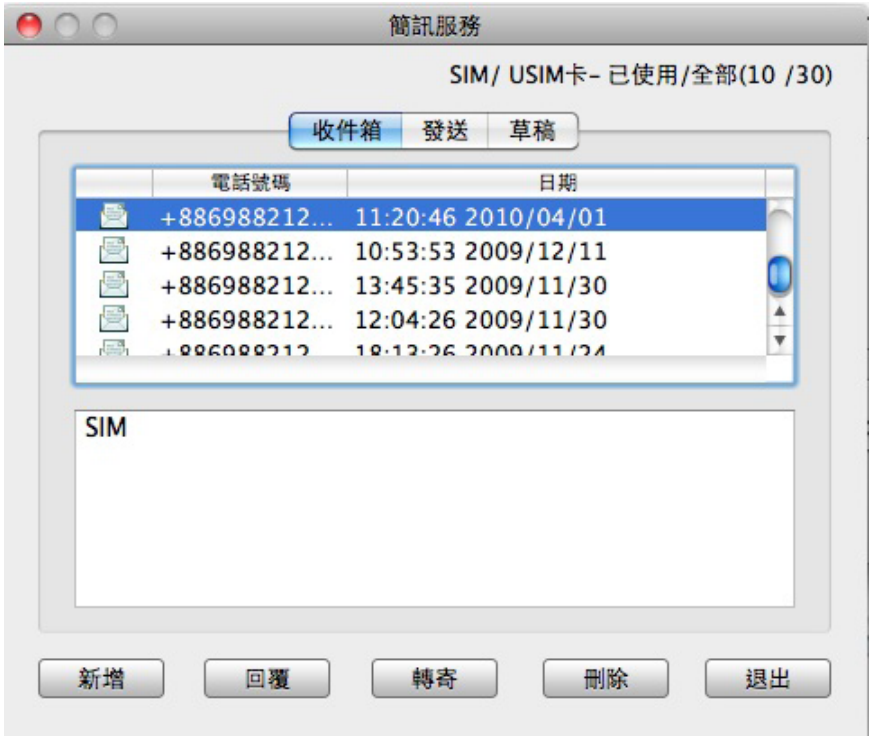
若要斷線，請再按一次連線按鈕。

斷線

簡訊 (SMS)

DWR-510 也可以收送、回覆、轉寄、刪除簡訊，就跟手機一樣。

Windows



Mac

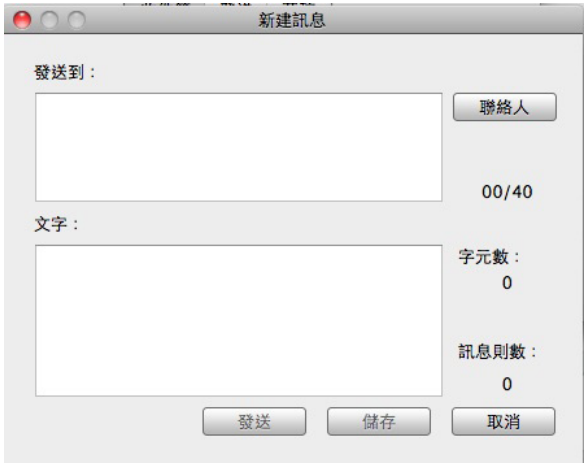
新增/回覆/轉寄簡訊

1. 請按 SMS 按鈕。
2. 按新增、回覆或轉寄。
3. 輸入收訊人手機號碼，或按通訊錄檢視 SIM 卡上儲存的連絡人。
   在連絡人視窗中，請勾選收件人，再按新增回到新增 SMS 視窗。
4. 輸入簡訊內容。
5. 按送出傳送簡訊。

Windows

刪除簡訊

1. 請按 SMS 按鈕。
2. 選擇您想刪除的簡訊，再按刪除。
3. 按刪除來刪除簡訊。
4. 按是以確定。



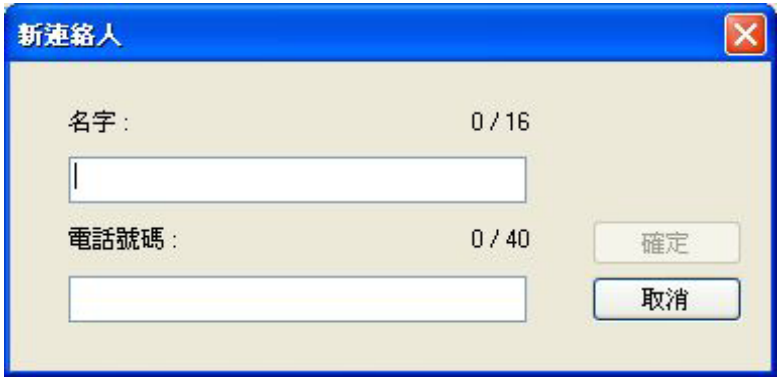
Mac

通訊錄管理

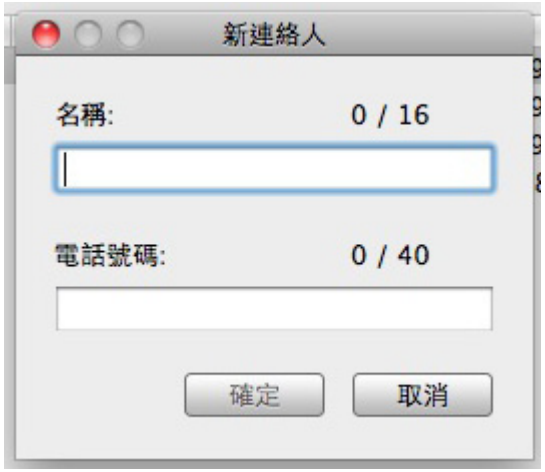
DWR-510 通訊錄管理員會顯示 SIM 上儲存的所有連絡人。您可以新增、編輯、刪除與匯入連絡人。

新增連絡人

1. 請按通訊錄按鈕。
2. 請按新增按鈕。
3. 在新增連絡人視窗中，輸入連絡人名稱與手機號碼。
4. 按確定新增此連絡人。



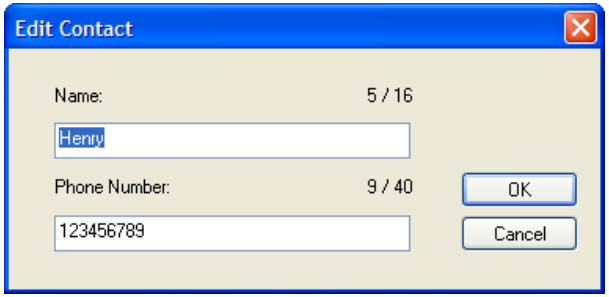
Windows



Mac

編輯連絡人

1. 請按通訊錄按鈕。
2. 選擇要編輯的連絡人。
3. 按編輯按鈕。
4. 修改連絡人資訊。
5. 按確定儲存變更。



Windows

刪除連絡人

1. 請按通訊錄按鈕。
1. 選擇要刪除的連絡人。
2. 按刪除按鈕。
3. 按是以確定刪除。

Mac

從 vCards 匯入通訊錄

1. 請按通訊錄按鈕。
2. 按匯入按鈕。
3. 選擇 vCard 來源。
4. 按開啟匯入卡片資料。
5. 匯入之後，會顯示匯入資訊。按確定以結束。

將通訊錄匯出到 vCards

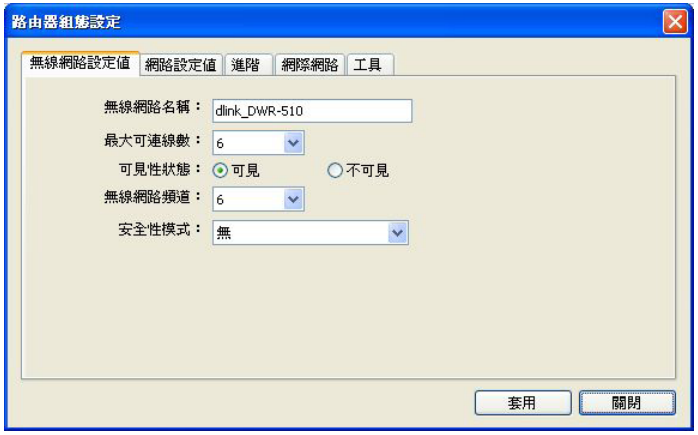
1. 請按通訊錄按鈕。
2. 按匯出按鈕。
3. 選擇 vCard 儲存目的地。
4. 按確定匯出卡片資料。
5. 匯出之後，會顯示匯出資訊。按確定以結束。

路由器設定(Windows 適用)

D-Link 行動連線管理員可讓您輕易調整 DWR-510 的無線或網路設定等選項。

無線網路設定

1. 輸入無線網路名稱，以及無線用戶端的最高連線數。
2. 設定可見性狀態為可見或不可見。
3. 選擇無線頻道與安全模式。
4. 按套用將設定儲存起來。

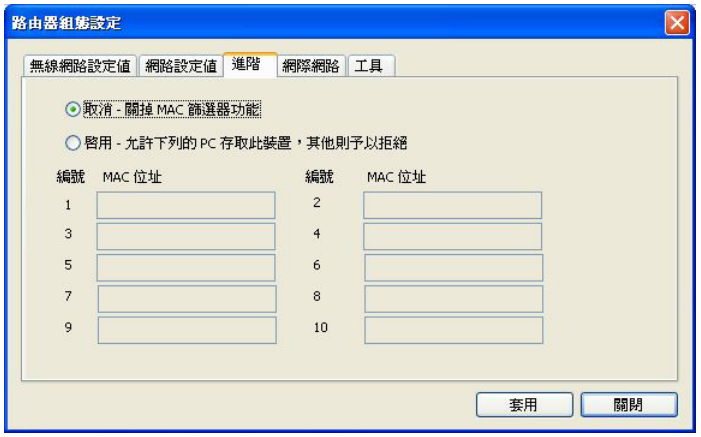


網路設定

1. 輸入路由器 IP 位址與子網路遮罩。
2. 若想啟用 DHCP 伺服器，請選啟用。不然請選停用。
3. 輸入 DHCP IP 位址範圍。
4. 按套用將設定儲存起來。

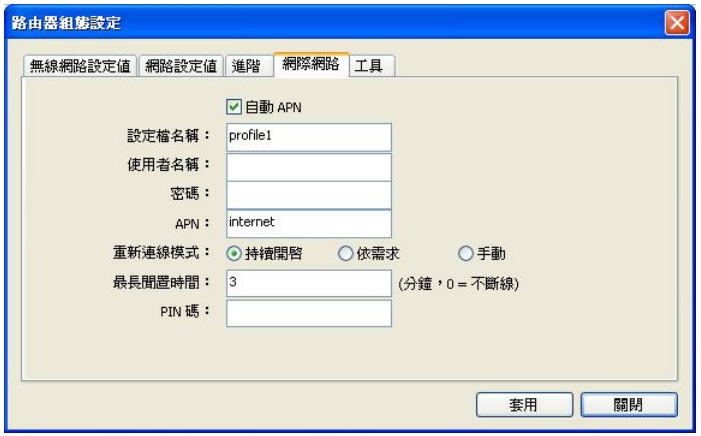
進階設定

1. 若想啟用 MAC 位址過濾，請選啟用。不然請選停用。
2. 請輸入可以存取本裝置的 MAC 位址，最多 10 筆。
3. 按套用將設定儲存起來。



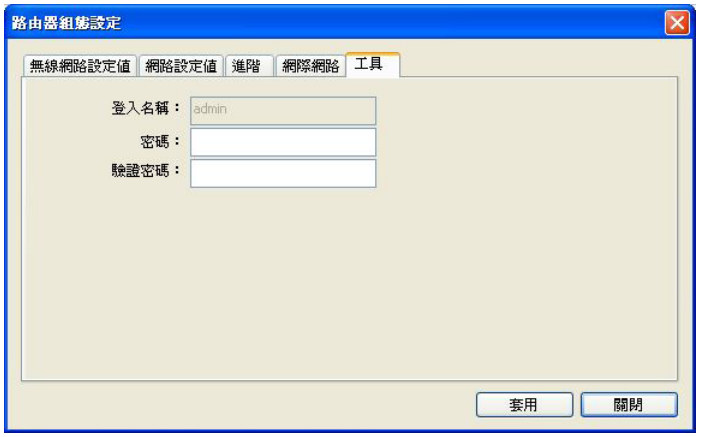
網際網路設定

1. 若想啟用自動 APN，請勾選該方塊。
2. 輸入設定檔名稱、使用者名稱、密碼與 APN 說明。
3. 選擇重新連線模式，有永遠連線、有流量時連線、或手動連線。
4. 請在最大閒置時間欄位輸入分鐘數，0 表示無限等待。
5. 輸入 PIN 碼。
6. 按套用將設定儲存起來。



工具

1. 若想變更 DWR-510 的密碼，請在文字欄位輸入新密碼。
2. 再輸入一次新密碼做確認。
3. 按套用將設定儲存起來。



設定

當 DWR-510 採用路由器模式時，您也可以使用網頁設定介面進行設定。本節教您如何使用網頁設定介面來設定 DWR-510。

網頁設定介面

若要存取設定公用程式，請開啟如 Internet Explorer 的瀏覽器，並輸入路由器 IP 位址（192.168.0.1）。

在使用者名稱輸入 admin，再輸入密碼。預設密碼是空白的。

按登入按鈕登入路由器。

若出現網頁無法顯示錯誤，請參考疑難排解章節。

網際網路設定

本節教您輸入網際網路服務供應商 (ISP) 所提供的連線資訊。

自動 APN: 若想啟用自動 APN，請勾選該方塊。

ISP: 輸入 ISP 名稱。

使用者名稱: 輸入使用者名稱。

密碼: 輸入密碼。

APN: 輸入 APN 說明。

重新連線模式: 選擇永遠連線、有流量時連線、或手動連線。

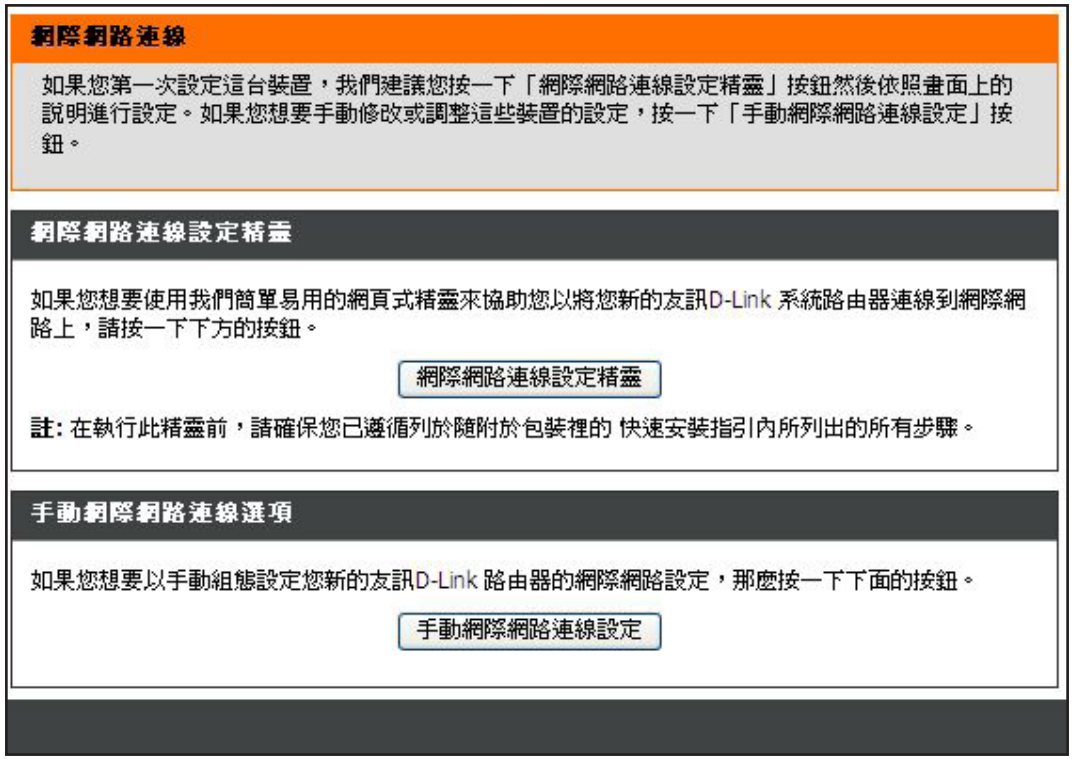
最大閒置時間: 請在最大閒置時間欄位輸入分鐘數，0 表示無限等待。

SIM 卡設定: 輸入 SIM 卡的 PIN 碼。

網際網路連線設定精靈

請登入路由器的網頁設定介面，會出現設定 > 網際網路頁面。按網際網路連線設定精靈按鈕，便可使用設定精靈快速設定路由器。

若要自行輸入設定而不透過精靈，請按手動網際網路連線設定，並跳到「手動網際網路連線」。



按下一步繼續。

輸入新密碼，再按下一步繼續。

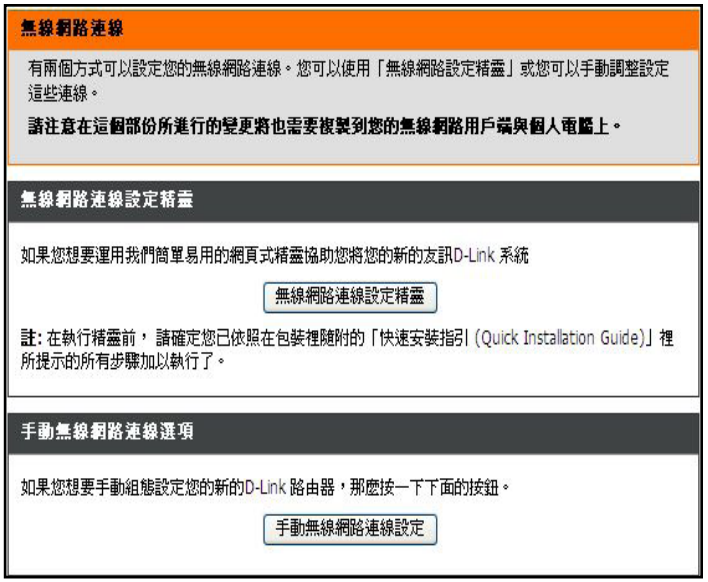
請輸入 3G 網際網路連線設定，並按下一步繼續。

按連線將設定儲存起來。路由器重新啟動完成後，請按繼續。連線可能要花 1 到 2 分鐘，請稍待。

無線網路設定

若想用精靈做路由器的無線網路設定，請按無線網路連線設定精靈。

若要自行輸入路由器無線網路設定，請按手動無線網路連線設定，並參考「手動無線網路連線設定」。

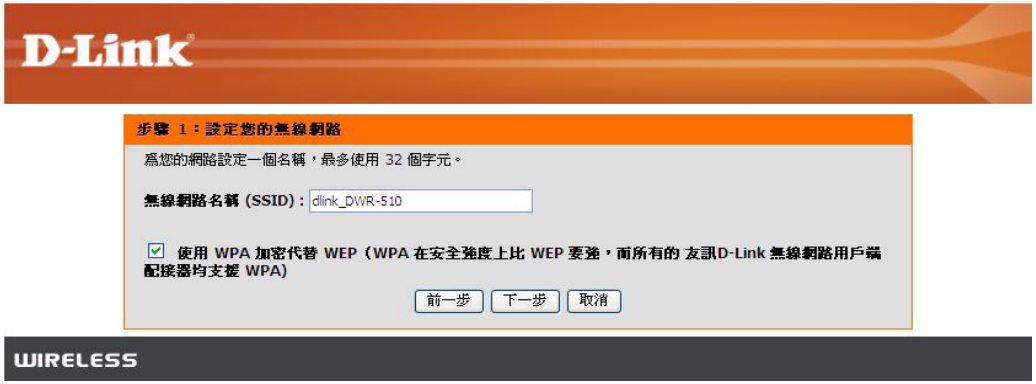


按無線網路連線設定精靈按鈕，來檢視無線網路安全設定精靈選單。歡迎選單會顯示設定步驟。按下一步繼續。

請輸入 SSID（服務集標示）。SSID 是您的無線網路名稱。請輸入名稱，最多 20 個字元。SSID 有分大小寫。

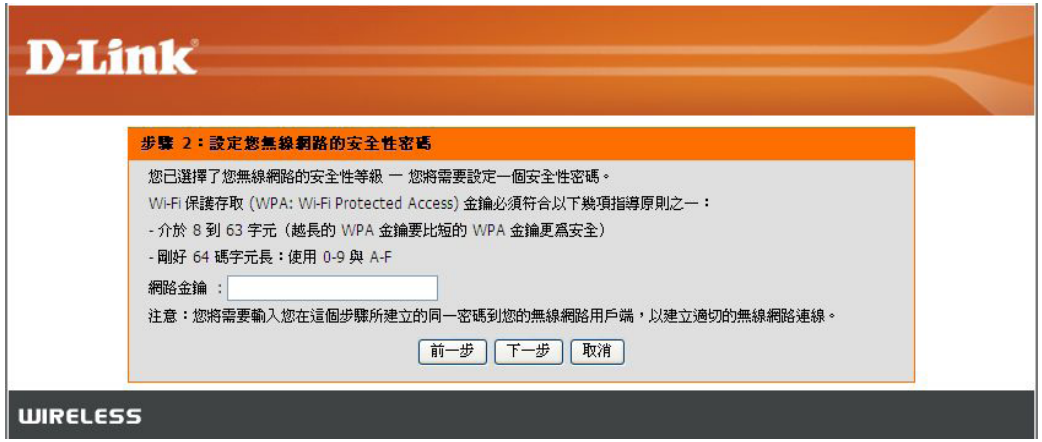
建議您勾選 WPA 無線加密方塊，確保無線網路的安全性。

按下一步繼續。



請在網路金鑰：欄位輸入您要使用的無線網路密碼。

按下一步繼續。



會出現最後一個畫面，表示設定完成。

請將無線網路名稱（SSID）與網路金鑰抄下來，以後別人要連接此無線網路時，就要用到這些資訊。

按下「存取(Save)」以完成安全連線精靈

手動無線網路設定

此部份可設定 D-Link 路由器的無線設定值。

無線網路名稱: 輸入無線網路名稱。

最大連線數目: 輸入無線用戶端的最高連線數。

無線頻道: 選擇無線頻道。

可見性狀態: 設定可見性狀態為可見或不可見。

安全模式: 選擇無線安全模式。

網路設定

請用此部份設定路由器的內部網路設定。

路由器 IP 位址: 輸入路由器 IP 位址。

子網路遮罩: 輸入子網路遮罩。

啟用 DHCP 伺服器: 若想啟用 DHCP 伺服器，請選啟用。不然請選停用。

DHPC IP 位址範圍: 輸入 DHCP IP 位址範圍。

管理員設定

此部份可以變更管理員帳號的密碼。

密碼: 輸入密碼。

密碼確認: 再輸入一次新密碼做確認。

回復成原廠設定

此部份可將路由器重設回原廠預設值。

回復到原廠預設值: 按此按鈕，將所有設定重設回原廠預設值。

裝置資訊

所有網際網路和網路連線詳細資料皆顯示於此頁面且也會顯示韌體版本資訊。

一般: 顯示韌體版本。

WAN: 顯示 WAN 相關資訊。

LAN: 顯示 LAN 相關資訊。

無線網路資訊

所有無線網路連線詳細資料皆顯示於此頁面。

無線網路用戶端數目: 顯示無線網路用戶端及其 MAC 位址。

支援


D-Link
設定
進階
工具
狀態
支援
設定
進階
工具
狀態
登出
繁體中文
狀態說明
裝置資訊
無線網路
裝置資訊
您所有網際網路和網路連線的詳細內容會顯示在「裝置資訊」頁面。韌體版本也會顯示在這裡。
注意：有些瀏覽器會有限制，使其在狀態變更時，無法更新廣域網路的狀態顯示。有些瀏覽器需要您更新顯示器以取得更新的狀態。有些瀏覽器在嘗試取得廣域網路狀態時，會顯示出錯誤訊息。
依照廣域網路連線的類型，您可以採用以下各套行動之一：
WWAN 連線
您可以按一下「連線」以嘗試建立廣域網路連線，或「中斷連線」以中斷廣域網路連線。
無線區域網路
畫面的這個區域會顯示來自設定無線網路設定值頁面的組態設定值。
區域網路電腦
畫面的這個區域會持續更新，以顯示所有連線到您路由器區域網路側有啓用 DHCP 的電腦與裝置。偵測「範圍」會受限於設定在 DHCP 伺服器裡的位址範圍。在此位址範圍以外的電腦將不會顯示。如果 DHCP 用戶端（也就是電腦設定成「自動取得位址」的電腦）提供有主機名稱，那麼此主機名稱也會顯示。任何在固定 IP 位址此偵測「範圍」內的電腦也會顯示，但是不會顯示其主機名稱。
無線網路
此無線網路單元可讓您檢視連接到您無線網路路由器的無線網路用戶端。
MAC 位址
無線網路用戶端乙太網路 ID（MAC 位址）。

無線網路安全

本節介紹數種不同等級的安全性功能，您可使用這些功能來保護資料，避免駭客入侵。DWR-510 支援以下幾種安全類型:

- WPA2 (Wi-Fi Protected Access 2)
- WPA2-PSK (Pre-Shared Key)
- WPA (Wi-Fi Protected Access)
- WPA-PSK (Pre-Shared Key)
- WEP (Wired Equivalent Privacy,有線等效協定)

何謂 WEP?

WEP 代表「有線等效協定」（Wired Equivalent Privacy）。 它以 IEEE 802.11 標準為基礎，使用 RC4 加密演算法。WEP 會把無線網路上的資料加密，因此從一台無線裝置傳到另一台時，資料是受到保護的狀態。

您必須知道金鑰才能存取 WEP 網路。金鑰是您自行建立的字串。使用 WEP 時必須決定加密等級。加密類型會決定金鑰長度。128-bit 加密所需的金鑰長度比 64-bit 加密來得長。金鑰是 HEX 字串（十六進位，也就是 0-9 與 A-F）或 ASCII 字元（American Standard Code for Information Interchange，也就是英數字元）兩種格式。ASCII 格式可讓您輸入比較容易記得的字串。ASCII 字串在網路上會轉換成 HEX。可以定義四組金鑰讓您輕易更換。

設定 WEP

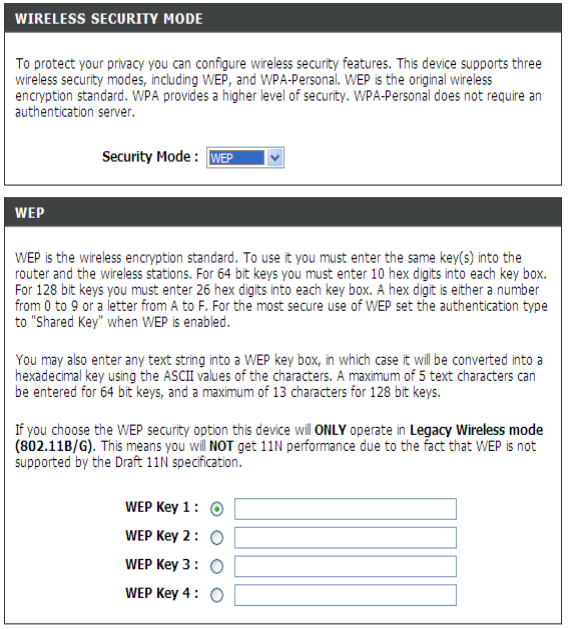
建議您先啟用無線路由器的加密，再啟用無線網卡的。請先建立無線連線再啟用加密。因為加密會導致資料量增加，無線網路訊號可能因此衰減。

1. 打開瀏覽器，輸入路由器 IP 位址 (192.168.0.1) 進入網頁設定介面。請按左邊的無線網路設定。

2. 在安全模式選擇 WEP。

3. 在 WEP 金鑰 1，輸入您建立的 WEP 金鑰。所有無線裝置都要採用這個金鑰。最多可輸入 4 個不同的金鑰。

4. 按儲存設定將設定儲存起來。若您是用無線網卡來設定路由器的，則設定完成後該網卡就會斷線，您必須啟用網卡的 WEP 功能，並輸入您剛才在路由器設定的 WEP 金鑰才能連線。



何謂 WPA?

WPA (Wi-Fi Protected Access，Wi-Fi 保護存取) 是一種 Wi-Fi 標準，用來提升 WEP (Wired Equivalent Privacy，有線等效協定) 的安全性功能。

它與 WEP 相較有兩點重要改進:

- 透過 TKIP (Temporal Key Integrity Protocol，暫時金鑰完整性協定) 改善資料加密。TKIP 會用一個雜湊演算法打亂金鑰，並加入完整性檢查功能，確保金鑰未被竄改。WPA2 則以 802.11i 為基礎，並使用 AES(Advanced Encryption Standard，進階加密標準) 而非 TKIP。

- 透過 EAP (Extensible Authentication Protocol，可擴充驗證協定) 進行使用者驗證，這一塊通常是 WEP 所欠缺的。WEP 以電腦硬體特定的 MAC 位址進行無線網路存取控管，這種方式相對簡單，也容易被監聽和盜取。EAP 則建立在更安全的公開金鑰加密系統上，確保只有經過授權的網路使用者可以存取網路。

WPA-PSK/WPA2-PSK 使用密碼或金鑰來驗證無線網路連線。金鑰是一個 8 到 63 個字元的英數字密碼。密碼可以包含符號（!?*&_）與空白。您的無線路由器或存取點也必須輸入此完全相同的金鑰。

WPA/WPA2 透過 EAP 將使用者驗證涵括進來。EAP 建立在更安全的公開金鑰加密系統上，確保只有經過授權的網路使用者可以存取網路。

設定 WPA-PSK/WPA2-PSK

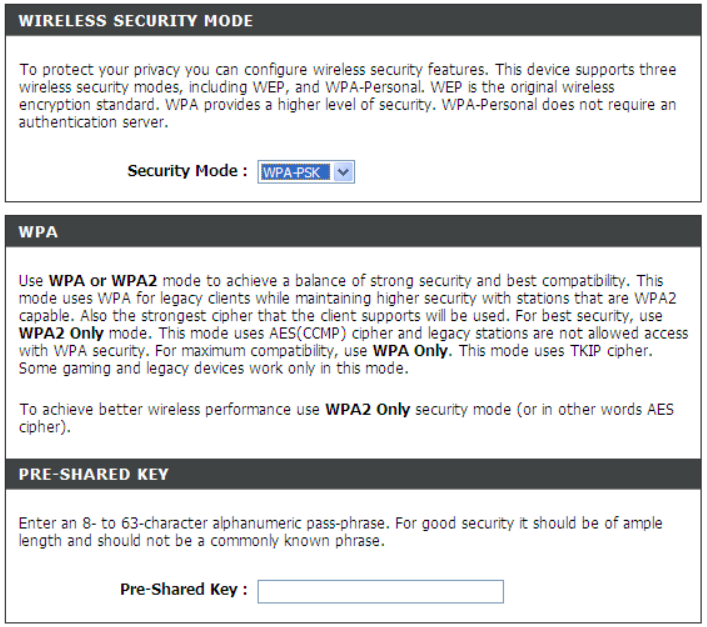
建議您先啟用無線路由器的加密，再啟用無線網卡的。請先建立無線連線再啟用加密。因為加密會導致資料量增加，無線網路訊號可能因此衰減。

1. 打開瀏覽器，輸入路由器 IP 位址 (192.168.0.1) 進入網頁設定介面。請按左邊的無線網路設定。

2. 在安全模式選擇 WPA-PSK 或 WPA2-PSK。

3. 在 Pre-Shared Key 輸入金鑰（密碼）。金鑰是一個 8 到 63 個字元的英數字密碼。密碼可以包含符號 (!?*&_) 與空白。所有無線用戶端都要採用這個金鑰，字元須完全相同

4. 按儲存設定將設定儲存起來。若您是用無線網卡來設定路由器的，則設定完成後該網卡就會斷線，您必須啟用網卡的 WPA-PSK（或 WPA2- PSK）功能，並輸入您剛才在路由器設定的密碼才能連線。



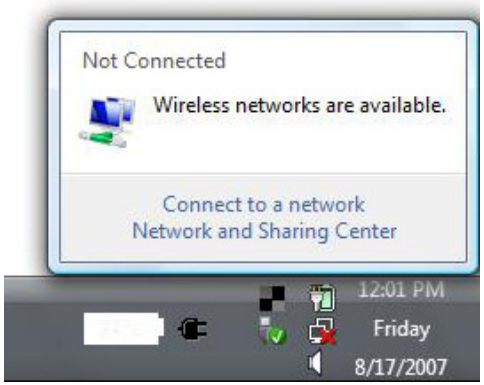
使用 Windows Vista™ 連到無線網路

Windows® Vista™ 使用者可使用內建的無線公用程式。若您使用其他公司的公用程式，或使用 Windows® 2000，請參考您的無線網卡使用手冊，了解如何進行無線網路連線。大多數公用程式都有一個「站台搜尋」功能，跟下列的 Windows® Vista™ 程式十分類似。

若出現偵測到無線網路圖示，請按一下該圖示進入公用程式。

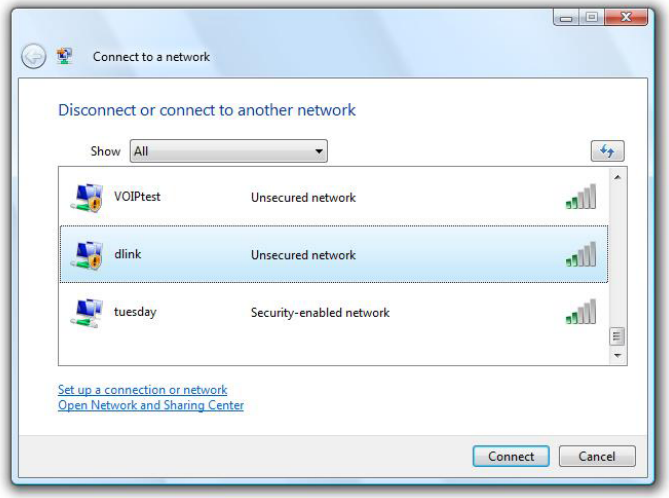
或

在您系統工具列的無線網路電腦圖示 (在右下角的時間旁邊) 按一下滑鼠右鍵。選擇連到網路。



此公用程式會顯示當地所有可用的無線網路。在其中一個網路按一下（以 SSID 顯示)，再按連線按鈕。

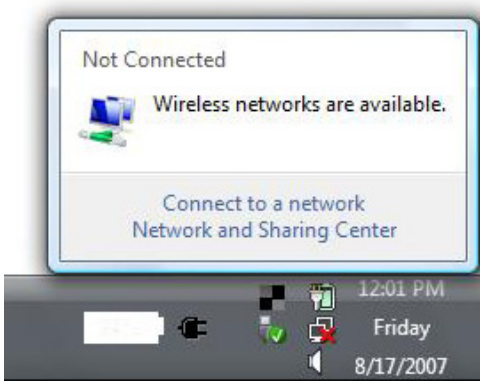
若訊號正常，卻無法存取網際網路，請檢查無線網卡的 TCP/IP 設定。請參見本手冊的網路基礎小節了解進一步資訊。



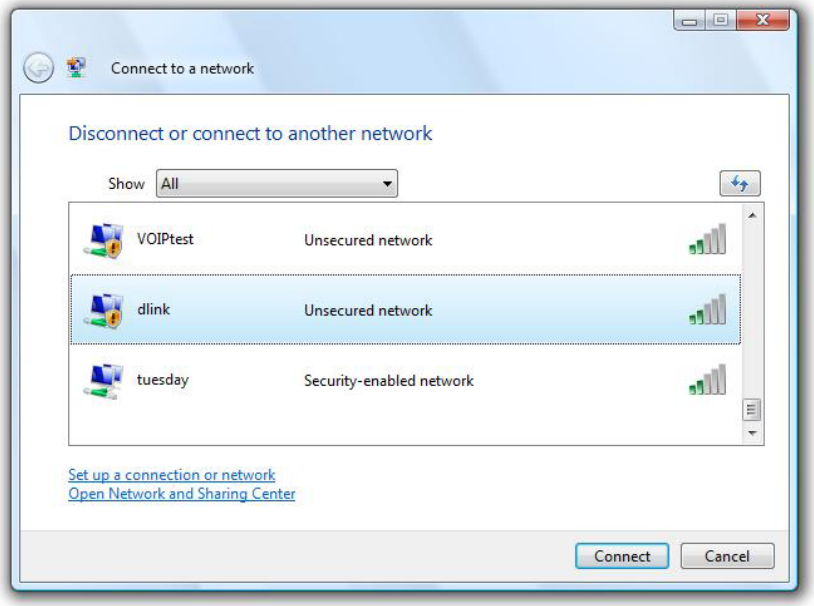
設定無線網路安全

建議您先啟用無線路由器或存取點的無線安全功能（WEP/WPA/WPA2），再設定您的無線網卡。若要加入某個現有的網路，就必須知道目前該網路使用的安全金鑰或密碼。

1. 在您系統工具列的無線網路電腦圖示（在右下角的時間旁邊）按一下滑鼠右鍵，開啟 Windows® Vista™ 無線網路公用程式。選擇連到網路。



2. 選取您要連接的無線網路 (SSID) 並按一下連線。



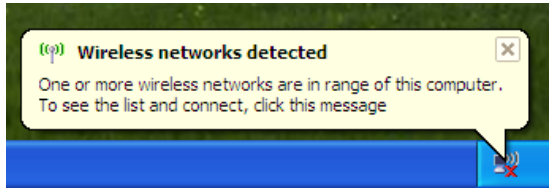
3. 輸入跟路由器相同的安全金鑰或密碼，再按連線。

可能要花 20-30 秒才能連上無線網路。若連線失敗，請檢查安全性設定是否正確。金鑰或密碼必須跟無線路由器上的一模一樣。

使用 Windows® XP 連到無線網路

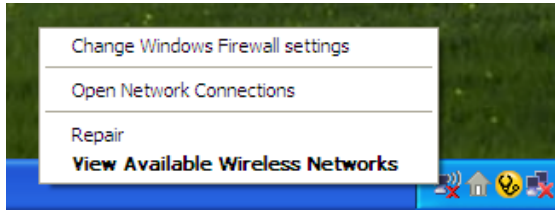
Windows® XP 使用者可使用內建的無線公用程式 (Zero Configuration Utility)。以下說明是針對 Service Pack 2 使用者撰寫的。若您使用其他公司的公用程式，或使用 Windows® 2000，請參考您的無線網卡使用手冊，了解如何進行無線網路連線。大多數公用程式都有一個「站台搜尋」功能，跟下列的 Windows® XP 程式十分類似。

若出現偵測到無線網路圖示，請按一下該圖示進入公用程式。

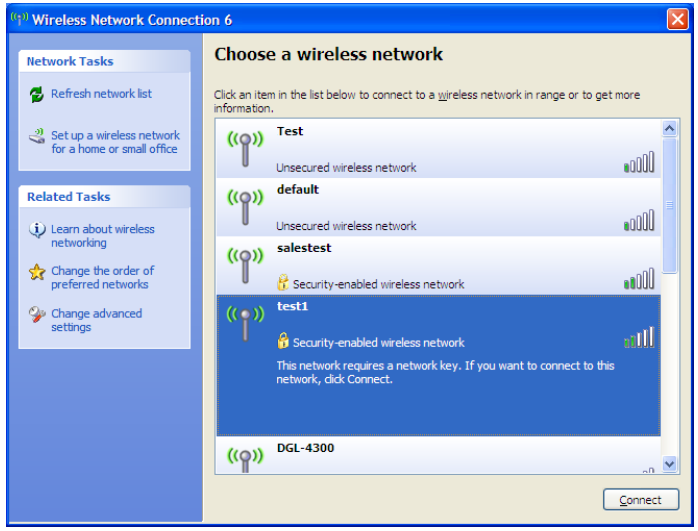


或

在您系統工具列的無線網路電腦圖示（在右下角的時間旁邊）按一下滑鼠右鍵。選擇檢視可用的無線網路。



此公用程式會顯示當地所有可用的無線網路。在其中一個網路按一下 (以 SSID 顯示)，再按連線按鈕。

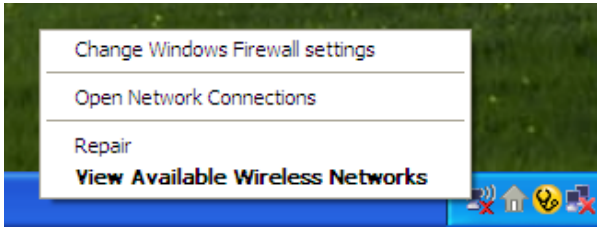


若訊號正常，卻無法存取網際網路，請檢查無線網卡的 TCP/IP 設定。請參見本手冊的網路基礎小節了解進一步資訊。

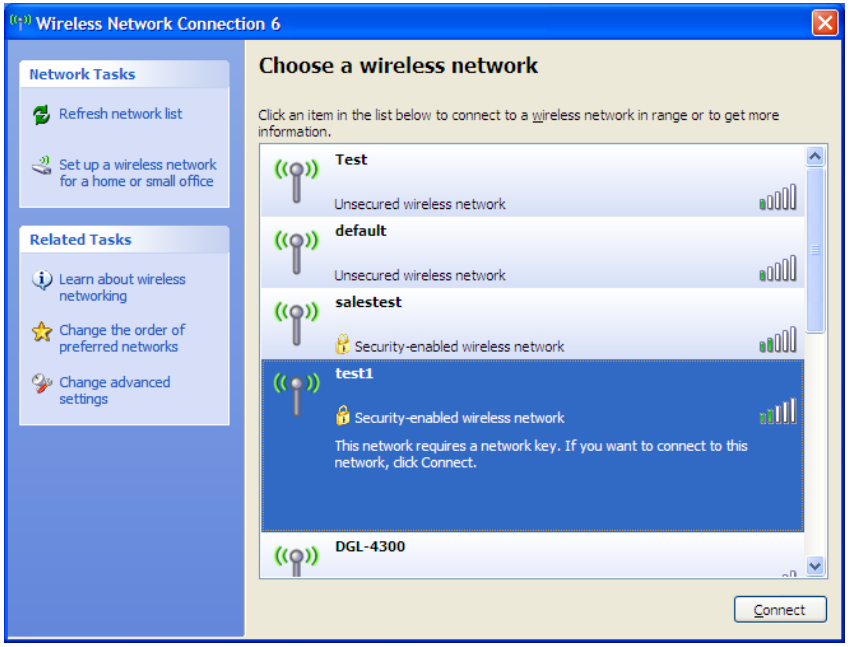
設定 WEP

建議您先啟用無線路由器或存取點的 WEP，再設定您的無線網卡。若要加入某個現有的網路，就必須知道目前該網路使用的 WEP 金鑰。

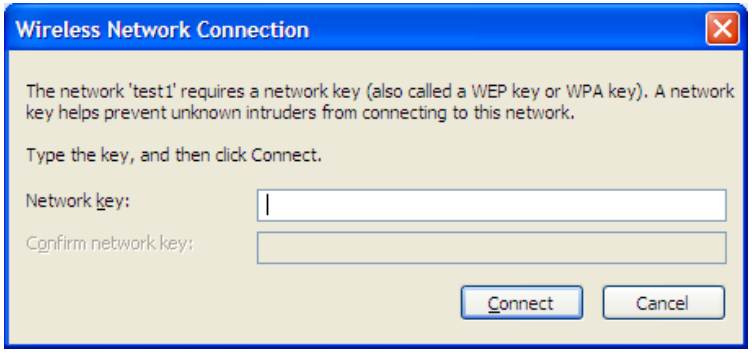
1. 在您系統工具列的無線網路電腦圖示 (在右下角的時間標示旁邊) 按一下滑鼠右鍵，開啟 Windows® XP 無線網路公用程式。選擇檢視可用的無線網路。



2. 選取您要連接的無線網路 (SSID) 並按一下連線。



3. 會出現無線網路連線方塊。輸入跟路由器相同的 WEP 金鑰，再按連線。

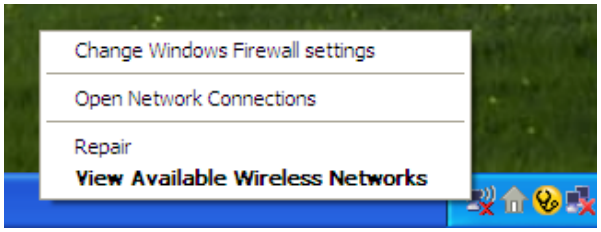


可能要花 20-30 秒才能連上無線網路。若連線失敗，請檢查 WEP 設定是否正確。WEP 金鑰必須跟無線路由器上的一模一樣。

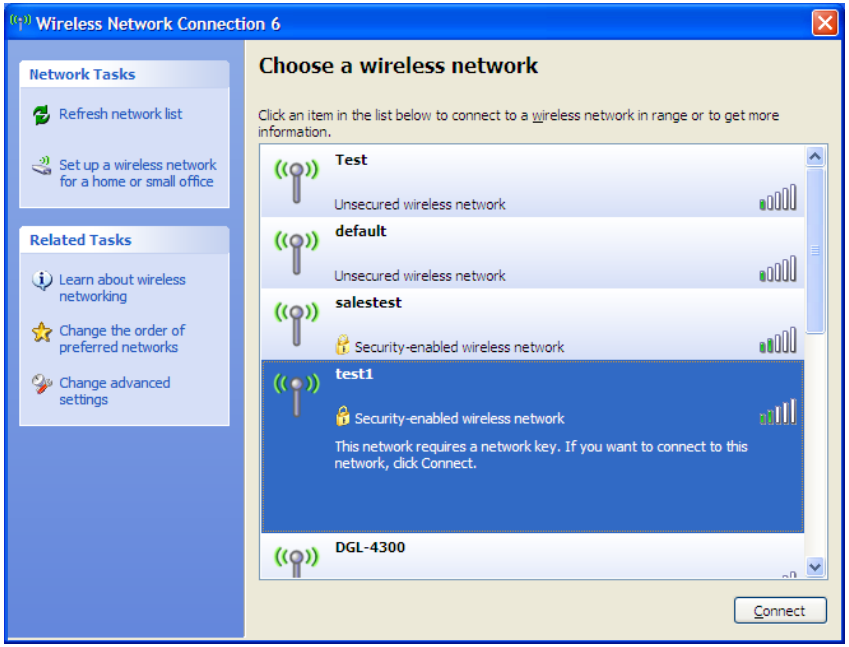
設定 WPA-PSK

建議您先啟用無線路由器或存取點的 WPA，再設定您的無線網卡。若要加入某個現有的網路，就必須知道目前該網路使用的 WPA 金鑰。

1. 在您系統工具列的無線網路電腦圖示 (在右下角的時間旁邊) 按一下滑鼠右鍵，開啟 Windows® XP 無線網路公用程式。選擇檢視可用的無線網路。

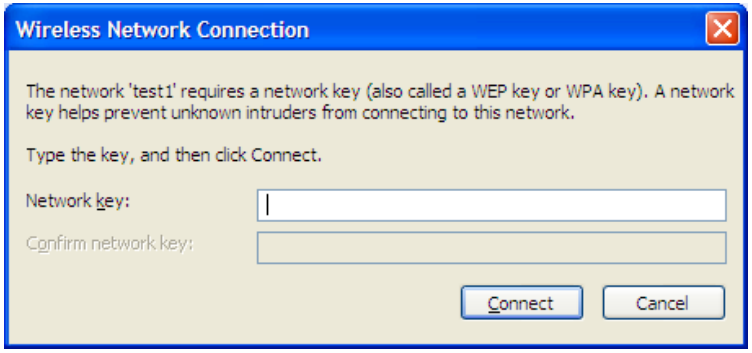


2. 選取您要連接的無線網路 (SSID) 並按一下連線。



3. 會出現無線網路連線方塊。請輸入 WPA-PSK 密碼並按連線。

可能要花 20-30 秒才能連上無線網路。若連線失敗，請檢查 WPA-PSK 設定是否正確。WPA-PSK 密碼必須跟無線路由器上的一模一樣。



疑難排解

本章對 DWR-510 在安裝與操作期間可能發生的問題提供解決辦法。若您遇到問題請參考以下說明。（範例均採用 Windows® XP。若您採用別的作業系統，畫面應與以下範例相似。）

1. 為何我無法存取網頁設定介面?

當您輸入 D-Link 路由器的 IP 位址時 (如 192.168.0.1)，您並沒有真正連到網際網路上的某個網站，也沒有連上網際網路，而僅只連到此裝置本身而已。本裝置將公用程式內建在 ROM 晶片中。您的電腦必須位在相同的 IP 子網路裡，才能連線到網頁設定介面。

- 請確定您安裝了最新版的瀏覽器，且該瀏覽器必須支援 Java。建議您採用下列瀏覽器:
    - Internet Explorer 6.0 以上
    - Netscape 8 以上
    - Mozilla 1.7.12 (5.0) 以上
    - Opera 8.5 以上
    - Safari 1.2 以上 (支援 Java 1.3.1 或更新版)
    - Camino 0.8.4 以上
    - Firefox 1.5 以上
- 檢查裝置上的連線燈號是否恆亮，以確認實體線路已連接成功。若未看到恆亮連號，請換一條其他不同之纜線，或改插裝置上的其他連接埠 (若有的話)。若您的電腦已關機，燈號可能不會亮。
- 請關掉電腦執行的所有網際網路安全性軟體。軟體防火牆（如 Zone Alarm、Black Ice、Sygate、Norton Personal Firewall 與 Windows® XP 防火牆）可能會把設定公用程式之頁面封鎖。請參閱防火牆軟體所附的說明檔，以了解如何關閉軟體或進行調整。

- 調整您的網際網路設定:
    - 進入 開始 > 設定 > 控制台。在網際網路選項圖示上按兩下。選擇安全性頁籤，按下「將所有區域重設為預設等級」按鈕。
    - 按一下連線頁籤，在撥號選項點選永遠不撥號連線。按一下區域網路設定按鈕。確認所有項目都沒有勾選。再按確定。
    - 選擇進階頁籤，並按「還原成進階預設值」按鈕。按三次確定。
    - 若您開著瀏覽器的話，請關掉再重開。
- 存取網頁管理介面。開啟瀏覽器，並在網址列輸入 D-Link 路由器的 IP 位址。此動作應該會看到網頁型管理介面的登入頁面。
- 如果仍然無法存取管理程式，請拔掉路由器電源 10 秒鐘再插回去。等 30 秒左右再重試公用程式。若您有多部電腦，請換一台電腦試試看連線。

2. 如何升級裝置韌體?

若要升級 DWR-510 的韌體，請將本裝置插入 PC 的 USB 連接埠。再執行韌體公用程式（FirmwareUpgrade.exe）。請按開始按鈕更新韌體。DWR-510 韌體更新期間請勿拔掉本裝置。請按確定按鈕結束韌體更新程序。

注意：請至本公司網頁參考韌體版本更新資訊。

無線網路基礎知識

D-Link 無線網路產品遵循業界標準，為家庭、企業或公共存取提供容易使用且相容的高速無線網路。D-Link 無線系列產品嚴格遵照 IEEE 標準，讓您隨心所欲、安全無虞的存取資料。請盡情享受無線網路帶給您的自由。

無線區域網路 (WLAN) 是一種透過無線電訊號來傳送資料的細胞電腦網路，不須透過傳統纜線連接。WLAN 在家庭、辦公室環境，以及各種類公共場所，如機場、咖啡館與大學的應用均日趨增加。以創新方式使用 WLAN 技術可協助人們更有效地進行工作與通訊。WLAN 提升了行動性，更不需要纜線與固定設施，嘉惠了眾多使用者。

無線網路使用者可直接使用跟有線網路相同的應用程式。筆記型與桌上型電腦的無線網卡支援跟乙太網路卡相同的協定。

在許多情況下，若能將無線裝置連上傳統乙太區域網路來使用服務、印表機，或透過有線區域網路來連網際網路，將是相當有用的。無線路由器裝置就可以滿足這個需求。

何謂無線網路?

無線網路（或稱 Wi-Fi）技術可讓電腦不用透過纜線就連上網路。Wi-Fi 使用無線電頻率進行無線連線，所以使用者可在家庭或辦公室的任何地點隨心所欲進行連線。

為何要採用 D-Link 無線網路?

D-Link 是業界領導廠商，在設計、開發與製造網路產品方面屢獲獎項。D-Link 產品效能深得您心，且價格經濟實惠。全方位產品協助您親手建立網路。

無線網路的運作方式為何?

無線網路的運作方式與無線電話相似，無線電波訊號從 A 點傳到 B 點以傳送資料。但無線技術在存取方面有些限制。您必須位在無線網路的涵蓋範圍內才能進行連線。無線網路分為兩種：無線區域網路（Wireless Local Area Network，WLAN）以及無線個人網路（Wireless Personal Area Network，WPAN)。

無線區域網路（WLAN）

在無線區域網路中，存取點裝置（Access Point，AP）會負責將各電腦連上網路。存取點附有小型天線，可收送無線電訊號進行資料傳輸。以圖中的室內存取點為例，其訊號可傳輸達 300 呎。至於室外的存取點，其訊號更可達 30 英里，可供廠房、工業區、大學與高中校園、機場、高爾夫球場等諸多室外場合應用。.

無線個人網路（WPAN）

藍牙（Bluetooth）是 WPAN 使用的業界標準無線技術。WPAN 裡的藍牙裝置可在 30 呎的範圍內運作。

它的速度與無線涵蓋範圍均不如 WLAN，但優點是耗電量少，適合個人裝置使用，如行動電話、PDA、耳機、筆記型電腦、喇叭與其他使用電池的裝置。

無線網路的使用者為何?

無線技術在近幾年迅速普及，幾乎每個人都會用到。不論是家庭、辦公室還是商務，D-Link 均提供無線解決方案。

家庭

- 為家庭每位成員提供寬頻連線
- 遨遊網路、收電子郵件、傳即時訊息等等。
- 省去眾多且雜亂的纜線
- 使用簡便

SOHO 族

- 在家就享有辦公室的便利性
- 從家中遠端存取辦公室網路
- 將網際網路連線與印表機與多台電腦共享
- 不須專屬的辦公空間

無線網路的應用場合?

無線技術已遍佈各地，不限於家庭與辦公室。人們喜愛無線的自由性，因此越來越多公共設施提供無線存取以吸引眾人，讓無線網路更加風行。在公共場合的無線網路連線稱為「熱點」(hotspot)。

在筆記型電腦插上 D-Link Cardbus 網路卡，您就可連上熱點，在機場、飯店、咖啡廳、圖書館、餐廳與會議中心等場所享受網際網路的便利。

無線網路的設定簡便，但若您是第一次使用，可能會不知從何下手。因此我們將幾個設定步驟和技巧聯合起來，協助您透過這些程序來設定無線網路。

技巧

安裝無線網路時有幾個小技巧。

將路由器或存取點放在中心位置

請將路由器/存取點放在網路的中心位置，以取得最佳效能。盡量將路由器/存取點放在房間高處，讓訊號散佈到整間房屋。若您的房屋坪數廣大，可能需要一台中繼器來加強訊號，增加涵蓋範圍。

減少干擾

請將無線電話、微波爐與電視等家用電器盡量遠離路由器/存取點。這些家電可能會在相同的頻率運作，因此將距離拉遠可大幅減少其干擾。

安全性

請不要讓鄰居或入侵者連到您的無線網路。您可打開路由器的 WPA 或 WEP 加密功能保護無線網路。請參閱產品使用手冊了解詳細的設定方式。

無線模式

網路有兩種基本模式:

- **基礎建設模式** – 所有無線用戶端都連到存取點或無線路由器上。
- **點對點模式** – 直接連到另一台電腦進行點對點通訊，也就是用多台電腦上的無線 Cardbus 網卡互相連接。

基礎建設模式網路會有一台存取點或無線路由器。所有無線裝置或用戶端都要連到這台無線路由器或存取點。

點對點模式則只有用戶端，譬如裝了無線網卡的筆記型電腦。所有的網卡都要採用點對點模式才能彼此通訊。

網路基礎知識

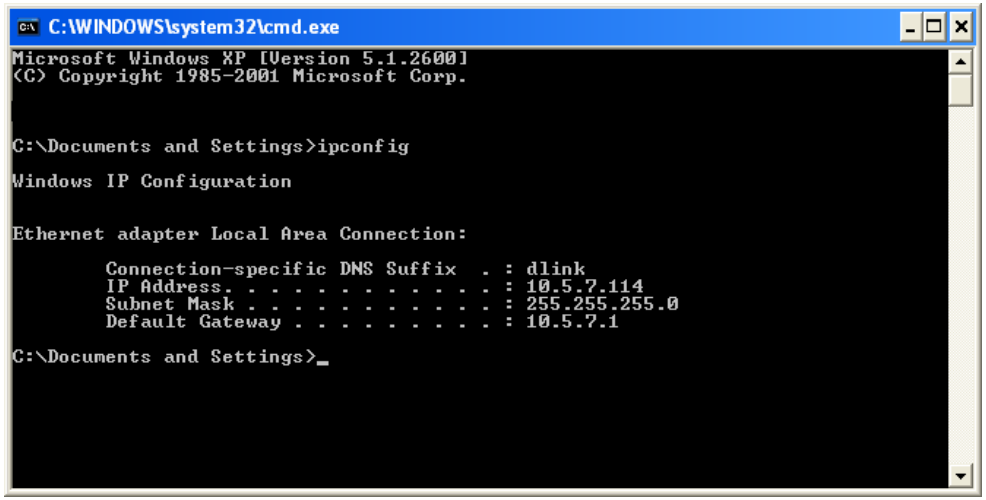
檢查 IP 位址

安裝新的 D-Link 網路卡後，TCP/IP 預設應該會從 DHCP 伺服器 (無線路由器) 自動取得 IP 位址。若要檢查 IP 位址，請遵循下列步驟。

按開始 > 執行。在執行方塊輸入 cmd 再按確定。(Windows® Vista™ 使用者請在開始搜尋方塊輸入 cmd。)

在提示符號輸入 ipconfig 並敲 Enter 鍵。

畫面會顯示網路卡的 IP 位址、子網路遮罩與預設閘道器。



若位址是 0.0.0.0，請檢查網路卡是否正確安裝、安全性設定，以及您路由器的設定。有些防火牆軟體會把新網路卡發出的 DHCP 要求給封鎖。

指派固定 IP 位址

若您並非使用具有 DHCP 功能的閘道器/路由器，或者您就是必須指定固定 IP 位址，請遵循以下步驟：

第 1 步

Windows® Vista™ - 按 開始 > 控制台 > 網路與網際網路 > 網路與共享中心 > 管理網路連線。

Windows® XP - 按 開始 > 控制台 > 網路連線。

Windows® 2000 - 從桌面上以滑鼠右鍵按 我的網路 > 內容。

第 2 步

在區域連線裡找出代表您那張網路卡的圖示，在圖示上按右鍵並選擇內容。

第 3 步

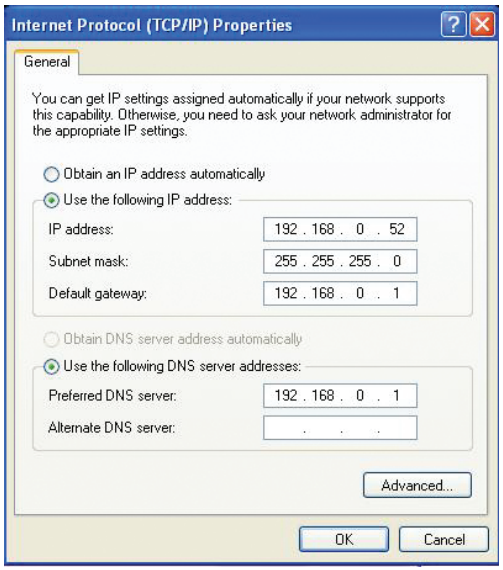
選擇 Internet Protocol (TCP/IP) 並按內容。

第 4 步

按下使用下列的 IP 位址並輸入 IP 位址，此位置必須跟您的網路處在相同的子網路中，或與路由器上的 LAN IP 位址處於相同子網路中。

範例：若路由器的 LAN IP 位址是 192.168.0.1，請將 IP 位置設成 192.168.0.X，X 是 2 到 99 之間的數字。請確定您輸入的數字還沒被網路上其他人使用過。將預設閘道設成路由器的 LAN IP 位址 (192.168.0.1)。

將慣用 DNS 設成路由器的 LAN IP 位址 (192.168.0.1)。其他 DNS 伺服器則不一定要設定，您可以輸入 ISP 的 DNS 伺服器。



第 5 步

按確定兩次儲存設定。

技術規格

GSM 頻帶 (GSM/GPRS/EDGE)
- 850/900/1800/1900 MHz
- Power Class 4 (850/900 MHz)
- Power Class 1 (1800/1900 MHz)

UMTS/HSDPA 頻帶 *
- 850/1900 MHz
- 850/2100 MHz
- 900/2100 MHz
- Power Class 3 (+24 dBm)

資料傳輸率 **
- DL: 7.2 Mbps
- UL: 5.76 Mbps

標準
- 802.11g/b, 相容 802.11n 裝置

無線網路安全
- 64/128-bit WEP (Wired Equivalent Privacy，有線等效協定)
- WPA & WPA2 (Wi-Fi Protected Access)

防火牆
- 內建 NAT
- 內建防火牆

天線
- 內建 3G 與 Wi-Fi 天線

LED 狀態燈號
- 訊號 LED

尺寸 (L x W x H)
- 90 x 28 x 11 mm

工作溫度
- -10 到 55 ˚C (14 到 131 ˚F)

工作溼度
- 10% to 90% (非凝結態)

認證
- CE
- FCC

* 支援的頻帶會因各地區的硬體版本而有所不同。
** 這是 IEEE Standard 802.11g 規格載明的無線網路信號最高傳輸率。實際資料傳輸率可能視情況而異。網路情形與環境變因，包括網路流量、房屋建材與建造方式、以及網路負載，都可能降低實際的資料傳輸率。環境因素會明顯影響無線網路信號涵蓋範圍。

臺灣NCC 警語

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。

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。

臺灣地區使用頻率範圍及使用頻道數為 CH1~11 (2.412~2.483秭赫(Ghz))。