



Super G™ Multi-Functional Wireless Access Point

Model # AP431W

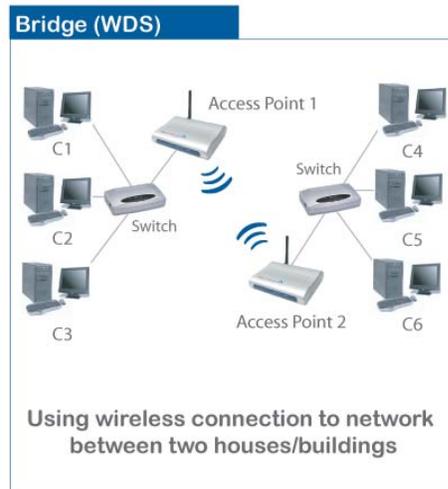
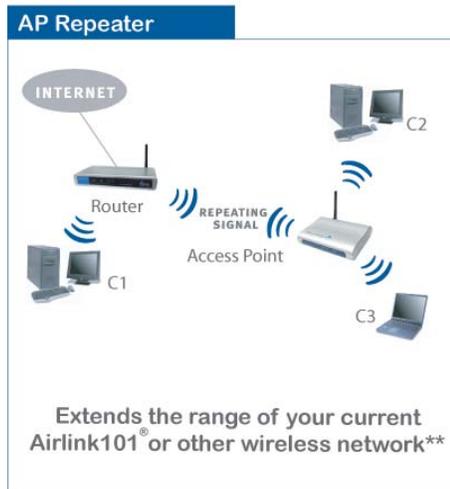
Quick Installation Guide

Section 1

This Quick Installation Guide only provides 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.



If you want to use the AP431W 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**
Encryption: **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.

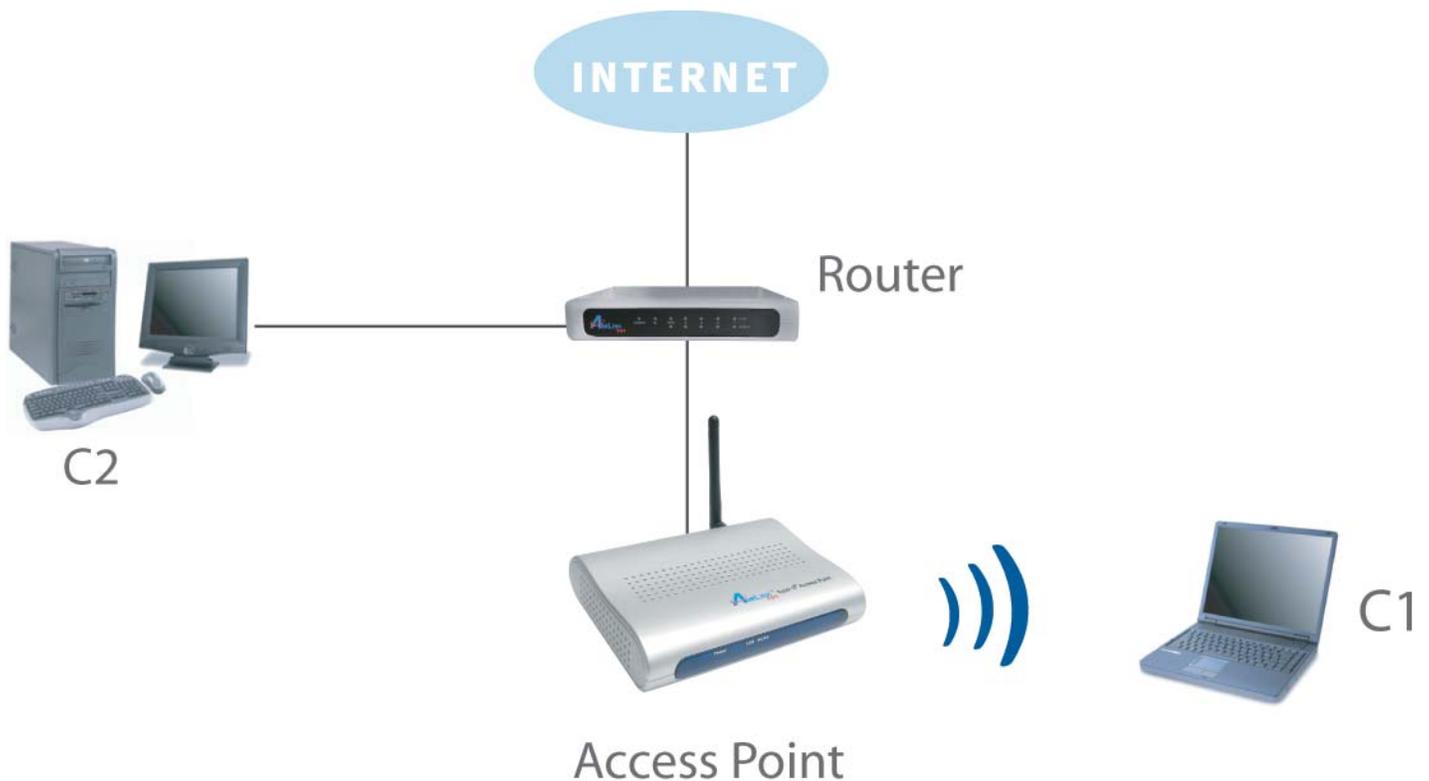
Section 2

Connecting the Access Point

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.

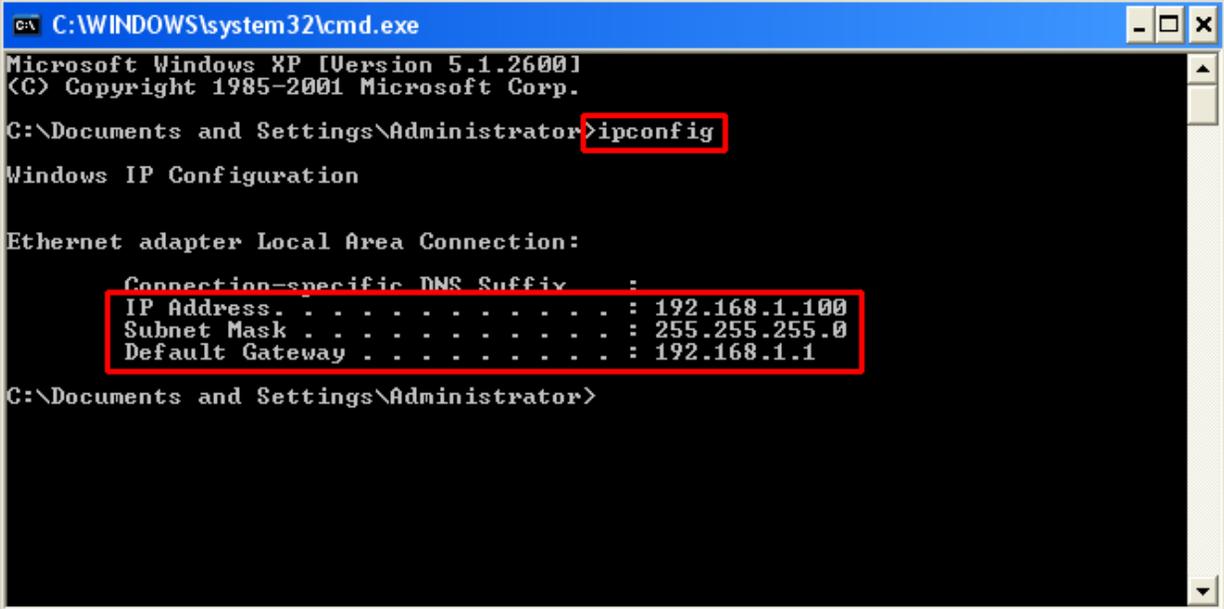


Section 3

Gathering Information

Step 1 From a computer connected to the router with a cable, 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 AP431W 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 AP431W needs to use the same wireless settings in order for it to work properly. You may gather this 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.

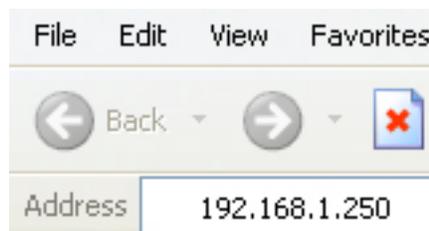
If the first three numbers of your **IP Address** are not **192.168.1**, (Ex. **192.168.2**), then please refer to **Section 4 of the User's Manual** in the provided CD for instructions on how to change the IP Address of the Access Point.

Section 4

Using Web Configuration Utility

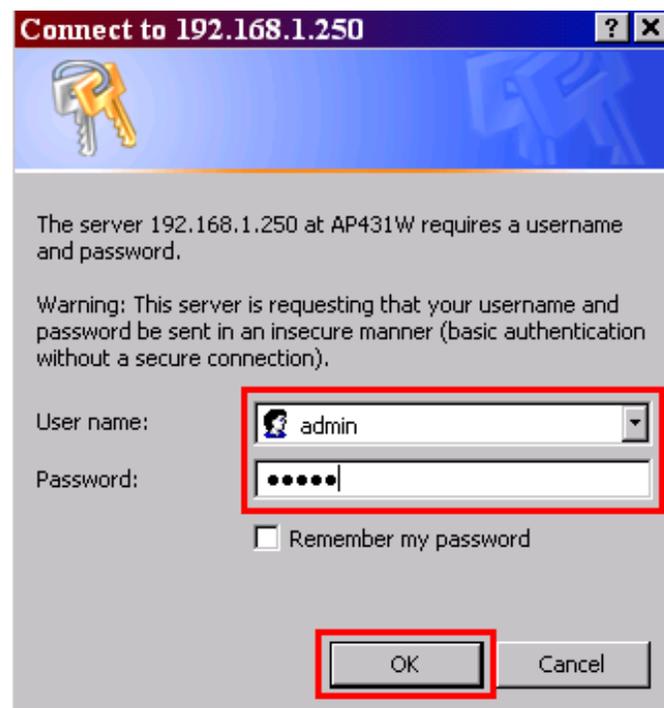
You can use the Access Point's built-in Web Configuration Utility to configure the encryption settings and operating modes. This section describes how to configure the Access Point's wireless and security settings. For information on the different operating modes, please refer to **Section 5, Selecting 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)** for your wireless network and select a **Channel** number.

The screenshot shows the 'Wireless' configuration page. The 'Wireless' tab is highlighted in a red box. The MAC Address is 00:17:9a:b7:29:2b. The Super G Mode is set to 'Disable'. The SSID is set to 'default'. The SSID Broadcast is set to 'Enable'. The Channel is set to '6', and the 'Auto Channel Scan' checkbox is unchecked.

Step 4 You may enable encryption (authentication) for your wireless network for security purpose, or to match the encryption settings of your existing Access Point. Select an encryption mode from the **Authentication** drop-down list.

The screenshot shows the 'Wireless' configuration page with the 'Authentication' dropdown menu open. The MAC Address is 00:17:9a:b7:29:2b. The Super G Mode is set to 'Disable'. The SSID is set to 'default'. The SSID Broadcast is set to 'Enable'. The Channel is set to '6', and the 'Auto Channel Scan' checkbox is unchecked. The Transmission Rates are set to 'Auto'. The Authentication dropdown menu is open, showing options: Open System (selected), Shared Key, Open System/Shared Key, WPA-EAP, WPA-PSK, WPA2-EAP, WPA2-PSK, WPA-Auto-EAP, and WPA-Auto-PSK. The Encryption is set to 'Disable'. The Key Type is set to 'HEX'. The Valid Key is set to 'First'. The First Key is set to '64 Bits'. The Second Key, Third Key, and Fourth Key fields are empty. The Firmware Version is AP431W.v100.r541.t579-51.

WEP (Wired Equivalent Privacy)

Step 4a WEP is a basic encryption type for wireless network.

- **Open System** and disabling **Encryption** implies no encryption
- **Open System** and enabling **Encryption** implies WEP open system mode
- **Shared Key** and enabling **Encryption** implies WEP shared key mode
- **Open System/Shared Key** and enabling **Encryption** implies WEP auto switch mode

A screenshot of a wireless network configuration interface. The 'Authentication' dropdown is set to 'Open System'. The 'Encryption' section has radio buttons for 'Disable' and 'Enable', with 'Enable' selected. A red box highlights the 'Open System' option in the encryption dropdown menu. The 'Key Type' is set to 'HEX' and the 'Key Size' is set to '64 Bits'. The 'Valid Key' dropdown is set to 'First'. The 'First Key' field contains a series of dots representing a password. There are also fields for 'Second Key', 'Third Key', and 'Fourth Key'.

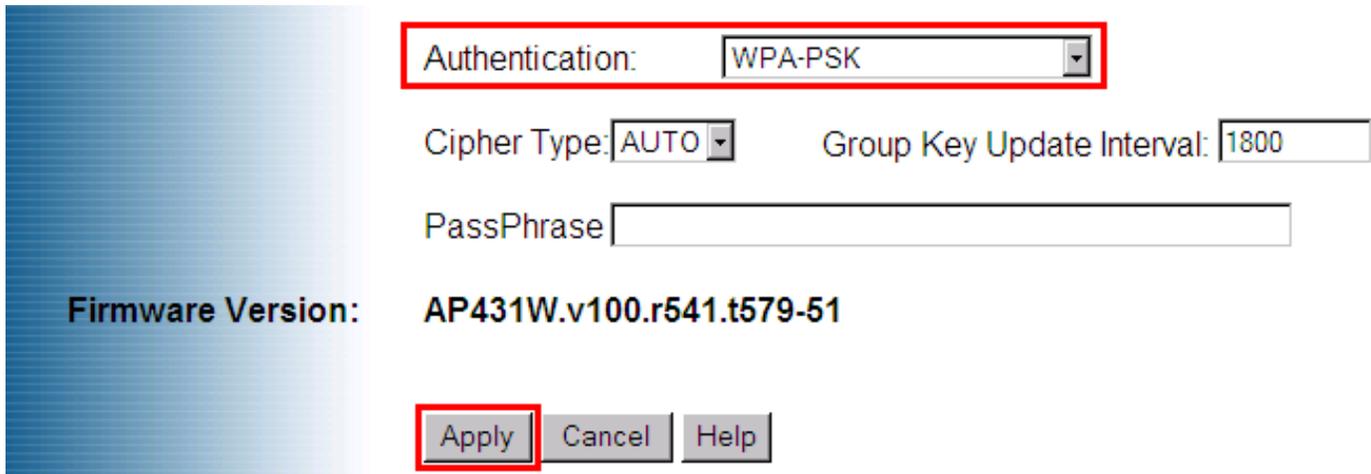
Step 4b Enable **Encryption**, and select the same **Key Type** and **Key Size** (64-Bits / 128-Bits / 152 Bits) from the drop-down menus for your wireless network.

Enter the same key (password) of your wireless network in the **First Key** field and click **Apply**.

A screenshot of a wireless network configuration interface. The 'Wireless' section is active. The 'MAC Address' is 00:17:9a:b7:29:2b. 'Super G Mode' is set to 'Disable'. 'SSID' is 'default'. 'SSID Broadcast' is 'Enable'. 'Channel' is '6' and 'Auto Channel Scan' is unchecked. 'Transmission Rates' is 'Auto'. 'Authentication' is 'Shared Key'. The 'Encryption' section has radio buttons for 'Disable' and 'Enable', with 'Enable' selected. A red box highlights the 'Enable' radio button. The 'Key Type' is 'HEX' and 'Key Size' is '64 Bits'. The 'Valid Key' dropdown is 'First'. The 'First Key' field contains a series of dots representing a password. There are also fields for 'Second Key', 'Third Key', and 'Fourth Key'.

WPA-PSK (WiFi Protected Access-Pre Shared Key)

Step 4c WPA-PSK and WPA-2PSK are more secured than WEP and highly recommended. Select **WPA-PSK** or **WPA2-PSK** from the drop-down menu and enter the key value in the **PassPhrase**. Click **Apply**.



The screenshot shows a network configuration interface with a blue gradient background on the left. The 'Firmware Version' is listed as 'AP431W.v100.r541.t579-51'. The 'Authentication' dropdown menu is set to 'WPA-PSK'. The 'Cipher Type' is set to 'AUTO' and the 'Group Key Update Interval' is set to '1800'. The 'PassPhrase' field is empty. The 'Apply' button is highlighted with a red box.

Firmware Version: AP431W.v100.r541.t579-51

Authentication: WPA-PSK

Cipher Type: AUTO Group Key Update Interval: 1800

PassPhrase

Apply Cancel Help

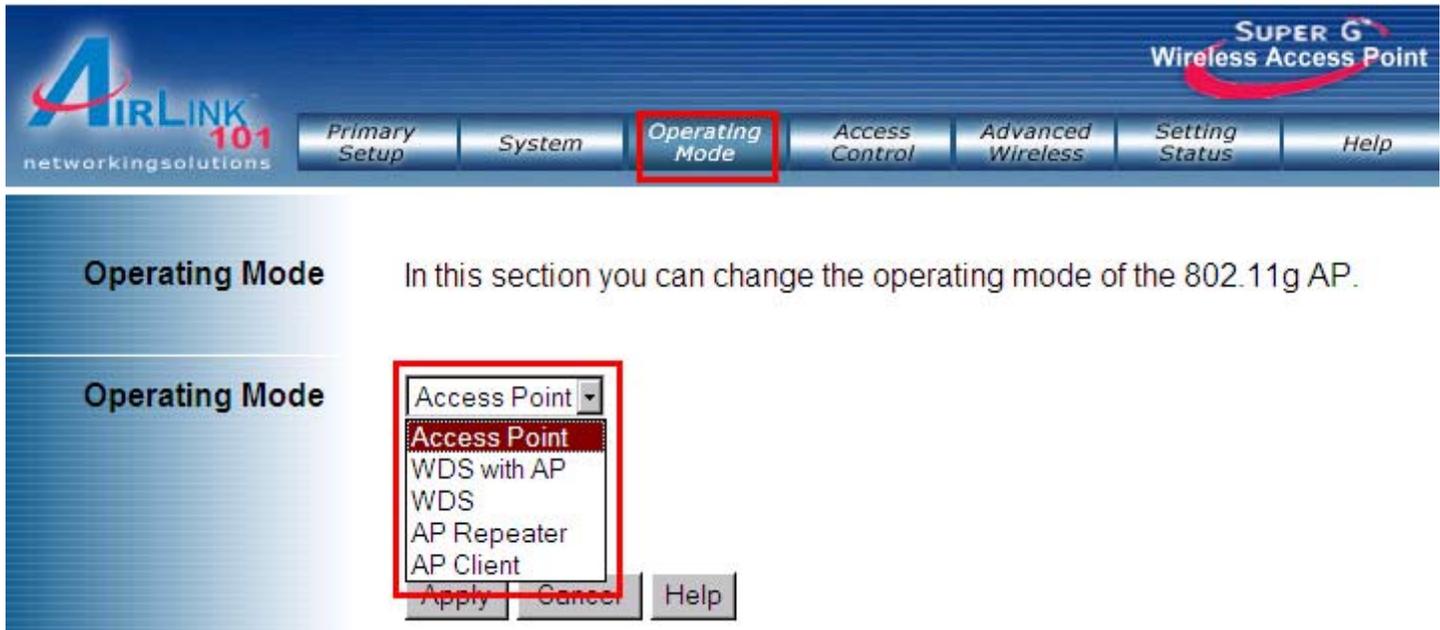
You can refer to the User Manual in the provided CD for other authentication types.

Section 5

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 top navigation bar includes tabs for 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 text: "In this section you can change the operating mode of the 802.11g AP." Below this text is a dropdown menu for "Operating Mode" with a red box around it. The menu options are: Access Point (selected), WDS with AP, WDS, AP Repeater, and AP Client. At the bottom of the menu are buttons for Apply, Cancel, and Help.

Access Point

This mode allows your wireless computers to connect to your wired network. (Default mode)



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 AP you want to connect to. You can also click on the **Scan** button to display the available wireless networks, and select the desired wireless network from the list.

Step 2 Click **Apply** to save the changes.

Operating Mode In this section you can change the operating mode of the 802.11g AP.

Operating Mode

Remote AP MAC Address

SSID

| Type | CH | Signal | BSSID | Security | SSID |
|------------------------------|----|--------|-------------------|----------|-----------------|
| <input type="radio"/> AP BSS | 10 | 100% | 00:0d:72:f3:68:e1 | WEP | 2WIRE217 |
| <input type="radio"/> AP BSS | 11 | 100% | 00:09:5b:dd:f0:b6 | WPA-PSK | TemporarilyDown |

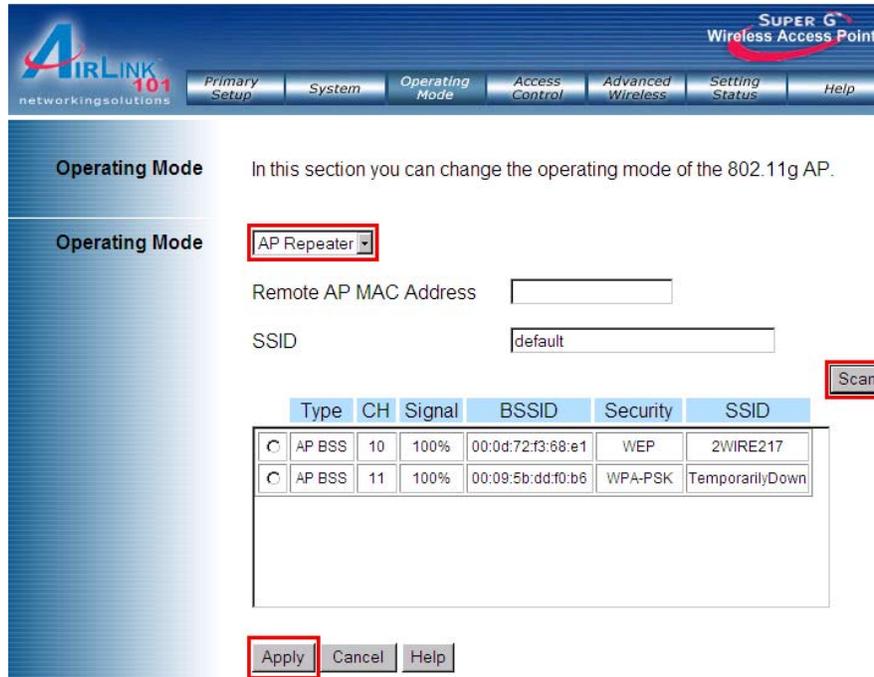
Step 3 Once the Access Point has restarted, you may disconnect it from the wireless router and connect it to the Ethernet port of your computer or game console, and reboot the Access Point.



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 or use the **Scan** button to search for the remote AP (source AP/wireless router). Click **Apply** to save the changes



Operating Mode In this section you can change the operating mode of the 802.11g AP.

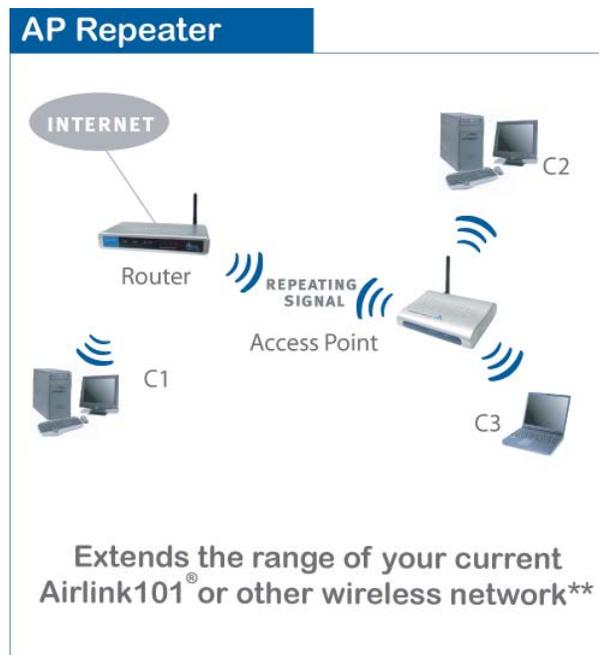
Operating Mode

Remote AP MAC Address

SSID

| Type | CH | Signal | BSSID | Security | SSID | |
|------|--------|--------|-------|-------------------|---------|-----------------|
| C | AP BSS | 10 | 100% | 00:0d:72:f3:68:e1 | WEP | 2WIRE217 |
| C | AP BSS | 11 | 100% | 00:09:5b:dd:f0:b6 | WPA-PSK | TemporarilyDown |

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.



Note: The repeater mode may not be compatible with all routers due to the lack of a standard protocol for repeater mode.

WDS (Bridge)

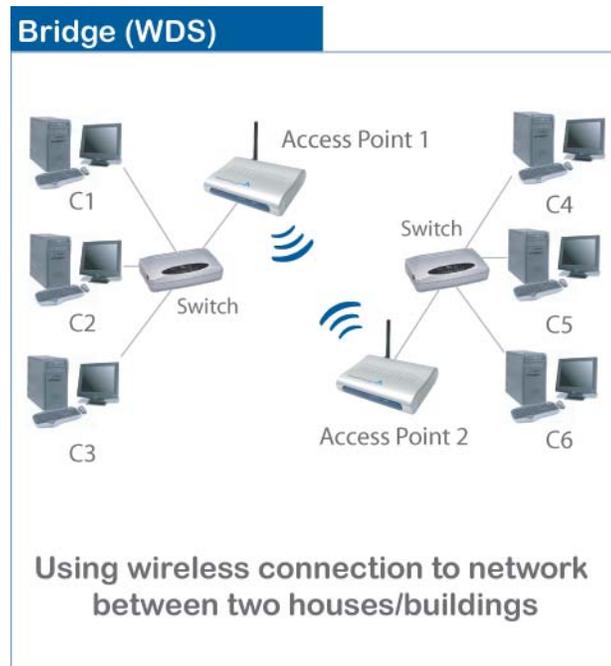
The WDS mode converts the Access Point to a wireless bridge. It bridges the network clients from physically separate LANs into one virtual LAN.

Step 1 Select **WDS** and enter the MAC address of the remote APs. Click **Apply** to save the changes.

The screenshot shows the AIRLINK 101 web interface. The top navigation bar includes: AIRLINK 101 networkingsolutions, Primary Setup, System, Operating Mode (selected), Access Control, Advanced Wireless, Setting Status, and Help. The main content area is titled "Operating Mode" and contains the following elements:

- Text: "In this section you can change the operating mode of the 802.11g AP."
- Operating Mode dropdown menu: Set to "WDS".
- Section: "Remote AP MAC Address" containing eight input fields numbered 1 through 8.
- Buttons: "Apply", "Cancel", and "Help".

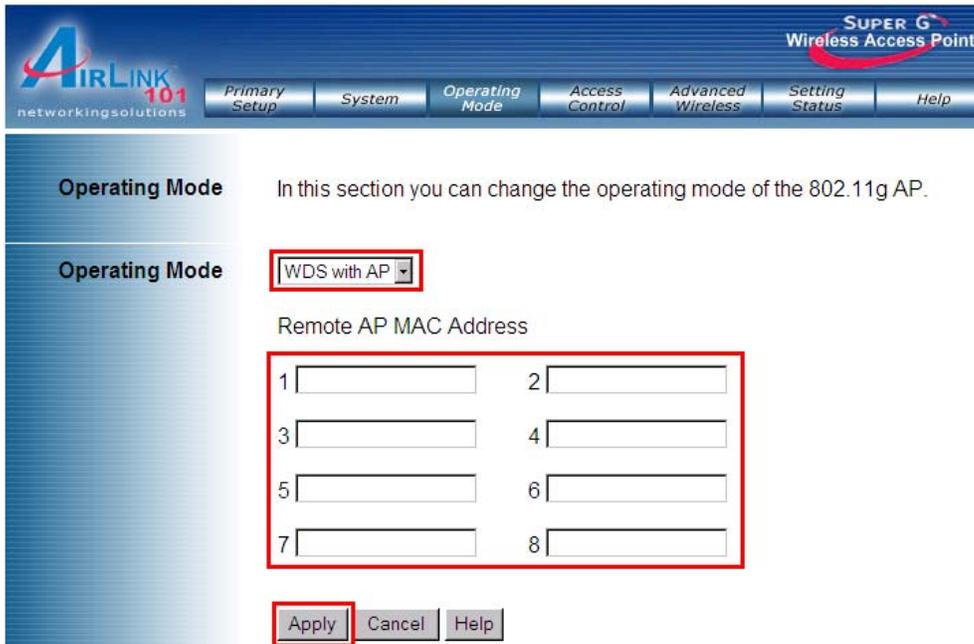
Step 2 Configure other Access Points in the same way.



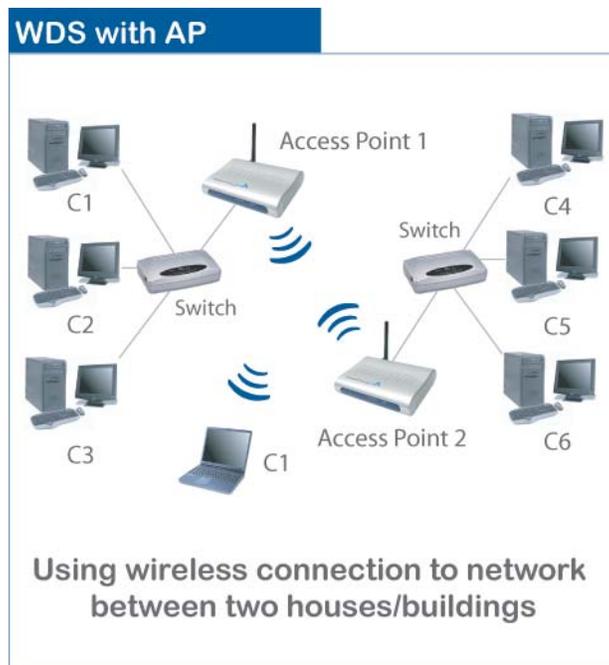
WDS with AP

The WDS mode converts the Access Point to a wireless bridge. It bridges the network clients from physically separate LANs into one virtual LAN and allows wireless clients to connect to the network via the Access Point.

Step 1 Select **WDS with AP** and enter the MAC address of the remote APs. Click **Apply** to save the changes.



Step 2 Configure other Access Points in the same way.



Section 6

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 7

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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