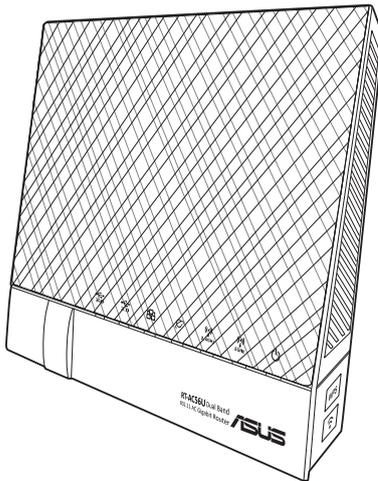


User Guide

RT-AC56U

Dual Band 2x2 802.11AC Gigabit Router



The ultra-thin and stylish RT-AC56U features a 2.4GHz and 5GHz dual bands for an unmatched concurrent wireless HD streaming; SMB server, UPnP AV server, and FTP server for 24/7 file sharing; a capability to handle 300,000 sessions; and the ASUS Green Network Technology, which provides up to 70% power-saving solution.

E7967

First Edition

December 2012

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1 A quick look

Package contents

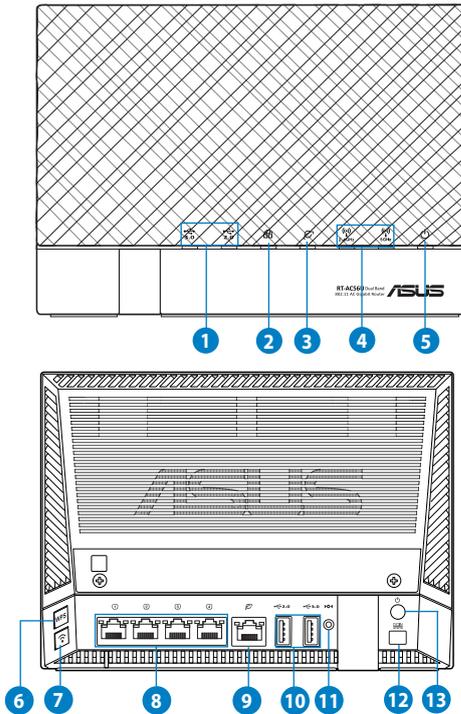
- ☑ RT-AC56U Wireless Router
- ☑ Power adapter
- ☑ Support CD (Manual, utility software)
- ☑ Stand
- ☑ Network cable (RJ-45)
- ☑ Quick Start Guide
- ☑ Warranty card



NOTES:

- If any of the items is damaged or missing, contact ASUS for technical inquiries and support, Refer to the ASUS Support Hotline list at the back of this user manual.
- Keep the original packaging material in case you would need future warranty services such as repair or replacement.

Your wireless router



-
- 1 USB 3.0 / 2.0 LED**
Off: No power or no physical connection.
On: Has physical connection to USB 3.0 / 2.0 devices.
-
- 2 LAN LED**
Off: No power or no physical connection.
On: Has physical connection to a local area network (LAN).
-
- 3 WAN LED**
Off: No power or no physical connection.
On: Has physical connection to a wide area network (WAN).
-
- 4 2.4GHz LED / 5GHz LED**
Off: No 2.4GHz or 5GHz signal.
On: Wireless system is ready.
Flashing: Transmitting or receiving data via wireless connection.
-
- 5 Power LED**
Off: No power.
On: Device is ready.
Flashing slow: Rescue mode
Flashing quick: WPS is processing.
-
- 6 WPS button**
This button launches the WPS Wizard.
-
- 7 Wi-Fi On/Off button**
Press this button to turn on /off the Wi-Fi connection
-
- 8 LAN 1 ~ 4 ports**
Connect network cables into these ports to establish LAN connection.
-
- 9 WAN (Internet) port**
Connect a network cable into this port to establish WAN connection.
-
- 10 USB 3.0 / 2.0 ports**
Insert USB 3.0 / 2.0 devices such as USB hard disks or USB flash drives into these ports.
Insert your iPad's USB cable into one of these ports to charge your iPad.
-
- 11 Reset button**
This button resets or restores the system to its factory default settings.
-
- 12 Power (DC-IN) port**
Insert the bundled AC adapter into this port and connect your router to a power source.
-
- 13 Power button**
Press this button to power on or off the system.
-





NOTES:

- Use only the adapter that came with your package. Using other adapters may damage the device.
- **Specifications:**

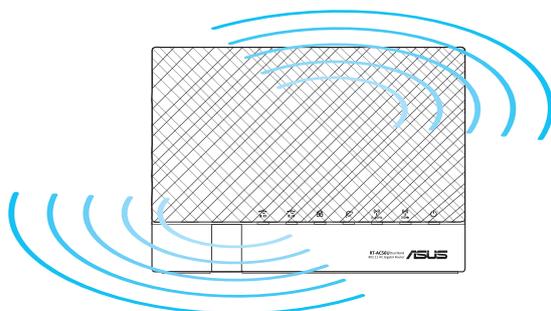
| | | | |
|------------------------------|--|----------------|--------|
| DC Power adapter | DC Output: +19V with max 1.58A current; | | |
| Operating Temperature | 0~40°C | Storage | 0~70°C |
| Operating Humidity | 50~90% | Storage | 20~90% |

2 Creating your network

Positioning your router

For the best wireless signal transmission between the wireless router and the network devices connected to it, ensure that you:

- Place the wireless router in a centralized area for a maximum wireless coverage for the network devices.
- Keep the device away from metal obstructions and away from direct sunlight.
- Keep the device away from 802.11g or 20MHz only Wi-Fi devices, 2.4GHz computer peripherals, Bluetooth devices, cordless phones, transformers, heavy-duty motors, fluorescent lights, microwave ovens, refrigerators, and other industrial equipment to prevent signal interference or loss.
- Always update to the latest firmware. Visit the ASUS website at <http://www.asus.com> to get the latest firmware updates.
- To ensure the best wireless signal, orient the three detachable antennas as shown in the drawing below.
- For optimum performance, please switch on the cooling system.



What you need

To set up your network, you need one or two computers that meet the following system requirements:

- Ethernet RJ-45 (LAN) port (10Base-T/100Base-TX/1000BaseTX)
- IEEE 802.11a/b/g/n/ac wireless capability
- An installed TCP/IP service
- Web browser such as Internet Explorer, Firefox, Safari, or Google Chrome



NOTES:

- If your computer does not have built-in wireless capabilities, you may install an IEEE 802.11a/b/g/n/ac WLAN adapter to your computer to connect to the network.
 - With its dual band technology, your wireless router supports 2.4GHz and 5GHz wireless signals simultaneously. This allows you to do Internet-related activities such as Internet surfing or reading/writing e-mail messages using the 2.4GHz band while simultaneously streaming high-definition audio/video files such as movies or music using the 5GHz band.
 - If you are using only one computer with single band IEEE 802.11b/g/n WLAN adapter, you will only be able to use the 2.4GHz band.
 - If you are using only one computer with dual band IEEE 802.11a/b/g/n/ac WLAN adapter, you will be able to use the 2.4GHz or 5GHz band.
 - If you are using two computers with both IEEE 802.11a/b/g/n/ac WLAN adapters, you will be able to use both 2.4GHz and 5GHz bands simultaneously.
 - The Ethernet RJ-45 cables that will be used to connect the network devices should not exceed 100 meters.
-

Setting up your wireless router



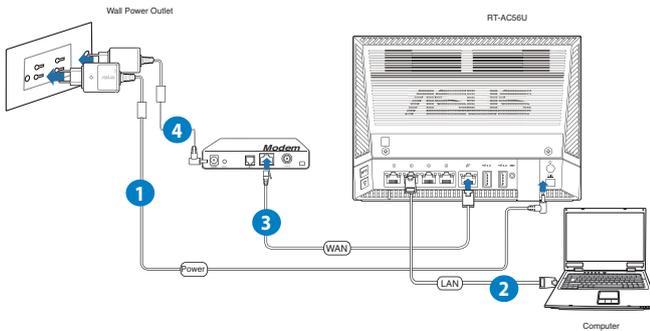
IMPORTANT!

- Use wired connection in setting up your wireless router to avoid possible setup problems due to wireless uncertainty.
- Before setting up your ASUS wireless router, do the following:
 - If you are replacing an existing router, disconnect it from your network.
 - Disconnect the cables/wires from your existing modem setup. If your modem has a backup battery, remove it as well.
 - Reboot your computer (recommended).

Wired connection



NOTE: Your wireless router has an integrated auto-crossover function, so use either straight-through or crossover cable for wired connection.



To set up your wireless router via wired connection:

1. Insert your wireless router's AC adapter to the DC-IN port and plug it to a power outlet.

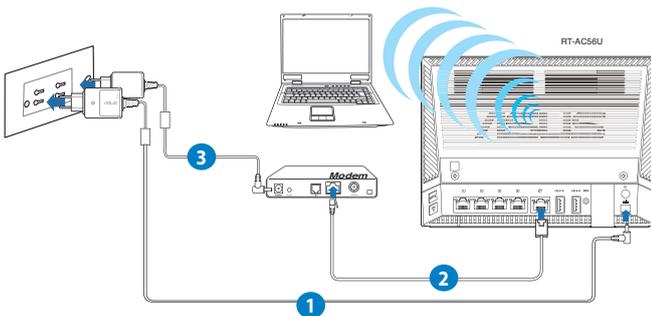
- Using the bundled network cable, connect your computer to your wireless router's LAN port.



IMPORTANT! Ensure that the LAN LED is blinking.

- Using another network cable, connect your modem to your wireless router's WAN port.
- Insert your modem's AC adapter to the DC-IN port and plug it to a power outlet.

Wireless connection



To set up your wireless router via wired connection:

- Insert your wireless router's AC adapter to the DC-IN port and plug it to a power outlet.
- Using the bundled network cable, connect your modem to your wireless router's WAN port.
- Insert your modem's AC adapter to the DC-IN port and plug it to a power outlet.
- Install an IEEE 802.11 a/b/g/n/ac WLAN adapter on your computer.



NOTES:

- For details on connecting to a wireless network, refer to the WLAN adapter's user manual.
 - To set up the security settings for your network, refer to the section **Setting up the wireless security settings** in this user manual.
-

Before you proceed

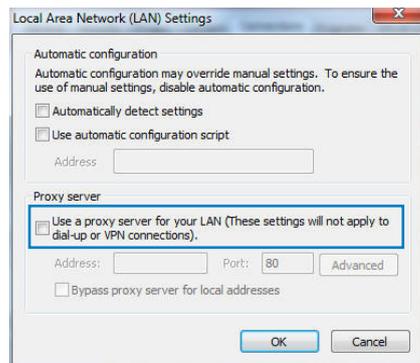
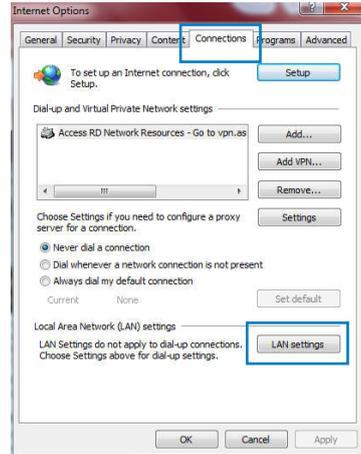


NOTE: Before configuring your wireless router, do the steps described in this section for your host computer and network clients.

A. Disable the proxy server, if enabled.

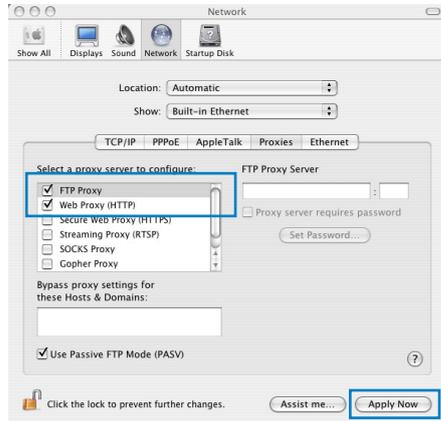
Windows® 7

1. Click **Start > Internet Explorer** to launch the browser.
2. Click **Tools > Internet options > Connections tab > LAN settings.**
3. From the Local Area Network (LAN) Settings screen, untick **Use a proxy server for your LAN.**
4. Click **OK** when done.



MAC OS

1. From your Safari browser, click **Safari > Preferences > Advanced > Change Settings...**
2. From the Network screen, deselect **FTP Proxy** and **Web Proxy (HTTP)**.
3. Click **Apply Now** when done.

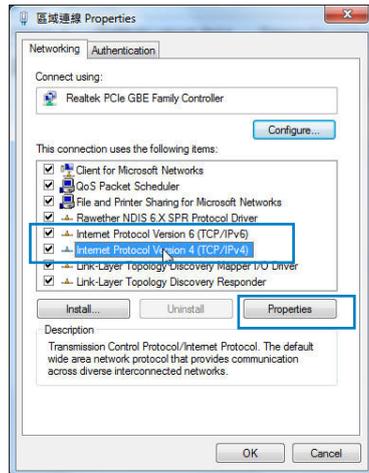


NOTE: Refer to your browser's help feature for details on disabling the proxy server.

B. Set the TCP/IP settings to automatically obtain an IP address.

Windows® 7

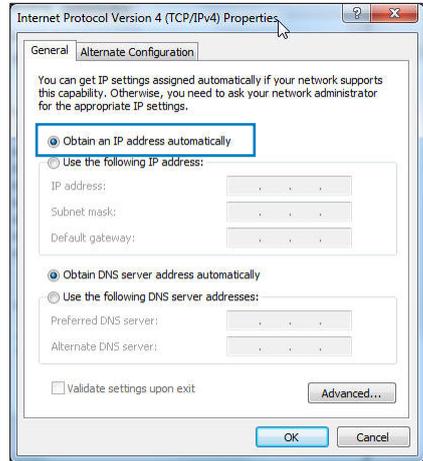
1. Click **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage network connections.**
2. Select **Internet Protocol Version 4 (TCP/IPv4)** or **Internet Protocol Version 6 (TCP/IPv6)**, then click **Properties.**



3. To obtain the IPv4 IP settings automatically, tick **Obtain an IP address automatically**.

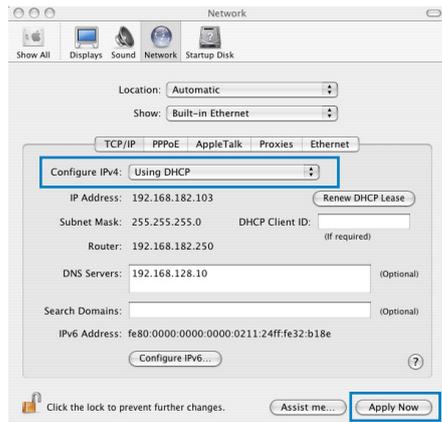
To obtain the IPv6 IP settings automatically, tick **Obtain an IPv6 address automatically**.

4. Click **OK** when done.



MAC OS

1. Click the Apple icon  located on the top left of your screen.
2. Click **System Preferences > Network > Configure...**
3. From the **TCP/IP** tab, select **Using DHCP** in the **Configure IPv4** dropdown list.
4. Click **Apply Now** when done.

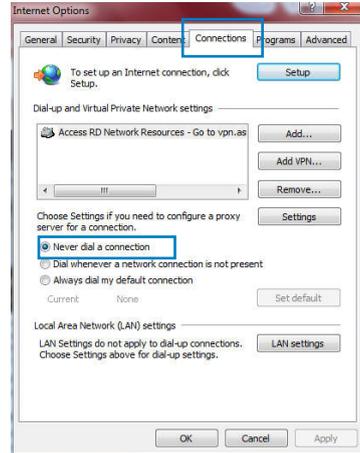


NOTE: Refer to your operating system's help and support feature for details on configuring your computer's TCP/IP settings.

C. Disable the dial-up connection, if enabled.

Windows® 7

1. Click **Start** > **Internet Explorer** to launch the browser.
2. Click **Tools** > **Internet options** > **Connections** tab.
3. Tick **Never dial a connection**.
4. Click **OK** when done.



NOTE: Refer to your browser's help feature for details on disabling the dial-up connection.

3 Configuring via the web GUI

Logging into the web GUI

Your ASUS Wireless Router comes with an intuitive web graphics user interface (GUI) that allows you to easily configure its various features through a web browser such as Internet Explorer, Firefox, Safari, or Google Chrome.

To log into the web GUI:

1. On your web browser such as Internet Explorer, Firefox, Safari, or Google Chrome, manually key in the wireless router's default IP address: **192.168.1.1**
2. On the login page, key in the default user name (**admin**) and password (**admin**).



NOTES:

- For your network clients, ensure that you set the TCP/IP settings to obtain IP addresses automatically, disable the proxy server settings, disable the dial-up settings, and cancel the dial-up connection.
- For more details, refer to the section **Before you proceed** in this user manual.

3. The wireless router's web GUI launches. Use the web GUI to configure various settings.



Setting up the Internet connection



NOTE: When setting the Internet connection for the first time, press the Reset button on your wireless router to reset it to its factory default settings.

Quick Internet Setup (QIS) with auto-detection

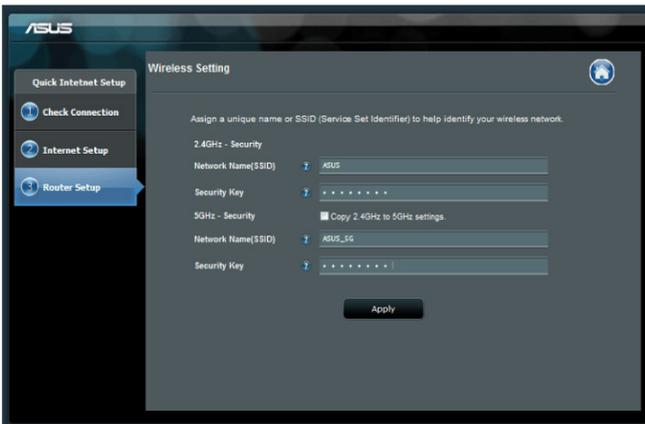
The Quick Internet Setup (QIS) function guides you in quickly setting up your Internet connection.

To use QIS with auto-detection:

1. Launch a web browser such as Internet Explorer, Firefox, Safari, or Google Chrome.



2. The wireless router automatically detects if your ISP connection type is **Dynamic IP**, **PPPoE**, **PPTP**, **L2TP**, and **Static IP**. Key in the necessary information for your ISP connection type.



IMPORTANT! Obtain the necessary information about your Internet connection type from your ISP.



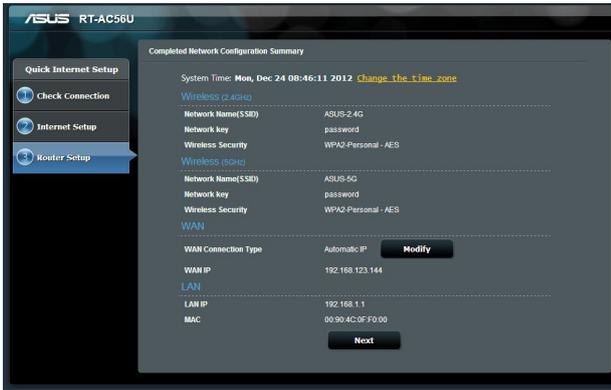
NOTES:

- The auto-detection of your ISP connection type takes place when you configure the wireless router for the first time or when your wireless router is reset to its default settings.
- If QIS failed to detect your Internet connection type, click **Skip to manual setting** and manually configure your connection settings.
- If QIS failed to launch automatically, manually launch your wireless router's web GUI to access the QIS page. To do this, follow these steps:
 - On your web browser, key in **<http://192.168.1.1>**
 - On the login page, key in the default username **admin** and password **admin**.
 - Click the **Quick Internet Setup** icon from the upper left corner of the Network Map page.

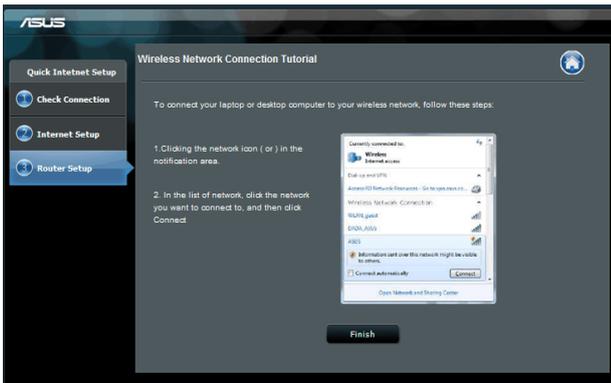
3. Assign the network name (SSID) and security key for your 2.4GHz and 5 GHz wireless connection. Click **Apply** when done.



4. Your Internet and wireless settings are displayed. Click **Next** to continue.



5. Read the wireless network connection tutorial. When done, click **Finish**.



Setting up the wireless security settings

To protect your wireless network from unauthorized access, you need to configure its security settings.

To set up the wireless security settings:

1. Key in **192.168.1.1** on your web browser.
2. On the login screen, key in the default user name (**admin**) and password (**admin**), then click **OK**. The wireless router's web GUI launches.
3. On the Network Map screen, select the **System status** icon to display the wireless security settings such as SSID, security level, and encryption settings.



NOTE: You can set up different wireless security settings for 2.4GHz and 5GHz bands.

2.4GHz security settings



5GHz security settings



4. On the **Wireless name (SSID)** field, key in a unique name for your wireless network.
5. From the **Security Level** dropdown list, select the encryption method for your wireless network.



IMPORTANT! The IEEE 802.11n/ac standard prohibits using High Throughput with WEP or WPA-TKIP as the unicast cipher. If you use these encryption methods, your data rate will drop to IEEE 802.11g 54Mbps connection.

6. Key in your security passkey.
7. Click **Apply** when done.

Managing your network clients

To manage your network clients:

1. Launch the wireless router's web GUI.
2. On the Network Map screen, select the **Client Status** icon to display the information about your network clients.



Monitoring your USB device

The ASUS Wireless Router provides one USB 3.0 and one USB 2.0 ports for connecting USB devices such as a USB storage device and USB printer, to allow you to monitor the working environment, share files, and printer with clients in your network.



NOTE: To use this feature, you need to plug a USB storage device, such as a USB hard disk or USB flash drive, to the USB 3.0/2.0 port on the rear panel of your wireless router. Ensure that the USB storage device is formatted and partitioned properly. Refer to the Plug-n-Share Disk Support List at <http://event.asus.com/networks/disksupport>



IMPORTANT! You first need to create a user account to allow other network clients to access the USB device. For more details, refer to the section **Using AiDisk for sharing files** in this user manual.

To monitor your USB device:

1. Launch the wireless router's web GUI.
2. On the Network Map screen, select the **USB Disk Status** icon to display the information about your USB device.



3. On the AiDisk Wizard field, click **GO** to set up an FTP server for Internet file sharing.



NOTES:

- For more details, refer to the section **Using the Network Place (Samba) Share service** and **Using the FTP Share service** in this user manual.
- On USB External HDD/Flash disk:
 - The wireless router works with most USB HDDs/Flash disks (up to 2TB size) and supports read-write access for FAT16, FAT32, EXT2, EXT3, and NTFS.
 - To safely remove the USB disk, launch the web GUI (<http://192.168.1.1>), then in the upper right corner of Network Map page click the USB icon > click **Eject USB1**.
 - Incorrect removal of the USB disk may cause data corruption.

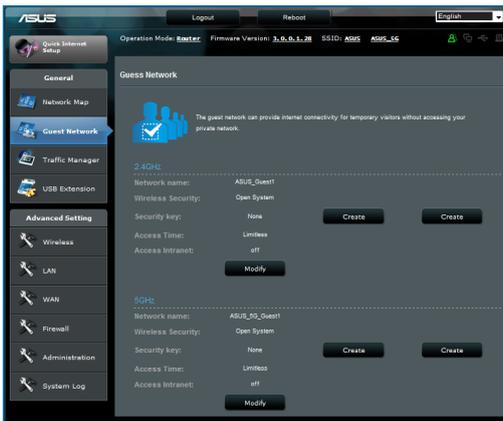


Creating your Guest Network

The Guest Network provides Internet connectivity for temporary visitors without providing access to your private network.

To create your guest network:

1. Launch the wireless router's web GUI.
2. On the Guest Network screen, click **Create** to create a network for your visitors.



Using the Traffic Manager

Managing QoS (Quality of Service) Bandwidth

The Quality of Service (QoS) allows you to set the bandwidth priority and manage the network traffic.

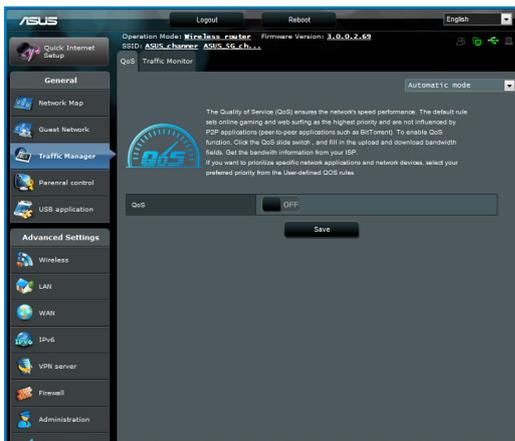
To set up the bandwidth priority:

1. Launch the wireless router's web GUI.
2. On the Traffic Manager screen, select the **QoS** tab.
3. Click **ON** to enable the default rule and fill in the upload and download bandwidth fields.



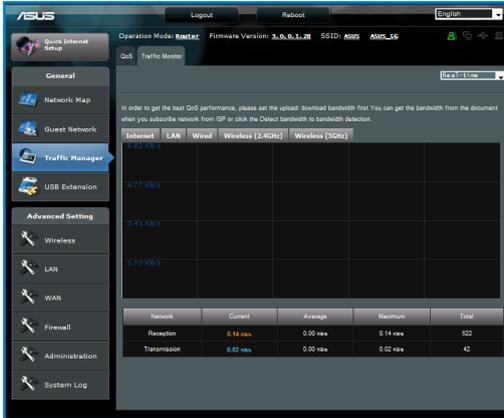
NOTE:

- Get the bandwidth information from your ISP.
- If you want to prioritize specific network applications and network devices, select your preferred priority from the User-defined QoS rules.



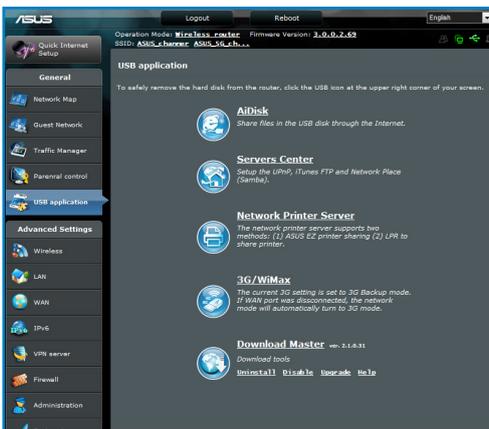
Monitoring Traffic

The traffic monitor function allows you to assess the bandwidth usage and speed of your Internet, LAN, Wired, WLAN (2.4GHz or 5GHz) connections.



Using the USB Extension

The USB Extension function provides **AiDisk**, **Servers Center**, **Network Printer Server** and **Download Master** submenus.



Using AiDisk for Files Sharing

AiDisk allows you to share files in the USB disk through the Internet.



NOTE: Before using AiDisk, ensure that you have inserted a USB disk into the USB port of your wireless router.

To use AiDisk:

1. Click the **AiDisk** icon in USB Extension.
2. From the Welcome to AiDisk wizard screen, click **Go**.

