



User Guide

www.wilinklat.com



Copyright Statement

is the registered trademark of Techview Inc. All the products and product names mentioned herein are the trademarks or registered trademarks of their respective holders. Copyright of the whole product as integration, including its accessories and software, belongs to Techview Inc. Without prior expressed written permission from Techview Inc., any individual or party is not allowed to copy, plagiarize, reproduce, or translate it into other languages.

All photos and product specifications mentioned in this manual are for references only. Upgrades of software and hardware may occur; Wilink reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes. If you would like to know more about our product information, please visit our website at http://www.wilinklat.com.



Table of Contents

CHAPTER 1 PRODUCT OVERVIEW	
1.1 What it does	
CHAPTER 2 INSTALLATION AND QUICK SETUP GUIDE	
2.1 OPEN PACKAGE 2.2 PHYSICAL INSTALLATION 2.3 LOG IN TO WEB MANAGER 2.4 QUICK INTERNET CONNECTION SETUP 2.5 VERIFY INTERNET CONNECTION SETTINGS 2.6 WIRELESS SETTINGS 2.6.1 Wireless Basic Settings 2.6.2 Wireless Security Settings	3 6 10 14
2.7 CONNECT TO DEVICE WIRELESSLY	
CHAPTER 3 ADVANCED SETTINGS	26
3.1 STATUS 3.2 INTERNET CONNECTION SETUP. 3.2.1 PPPOE 3.2.2 Static IP. 3.2.3 DHCP. 3.2.4 PPTP. 3.2.5 L2TP. 3.3 MAC CLONE. 3.4 WAN SPEED. 3.5 LAN SETTINGS. 3.6 DNS SETTINGS. 3.7 DHCP. 3.8 DHCP CLIENT LIST.	
CHAPTER 4 WIRELESS SETTINGS	42
4.1 WIRELESS BASIC SETTINGS. 4.1.1 Wireless AP Mode. 4.1.2 WDS Bridge Mode. 4.2 WIRELESS SECURITY. 4.3 WIRELESS ACCESS CONTROL. 4.4 WIRELESS CLIENT.	43 44 56



CHAPTER 5 BANDWIDTH CONTROL	63
5.1 BANDWIDTH CONTROL	63 65
CHAPTER 6 SPECIAL APPLICATIONS	
6.1 PORT RANGE FORWARDING	
6.2 DMZ Host	70
6.3 DDNS	
6.4 UPNP	
6.5 STATIC ROUTING	
CHAPTER 7 SECURITY	76
7.1 URL FILTER	
7.2 MAC FILTER	
7.3 CLIENT FILTER	81
CHAPTER 8 TOOLS	85
8.1 REBOOT	85
8.2. RESTORE TO FACTORY DEFAULT SETTINGS	85
8.3 BACK/RESTORE	
8.4 SYSLOG	
8.5 REMOTE WEB-BASED MANAGEMENT	
8.6 TIME	
8.7 LOGIN PASSWORD	
APPENDIX 1 GLOSSARY	94
APPENDIX 2 FAQS	98
APPENDIX 3 REMOVE WIRELESS NETWORK FROM	YOUR PC101
APPENDIX 4 SAFETY AND EMISSION STATEMENT	104



Chapter 1 Product Overview

1.1 What it does

Thanks for purchasing this Wilink router (**collectively device or router**).

The device is an 802.11n compliant wireless router that delivers up to 4x faster wireless speeds and 3x farther range than 802.11g while staying backward compatible with 802.11g/b devices. Upgrading your home network to 150Mbps of Wireless N speed, the device provides an excellent solution for experiencing better wireless performance while sharing a broadband Internet connection with multiple computers over a secure wireless network. The router makes it easy to set up your wireless network in your home or office without professional installation. Thanks to the world's most intuitive utility interface, it takes you to finish easily installing your wireless network and Internet connection in three steps. Once the setup process is complete, you can share a high-speed Internet connection, files, media, and more. Also, to prevent unauthorized access, it supports for WPA/WPA2 security standards ensure that you will be able to use the best possible encryption regardless of your other wireless devices. The router is ideal for sharing your Internet connection throughout home or small office.

1.2 Features

- Compliant with IEEE 802.11n, IEEE 802.11g, IEEE 802.11b, IEEE 802.3 and IEEE 802.3u standards;
- 5dBi high gain omni-directional antenna delivers better signal and greater coverage;
- Up to 150Mbps wireless rate;
- 1 10/100M WAN port for Internet connection;
- ➤ 4 10/100M Ethernet ports for LAN connection;
- Auto MDI/MDIX on each port;



- Provides Internet connection types: Dynamic/ static IP; can be connected to an xDSL/Cable MODEM;
- Combines the function of a wireless AP, router, 4-port switch and firewall;
- WPA, WPA2 and WPA&WPA2 encryptions secure your wireless network against unauthorized access;
- Simple and quick to secure a Wi-Fi connection at a push of the WPS button;
- Hidden/invisible SSID;
- MAC-based wireless access control;
- WMM streams your video and audio;
- SNTP to synchronize local time with Internet time servers;
- Supports UPnP and DDNS features;
- WDS support for extending existing wireless coverage;
- Provides virtual server and DMZ features;
- Provides logs to record device's usage status.



Chapter 2 Installation and Quick Setup Guide

2.1 Open package

Unpack the box and verify the following items:

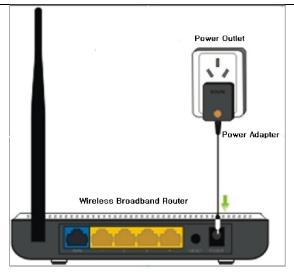
- Router inalámbrico N150
- Power Adapter
- Quick Install Guide

If any of the above items is incorrect, missing, or damaged, please contact your Wilink reseller for immediate replacement.

2.2 Physical installation

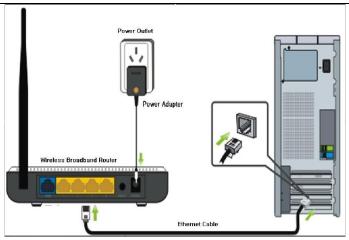
 Connect one end of the included power adapter to the device and plug the other end into a wall outlet nearby (Using a power adapter with a different voltage rating than the one included with the device will cause damage to the device.)



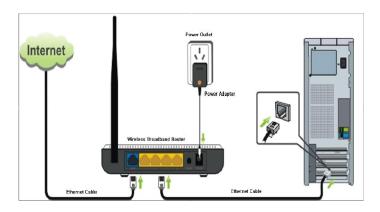


2. Connect one of the LAN ports on the device to the NIC port on your PC using an Ethernet cable.





3. Connect the Ethernet cable from Internet side to the WAN port on the device.



4. Observe status of LEDs on the device and ensure that they are functioning correctly as stated in the table below.



LED Overview:

LED	Status	Description
POWER	Solid	Indicates a proper connection to the
		power supply
SYS	Blinking	Indicates system is functioning
		improperly
WAN	Solid	WAN port connected correctly
	Blinking	WAN port is transferring data
WLAN	Solid	Wireless is enabled
	Blinking	Transferring data
LAN (1/2/3/4)	Solid	LAN port connected correctly
	Blinking	LAN port is transferring data
WPS	Solid	WPS is enabled or Reset OOB is
		completed successfully
	Blinking	Device is performing WPS
		authentication on a client device

2.3 Log in to Web Manager

1. 1). Launch a web browser; in the address bar, input 192.168.0.1



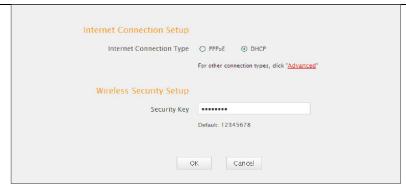
and press Enter;

2). Enter **admin** in the password field on the appearing login window and then click **OK.**



2. Now you may access the device's home page for quickly setting up Internet connection and wireless security.





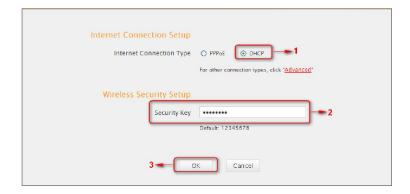
2.4 Quick Internet Connection Setup

2 common Internet connection types are available on the home page: PPPoE and DHCP.

DHCP: Select DHCP (Dynamic IP) if you can access Internet as soon

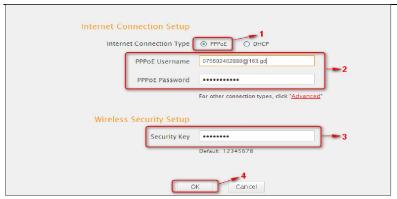


as your computer directly connects to an Internet-enabled ADSL/Cable modem; configure a security key (8-63 characters) to secure your wireless network and then click **OK**.



PPPoE: Select PPPoE (Point to Point Protocol over Ethernet) if you used to connect to the Internet using a broadband connection that requires a username and a password. Enter the user name and password provided by your ISP; configure a security key to secure your wireless network and then click **OK**.





Note:

- 1. DHCP is the default Internet connection type;
- If you are not sure about your PPPoE username and password, contact your Internet service provider (ISP) for help. For other Internet connection types, please go to section 3.2: Internet Connection Setup.

2.5 Verify Internet Connection Settings

System automatically skips to the status page when you finish all needed settings on the home page. Here you can see the system status and WAN connection status of the device.

1. If you find "**Connected**" and a WAN IP address displayed there (as shown below), you have got a wired internet access now.



WAN Status

Connection Status Connected

Internet Connection Type DHCP

WAN IP 192.168.10.10

Subnet Mask 255.255.255.0

Gateway 192.168.10.1

DNS Server 100.100.100.100

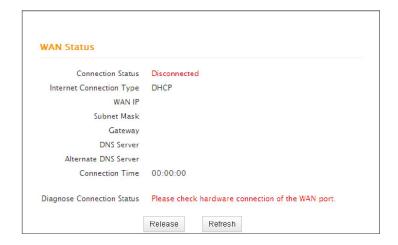
Alternate DNS Server

Connection Time 00:01:33

Release Refresh

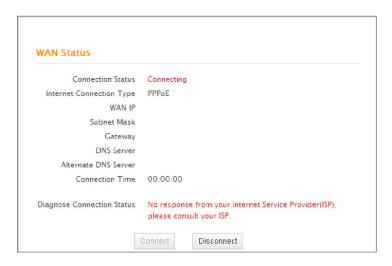


2. If connection status displays "Disconnected" and there is no WAN IP address displayed (as seen below), connection between the Internet-enabled modem and your device may have failed. Please double check or re-connect all involved devices and cables properly and then refresh the page. If nothing is wrong, "Connecting" or "Connected" will be displayed.





- If "Connecting" is displayed and no WAN IP address is seen, try refreshing the page five times. And if it still displays "Connecting" try steps below:
- 1) Contact your ISP for assistance if you are using the DHCP connection type.
- 2) Read the connection diagnostic info on WAN status.



⚠Note:

Below diagnostic info will be displayed on particular occasions for your reference:

- 1) You have connected to Internet successfully.
- 2) You might have entered a wrong user name and/or a wrong password. Please contact your ISP for the correct user name and password and enter them again.
- 3) Ethernet cable is not connected or not properly connected to the



WAN port on the device. Please reconnect it properly.

4) No response is received from your ISP. Please verify that you can access Internet when you directly connect your PC to an Internet-enabled modem, if not, contact your local ISP for help.

2.6 Wireless Settings

2.6.1 Wireless Basic Settings

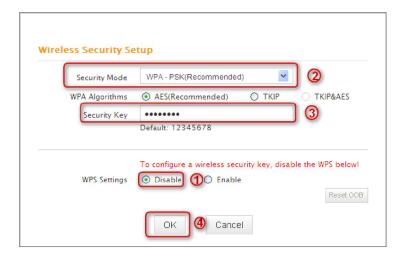
If you want to create a WLAN for sharing Internet connection, simply click **Wireless-> Wireless Basic Settings**. Change the SSID, you can name it whatever you like. Select 2437MHz (channel 6) and leave other options unchanged and then click **OK**.





2.6.2 Wireless Security Settings

If you want to encrypt your wireless network, click **Wireless Security**, disable WPS, specify a security key of down to 8 characters, and then click OK.





2.7 Connect to Device Wirelessly

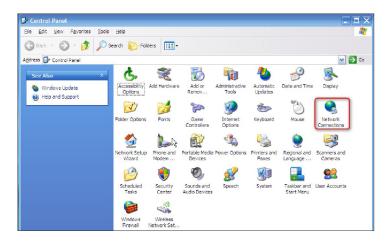
Having finished above settings, you can search the device's wireless network (SSID) from your wireless devices (notebook, iPad, iPhone, etc) and enter a security key to connect to it wirelessly.

- 1. If you are using Windows XP OS, do as follows:
- 1) Click Start and select Control Panel.

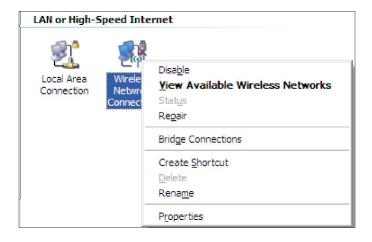




2) Click Network Connections.



3) Right click **Wireless Network Connection** and then select **View Available Wireless Networks**.



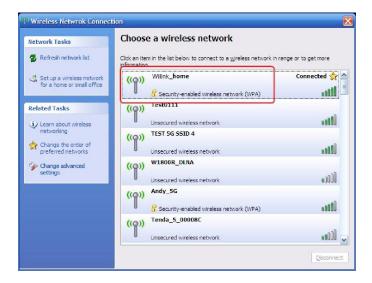


4) Select the desired wireless network, click **Connect**, enter the security key and then click **OK**.



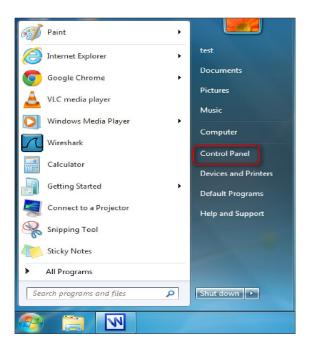


5) You can access Internet via the device when "**Connected**" appears next to the wireless network name you selected.



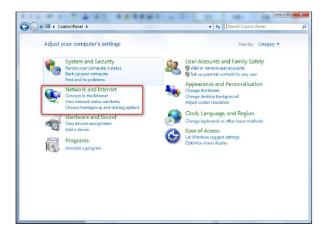


- 2. If you are using Windows 7 OS, do as follows:
- 1) Click Start and select Control Panel.

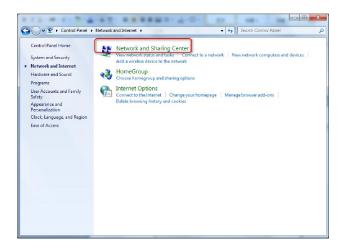




2) Click Network and Internet.

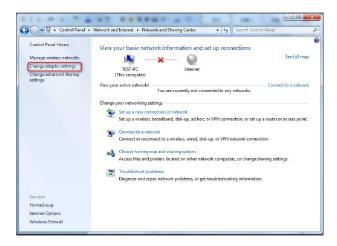


3) Click Network and Sharing Center.



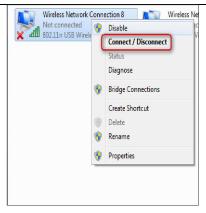


4) Click Change adapter settings.



5) Select a desired wireless connection and click **Connect/Disconnect**.





6) Select the wireless network you wish to connect and click **Connect**.



7) Enter the security key and click **OK**.





8) You can access Internet via the device when "**Connected**" appears next to the wireless network name you selected.







Chapter 3 Advanced Settings

3.1 Status

Here you can see at a glance the operating status of the device.



- Connection Status: Displays WAN connection status: Disconnected, Connecting or Connected.
- Disconnected: Indicates that the Ethernet cable from your ISP side is not correctly connected to device's WAN port or the router is not logically connected to your ISP.
- 3) **Connecting:** Indicates that the WAN port is correctly connected and is requesting an IP address from your ISP.
- 4) **Connected**: Indicates that the router has been connected to your ISP.
- 5) **Internet Connection Type:** Displays current Internet connection type.
- 6) WAN IP: Displays the WAN IP address.
- 7) **Subnet Mask:** Displays WAN subnet mask provided by your ISP.
- 8) Gateway: Displays WAN gateway address.
- 9) **DNS Server:** Displays the preferred WAN DNS address.
- 10) Alternate DNS Server: Displays the alternate WAN DNS



address if any.

11) **Connection Time:** Time duration since the device has been successfully connected to ISP.

- 1) LAN MAC Address: Displays device's LAN MAC address.
- 2) WAN MAC Address: Displays device's WAN MAC address.
- System Time: Displays device system either customized or obtained from Internet.
- 4) **Up Time:** Displays device's uptime.
- 5) **Connected Client(s):** Displays the number of connected network devices (which obtain IP addresses from device DHCP server).
- 6) **Firmware Version:** Displays Device's current firmware version.
- Hardware Version: Displays Device's current hardware version.

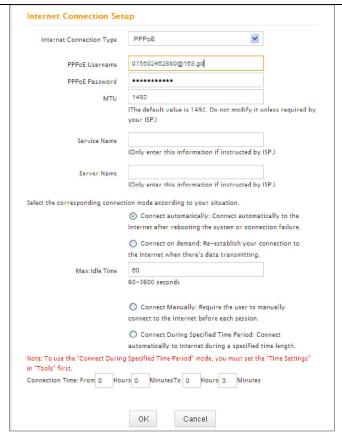


3.2. Internet Connection Setup

3.2.1 **PPPoE**

Select PPPoE (Point to Point Protocol over Ethernet) if you used to connect to the Internet using a broadband connection that requires a username and a password and enter the username and password provided by your ISP.





- 1. Internet connection Type: Select PPPoE.
- 2. **PPPoE User Name:** Enter the User Name provided by your ISP.
- 3. PPPoE Password: Enter the password provided by your ISP.
- 4. MTU: Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless necessary. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.

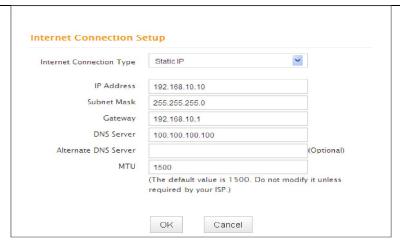


- 5. **Service Name:** Description of PPPoE connection. Leave blank unless otherwise required.
- 6. **Server Name:** Description of server. Leave blank unless otherwise required.
- 7. **Connect Automatically:** Connect automatically to the Internet after rebooting the system or connection failure.
- **Connect Manually:** Require the user to manually connect to the Internet before each session.
- **Connect On Demand:** Re-establish connection to the Internet only when there is data transmission.
- **Connect During Specified Time Period:** Only connect to Internet during a specified time period.
- 8. **OK:** Click it to save all your settings.

3.2.2 Static IP

Select **Static IP** if your ISP provides all the needed info. You will need to enter the provided IP address, subnet mask, gateway address, and DNS address(es) in corresponding fields.



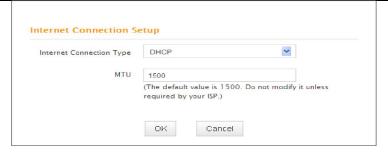


- Internet connection Type: Select Static IP.
- IP Address: Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
- 3. Subnet mask: Enter the subnet mask provided by your ISP.
- Gateway: Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.
- 5. **DNS Server:** Enter the DNS address provided by your ISP.
- Alternate DNS Server: Enter the other DNS address if your ISP provides 2 such addresses (optional).
- 7. **OK:** Click it to save all your settings.

3.2.3 DHCP

Select **DHCP** (Dynamic IP) if you can access Internet as soon as your computer directly connects to an Internet-enabled ADSL/Cable modem.





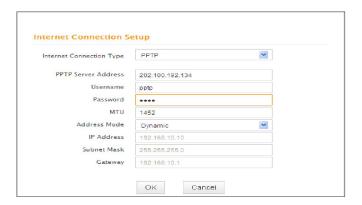
- 1. Internet connection Type: Select DHCP.
- MTU: Maximum Transmission Unit. DO NOT change it from the factory default of 1500 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.
- 3. **OK:** Click it to save your settings.

3.2.4 PPTP

PPTP: Select PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. The PPTP allows you to connect a router to a VPN server. For example: a corporate branch and



headquarter can use this connection type to implement mutual and secure access to each other's resources.



- Internet connection Type: Displays the current Internet connection type.
- 2) **PPTP Server Address**: Enter the IP address of a PPTP server.
- 3) User Name: Enter your PPTP User Name.
- 4) **Password**: Enter the password.
- 5) MTU: Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.
- 6) Address Mode: Select "Dynamic" if you don't get any IP info from your ISP, otherwise select "Static". Consult your ISP if you are not clear.
- 7) **IP Address**: Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
- 8) Subnet mask: Enter the subnet mask provided by your ISP.
- 9) **Gateway**: Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.



3.2.5 L2TP

Select L2TP (Layer 2 Tunneling Protocol) if your ISP uses an L2TP connection. The L2TP connects your router to a L2TP server. For example: a corporate branch and headquarter can use this connection type to implement mutual and secure access to each other's resources.



- Internet connection Type: Displays the current Internet connection type.
- L2TP Server Address: Enter the IP address of a L2TP server.
- 3) User Name: Enter your L2TP username.
- 4) Password: Enter the password.
- 5) MTU: Maximum Transmission Unit. DO NOT change it from the factory default of 1492 unless instructed by your ISP. You may need to change it for optimal performance with some specific websites or application software that cannot be opened or enabled; in this case, try 1450, 1400, etc.
- 6) Address Mode: Select "Dynamic" if you don't get any IP info



from your ISP, otherwise select "Static". Consult your ISP if you are not clear.

- 7) **IP Address:** Enter the IP address provided by your ISP. Consult your ISP if you are not clear.
- 8) **Subnet mask:** Enter the subnet mask provided by your ISP.
- Gateway: Enter the WAN Gateway provided by your ISP. Consult your ISP if you are not clear.

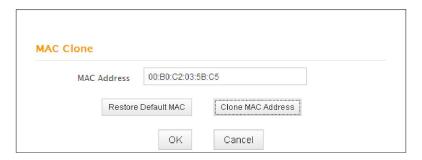
⚠ Note:

- 1) PPPOE, PPTP and L2TP cannot be used simultaneously!
- 2) For PPTP and L2TP Internet connections, only Static IP or Dynamic IP is available.
- 3) Note that PPTP and L2TP may not be available on some products.



3.3 MAC Clone

This section allows you to configure Device's WAN MAC address.



- 1) MAC Address: Config device's WAN MAC address.
- 2) **Clone MAC Address:** Click to copy your PC's MAC address to the device as a new WAN MAC address.
- 3) **Restore Default MAC:** Reset device's WAN MAC to factory default.

3.4 WAN Speed

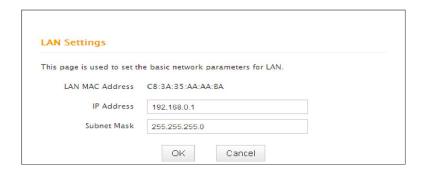
Here you can set the speed and duplex mode for WAN port. It is advisable to keep the default **Auto** setting to get the best speed.





3.5.LAN Settings

Click **Advanced** -> **LAN Settings** to enter the screen below.

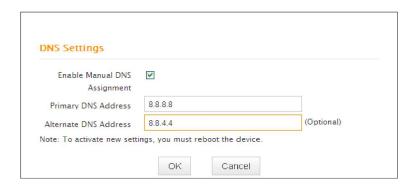


- LAN MAC Address: Displays device's LAN MAC address, which is NOT changeable.
- 2) **IP Address**: Device's LAN IP address. The default is 192.168.0.1. You can change it according to your need.
- 3) **Subnet Mask:** Device's LAN subnet mask, 255.255.255.0 by default.
- 4) **OK:** Click to save your settings.



3.6 DNS Settings

DNS is short for Domain Name System or Domain Name Service.



- Enable Manual DNS Assignment: Check to activate DNS settings.
- 2) **Primary DNS Server**: Enter the primary DNS address provided by your IPS.
- 3) **Alternate DNS Server**: Enter the other DNS address if your ISP provides 2 such addresses (optional).
- 4) **OK:** Click to save your settings.

⚠Note:

- 1) Web pages are not able to open if DNS server addresses are entered incorrectly.
- 2) Do remember to restart the device to activate new settings when you finish all settings.



3.7. DHCP

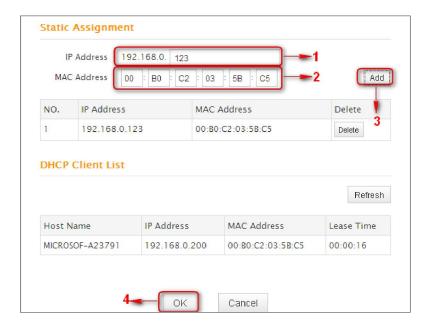
The Dynamic Host Configuration Protocol (DHCP) is an automatic configuration protocol used on IP networks. If you enable the built-in DHCP server on the device, it will automatically configure the TCP/IP settings for all your LAN computers (including IP address, subnet mask, gateway and DNS etc), eliminating the need of manual intervention. Just be sure to set all computers on your LAN to be DHCP clients by selecting "Obtain an IP Address Automatically" respectively on each such PC. When turned on, these PCs will automatically load IP information from the DHCP server. (This feature is enabled by default. Do NOT disable it unless necessary)





3.8 DHCP Client List

DHCP Client List displays information of devices that have obtained IP addresses from the device's DHCP Server. If you would like some devices on your network to always get the same IP addresses, you can manually add a static DHCP reservation entry for each such device.



- 1) **IP Address:** Enter the IP address for static DHCP reservation.
- 2) **MAC Address:** Enter the MAC address of a computer to always receive the same IP address (the IP you just specified).
- 3) Add: Click to add the entry to the MAC address reservation list.
- 4) **OK:** Click to save your settings.

Note:



If the IP address you have reserved for your PC is currently used by another client, then you will not be able to obtain a new IP address from the device's DHCP server, instead, you must manually specify a different IP address for your PC to access Internet.



Chapter 4 Wireless Settings

4.1 Wireless Basic Settings

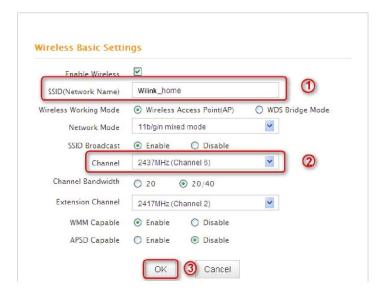
Here you can expand your wireless coverage with the following modes: Wireless AP (default mode) and WDS.

- Wireless Access Point (AP): Select this mode if you want to convert an existing wired network to a wireless network so as to extend Internet access to wireless clients.
- 2) WDS Bridge Mode: wireless distribution system (WDS) is a system enabling the wireless interconnection of access points in an IEEE 802.11 network. It allows a wireless network to be expanded using multiple access points without the traditional requirement for a wired backbone to link them. Select this mode if you want to extend an existing wireless network.

The two modes are described as below:



4.1.1 Wireless AP Mode



- SSID: This is the public name of your wireless network. The default is Wilink_XXXXXX. XXXXXX is the last six characters in the device's MAC address. It is recommended that you change it for better security and identification.
- 2) **Channel:** Select a channel that is the least used by neighboring networks from the drop-down list or **Auto**. Channels 1, 6 and 11 are recommended.
- 3) **OK**: Click to save your settings.

riangleNote:

It is advisable to keep other items unchanged from factory default settings. For more details of other features, see Appendix 1.

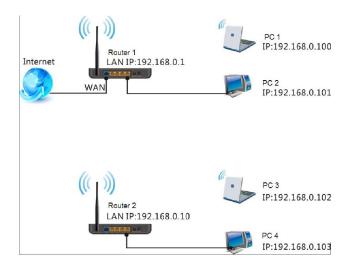


4.1.2 WDS Bridge Mode

WDS Bridge Mode: wireless distribution system (WDS) is a system enabling the wireless interconnection of access points in an IEEE 802.11 network. It allows a wireless network to be expanded using multiple access points without the traditional requirement for a wired backbone to link them.

riangleNote:

The Access Points you select MUST support WDS.



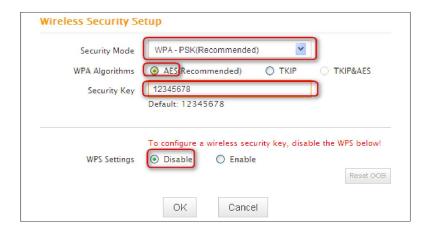


For example:

As seen in the figure above, PC1 and PC2 access Internet via a wireless connection to Router 1. While PC3 and PC4 are too far to directly connect to Router 1 for Internet access. Now you can use the WDS bridge feature to let PC3 and PC4 access Internet.

Before you get started:

1. View and note down the wireless security settings: security mode, cipher type, security key, etc. on Router 1.



- 2. Verify that DHCP server is enabled on Router 1.
- 3. Set the LAN IP address of Router 2 to a different address yet on the same net segment as Router 1.

As shown below:

Router 1:

LAN IP: 192.168.0.1;

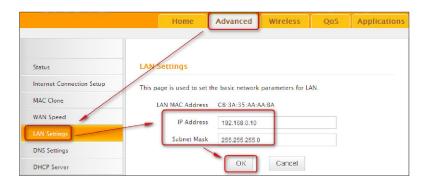
Subnet Mask: 255.255.255.0;

Router 2:

LAN IP: 192.168.0.10;



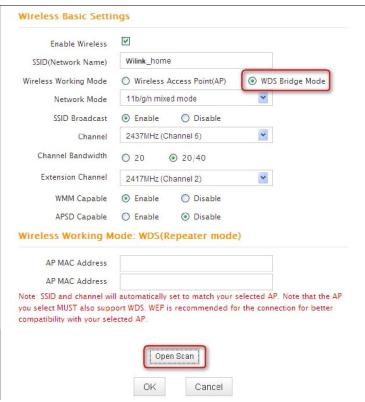
Subnet Mask: 255.255.255.0;



Then do as follows:

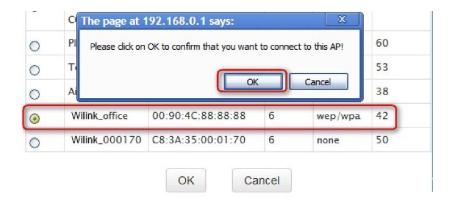
- 1. Configure Router 2:
- 1) Wireless Working Mode: Select WDS Bridge Mode.
- 2) Click **Open Scan** (or **Scan**) to search for Router 1.





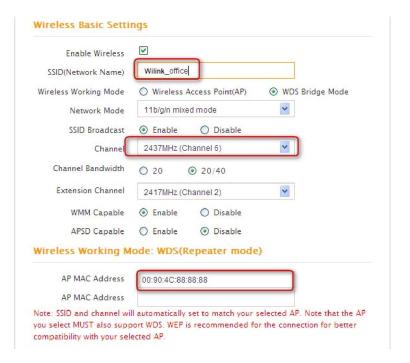


3) Select the wireless network to connect and click OK.



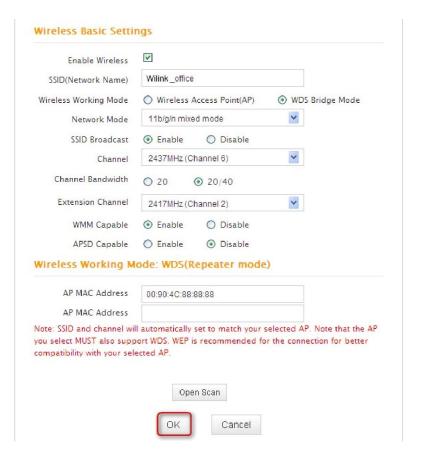


4) Verify that the SSID, channel, and AP MAC address on the page match those of the added wireless network. If not, manually correct them.





5) Close **Scan** and click **OK** to save your settings.





6) Go to **Wireless Security** page and set the wireless security settings exactly as they are on the link partner (Router 1).



 Go to **DHCP Server** to disable the DHCP on Router 2. Now you have finished all settings on Router 2 required for WDS.



- 2. Configure Router 1:
- 1) Go to wireless section on Router 1 and specify **WDS** (or **WDS Bridge**) as its wireless working mode.
- Manually enter Router 2's MAC address (Also, you can use the Scan option as mentioned above) and click OK to finish your settings.
- 3. Configure PC3 and PC4: