2.4GHZ/5GHZ DUAL BAND
DUAL CONCURRENT
IEEE802.11A+B+G+N WIRELESS LAN ROUTER

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 when the equipment is operated in a commercial environment. 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.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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.

For operation within 5.15 ~ 5.25GHz frequency range, it is restricted to indoor environment.

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:

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.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN60950-1: 2006

Safety of Information Technology Equipment

EN 50385: 2002

Product standard to demonstrate the compliance of radio base stations and fixed terminal stations for wireless telecommunication systems with the basic restrictions or the reference levels related to human exposure to radio frequency electromagnetic fields (110MHz - 40 GHz) - General public

EN 300 328 V1.7.1 (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 893 V1.4.1: (2007-07)

Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive

EN 301 489-1 V1.8.1 (2008-04)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

EN 301 489-17 V1.3.2 (2008-04)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

CE0560

cs Česky [Czech]	*[Jméno výrobce]* tímto prohlašuje, že tento *[typ zařízení]* je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede *[fabrikantens navn]* erklærer herved, at følgende udstyr *[udstyrets typebetegnelse]* overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt *[Name des Herstellers]*, dass sich das Gerät *[Gerätetyp]* in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab *[tootja nimi = name of manufacturer]* seadme *[seadme tüüp = type of equipment]* vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, *[name of manufacturer]*, declares that this *[type of equipment]* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
es Español [Spanish]	Por medio de la presente *[nombre del fabricante]* declara que el *[clase de equipo]* cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ *[name of manufacturer]* ΔΗΛΩΝΕΙ ΟΤΙ *[type of equipment]* ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
fr Français [French]	Par la présente *[nom du fabricant]* déclare que l'appareil *[type d'appareil]* est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
it Italiano [Italian]	Con la presente *[nome del costruttore]* dichiara che questo *[tipo di apparecchio]* è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo *[name of manufacturer / izgatavotāja nosaukums]* deklarē, ka *[type of equipment / iekārtas tips]* atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo *[manufacturer name]* deklaruoja, kad šis *[equipment type]* atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart *[naam van de fabrikant]* dat het toestel *[type van toestel]* in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
mt Malti [Maltese]	Hawnhekk, *[isem tal-manifattur]*, jiddikjara li dan *[il-mudel tal-prodott]* jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
hu Magyar [Hungarian]	Alulírott, *[gyártó neve]* nyilatkozom, hogy a *[... típus]* megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
pl Polski [Polish]	Niniejszym *[nazwa producenta]* oświadcza, że *[nazwa wyrobu]* jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	*[Nome do fabricante]* declara que este *[tipo de equipamento]* está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	*[Ime proizvajalca]* izjavlja, da je ta *[tip opreme]* v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	*[Meno výrobcu]* týmto vyhlasuje, že *[typ zariadenia]* spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	*[Valmistaja = manufacturer]* vakuuttaa täten että *[type of equipment = laitteen tyyppimerkintä]* tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar *[företag]* att denna *[utrustningstyp]* står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

TABLE OF CONTENT

ABOUT THIS GUIDE

Congratulations on your purchase of this 300Mbps Wireless N Dual Band Gigabit Router with USB Port. This integrated access device combines Internet gateway functions with wireless LAN and Fast Ethernet switch. It provides a complete solution for Internet surfing and office resource sharing, and it is easy to configure and operate for every user.

Purpose

This manual discusses how to install the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Terms/Usage

In this guide, the term "the WLAN Router" refers to your 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Overview of this User's Guide

Introduction: Describes the 300Mbps Wireless N Dual Band Gigabit Router with USB Port and its features.

Unpacking and Setup. Helps you get started with the basic installation of the the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Identifying External Components: Describes the front panel, rear panel and LED indicators of the IEEE 802.11b/g/n Wireless Home Router.

Connecting the WLAN Router: Tells how you can connect the WLAN Router to your xDSL/Cable Modem.

USB Control Center Utility: Describes ways on how to use the utility for scanning, file sharing and printing.

Technical Specifications: Lists all the technical (general, physical and environmental, performance and Routers settings) specifications of the WLAN Router.

Note: Run the CD and follow the steps in the Quick Installation Guide first to setup your router. If you still have problems after doing so then proceed to the following paragraphs to install the router with web-based configuration.

INTRODUCTION

With the explosive growth of the Internet, accessing information and services at any time, day or night has become a standard requirement for most people. The era of the standalone PC is waning. Networking technology is moving out of the exclusive domain of corporations and into homes with at least two computers.

This integrated access device combines Internet gateway functions with wireless LAN and Fast Ethernet switch. Designed for the business and home, it saves you the cost of installing a separate modem and ISP line for each computer, while providing ready connection for the users, with or without the network wires.

Broadband network access is also gaining ground. However, allowing more than two computers to access the Internet at the same time means less affordable, higher costs. Thus, there is a need to share one public IP address over a single Internet connection to link the home with the Internet.

The scarcity of IP addresses and using a shared Internet connection through an Internet sharing device can solve high network access costs. All linked computers can make full use of broadband capabilities over such a device.

This device not only comes equipped with a wide range of features, but also can be installed and configured right out of the box. This device supports a simple local area network and Internet access share, offering great cost savings.

The local area network connects home computers while also allowing any of the computers to access the Internet, share resources, or play online games—the basis of the family computing lifestyle.

Applications:

Broadband Internet access:
Several computers can share one high-speed broadband connection through wireless or wired (WLAN, LAN and WAN-Internet).

Resource sharing:
Share resources such as printers, scanners and other peripherals.

File sharing:
Exchange data, messages, and distribute files thus making good use of hard disk space.

Online gaming:
Through the local area network, online gaming and e-commerce services can be easily setup.

Firewall:
A built-in firewall function — for security and anti-hacking systems.

Supported Features:

- Wi-Fi compliant with IEEE 802.11n and IEEE 802.11a/b/g standards
- Supports 802.11a(5G)+802.11n(2.4G+5G)+802.11b/g(2.4G) dual band concurrent operation.
- 4 x 10/100/1000Mbps Gigabit Ethernet LAN port and 1 x 10/100/1000Mbps Gigabit Ethernet WAN port (Internet)
- Supports Cable/DSL modems with Dynamic IP, Static IP, PPPoE, PPTP, L2TP & BigPond connection types
- High-speed up to 300Mbps data rate using IEEE 802.11n connection
- 2 2dBi external antennas support high speed performance and great coverage with MIMO technology
- Support Wi-Fi Protected Setup (WPS) for easy connection
- Supports 2 inches LCD panel and 4 key pads for easy to view the information of the router
- Universal Plug and Play (UPnP)
- Provides additional security of enable/disable wireless SSID, Internet Access Control (MAC Address, Domain & IP Filtering)
- Easy management via web browser and remote management
- Supports 64/128-bit WEP, WPA/WPA2 and WPA-PSK/WPA2-PSK
- Works with Windows 95/98/NT/2000/XP/2003 Server/Vista/Windows 7, Linux and Mac OS
- Coverage up to 100 meters (330ft.) indoor and 300meters (980ft) outdoor (depends on the environment

UNPACKING AND SETUP

This chapter provides unpacking and setup information for the IEEE 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Unpacking

Open the box of the WLAN Router and carefully unpack it. The box should contain the following items:

- 300Mbps Wireless N Dual Band Gigabit Router with USB Port
- CD ROM (Utility/User's Guide)
- Multi-Language Quick Installation Guide
- 2 x 2dBi gain dipole antenna
- Power Adapter (12V DC, 2A)
- Cat. 5 Ethernet Cable (1.5m/5ft)

If any item is found missing or damaged, please contact your local reseller for replacement.

Setup

The setup of the WLAN Router can be performed properly using the following methods:

- The power outlet should be within 1.82 meters (6 feet) of the Broadband Router.
- Visually inspect the DC power jack and make sure that it is fully secured to the power adapter.
- Make sure that there is proper heat dissipation and adequate ventilation around the Broadband Router. Do not place heavy objects on the Broadband Router.
- Fix the direction of the antennas. Try to place the Wireless Router in a position that can best cover your wireless network. Normally, the higher you place the antenna, the better the performance will be. The antenna's position enhances the receiving sensitivity.

HARDWARE INSTALLATION

Front Panel

The figure below shows the front panel of the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Front Panel

POWER:
This indicator lights green when the hub is receives power, otherwise it is off.

Top Panel

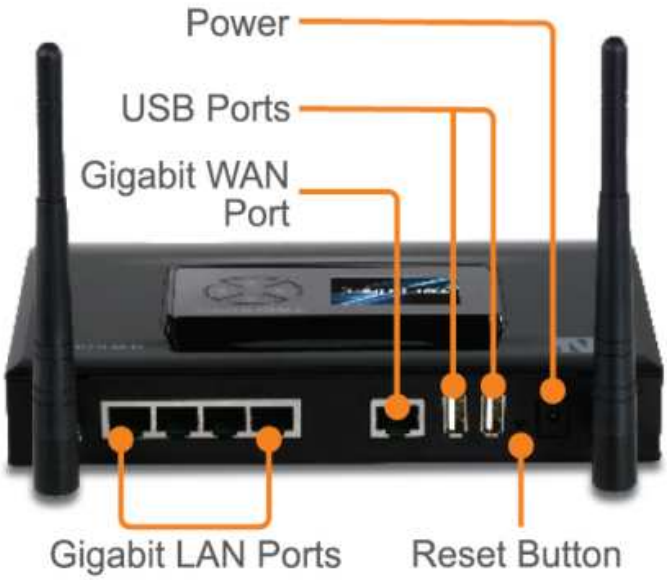
The figure below shows the top panel of the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

Top Panel

LCD Screen:
The LED screen displays information regarding the router.

Rear Panel

The figure below shows the rear panel of the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.



Rear Panel

Antenna:

There are two 2dBi gain antennas on the rear panel for wireless connection.

LAN (1-4):

Four 10/100/1000Mbps Auto-MDIX LAN port for connecting 10Mbps, 100Mbps Ethernet or 10000Mbps Gigabit connections.

WAN:

One 10/100/1000Mbps WAN port that connects to the xDSL/Cable modem for Internet connectivity.

USB:

Two USB ports to share either USB storage devices or printers over the network.

POWER:

Plug the power adapter to this power jack

RESET:

Use a pin-shaped item to push to reset this device to factory default settings. It will be a useful tool when the manager forgot the password to login, and needs to restore the device back to default settings.

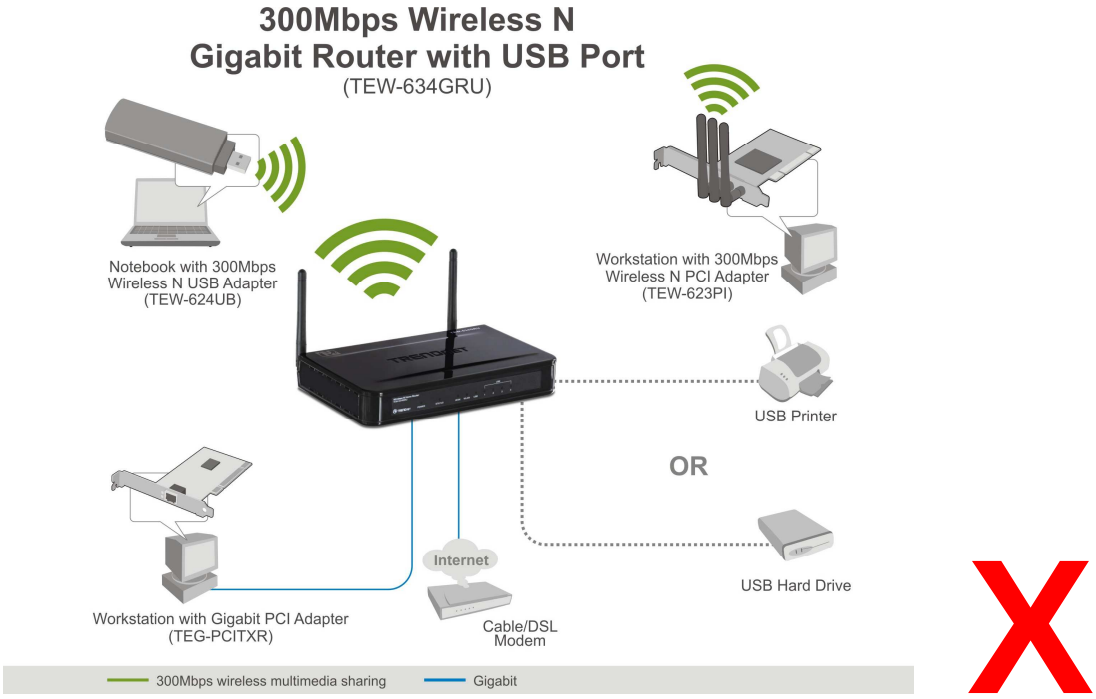
Side Panel

The figure below shows the side panel of the 300Mbps Wireless N Dual Band Gigabit Router with USB Port.

WPS (side panel):
Push this button to execute the Wi-Fi Protected Setup process.

Hardware connections

Connecting the WLAN Router



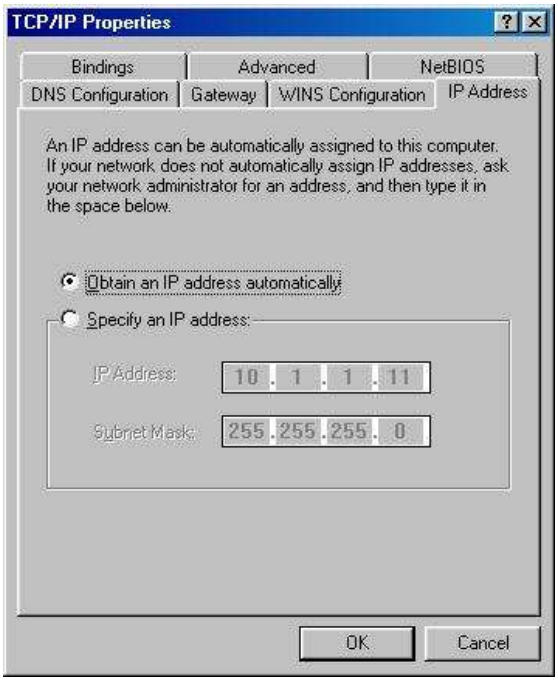
1. Plug in one end of the network cable to the WAN port of the WLAN Router.
2. Plug in the other end of the network cable to the Ethernet port of the xDSL or Cable modem.
3. Use another network cable to connect to the Ethernet card on the computer system; the other end of the cable connects to the LAN port of the WLAN Router. Since the IEEE 300Mbps Wireless N Dual Band Gigabit Router with USB Port has four ports, you can connect up to four computers directly to the unit. Then you do not have to buy a switch to connect these computers since one WLAN Router functions both as a connection-sharing unit and as a switch.

PC NETWORK TCP/IP SETTING

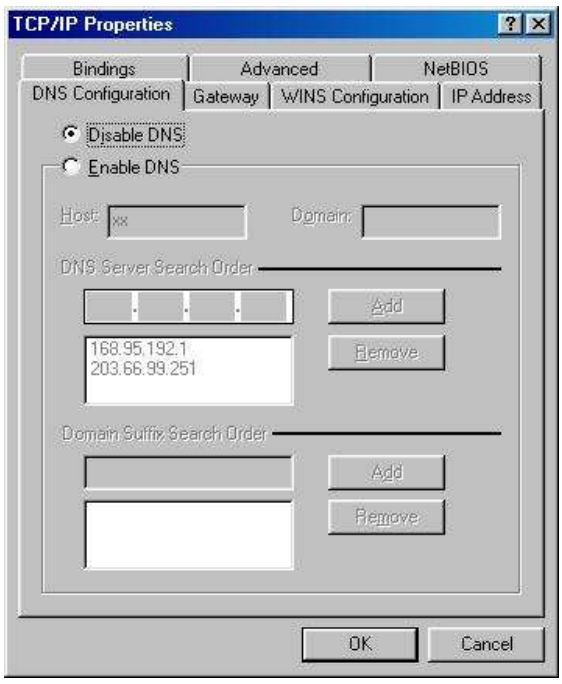
The network TCP/IP settings differ based on the computer's operating system (Win95/98/ME/NT/2000/XP) and are as follows.

Windows 95/98/ME

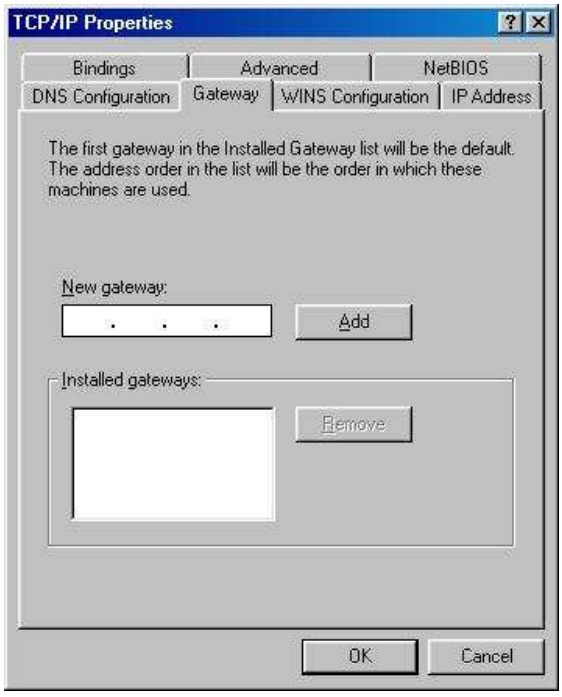
1. Click on the "**Network neighborhood**" icon found on the desktop.
2. Click the right mouse button and a context menu will be show.
3. Select "**Properties**" to enter the TCP/IP setting screen.
4. Select "**Obtain an IP address automatically**" on the "**IP address**" field.



5. Select "**Disable DNS**" in the "**DNS**" field.



6. Select "**None**" for the "**Gateway address**" field.

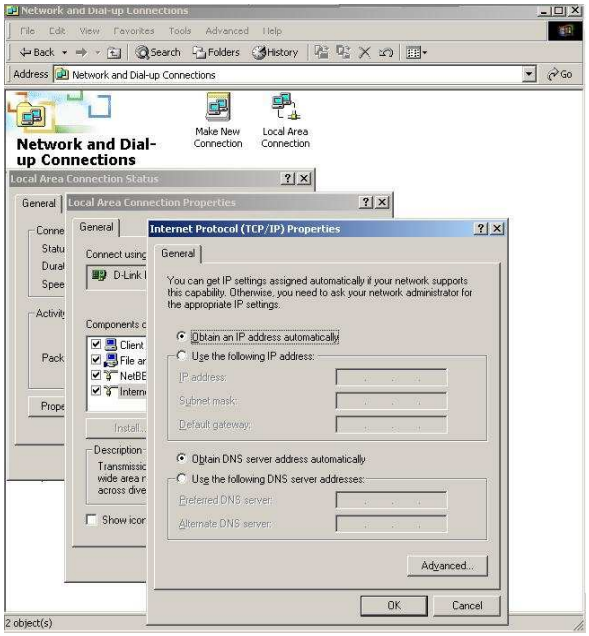


Windows 2000

Double click on the "**My Computer**" icon on the desktop. When "**My Computer**" window opens, open the "**Control Panel**" and then open the "**Network dialup connection**" applet. Double click on the "Local area network connection" icon. Select "Properties" to enter the TCP/IP setting window.

1. In the "**Local area network status**" window, click on "**Properties**."
2. In the "**Local area network connection**" window, first select TCP/IP setting and then select "**Properties**."

3. Set both “**IP address**” and “**DNS**” to **Automatic configuration**.

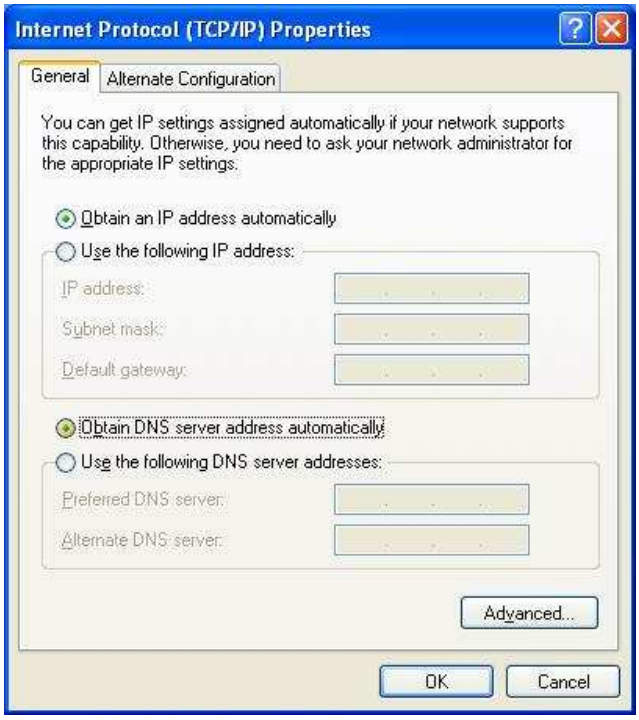


Windows XP / Vista

Point the cursor and click the right button on the “My Network Place” icon.

Select “properties” to enter the TCP/IP setting window.

1. Set “**IP address**” to “**Obtain an IP address automatically**.”
2. Set “**DNS**” to “**Obtain DNS server address automatically**.”



CONFIGURATION

First make sure that the network connections are functioning normally.

This WLAN Router can be configured using Internet Explorer 6.0 or newer web browser versions.

Login to the WLAN Router through Wireless LAN

Before configuring the WLAN Router through WLAN, make sure that the SSID, Channel and the WEP is set properly.

The default setting of the WLAN Router that you will use:

- ✓ SSID: TRENDnet673N (2.4G band) and TRENDnet673A (5G band)
- ✓ Channel: 6 (2.4G band) and 40 (5G band)
- ✓ Security: disable

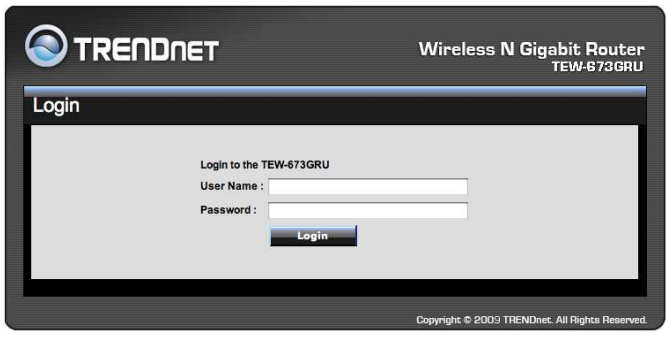
Login to the WLAN Router

Before you configure this device, note that when the WLAN Router, make sure the host PC must be set on the **IP subnet** that can be accessed by the xDSL/Cable modem. For example, when the default network address of the xDSL/Cable modem Ethernet interface is 192.168.10.1, then the host PC should be set at 192.168.10.xxx (where xxx is a number between 2 and 254), and the default subnet mask is 255.255.255.0.

Using the Web Browser

1. Open Internet Explorer 6.0 or above Internet browser.
2. Enter IP address ***http://192.168.10.1*** (the factory-default IP address setting) to the URL web address location.

3. When the following dialog box appears, enter the user name and password to login to the main configuration window, the default username and password is "***admin***".

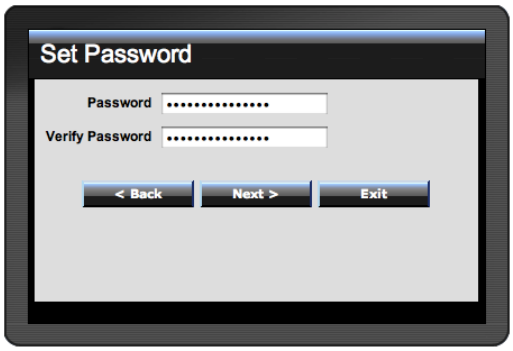


Setup Wizard

Setup wizard is provided as part of the web configuration utility. Users can simply follow the step-by-step process to get the wireless Router configuration ready to run in 6 easy steps by clicking on` the “Wizard” button on the function menu. The following screen will appear. Please click “Next” to continue.

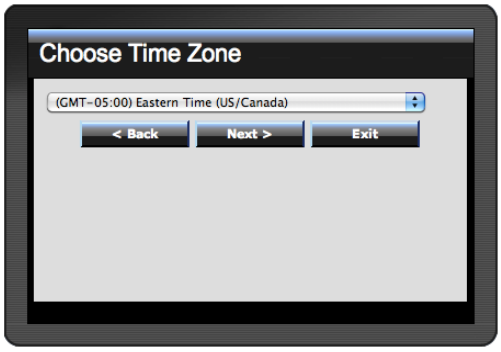
Step 1: Set your new password

Set a new admin password of the WLAN Router. Please click “Next” to continue.



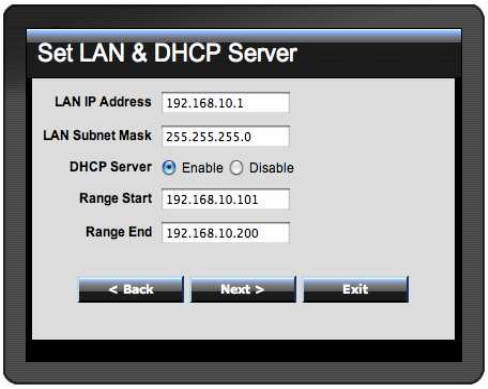
Step 2: Choose time zone

Select the time zone from the drop down list. Please click “Next” to continue.



Step 3: Set LAN connection and DHCP server

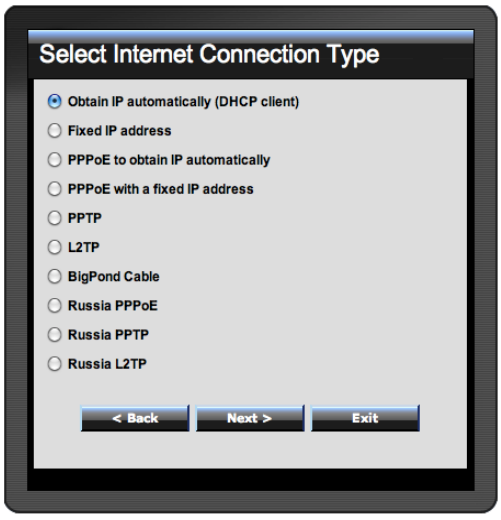
Set user's IP address and mask. The default IP is 192.168.10.1. If the user chooses to enable DHCP, please click "Enable". DHCP enabled is able to automatically assign IP addresses. Please assign the range of IP addresses in the fields of "Range start" and "Range end". Please click "Next" to continue.



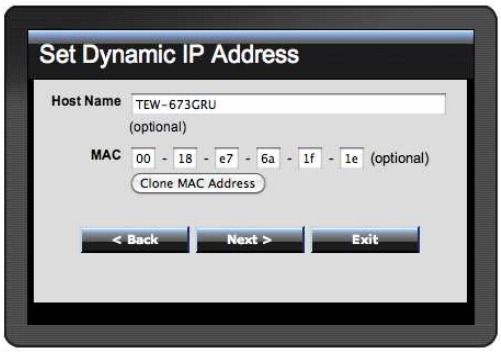
Step 4: Set Internet connection

The WLAN Router will attempt to auto detect your Internet Connection.

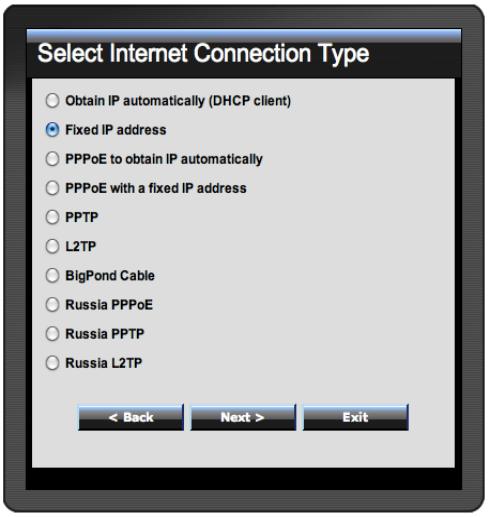
<u>Obtain IP automatically (DHCP client):</u>



If the user has enabled DHCP server, choose "Obtain IP automatically (DHCP client)" to have the WLAN Router assign IP addresses automatically.

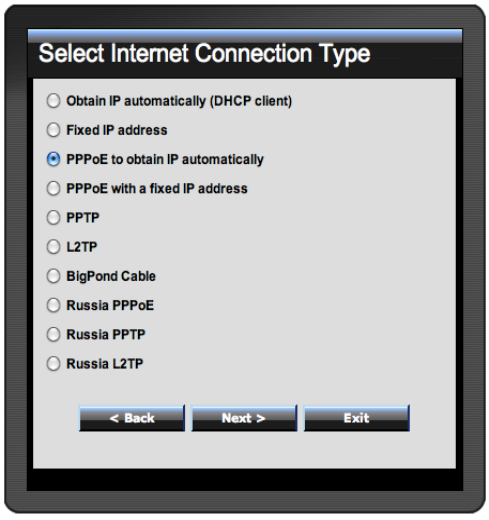


Fixed IP Address:

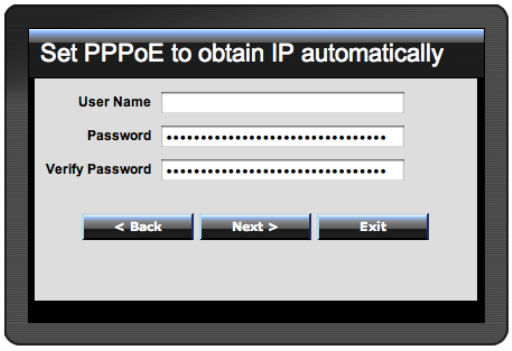


If the Internet Service Provider (ISP) assigns a fixed IP address, choose this option and enter the assigned WAN IP Address, WAN Subnet Mask, WAN Gateway Address and DNS Server Addresses for the WLAN Router.

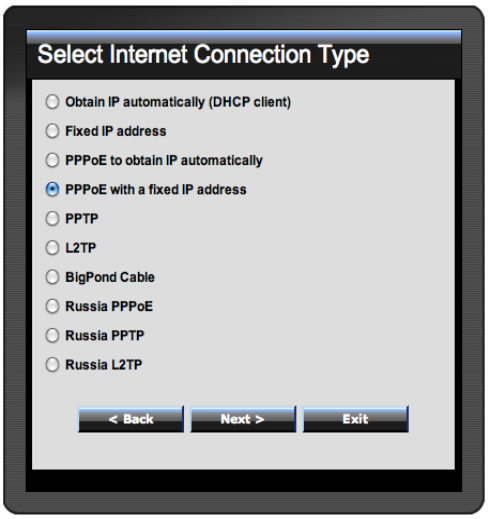
PPPoE to obtain IP automatically:



If connected to the Internet using a PPPoE (Dial-up xDSL) connection, and the ISP provides a User Name and Password, then choose this option and enter the required information.

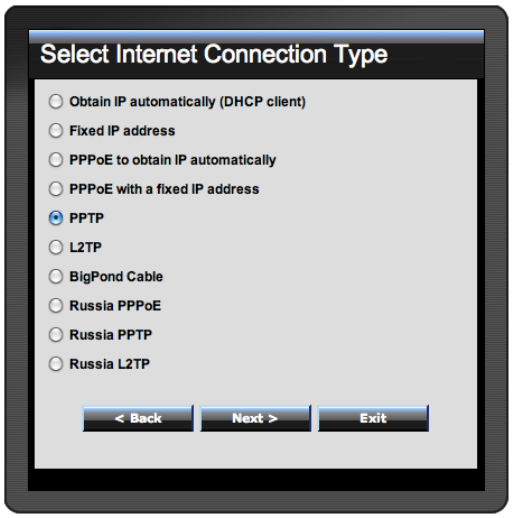


PPPoE with a fixed IP address:

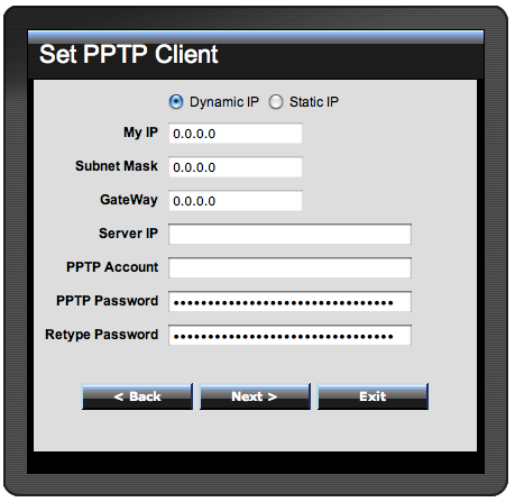


If connected to the Internet using a PPPoE (Dial-up xDSL) connection, and the ISP provides a User Name, Password and a Fixed IP Address, choose this option and enter the required information.

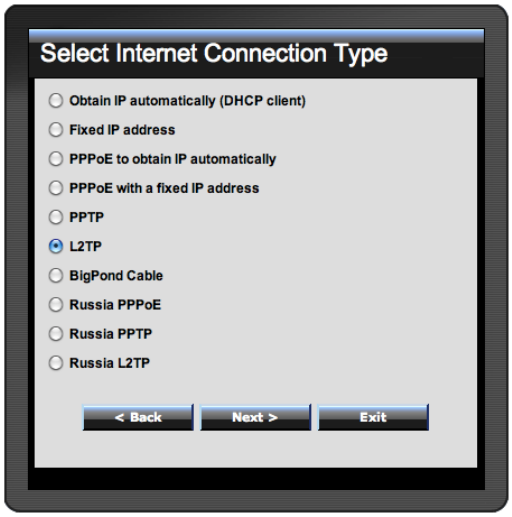
PPTP:



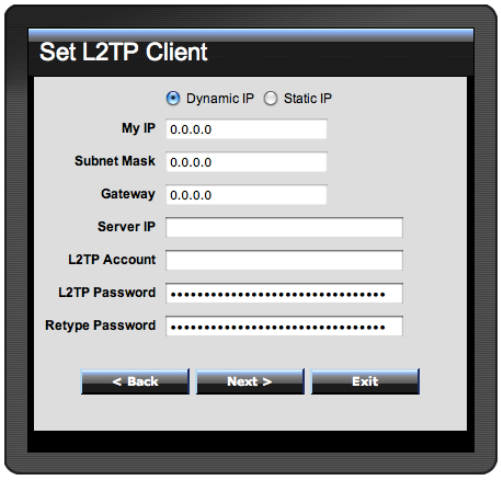
If connected to the Internet using a PPTP xDSL connection, enter your IP, Subnet Mask, Gateway, Server IP, PPTP Account and PPTP Password.



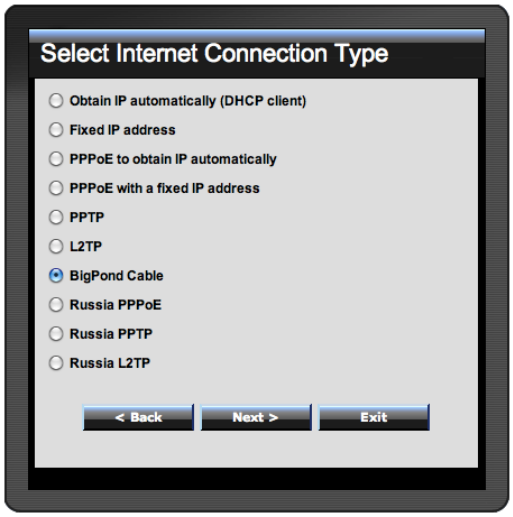
L2TP:



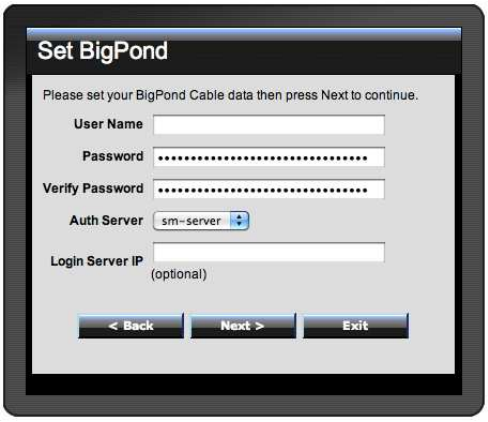
If connected to the Internet using a L2TP (Dial-up xDSL) connection and the ISP provides a Server IP, Account and Password information, choose this option and enter the required information.



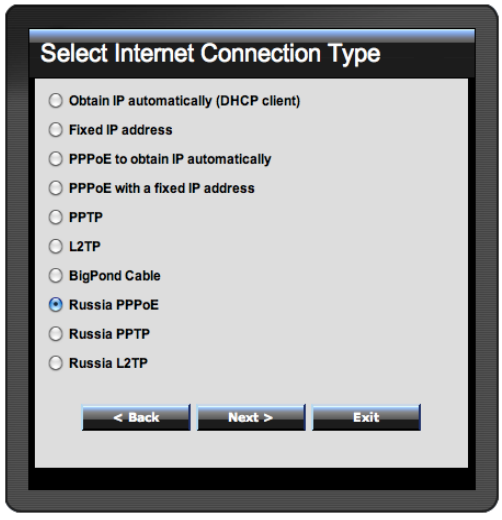
Big Pond Cable(Australia):



If your ISP is Big Pond Cable, the ISP will provide a User Name, Password, Authentication Server and Login Server IP (Optional). Choose this option and enter the required information.

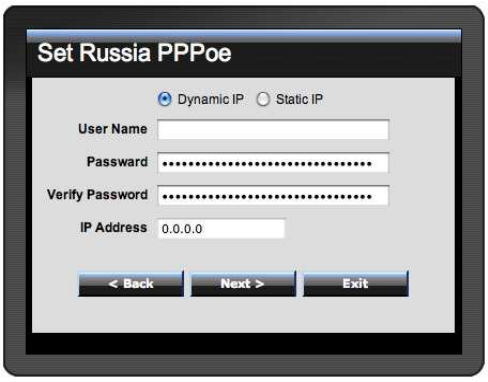


Russia PPPoE:

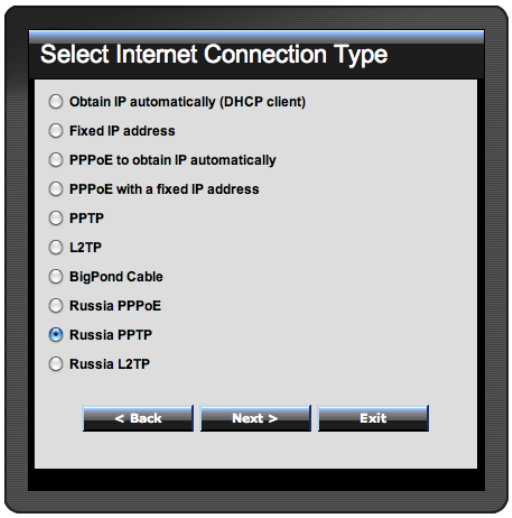


If your ISP is Russian PPPoE, the ISP will provide a User Name, Password. If you have a Static IP WAN Physical IP Address, WAN Physical Subnet Mask and WAN

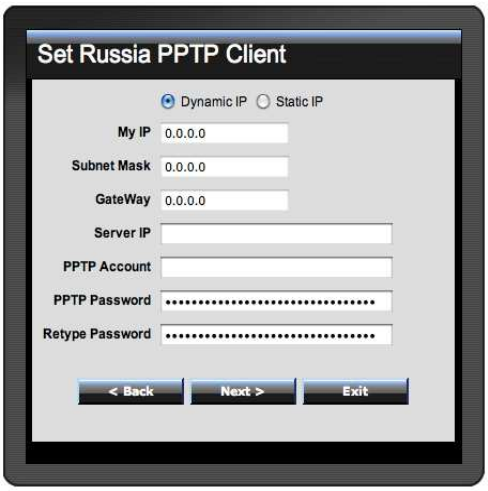
Physical Gateway IP Address will be required. Choose this option and enter the required information.



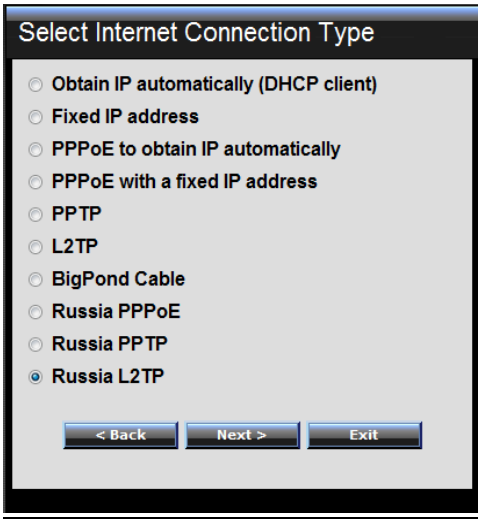
Russia PPTP:



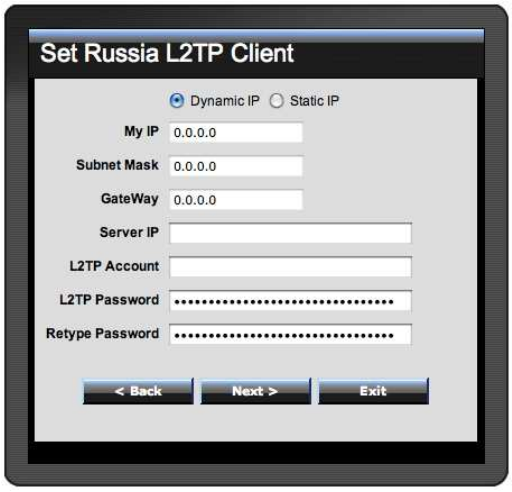
If connected to the Internet using Russian PPTP xDSL connection, enter your server IP, PPTP Account and Password. If using Static IP you must enter your IP, Subnet Mask, Gateway, Server IP, PPTP Account and PPTP Password.



Russia L2TP:

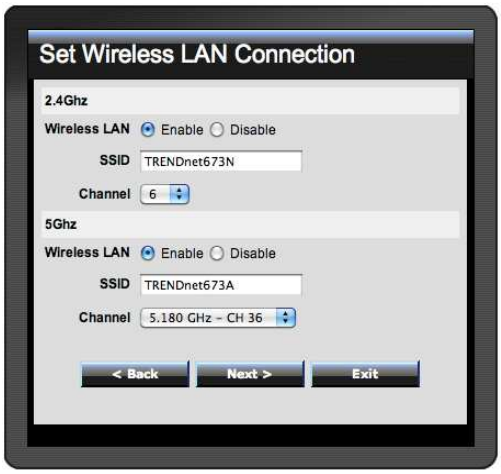


If connected to the Internet using Russian L2TP (Dial-up xDSL) enter your server IP, PPTP Account and Password. If using Static IP you must enter your IP, Subnet Mask, Gateway, Server IP, PPTP Account and PPTP Password.



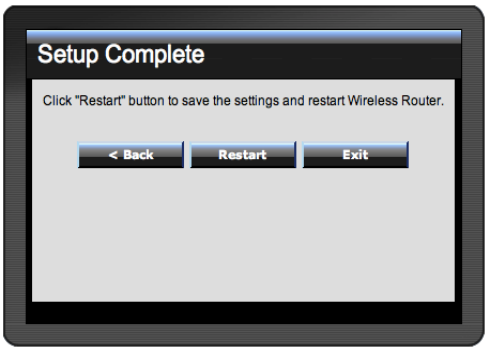
Step 5: Set Wireless LAN connection

Click “Enable” to enable Wireless LAN. If user enables the Wireless LAN, type the SSID in the text box and select a channel. The SSID and channel must be the same as wireless devices attempting to connect to the WLAN Router.



Step 6: Setup completed

The Setup wizard is now completed. The new settings will be effective after the WLAN Router restarts. Please click “Restart” to reboot the WLAN Router. If user does not want to make any changes, please click “Exit” to quit without any changes. User also can go back to modify the settings by clicking “Back”.

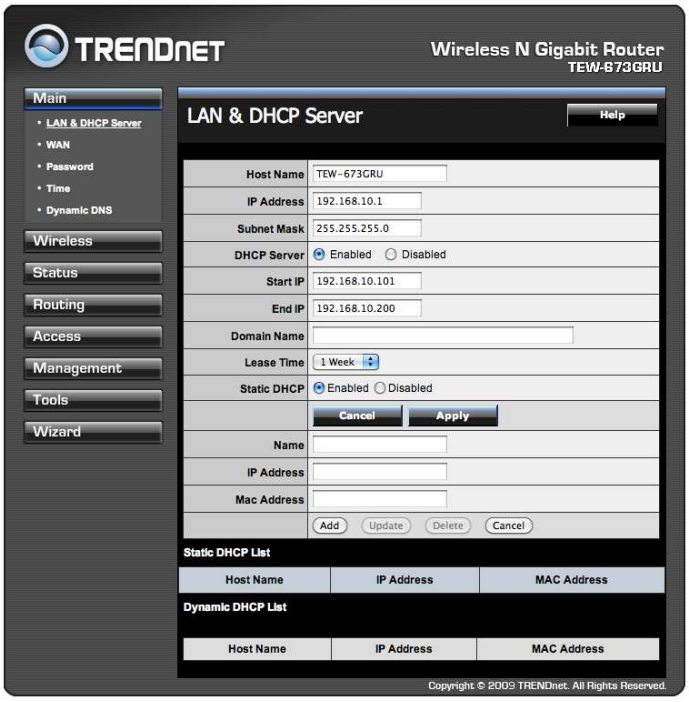


Main configuration

The screen enables users to configure the LAN & DHCP Server, set WAN parameters, create Administrator and User passwords, and set the local time, time zone, and dynamic DNS.

LAN & DHCP Server

This page allows the user to configure LAN and DHCP properties, such as the host name, IP address, subnet mask, and domain name. LAN and DHCP profiles are listed in the DHCP table at the bottom of the screen.



Host Name: Type the host name in the text box. The host name is required by some ISPs. The default host name is "TEW-673GRU"

IP Address: This is the IP address of the WLAN Router. The default IP address is 192.168.10.1.

Subnet Mask: Type the subnet mask for the WLAN Router in the text box. The default subnet mask is 255.255.255.0.

DHCP Server: Enables the DHCP server to allow the WLAN Router to automatically assign IP addresses to devices connecting to the LAN port or wirelessly. DHCP is enabled by default.

All DHCP client computers are listed in the table at the bottom of the screen, providing the host name, IP address, and MAC address of the client.

Start IP: Type an IP address to serve as the start of the IP range that DHCP server will use to assign IP addresses to all LAN devices connected to the WLAN Router.

End IP: Type an IP address to serve as the end of the IP range that DHCP will use to assign IP addresses to all LAN devices connected to the WLAN Router.

Domain Name: Type the local domain name of the network in the text box. This item is optional.

Lease Time: The lease time specifies the amount of connection time a network user be allowed with their current dynamic IP address.

Static DHCP: This option enables users to statically assign IP address to LAN clients connected to the WLAN router.

Name: Type the name of the LAN client that will be using the static IP address.

IP Address: Type an IP address to assign a LAN client.

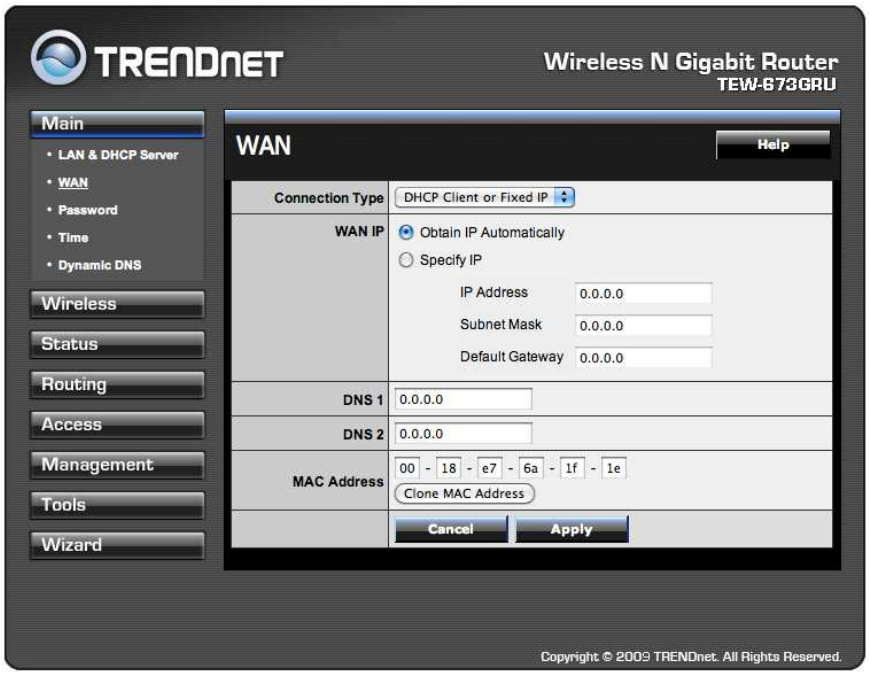
MAC Address: Enter the MAC address of the specific LAN client that will be using the IP address.

Static DHCP List: List all static IP address assigned on the WLAN router.

Dynamic DHCP List: List all assigned DHCP clients on the WLAN router.

WAN

This screen enables users to set up the WLAN Router's WAN connection, specify the IP address for the WAN, add DNS numbers, and enter the MAC address.



Connection Type: Select the connection type, DHCP client or Fixed IP, PPPoE, PPTP, L2TP, BigPond Cable, Russia PPPoE, Russia, PPTP and Russia L2TP from the drop-down list.

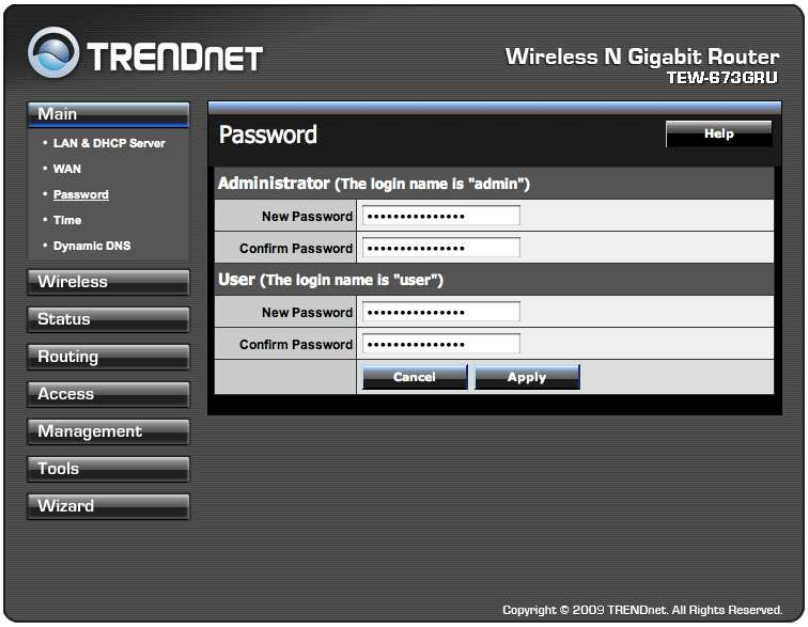
WAN IP: Select whether user wants to specify an IP address manually, or want to obtain an IP address automatically. When Specify IP is selected, type the IP address, subnet mask, and default gateway in the text boxes. User's ISP will provide with this information.

DNS 1-2: Type up to 2 DNS numbers in the text boxes. User's ISP will provide this information.

MAC Address: If required by user's ISP, type the MAC address of the WLAN Router WAN interface in this field. Or click on CLONE MAC Address to automatically enter your PC's MAC address.

Password

This screen enables users to set administrative and user passwords. These passwords are used to gain access to the WLAN Router interface.

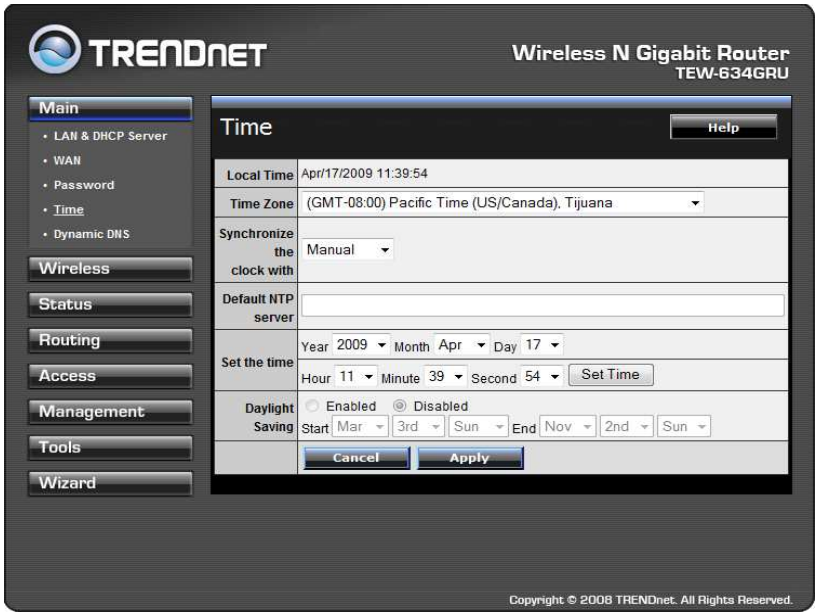


Administrator: Type the password the Administrator will use to log into the system. The password must be typed again for confirmation. The Administrator have the ability to apply and setting on the WLAN Router.

User: Type the password the User will use to log in to the system. The password must be typed again for confirmation. The User accounts only have the ability to view settings and cannot apply any setting changes.

Time

This screen enables users to set the time and date for the WLAN Router's real-time clock, select properly time zone, and enable or disable daylight saving.



Local Time: Displays the current time applied on the WLAN Router.

Time Zone: Select the time zone from the drop-down list.

Synchronize the clock with: Select the clock adjustment method form the drop-down list.

Automatic: Automatically adjust the system time from an entered NTP Server

Manual: Manually adjust the system time when you press the ***Set Time*** button.

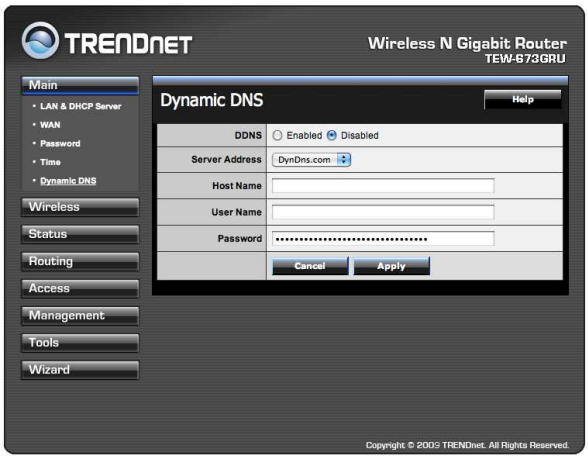
Default NTP server: The Simple Network Time Protocol (SNTP) server allows the WLAN Router to synchronize the system clock to the global Internet through the SNTP Server. Specify the NTP domain name or IP address in the text box.

Set the time: Manually setting the WLAN Router system time, press the ***Set Time*** button to update the system time.

Daylight Saving: Enables users to enable or disable daylight saving time. When enabled, select the start and end date for daylight saving time.

Dynamic DNS

This synchronizes the DDNS server with your current Public IP address when you are online. First, you need to register your preferred DNS with the DDNS provider. Then, please select the DDNS address in the Server Address and fill the related information in the below fields: Host Name, User Name and Password.

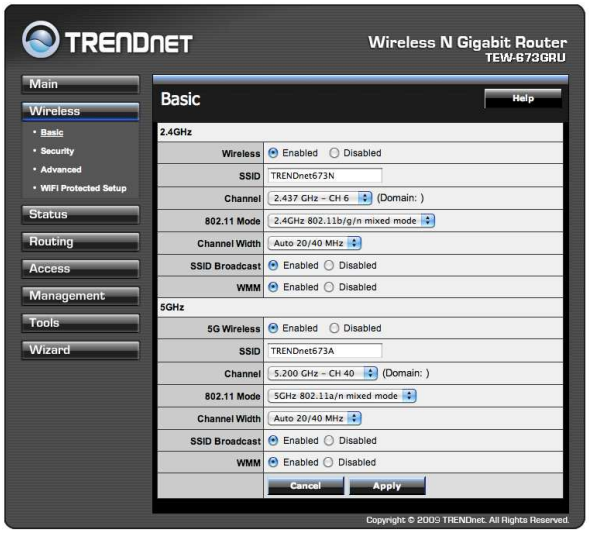


Wireless

Basic

This section enables users to configure the wireless parameters for the WLAN Router.

This page allows you to enable and disable the wireless LAN function, create a SSID, and select the channel for wireless communications.



2.4GHz

Enable/Disable: Enables or disables 2.4GHz wireless LAN on the WLAN Router.

SSID: Type an SSID in the text box. The SSID of any wireless device must match the SSID typed here in order for the wireless device to access the LAN and WAN of the WLAN Router.

Channel: Select a transmission channel for wireless communications. The channel of any wireless device must match the channel selected here in order for the wireless device to access the LAN and WAN via the WLAN Router.

802.11 Mode: Select one of the following:

- **2.4GHz 802.11b only mode** - Select if you are using only 2.4GHz 802.11b wireless clients.
- **2.4GHz 802.11g only mode** - Select if you are using only 2.4GHz 802.11g wireless clients.
- **2.4GHz 802.11n only mode** - Select if you are using only 2.4GHz 802.11n wireless clients.
- **2.4GHz 802.11b/g mixed mode** - Select if you are using both 2.4GHz 802.11b and 802.11g wireless clients.
- **2.4GHz 802.11b/g/n mixed mode** - Select if you are using a mix of 2.4GHz 802.11b, 11g, and 11n wireless clients.

Channel Width: Select the Channel Width:

- **Auto 20/40** - Select if you are using both 802.11n and non-802.11n wireless devices.
- **20MHz** - This is the default setting with single channel support required by Wi-Fi regulations.

SSID Broadcast: While SSID Broadcast is enabled, all wireless clients will be able to view the WLAN Router's SSID. For security purposes, users may want to disable SSID Broadcast to ensure only authorized clients have access.

WMM: If selected the Enable, the WMM (Wi-Fi Multimedia Quality of Service) feature will be enabled.

5GHz

Enable/Disable: Enables or disables 5GHz wireless LAN on the WLAN Router.

SSID: Type an SSID in the text box. The SSID of any wireless device must match the SSID typed here in order for the wireless device to access the LAN and WAN of the WLAN Router.

Channel: Select a transmission channel for wireless communications. The channel of any wireless device must match the channel selected here in order for the wireless device to access the LAN and WAN via the WLAN Router.

802.11 Mode: Select one of the following:

- **5GHz 802.11a only mode** - Select if you are using only 5GHz 802.11a wireless clients.
- **5GHz 802.11n only mode** - Select if you are using only 5GHz 802.11n wireless clients.
- **5GHz 802.11a/n mixed mode** - Select if you are using both 5GHz 802.11a and 802.11n wireless clients.

Channel Width: Select the Channel Width:

- **Auto 20/40** - Select if you are using both 802.11n and non-802.11n wireless devices.
- **20MHz** - This is the default setting with single channel support required by Wi-Fi regulations.

SSID Broadcast: While SSID Broadcast is enabled, all wireless clients will be able to view the WLAN Router's SSID. For security purposes, users may want to disable SSID Broadcast to ensure only authorized clients have access.

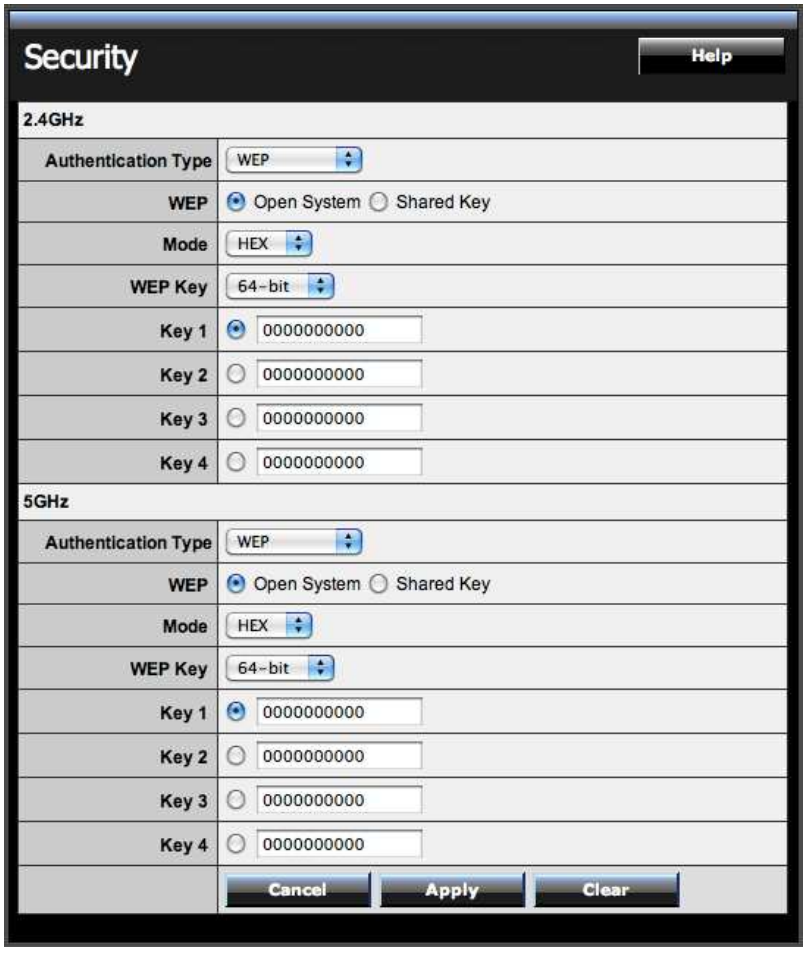
WMM: If selected the Enable, the WMM (Wi-Fi Multimedia Quality of Service) feature will be enabled.

Security

This page allows users to set the wireless security of the WLAN router for a secure wireless communication.

Authentication Type: The authentication type is set to Disable by default. There are four options: Disabled, WEP, WPA, WPA2 and WPA-Auto.

WEP Encryption



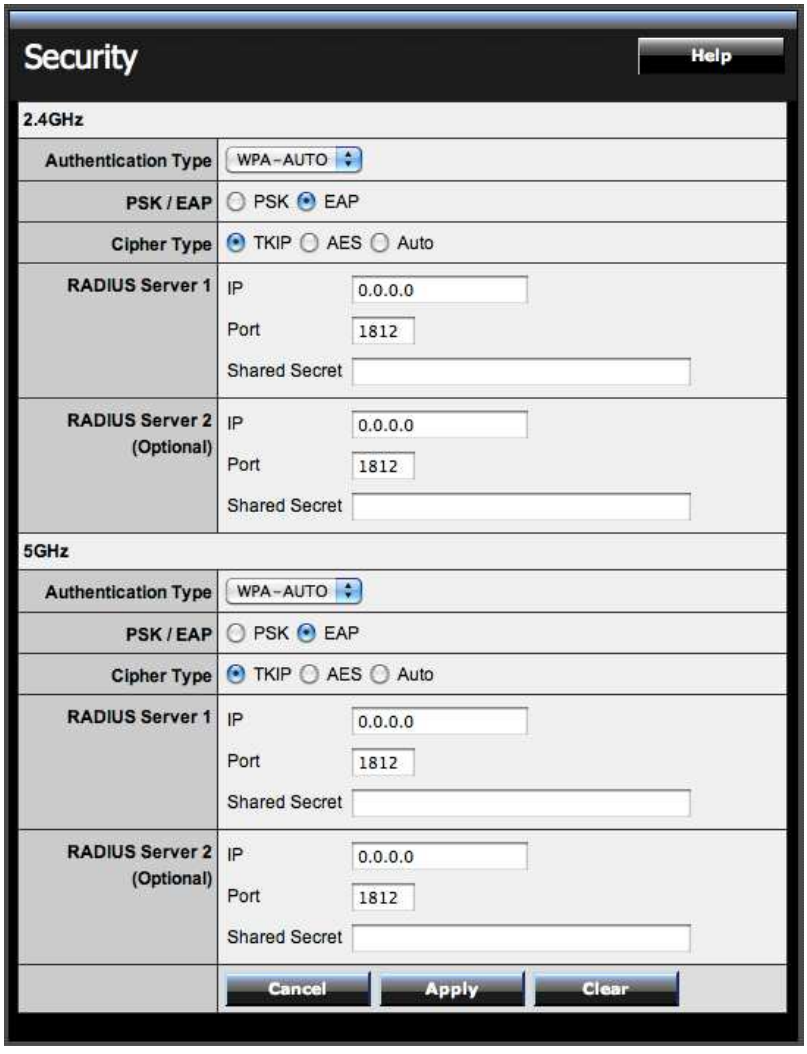
WEP: Open System and Shared Key requires the user to set a WEP key to exchange data with other wireless clients that have the same WEP key.

Mode: Select the key type: ASCII or HEX

WEP Key: Select the level of encryption from the drop-down list. The WLAN Router supports, 64 and 128-bit encryption.

Key 1 ~ Key 4: Enables users to create up to 4 different WEP keys. Manually enter a set of values for each key. Select a key to use by clicking the radio button next to the key.

WPA/WPA2/WPA-Auto Security



If WPA, WPA2 or WPA-Auto EAP is selected, the above screen is shown. Please set the length of the encryption key and the parameters for the RADIUS server.

Cipher Type: Select the cipher type for TKIP or AES encryption, Selected Auto for auto detects the cipher type.

RADIUS Server:

1. Enter the IP address, Port used and Shared Secret by the Primary Radius Server.
2. Enter the IP address, Port used and Shared Secret by the Secondary Radius Server. (optional)

WPA-PSK/WPA2-PSK Security

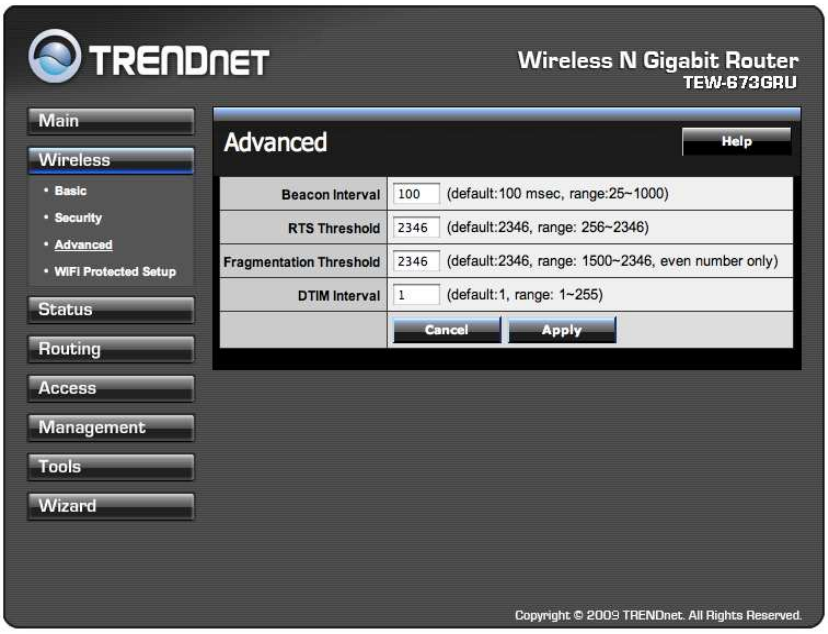
If WPA, WPA2 or WPA-Auto PSK is selected the below screen will show.

Cipher Type: Select the cipher type for TKIP or AES encryption, Select Auto for auto detects the cipher type.

Passphrase: Enter a passphrase key, the length should be 8 characters at least.

Advanced

This screen enables users to configure advanced wireless functions.



Beacon Interval: Type the beacon interval in the text box. User can specify a value from 25 to 1000. The default beacon interval is 100.

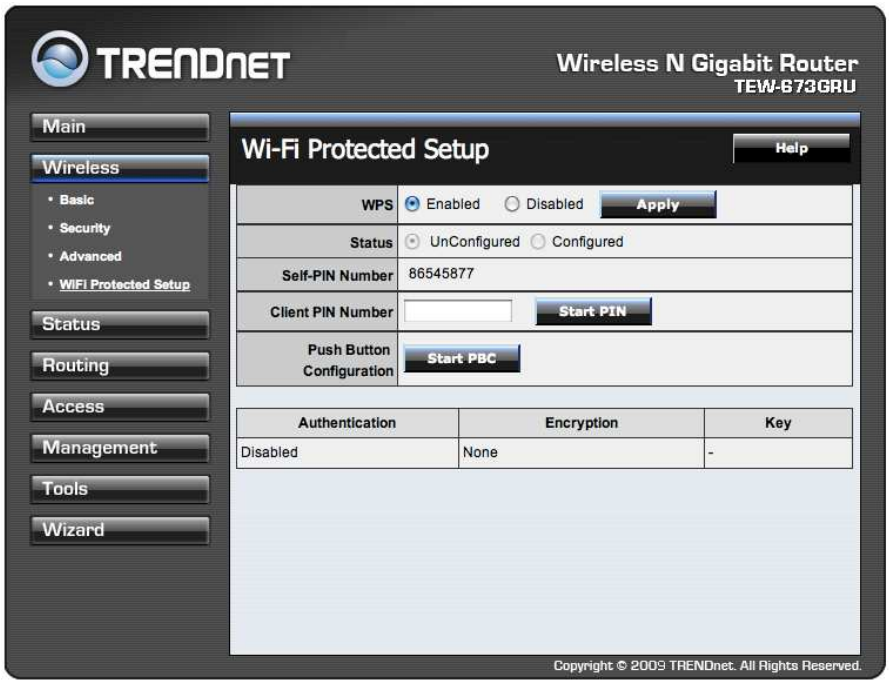
RTS Threshold: Type the RTS (Request-To-Send) threshold in the text box. This value stabilizes data flow. If data flow is irregular, choose values between 256 and 2346 until data flow is normalized.

Fragmentation Threshold: Type the fragmentation threshold in the text box. If packet transfer error rates are high, choose values between 1500 and 2346 until packet transfer rates are minimized. (NOTE: set this fragmentation threshold value may diminish system performance.)

DTIM Interval: Type a DTIM (Delivery Traffic Indication Message) interval in the text box. User can specify a value between 1 and 255. The default value is 1.

WIFI Protected Setup

This screen enables users to configure the Wi-Fi Protected Setup function.



WPS: Enable or Disable the WPS (Wi-Fi Protected Setup) function

Status: Displays the state (Un-configured State/Configured State) information of WPS.

Self-PIN Number: Display the default PIN number of the WLAN Router.

Client PIN Number: Type Client PIN number that the client uses to negotiate with WLAN Router via WPS protocol. It is only used when users want their station to join WLAN Router's network.

Push Button Configuration: Clicking this button will invoke the Push Button Configuration (PBC) method of WPS. It is only used when WLAN Router acts as a Registrar. This feature can also be used by pressing the WPS button on the side of the WLAN Router.

Status

This selection enables users to view the status of the WLAN Router LAN, WAN and Wireless connections, and view logs and statistics pertaining to connections and packet transfers.

Device Information

This screen enables users to view the WLAN Router's LAN, Wireless and WAN configurations.

Firmware Version: Displays the latest build of the WLAN Router firmware interface. After updating the firmware in Tools - Firmware, check this to ensure that the firmware was successfully updated.

WAN: This section displays the WAN interface configuration including the MAC address, Connection status, DHCP client status, IP address, Subnet mask, Default gateway, and DNS.

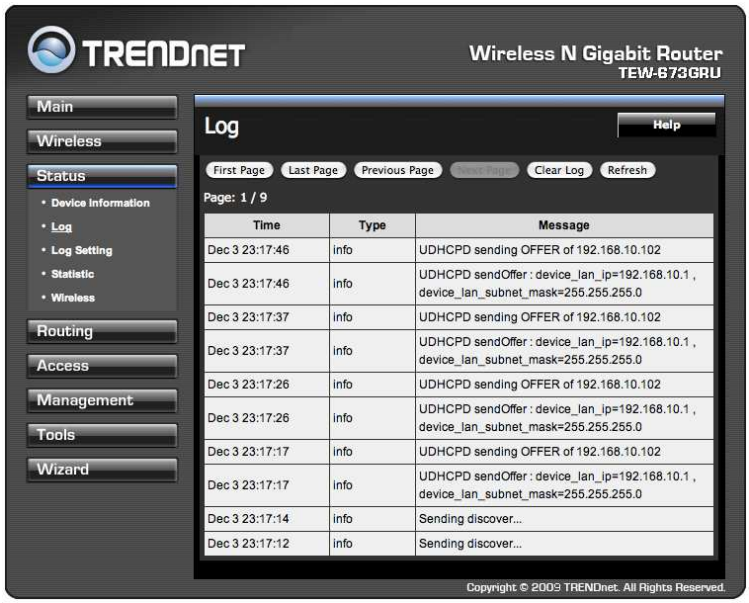
Wireless 2.4G/5G: These sections displays the wireless configuration information, including the MAC address, the Connection status, SSID, Channel and Authentication type.

LAN: This section displays the LAN interface configuration including the MAC address, IP Address, Subnet Mask, and DHCP Server Status. Click "DHCP Table" to view a list of client stations currently connected to the WLAN Router LAN interface.

Click *"DHCP Release"* to release all IP addresses assigned to client stations connected to the WAN via the WLAN Router. Click *"DHCP Renew"* to reassign IP addresses to client stations connected to the WAN.

Log

This screen enables users to view a running log of Router system statistics, events, and activities. The log displays up to 200 entries. Older entries are overwritten by new entries. The Log screen commands are as follows:



Click "*First Page*" to view the first page of the log

Click "*Last Page*" to view the final page of the log

Click "*Previous Page*" to view the page just before the current page

Click "*Next Page*" to view the page just after the current page

Click "*Clear Log*" to delete the contents of the log and begin a new log

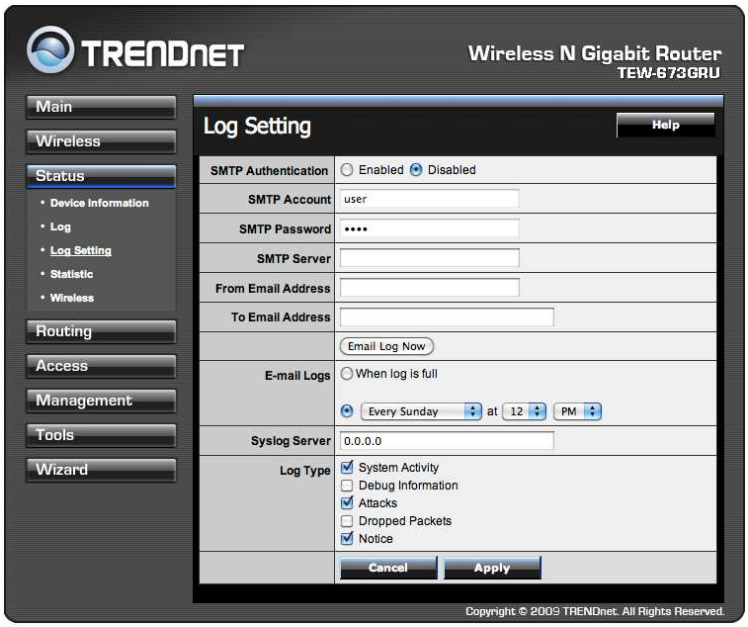
Click "*Refresh*" to renew log statistics

Time: Displays the time and date that the log entry was created.

Message: Displays summary information about the log entry.

Log Setting

This screen enables users to set Router Log parameters.



SMTP Authentication: Select Enabled SMTP server authentication.

SMTP Account: If the SMTP Authentication enabled, fill in the SMTP account name here.

SMTP Password: If the SMTP Authentication enabled, fill in the password of the SMTP account here.

SMTP Server: Type your SMTP server address here.

Send to: Type an email address for the log to be sent to. Click “Email Log Now” to immediately send the current log.

- **E-mail Logs: When log is full** - The time is not fixed. The log will be sent when the log is full, which will depend on the volume of traffic.
- **Every day, Every Monday ...** - The log is sent on the interval specified.
  - If "Every day" is selected, the log is sent at the time specified.
  - If the day is specified, the log is sent once per week, on the specified day.
  - Select the time of day you wish the E-mail to be sent.
  - If the log is full before the time specified to send it, it will be sent regardless.

Syslog Server: Type the IP address of the Syslog Server if user wants the WLAN Router to listen and receive incoming Syslog messages.

Log Type: Enables users to select what items will be included in the log:

System Activity: Displays information related to WLAN Router operation.

Debug Information: Displays information related to errors and system malfunctions.

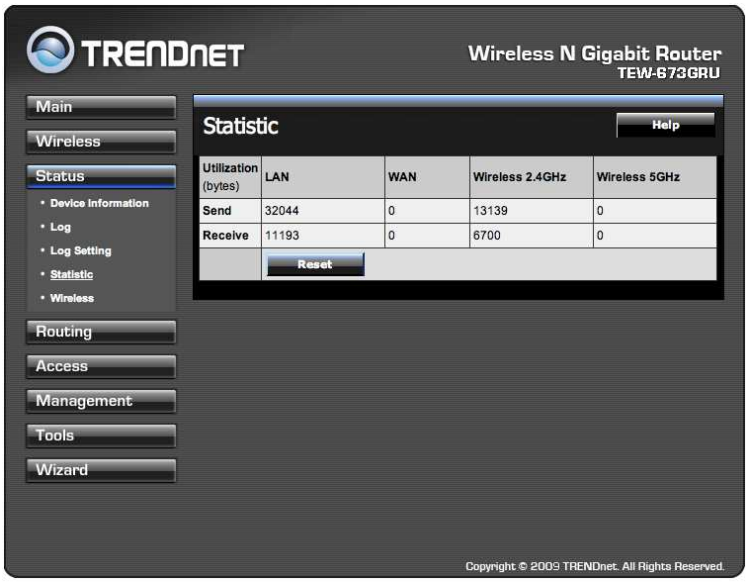
Attacks: Displays information about any malicious activity on the network.

Dropped Packets: Displays information about packets that have not been transferred successfully.

Notice: Displays important notices by the system administrator.

Statistic

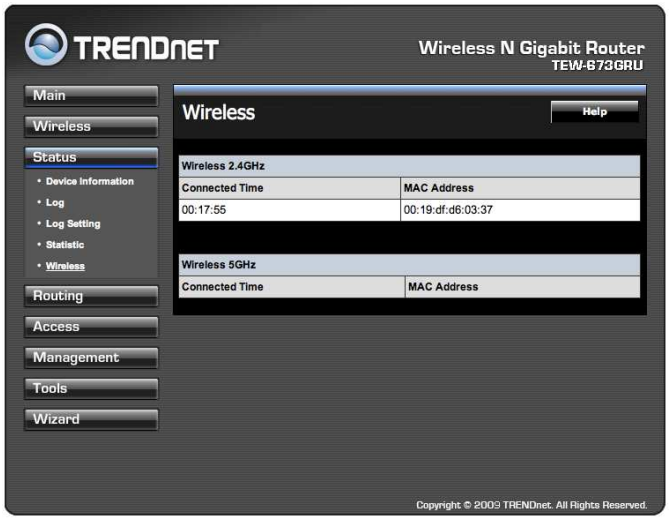
This screen displays a table that shows the rate of packet transmission via the WLAN Router's LAN, WAN ports and Wireless 2.4G/5G (in bytes per second).



Click **"Reset"** to erase all statistics and begin logging statistics again.

Wireless

This screen enables users to view wireless information about wireless devices that are connected to the WLAN Router.



Connected Time: Lists all wireless clients and how long they have been connected WLAN Router.

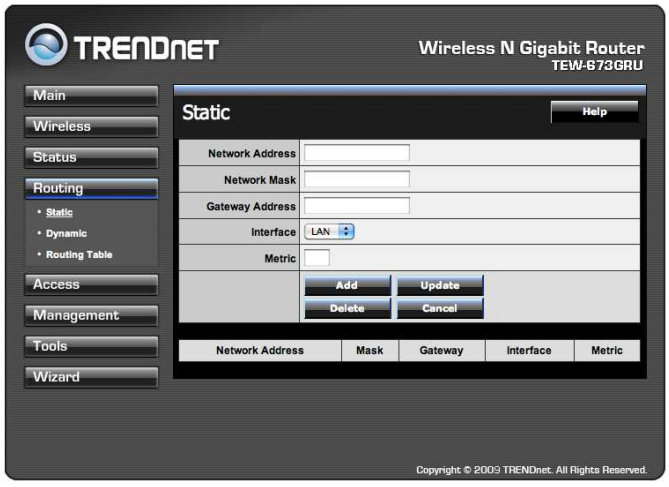
MAC Address: Displays the wireless client's MAC address.

Routing

This selection enables users to set how the WLAN Router forwards data: Static and Dynamic. Routing Table enables users to view the information created by the WLAN Router that displays the network interconnection topology.

Static

It enables users to set parameters by which the WLAN Router forwards data to its destination if the network has a static IP address.



Network Address: Type the static IP address the network uses to access the Internet. Contact the ISP or network administrator for this information.

Network Mask: Type the network (subnet) mask of the network. If this field is left blank, the network mask defaults to 255.255.255.0. Contact the ISP or network administrator for this information.

Gateway Address: Type the gateway address of the network. Contact the ISP or network administrator for this information.

Interface: Select an interface, WAN or LAN, to connect to the Internet.

Metric: Select which metric that the user wants to apply to this configuration.

Add: Click to add the configuration to the static IP address table at the bottom of the page.

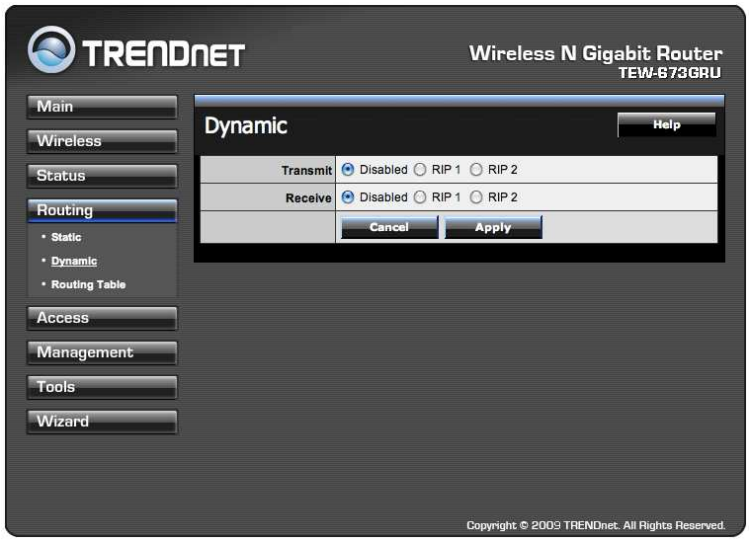
Update: Select one of the entries in the static IP address table at the bottom of the page, and after changing parameters, click "Update" to confirm the changes.

Delete: Select one of the entries in the static IP address table at the bottom of the page and click "Delete" to remove the entry.

New: Click "New" to clear the text boxes and add required information to create a new entry.

Dynamic

This screen enables users to set NAT parameters.

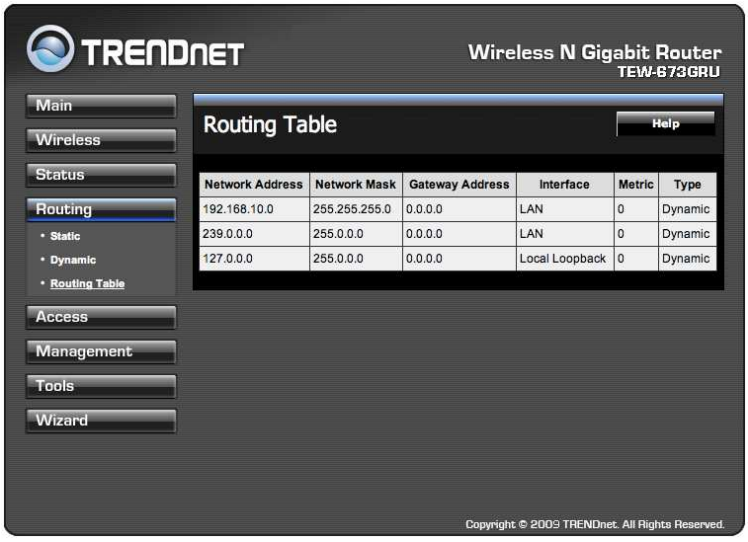


Transmit: Click the radio buttons to set the desired transmit parameters, Disabled, RIP 1, or RIP 2.

Receive: Click the radio buttons to set the desired transmit parameters, Disabled, RIP 1, or RIP 2.

Routing Table

This displays the routing table of the WLAN Router. The routing table is a database created by the WLAN Router that displays the network interconnection topology.



Network Address: Displays the network IP address of the connected node.
Network Mask: Displays the network (subnet) mask of the connected node.
Gateway Address: Displays the gateway address of the connected node.
Interface: Displays whether the node is connected via a WAN or LAN.
Metric: Displays the metric of the connected node.
Type: Displays whether the node has a static or dynamic IP address

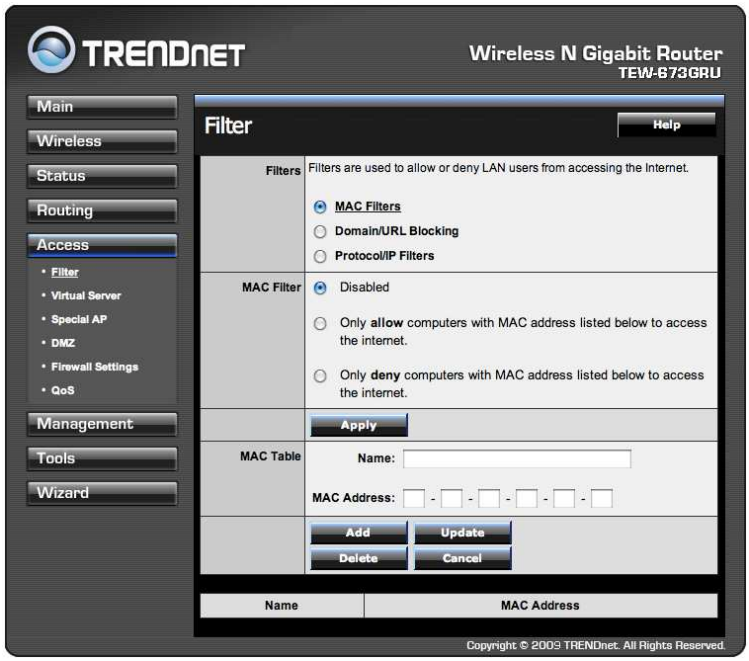
Access

This page defines access restrictions, set up protocol and IP filters, create virtual servers, access for special applications such as games, and set firewall rules.

Filter

Using filters to deny or allow the users to access. Five types of filters to select: MAC, URL blocking, IP, Protocol filter and Domain blocking.

MAC Filters



MAC Filter: Enables you to allow or deny network access to LAN and/or WLAN users based upon the MAC address of their network interface.

Disable: Disable the MAC filter function.

Allow: Allow computers listed on the MAC Table access through the WLAN router.

Select Deny: Denied computers will not have access through the WLAN Router and will not be able to access anything on the network including Internet.

MAC Table: Use this section to create a user profile which Internet access is denied or allowed. The user profiles are listed in the table at the bottom of the page. (Note: Click anywhere in the item. Once the line is selected, the fields automatically load the item's parameters, which you can edit.)

Name: Type the name of the user to be permitted/denied access.

MAC Address: Type the MAC address of the user's network interface.

Add: Click to add the user to the list at the bottom of the page.

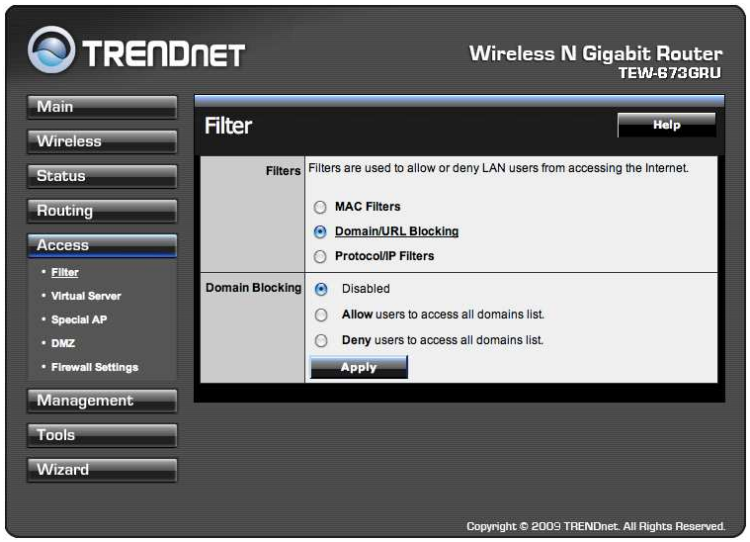
Update: Click to update information for the user, if you have changed any of the fields.

Delete: Select a user from the table at the bottom of the list and click Delete to remove the user profile.

New: Click New to erase all fields and enter new information.

Domain/URL Blocking

You could specify the domains that allow users to access or deny by clicking one of the two items. Also, add the specified domains in the text box.



Disable: Disable the Domain/URL Blocking function.

Allow: Allow users to access all domains except “Domains List”.

Deny: Deny users to access all domains except “Domains List”.

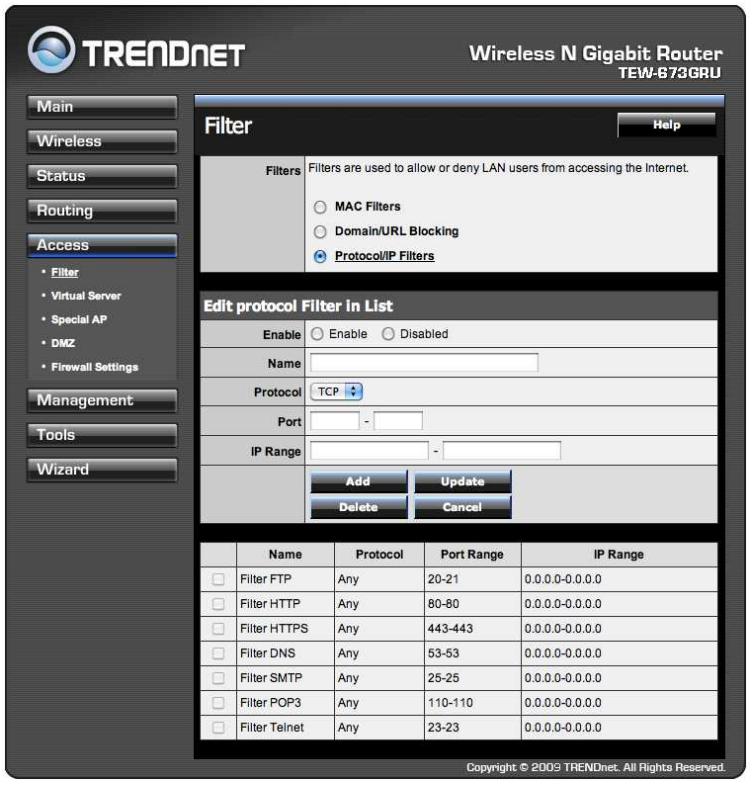
Domains List: List Domain/URL you will Denied or Allowed.

Add: Click to ***Add*** button to add domain to the Domains list.

Delete: Select a Domain/URL from the table at the bottom of the list and click Delete to remove the Domain/URL.

Protocol/IP Filters

This screen enables you to define a minimum and maximum IP address range filter; all IP addresses falling within the range are not allowed Internet access. The IP filter profiles are listed in the table at the bottom of the page. (Note: Click anywhere in the item. Once the line is selected, the fields automatically load the item's parameters, which you can edit.)



Enable: Click to enable or disable the IP address filter.

Name: Type the name of the user to be denied access.

Protocol: Select a protocol (TCP or UDP) to use for the virtual server.

Port: Type the port range of the protocol.

IP Range: Type the IP range. IP addresses falling between this value and the Range End are not allowed to access the Internet.

Add: Click to add the IP range to the table at the bottom of the screen.

Update: Click to update information for the range if you have selected a list item and have made changes.

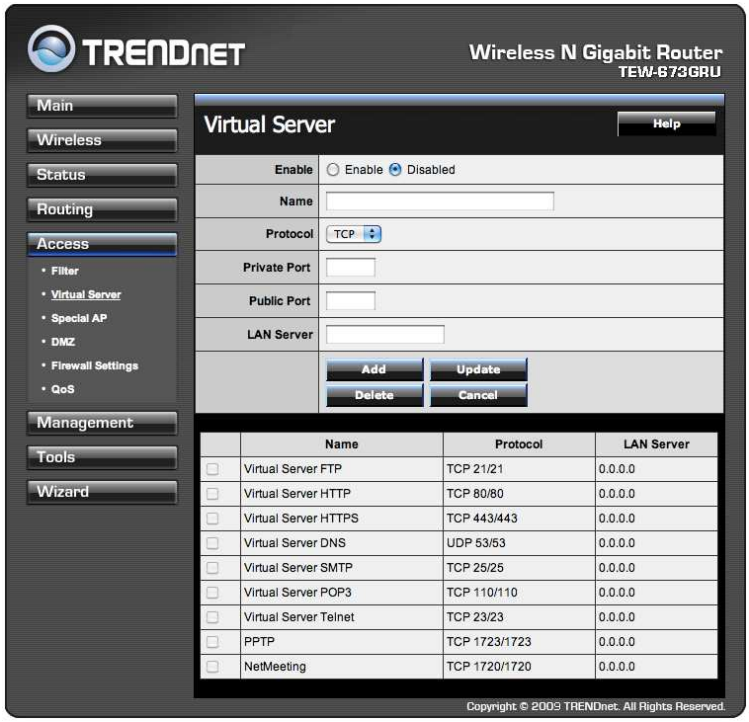
Delete: Select a list item and click Delete to remove the item from the list.

Cancel: Click the ***Cancel*** button to erase all fields and enter new information.

Virtual Server

This screen enables users to create a virtual server via the WLAN Router. If the WLAN Router is set as a virtual server, remote users requesting Web or FTP services through the WAN are directed to local servers in the LAN. The WLAN Router redirects the request via the protocol and port numbers to the correct LAN server. The Virtual Sever profiles are listed in the table at the bottom of the page.

Note: When selecting items in the table at the bottom, click anywhere in the item. The line is selected, and the fields automatically load the item's parameters, which user can edit.



Enable: Click to enable or disable the virtual server.

Name: Type a descriptive name for the virtual server.

Protocol: Select a protocol (TCP or UDP) to use for the virtual server.

Private Port: Type the port number of the computer on the LAN that is being used to act as a virtual server.

Public Port: Type the port number on the WAN that will be used to provide access to the virtual server.

LAN Server: Type the LAN IP address that will be assigned to the virtual server.

Add: Click to add the virtual server to the table at the bottom of the screen.

Update: Click to update information for the virtual server if the user has selected a listed item and has made changes.

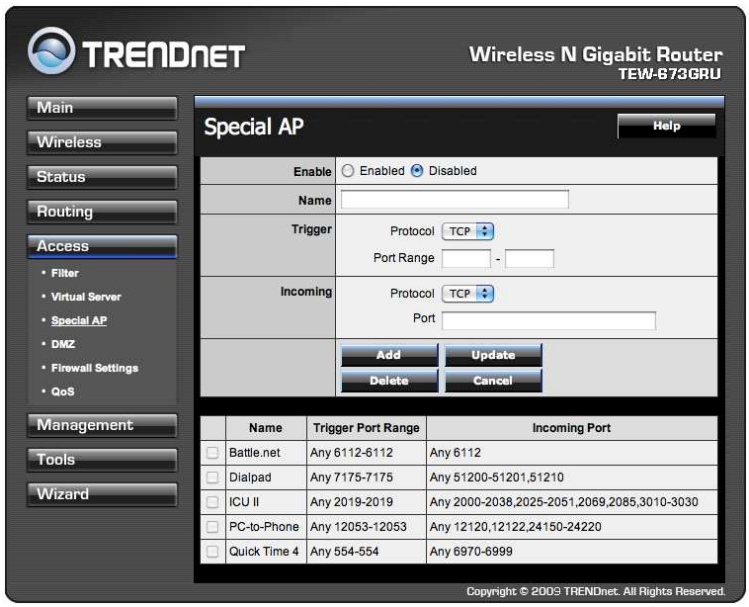
Delete: Select a listed item and click “Delete” to remove the item from the list.

Cancel: Click ***Cancel*** button to erase all fields and enter new information.

Special AP

This screen enables users to specify special applications, such as games which require multiple connections that are blocked by NAT. The special applications profiles are listed in the table at the bottom of the page.

Note: When selecting items in the table at the bottom, click anywhere in the item. The line is selected, and the fields automatically load the item's parameters, which user can edit.



Enable: Click to enable or disable the application profile. When enabled, users will be able to connect to the application via the WLAN Router's WAN connection. Click "Disabled" on a profile to prevent users from accessing the application on the WAN connection.

Name: Type a descriptive name for the application.

Trigger: Defines the outgoing communication that determines whether the user has legitimate access to the application.

- **Protocol:** Select the protocol (TCP, UDP, or ICMP) that can be used to access the application.
- **Port Range:** Type the port range that can be used to access the application in the text boxes.

Incoming: Defines which incoming communications users are permitted to connect with.

- **Protocol:** Select the protocol (TCP, UDP, or ICMP) that can be used by the incoming communication.
- **Port:** Type the port number that can be used for the incoming communication.

Add: Click to add the special application profile to the table at the bottom of the screen.

Update: Click to update information for the special application if user have selected a list item and have made changes.

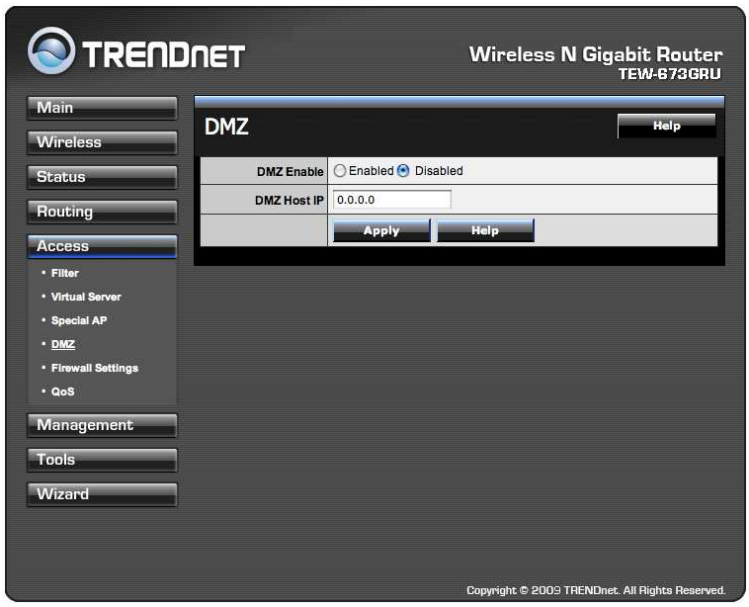
Delete: Select a list item and click Delete to remove the item from the list.

Cancel: Click ***Cancel*** button to erase all fields and enter new information.

DMZ

This screen enables users to create a DMZ for those computers that cannot access Internet applications properly through the WLAN Router and associated security settings.

Note: Any clients added to the DMZ exposes the clients to security risks such as viruses and unauthorized access.



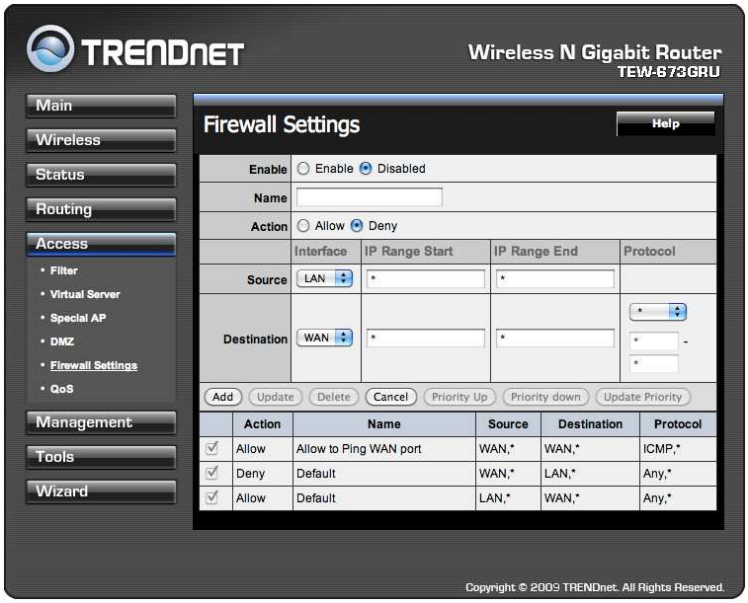
Enable: Click to enable or disable the DMZ.

DMZ Host IP: Type a host IP address for the DMZ. The computer with this IP address acts as a DMZ host with unlimited Internet access.

Apply: Click to save the settings.

Firewall Settings

This screen enables users to set up the firewall. The WLAN Router provides basic firewall functions, by filtering all the packets that enter the WLAN Router using a set of rules. The rules are listed in sequential order--the lower the rule number, the higher the priority the rule has.



Enable: Click to enable or disable the firewall rule profile.

Name: Type a descriptive name for the firewall rule profile.

Action: Select whether to allow or deny packets that conform to the rule.

Source: Defines the source of the incoming packet that the rule is applied to.

- **Interface:** Select which interface (WAN or LAN) the rule is applied to.
- **IP Range Start:** Type the start IP address that the rule is applied to.
- **IP Range End:** Type the end IP address that the rule is applied to.

Destination: Defines the destination of the incoming packet that the rule is applied to.

- **Interface:** Select which interface (WAN or LAN) the rule is applied to.
- **IP Range Start:** Type the start IP address that the rule is applied to.
- **IP Range End:** Type the end IP address that the rule is applied to.
- **Protocol:** Select the protocol (TCP, UDP, or ICMP) of the destination.
- **Port Range:** Select the port range.

Add: Click to add the rule profile to the table at the bottom of the screen.

Update: Click to update information for the rule if the user has selected a listed item and has made changes.

Delete: Select a listed item and click ***Delete*** button to remove the entry from the list.

New: Click **"New"** to erase all fields and enter new information.

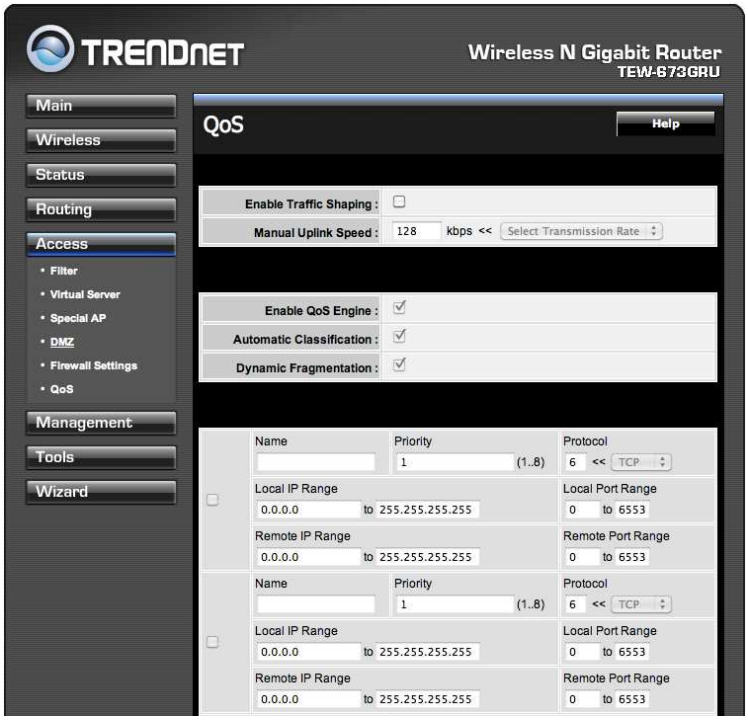
Priority Up: Select a rule from the list and click **"Priority Up"** to increase the priority of the rule.

Priority Down: Select a rule from the list and click **"Priority Down"** to decrease the priority of the rule.

Update Priority: After increasing or decreasing the priority of a rule, click **"Update Priority"** to save the changes.

QoS

The QoS Engine option helps improve your network gaming performance by prioritizing applications. By default the QoS Engine settings are disabled and application priority is not classified automatically.



Enable Traffic Shaping: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications.

Manual Uplink Speed: This option is enabled by default when the QoS Engine option is enabled. This option will allow your router to automatically determine the uplink speed of your Internet connection.

Enable QoS Engine: This option is disabled by default. Enable this option for better performance and experience with online games and other interactive applications.

Dynamic Fragmentation: This option should be enabled when you have a slow Internet uplink. It helps to reduce the impact that large low priority network packets can have on more urgent ones.

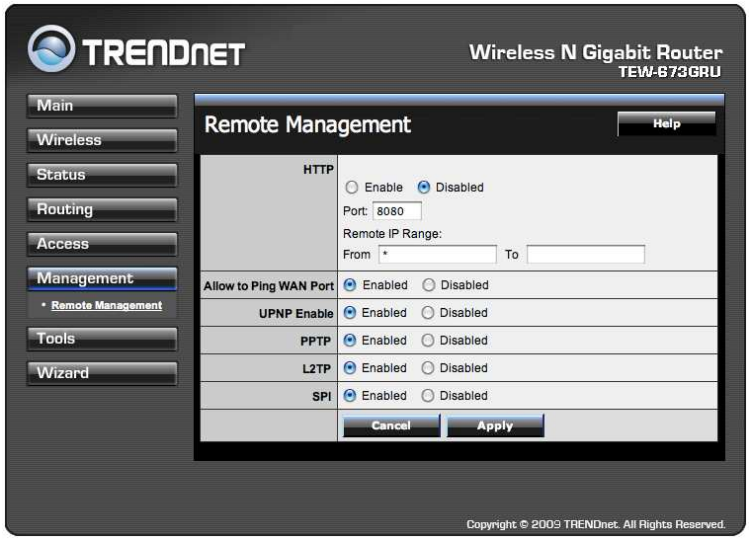
Automatic Classification: This option is enabled by default. This will allow your router to automatically determine the network priority of running programs.

Management

Management enables users to set up the Remote Management feature.

Remote Management

This screen enables users to set up remote management. Using remote management, the WLAN Router can be configured through the WAN via a Web browser. A user name and password are required to perform remote management.



HTTP: Enables users to set up HTTP access for remote management.

Allow to Ping WAN Port: Type a range of Router IP addresses that can be pinged from remote locations

UPnP Enable: UPnP is short for Universal Plug and Play that is a networking architecture that provides compatibility among networking equipment, software, and peripherals. The WLAN Router is an UPnP-enabled Router and will only work with other UPnP devices/software. If user does not want to use the UPnP functionality, select “Disabled” to disable it.

PPTP: Enables users to set up PPTP access for remote management.

L2TP: Enables users to set up L2TP access for remote management.

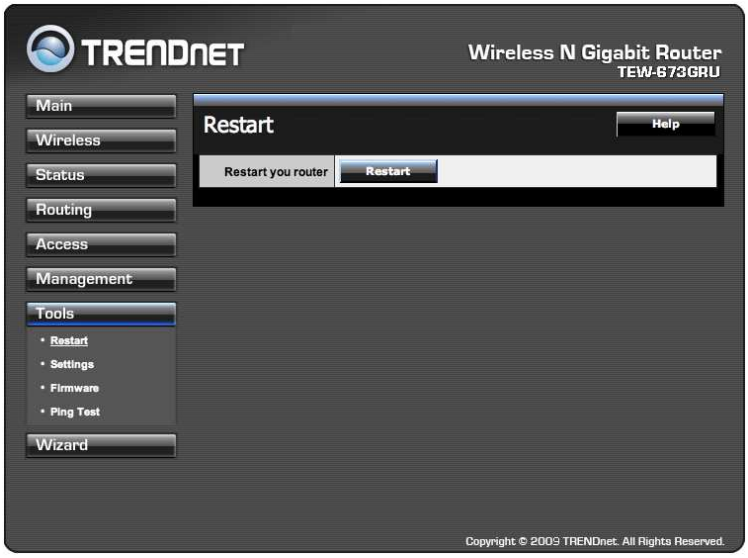
SPI: Enable SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

Tools

This page enables users to restart the system, save and load different settings as profiles, restore factory default settings, run a setup wizard to configure WLAN Router settings, upgrade the firmware, and ping remote IP addresses.

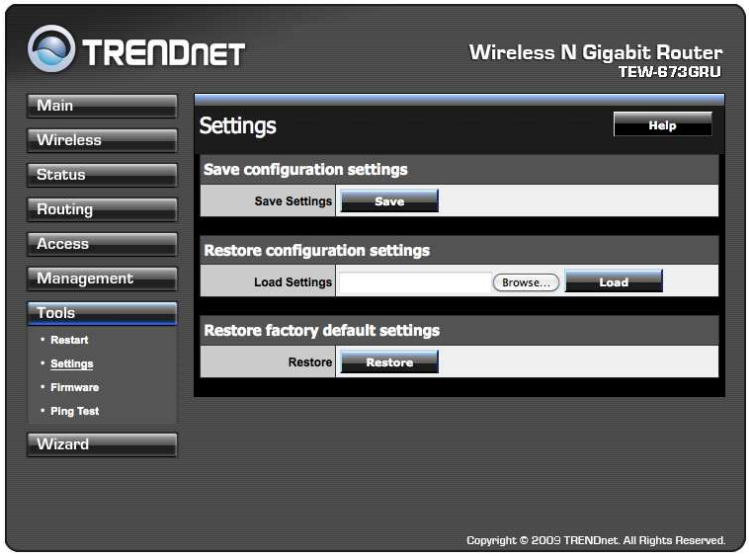
Restart

Click “Restart” to restart the system in the event the system is not performing correctly.



Settings

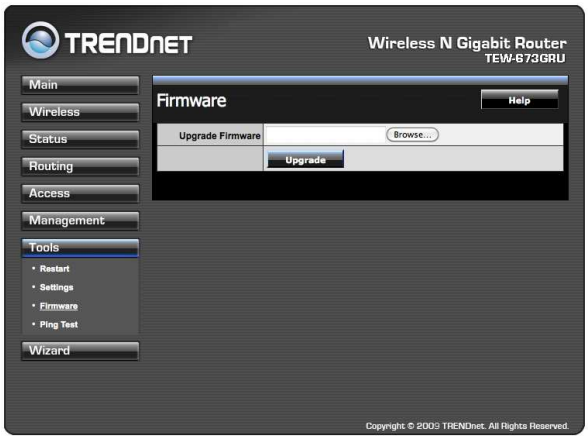
This screen enables users to save settings as a profile and load profiles for different circumstances. User can also load the factory default settings, and run a setup wizard to configure the WLAN Router and Router interface.



Save Settings: Click “Save” to save the current configuration as a profile that can load when necessary.
Load Settings: Click “Browse” and go to the location of a stored profile. Click “Load” to load the profile's settings.
Restore Factory Default Settings: Click “Restore” to restore the default settings. All configuration changes will lost.

Firmware

This screen enables users to keep the WLAN Router firmware up to date.



Please follow the below instructions:

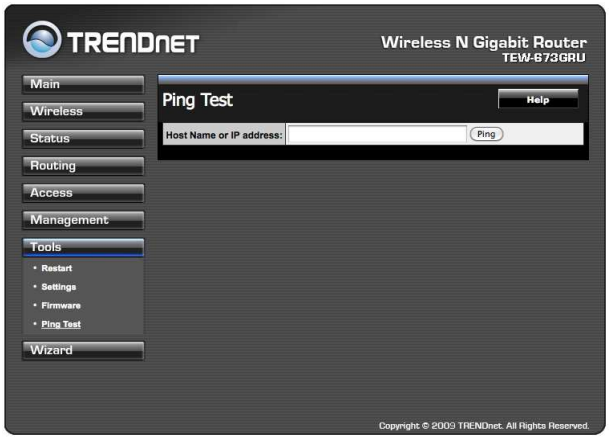
Download the latest firmware from the manufacturer's Web site, and save it to disk.

Click **“Browse”** and go to the location of the downloaded unzipped firmware file.

Select the file and click **“Upgrade”** to update the firmware to the latest release.

Ping

The ping test enables users to determine whether an IP address or host is present on the Internet. Type the host name or IP address in the text box and click Ping.

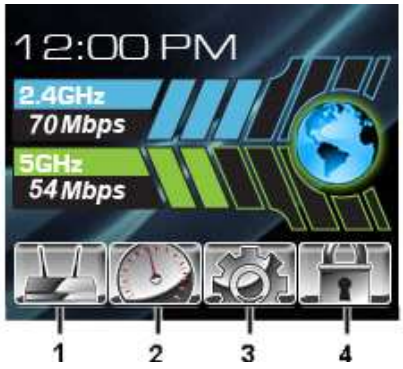


USING THE LCD PANEL

The LCD panel provides information on device, performance, settings, and helps to initiate WPS (Wi-Fi Protected Setup).

Main Menu

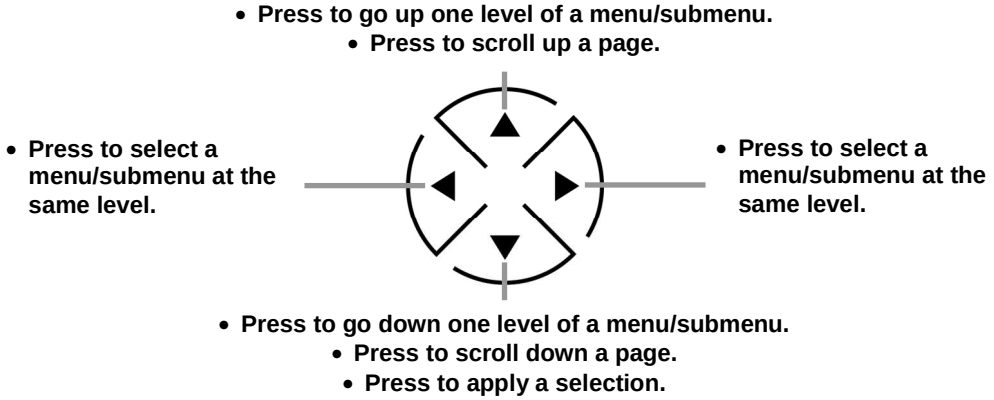
When turning on the router, the Welcome screen appears. After a few seconds, the Main Menu screen appears.



	Menu	Description	
1	**Device Info**	Provides information about the router, Internet, wireless, and wired connection.	See page 55.
2	**Performance**	Provides performance data.	See page 57.
3	**Settings**	Provides information on setting values, and options to restart and reset the router.	See page 58.
4	**WPS**	Helps to initiate Wi-Fi Protected Setup.	See page 61.

Navigation Keys

The router is equipped with navigation keys to access menus and apply options on the LCD panel:



Device Info Menu

The Device Info menu provides information about the router, Internet, wireless, and wired connection, including hardware/firmware version, router uptime, WAN type, radio band, security, IP address, etc.

To enter the Device Info menu, press ▼ to highlight the Device Info icon on the Main Menu screen.

Four options are available: **General**, **Internet**, **Wireless**, and **Wired**.

General

1. To select **General**, press ▼ to highlight **General** on the Device Info menu.
2. Press ▼ again to enter the General screen. Information about device name, hardware version, firmware version, and router uptime are displayed.

NOTE: ▼ **Next** ▼ indicates that more pages are available, press ▼ to view next page. If ▲ **Back** ▲ appears at the top of the page, press ▲ to view the previous page.

3. To go back to the Device Info menu or the Main Menu screen, press ▲ repeatedly until the desired menu or screen is reached.

Internet

1. To select **Internet**, press ▼ and ► to highlight **Internet** on the Device Info menu.
2. Press ▼ to enter the Internet screen. Information about WAN type, link status, cable status, and connected time are displayed.

3. To go back to the Device Info menu or the Main Menu screen, press ▲ repeatedly until the desired menu or screen is reached.

Wireless

1. To select **Wireless**, press ▼ and ► to highlight **Wireless** on the Device Info menu.
2. Press ▼ to enter the Wireless screen. Information about SSID name, MAC address, radio band, channel, and security are displayed.

3. To go back to the Device Info menu or the Main Menu screen, press ▲ repeatedly until the desired menu or screen is reached.

Wired

1. To select **Wired**, press ▼ and ► to highlight **Wired** on the Device Info menu.
2. Press ▼ to enter the Wired screen. Information about IP address, subnet, DHCP server, MAC address, and LAN status are displayed.

3. To go back to the Device Info menu or the Main Menu screen, press ▲ repeatedly until the desired menu or screen is reached.

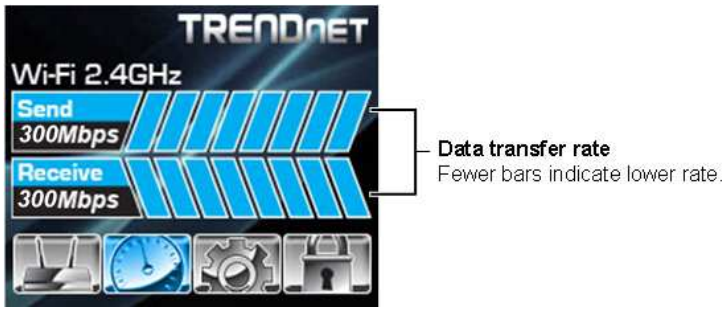
Performance Menu

The Performance menu provides performance data on 2.4 GHz, 5 GHz, wired, and Internet connection.

To enter the Performance menu, press ▼ and ► to highlight the Performance icon on the Main Menu screen.

Four options are available: 2.4GHz, 5GHz, Wired, and Internet.

1. On the Performance menu, press ▼ and ► to highlight **2.4GHz**, **5GHz**, **Wired**, or **Internet**.
2. Press ▼ to enter the selected performance screen. Information about the data transfer rate is displayed.



3. To go back to the Performance menu, press ▲ twice.
4. To go back to the Main Menu screen, press ◄ to reach the Device Info menu then press ▲.

Settings Menu

The Settings menu provides information on date, time, and connected devices. In addition, the menu also provides options to restart and reset the router.

To enter the Settings menu, press ▼ and ► to highlight the Settings icon on the Main Menu screen.

Four options are available: **Restart**, **Reset**, **Date/Time**, and **Connected Devices**.

Restart

1. To select **Restart**, press ▼ to highlight **Restart** on the Settings screen.
2. Press ▼. A confirmation message appears.

3. Press ◄ or ► to select **Yes** or **No**.
   - Select **Yes** to restart the device.
   - Select **No** to return to the previous screen.
4. Press ▼ to apply.

Reset

1. To select **Reset**, press ▼ and ► to highlight **Reset** on the Settings menu.
2. Press ▼. A confirmation message appears.

3. Press ◄ or ► to select **Yes** or **No**.
   - Select **Yes** to reset the device to factory defaults.
   - Select **No** to return to the previous screen.
4. Press ▼ to apply.

Date/Time

1. To select **Date/Time**, press ▼ and ► to highlight **Date/Time** on the Settings menu.
2. Press ▼ to enter the Time/Date screen.

3. Information about date and time is displayed.
4. To go back to the Settings menu, press ▲ twice.
5. To go back to the Main Menu screen, press ◄ to reach the Device Info menu then press ▲.

Connected Devices

1. To select **Connected Devices**, press ▼ and ► to highlight **Connected Devices** on the Settings menu.
2. Press ▼ to enter the Connected Devices screen. Information about connected devices is displayed.

NOTE: ▼ **Next** ▼ indicates that more pages are available, press ▼ to view the next page. If ▲ **Back** ▲ appears at the top of the page, press ▲ to view the previous page.

3. To go back to the Settings menu, press ▲ repeatedly until the desired menu is reached.
4. To go back to the Main Menu screen, press ◄ to reach the Device Info screen then press ▲.

WPS Menu

The WPS menu helps to initiate WPS (Wi-Fi Protected Setup). Step-by-step instructions are provided to go through the procedure.

To enter the WPS menu, press ▼ and ► to highlight the WPS icon on the Main Menu screen.

Two options are available: **WPS** and **Current PIN**.

WPS

To use WPS, ensure that the device that you want to connect with the router has a wireless adapter installed and a WPS button.

1. To select **WPS**, press ▼ to highlight **WPS** on the WPS menu.
2. Press ▼ to enter the WPS screen.
3. Press the WPS button of the other device.

4. Press ▼ to go to the next step.

5. Press the WPS button of the router, which is located on the right side.

6. Press ▼ to go to the next step.

> **NOTE:** You have to wait for a few minutes to establish the connection.

7. If the connection succeeds, a success message appears. The Device IP and MAC address are displayed.

If the connection fails, the failure message appears. Ensure that all hardware are well installed and powered up, then try again.

Current PIN

1. To select **Current PIN**, press ▼ and ► to highlight **Current PIN** on the WPS menu.
2. Press ▼. A confirmation message appears.
3. Press ◄ or ► to select **Yes** or **No**:
   - Select **Yes** to refresh the PIN number. After few seconds, the new PIN number appears on the screen.

   - Select **No** to return to the previous screen.
4. Enter the PIN number on your device.

USB CONTROL CENTER UTILITY

Utility

The USB Control Center Utility is used to connect your computer to USB devices connected to the WLAN Router. The utility allows you to use USB devices as if they were connected directly to your PC through the Wireless N Gigabit Router with USB port (TEW-673GRU).

System

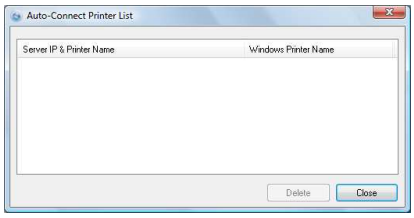
Select this feature to completely close and exit from USB Control Center utility.

Configure

This option allows you to enable/disable the ability to automatically run the USB Control Center Utility when your computer turns on.

Auto-Connect Printer List

Provides a list of installed printers on your computer. Select the printer you would like to add into the Auto-Connect Printer Lists.



Configure Server

Click this button to configure the USB server and to log into the user interface of the Wireless N Gigabit Router with USB port (TEW-673GRU).

Print Sharing

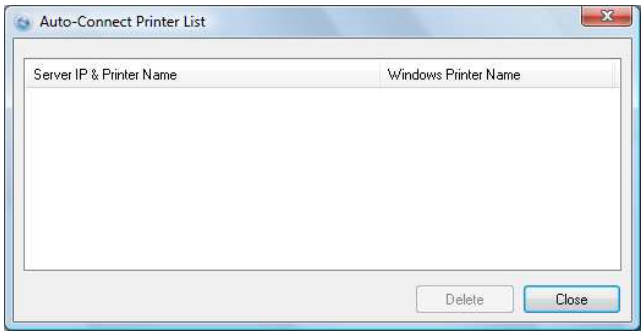
This section describes how to use a USB printer through the WLAN Router. Note: For proper installation it is recommended that the printer's drivers are installed before connecting it to the USB port.

Auto Connect Printer

Click this button to configure selected printer for Auto-Connect, or to delete selected printer from Auto-Connect list. This enables auto connection to the printer when printing. It is recommended to set this feature on computers that prints a lot. Once the printer is connected, the USB Control Center utility will automatically detect the printer.

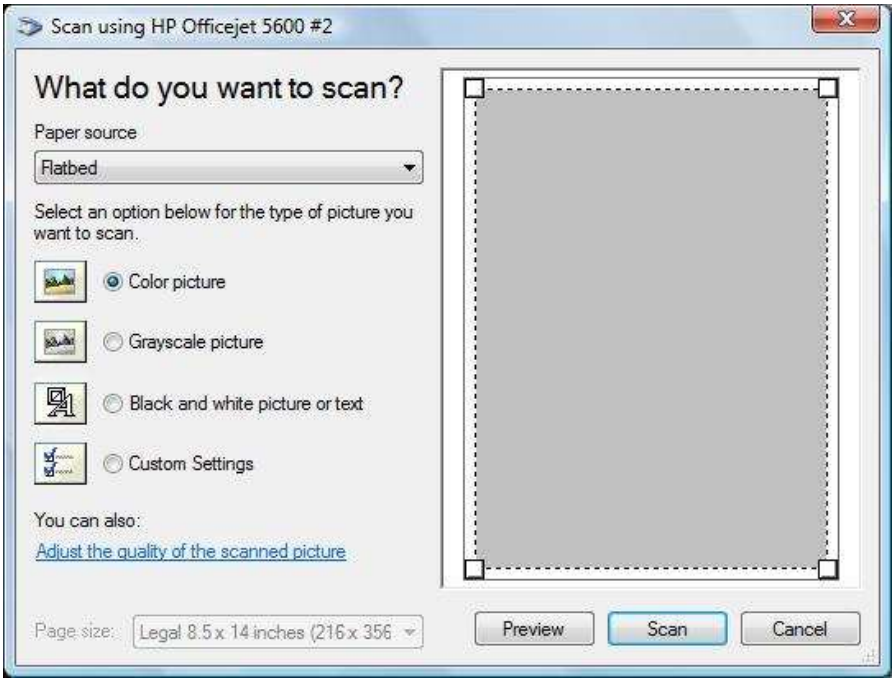
Set Auto-Connect Printer

Provides a list of installed printers on your computer. Select the printer you would like to add into the Auto-Connect Printer Lists.



Network Scanner

This section describes the usage of a scanner through the Wireless N Gigabit Router with USB port. Once you click on the Network Scanner button on the USB utility the below image will appear.



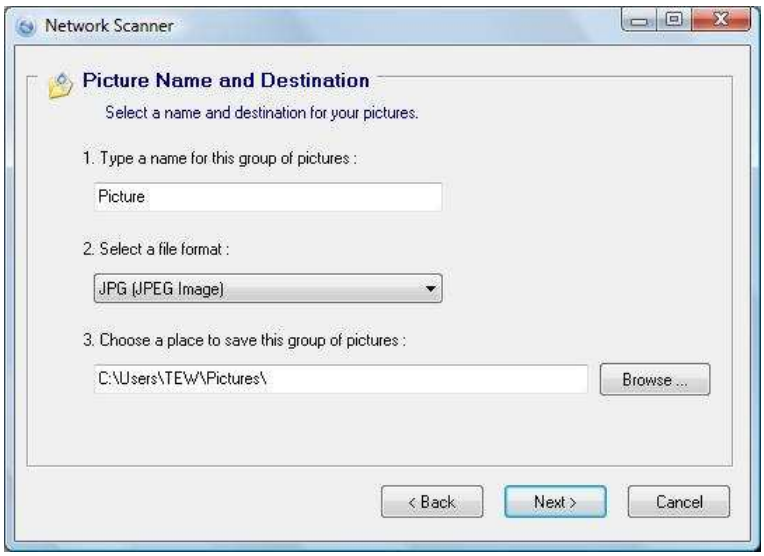
Paper Source: Select the type of scanner being used (Flatbed or Document Feeder)

Type of image: For proper scanning select the appropriate type of file being scanned.

Preview: Click to preview scanned image

Scan: Click to begin scanning

Cancel: Click to cancel scanning



Name: Type the name of the folder you would like to have the scanned images stored in.

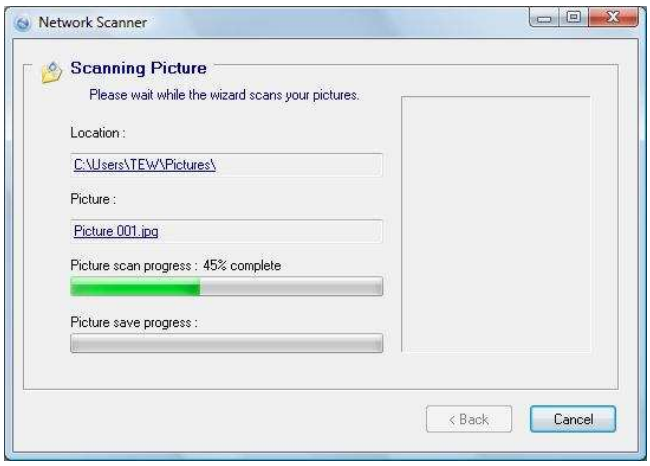
File Format: Select the file format

Save Location: Click Browse and select the location where you would like to have the scanned files saved in.

Back: Click to return to be previous screen.

Next: Click to begin scanning

Cancel: Click to cancel scanning job and to return to back to the USB Utility.



Connecting USB Storage Device

This section describes the how to use the utility when connecting to USB storage device through the WLAN Router.

Connect

Click this button to establish connection to the selected USB device that is not configured to Auto-Connect, like USB storage devices.

Disconnect

Click this button to properly disconnect your computer form the connected USB device.

Request to Connect

Click this button if the USB device you would like to connect to is already connected by another computer in your network. The below message will be sent to the other computer indicating that another computer would like to connect to the USB device and will provide the ability to approve or reject connection.

Note: Only a single user can establish connection to a USB device. Once the "Request to Connect" is approved, the connection to the USB device will automatically transfer to the requested user.

TECHNICAL SPECIFICATIONS

Hardware	
Standards	Wired: IEEE 802.3/u Fast Ethernet, IEEE 802.3ab Gigabit Ethernet Wireless: IEEE 802.11a, 802.11b, IEEE 802.11g, IEEE 802.11n USB: v1.1, 2.0
WAN	1 x 10/100/1000Mbps Gigabit Ethernet port (Internet)
LAN	4 x 10/100/1000Mbps Gigabit Ethernet ports
WPS Button	Enable Wi-Fi Protected Setup function
USB	2 x USB 2.0, 1.1 Compliant USB Type A Port
Connection Type	Dynamic IP, Static (Fixed) IP, PPPoE, PPTP, L2TP, BigPond
Internet Access Control	MAC Address Filter, Domain/URL Filter, Protocol/IP Filter
LED Indicator	Power
LCD Panel	2 inches LCD Display
Power Adapter	12V DC, 2A external power adapter
Power Consumption	14watts (max.)
Dimension (L x W x H)	194 x 116 x 30 mm
Weight	378g
Temperature	Operation: 0°~ 40°C (32°F~ 104°F); Storage: -10°~ 70°C (14°F~158 °F)
Humidity	10%~95% RH, no condensation
Certifications	CE, FCC

Wireless	
Frequency	802.11b/g/n: 2.412~2.484GHz 802.11a: 5.18~5.25GHz , 5.725~5.825GHz
Antenna	2 x 3dBi detachable dipole antennas
Media Access Protocol	CSMA/CA with ACK
Modulation Technique	DBPSK/DQPSK/CCK/OFDM (BPSK/QPSK/16-QAM/64-QAM)
Data Rate	802.11b: 11Mbps, 5.5Mbps, 2Mbps, and 1Mbps 802.11a/g: 54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps, 9Mbps and 6Mbps 802.11n (HT20/40): 144.4(300)Mbps, 130(270)Mbps, 117(243)Mbps, 104(216)Mbps, 78(162)Mbps, 66(135)Mbps, 58.5(121.5)Mbps, 52(108)Mbps, 39(81)Mbps, 26(54)Mbps, 19.5(40.5)Mbps, 6.5(213.5)Mbps,
Security	WEP(HEX/ASCII): 64/128-bit WPA(AES/TKIP): WPA/WPA2, WPA-PSK/WPA2-PSK Enable/Disable broadcast SSID Protocol filtering Domain filtering
QoS	WMM enable/disable feature
Output Power	2.4GHz：26dBm (peak power) 5.0GHz：25dBm (peak power)
Receiving Sensitivity	2.4G Band: ✓ 802.11b: typical -86dBm (11Mbps) ✓ 802.11g: typical -71dBm (54Mbps) ✓ 802.11n: typical -64dBm (300Mbps) 5G Band: ✓ 802.11a: typical -70dBm (54Mbps) ✓ 802.11n: typical -62dBm (300Mbps)