



# Wireless 300N Gigabit Router

Model # AR690W

## User's Manual

Ver. 1A

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# 1. Introduction

Congratulations on your purchase of the AR690W Wireless 300N Gigabit Router. The Wireless 300N Router is recommended to be used with AirLink101® Wireless 300N products to provide the best performance. The high bandwidth combined with extended wireless coverage delivers fast and reliable connections for all of your networking applications. The built-in gigabit switch highly increases the wired Ethernet speed.

A full range of security features such as WEP, WPA-PSK, and WPA2-PSK provide the highest level of wireless network security. The built-in Web Configuration Utility allows you to set up the router with an easy-to-use user interface. Best of all, the AR690W works with 802.11g and 802.11b network devices that ensures compatibility with your existing wireless products.

## 1.1 Package Contents

Before you begin the installation, please check the items of your package:

- Wireless 300N Router
- RJ-45 Cable
- Power Adapter
- Quick Installation Guide
- Manual CD

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packaging materials in case you need to ship the unit in the future.

## 1.2 Features

- Industry's highest wireless data rate of up to 300Mbps with IEEE 802.11n draft specification 2.0
- 3 external fixed antennas for wider coverage and stronger signal strength to eliminate dead spots
- 64-bit/128-bit WEP encryption, Pre-shared Key (PSK), and Wi-Fi Protected Access (WPA2 and WPA) support provide full protection for your wireless connection
- Stronger signal strength increases the reliability and speed of wireless connections
- Great for environments with higher wireless data traffic requirements
- Fully backward-compatible with 802.11b/g devices
- Works best with AirLink101® Wireless N and 300N Adapters

## 2. Connecting the Router

**Note:** Prior to connecting the router, be sure to power off your computer, DSL/Cable modem, and the router. You should setup the router with a wired connection first before attempting to setup any wireless connections.

**Step 1** Connect one end of a network cable to the **WAN** port of the router and connect the other end of the cable to the DSL/Cable modem.

**Step 2** With another network cable, connect one end of the cable to your computer's network card and connect the other end to one of the **LAN (Ethernet)** ports of the router.






**Step 3** Power on the DSL/Cable modem and wait for the lights on the modem to settle down.

**Step 4** Power on the router by connecting one end of the supplied power adapter to the power jack of the router and connecting the other end to an electrical outlet.

**Step 5** Power on your computer.

**Step 6** Make sure the **WAN**, **WLAN**, and the **LAN** ports that the computer is connected to are lit. If not, try the above steps again.

### AR690W Icon Illustrations:

Power	Status	WAN	Wireless	LAN	WPS
				1 ~ 4	

Power

**On:** Power on

Status

**Blinking:** Functioning properly

WAN

**On:** Link established

**Blinking:** Data transmission

Wireless

**On:** Wireless is ready

**Blinking:** Data transmission

LAN

**On (Green):** 1000Mbps device is connected

**Blinking (Green):** Data transmit under 1000Mbps mode

**On (Orange):** 100Mbps device is connected

**Blinking (Orange):** Data transmit under 100Mbps mode

WPS (WiFi Protected Setup)

**Blinking Blue:** WPS set up in progress

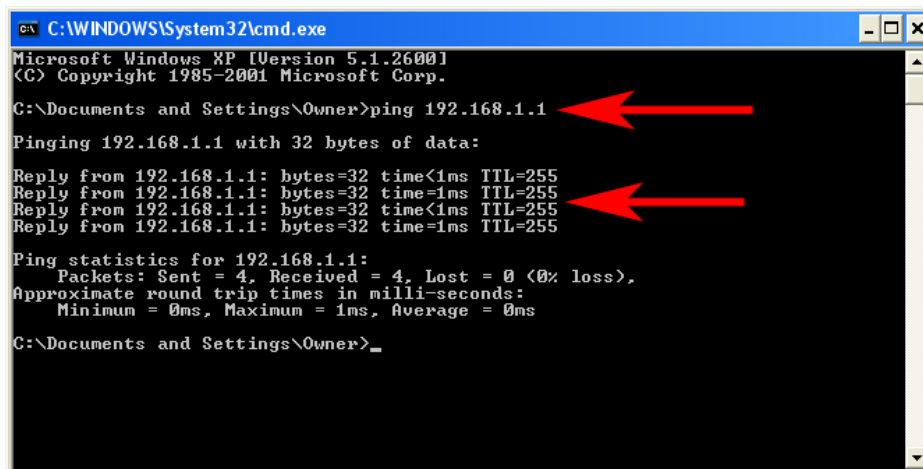
**Static Blue:** WPS set up successfully

**Blinking Red:** Error found

### 3. Verifying Connection to the Router

**Step 1** Go to **Start, Run**, type **command** (for Windows 95/98/ME) or **cmd** (for Windows 2000/XP) and click **OK**. You will see the command prompt as below.

**Step 2** Type **ping 192.168.1.1** and press **Enter**. You should get four reply responses back.



```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Owner>ping 192.168.1.1
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=1ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Documents and Settings\Owner>_
```

**Step 3** If you get **Request timed out**, or **Destination host unreachable**, double-check the network cable connection between the computer and the router and try **Step 2** again. If you still encounter problem, go to the next step; otherwise proceed to **Section 3, Configuring the Router**.

**Step 4** For Windows 2000/XP, type **ipconfig/release** and press **Enter**. (Windows 98se/ME users skip ahead to **Step 6**)

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Owner>ipconfig/release
Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . :
    IP Address. . . . .                : 0.0.0.0
    Subnet Mask . . . . .              : 0.0.0.0
    Default Gateway . . . . .          :
```

**Step 5** Type **ipconfig/renew** and press **Enter**. You should get an IP address of **192.168.1.x** (where **x** is a number between 2 - 254). Proceed to **Section 3, Configuring the Router**. If you don't get an IP address, reset the router by holding in the reset button at the back of the router for 10 seconds while it is ON and try **ipconfig/renew** again.

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Owner>ipconfig/renew
Windows IP Configuration

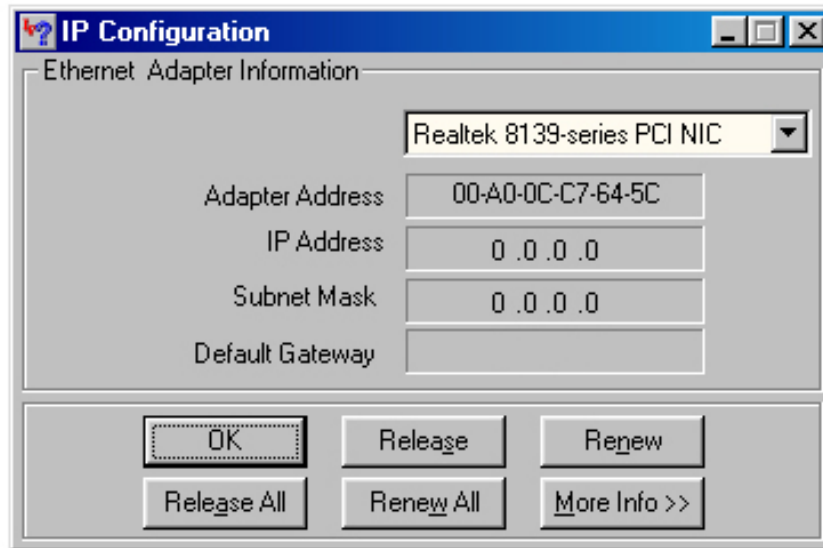
Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . :
    IP Address. . . . .                : 192.168.1.5
    Subnet Mask . . . . .              : 255.255.255.0
    Default Gateway . . . . .          : 192.168.1.1

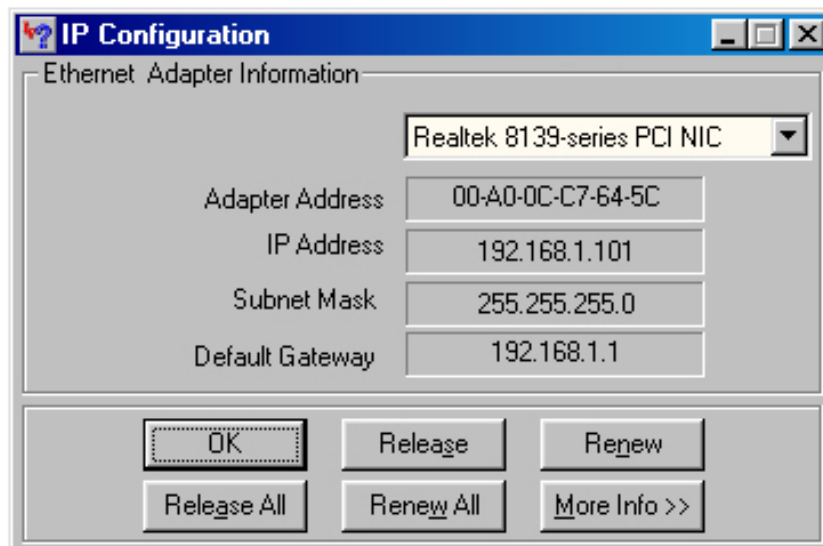
C:\Documents and Settings\Owner>_
```

**Step 6** For Windows 95/98/ME go to **Start, Run**, type **winipcfg** and click **OK**. (Step is not necessary for Windows 2000/XP)

**Step 7** Select your network card from the drop-down menu and click **Release**.



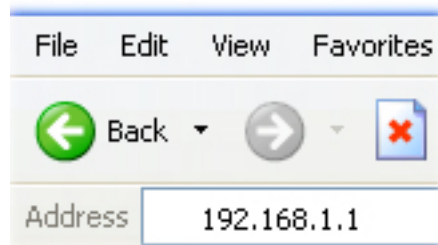
**Step 8** After your IP address is released, click **Renew**. You should get an IP address of **192.168.1.x** (where **x** is a number between 2 - 254). If you don't get an IP address, reset the router by holding in the reset button at the back of the router for 10 seconds while it is ON and try **Renew** again.



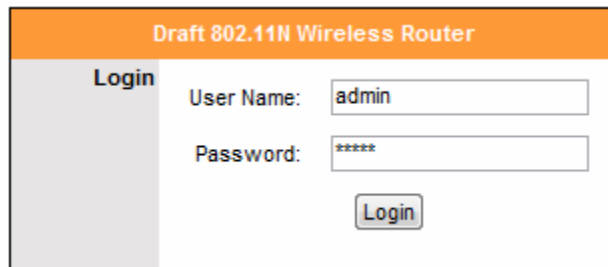


## 4. Configuring the Router

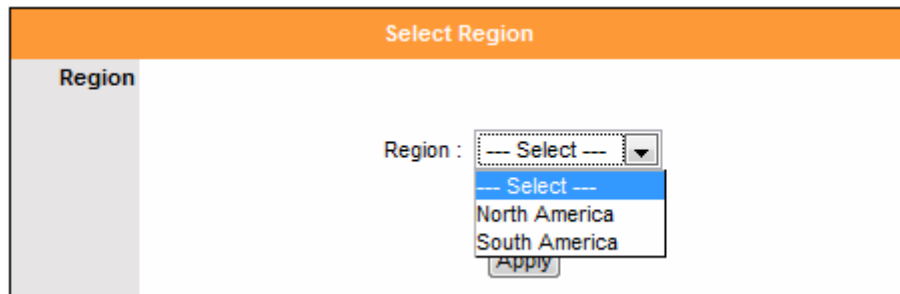
**Step 1** Open the web browser and type **192.168.1.1** in the URL Address field and press **Enter**.



**Step 2** Enter **admin** for both the username and password fields and click **Login**.

A screenshot of a web page titled 'Draft 802.11N Wireless Router'. On the left side, there is a grey vertical bar with the word 'Login' in white. To the right of this bar, there are two input fields. The first is labeled 'User Name:' and contains the text 'admin'. The second is labeled 'Password:' and contains six asterisks '\*\*\*\*\*'. Below these fields is a button labeled 'Login'.

**Step 3** Select the proper region, **North America** or **South America**, and click **Apply**.

A screenshot of a web page titled 'Select Region'. On the left side, there is a grey vertical bar with the word 'Region' in white. To the right of this bar, there is a label 'Region:' followed by a dropdown menu. The dropdown menu is open, showing three options: '-- Select --' (highlighted in blue), 'North America', and 'South America'. Below the dropdown menu is a button labeled 'Apply'.

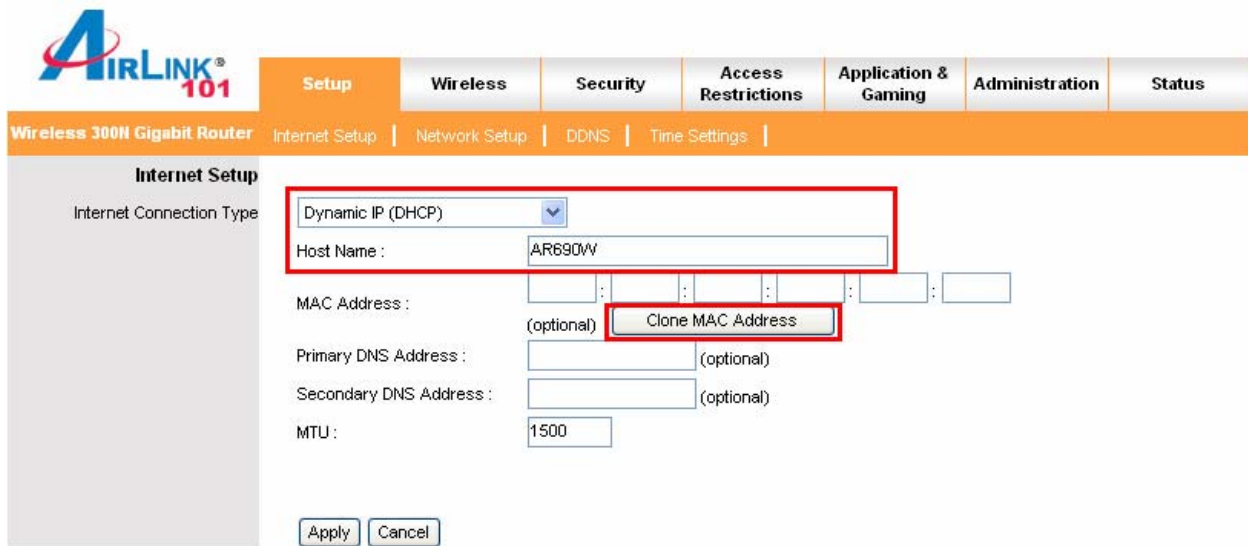
**Warning:** This device requires that the user or installer properly selects the current region of operation before using this device. This device will automatically limit the allowable channels determined by the current region of operation. **Incorrectly selecting the current region of operation may result in illegal operation and may cause harmful interference to other systems.** The user is obligated to ensure the

device is operating according to the channel limitations, indoor/outdoor restrictions and license requirements for the current country of operation.

## Cable Modem

For most cable modem users, you should be able to connect to the Internet without any configuration. If your ISP has provided you with a host name, enter it in the optional **Host Name** field.

Click on the **Clone MAC Address** button. Click **Apply** and **OK** to save the settings.



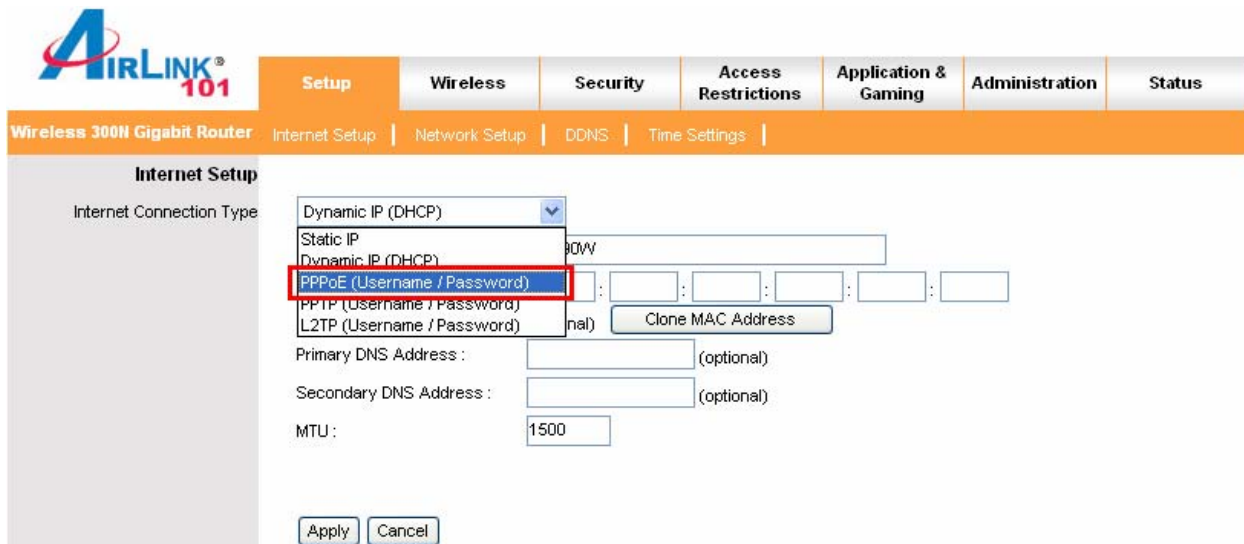
The screenshot shows the configuration interface for an AIRLINK 101 Wireless 300N Gigabit Router. The 'Internet Setup' section is active, showing the 'Internet Connection Type' dropdown set to 'Dynamic IP (DHCP)'. The 'Host Name' field is populated with 'AR690W'. Below this, the 'MAC Address' field is empty, and the 'Clone MAC Address' button is highlighted with a red box. The 'Primary DNS Address' and 'Secondary DNS Address' fields are also empty, both marked as optional. The 'MTU' field is set to '1500'. At the bottom, there are 'Apply' and 'Cancel' buttons.

If you have trouble connecting to the Internet, please refer to the **Troubleshooting** section at the end of this guide.

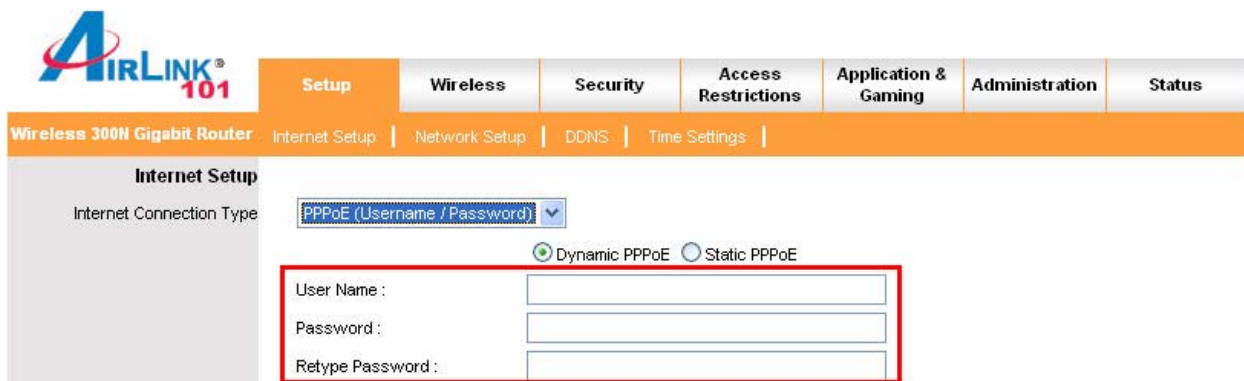
## DSL

For DSL users, follow the steps below to configure the router.

**Step 1** Select **PPPoE** from the drop-down menu.



**Step 2** Enter your username and password provided by your ISP.



**Note:** Depending on the ISP, you may need to include the domain name with your username.

**Example:**        **username@sbcglobal.net**

**Step 3** Click **Apply** and **OK** to save the settings.

If you have trouble connecting to the Internet, please refer to the **Troubleshooting** section at the end of this manual.

## 5. Connecting to the Router Wirelessly

Below are the default wireless settings of the router. You must configure your wireless network card to the same settings in order to establish a wireless connection to the

router. Please refer to your wireless network card's manual on how to configure these settings.

SSID: **default**

Operating Mode: **Infrastructure**

Authentication: **Open System**

Channel #: **6**

WEP: **disabled**

If you want to change the router's wireless settings, log in to the router and select the **Wireless** tab. Make sure that you click **Apply** and **OK** to save the settings.



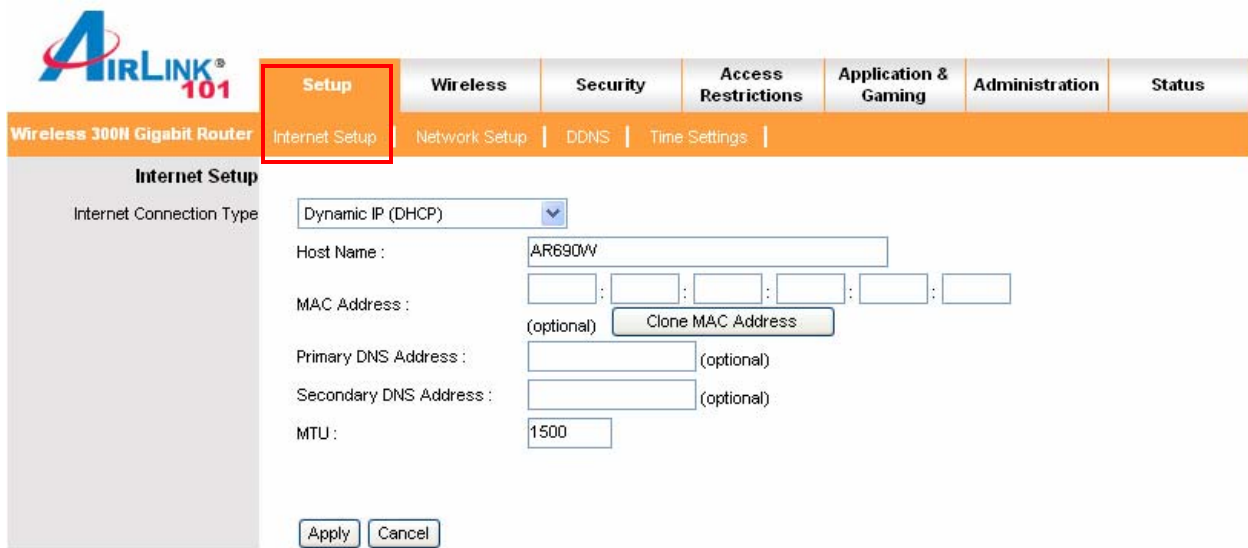
For more information about wireless settings, refer to section **6.2**.

## 6. Web Configuration Utility

This router has a built-in web configuration utility that you can use to configure the router's settings. Simply log in to the router using your computer's web browser.

### 6.1 Setup

#### 6.1.1 Internet Setup



The screenshot shows the web configuration utility for an AIRLINK 101 Wireless 300N Gigabit Router. The 'Setup' menu item is highlighted in red. The 'Internet Setup' page is active, showing the following configuration options:

- Internet Connection Type: Dynamic IP (DHCP)
- Host Name: AR690V
- MAC Address: [ ] : [ ] : [ ] : [ ] : [ ] : [ ] (optional) Clone MAC Address
- Primary DNS Address: [ ] (optional)
- Secondary DNS Address: [ ] (optional)
- MTU: 1500

Buttons for 'Apply' and 'Cancel' are located at the bottom of the form.

This is the default screen when you log in to the router's web configuration utility. You can setup your Internet connection here.

## 6.1.2 Network Setup

Network Setup allows manually configuring TCP/IP and DHCP settings.

**AIRLINK® 101**

300N Wireless Router

Setup | Wireless | Security | Access Restrictions | Application & Gaming | Administration | Status

Internet Setup | **Network Setup** | DDNS | Time Settings

**Network Setup**

Router IP

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Local Domain Name: (optional)

Enable DNS Relay: Enabled

DHCP Server Settings

DHCP Server: Enabled

Starting IP Address: 192.168.1.100

Ending IP Address: 192.168.1.199

Lease Time: 10080 (minutes)

**Static DHCP Settings**

DHCP Entries: 1 (---) Delete This Entry Static DHCP List

Enable: Disabled

Name: << Computer Name

IP Address: 192.168.1.

MAC Address: : : : : :  
Copy Your PC's MAC Address

Apply Cancel

### Assigning Static DHCP Settings

**Step 1** Select **Enabled** in the under the Static DHCP Settings section

**Step 2** Select a computer name from the drop-down menu or enter a name associated with this Static IP Address

**Step 3** Enter the Static IP Address in the **IP Address** field

**Step 4** Enter the MAC address of the corresponding computer in the **MAC Address** field

Remember to click **Apply** and **OK** to save your changes.

### 6.1.3 DDNS

Dynamic DNS (DDNS) allows any user who wishes to access your server to reach it by a registered DNS name instead of an IP address. Before you enable **DDNS**, you need to register an account with one of the DDNS providers listed in the drop-down menu.



The screenshot shows the configuration interface for the DDNS service on an AirLink 101 300N Wireless Router. The interface includes a navigation menu at the top with tabs for Setup, Wireless, Security, Access Restrictions, Application & Gaming, Administration, and Status. Below this is a sub-menu for the 300N Wireless Router, with tabs for Internet Setup, Network Setup, DDNS, and Time Settings. The DDNS configuration page is titled "DDNS" and "DDNS Service". It contains the following fields:

- Enable DDNS: A dropdown menu currently set to "Disabled".
- Server Address: A dropdown menu currently set to "DynDns.org".
- Host Name: A text input field.
- Username: A text input field.
- Password: A text input field.

At the bottom of the form are two buttons: "Apply" and "Cancel".

To Enable DDNS, select the DDNS provider you have registered with and enter the required fields. Click **Apply** and **OK** to save the settings.

## 6.1.4 Time Settings

Time Settings allow you to configure the router clock.

The screenshot displays the 'Time Settings' configuration page for an AIRLINK 101 300N Wireless Router. The interface includes a top navigation bar with tabs for 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Application & Gaming', 'Administration', and 'Status'. Below this, a secondary navigation bar highlights 'Time Settings' among other options like 'Internet Setup', 'Network Setup', and 'DDNS'. The main content area is titled 'Time Settings' and shows the current device time as 'Apr 15, 2007 11:17:34'. Under 'Synchronize the device's clock', three radio buttons are present: 'Automatic (Simple Network Time Protocol)' (selected), 'Your computer's clock', and 'Manual (Enter your own settings)'. The 'Time Zone' is set to '(GMT-08:00) Pacific Time (US & Canada); Tijuana'. A 'Daylight Saving' checkbox is unchecked. The 'Get the time automatically via Network Time Protocol(NTP)' section includes an 'NTP Server' field with 'clock.isc.org', an 'Interval' dropdown set to '24 hrs', and a 'Time' section with dropdown menus for Year (2007), Month (04), Day (15), Hour (11), Minute (17), and Second (34). 'Apply' and 'Cancel' buttons are located at the bottom of the form.

**Automatic** connects to the internet and synchronizes the router's clock with time provided by accurate timeservers on the internet. Using this feature requires that your router have a working internet connection.

**Your computer's clock** allows you to synchronize the router's clock with your computer's system clock

**Manual** provides you with the option of setting your own date and time.

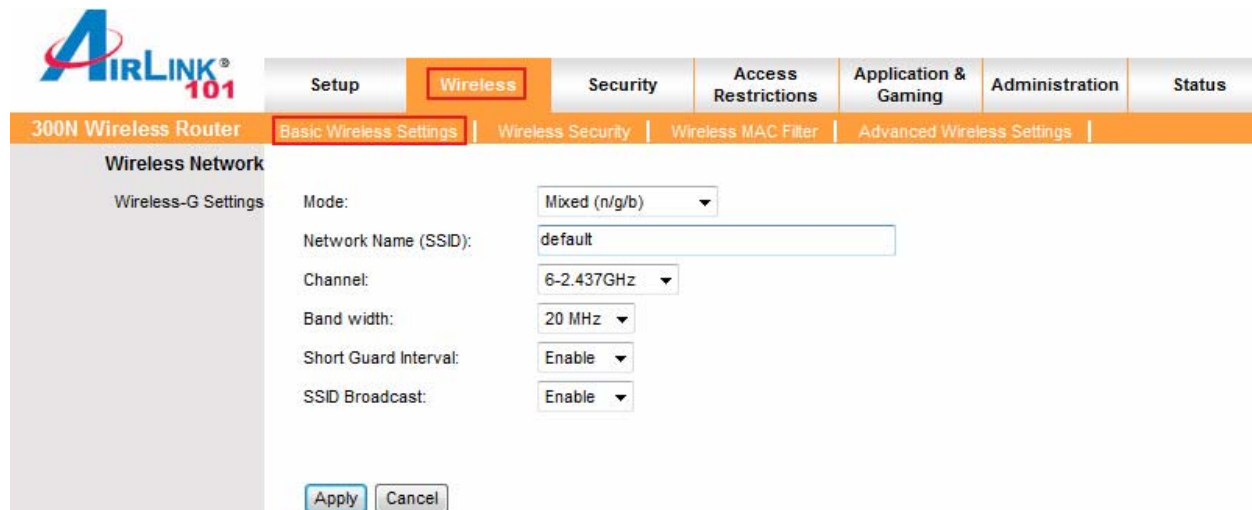
Click **Apply** and **OK** to save the settings.



## 6.2. Wireless

### 6.2.1 Basic Wireless Settings

You can configure the router's basic wireless settings on this screen.



The screenshot shows the configuration interface for an AIRLINK 101 300N Wireless Router. The 'Wireless' tab is selected in the top navigation bar. Below it, the 'Basic Wireless Settings' sub-tab is active. The settings are as follows:

Setting	Value
Mode	Mixed (n/g/b)
Network Name (SSID)	default
Channel	6-2.437GHz
Band width	20 MHz
Short Guard Interval	Enable
SSID Broadcast	Enable

Buttons for 'Apply' and 'Cancel' are located at the bottom of the settings area.

**Mode:** Choose from Mixed (n/g/b), Mixed (g/b), Wireless-11n Only, Wireless-11g Only, Wireless-11b Only, or Disabled to stop wireless function.

**Network Name (SSID):** You can change the router's SSID in this field. The SSID is the name that your router sends out wirelessly. Once you have changed the SSID, your network clients need to re-connect themselves using the new SSID.

**Channel:** Select the desired channel.

Changing channels is useful when you are experiencing slow, unstable wireless connections, or if you are unable to establish a wireless connection at all.

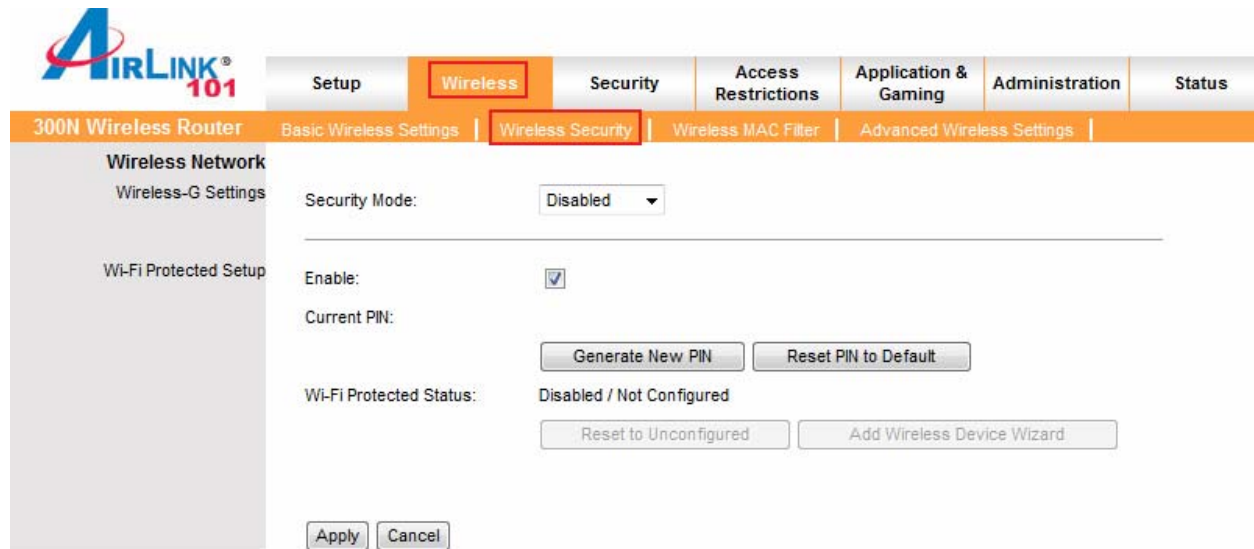
Your router has 11 channels available (1-11). Start with channel 1 and work your way up. Each time you change channels on the router, restart the wireless computers and then try to connect. If the computers are able to connect, test the channel out for a while and make sure that they hold the connection. Keep changing channels until you find one that gives you a stable connection.

All the network clients need to be using the same channel.

**SSID Broadcast:** Choose to enable or disable the broadcasting of your SSID.

## 6.2.2 Wireless Security

You can configure wireless security such as WEP or WPA encryption on this screen.

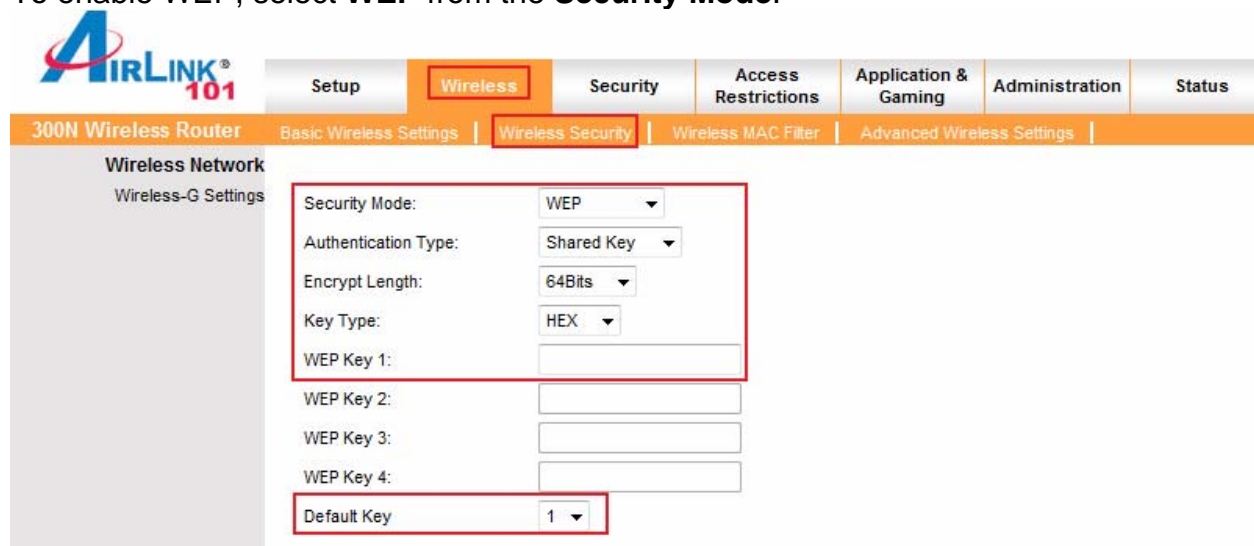


The screenshot shows the configuration page for the AIRLINK 101 300N Wireless Router. The 'Wireless' tab is selected, and the 'Wireless Security' sub-tab is active. The 'Security Mode' is set to 'Disabled'. The 'Wi-Fi Protected Setup' section is expanded, showing 'Enable' checked, 'Current PIN' field, and buttons for 'Generate New PIN' and 'Reset PIN to Default'. The 'Wi-Fi Protected Status' is 'Disabled / Not Configured', with buttons for 'Reset to Unconfigured' and 'Add Wireless Device Wizard'. 'Apply' and 'Cancel' buttons are at the bottom.

**Note:** It is recommended that you use WPA-PSK or WPA2-PSK encryption over WEP if your wireless clients support it. All of the wireless clients must use the same security settings in order to connect to the router.

### WEP

To enable WEP, select **WEP** from the **Security Mode**.



The screenshot shows the configuration page for the AIRLINK 101 300N Wireless Router. The 'Wireless' tab is selected, and the 'Wireless Security' sub-tab is active. The 'Security Mode' is set to 'WEP'. The 'Authentication Type' is 'Shared Key', 'Encrypt Length' is '64Bits', and 'Key Type' is 'HEX'. There are four input fields for 'WEP Key 1', 'WEP Key 2', 'WEP Key 3', and 'WEP Key 4'. The 'Default Key' is set to '1'. A red box highlights the 'Security Mode', 'Authentication Type', 'Encrypt Length', 'Key Type', and 'WEP Key 1' fields. Another red box highlights the 'Default Key' dropdown.

**Authentication Type:** Select “Shared Key”

**Encryption:** Choose **64 bits**

**Key Type:** Choose **HEX**

**WEP Key 1:** Enter a 10 digit number. This will be your wireless password. An easy one to remember is a phone number with area code (ex: 8887463238). You do not need to enter anything in WEP Key 2, 3 and 4.

**Default Key:** Select key 1

Click **Apply** and **OK** to save the settings.

## WPA

To enable WPA, select **WPA-PSK** or **WPA2-PSK** from the **Security Mode**.

The screenshot shows the configuration interface for the AIRLINK 101 300N Wireless Router. The 'Wireless Security' tab is selected, and the 'Wireless Security' sub-tab is active. The 'Security Mode' is set to 'WPA-PSK', 'Encryption Methods' is 'TKIP', and 'Passphrase Format' is 'ASCII'. The 'Passphrase' field is empty. The 'Key Renewal' is set to '1500' seconds. The 'Wi-Fi Protected Setup' section is expanded, showing 'Enable' checked, 'Current PIN' field, and 'Wi-Fi Protected Status' as 'Disabled / Not Configured'. The 'Apply' button is highlighted with a red box.

**Encryption Methods:** Select either **TKIP** or **AES** as the encryption method. AES is only supported by some newer cards, so make sure that your card supports AES before selecting that option. TKIP will work with most cards. If you are unsure, choose TKIP.

**Passphrase:** Enter a passphrase between 8 to 63 characters long. For best security, use a passphrase that is at least 30 characters long.

**Key Renewal:** Enter the desired key renewal time in seconds. It is best to leave this at the default setting of 1500.

Click **Apply** and **OK** to save the settings.

## WPA with RADIUS

If you are using a RADIUS server in your network for authentication, you may choose **WPA** or **WPA2** from the **Security Mode**.

The screenshot shows the configuration interface for the AIRLINK 101 300N Wireless Router. The 'Wireless' tab is selected, and the 'Wireless Security' sub-tab is active. The 'Security Mode' is set to 'WPA' and 'Encryption Methods' is set to 'TKIP'. The 'RADIUS Server' field is populated with '192.168.1.1', and the 'RADIUS Port' is set to '1812'. The 'Shared Key' field is empty. The 'Key Renewal' is set to '1500' seconds. Below these fields, the 'Wi-Fi Protected Setup' section is visible, with the 'Enable' checkbox checked. The 'Current PIN' field is empty, and there are buttons for 'Generate New PIN' and 'Reset PIN to Default'. The 'Wi-Fi Protected Status' is 'Disabled / Not Configured', with buttons for 'Reset to Unconfigured' and 'Add Wireless Device Wizard'. At the bottom, there are 'Apply' and 'Cancel' buttons.

**Encryption Methods:** Select either **TKIP** or **AES** as the encryption method.

**RADIUS Server:** Enter the IP Address of your RADIUS server.

**RADIUS Port:** Enter the port number of your RADIUS server.

**Shared Key:** Enter the shared key.

**Key Renewal:** Enter the desired key renewal time in seconds.

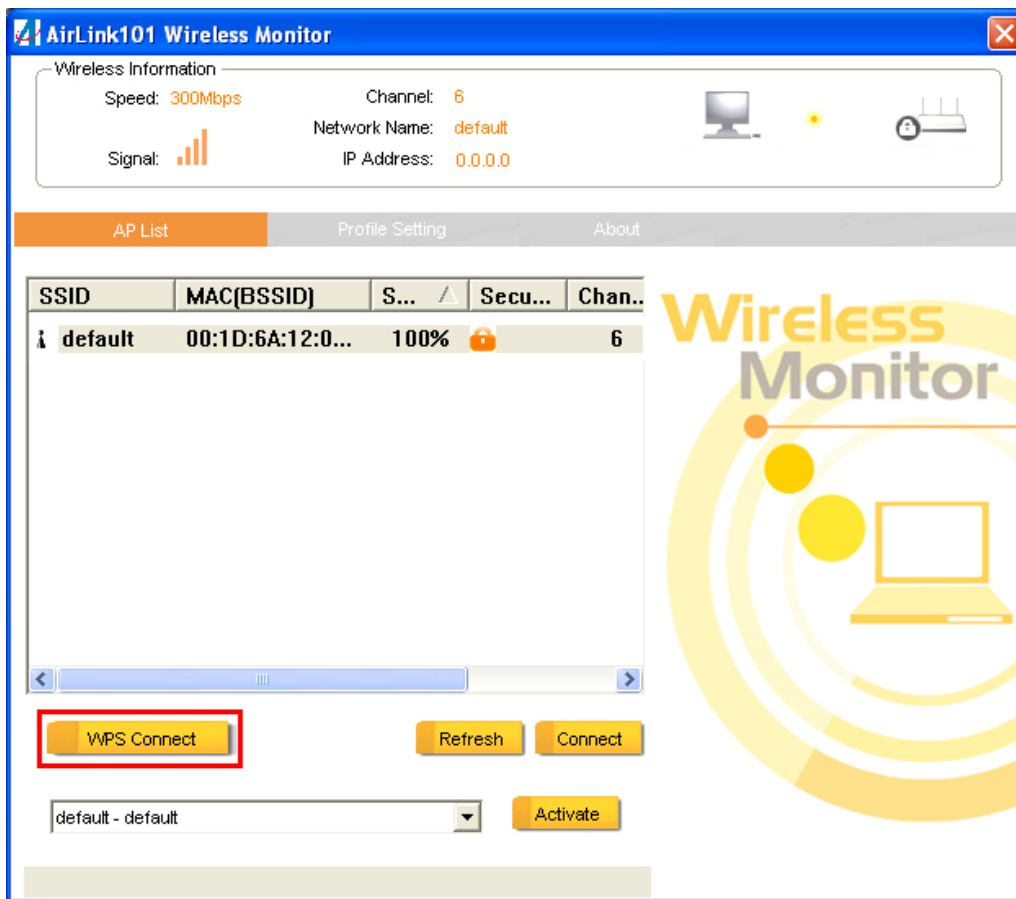
Click **Apply** and **OK** to save the settings.

## WiFi Protected Setup

Wi-Fi Protected Setup™ (**WPS**) is a new and easy way to configure the encryption for your wireless network clients to connect to the router. Your wireless adapters must support WPS in order to use this convenient function. If your wireless adapters do not support WPS, you will need to set up the wireless security manually and you can skip this section.

In the instructions below, we are going to use the utility Wireless Monitor that comes with the Airlink101 Wireless 300N adapters, and AR690W Wireless 300N Gigabit Router as the example.

**Step 1** Go to the computer with the Wireless 300N adapter and open the Airlink101 Wireless Monitor. Click on the **WPS Connect** button.



**Note:** If you do not see the WPS Connect button, you can go to [www.airlink101.com](http://www.airlink101.com) to download the latest utility and driver.

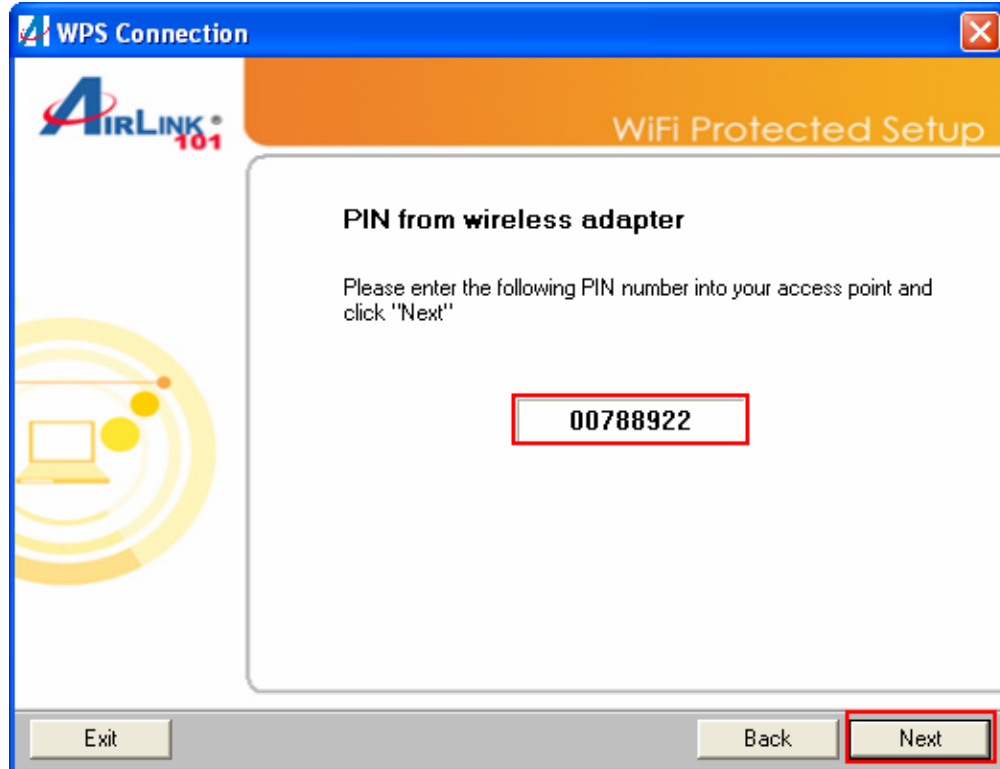
**Step 2a** If you choose the Push Button method, make sure that you click on the **Wi-Fi Protected Setup** button.



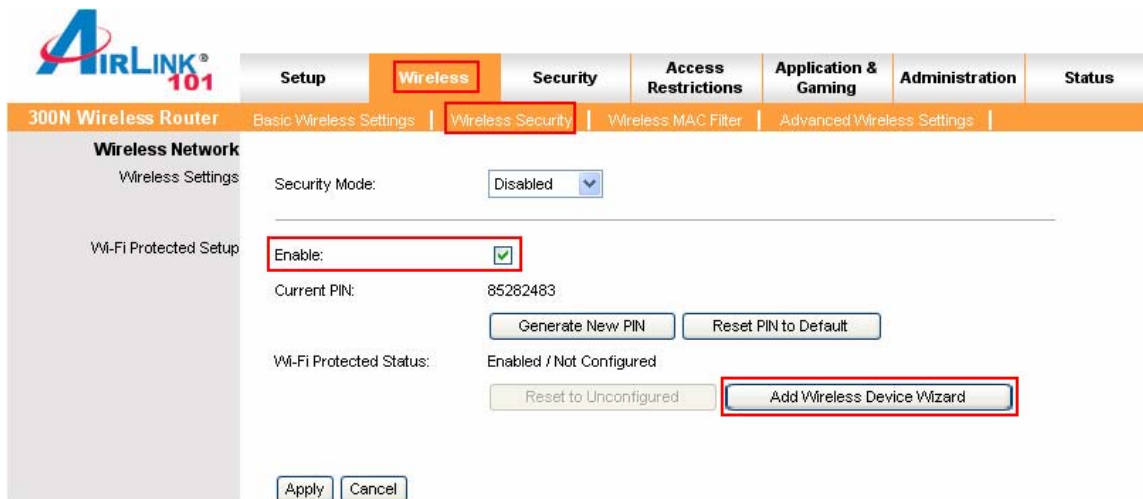
**Step 2b** Push the WPS button on the router, and the blue LED will start blinking. The router will now start the handshake with the wireless adapter, then the connection will be built up in couple minutes.



**Step 3a** If you choose the Pin Code method, write down the **PIN** and click **Next**.



**Step 3b** Log in to your router's configuration page from the web browser and click on **Wireless**. Then click **Wireless security**. Make sure that the Wi-Fi Protected Setup **Enable** box is checked. Click the **Add Wireless Device Wizard** button.



**Step 3c** Enter the Pin Code in the **Pin Number** box and click **Connect**.

**Draft 802.11N Wireless Router**

**Wi-Fi Protected Setup**

There are two way to add a wireless device to your wireless network: PIN or Push Button.

If the wireless device you want to add only comes with a PIN number, enter its PIN number below and press the "Connect" button. It will help you to add this device to your wireless network.

**PIN number :**

If the wireless device your want to add has both options available, you may use the Virtual Push Button if you prefer.

**Push Button :**

After a few moments both the router configuration screen and the adapter configuration screen should show a message telling you that you are connected.

**Step 3d** Click **Continue** on the router configuration screen.

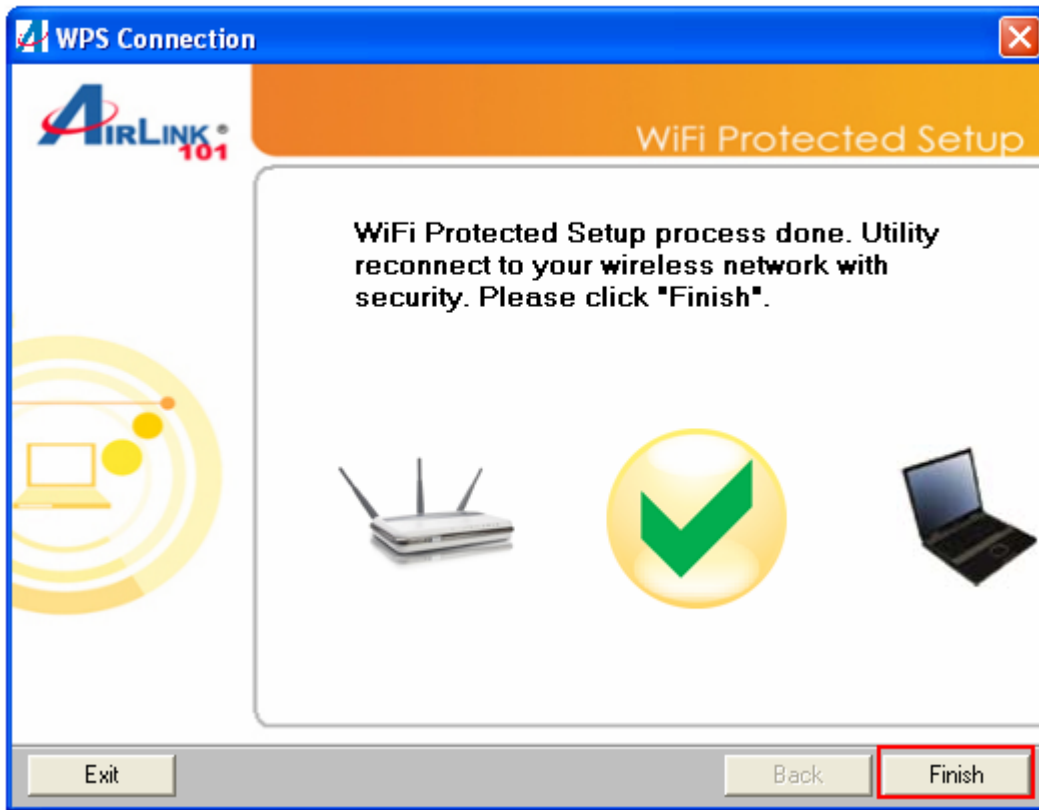
**WPS - The Result of Adding Wireless Device**

**WPS Success**

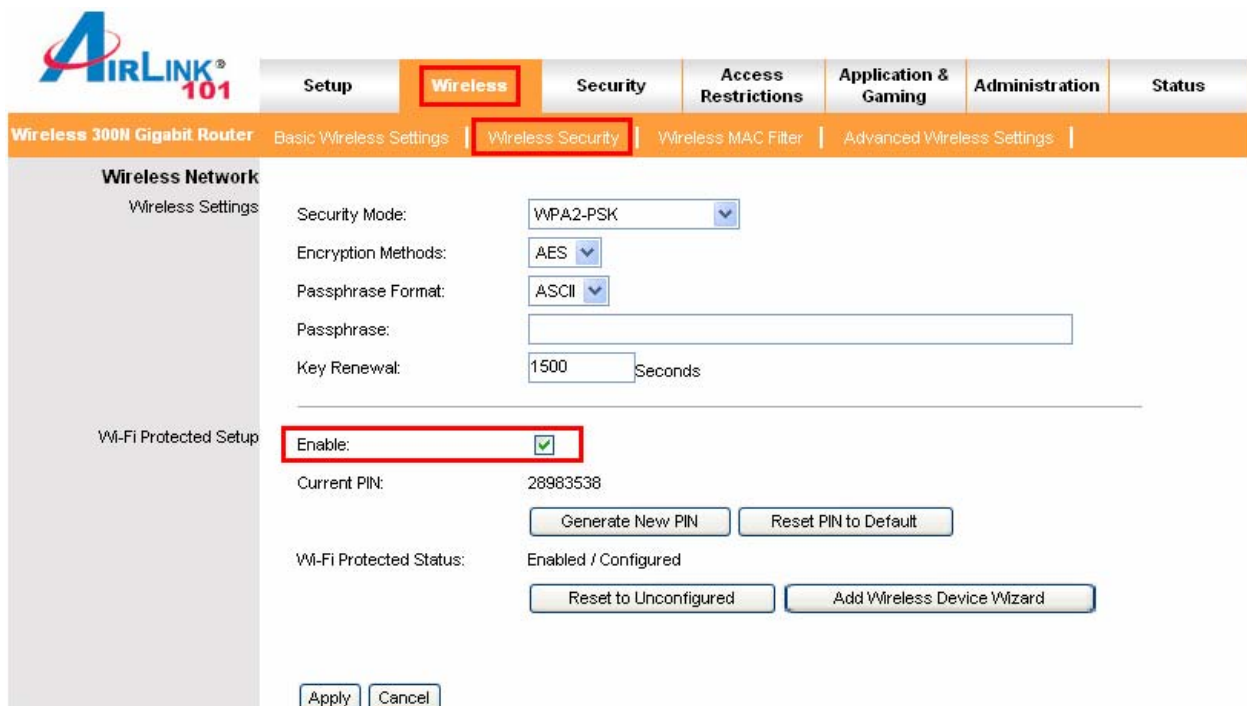
You have added the wireless device to your wireless network successfully, please click on the button below to continue.

**Step 4** Click **Finish** on the WPS Connection screen.





**Note:** If you cannot connect successfully with WPS, you need to log in to your router's configuration and click on **Wireless**. Then click **Wireless security**. Make sure that the Wi-Fi Protected Setup **Enable** box is checked.



### 6.2.3 Wireless MAC Filter

You can restrict certain wireless clients from accessing the router by specifying their MAC address and enabling access restriction. This should not be used as a security feature in place of encryption.

The screenshot shows the configuration interface for the Airlink 101 router. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Application & Gaming', 'Administration', and 'Status'. The 'Wireless' section is active, and the 'Wireless MAC Filter' sub-tab is selected. On the left, the 'Wireless MAC Filter' section is expanded, showing 'Access Restrictions' and 'Wireless Client List'. The 'Access Restrictions' dropdown menu is open, showing 'Disabled' as the selected option. Below the dropdown, there are two options: 'Permit PCs listed below to access the wireless network.' and 'Prevent PCs listed below from accessing the wireless network.' The 'Wireless Client List' contains 20 input fields for MAC addresses, labeled MAC 01 through MAC 20. At the bottom of the page, there are 'Apply' and 'Cancel' buttons.

From the pull down menu, select whether the specified wireless clients will be prevented or permitted to access the wireless network. Enter their MAC address in the fields below and click **Apply** and **OK** to save the settings.

## 6.2.4 Advanced Wireless Settings

You can configure various advanced wireless settings on this screen. These settings are for advanced users ONLY. Most users will want to leave these settings alone.

The screenshot shows the configuration interface for an AIRLINK 101 300N Wireless Router. The top navigation bar includes tabs for Setup, Wireless, Security, Access Restrictions, Application & Gaming, Administration, and Status. The 'Wireless' tab is selected, and the 'Advanced Wireless Settings' sub-tab is active. The settings are as follows:

Setting	Value	Default / Range
Transmission Rate	Auto	
Transmission Power	Full	
CTS Protection Mode	Disable	
Beacon Interval	100	(Default: 100 Milliseconds, Range: 0 ~ 2346)
DTIM Interval	1	(Default: 1, Range: 1 ~ 255)
Fragmentation Threshold	2346	(Default: 2346, Range: 256 ~ 2346, even)
RTS Threshold	2346	(Default: 2346, Range: 0 ~ 2346)
WMM function	Disable	

Buttons for 'Apply' and 'Cancel' are located at the bottom of the settings area.

**Transmission Rate:** Select from Auto, 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48 and 54 Mbps.

**Transmission Power:** Select from full, half, quarter, eighth, min.

**CTS Protection Mode:** Select from disable, enable, auto.

**Beacon Interval:** Enter a value from the valid range of 0 to 2346. The default value is 100 Milliseconds

**DTIM Interval:** Enter a value from the valid range of 0 to 255. The default value is 1.

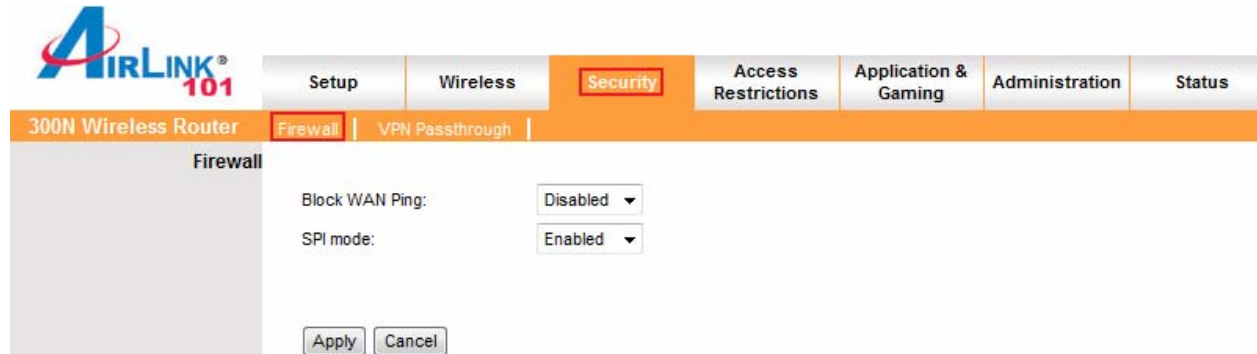
**Fragmentation Threshold:** Enter an even number from 256 to 2346. The default value is 2346.

**RTS Threshold:** Enter a value from the valid range of 0 to 2346. The default value is 2346.

Click **Apply** and **OK** to save the settings.

## 6.3 Security

### 6.3.1 Firewall



**Block WAN Ping:** This setting blocks remote users from being able to ping your internet IP address.

**SPI Mode:** Select to enable or disable Stateful Packet Inspection. This setting provides an additional level of security.

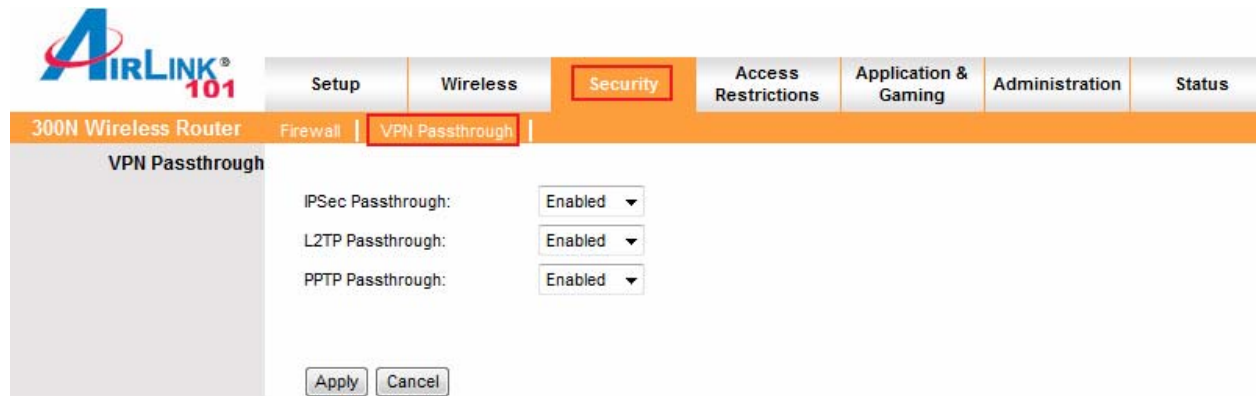
However, it may slow down some applications such as VOIP Phones and other services that require constant streams of data. You can disable this feature to eliminate lag problems with VOIP Phones.

It can also prevent VPN clients from working properly. If you are having trouble connecting to your VPN, you may want to disable this feature.

Click **Apply** and **OK** to save the settings.

## 6.3.2 VPN Passthrough

You can select to enable or disable the passthrough of **IPSec**, **L2TP**, and/or **PPTP** for connecting to a VPN.



The screenshot shows the AIRLINK 101 router's web interface. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Application & Gaming', 'Administration', and 'Status'. The 'Security' tab is selected, and the 'VPN Passthrough' sub-tab is active. The page title is '300N Wireless Router' and the sub-header is 'VPN Passthrough'. The settings are as follows:

IPSec Passthrough:	Enabled
L2TP Passthrough:	Enabled
PPTP Passthrough:	Enabled

At the bottom, there are 'Apply' and 'Cancel' buttons.

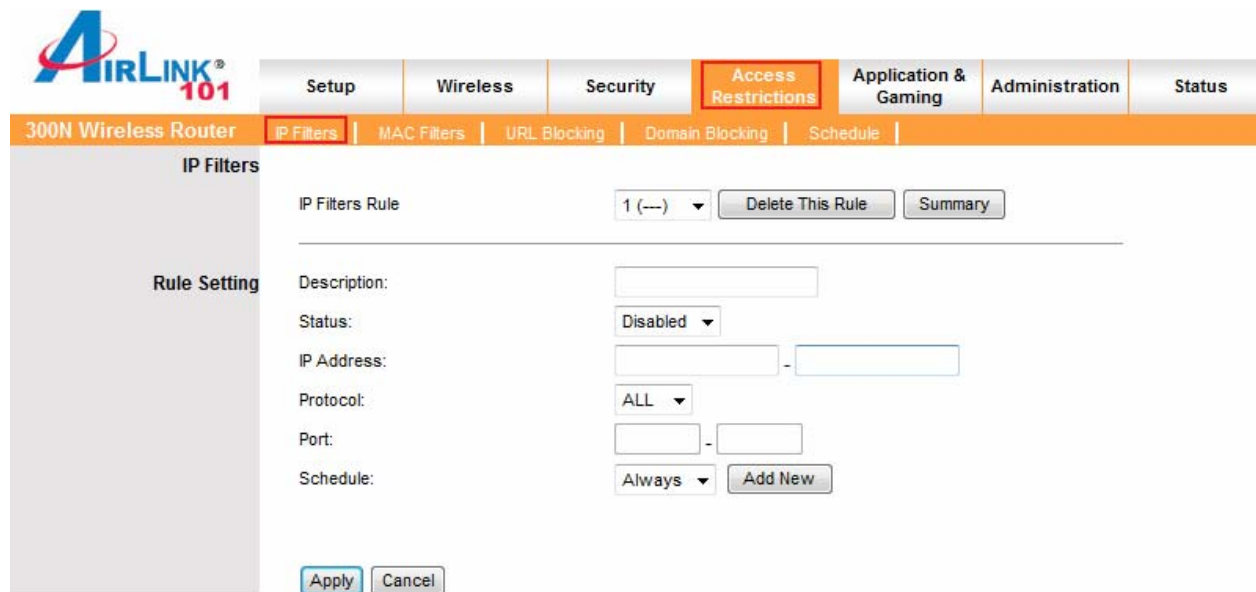
Click **Apply** and **OK** to save the settings.

## 6.4 Access Restrictions

You can setup policies that deny or allow specific clients to access the Internet based on IP address, MAC address, URL, Domain or a specified time.

### 6.4.1 IP Filters

Set up policies based on IP addresses.



The screenshot shows the AIRLINK 101 router's web interface. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Application & Gaming', 'Administration', and 'Status'. The 'Access Restrictions' tab is selected, and the 'IP Filters' sub-tab is active. The page title is '300N Wireless Router' and the sub-header is 'IP Filters'. The 'Rule Setting' section is visible:

IP Filters Rule: 1 (---) [Delete This Rule] [Summary]

---

Rule Setting:

Description:	<input type="text"/>
Status:	Disabled
IP Address:	<input type="text"/> - <input type="text"/>
Protocol:	ALL
Port:	<input type="text"/> - <input type="text"/>
Schedule:	Always [Add New]

At the bottom, there are 'Apply' and 'Cancel' buttons.

**Description:** Enter a name for the policy.

**Status:** Choose to enable or disable the selected policy.

**IP Addresses:** Specify the range of IP addresses you wish to block from your router.

**Protocol:** Select protocol from All, TCP, UDP or ICMP

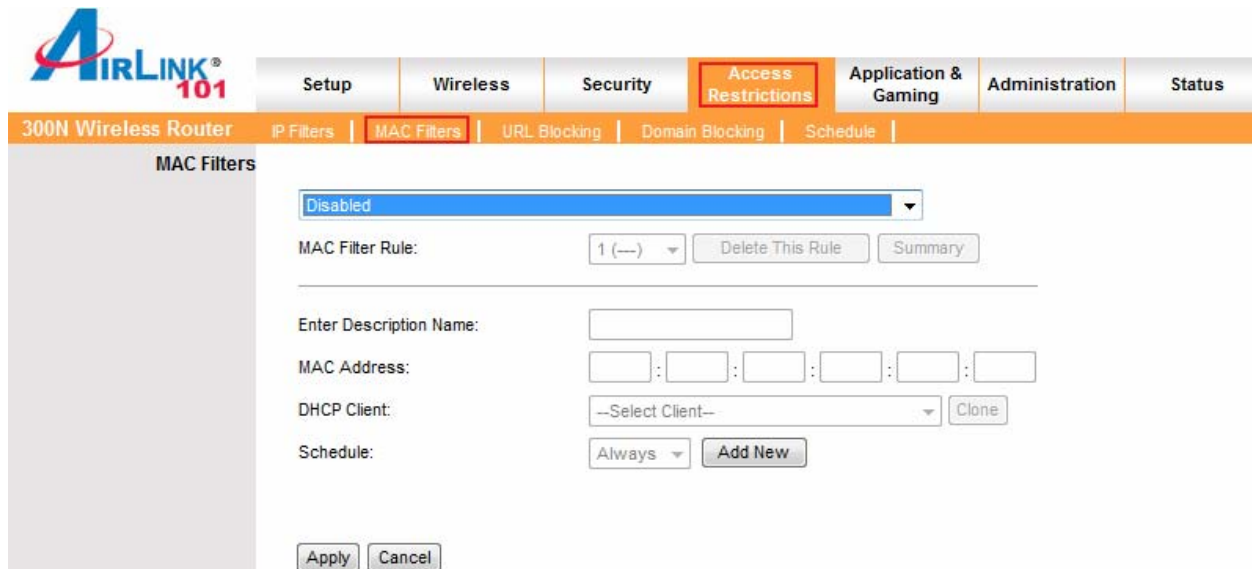
**Port:** Enter the range of ports you wish to block from the specified IP addresses

**Schedule:** Enter a schedule time

To view all of the policies, click the **Summary** button.

## 6.4.2 MAC Filters

Block or allow access to the network for devices with specific MAC addresses.



The screenshot shows the web interface of an AIRLINK 101 300N Wireless Router. The navigation menu includes Setup, Wireless, Security, Access Restrictions (highlighted), Application & Gaming, Administration, and Status. The sub-menu includes IP Filters, MAC Filters (highlighted), URL Blocking, Domain Blocking, and Schedule. The main content area is titled "MAC Filters" and features a dropdown menu set to "Disabled". Below this, there is a "MAC Filter Rule:" section with a dropdown showing "1 (---)", a "Delete This Rule" button, and a "Summary" button. The form includes fields for "Enter Description Name:", "MAC Address:" (with six input boxes separated by colons), "DHCP Client:" (with a dropdown menu set to "--Select Client--" and a "Clone" button), and "Schedule:" (with a dropdown set to "Always" and an "Add New" button). At the bottom, there are "Apply" and "Cancel" buttons.

**Enter Description Name:** Enter a name for the policy.

**MAC Address:** Enter a MAC address

**DHCP Client:** Select DHCP client on your network.

To view all the policies, click the **Summary** button.

### 6.4.3 URL Blocking

You can block the specified clients from accessing certain websites by URL

Enter the URL or the Keyword you wish to block.

Click **Apply** and **OK** to save the settings.

**AIRLINK 101**

300N Wireless Router

Setup | Wireless | Security | **Access Restrictions** | Application & Gaming | Administration | Status

IP Filters | MAC Filters | **URL Blocking** | Domain Blocking | Schedule

#### URL Blocking

Website Blocking by URL Address

Configure URL Blocking below:

Disabled  
ALLOW user access to ONLY below listed sites  
DENY user access to ONLY below listed sites

URL 02:	<input type="text"/>	Always ▾	Add New
URL 03:	<input type="text"/>	Always ▾	Add New
URL 04:	<input type="text"/>	Always ▾	Add New
URL 05:	<input type="text"/>	Always ▾	Add New
URL 06:	<input type="text"/>	Always ▾	Add New
URL 07:	<input type="text"/>	Always ▾	Add New
URL 08:	<input type="text"/>	Always ▾	Add New
URL 09:	<input type="text"/>	Always ▾	Add New
URL 10:	<input type="text"/>	Always ▾	Add New

Apply Cancel

## 6.4.4 Domain Blocking

Block users from accessing specific domains on the internet.

The screenshot shows the 'Domain Blocking' configuration page in the AirLink 101 300N Wireless Router interface. The 'Access Restrictions' tab is selected. The page title is 'Domain Blocking'. Below the title, it says 'Configure Domain Blocking below:'. There is a dropdown menu currently set to 'Disabled', with a red box highlighting it and its options: 'Disabled', 'Allow users to access below listed Domains', and 'Deny users to access below listed Domains'. Below the dropdown are ten rows, each with a 'Domain' label (Domain 02 through Domain 10), an empty text input field, a dropdown menu set to 'Always', and an 'Add New' button. At the bottom, there are 'Apply' and 'Cancel' buttons.

## 6.4.5 Schedule

Select a time range in which the specified clients to access the Internet by **Day** and **Time**.

The screenshot shows the 'Schedule' configuration page in the AirLink 101 300N Wireless Router interface. The 'Access Restrictions' tab is selected, and the 'Schedule' sub-tab is active. The page title is 'Schedule'. Below the title, there is a dropdown menu set to '1 (---)', a 'Delete This Schedule' button, and a 'Summary' button. Below this is a 'Name:' label followed by an empty text input field. The 'Day(s):' section has two radio buttons: 'All Week' (unselected) and 'Select Day(s)' (selected). Below the radio buttons are checkboxes for 'Sun', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', and 'Sat', all of which are currently unchecked. The 'All Day - 24 hrs:' section has an unchecked checkbox. The 'Start Time:' section has two empty input fields for hours and minutes, followed by a dropdown menu set to 'AM' and the text '(hour:minute, 12 hour time)'. The 'End Time:' section has two empty input fields for hours and minutes, followed by a dropdown menu set to 'AM' and the text '(hour:minute, 12 hour time)'. At the bottom, there are 'Apply' and 'Cancel' buttons.



## 6.5 Applications & Gaming

### 6.5.1 Port Range Forwarding

If you want to host an FTP or online gaming server, you must open up ports on the router. This page allows you to setup port forwarding for the specified applications.

Before using forwarding, you should assign static IP addresses to the designated PCs.

**AIRLINK® 101**

Setup | Wireless | Security | Access Restrictions | **Application & Gaming** | Administration | Status

300N Wireless Router | **Port Range Forwarding** | Port Range Triggering | DMZ

**Port Range Forwarding**

Application Name

None ▾

None ▾

None ▾

None ▾

None ▾

Start ~ End Port	Protocol	To IP Address	Enabled	Schedule
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾
<input type="text"/> ~ <input type="text"/>	Both ▾	192.168.1. <input type="text"/>	<input type="checkbox"/>	Always ▾

Apply Cancel

If you are only forwarding one port, you can put it in both the **Start** and **End** Port boxes.

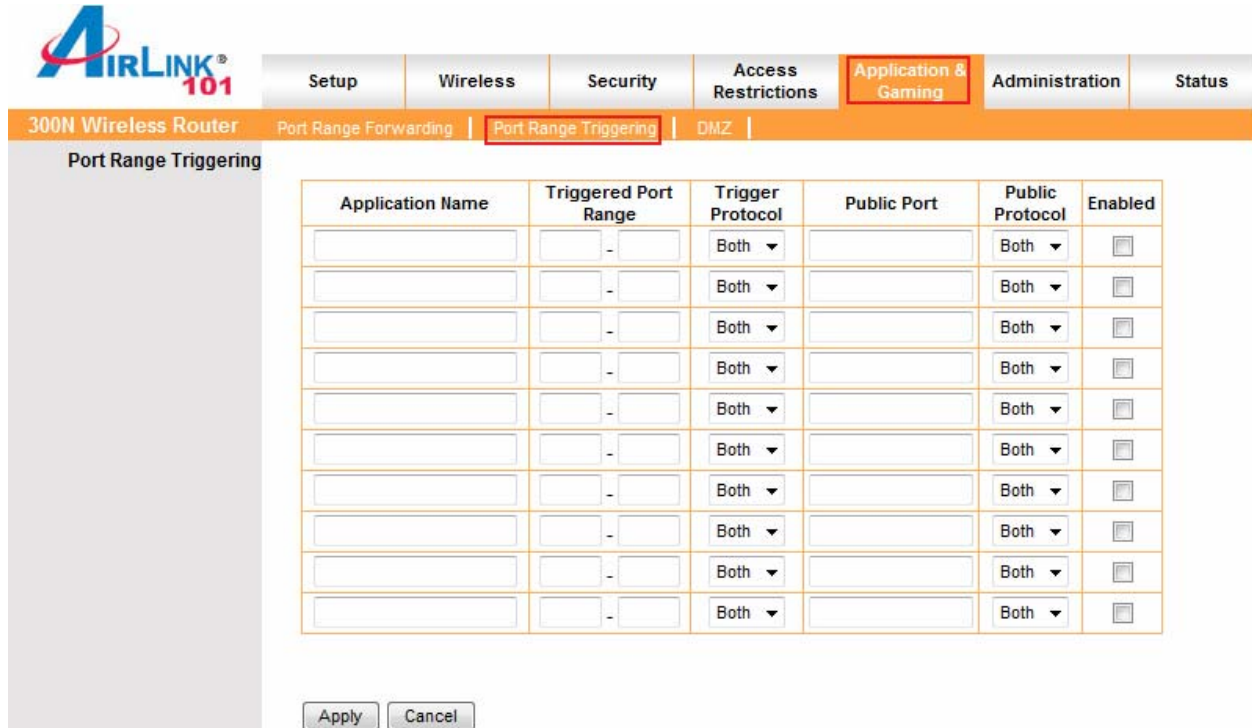
**Protocol:** If you don't know which one to choose, select both.

**To IP Address:** This should be the IP address of the computer you want to forward the ports to.

Make sure that you check the **Enabled** box to activate the setting, then click **Apply** and **OK** to save the settings.

## 6.5.2 Port Range Triggering

Port triggering allows the router to keep track of outgoing data for specific port numbers. The router remembers which computer sends out what data, so that when the requested data returns through the router, the data is sent back to the proper computer by way of IP address and port mapping rules.



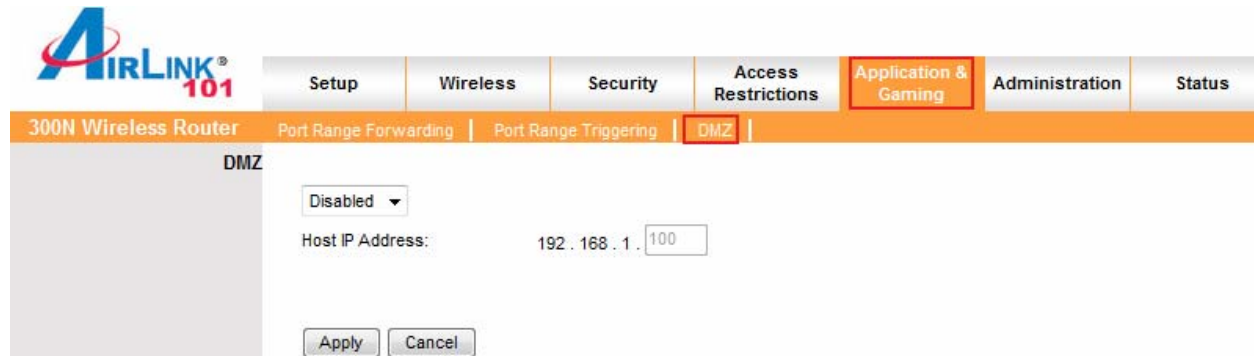
The screenshot shows the configuration interface for an AIRLINK 101 300N Wireless Router. The top navigation bar includes tabs for Setup, Wireless, Security, Access Restrictions, Application & Gaming (highlighted), Administration, and Status. Below this, a sub-menu shows Port Range Forwarding, Port Range Triggering (highlighted), and DMZ. The main content area is titled "Port Range Triggering" and contains a table with the following columns: Application Name, Triggered Port Range, Trigger Protocol, Public Port, Public Protocol, and Enabled. There are 10 rows in the table, each with empty input fields for the first four columns and a "Both" dropdown for the fifth. Below the table are "Apply" and "Cancel" buttons.

Application Name	Triggered Port Range	Trigger Protocol	Public Port	Public Protocol	Enabled
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>
<input type="text"/>	<input type="text"/> - <input type="text"/>	Both ▾	<input type="text"/>	Both ▾	<input type="checkbox"/>

Click **Apply** and **OK** to save the settings.

### 6.5.3 DMZ

DMZ (De-Militarized Zone) Host is a host without the protection of the router's firewall. It allows a computer to be exposed to unrestricted two-way communication with the Internet. You should only use this feature when the Port Forwarding function fails to make an application work.



**DMZ:** Select to enable or disable DMZ.

**Host IP Address:** Specify the IP address of the computer you wish to use with DMZ.

**Note:** Any DMZ host should have a new static IP address assigned to it because its IP address may change when using the DHCP function.

Click **Apply** and **OK** to save the settings.

## 6.5.4 QoS

The QoS (Quality of Service) feature allows you to specify which applications or computers have bandwidth priority over others, as opposed to letting all computers and applications share the bandwidth equally.

**300N Wireless Router** | Port Range Forwarding | Port Range Triggering | DMZ | QoS |

**QoS(Quality of Service)**

QoS Management:  Disabled  Manual  Auto Smart QoS

Internet (WAN) Bandwidth: Downstream: 80 Mbps, Upstream: 80 Mbps

Category: Applications | --- Select One ---

<b>Name</b>	<input type="text"/>
<b>IP</b>	<input type="text"/> (** for all IP.)
<b>Port Range</b>	<input type="text"/> ~ <input type="text"/> (** for all Port.)
<b>Priority</b>	High

Priority	Name	Information		
High	Web Browse	Port : 80 - 80	<input type="button" value="Remove"/>	<input type="button" value="Edit"/>

There are pre-configured options for some popular applications that you are able to choose from. You can also set manual QoS rules:

First choose **Manual**, then click **Apply**.

In **Name**, enter a label for your new rule.

Enter the IP address of the computer you are configuring the rule for in the **IP** box.

For **Port Range**, enter a start and end port for your rule.

Select the **Priority** you want to set for the rule. The higher the priority you set for the rule, the more bandwidth that application will be able to use. When you are finished, click **Add**

## 6.6 Administration

### 6.6.1 Management

The Management screen allows you to change the router's login password as well as other administrative settings.

The screenshot shows the 'Administration' page for the '300N Wireless Router'. The 'Management' tab is selected. The page includes a navigation menu with 'Setup', 'Wireless', 'Security', 'Access Restrictions', 'Application & Gaming', 'Administration', and 'Status'. Below the navigation menu, there are sub-tabs: 'Management', 'Log', 'Diagnostics', 'Factory Defaults', 'Firmware Upgrade', and 'Restart'. The 'Management' section contains the following fields and controls:

- Router Password:** Two text input fields for 'Router Password:' and 'Re-enter to Confirm:', both masked with dots.
- Remote Router Access:** A 'Remote Management:' dropdown menu set to 'Disabled', an 'IP Address:' text input field with an asterisk and a note '( \* means any IP Address.)', and a 'Port:' dropdown menu set to '8080'.
- UPnP:** A 'UPnP:' dropdown menu set to 'Enabled'.
- Backup the Configuration File:** A 'Backup' button.
- Restore the Configuration File:** A 'File Path:' text input field, a 'Browse...' button, and a 'Restore' button.
- At the bottom, there are 'Apply' and 'Cancel' buttons.

**Router Password:** Set the router's login password.

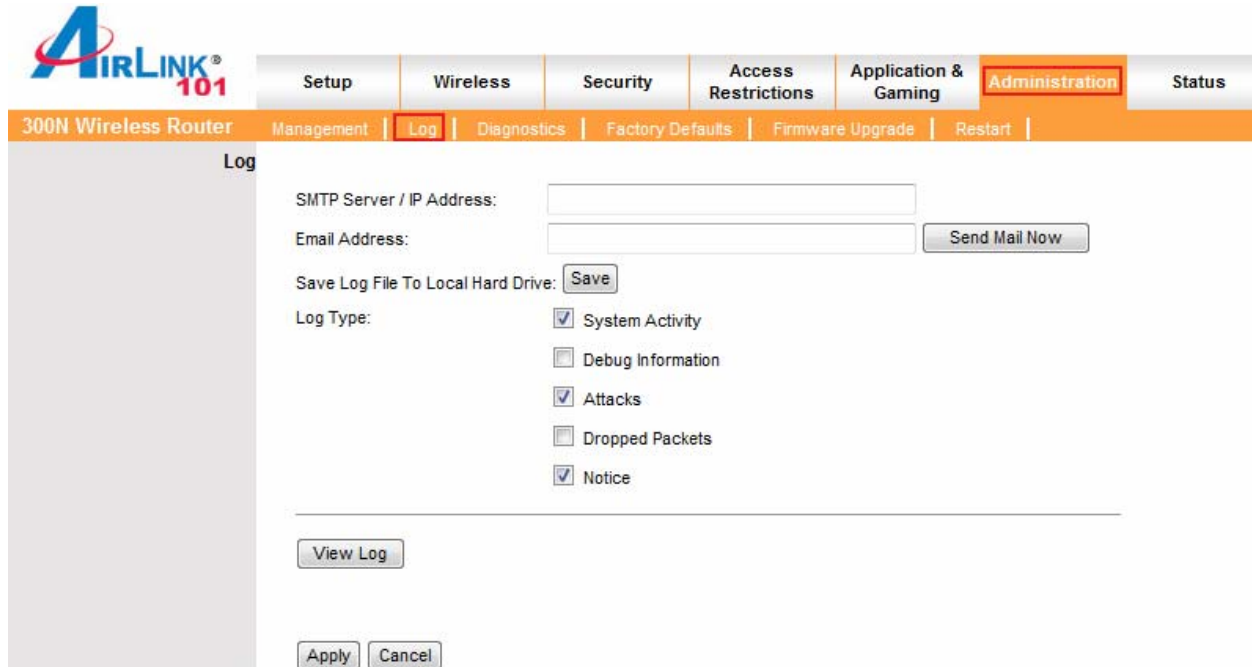
**Remote Router Access:** Select to enable or disable remote management/upgrade of the router. You can allow remote management from any IP Address or a specified IP Address as well as the port number.

**UPnP:** Universal Plug and Play (UPnP) allows Windows Me and XP to automatically configure the router for various Internet applications, such as gaming and videoconferencing.

**Backup and Restore:** You can choose to backup the router's settings so that you don't have to manually configure the settings again if you reset the router to factory default.

## 6.6.2 Log

You can choose to enable or disable logging of your network activity on this screen.



The screenshot shows the web interface of an AIRLINK 101 300N Wireless Router. The top navigation bar includes tabs for Setup, Wireless, Security, Access Restrictions, Application & Gaming, Administration (highlighted), and Status. Below this is a secondary navigation bar with links for Management, Log (highlighted), Diagnostics, Factory Defaults, Firmware Upgrade, and Restart. The main content area is titled 'Log' and contains the following configuration options:

- SMTP Server / IP Address: [Text Input Field]
- Email Address: [Text Input Field] [Send Mail Now Button]
- Save Log File To Local Hard Drive: [Save Button]
- Log Type:
  - System Activity
  - Debug Information
  - Attacks
  - Dropped Packets
  - Notice

At the bottom of the form, there are three buttons: View Log, Apply, and Cancel.

**SMTP Server / IP Address:** Enter your internet service provider's outgoing email server address.

**Email Address:** Enter an email address where you would like the log to be sent.

**Send Mail Now:** Send the log file to the specified the email address.

**Save Log File to Local Hard Drive:** Save the current log information to a file on your computer.

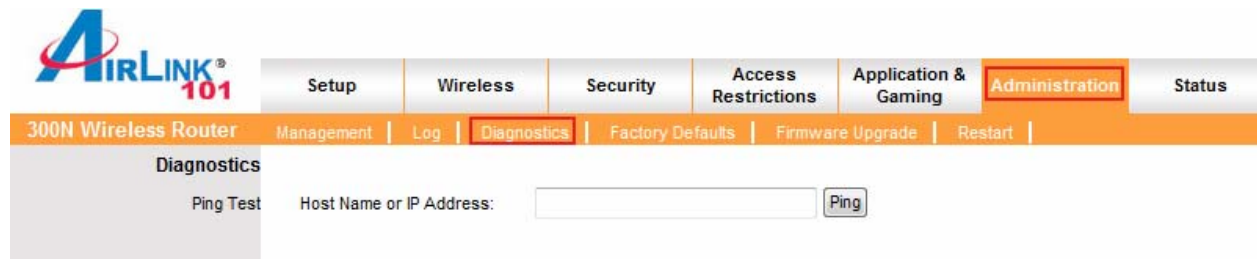
**Log Type:** Specify the information you want the system to log. Options include System Activity, Debug Information, Attacks, Dropped Packets, and Notice.

**View Log:** Allows you to see logged information related to System Activity, Debug Information, Attacks, Dropped Packets, and Notice.

Click **Apply** and **OK** to save the settings.

### 6.6.3 Diagnostics

The Diagnostics screen allows you to perform **Ping** tests.



**Ping Test:** Enter the IP or URL Address you wish to ping and click **Ping**.

### 6.6.4 Factory Defaults

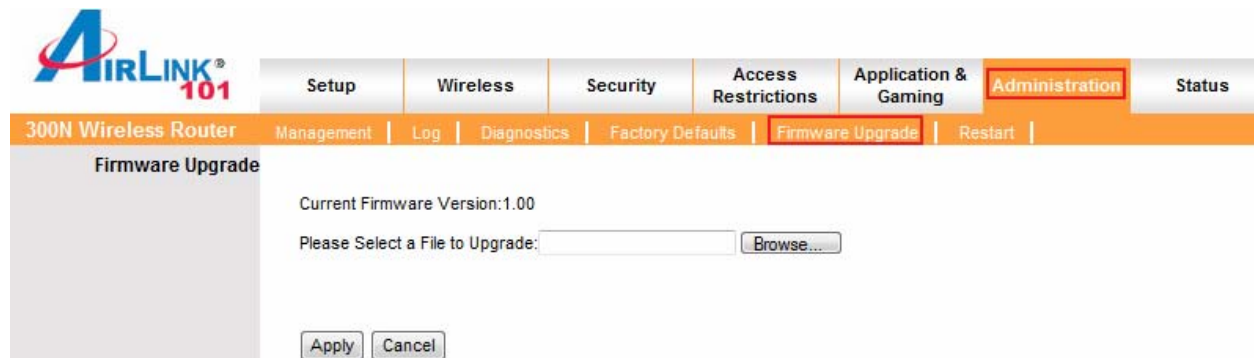
The Factory Defaults screen allows you to set all the router's settings to the factory default. You can use this anytime you think that you've changed settings that have stopped the router from working. Resetting to defaults will undo all of your changes.



Click on the **Factory Defaults** button to restore all the settings to default.

## 6.6.5 Firmware Upgrade

The Firmware Upgrade screen allows you to upgrade the router's firmware.



You may download the new firmware from the Airlink101 website [www.airlink101.com](http://www.airlink101.com)

Click on **Browse**, then browse to the new firmware and click **Apply**.

**Note:** Do not power off the router during the firmware upgrading, otherwise your router may be damaged permanently.

## 6.6.6 Restart

The Restart page allows you to restart the router without restoring the settings to factory default.



Click on the **Restart** button to restart the router.



## 6.7 Status

### 6.7.1 Router

The Router screen displays a summary of all router status information, including the firmware version.

**AIRLINK<sup>®</sup> 101**

Setup | Wireless | Security | Access Restrictions | Application & Gaming | Administration | **Status**

Wireless 300N Gigabit Router | **Router** | Local Network | Wireless Network

**Router Information**

Firmware Version:	1.00
Current Time:	17:38:34 07/08/2008
Internet MAC Address:	00:1d:6a:34:dc:fd
Host Name:	AR690W

---

**Internet Connection**

Connection Type:	Dynamic IP
Connection Status:	connected
IP Address:	192.168.12.15
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.12.1
DNS1:	192.168.12.1
DNS2:	N/A

Click on the **Refresh** button to reload the screen.

## 6.7.2 Local Network

The Local Network screen displays status information regarding your Local Area Network.

The screenshot shows the configuration page for the AIRLINK 101 300N Wireless Router. The 'Local Network' tab is selected. The page displays the following information:

Local MAC Address:	00:de:fa:15:00:01
IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0

---

**DHCP Server**

DHCP Server:	Enabled
Start IP Address:	192.168.1.100
End IP Address:	192.168.1.199

[DHCP Client Table](#)

Click on the **DHCP Client Table** to display a list of DHCP clients in your network.

## 6.7.3 Wireless Network

The Wireless Network screen displays status information regarding your wireless network.

The screenshot shows the configuration page for the AIRLINK 101 300N Wireless Router. The 'Wireless Network' tab is selected. The page displays the following information:

MAC Address:	00:de:fa:15:00:01
Mode:	Disabled
Network Name (SSID):	new
Channel:	6
Security:	WPA2-PSK
SSID Broadcast:	Enabled

[Wireless Client List](#)

## 7. Troubleshooting

If you have trouble connecting to the Internet, try the following steps.

**Step 1** Power off the Cable/DSL modem, router, and computer and wait for **5 minutes**.

**Step 2** Turn on the Cable/DSL modem and wait for the lights on the modem to settle down.

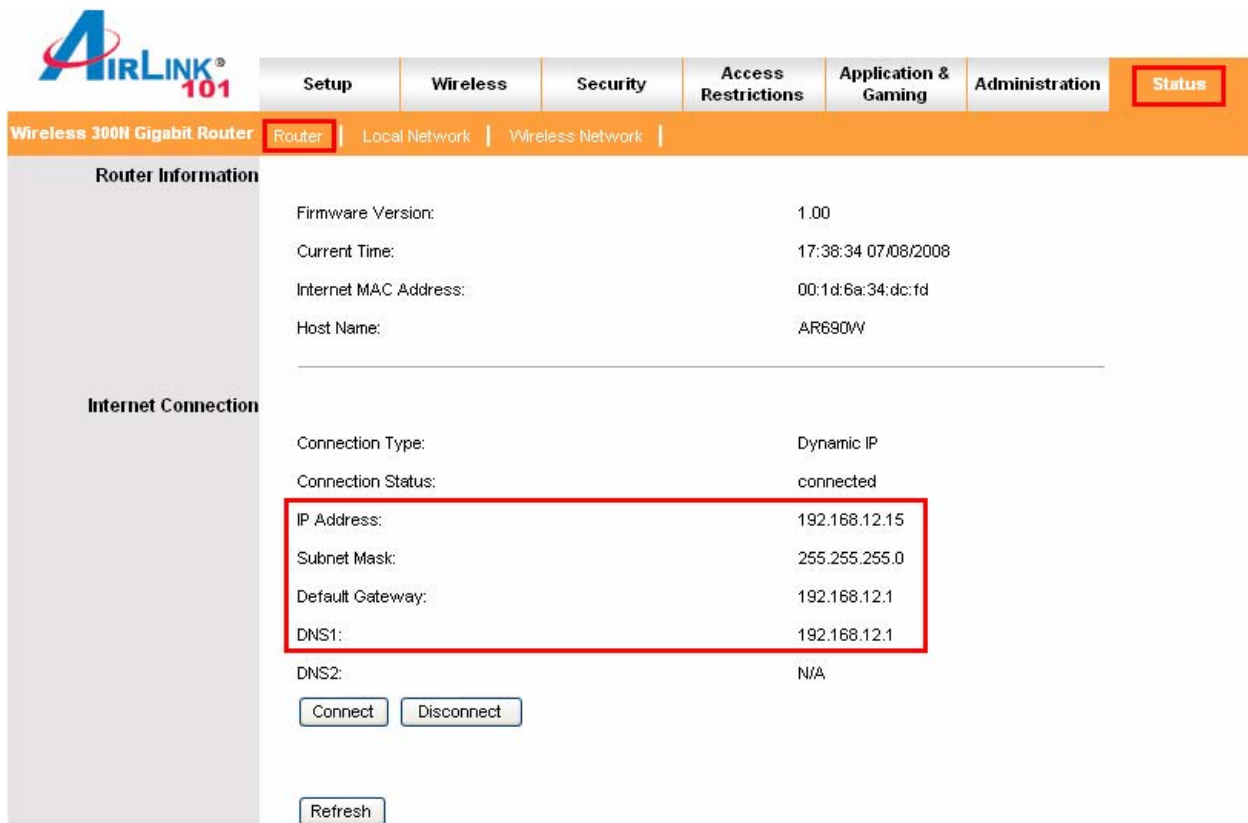
**Step 3** Turn on the router and wait for the lights on the router to settle down.

**Step 4** Turn on the computer.

**Step 5** Reconfigure the router as described in **Section 3**.

**Step 6** Log in to the router and select the **Status** tab.

**Step 7** Verify that the **IP Address**, **Default Gateway**, and at least one of the **DNS** fields have valid numbers assigned to them (instead of all 0's).



The screenshot displays the web interface of an AIRLINK 101 Wireless 300N Gigabit Router. The navigation menu at the top includes Setup, Wireless, Security, Access Restrictions, Application & Gaming, Administration, and Status (highlighted in red). The main content area is divided into Router Information and Internet Connection sections. The Router Information section lists Firmware Version (1.00), Current Time (17:38:34 07/08/2008), Internet MAC Address (00:1d:6a:34:dc:fd), and Host Name (AR690W). The Internet Connection section shows Connection Type (Dynamic IP), Connection Status (connected), IP Address (192.168.12.15), Subnet Mask (255.255.255.0), Default Gateway (192.168.12.1), and DNS1 (192.168.12.1). The IP Address, Subnet Mask, Default Gateway, and DNS1 fields are highlighted with a red box. There are buttons for Connect, Disconnect, and Refresh.

Field	Value
Firmware Version	1.00
Current Time	17:38:34 07/08/2008
Internet MAC Address	00:1d:6a:34:dc:fd
Host Name	AR690W
Connection Type	Dynamic IP
Connection Status	connected
IP Address	192.168.12.15
Subnet Mask	255.255.255.0
Default Gateway	192.168.12.1
DNS1	192.168.12.1
DNS2	N/A

If each field has a valid number assigned, the router is connected to the Internet.

## Appendix A – Specifications

### Standards

- IEEE 802.11b / 802.11g
- IEEE 802.11n draft 2.0
- IEEE 802.3, 802.3u, 802.3ab

### Ports

- 1 x 10/100/1000Mbps WAN port
- 4 x 10/100/1000Mbps LAN port

### Antenna type

- 3 External 2dBi antennas

### Security

- WEP 64/128-bit
- WPA2-PSK, WPA-PSK

### LEDs

- Power, Status, WAN, WLAN, LAN1~4, WPS

### Advanced Features

- Quality of Service (QoS)
- WMM
- Stateful Packet Inspection (SPI) / DoS
- VPN Pass-through

### Data Rate

- Transmitting: Up to 300Mbps\*
- Receiving: Up to 300Mbps\*

### WiFi Protected Setup

- PIN (Personal Identification Number)
- PBC (Push button configuration)

### System Requirement

- Windows®, Mac®, or Linux® operating system
- Internet Explore 5.5 or above
- Installed Ethernet adapter
- Recommended use with Wireless 300N Adapters: AWLH6090 and AWLL6090 for best performance

### Power

- 5V DC / 3A

### Dimensions

- 225 x 120 x 30 mm

### Temperature

- Operating: 0°C to 40°C

### Humidity

- 10% to 90% Non-Condensing

### Warranty

- Limited 1-year warranty

### Certification

- FCC, CE, IC, UL, TUV

## Appendix B – Information

### Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **IMPORTANT NOTE:**

##### **FCC Radiation Exposure Statement:**

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

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

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

### **European Union Notice:**

Radio products with the CE marking comply with the R&TTE Directive (1999/5/EC), the EMC Directive (2004/104/EC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms:

- EN 60950-1 Product Safety
- EN 300 328 Technical requirement for radio equipment
- EN 301 489-1/-17 General EMC requirements for radio equipment

## Technical Support

E-mail: [support@airlink101.com](mailto:support@airlink101.com)

Toll Free: 1-888-746-3238

Web Site: [www.airlink101.com](http://www.airlink101.com)

\*Theoretical maximum wireless signal rate derived from IEEE 802.11g standard and IEEE 802.11n draft specification version 2.0. 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. Specifications are subject to change without notice. All products and trademarks are the property of their respective owners. Copyright ©2008 AirLink101®