



Super G™ Wireless Access Point

Model # AP421W

Quick Installation Guide

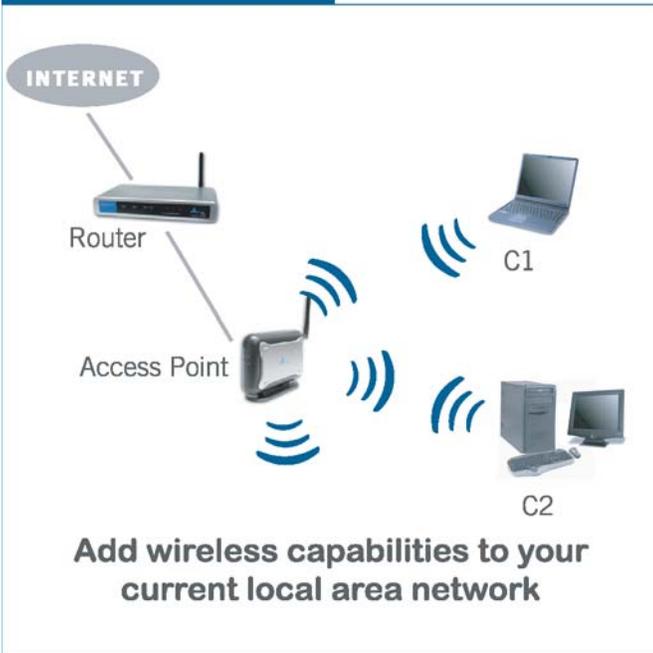
Section 1

This Quick Installation Guide only provides the basic instructions. For more detailed information, please refer to the User's Manual in the supplied CD.

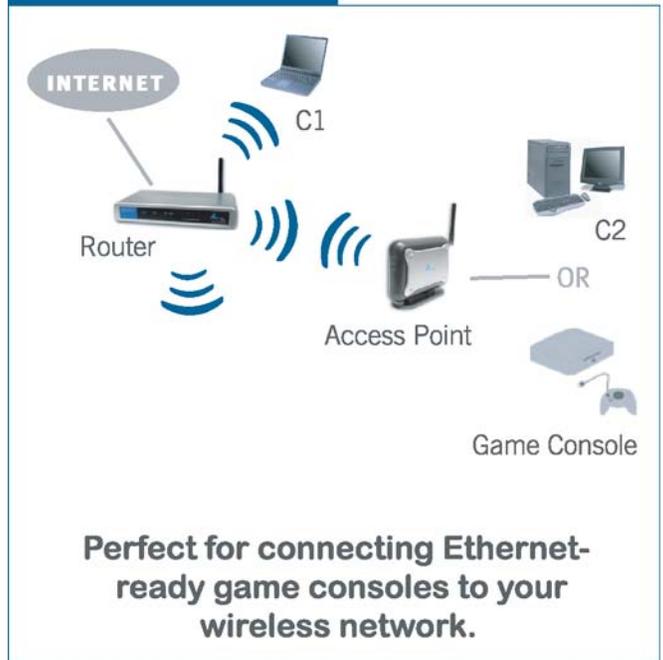
Getting Started

Please refer to the following diagrams to determine which operating mode you should use for your network.

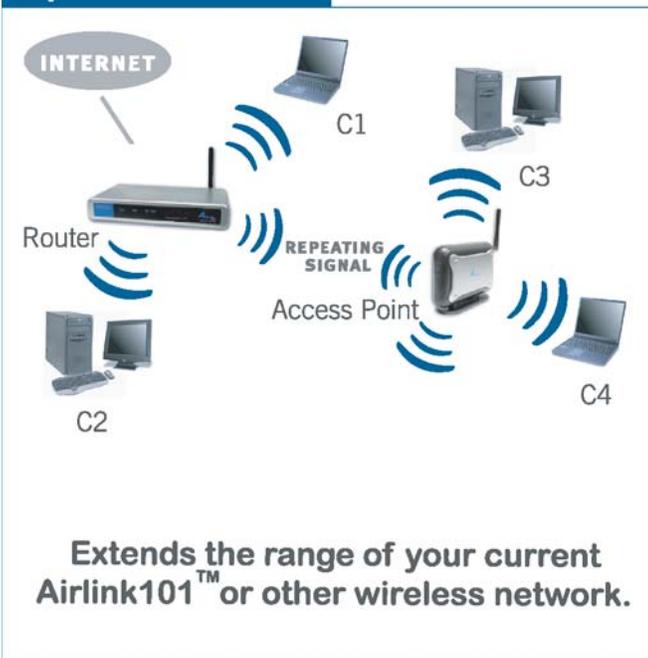
Access Point



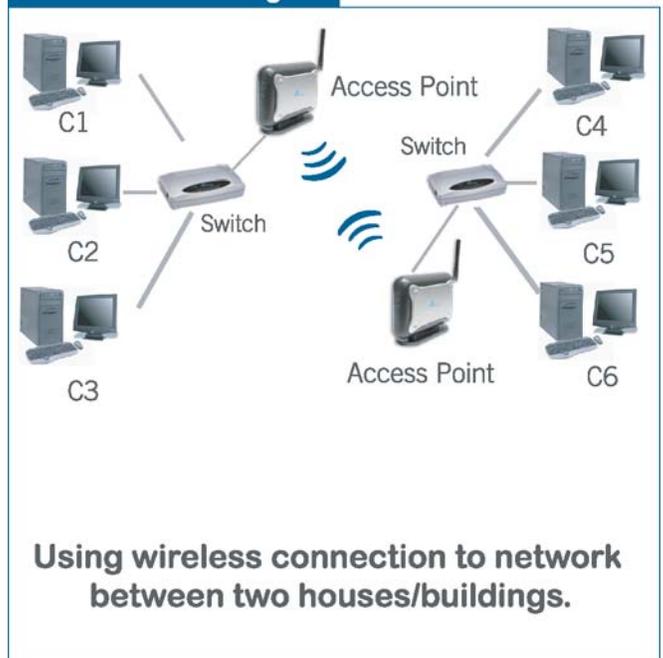
AP Client



Repeater



Point to Point Bridge



If you want to use the AP421W as an Access Point with minimal configuration, just connect it to your existing router or switch with a Cat. 5 network cable and then power it on. The Access Point is ready to use with its default settings:

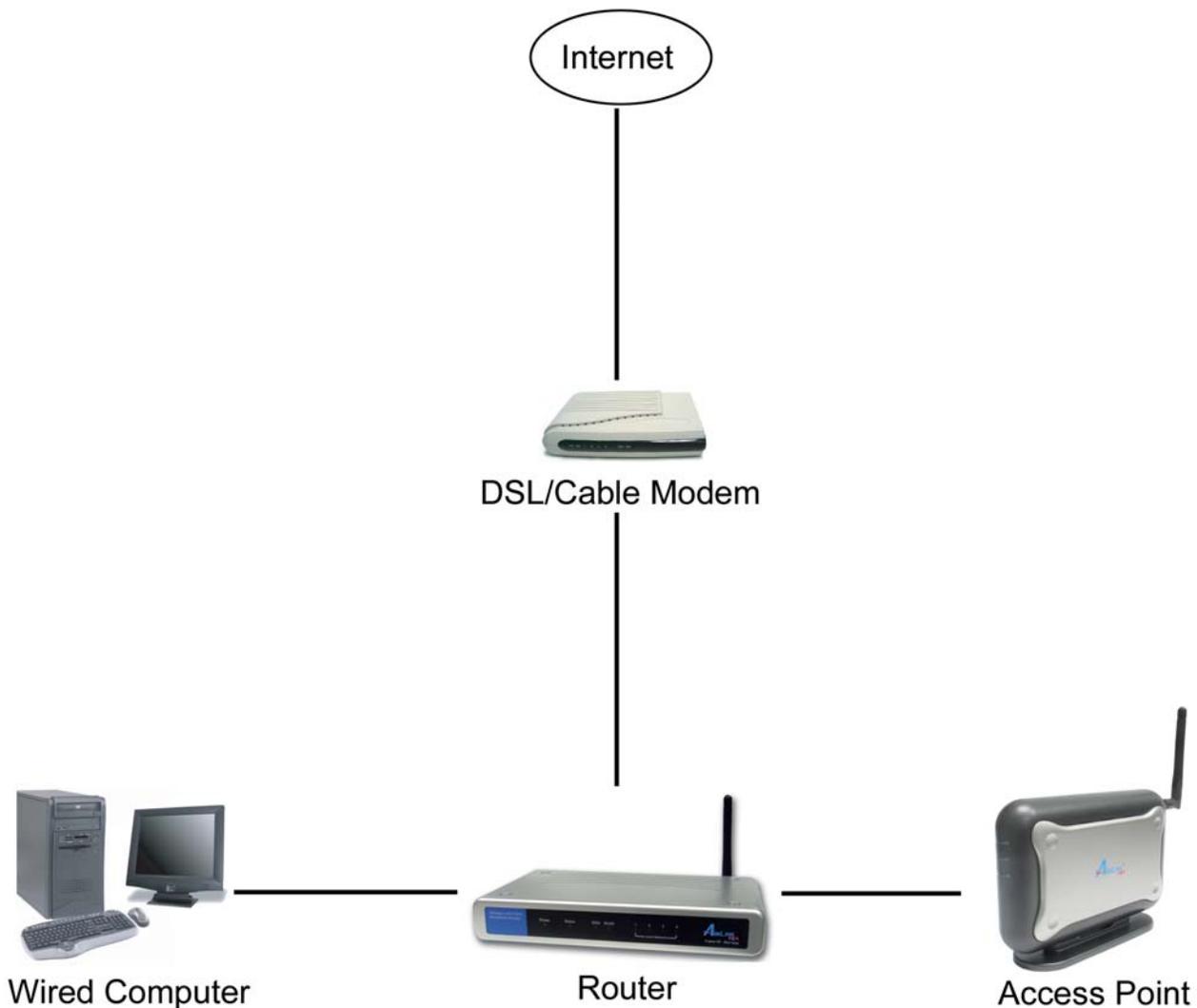
SSID: **default**
Channel: **6**
Encryptions: **disabled**

If you want to configure the Access Point's settings or set it to other operating modes, please follow the rest of this guide.

Step 1 Connect one end of a network cable to the **Network** port of the Access Point and connect the other end to one of the **LAN** ports of the router (*See the diagram below*).

Step 2 Power on the Access Point by connecting one end of the supplied power adapter to the power jack of the Access Point and connecting the other end to an electrical outlet.

Step 3 Verify that all three lights on the Access Point are lit. If not, verify that all the connections are secure and try again.

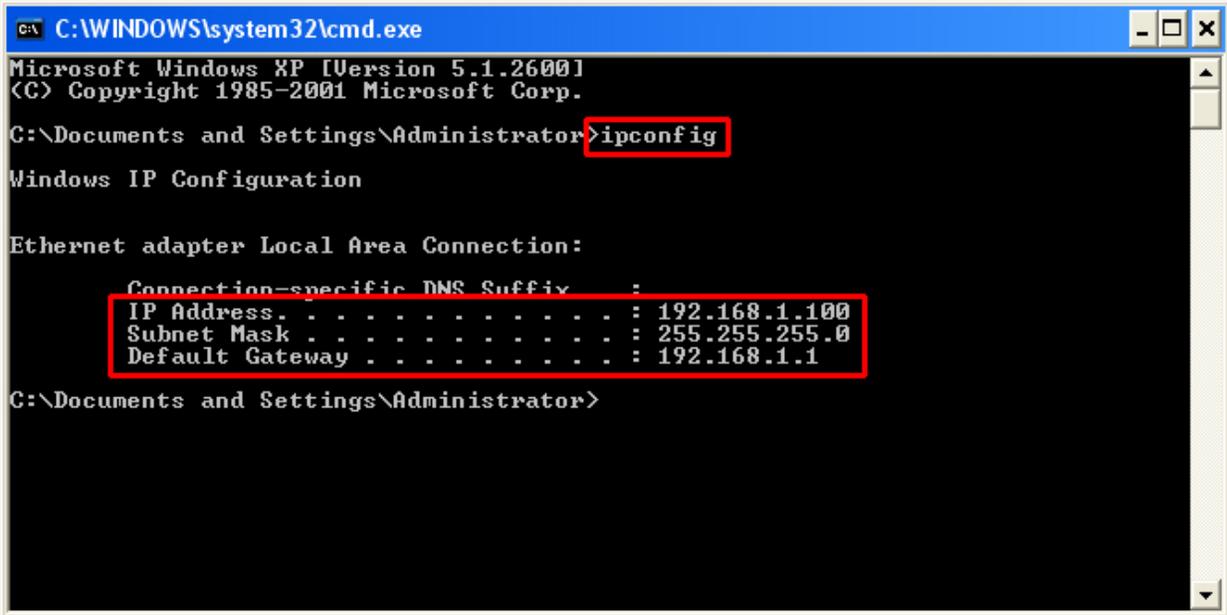


Section 2

Gathering Information

Step 1 On the wired computer, go to **Start, Run**, type **command** (for Windows 95/98/ME) or **cmd** (for Windows 2000/XP) and click **OK**.

Step 2 Type **ipconfig** and press **Enter**. Your network settings will be displayed.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  :
    IP Address. . . . . : 192.168.1.100
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Administrator>
```

Step 3 Write down the values for the **IP Address**, **Subnet Mask**, and **Default Gateway** on a piece of paper.

Step 4 If you want to set the AP421W to a mode other than an Access Point, write down the following values for your existing wireless router or AP:

1. **SSID (Network Name)**
2. **Channel Number**
3. **Wireless Security Settings**

The AP421W needs to use the same wireless settings in order for it to work properly. You may gather these information from the web configuration utility of your wireless router.

Step 5 Refer to the **IP Address** you've written down from **Step 3**.

If the first three numbers of your **IP Address** are **192.168.1**, then you do not need to configure your computer's IP Address. Please continue to the next page.

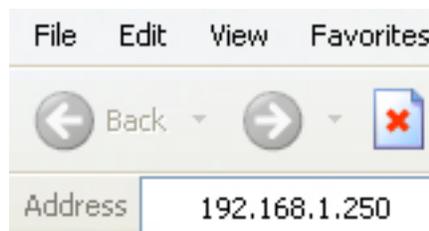
If the first three numbers of your **IP Address** are not **192.168.1**, (Ex. **192.168.2**), then please refer to **Section 4 of the User's Manual** in the provided CD for instructions on how to change the IP Address.

Section 3

Using Web Configuration Utility

You can use the Access Point's built-in Web Configuration Utility to configure the encryption settings and operating modes. This section describes how to configure the Access Point's wireless and security settings. For information on the different operating modes, please refer to **Section 4, Selecting Operating Modes**.

Step 1 Open your Web Browser (Internet Explorer or Netscape), enter the IP Address of the Access Point (default: **192.168.1.250**) in the Address Bar and press **Enter**.

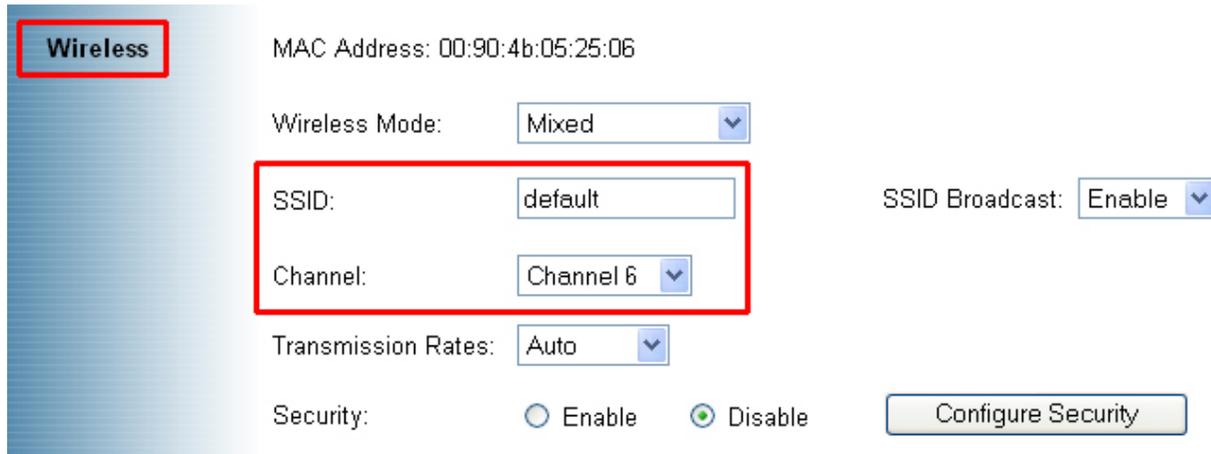


Note: If you have changed the IP Address of the Access Point, enter its new IP Address instead of the default.

Step 2 Enter **admin** for both the **User name** and **Password** and click **OK**.

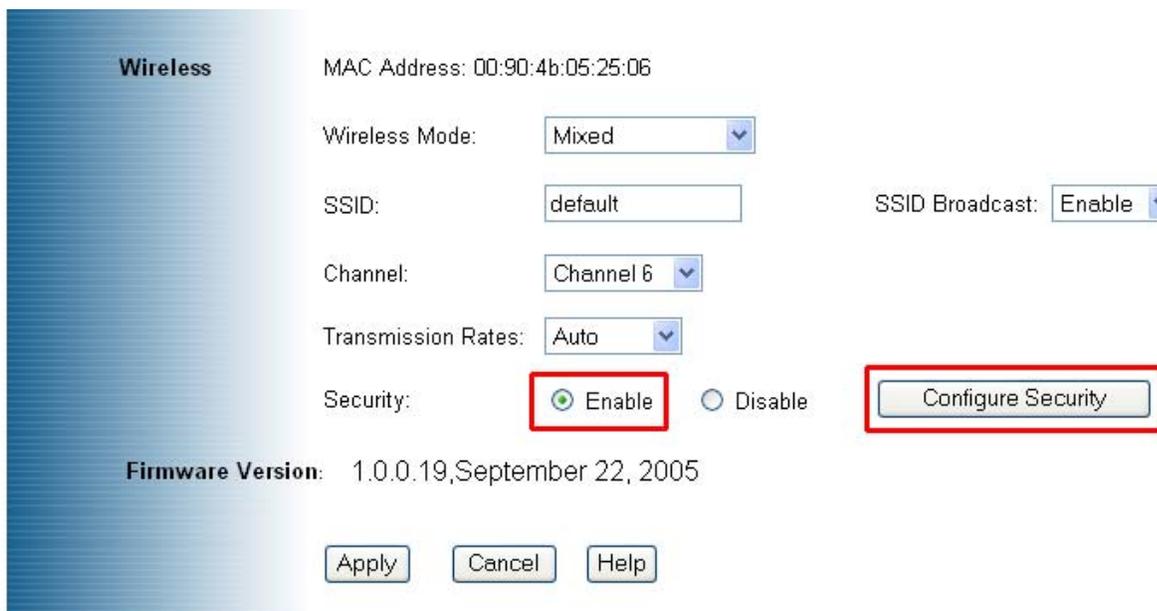


Step 3 At the Wireless section, enter the **SSID (Network Name)** of your wireless network and the **channel** number.



The screenshot shows the 'Wireless' configuration page. The 'Wireless' tab is highlighted with a red box. The MAC Address is 00:90:4b:05:25:06. The Wireless Mode is set to 'Mixed'. The SSID is 'default' and the Channel is 'Channel 6', both highlighted with a red box. The SSID Broadcast is set to 'Enable'. The Transmission Rates are set to 'Auto'. The Security options are 'Enable' (unselected) and 'Disable' (selected). A 'Configure Security' button is visible.

Step 4 If you have enabled encryption for your wireless network, you'll need to configure the same security settings on the Access Point as well. Select **Enable** and click on **Configure Security**.



The screenshot shows the 'Wireless' configuration page. The 'Wireless' tab is highlighted. The MAC Address is 00:90:4b:05:25:06. The Wireless Mode is set to 'Mixed'. The SSID is 'default' and the Channel is 'Channel 6'. The Transmission Rates are set to 'Auto'. The Security options are 'Enable' (selected) and 'Disable' (unselected), with 'Enable' highlighted by a red box. The 'Configure Security' button is also highlighted by a red box. The Firmware Version is 1.0.0.19, September 22, 2005. At the bottom, there are 'Apply', 'Cancel', and 'Help' buttons.

WEP

Step 5a Select the same level of WEP encryption (**64-Bits / 128-Bits**) of your wireless network from the drop-down menu.

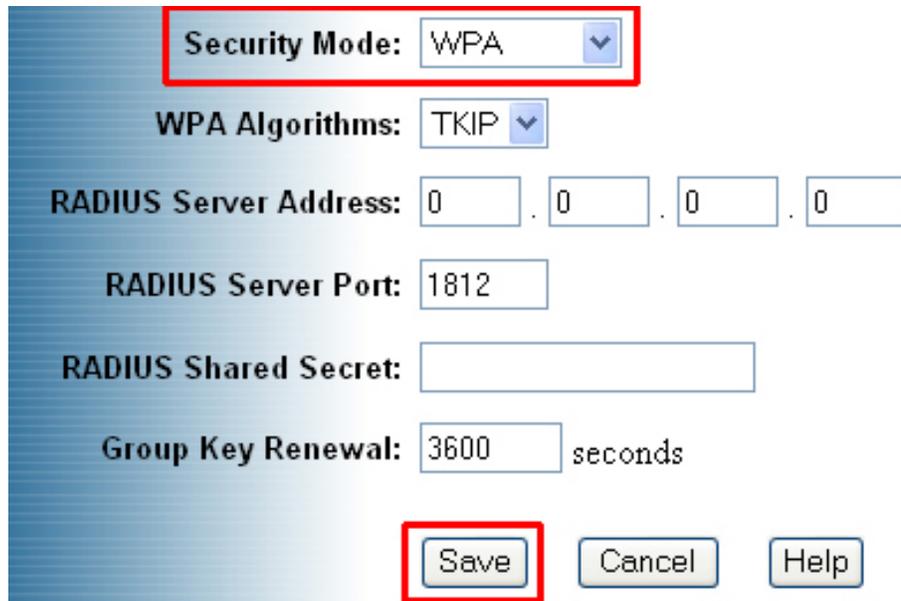
The screenshot shows a configuration window for WEP. The 'Security Mode' is set to 'WEP'. The 'Authentication Type' is 'Open System'. Under 'Transmit Key', radio button '1' is selected. The 'WEP Encryption' dropdown menu is highlighted with a red box and shows '64 bits 10 hex digits'. Below this are fields for 'Passphrase', 'Key 1', 'Key 2', 'Key 3', and 'Key 4'. At the bottom are 'Save', 'Cancel', and 'Help' buttons.

Step 5b Enter the same **WEP key (password)** of your wireless network in the **Key 1** field and click **Save**. Skip to **Step 8**.

This screenshot is identical to the previous one, but with a red box around the 'Key 1' text input field and another red box around the 'Save' button at the bottom.

WPA

Step 6 Select **WPA** from the drop-down menu and enter all the applicable fields. Click **Save** and proceed to **Step 8**.



The screenshot shows a configuration window for WPA. The 'Security Mode' dropdown menu is highlighted with a red box and set to 'WPA'. Below it, the 'WPA Algorithms' dropdown is set to 'TKIP'. The 'RADIUS Server Address' field is a dotted IP address with four boxes, each containing '0'. The 'RADIUS Server Port' field contains '1812'. The 'RADIUS Shared Secret' field is empty. The 'Group Key Renewal' field contains '3600' followed by the text 'seconds'. At the bottom, the 'Save' button is highlighted with a red box, along with 'Cancel' and 'Help' buttons.

Security Mode: WPA

WPA Algorithms: TKIP

RADIUS Server Address: 0 . 0 . 0 . 0

RADIUS Server Port: 1812

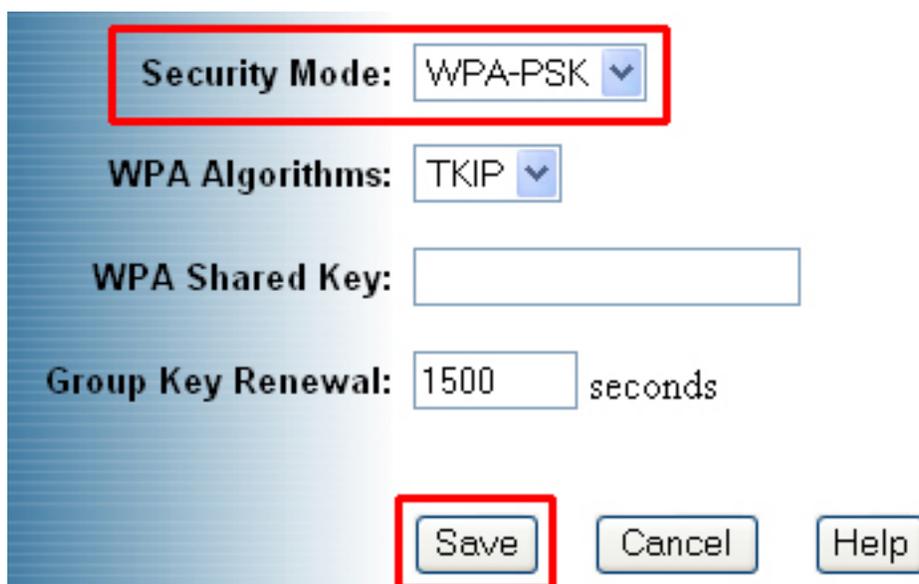
RADIUS Shared Secret:

Group Key Renewal: 3600 seconds

Save Cancel Help

WPA-PSK

Step 7 Select **WPA-PSK** from the drop-down menu and enter all the applicable fields. Click **Save** and proceed to **Step 8**.



The screenshot shows a configuration window for WPA-PSK. The 'Security Mode' dropdown menu is highlighted with a red box and set to 'WPA-PSK'. Below it, the 'WPA Algorithms' dropdown is set to 'TKIP'. The 'WPA Shared Key' field is empty. The 'Group Key Renewal' field contains '1500' followed by the text 'seconds'. At the bottom, the 'Save' button is highlighted with a red box, along with 'Cancel' and 'Help' buttons.

Security Mode: WPA-PSK

WPA Algorithms: TKIP

WPA Shared Key:

Group Key Renewal: 1500 seconds

Save Cancel Help

Step 8 Click **Apply** to save the changes.

Wireless

MAC Address: 00:90:4b:05:25:06

Wireless Mode:

SSID: SSID Broadcast:

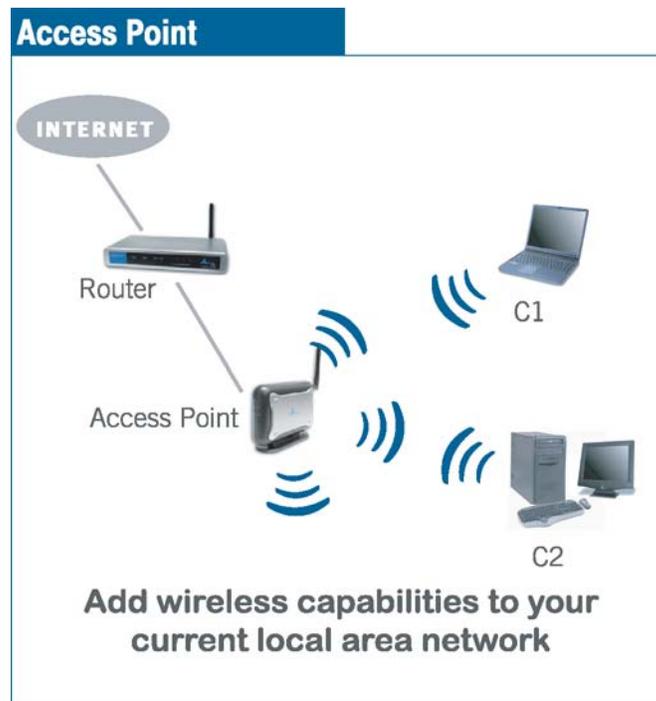
Channel:

Transmission Rates:

Security: Enable Disable

Firmware Version: 1.0.0.19, September 22, 2005

Step 9 For best result, place the Access Point at a central location where it is accessible to all the wireless computers.

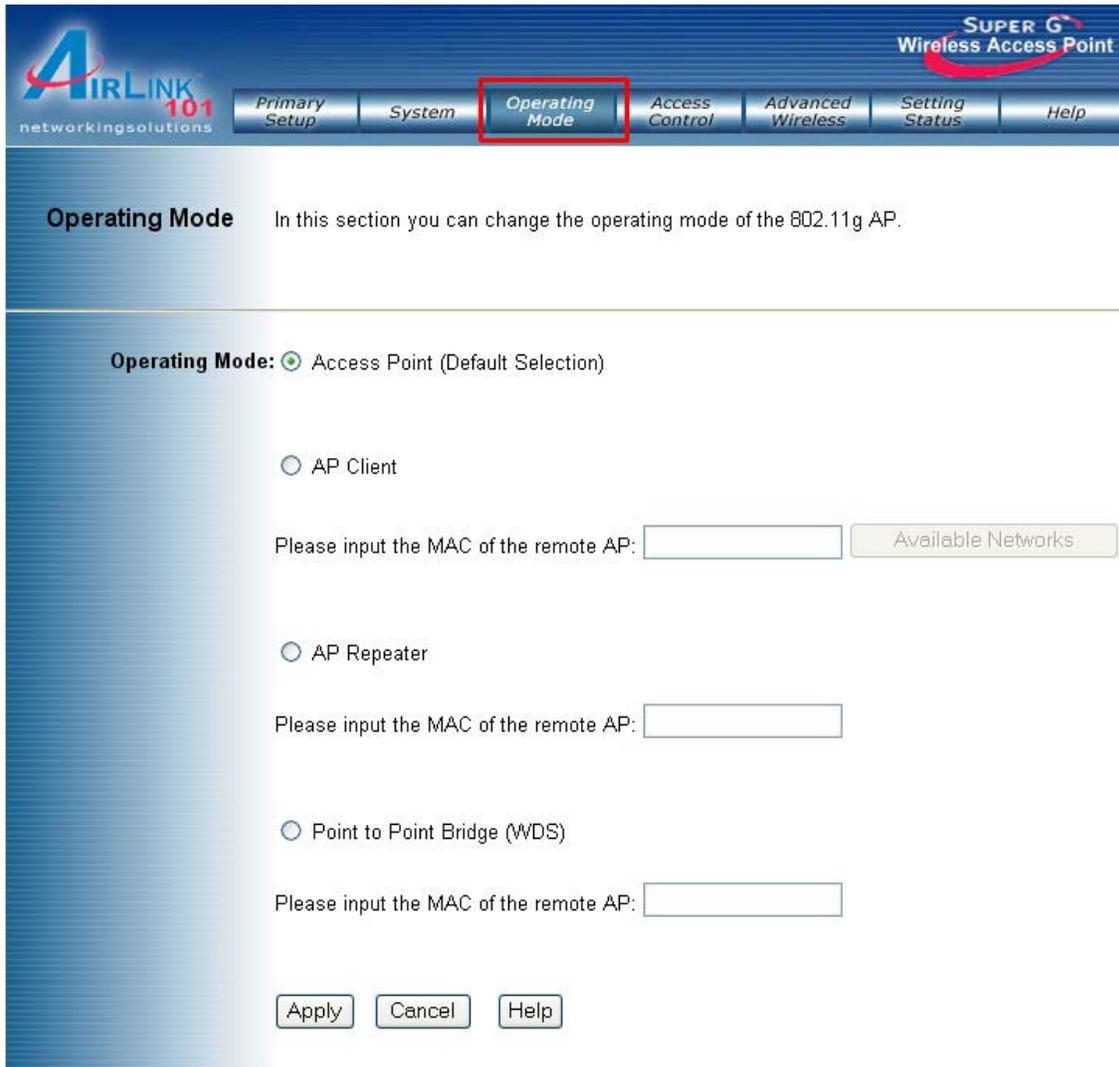


Section 4

Selecting Operating Modes

This section describes how to change the Access Point's operating modes.

Step 1 Select the **Operating Mode** tab to display the Operating Mode page.



The screenshot shows the web interface for the AIRLINK 101 Super G Wireless Access Point. The navigation menu at the top includes: Primary Setup, System, **Operating Mode** (highlighted with a red box), Access Control, Advanced Wireless, Setting Status, and Help. The main content area is titled "Operating Mode" and contains the following text: "In this section you can change the operating mode of the 802.11g AP." Below this, there are three radio button options for the operating mode:

- Access Point (Default Selection)
- AP Client
- AP Repeater
- Point to Point Bridge (WDS)

Each mode except "Access Point" has a corresponding text input field for the remote AP's MAC address. The "AP Client" mode also includes a button labeled "Available Networks". At the bottom of the page, there are three buttons: "Apply", "Cancel", and "Help".

Step 2 Select the desired mode and enter the remote Access Point's MAC address. You can find the target MAC address from the remote AP's web configuration utility.

Step 3 Click **Apply** to save the changes.

AP Client

The AP Client mode converts the Access Point to a wireless network adapter, allowing the network device such as your computer or game console to become a wireless client.

Step 1 Select **AP Client** and enter the MAC address of the remote AP or click on the **Available Networks** button to scan for any available wireless network.

AP Client

Please input the MAC of the remote AP:

Step 2 Select the desired wireless network from the list.

	SSID	MAC address	Channel	Signal Strength(%)	Mode
<input type="radio"/>		00:02:2D:2B:A4:4C	1	16	802.11b - Infra
<input type="radio"/>		00:12:17:1D:6D:CE	6	4	802.11g - Infra
<input type="radio"/>	Default	00:0D:72:20:1D:29	6	32	802.11b - Infra
<input type="radio"/>		00:11:50:2B:84:A9	6	6	802.11g - Infra
<input type="radio"/>		00:C0:49:54:11:E4	11	10	802.11g - Infra

Step 3 Click **Apply** to confirm the selection.

Wireless Mode:

SSID:

Channel:

Step 4 Click **Apply** to save the changes.

Operating Mode: Access Point (Default Selection)

AP Client

Please input the MAC of the remote AP:

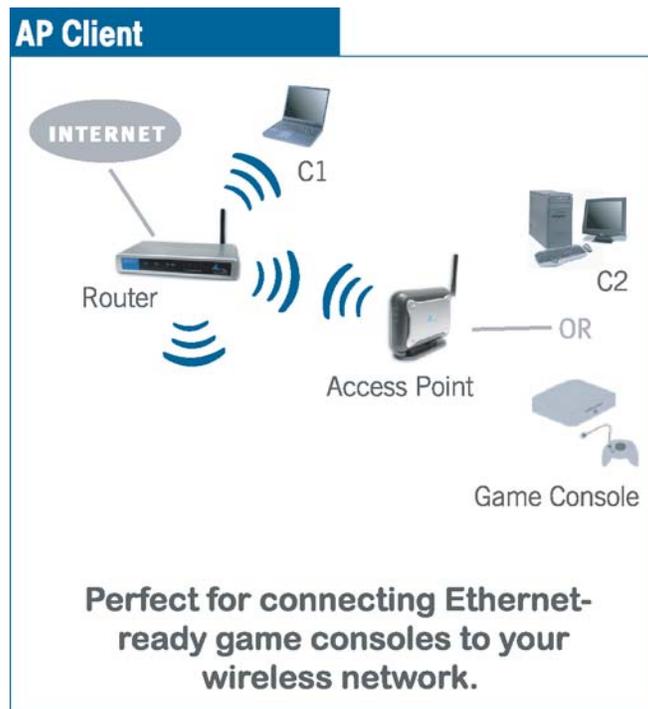
AP Repeater

Please input the MAC of the remote AP:

Point to Point Bridge (WDS)

Please input the MAC of the remote AP:

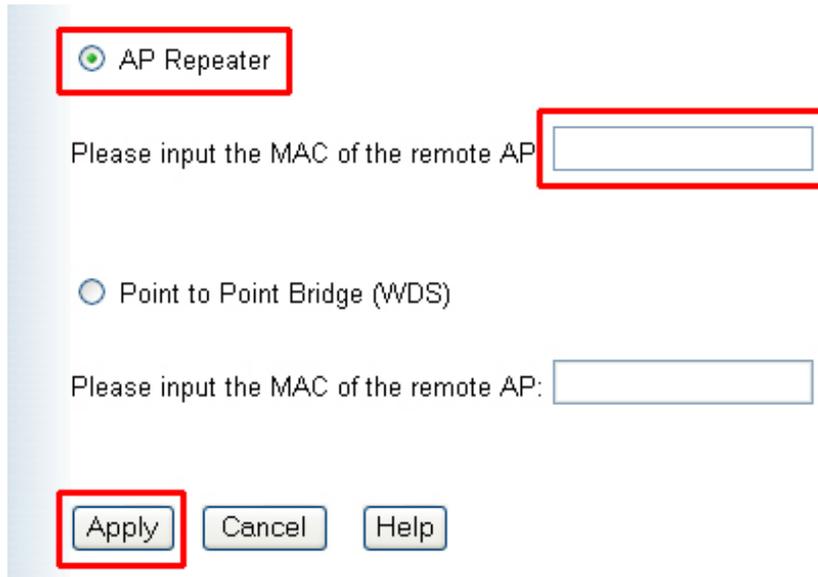
Step 5 Once the Access Point has restarted, you may disconnect it from the wireless router and connect it to the Ethernet port of your computer or game console.



AP Repeater

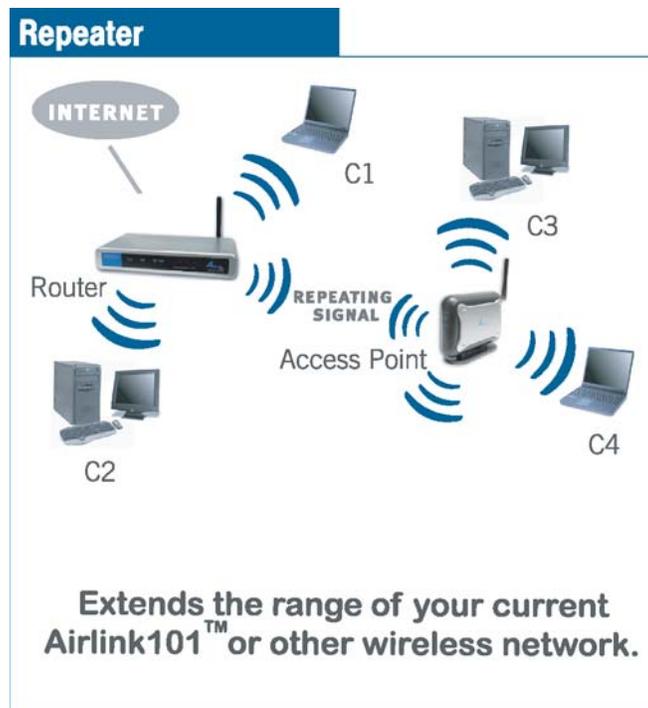
The AP Repeater mode converts the Access Point to a wireless repeater. By extending the wireless signal of the source AP/wireless router, the wireless coverage is expanded.

Step 1 Select **AP Repeater** and enter the MAC address of the remote AP (source AP/wireless router) and click **Apply** to save the changes.



The screenshot shows a configuration window for an AP Repeater. At the top, the 'AP Repeater' radio button is selected and highlighted with a red box. Below it, a text prompt 'Please input the MAC of the remote AP' is followed by an empty text input field, also highlighted with a red box. Further down, the 'Point to Point Bridge (WDS)' radio button is unselected. Below that, another text prompt 'Please input the MAC of the remote AP:' is followed by another empty text input field. At the bottom of the window, three buttons are visible: 'Apply' (highlighted with a red box), 'Cancel', and 'Help'.

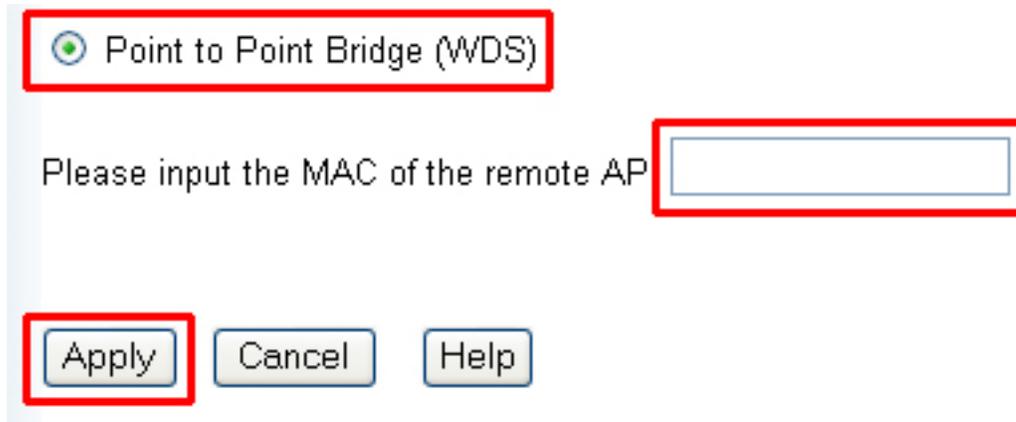
Step 2 Once the Repeater has restarted, you may disconnect it from the wireless router. For best result, place the Repeater at a central location between the wireless router and your wireless computers.



Point to Point Bridge (WDS)

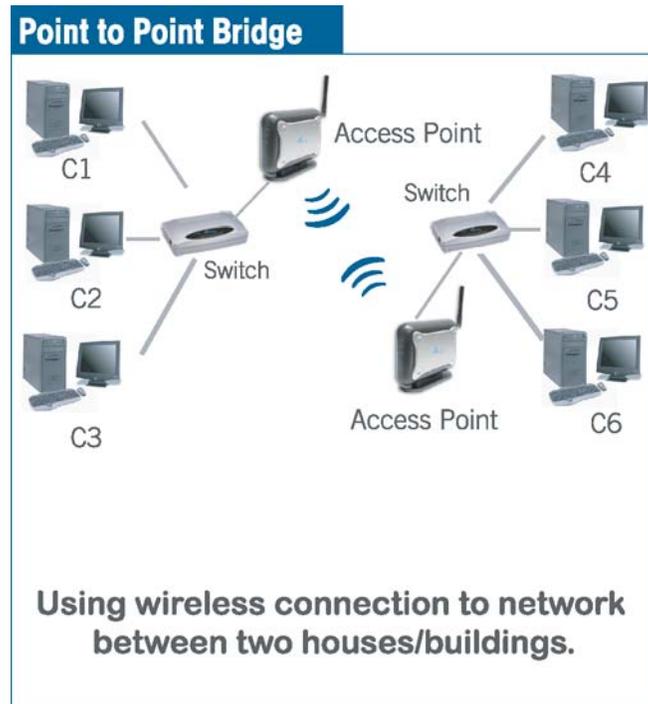
The Point to Point Bridge mode converts the Access Point to a wireless bridge. It bridges the network clients from two physically separate LANS into one virtual LAN.

Step 1 Select **Point to Point Bridge** and enter the MAC address of the remote AP and click **Apply** to save the changes.



The screenshot shows a configuration window for 'Point to Point Bridge (WDS)'. The title bar is highlighted with a red box. Below the title, the text 'Please input the MAC of the remote AP' is followed by an empty text input field, also highlighted with a red box. At the bottom, there are three buttons: 'Apply', 'Cancel', and 'Help'. The 'Apply' button is highlighted with a red box.

Step 2 Configure the other Access Point with reciprocal settings.



Section 5

Connecting to the Access Point

Once you have properly configured the Access Point, your wireless computers should be able to detect its signal.

Use your wireless network adapter's utility to detect and connect to the Access Point. You can identify the Access Point by its **MAC Address**, which is displayed in the **BSSID** field of your wireless network adapter's utility.

You can check the Access Point's **MAC Address** on its bottom label.



If the signal is weak, try reorienting the Access Point's antenna or relocate the Access Point to a different place.

For more detailed information about using the Access Point's Web Configuration Utility, please refer to the User's Manual on the provided CD.

Section 6

Technical Support

E-mail: support@airlink101.com

Toll Free: 1-888-746-3238

Web Site: www.airlink101.com

* Super G™ technology (108Mbps) can only be obtained when using products with Atheros Super G™ chipset.

* Theoretical maximum wireless signal rate based on Atheros™ Super G™ and IEEE standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, mix of wireless products used, radio frequency interference (e.g., cordless telephones and microwaves) as well as network overhead lower actual data throughput rate.

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