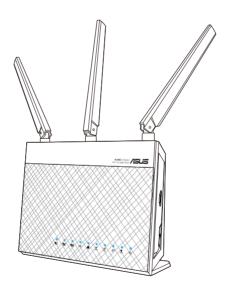
# **User Guide**

# **4G-AC55U**

### **Dual-Band Wireless-AC1200 LTE Modem Router**





E10633 Second Edition V2 June 2015

#### Copyright © 2015 ASUSTeK Computer Inc. All Rights Reserved.

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ASUSTEK Computer Inc. ("ASUS").

Product warranty or service will not be extended if: (1) the product is repaired, modified or altered, unless such repair, modification of alteration is authorized in writing by ASUS; or (2) the serial number of the product is defaced or missing.

ASUS PROVIDES THIS MANUAL "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ASUS, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE OR DATA, INTERRUPTION OF BUSINESS AND THE LIKE), EVEN IF ASUS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ARISING FROM ANY DEFECT OR ERROR IN THIS MANUAL OR PRODUCT.

SPECIFICATIONS AND INFORMATION CONTAINED IN THIS MANUAL ARE FURNISHED FOR INFORMATIONAL USE ONLY, AND ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE, AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY ASUS. ASUS ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR INACCURACIES THAT MAY APPEAR IN THIS MANUAL, INCLUDING THE PRODUCTS AND SOFTWARE DESCRIBED IN IT.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

# **Table of contents**

1	Getting to know your wireless router				
1.1		ome!			
1.2	Package contents				
1.3	Your wireless router				
1.4	Device Properties				
1.5	Positioning your router1				
1.6	Installing your router1				
	1.6.1	Prepare the setup requirements	11		
	1.6.2	Set up your LTE wireless router	12		
2	Getti	ing started			
2.1		Internet Setup (QIS) with Auto- detection	14		
3	Quick Look your Wireless Router				
3.1	Using	Using the Network Map19			
	3.1.1	Setting up the wireless security settings	20		
	3.1.2	System Status	21		
	3.1.3	Managing your network clients	22		
	3.1.4	Monitoring the Internet Status	24		
	3.1.5	Monitoring your USB device	25		
4	Conf	iguring the Advanced Settings			
4.1	Wireless20				
	4.1.1	General	26		
	4.1.2	WPS	28		
	4.1.3	WDS	30		
	4.1.4	Wireless MAC Filter	32		
	4.1.5	RADIUS Setting	33		
	4.1.6	Professional	34		
	4.1.7	Guest Network	37		

# **Table of contents**

4.2	LAN		39
	4.2.1	LAN IP	39
	4.2.2	DHCP Server	40
	4.2.3	Route	42
	4.2.4	IPTV	43
	4.2.5	Switch Control	43
4.3	WAN		
	4.3.1	Internet Connection	44
	4.3.2	IPv6 (Internet Settings)	53
	4.3.3	Dual WAN	54
	4.3.4	Port Trigger	55
	4.3.5	Virtual Server/Port Forwarding	57
	4.3.6	DMZ	60
	4.3.7	DDNS	61
	4.3.8	NAT Passthrough	62
4.4	Traffic Manager		
	4.4.1	QoS	63
	4.4.2	Traffic Monitor	65
	4.4.3	Setting up Parental Controls	67
4.5	Firewall		
	4.5.1	General	69
	4.5.2	URL Filter	69
	4.5.3	Keyword filter	70
	4.5.4	Network Services Filter	70
	4.5.5	IPv6 Firewall	71
4.6	Using the USB Application		
	4.6.1	Using AiDisk	72
	4.6.2	Using Servers Center	75
4.7	Download Master		
	4.7.1	Configuring Bit Torrent download settings	82

Tala	la af	a contacta		
ıab	ie ot	contents		
	4.7.2	NZB settings83		
	4.7.3	eMule settings83		
4.8	Using AiCloud 2.084			
	4.8.1	Cloud Disk85		
	4.8.2	Smart Access86		
	4.8.3	Smart Sync87		
	4.8.4	Sync Server88		
	4.8.5	Settings91		
4.9	Administration92			
	4.9.1	Operation Mode92		
	4.9.2	System93		
	4.9.3	Firmware Upgrade95		
	4.9.4	Restore/Save/Upload Setting96		
4.10	Systen	n Log97		
4.11	Ethernet WAN Mobile Broadband Function Support List9			
5	Utilit	ies		
5.1	Device	e Discovery100		
5.2	Firmw	are Restoration101		
5.3	Setting up your printer server102			
	5.3.1	ASUS EZ Printer Sharing 102		
	5.3.2	Using LPR to Share Printer106		
6	Troul	bleshooting		
6.1	Basic Troubleshooting111			
6.2	Freque	ently Asked Questions (FAQs)113		
App	endic	es		
		122		

# 1 Getting to know your wireless router

# 1.1 Welcome!

Thank you for purchasing an ASUS 4G-AC55U Wireless Router! The powerful and stylish 4G-AC55U features 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.

# 1.2 Package contents

☑ 4G-AC55U Wireless Router ☑ AC adapter

☑ Network cable (RJ-45) ☑ Quick Start Guide

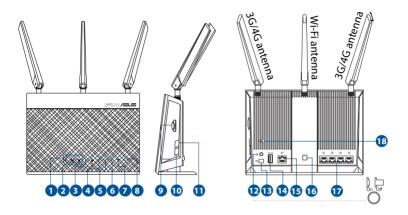
✓ Support CD (User Manual)
✓ SIM adapter

✓ 2 x 3G/4G antennas

#### **NOTES:**

- If any of the items is damaged or missing, contact your retailer or 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.

#### 1.3 Your wireless router



- 3G/4G signal strength LED
  - 1 lit LED: Weak signal
  - 2 lit LEDs: Normal signal
  - 3 lit LEDs: Strong signal
- USB 2.0 LED
  - Off: No power or no physical connection.
  - On: Has physical connection to USB 2.0 devices.
- 3 LAN LED
  - Off: No data activity or no physical connection.
  - On: Ethernet connection is established.
- 2.4GHz Wi-Fi LED
  - Off: No 2.4GHz signal.
  - On: 2.4GHz wireless is ready.
  - Flashing: Transmitting or receiving data via wireless connection.
- 5GHz Wi-Fi LED
  - Off: No 5GHz signal.
  - On: 5GHz wireless is ready.
  - Flashing: Transmitting or receiving data via wireless connection.
- 6 WAN LED
  - Off: No data activity or no physical connection.
  - On: Has physical connection to a wide area network (WAN).
- 3G/4G Mobile Broadband LED
  - Off: No mobile broadband Internet connection.
  - Flashing: Establishing a LTE/Ethernet WAN connection.
  - On: Successfully established a Mobile Broadband Internet connection.

8 Power LED

Off: No power.

On: Device is ready.

Flashing slow: Rescue mode

Flashing quick: WPS is processing.

SIM card slot

Install a USIM card with the bundled SIM adapter into this slot to establish a Mobile Broadband Internet connection.

Mobile broadband signal button

Long press the button to show the signal strength. The number of LEDs (up to 10 LEDs) that light up indicate the signal strength.

WPS button

Long press the button to launch the WPS Wizard.

Power switch

Press this button to power on or off the system.

Power (DC-In) port

Insert the bundled AC adapter into this port and connect your router to a power source.

USB 2.0 port

Insert USB 2.0 compatible devices such as USB hard disks or USB flash drives into this port.

15 WAN port

Connect a network cable into this port to establish WAN connection.

16 Wi-Fi On/Off button

Press this button to turn on /off the Wi-Fi connection.

1 LAN ports

Connect network cables into these ports to establish LAN connection.

18 Reset button

This button resets or restores the system to its factory default settings.

#### NOTES:

- Use only the adapter that came with your package. Using other adapters may damage the device.
- Ensure to insert the SIM card into the card slot before powering on the router.

# 1.4 Device Properties

#### **Power Consumption:**

- Input: AC 230 V / 50 HzV, DC 19V /1.75A (EU)(UK)
- Maximum power consumption: 17.1 W
- Average power consumption: 11.4 W
- The average power consumption was determined at room temperature (23 °C to 27 °C) with the following load:
  - Active Mobile Broadband connection
  - Wireless LAN on; no devices are connected to the wireless LAN
  - One network device is connected to a LAN port; no data transfer; no network devices are connected to the other LAN ports

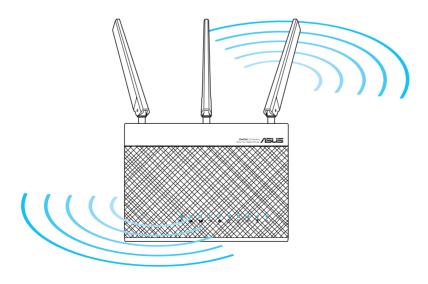
#### **Ambient conditions:**

DC Power adapter	DC Output: +19V with max 1.75A current		
Operating Temperature	0~40°C	Storage Temperature	0~70°C
Operating Humidity	10 ~ 90%	Storage Humidity	5 ~ 95%

# 1.5 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 LTE router near a window to receive the best quality for maximum wireless upstream performance with an LTE base station.
- Keep the device away from metal obstructions and away from direct sunlight.
- Do not place the Wireless LTE Router in a dusty or wet environment.
- To prevent signal loss, 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.
- Always update to the latest firmware. Visit the ASUS website at <a href="http://www.asus.com">http://www.asus.com</a> to get the latest firmware updates.
- To ensure the best wireless signal, orient the two detachable antennas as shown in the drawing below.

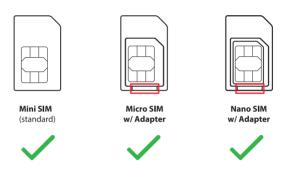


# 1.6 Installing your router

#### 1.6.1 Prepare the setup requirements.

To set up your wireless network, you need to meet the following requirements:

• A mini SIM/USIM card with WCDMA and LTE subscription



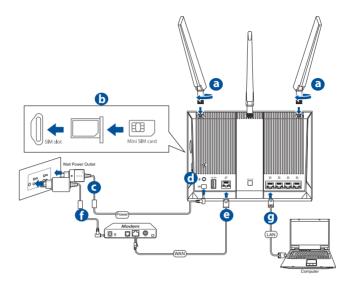
#### **IMPORTANT!**

- Ensure that your SIM/USIM card is subscribed to WCDMA and LTE services. Contact your mobile service provider about these services.
- If you use a 3rd party adapter, ensure that you cut off the portion marked in red above to avoid stocking the SIM adapter in SIM slot.

**CAUTION!** Use only a standard SIM/USIM card with the bundled SIM adapter on your router. Using a different form of SIM card type, such as micro or nano SIM card, may result to a stuck SIM card and may damage your router.

- An ADSL/cable modem with Internet subscription
- A computer with Ethernet RJ-45 (LAN) port (10/100/1000 Base-TX) or a Wi-Fi-enabled device with a 2.4 GHz and 5 GHz 802.11 a/b/g/n/ac wireless interface
- Web browser such as Internet Explorer, Firefox, Safari, or Google Chrome

### 1.6.2 Set up your LTE wireless router.



- a. Attach the two 3G/4G antennas.
- b. Insert the SIM/USIM card into the USIM card slot. When the SIM/USIM card is properly installed, the Mobile Broadband LED lights up and flashes slowly after power on. See **Install SIM/USIM card into your router**.
- c. Insert the AC adapter of your router to the DC-IN port and plug it to a power outlet.
- d. Turn on your router.
- e. Using a network cable, connect your modem to the WAN port of your router. When the network cable is properly connected, the WAN LED lights up.
- f. Insert the AC adapter of your modem to the DC-IN port and plug it to a power outlet.

**NOTE:** You can use either 3G/4G or wired Ethernet connection for Internet access.

g. Using the bundled network cable, connect your computer to the LAN port of your router.

#### Manually connecting to a wireless network

**NOTE:** Ensure that you press the Wi-Fi button on your router.

- 1. Enable the Wi-Fi function on your wireless client for it to automatically scan for wireless networks.
- 2. Select the wireless network named "ASUS" or "ASUS\_5G", which is the default wireless network name (SSID) of ASUS wireless routers.

#### **Installing SIM/USIM card into your router**

1. Find the SIM card tray at the side of the router.



2. Pull out the tray.



3. Place the SIM/USIM card on the tray and push the tray all the way into the slot.



#### **NOTES:**

- Use only the bundled SIM adapter.
- Always insert the SIM adapter with a Micro SIM card or Nano SIM card. The SIM adapter might get stuck if it is inserted alone.

# 2 Getting started

# 2.1 Quick Internet Setup (QIS) with Autodetection

#### To set up your router using QIS (Quick Internet Setup):

- 1. Press the power button at the back of your router. Ensure that the following LEDs light up:
  - Power LED

- 2.4GHz Wi-Fi LED
- WAN or Mobile Broadband LED
- 5GHz Wi-Fi LED
- 2. Launch your web browser such as Internet Explorer, Firefox, Google Chrome, or Safari.

**NOTE:** If QIS does not launch automatically, enter <a href="http://192.168.1.1">http://192.168.1.1</a> or <a href="http://router.asus.com">http://router.asus.com</a> in the address bar and refresh the browser again.

3. Log into the Web GUI. The QIS page launches automatically. By default, the login username and password for your router's Web GUI is "admin".





**4.** Assign your router login name and password and click **Next**. You need this login name and password to log into 4G-AC55U to view or change the router settings. You can take note of your router login name and password for future use.



5. If the WAN port is connected, the wireless router's Quick Internet Setup (QIS) feature automatically detects if your ISP connection type is **Dynamic IP**, **PPPOE**, **PPTP**, **L2TP**, and **Static IP**. Please obtain the necessary information from your Internet Service Provider (ISP). If your connection type is Dynamic IP (DHCP), QIS wizard will automatically direct you to the next step.

### for Automatic IP (DHCP)

The DHCP server automatically assigns the IP address.



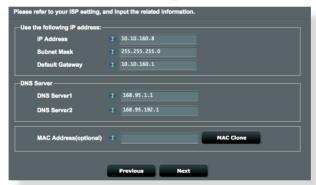
#### for PPPoE, PPTP, and L2TP

You need to key in the account name and password that you obtained from your ISP for Internet connection.



#### for Static IP

You need to manually configure the IP address.



6. If a 3G/4G network is connected, the wireless router's Quick Internet Setup (QIS) feature automatically detects and applies the APN setting to connect to the wireless base station. If the QIS wizard failed to automatically apply the APN setting or the SIM card prompts for a PIN code, set up the APN setting manually.

**NOTE**: The PIN code may vary from different providers.





The dual WAN connection configuration result is displayed. Click **Next** to continue.

Mobile Broadband Connection is configured successfully



### Ethernet WAN Connection is configured successfully



8. If both WAN are configured, go to next step to configure the wireless LAN settings.



- Assign the network name (SSID) and security key for your 2.4GHz and 5GHz wireless connection. Click **Apply** when done.
- Your Internet and wireless settings are displayed. Click Next to complete the QIS process.



11. The 3G/4G signal strength LED lights up and is steady after completing the 3G/4G network settings via QIS, indicating a successful Internet connection.

# **3 Quick Look your Wireless Router**

# 3.1 Using the Network Map

**Network Map** allows you to check the Internet connection status, configure your network's security settings, and manage your network clients.



### 3.1.1 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. From the navigation panel, go to **General** > **Network Map**.
- 2. On the Network Map screen, click System status icon

You can configure the wireless security settings such as wireless name(SSID), authentication method, and encryption settings.

#### 2.4GHz security settings



#### **5GHz** security settings



- 3. On the **Wireless name (SSID)** field, key in a unique name for your wireless network.
- 4. From the **Authentication Method** dropdown list, select the authentication method for your wireless network.

If you select **WPA-Personal** or **WPA-2 Personal** as the authentication method, key in the WPA-PSK key or security passkey.

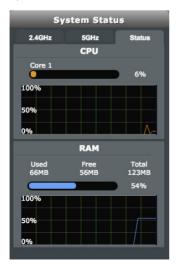
**IMPORTANT!** The IEEE 802.11n/ac standard prohibits using Low Throughput with WEP or WPA-TKIP as the unicast cipher. If you use these encryption methods, your data rate will drop to IEEE 802.11g 54Mbps connection.

5 Click **Apply** when done.

#### 3.1.2 System Status

#### To monitor the system resources:

- From the navigation panel, go to General > Network Map.
- 2. On the Network Map screen, click the System status icon you can find the information about CPU and memory usage.



### 3.1.3 Managing your network clients

#### To manage your network clients:

- From the navigation panel, go to General > Network Map tab.
- 2. On the **Network Map** screen, select the Client Status icon to display your network client's information.



3. On Client status table, click the device icon to show the detailed profile of the device. To block a client's access to your network, select the client and click block icon.



### 3.1.4 Monitoring the Internet Status

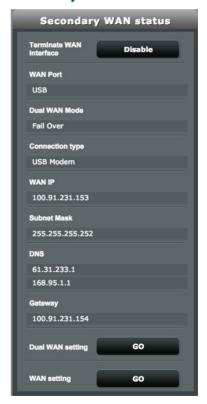
#### To monitor your Internet status:

- From the navigation panel, go to General > Network Map tab.
- 2. On the **Network Map** screen, select the Internet icon to display your Internet configuration.
- To terminate WAN interface from your network, click **Disable** button on Terminate WAN Interface.

#### **Primary WAN**



#### **Secondary WAN**



#### 3.1.5 Monitoring your USB device

The ASUS wireless router provides one USB port for connecting USB devices or USB printer to allow you to share files and printer with clients in your network.

#### To monitor your USB device:

- From the navigation panel, go to General > Network Map tab.
- On the **Network Map** screen, select the USB Disk Status icon to display your USB device's information.
- On the Media Server field, click GO to set up an iTune and DLNA server for local media file sharing.

**NOTE:** The wireless router works with most USB HDDs/Flash disks (up to 2 TB size) and supports read-write access for FAT16, FAT32, EXT2, EXT3, and NTFS.

- 4. On the **AiDisk Wizard** field, click **GO** to set up an FTP server for Internet file sharing.
- 5. To eject USB Disk from USB interface, click **Remove** button on **Safely Remove disk** field. When the USB disk is ejected successfully, the USB status shows **Unmounted**.

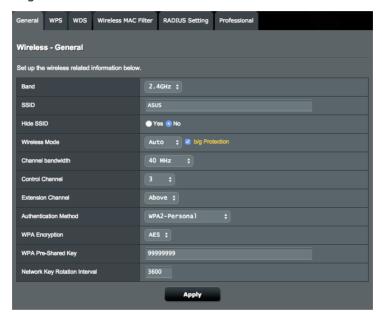


# 4 Configuring the Advanced Settings

# 4.1 Wireless

#### 4.1.1 General

The General tab allows you to configure the basic wireless settings.



# To configure the basic wireless settings:

- From the navigation panel, go to Advanced Settings > Wireless > General tab.
- Configure wireless basic configuration for 2.4GHz or 5GHz frequency band.
- 3. In the **SSID** field, assign a unique name containing up to 32 characters for your SSID (Service Set Identifier) or network name to identify your wireless network. Wi-Fi devices can identify and connect to the wireless network via your assigned SSID. The SSIDs on the information banner are updated once new SSIDs are saved to the settings.

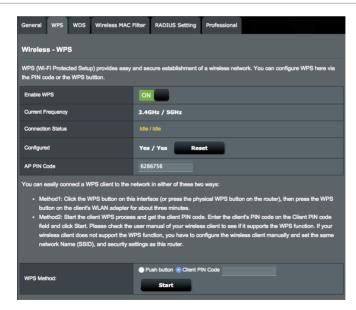
- 4. In the **Hide SSID** field, select **Yes** to prevent wireless devices from detecting your SSID. When this function is enabled, you would need to enter the SSID manually on the wireless device to access the wireless network.
- 5. In the Wireless Mode field, select any of these wireless mode options to determine the types of wireless devices that can connect to your wireless router:
  - Auto: Select Auto to allow 802.11ac, 802.11n, 802.11g, 802.11b and 802.11a devices to connect to the wireless router.
  - **Legacy**: Select **Legacy** to allow 802.11b/g/n devices to connect to the wireless router. Hardware that supports 802.11n natively, however, will only run at a maximum speed of 54Mbps.
  - b/g Protection: Tick b/g Protection to allow wireless router protect 802.11n transmissions performance from legacy devices with 802.11g, 802.11b connection.
- In the Control Channel field, select the operating channel for your wireless router. Select Auto to allow the wireless router to automatically select the channel that has the least amount of interference.
- 7. In the **Channel bandwidth** field, select any of these channel bandwidth to accommodate higher transmission speeds:
  - 20/40MHz (default): Select this bandwidth to automatically select the best bandwidth for your wireless environment. In 5GHz band, the default bandwidth 20/40/80MHz is selected.
  - **80MHz**: Select this bandwidth to maximize the wireless throughput of 5GHz radio.
  - 40MHz: Select this bandwidth to maximize the wireless throughput of 2.4GHz radio.
  - **20MHz**: Select this bandwidth if you encounter some issues with your wireless connection.
- 8. If 20/40/80MHz, 20/40MHz, 40MHz or 80MHz is selected, you can define a upper or lower adjacent channel in the Extension Channel field to be accommodated
- 9. In the **Authentication Method** field, select any of these authentication methods:

- Open System: This option provides no security.
- WPA2-Personal / WPA Auto-Personal: This option provides strong security. You can use either WPA2-Personal (with AES) or WPA Auto-Personal (with AES or TKIP + AES). If you select this option, you must enter the WPA Pre-Shared Key (network key).
- WPA2 Enterprise / WPA Auto-Enterprise: This option provides very strong security. It is with integrated EAP server or an external RADIUS back-end authentication server.
- 11. When done, click **Apply**.

#### 4.1.2 WPS

WPS (Wi-Fi Protected Setup) is a wireless security standard that allows you to easily connect devices to a wireless network. You can configure the WPS function via the PIN code or WPS button.

**NOTE**: Ensure that the devices support WPS.



#### To enable WPS on your wireless network:

- From the navigation panel, go to Advanced Settings > Wireless > WPS tab.
- 2. In the **Enable WPS** field, move the slider to **ON**.
- 3. WPS uses 2.4GHz and 5GHz radio concurrently.
- 4. You can use any of the following WPS methods for wireless connection pairing:

#### PBC (Push Button Configuration) Mode:

- Hardware PBC on the router: Press the physical WPS button on wireless router, and then press WPS button on wireless client for three (3) minutes.
- Software PBC on the router: Tick <Push button> on WPS
   Method field, click Start, and then press the WPS button
   on the wireless client for three (3) minutes.

#### PIN Code Mode:

- Pairing from the wireless client: Press the WPS button on the wireless router, and then perform WPS connection process in PIN code mode and enter the AP PIN Code on the client device.
- Pairing from the wireless router: Press the WPS button on wireless client, and then perform the WPS connection process in PIN code mode and enter the Client PIN Code on the WPS Method > Client PIN Code filed. Check if the PIN code is correct and then click Start to pair with wireless client.

#### **NOTES:**

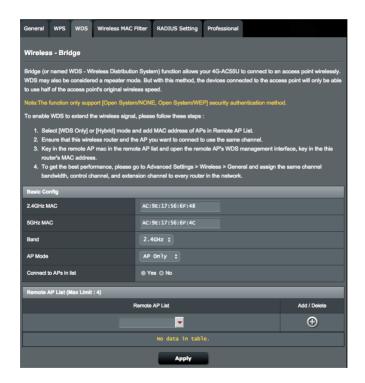
- WPS supports authentication using Open System and WPA2-Personal. WPS does not support a wireless network that uses a Shared Key, WPA-Personal, WPA-Enterprise, WPA2-Enterprise, and RADIUS encryption method.
- Check your wireless device or its user manual for the location of the WPS button.
- During the WPS process, the wireless router scans for any available WPS devices. If the wireless router does not find any WPS devices, it switches to idle mode.
- The router's power LED indicators quickly flash three minutes until the WPS setup is completed.

#### 4.1.3 WDS

Bridge or WDS (Wireless Distribution System) allows your ASUS wireless router to connect to another wireless access point exclusively, preventing other wireless devices or stations to access your ASUS wireless router. It can also be considered as a wireless repeater where your ASUS wireless router communicates with another access point and other wireless devices.

#### To set up the wireless bridge:

 From the navigation panel, go to Advanced Settings > Wireless > WDS tab.



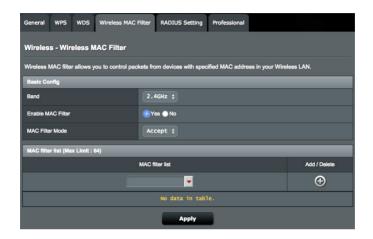
- 2. Select the band for the wireless bridge.
- 3. In the **AP Mode** field, select any of these options:
  - AP Only: Disables the WDS function.
  - **WDS Only**: Enables the WDS feature but prevents other wireless devices/stations from connecting to the router.
  - HYBRID: Enables the Wireless Bridge feature and allows other wireless devices/stations to connect to the router.
- 4. In the **Connect to APs in list** field, click **Yes** if you want to connect to an Access Point listed in the Remote AP List.
- On the Remote AP List, key in a MAC address and click the Add button to enter the MAC address of other available Access Points
- 6. Click **Apply**.

#### **NOTES:**

- In Hybrid mode, wireless devices connected to the ASUS wireless router only receives half the connection speed of the Access Point.
- Any Access Point added to the list should be on the same Control Channel and the same fixed Channel bandwidth as the local ASUS wireless router. You can modify the Control Channel from Advanced Settings > Wireless > General tab.

#### 4.1.4 Wireless MAC Filter

Wireless MAC filter provides control over packets transmitted to a specified MAC (Media Access Control) address on your wireless network.



#### To set up the Wireless MAC filter:

- From the navigation panel, go to Advanced Settings > Wireless > Wireless MAC Filter tab.
- 2. Tick **Yes** in the **Enable Mac Filter** field.
- In the MAC Filter Mode dropdown list, select either Accept or Reject.
- Select Accept to allow devices in the MAC filter list to access to the wireless network.
- Select Reject to prevent devices in the MAC filter list to access to the wireless network.
- 4. On the **MAC filter list**, click the **Add** button and key in the MAC address of the wireless device.
- 5. Click Apply.

#### 4.1.5 RADIUS Setting

RADIUS (Remote Authentication Dial In User Service) Setting provides an extra layer of security when you choose WPA-Enterprise, WPA2-Enterprise, or Radius with 802.1x as your Authentication Mode.



#### To set up the wireless RADIUS settings:

1. Ensure that the wireless router's authentication mode is set to **WPA-Enterprise** or **WPA2-Enterprise**.

**NOTE**: Please refer to section **4.1.1 General** for configuring your wireless router's Authentication Mode.

- 2. From the navigation panel, go to **Advanced Settings** > **Wireless** > **RADIUS Setting**.
- 3. Select the frequency band.
- 4. In the **Server IP Address** field, key in your RADIUS server's IP Address.
- 5. In the **Server Port** field, key in the server port.
- 6. In the **Connection Secret** field, assign the password to access your RADIUS server.
- 7. Click Apply.

#### 4.1.6 Professional

The Professional screen provides advanced configuration options.

**NOTE**: We recommend that you use the default values on this page.



In the **Professional Settings** screen, you can configure the following:

- **Frequency**: Select the frequency band that the professional settings will be applied to.
- **Enable Radio**: Select **Yes** to enable wireless networking. Select **No** to disable wireless networking.

- Enable wireless scheduler: Select Yes to enable wireless networking by the following schedule rules. Select No to disable the schedule rules.
- **Date to Enable Radio (weekdays)**: You can specify which days of the week wireless networking is enabled.
- **Time of Day to Enable Radio**: You can specify a time range when wireless networking is enabled during the week.
- **Date to Enable Radio (weekend)**: You can specify which days of the weekend wireless networking is enabled.
- **Time of Day to Enable Radio**: You can specify a time range when wireless networking is enabled during the weekend.
- Set AP isolated: The Set AP isolated item prevents wireless
  devices on your network from communicating with each
  other. This feature is useful if you want to create a public
  wireless network that only allow guests to access the
  Internet. Select Yes to enable this feature or select No to
  disable.
- Roaming Assistant: When your wireless environment has provisioned a several APs (access point) or wireless repeaters to cover all wireless dead zones. When a client that connected on AP1 moves from one place with better signal to another with poor signal, but there is an another signal from AP2. To prevent the client stick on AP1, you can enable Roaming Assistant, and set a minimal RSSI value as threshold. When the connection quality lower than the threshold, AP1 disconnect the wireless client so that it can reevaluate the wireless environment to select a AP with the best signal quality, such as AP2.
- **Enable IGMP Snooping**: When IGMP snooping is enabled, multicast traffic is only forwarded to wireless client that are members of the specific multicast group.
- Multicast rate (Mbps): Select the multicast transmission rate or click Disable to switch off simultaneous single transmission.

- Preamble Type: Preamble Type defines the length of time that the router spent for CRC (Cyclic Redundancy Check). CRC is a method of detecting errors during data transmission.
   Select Short for a busy wireless network with high network traffic. Select Long if your wireless network is composed of older or legacy wireless devices.
- AMPDU RTS: In 802.11n or 802.11ac using a method, A-MPDU, to aggregate short packet into a longer packet for the same MAC address. When a wireless device ready for transmission sends a RTS (Request to Send). After enabling AMPDU RTS, every AMPDU frame send with RTS process.
- **RTS Threshold**: Select a lower value for RTS (Request to Send) Threshold to improve wireless communication in a busy or noisy wireless network with high network traffic and numerous wireless devices.
- DTIM Interval: DTIM (Delivery Traffic Indication Message)
   Interval or Data Beacon Rate is the time interval before a signal is sent to a wireless device in sleep mode indicating that a data packet is awaiting delivery. The default value is three milliseconds.
- Beacon Interval: Beacon Interval is the time between one DTIM and the next. The default value is 100 milliseconds. Lower the Beacon Interval value for an unstable wireless connection or for roaming devices.
- Enable TX Bursting: Enable TX Bursting improves transmission speed between the wireless router and 802.11g devices.
- Enable WMM APSD: WMM APSD(Automatic Power Save Delivery) is the enhancement to the legacy power saver mode. Enable WMM APSD, the wireless AP manages radio usage to help increase battery life for battery-powered wireless clients, such as smartphone and laptop. APSD automatically changes to use a longer beacon interval when the traffic does not require a short packet exchange interval.

#### 4.1.7 Guest Network

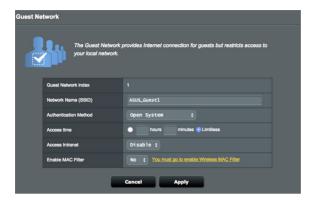
The **Guest Network** provides temporary visitors with Internet connectivity via access to separate SSIDs or networks without providing access to your private network.



# To create a guest network:

- 1. From the navigation panel, go to **General** > **Guest Network**.
- 2. On the **Guest Network** screen, select 2.4Ghz and 5Ghz frequency band for the guest network that you want to create.
- 3. Click Enable.
- 4. Configure a guest's settings on pop-up screen
- 5. Assign a Network Name (SSID) for identify your guest network.
- 6. Select an Authentication Method.
- 7. If you select a WPA authentication method, select a WPA Encryption.
- 8. Specify the **Access time** or choose **Limitless**.

- 9. Select **Disable** or **Enable** on the **Access Intranet** item.
- 10. Select **No** or **Yes** on **MAC Filter** item for your guest network.



11. When done, click **Apply**.

#### **4.2 LAN**

#### 4.2.1 LANIP

The LAN IP screen allows you to modify the LAN IP settings of your wireless router.

**NOTE:** Any changes to the LAN IP address will be reflected on your DHCP settings.



## To modify the LAN IP settings:

- From the navigation panel, go to Advanced Settings > LAN > LAN IP tab.
- 2. Modify the IP address and Subnet Mask.
- 3. When done, click **Apply**.

#### 4.2.2 DHCP Server

Your wireless router uses DHCP to assign IP addresses automatically on your network. You can specify the IP address range and lease time for the clients on your network.



## To configure the DHCP server:

- From the navigation panel, go to Advanced Settings > LAN
   DHCP Server tab.
- 2. In the Enable the DHCP Server field, tick Yes.
- 3. In the **Domain Name** text box, enter a domain name for the wireless router.
- 4. In the **IP Pool Starting Address** field, key in the starting IP address.

- 5. In the **IP Pool Ending Address** field, key in the ending IP address.
- 6. In the **Lease Time** field, specify in seconds when an assigned IP address will expire. Once it reaches this time limit, the DHCP server will then assign a new IP address.

#### **NOTES:**

- We recommend that you use an IP address format of 192.168.1.xxx (where xxx can be any number between 2 and 254) when specifying an IP address range.
- An IP Pool Starting Address should not be greater than the IP Pool Ending Address.
- 7. In the **DNS and Server Settings** section, key in your DNS Server and WINS Server IP address if needed.
- 8. Your wireless router can also manually assign IP addresses to devices on the network. On the **Enable Manual Assignment** field, choose **Yes** to assign an IP address to specific MAC addresses on the network. Up to 32 MAC Addresses can be added to the DHCP list for manual assignment.

#### 4.2.3 Route

If your network makes use of more than one wireless router, you can configure a routing table to share the same Internet service.

**NOTE**: We recommend that you do not change the default route settings unless you have advanced knowledge of routing tables.

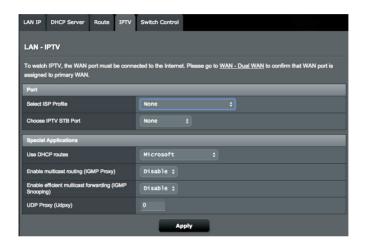


### To configure the LAN Routing table:

- From the navigation panel, go to Advanced Settings > LAN > Route tab.
- 2. On the **Enable static routes** field, choose **Yes**.
- 3. On the **Static Route List**, enter the network information of other access points or nodes. Click the **Add** or **Delete** button to add or remove a device on the list.
- 4. Click Apply.

#### 4.2.4 IPTV

The wireless router supports connection to IPTV services through an ISP or a LAN. The IPTV tab provides the configuration settings needed to set up IPTV, VoIP, multicasting, and UDP for your service. Contact your ISP for specific information regarding your service.



#### 4.2.5 Switch Control

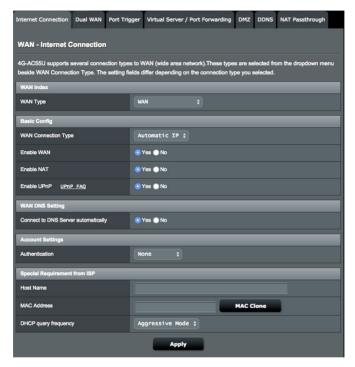
Switch Control tab enables you to configure NAT Acceleration and Jumbo frame to improve network performance. We recommend that you do not change the default route settings unless you have advanced knowledge.



### **4.3 WAN**

#### 4.3.1 Internet Connection

The Internet Connection screen allows you to configure the settings of various WAN connection types.



#### 4.3.1.1 WAN

## To configure the WAN connection settings:

- From the navigation panel, go to Advanced Settings > WAN > Internet Connection tab.
- Configure the following settings below. When done, click Apply.
  - WAN Connection Type: Choose your Internet Service
    Provider type. The choices are Automatic IP, PPPoE, PPTP,
    L2TP or static IP. Consult your ISP if the router is unable
    to obtain a valid IP address or if you are unsure the WAN
    connection type.

- Enable WAN: Select Yes to allow the router Internet access.
   Select No to disable Internet access.
- Enable NAT: NAT (Network Address Translation) is a system where one public IP (WAN IP) is used to provide Internet access to network clients with a private IP address in a LAN. The private IP address of each network client is saved in a NAT table and is used to route incoming data packets.
- Enable UPnP: UPnP (Universal Plug and Play) allows several devices (such as routers, televisions, stereo systems, game consoles, and cellular phone), to be controlled via an IP-based network with or without a central control through a gateway. UPnP connects PCs of all form factors, providing a seamless network for remote configuration and data transfer. Using UPnP, a new network device is discovered automatically. Once connected to the network, devices can be remotely configured to support P2P applications, interactive gaming, video conferencing, and web or proxy servers. Unlike Port forwarding, which involves manually configuring port settings, UPnP automatically configures the router to accept incoming connections and direct requests to a specific PC on the local network.
- Connect to DNS Server automatically: Allows this router to get the DNS IP address from the ISP automatically. A DNS is a host on the Internet that translates Internet names to numeric IP addresses.
- **Authentication**: This item may be specified by some ISPs. Check with your ISP and fill them in if required.
- Host Name: This field allows you to provide a host name for your router. It is usually a special requirement from your ISP.
   If your ISP assigned a host name to your computer, enter the host name here.
- MAC Address: MAC (Media Access Control) address is a
  unique identifier for your networking device. Some ISPs
  monitor the MAC address of networking devices that connect
  to their service and reject any unrecognized device that
  attempt to connect. To avoid connection issues due to an
  unregistered MAC address, you can:

45

- Contact your ISP and update the MAC address associated with your ISP service.
- Clone or change the MAC address of the ASUS wireless router to match the MAC address of the previous networking device recognized by the ISP.
- DHCP query frequency: Changes the DHCP Discovery interval settings to avoid overloading the DHCP server.

#### 4.3.1.2 Mobile broadband

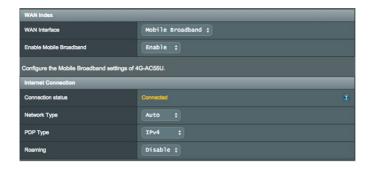
4G-AC55U has build in 3G/4G modem that allows you to use a Mobile Broadband connection for Internet access.

#### To set up your Mobile broadband Internet access:

From the navigation panel, go to Advanced Settings > WAN > Internet Connection tab, select the Mobile Broadband in WAN Type field.



- 2. In the **Enable Mobile Broadband** field, select **Enable**.
- 3. Check that you have properly inserted the SIM card, and configure the mobile settings of your router.



## 4. Set up the following:

- **Location**: Select your 3G/4G service provider's location from the dropdown list.
- **ISP**: Select your Internet Service Provider (ISP) from the dropdown list.
- APN (Access Point Name) service (optional): Contact your 3G/4G service provider for detailed information.
- Dial Number: The 3G/4G provider's access number
- PIN code: Enter the 3G/4G provider's PIN code for connection on SIM PIN Management if the SIM card is required.

#### NOTE:

- · The default PIN code may vary with different providers.
- When you set up for the first time or reboot your router, you need to enter the PIN code in any of thee two scenarios:
  - Your ISP enabled the PIN code verification by default.
  - You manually enabled the PIN code verification from your router's web GUI or your mobile phone.
- If PIN code verification is enabled, you will see the SIM lock status icon on the status icon area.



- **Username / Password**: Enter the username and password that your 3G/4G network provider has provided.
- **Idle Time**: Enter the time (in minutes) when the router goes into sleep mode when there is no activity in the network.



### **Internet Connection Configuration**



# To configure your mobile broadband connection:

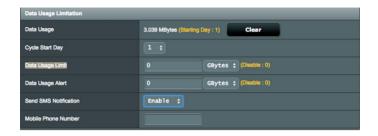
- 1. On **Network Type** field, select your preferred network:
  - Auto (Default): Select Auto to allow the wireless router to automatically select the channel that has the available connection from 4G, 3G and 2G network.

- **3G/4G**: Select 3G/4G to allow the wireless router to automatically connect to a 3G or 4G network.
- **4G only**: Select this option to automatically connect the wireless router to a 4G network only.
- **3G only**: Select this option to automatically connect the wireless router to a 3G network only.
- **2G only**: Select this option to automatically connect the wireless router to a 2G network only.
- Connection Type: This field allows you to define your connection policies.
- 3. **PDP Type**: The wireless router support several PDP Types, PPP, IPv4, IPv6, IPv6 to IPv4.
- 4. **Roaming**: When you travel to another country, you may use original SIM to access the local network if your ISP provider roaming service in the country. Enable this functions to allow you to access the local network.
  - Click Scan to show all the available mobile networks.
  - Select available mobile network and click **Apply** to connect to it.

#### **NOTES**:

- The LTE Router can detect your ISP based on the IMSI information of your SIM card. If the mobile network from your ISP is not found, connect to a roaming network of other ISPs.
- Using a roaming service will incur additional charges. Inquire from your mobile service provider before using the roaming service.

#### **Traffic Limitation**



### To configure the Data Usage settings:

- 1. **Data usage**: Show the data usage.
- 2. **Cycle Start Day**: Select the day you wish the data usage to begin to accumulate. The data usage will be reset at the end of each cycle.
- 3. **Data Usage Limit**: Set the monthly maximum volume of traffic (in GB) for Internet usage. When this limit is reached, an exclamation mark and pop-up alert message will show up when you login administration page, and Internet access is blocked.
- 4. **Data Usage Alert**: Set the maximum volume of Internet traffic at which an exclamation mark and pop-up alert message will show up when you login administration page. When your Internet usage reaches this limit, Internet access is not blocked until the Usage Limit is reached.
- 5. **Send SMS notification**: Enable this function to send an SMS notification from your router to your mobile device once the Data Usage limit for Internet usage is reached.
- 6. **Mobile Phone Number**: Enter the mobile number that is going to receive the SMS notification.

**Note**: The SMS fee is charged to your SIM/USIM card of your router.

7. Click Apply.

## **Configure PIN Code**

Enter PIN code if SIM card is required you to enter a PIN Code before apply APN connection.



You can also click Modify button to change PIN code when PIN code authentication is enable.

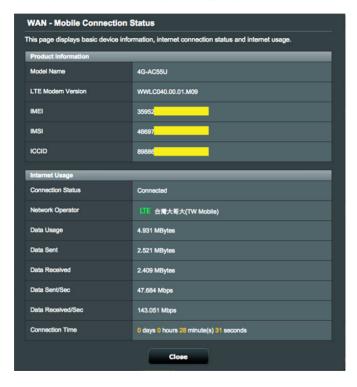




#### **Mobile Connection Status**

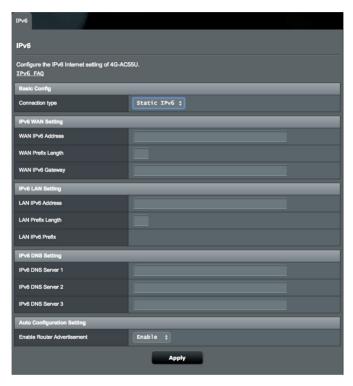
#### **To find Mobile broadband Information:**

- 1. Click to find the detail information
- 2. The **Mobile Connection Status** screen displays the detailed Mobile Broadband connection status.



### 4.3.2 IPv6 (Internet Settings)

This wireless router supports IPv6 addressing, a system that supports more IP addresses. This standard is not yet widely available. Contact your ISP if your Internet service supports IPv6.



## To set up IPv6:

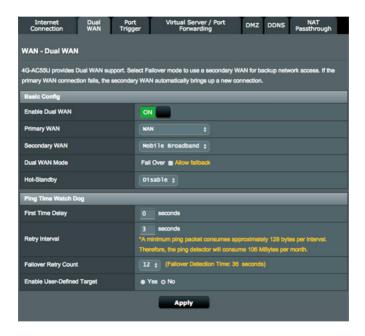
- 1. From the navigation panel, go to **Advanced Settings** > **IPv6**.
- 2. Select your **Connection Type**. The configuration options vary depending on your selected connection type.
- 3. Enter your IPv6 LAN and DNS settings.
- 4. Click Apply.

**NOTE**: Please refer to your ISP regarding specific IPv6 information for your Internet service.

#### 4.3.3 Dual WAN

Your ASUS wireless router provides dual WAN support. You can set the dual WAN feature to any of these two modes:

- **Failover Mode:** Select this mode to use the secondary WAN as the backup network access.
- Allow Failback: Tick the checkbox to allow Internet connection switch back to primary WAN automatically when primary WAN becomes available.



- **First time delay**: Set the time delay (in seconds) before the first ping packet is sent out.
- **Retry interval**: Set the time interval (in seconds) between two ping packets.
- **Failover Retry Count**: Set the time (in seconds) when the system triggers the failover or failback action after reaching

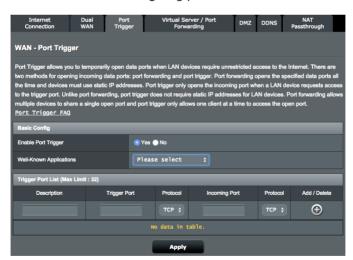
the ping test counter and getting no response from the target IP address.

 Enable User-defined Target: Select Yes when you want to manually define the target IP address or FQDN (Fully Qualified Domain Name) for the ping test packet.

## 4.3.4 Port Trigger

Port range triggering opens a predetermined incoming port for a limited period of time whenever a client on the local area network makes an outgoing connection to a specified port. Port triggering is used in the following scenarios:

- More than one local client needs port forwarding for the same application at a different time.
- An application requires specific incoming ports that are different from the outgoing ports.



#### To set up Port Trigger:

From the navigation panel, go to Advanced Settings > WAN > Port Trigger tab.

- 2. On the **Enable Port Trigger** field, tick **Yes**.
- On the Well-Known Applications field, select the popular games and web services to add to the Port Trigger List.
- On the **Trigger Port List** table, key in the following information:
  - Description: Enter a short name or description for the service.
  - **Trigger Port**: Specify a trigger port to open the incoming port.
  - **Protocol**: Select the protocol, TCP, or UDP.
  - **Incoming Port**: Specify an incoming port to receive inbound data from the Internet.
    - **Protocol**: Select the protocol, TCP, or UDP.
- 5. Click the **Add** button to enter the port trigger information to the list. Click the **Delete** button to remove a port trigger entry from the list.
- 6. When done, click **Apply**.

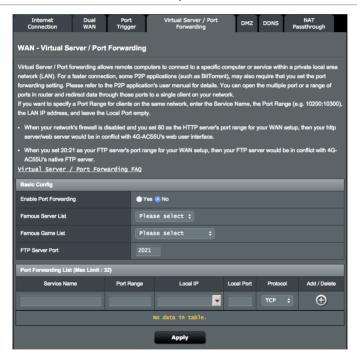
#### **NOTES:**

- When connecting to an IRC server, a client PC makes an outgoing connection using the trigger port range 66660-7000. The IRC server responds by verifying the username and creating a new connection to the client PC using an incoming port.
- If Port Trigger is disabled, the router drops the connection because
  it is unable to determine which PC is requesting for IRC access.
  When Port Trigger is enabled, the router assigns an incoming port to
  receive the inbound data. This incoming port closes once a specific
  time period has elapsed because the router is unsure when the
  application has been terminated.
- Port triggering only allows one client in the network to use a particular service and a specific incoming port at the same time.
- You cannot use the same application to trigger a port in more than one PC at the same time. The router will only forward the port back to the last computer to send the router a request/trigger.

### 4.3.5 Virtual Server/Port Forwarding

Port forwarding is a method to direct network traffic from the Internet to a specific port or a specific range of ports to a device or number of devices on your local network. Setting up Port Forwarding on your router allows PCs outside the network to access specific services provided by a PC in your network.

**NOTE:** When port forwarding is enabled, the ASUS router blocks unsolicited inbound traffic from the Internet and only allows replies from outbound requests from the LAN. The network client does not have access to the Internet directly, and vice versa.



### To set up Port Forwarding:

- From the navigation panel, go to Advanced Settings > WAN
   Virtual Server / Port Forwarding tab.
- On the Enable Port Forwarding field, tick Yes.

- On the Famous Server List field, select the type of service you want to access.
- 4. On the **Famous Game List** field, select the popular game that you want to access. This item lists the port required for your selected popular online game to work properly.
- 5. On the **Port Forwarding List** table, key in the following information:
  - Service Name: Enter a service name.
  - **Port Range**: If you want to specify a Port Range for clients on the same network, enter the Service Name, the Port Range (e.g. 10200:10300), the LAN IP address, and leave the Local Port empty. Port range accepts various formats such as Port Range (300:350), individual ports (566,789) or Mix (1015:1024.3021).

#### NOTES:

- When your network's firewall is disabled and you set 80 as the HTTP server's port range for your WAN setup, then your http server/web server would be in conflict with the router's web user interface.
- A network makes use of ports in order to exchange data, with each
  port assigned a port number and a specific task. For example, port 80
  is used for HTTP. A specific port can only be used by one application
  or service at a time. Hence, two PCs attempting to access data
  through the same port at the same time would fail. For example, you
  cannot set up Port Forwarding for port 100 for two PCs at the same
  time.
  - Local IP: Key in the client's LAN IP address.

**NOTE**: Use a static IP address for the local client to make port forwarding work properly. Refer to section "**4.2 LAN**" for information.

- **Local Port**: Enter a specific port to receive forwarded packets. Leave this field blank if you want the incoming packets to be redirected to the specified port range.
- Protocol: Select the protocol. If you are unsure, select BOTH.
- 5. Click the **Add** to enter the port trigger information to the list. Click the **Delete** button to remove a port trigger entry from the list.
- 6. When done, click **Apply**.

### To check if Port Forwarding has been configured successfully:

- Ensure that your server or application is set up and running.
- You will need a client outside your LAN but has Internet access (referred to as "Internet client"). This client should not be connected to the ASUS router.
- On the Internet client, use the router's WAN IP to access the server. If port forwarding has been successful, you should be able to access the files or applications.

### Differences between port trigger and port forwarding:

- Port triggering will work even without setting up a specific LAN IP address. Unlike port forwarding, which requires a static LAN IP address, port triggering allows dynamic port forwarding using the router. Predetermined port ranges are configured to accept incoming connections for a limited period of time. Port triggering allows multiple computers to run applications that would normally require manually forwarding the same ports to each PC on the network.
- Port triggering is more secure than port forwarding since the incoming ports are not open all the time. They are opened only when an application is making an outgoing connection through the trigger port.

#### 4.3.6 DMZ

Virtual DMZ exposes one client to the Internet, allowing this client to receive all inbound packets directed to your Local Area Network.

Inbound traffic from the Internet is usually discarded and routed to a specific client only if port forwarding or a port trigger has been configured on the network. In a DMZ configuration, one network client receives all inbound packets.

Setting up DMZ on a network is useful when you need incoming ports open or you want to host a domain, web, or e-mail server.

**CAUTION:** Opening all the ports on a client to the Internet makes the network vulnerable to outside attacks. Please be aware of the security risks involved in using DMZ.



### To set up DMZ:

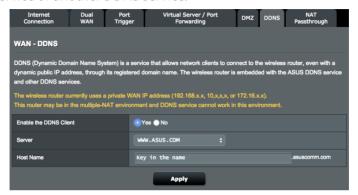
- From the navigation panel, go to Advanced Settings > WAN > DMZ tab.
- Configure the setting below. When done, click Apply.
  - IP address of Exposed Station: Key in the client's LAN IP address that will provide the DMZ service and be exposed on the Internet. Ensure that the server client has a static IP address.

#### To remove DMZ:

- Delete the client's LAN IP address from the IP Address of Exposed Station text box.
- 2. When done, click **Apply**.

#### 4.3.7 **DDNS**

Setting up DDNS (Dynamic DNS) allows you to access the router from outside your network through the provided ASUS DDNS Service or another DDNS service.



#### To set up DDNS:

- From the navigation panel, go to Advanced Settings > WAN > DDNS tab.
- Configure the following settings below. When done, click Apply.
  - **Enable the DDNS Client**: Enable DDNS to access the ASUS router via the DNS name rather than WAN IP address.
  - Server and Host Name: Choose ASUS DDNS or other DDNS.
     If you want to use ASUS DDNS, fill in the Host Name in the format of xxx.asuscomm.com (xxx is your host name).
  - If you want to use a different DDNS service, click FREE TRIAL and register online first. Fill in the User Name or E-mail Address and Password or DDNS Key fields.
  - **Enable wildcard**: Enable wildcard if your DDNS service requires one.

#### **NOTES:**

DDNS service will not work under these conditions:

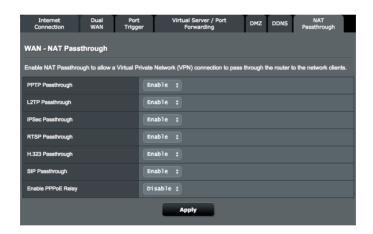
- When the wireless router is using a private WAN IP address (192.168. x.x, 10.x.x.x, or 172.16.x.x), as indicated by a yellow text.
- The router may be on a network that uses multiple NAT tables.

# 4.3.8 NAT Passthrough

NAT Passthrough allows a Virtual Private Network (VPN) connection to pass through the router to the network clients. PPTP Passthrough, L2TP Passthrough, IPsec Passthrough and RTSP Passthrough are enabled by default.

# To enable / disable the NAT Passthrough settings:

- 1. Go to the **Advanced Settings** > **WAN** > **NAT Passthrough** tab.
- Select **Enable** or **Disable** for specific traffic pass through the NAT firewall.
- 3. When done, click **Apply**.



# 4.4 Traffic Manager

#### 4.4.1 QoS

This feature ensures bandwidth for prioritized tasks and applications.



#### To enable the QoS function:

- From the navigation panel, go to General > Traffic Manager
   QoS tab.
- 2. From the **Enable Smart QoS** field, click **ON**.

**NOTE**: Get the bandwidth information from your ISP. You can also go to <a href="http://speedtest.net">http://speedtest.net</a> to check and get your real-world bandwidth.

- Fill in your Internet speed on the upload and download bandwidth fields.
- 4. Click Apply.

 On the top right dropdown menu, you can select the Userdefined QoS rules to apply on specified service and devices (IP or MAC).



6. You can also select **User-defined priorities** to re-defined the bandwidth for each priority level.

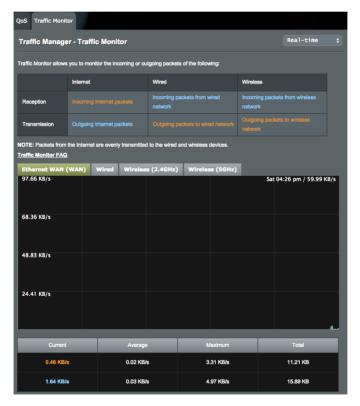


#### 4.4.2 Traffic Monitor

The traffic monitor function allows you to access the bandwidth usage and speed of your Ethernet WAN, Mobile broadband, wired, and wireless networks. It allows you to monitor network traffic even on a daily basis.

**NOTE**: Packets from the Ethernet WAN and Mobile broadband are evenly transmitted to the wired and wireless devices.

### **Ethernet WAN traffic**

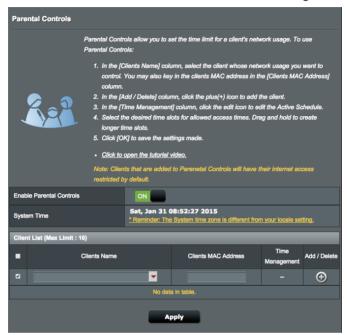


### Mobile Broadband traffic



### 4.4.3 Setting up Parental Controls

Parental Control allows you to control the Internet access time. Users can set the time limit for a client's network usage.



### To use the parental control function:

- 1. From the navigation panel, go to **General** > **Parental control**.
- 2. Click **ON** to enable Parental Control.
- Select the client whose network usage you want to control. You may also key in the client's MAC address in the Client MAC Address column.

**NOTE**: Ensure that the client name does not contain special characters or spaces as this may cause the router to function abnormally.

- 4. Click Add or Delete to add or delete the client's profile.
- 5. Set up the allowed time limit in **Time Management** map.

- 6. Drag and drop a desired time zone to allow client's network usage.
- 6. Click **OK**.
- 7. Click **Apply** to save the settings.

### 4.5 Firewall

The wireless router can serve as a hardware firewall for your network.

**NOTE**: The Firewall feature is enabled by default.

#### 4.5.1 General

#### To set up basic Firewall settings:

- From the navigation panel, go to Advanced Settings > Firewall > General tab.
- 2. On the **Enable Firewall** field, select **Yes.**
- 3. On the **Enable DoS protection**, select **Yes** to protect your network from DoS (Denial of Service) attacks though this may affect your router's performance.
- 4. You can also monitor packets exchanged between the LAN and WAN connection. On the Logged packets type, select **Dropped**, **Accepted**, or **Both**.
- 5. Click Apply.

#### 4.5.2 URL Filter

You can specify keywords or web addresses to prevent access to specific URLs.

**NOTE**: The URL Filter is based on a DNS query. If a network client has already accessed a website such as <a href="http://www.abcxxx.com">http://www.abcxxx.com</a>, then the website will not be blocked (a DNS cache in the system stores previously visited websites). To resolve this issue, clear the DNS cache before setting up the URL Filter.

### To set up a URL filter:

- From the navigation panel, go to Advanced Settings > Firewall > URL Filter tab.
- 2. On the **Enable URL Filter** field, select **Enabled**.
- 3. Enter a URL and click the button.
- 4. Click Apply.

### 4.5.3 Keyword filter

Keyword filter blocks access to webpages containing specified keywords. **To set up a keyword filter:** 

- From the navigation panel, go to Advanced Settings > Firewall > Keyword Filter tab.
- 2. On the **Enable Keyword Filter** field, select **Enabled**.
- 3. Enter a word or phrase and click the **Add** button.
- 4. Click Apply.

#### NOTES:

- The Keyword Filter is based on a DNS query. If a network client has already accessed a website such as http://www.abcxxx.com, then the website will not be blocked (a DNS cache in the system stores previously visited websites). To resolve this issue, clear the DNS cache before setting up the Keyword Filter.
- Web pages compressed using HTTP compression cannot be filtered.
   HTTPS pages also cannot be blocked using a keyword filter.

## 4.5.4 Network Services Filter

The Network Services Filter blocks LAN to WAN packet exchanges and restricts network clients from accessing specific web services such as Telnet or FTP.

### To set up a Network Service filter:

- From the navigation panel, go to Advanced Settings > Firewall > Network Service Filter tab.
- 2. On the **Enable Network Services Filter** field, select **Yes**.
- 3. Select the Filter table type. **Black List** blocks the specified network services. **White List** limits access to only the specified network services.
- 4. Specify the day and time when the filters will be active.
- 5. To specify a Network Service to filter, enter the Source IP, Destination IP, Port Range, and Protocol. Click the button.
- 6. Click Apply.

#### 4.5.5 IPv6 Firewall

By default, your ASUS wireless router blocks all unsolicited incoming traffic. The IPv6 Firewall function allows incoming traffic coming from specified services to go through your network.

# 4.6 Using the USB Application

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

**IMPORTANT!** To use the server functions, you need to insert a USB storage device, such as a USB hard disk or USB flash drive, in the USB 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 ASUS website at <a href="http://event.asus.com/2009/networks/disksupport/">http://event.asus.com/2009/networks/disksupport/</a> for the file system support table.



# 4.6.1 Using AiDisk

AiDisk allows you to share files stored on a connected USB device through the Internet. AiDisk also assists you with setting up ASUS DDNS and an FTP server.

#### To use AiDisk:

- 1. From the navigation panel, go to **General** > **USB application**, then click the **AiDisk** icon.
- 2. From the Welcome to AiDisk wizard screen, click **Go**.



3. Select the access rights that you want to assign to the clients accessing your shared data.



 Create your domain name via the ASUS DDNS services, read the Terms of Service and then select I will use the service and accept the Terms of service and key in your domain name. When done, click Next.

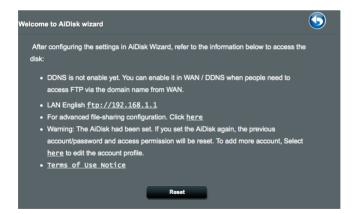


You can also select **Skip ASUS DDNS settings** then click **Next** to skip the DDNS setting.



You can also select **Skip ASUS DDNS settings** then click **Next** to skip the DDNS setting.

- 5. Click **Finish** to complete the setting.
- To access the FTP site that you created, launch a web browser or a third-party FTP client utility and key in the ftp link (ftp://<domain name>.asuscomm.com) you have previously created.



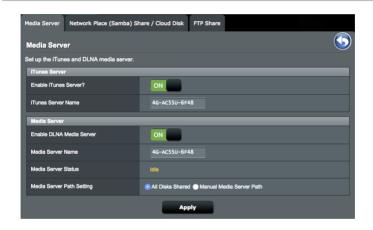
## 4.6.2 Using Servers Center

Servers Center allows you to share the media files from the USB disk via a Media Server directory, Samba share service, or FTP share service. You can also configure other settings for the USB disk in the Servers Center.

## **Using Media Server**

Your wireless router allows DLNA-supported devices to access multimedia files from the USB disk connected to your wireless router.

**NOTE**: Before using the DLNA Media Server function, connect your device to the 4G-AC55U's network.

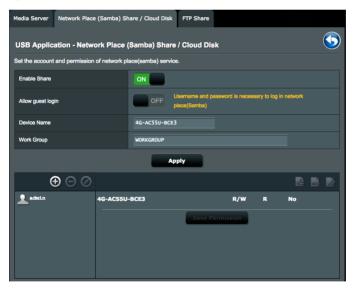


To launch the Media Server setting page, go to **General > USB** application > Media Services and Servers > Media Servers tab. Refer to the following for the descriptions of the fields:

- Enable iTunes Server: Select ON/OFF to enable/disable the iTunes Server.
- Enable DLNA Media Server: Select ON/OFF to enable/ disable the DLNA Media Server.
- Media Server Status: Displays the status of the media server.
- Media Server Path Setting: Select All Disks Shared or Manual Media Server Path.

## 4.6.3 Using Network Place (Samba) Share service

Network Place (Samba) Share allows you to set up the accounts and permissions for the Samba service.



#### To use Samba share:

From the navigation panel, go to General > USB application
 Media Services and Servers > Network Place (Samba)
 Share / Cloud Disk tab.

**NOTE**: Network Place (Samba) Share is enabled by default.

2. Follow the steps below to add, delete, or modify an account.

#### To create a new account:

a) Click (1) to add new account.

b) In the **Account** and **Password** fields, key in the name and password of your network client. Retype the password to

confirm. Click Add to add the account to the list.

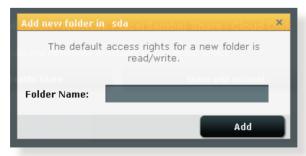


## To delete an existing account:

- a) Select the account that you want to delete.
- b)Click .
- c) When prompted, click **Delete** to confirm the account deletion.

## To add a folder:

- a) Click 🖳
- b) Enter the folder name, and click **Add**. The folder that you created will be added to the folder list.



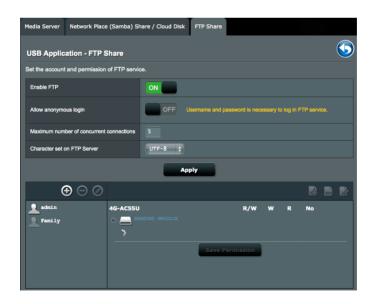
- 3. From the list of folders, select the type of access permission that you want to assign for specific folders:
  - **R/W:** Select this option to assign read/write access.
  - R: Select this option to assign read-only access.
  - No: Select this option if you do not want to share a specific file folder.
- 4. Click **Apply** to apply the changes.

## 4.6.4 Using the FTP Share service

FTP share enables an FTP server to share files from USB disk to other devices via your local area network or via the Internet.

#### IMPORTANT:

- Ensure that you safely remove the USB disk. Incorrect removal of the USB disk may cause data corruption.
- To safely remove the USB disk, refer to the section Safely removing the USB disk under 3.1.5 Monitoring your USB device.



#### To use FTP Share service:

**NOTE:** Ensure that you have set up your FTP server through AiDisk. For more details, refer to the section "4.6.1 Using AiDisk".

- From the navigation panel, click General > USB application
   Media Services and Servers > FTP Share tab.
- 2. From the list of folders, select the type of access rights that you want to assign for specific folders:
  - **R/W**: Select to assign read/write access for a specific folder.
  - **W**: Select to assign write only access for a specific folder.
  - **R**: Select to assign read only access for a specific folder.
  - No: Select this option if you do not want to share a specific folder.
- 3. If you prefer, you can set the **Allow anonymous login** field to **ON**.
- 4. In the **Maximum number of concurrent connections** field, key in the number of devices that can simultaneously connect to the FTP share server.
- 5. Click **Apply** to confirm the changes.
- 6. To access the FTP server, key in the ftp link **ftp://<hostname>.asuscomm.com** and your user name and password on a web browser or a third-party FTP utility.

## 4.7 Download Master

Download Master is a utility that helps you download files even while your laptops or other devices are switched off.

**NOTE:** You need a USB device connected to the wireless router to use Download Master.

#### To use Download Master:

 Click General > USB application > Download Master to download and install the utility automatically.

**NOTE:** If you have more than one USB drive, select the USB device you want to download the files to.



- 2. After the download process is finished, click the Download Master icon to start using the utility.
- 3. Click Add to add a download task.



4. Select a download type such as BitTorrent, HTTP, or FTP. Provide a torrent file or a URL to begin downloading.

**NOTE:** For details on Bit Torrent, refer to section "4.7.1 Configuring Bit Torrent download settings".

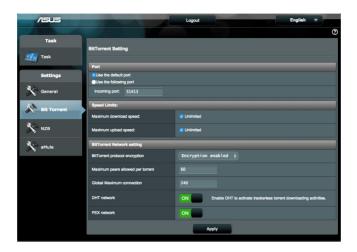
- 5. Use the navigation panel to configure the **General settings**.
  - You can define the download schedule by Selecting download Immediately or At Schedule Time.



- The download tasks information updates each 5 seconds in default. The options, **Refresh rate**, allow you to change the information updated period.
- You can select folder path from **Download to** field as download file repository.
- The default port number for **DownloadMaster** administration page is 8081. If the port number conflicts with other application you can change from here.
- To manage the **DownloadMaster** from Internet, you can slide **WAN network** to **ON**.
- If your network resource is tight, we recommend you disable Keep seeding after task completed by sliding the witch to OFF.



## 4.7.1 Configuring Bit Torrent download settings



## To configure BitTorrent download settings:

- From Download Master's navigation panel, click Bit Torrent to launch the Bit Torrent Setting page.
- 2. Select a specific port or use the default port for your download task.
- 3. To prevent network congestion, you can limit the maximum upload and download speeds under **Speed Limits**.
- 4. You can limit the maximum number of allowed peers and enable or disable file encryption during downloads.
- 5. Enable DHT (Distributed Hash Table) network can enhance download speeds and transfer rates by jointing a information sharing domain. To use the DHT network, your wireless router also needs to share some information with other member on the network,
- 6. Enable PEX (Peer Exchange) network to exchange peer information between two connected peers help you to gather more peers in the network.

## 4.7.2 NZB settings

You can set up a USENET server to download NZB files. After entering USENET settings, click **Apply**.



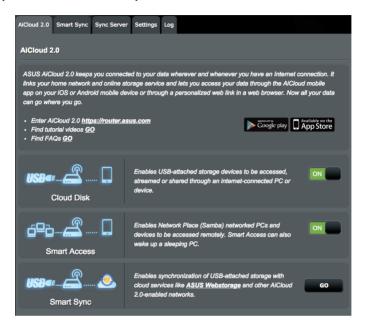
## 4.7.3 eMule settings

You can set up a eMule server to download file from eMule. After entering USENET settings, click **Apply**.



## 4.8 Using AiCloud 2.0

AiCloud 2.0 is a cloud service application that allows you to save, sync, share, and access your files.



#### To use AiCloud:

- 1. From Google Play Store or Apple Store, download and install the ASUS AiCloud app to your smart device.
- 2. Connect your smart device to your network. Follow the instructions to complete the AiCloud setup process.

## 4.8.1 Cloud Disk

#### To create a cloud disk:

- 1. Insert a USB storage device into the wireless router.
- 2. Turn on Cloud Disk.



3. Go to <a href="https://router.asus.com">https://router.asus.com</a> and enter the router login account and password. For better user experience, we recommend that you use **Google Chrome** or **Firefox**.



4. You can now start accessing Cloud Disk files on devices connected to the network.

**NOTE:** When accessing the devices that are connected to the network, you need to enter the device's user name and password manually, which will not be saved by AiCloud for security reason.



#### 4.8.2 Smart Access

The Smart Access function allows you to easily access your home network via your router's domain name.



#### **NOTES:**

- You can create a domain name for your router with ASUS DDNS. For more details, refer to section 4.3.7 DDNS.
- By default, AiCloud provides a secure HTTPS connection. Key in <a href="https://[yourASUSDDNSname].asuscomm.com">https://[yourASUSDDNSname].asuscomm.com</a> for a very secure Cloud Disk and Smart Access usage.

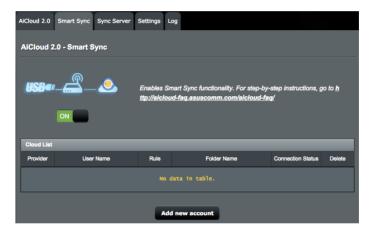
## 4.8.3 Smart Sync

#### To use Smart Sync:

1. From the nabigation panel, click **AiCloud 2.0** > **AiCloud 2.0** > **Smart Sync** > **Go**.



- 2. Select **ON** to enable Smart Sync.
- 3. Click Add new account.



- 4. Enter your ASUS WebStorage or Dropbox account password and select the directory that you want to sync with WebStorage.
- 5. Select Syn rules for the Smart sync task.
  - **Synchronization**: Selecting **Synchronization** allows you to sync a folder between two servers, which sync task always keeps your folder with the same files.
  - Download to USB Disk: Selecting Download to USB Disk allows you to replicate the remote files to the local folder on USB Disk.
  - Upload to Cloud: Selecting Upload to Cloud allows you to replicate the local files to the remote folder on ASUS WebStorage.



6. Click **Apply** to add the sync task.

## 4.8.4 Sync Server



#### To use Sync Server:

- 1. From the navigation panel, click **AiCloud 2.0** > **Sync Server**.
- 2. Enter Sync Server configuration on **Invitation Generator** to enable **Smart Sync**.
- 3. Send your friend the sync invitation.



4. After a invitation is generated, you can check the sync task on **Sync List** table .



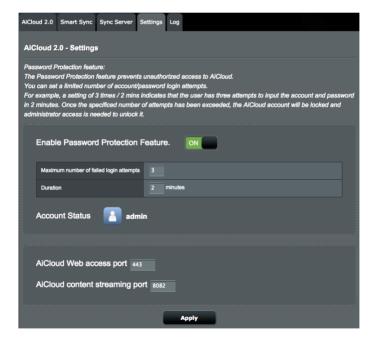
- 5. You can click Delete button to terminate the task if you don't want sync task the folder with remote sync client anymore.
- 6. You can also check the activities of sync server by clicking **Check log** button or lick **Log** tab.



## 4.8.5 Settings

AiCloud 2.0 allows you to define a access policy to prevent unauthorized access, such as dictionary attack. When a host try to access the AiCloud and exceed the defined Maximum number of failed login attempts in the defined duration, the AiCloud service will be disabled automatically.

The Secure Socket Layer (SSL) is a protocol that provide an encrypted communication between web server and browsers for secure data transfer, which includes access password. User access the AiCloud web portal use a default port, 443, over https. The content delivering uses a default port, 8082, over http.



## 4.9 Administration

## 4.9.1 Operation Mode

The Operation Mode page allows you to select the appropriate mode for your network.



#### To set up the operating mode:

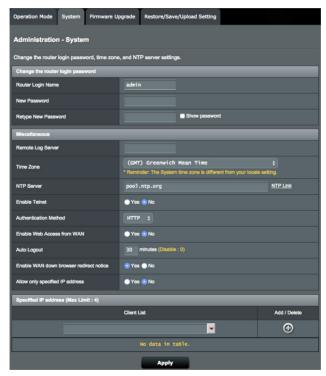
- From the navigation panel, go to Advanced Settings > Administration > Operation Mode tab.
- 2. Select any of these operation modes:
  - Wireless router mode (default): In wireless router mode, the wireless router connects to the Internet and provides Internet access to available devices on its own local network.
    - Repeater Mode: In Repeater mode, your wireless router wirelessly connects to an existing wireless network to extend the wireless coverage. In this mode, the firewall, IP sharing, and NAT functions are disabled.
    - Access Point mode: In this mode, the router creates a new wireless network on an existing network.
    - Media Bridge: This setup requires two wireless routers.
       The second router serves as a media bridge where multiple devices such as Smart TVs and gaming consoles can be connected via Ethernet.

## 3. Click Apply.

**NOTE**: The router will reboot when you change the modes.

## **4.9.2 System**

The **System** page allows you to configure your wireless router settings.

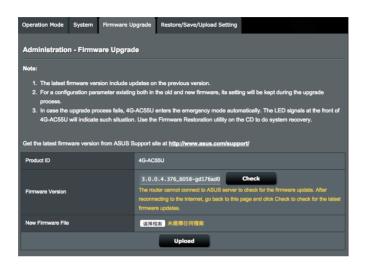


## To set up the System settings:

- From the navigation panel, go to Advanced Settings > Administration > System tab.
- 2. You can configure the following settings:
  - Change router login password: You can change the password and login name for the wireless router by entering a new name and password.
  - **Time Zone**: Select the time zone for your network.
  - **NTP Server**: The wireless router can access a NTP (Network time Protocol) server in order to synchronize the time.
  - **Enable Telnet**: Click **Yes** to enable Telnet services on the network. Click **No** to disable Telnet.
  - Authentication Method: You can select HTTP, HTTPS, or both protocols to secure router access.
  - Enable Web Access from WAN: Select Yes to allow devices outside the network to access the wireless router GUI settings. Select No to prevent access.
  - Auto Logout: System will auto log out the administration page after an idle period. To disable Auto logout, set the value in 0.
  - Enable WAN down browser redirect notice: When WAN
    connection is down, the system will pop up a screen to guide
    to how to configure the WAN connection. If you don't like to
    see this notice, select No to disable the notice.
  - Allow only specified IP address: Click Yes if you want to specify the IP addresses of devices that are allowed access to the wireless router GUI settings from WAN.
  - Specified IP Address: Enter the WAN IP addresses of networking devices allowed to access the wireless router settings. This Client list allows you to add the maximum IP addresses of 4.
- 3. Click Apply.

## 4.9.3 Firmware Upgrade

**NOTE**: Download the latest firmware from the ASUS website at <a href="http://www.asus.com">http://www.asus.com</a>



## To upgrade the firmware:

- From the navigation panel, go to Advanced Settings > Administration > Firmware Upgrade tab.
- In the New Firmware File field, click Browse to locate the downloaded file.
- 3. Click Upload.

#### NOTES:

- When the upgrade process is complete, wait for some time for the system to reboot.
- If the upgrade process fails, the wireless router automatically enters rescue mode and the power LED indicator on the front panel starts flashing slowly. To recover or restore the system, refer to section "5.2 Firmware Restoration".

## 4.9.4 Restore/Save/Upload Setting



## To restore/save/upload wireless router settings:

- From the navigation panel, go to Advanced Settings > Administration > Restore/Save/Upload Setting tab.
- 2. Select the tasks that you want to do:
  - To restore to the default factory settings, click **Restore**, and click **OK** in the confirmation message.
  - To save the current system settings, click **Save**, navigate to the folder where you intend to save the file and click **Save**.
  - To restore from a saved system settings file, click **Browse** to locate your file, then click **Upload**.

**Note**: If issues occur, upload the latest firmware version and configure new settings. **Do not** restore the router to its default settings.

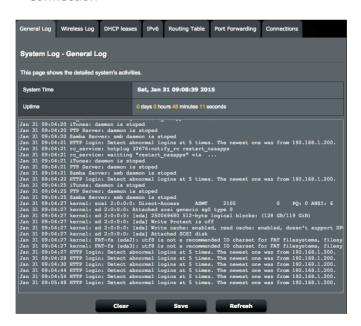
# 4.10 System Log

**System Log** contains your recorded network activities.

**NOTE:** System log resets when the router is rebooted or powered off.

## To view your system log:

- From the navigation panel, go to Advanced Settings > System Log.
- 2. You can view your network activities in any of these tabs:
  - General Log
  - · Wireless Log
  - DHCP Leases
  - IPv6 (WAN and LAN network information)
  - · Wireless Log
  - Port Forwarding
  - · Routing Table
  - Connection



# **4.11 Ethernet WAN Mobile Broadband Function Support List**

The wireless router supports wired WAN and Mobile broadband WAN in failover and failback modes. The Mobile broadband WAN is used both as Internet access and WAN backup interface. LAN, WAN, VPN, and Firewall supports different functions. See the comparison table below.

	Wired WAN	LAN as WAN	Mobile broadband	
		LAN		
IPTV	V	N/A	N/A	
Switch Control >> NAT Acceleration(IPv4 Only)	V	N/A	N/A	
Switch Control >> Jumbo Frame	V	N/A	N/A	
WAN				
IPv6	V	V	V (1)	
Port Trigger	V	V	V (2)	
Virtual Server / Port Forwarding	V	V	V (2)	
DMZ	V	V	V (2)	
DDNS	V	V	V (2)	
NAT Passthrough	V	V	V (2)	
	Traffic Manager			
QoS	V	V	V	
	Firewall			
General	V	V	V	
URL Filter	V	V	V	
Keyword Filter	V	V	V	
Network Services Filter	V	V	V	
IPv6 Firewall	V	V	N/A	
Administration				
System >> Enable Web Access from WAN	V	V	V (2)	

	Applications		
AiCloud Access from WAN	V	V	V (2)
VPN Server	V	V	V (2)
FTP Server	V	V	V (2)

#### **NOTES:**

- V(1): Mobile WAN has separated configuration on its configuration page
- V (2): In most of using case, Internet service provide dispatch the mobile broadband a private IP, that will cause the WAN service failed to access from WAN side.

# 5 Utilities

#### **NOTES:**

- Download and install the wireless router's utilities from the ASUS website:
  - Device Discovery v1.4.7.1 at <a href="http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Discovery.zip">http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Discovery.zip</a>
  - Firmware Restoration v1.9.0.4 at <a href="http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Rescue.zip">http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Rescue.zip</a>
  - Windows Printer Utility v1.0.5.5 at <a href="http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Printer.zip">http://dlcdnet.asus.com/pub/ASUS/LiveUpdate/Release/Wireless/Printer.zip</a>
- The utilities are not supported on MAC OS.

# **5.1** Device Discovery

Device Discovery is an ASUS WLAN utility that detects an ASUS wireless router device, and allows you to configure the wireless networking settings.

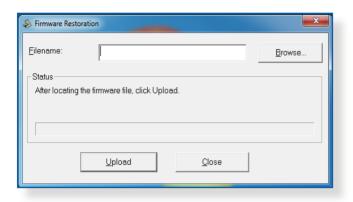
#### To launch the Device Discovery utility:

From your computer's desktop, click
 Start > All Programs > ASUS Utility > 4G-AC55U Wireless
 Router > Device Discovery.

**NOTE:** When you set the router to Access Point mode, you need to use Device Discovery to get the router's IP address.

## 5.2 Firmware Restoration

Firmware Restoration is used on an ASUS Wireless Router that failed during its firmware upgrading process. It uploads the firmware that you specify. The process takes about three to four minutes.



**IMPORTANT:** Launch the rescue mode on the router before using the Firmware Restoration utility.

**NOTE:** This feature is not supported on MAC OS.

# To launch the rescue mode and use the Firmware Restoration utility:

- 1. Unplug the wireless router from the power source.
- 2. Hold the Reset button at the rear panel and simultaneously replug the wireless router into the power source. Release the Reset button when the Power LED at the front panel flashes slowly, which indicates that the wireless router is in the rescue mode.

3. Set a static IP on your computer and use the following to set up your TCP/IP settings:

IP address: 192.168.1.x

**Subnet mask**: 255.255.255.0

From your computer's desktop, click
 Start > All Programs > ASUS Utility 4G-AC55U Wireless
 Router > Firmware Restoration.

5. Specify a firmware file, then click **Upload**.

**NOTE**: This is not a firmware upgrade utility and cannot be used on a working ASUS Wireless Router. Normal firmware upgrades must be done through the web interface. Refer to **Chapter 4: Configuring the Advanced Settings** for more details.

# 5.3 Setting up your printer server

## 5.3.1 ASUS EZ Printer Sharing

ASUS EZ Printing Sharing utility allows you to connect a USB printer to your wireless router's USB port and set up the print server. This allows your network clients to print and scan files wirelessly.



## To set up the EZ Printer sharing mode:

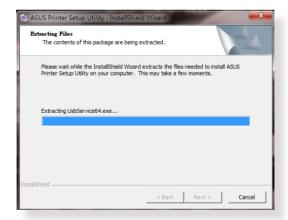
- 1. From the navigation panel, go to **General** > **USB Application** > **Network Printer Server**.
- Click **Download Now!** to download the network printer utility.



**NOTE:** Network printer utility is supported on Windows® XP, Windows® Vista, and Windows® 7 only. To install the utility on Mac OS, select **Use LPR protocol for sharing printer**.

3. Unzip the downloaded file and click the Printer icon to run the network printer setup program.



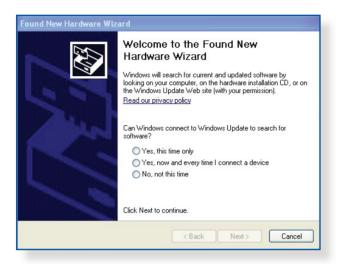


4. Follow the onscreen instructions to set up your hardware, then click **Next**.

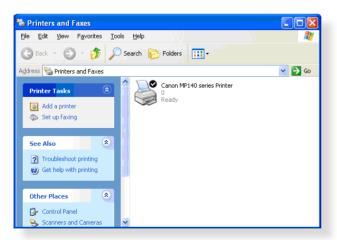


- 5. Wait a few minutes for the initial setup to finish. Click **Next**.
- 6. Click **Finish** to complete the installation.

7. Follow the Windows\* OS instructions to install the printer driver.



8. After the printer's driver installation is complete, network clients can now use the printer.



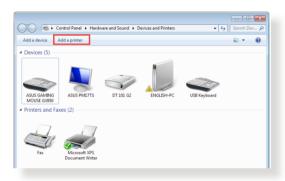
## 5.3.2 Using LPR to Share Printer

You can share your printer with computers running on Windows® and MAC operating system using LPR/LPD (Line Printer Remote/ Line Printer Daemon).

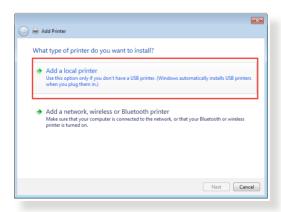
## **Sharing your LPR printer**

#### To share your LPR printer:

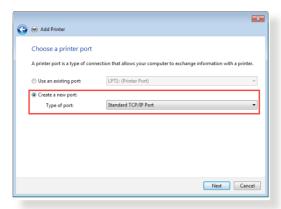
 From the Windows® desktop, click Start > Devices and Printers > Add a printer to run the Add Printer Wizard.



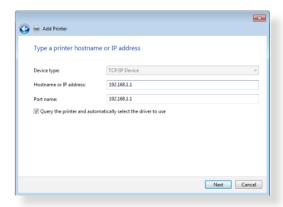
2. Select Add a local printer and then click Next.



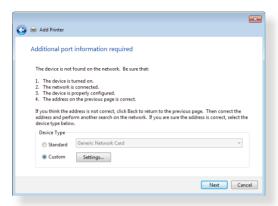
3. Select Create a new port then set Type of Port to Standard TCP/IP Port. Click New Port.



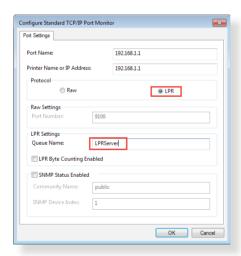
4. In the **Hostname or IP address** field, key in the IP address of the wireless router then click **Next**.



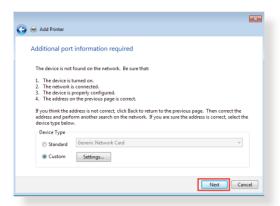
5. Select **Custom** then click **Settings**.



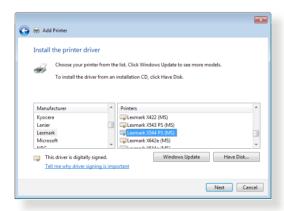
Set Protocol to LPR. In the Queue Name field, key in LPRServer then click OK to continue.



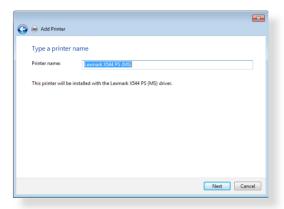
7. Click **Next** to finish setting up the standard TCP/IP port.



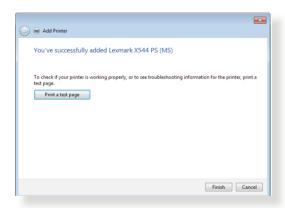
8. Install the printer driver from the vendor-model list. If your printer is not in the list, click **Have Disk** to manually install the printer drivers from a CD-ROM or file.



9. Click **Next** to accept the default name for the printer.



10. Click **Finish** to complete the installation.



## **6 Troubleshooting**

This chapter provides solutions for issues you may encounter with your router. If you encounter problems that are not mentioned in this chapter, visit the ASUS support site at: <a href="http://support.asus.com/">http://support.asus.com/</a> for more product information and contact details of ASUS Technical Support.

## 6.1 Basic Troubleshooting

If you are having problems with your router, try these basic steps in this section before looking for further solutions.

## Upgrade Firmware to the latest version.

- Launch the Web GUI. Go to Advanced Settings >
   Administration > Firmware Upgrade tab. Click Check to verify if the latest firmware is available.
- 2. If the latest firmware is available, visit the ASUS global website at <a href="http://www.asus.com/Networks/Wireless-Routers/4GAC55U/#download">http://www.asus.com/Networks/Wireless-Routers/4GAC55U/#download</a> to download the latest firmware.
- From the Firmware Upgrade page, click Browse to locate the firmware file.
- 4. Click **Upload** to upgrade the firmware.

## Restart your network in the following sequence:

- 1. Turn off the modem.
- 2. Unplug the modem.
- 3. Turn off the router and computers.
- 4. Plug in the modem.
- 5. Turn on the modem and then wait for 2 minutes.
- 6. Turn on the router and then wait for 2 minutes.
- 7. Turn on computers.

## Check if your Ethernet cables are plugged properly.

- When the Ethernet cable connecting the router with the modem is plugged in properly, the WAN LED will be on.
- When the Ethernet cable connecting your powered-on computer with the router is plugged in properly, the corresponding LAN LED will be on.

# Check if the wireless setting on your computer matches that of your computer.

 When you connect your computer to the router wirelessly, ensure that the SSID (wireless network name), encryption mehtod, and password are correct.

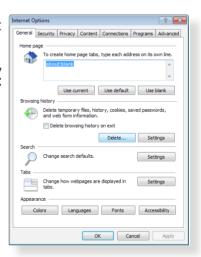
## Check if your network settings are correct.

- Each client on the network should have a valid IP address.
   ASUS recommends that you use the wireless router's DHCP server to assign IP addresses to computers on your network.
- Some cable modem service providers require you to use the MAC address of the computer initially registered on the account. You can view the MAC address in the web GUI, Network Map > Clients page, and hover the mouse pointer over your device in Client Status.

## **6.2 Frequently Asked Questions (FAQs)**

## I cannot access the router GUI using a web browser

- If your computer is wired, check the Ethernet cable connection and LED status as described in the previous section.
- Ensure that you are using the correct login information. The
  default factory login name and password is "admin/admin".
  Ensure that the Caps Lock key is disabled when you enter the
  login information.
- Delete the cookies and files in your web browser. For Internet Explorer 8, follow these steps:
  - Launch Internet Explorer 8, then click Tools > Internet Options.
  - In the General tab, under Browsing history, click Delete..., select Temporary Internet Files and Cookies then click Delete.



#### NOTES:

- The commands for deleting cookies and files vary with web browsers.
- Disable proxy server settings, cancel the dial-up connection, and set the TCP/IP settings to obtain IP addresses automatically. For more details, refer to Chapter 1 of this user manual.
- Ensure that you use CAT5e or CAT6 ethernet cables.

# The client cannot establish a wireless connection with the router.

**NOTE:** If you are having issues connecting to 5Ghz network, make sure that your wireless device supports 5Ghz or features dual band capabilities.

## · Out of Range:

- Move the router closer to the wireless client.
- Try to adjust antennas of the router to the best direction as described in section 1.4 Positioning your router.

#### DHCP server has been disabled:

- Launch the web GUI. Go to General > Network Map> Clients and search for the device that you want to connect to the router.
- 2. If you cannot find the device in the **Network Map**, go to **Advanced Settings** > **LAN** > **DHCP Server**, **Basic Config** list, select **Yes** on the **Enable the DHCP Server**.
- SSID has been hidden. If your device can find SSIDs from other routers but cannot find your router's SSID, go to Advanced Settings > Wireless > General, select No on Hide SSID, and select Auto on Control Channel.
- If you are using a wireless LAN adapter, check if the wireless channel in use conforms to the channels available in your country/area. If not, adjust the channel, channel bandwidth, and wireless mode.
- If you still cannot connect to the router wirelessly, you can reset your router to factory default settings. In the router GUI,click Administration > Restore/Save/Upload Setting and click Restore.

#### Wired Internet is not accessible.

- Check if your router can connect to your ISP's WAN IP address.
   To do this, launch the web GUI and go to General > Network Map, and check the Internet Status.
- If your router cannot connect to your ISP's WAN IP address, try restarting your network as described in the section Restart your network in following sequence under Basic Troubleshooting.
- The device has been blocked via the Parental Control function. Go to General > Parental Control and see if the device is in the list. If the device is listed under Client Name, remove the device using the Delete button or adjust the Time Management Settings.
- If there is still no Internet access, try to reboot your computer and verify the network's IP address and gateway address.
- Check the status indicators on the ADSL modem and the wireless router. If the WAN LED on the wireless router is not ON, check if all cables are plugged properly.

### Mobile broadband Internet is not accessible.

- Insert a SIM that with data plan subscription into the USIM card slot. The 3G/4G Mobile Broadband LED lights up, indicating that the SIM card is properly installed.
- The APN settings are not applied automatically. Obtain the APN service settings from your ISP, then follow the steps below tho manually configure the APN settings.
  - Go to Advanced Settings > WAN > Internet Connection tab.
  - In the **WAN Type** field, select **Mobile broadband**.
- If APN is configured correct and Internet connection still failed, ensure that:
  - The frequency band is compatible with your ISP.

- The wireless router is placed close to the window for a strong 3G/4G signal.
- Port trigger, port forwarding, DDNS or DMZ service cannot work. Most ISPs provide a private IP address for a mobile broadband device. Hence some services, such as AiCloud, are not accessible. Please contact your ISP for assistance.

## You forgot the SSID (network name) or network password

- Setup a new SSID and encryption key via a wired connection (Ethernet cable). Launch the web GUI, go to **Network Map**, click the router icon, enter a new SSID and encryption key, and then click **Apply**.
- Reset your router to the default settings. Launch the web GUI, go to Administration > Restore/Save/Upload Setting, and click Restore. The default login account and password are both "admin".

## How to restore the system to its default settings?

 Go to Administration > Restore/Save/Upload Setting, and click Restore.

The following are the factory default settings:

**User Name:** admin **Password:** admin

**Enable DHCP:** Yes (if WAN cable is plugged in)

**IP address:** 192.168.1.1

**Domain Name:** (Blank)

**Subnet Mask:** 255.255.255.0

**DNS Server 1:** 192.168.1.1

**DNS Server 2:** (Blank) **SSID (2.4GHz):** ASUS

SSID (5GHz): ASUS\_5G

## Firmware upgrade failed.

Launch the rescue mode and run the Firmware Restoration utility. Refer to section **5.2 Firmware Restoration** on how to use the Firmware Restoration utility.

#### **Cannot access Web GUI**

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

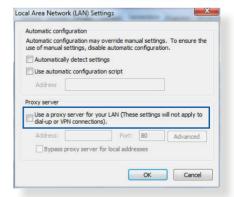
### A. Disable the proxy server, if enabled.

#### Windows® 7

- Click Start > Internet Explorer to launch the browser.
- Click Tools > Internet options > Connections tab > LAN settings.

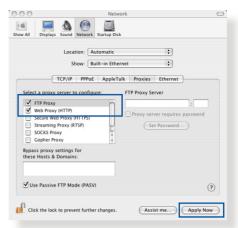


- From the Local Area Network (LAN) Settings screen, untick Use a proxy server for your LAN
- 4. Click **OK** when done.



#### **MAC OS**

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

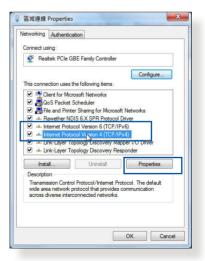


**NOTE:** Refer to your browser's help feature for details on disabling the proxy server.

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

#### Windows® 7

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



 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**

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

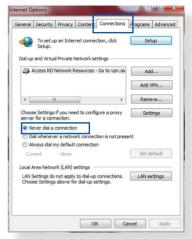


**NOTE:** Refer to your operating system's help and support feature for details on configuring your computer's TCP/IP settings.

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

#### Windows® 7

- Click Start > Internet Explorer to launch the browser.
- 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.

## **Appendices**

## **Notices**

## **ASUS Recycling/Takeback Services**

ASUS recycling and takeback programs come from our commitment to the highest standards for protecting our environment. We believe in providing solutions for you to be able to responsibly recycle our products, batteries, other components, as well as the packaging materials. Please go to <a href="http://csr.asus.com/english/Takeback.htm">http://csr.asus.com/english/Takeback.htm</a> for the detailed recycling information in different regions.

#### **REACH**

Complying with the REACH (Registration, Evaluation, Authorisation, and Restriction of Chemicals) regulatory framework, we published the chemical substances in our products at ASUS REACH website at

http://csr.asus.com/english/index.aspx

## **Federal Communications Commission Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more 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.

**IMPORTANT!** This device is going to be operated in 5.15~5.25GHz frequency range, it is restricted in indoor environment only.

#### WARNING!

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Users must not modify this device. Modifications by anyone other than the party responsible for compliance with the rules of the Federal Communications Commission (FCC) may void the authority granted under FCC regulations to operate this device.
- For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

## **Declaration of Conformity for R&TTE directive 1999/5/EC**

Essential requirements - Article 3

Protection requirements for health and safety – Article 3.1a

Testing for electric safety according to EN 60950-1 has been conducted. These are considered relevant and sufficient.

Protection requirements for electromagnetic compatibility – Article 3.1b

Testing for electromagnetic compatibility according to EN 301 489-1 and EN 301 489-17 has been conducted. These are considered relevant and sufficient.

Effective use of the radio spectrum – Article 3.2

Testing for radio test suites according to EN 300 328 & EN 301 893 have been conducted. These are considered relevant and sufficient.

Operate the device in 5150-5250 MHz frequency band for indoor use only.

## **CE Mark Warning**

This is a Class B product, in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

This equipment may be operated in AT, BE, CY, CZ, DK, EE, FI, FR, DE, GR, HU, IE, IT, LU, MT, NL, PL, PT, SK, SL, ES, SE, GB, IS, LI, NO, CH, BG, RO, RT.

## **Radio Frequency (RF) Exposure Information**

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 31 cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux

rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 31 cm de distance entre la source de rayonnement et votre corps.

## Canada, avis d'Industry Canada (IC)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### NCC 警語

經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻電機之使用不得影響飛航安全及干擾合法通信;經發現有干擾現象時,應立即停用,並改善至無干擾時方得繼續使用。前項合法通信,指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

#### **GNU General Public License**

## **Licensing information**

This product includes copyrighted third-party software licensed under the terms of the GNU General Public License. Please see The GNU General Public License for the exact terms and conditions of this license. We include a copy of the GPL with every CD shipped with our product. All future firmware updates will also be accompanied with their respective source code. Please visit our web site for updated information. Note that we do not offer direct support for the distribution.

#### **GNU GENERAL PUBLIC LICENSE**

Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of

this license document, but changing it is not allowed.

#### **Preamble**

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free

Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making

the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

### Terms & conditions for copying, distribution, & modification

- O. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".
  - Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.
- 1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.
  - You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
- 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the

terms of Section 1 above, provided that you also meet all of these conditions:

- a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
- b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
- c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
  - a) Accompany it with the complete corresponding machinereadable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
  - b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License.
  - Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.
- 7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- The Free Software Foundation may publish revised and/ or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the

- Free Software Foundation.
- 10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission.

For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### **NO WARRANTY**

- 11 BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 12 IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

## **END OF TERMS AND CONDITIONS**

## For Turkey only

## **Authorised distributors in Turkey:**

**BOGAZICI BIL GISAYAR SAN. VE TIC. A.S.** 

**Tel. No.:** +90 212 3311000

**Address:** AYAZAGA MAH. KEMERBURGAZ CAD. NO.10

AYAZAGA/ISTANBUL

CIZGI Elektronik San. Tic. Ltd. Sti.

**Tel. No.:** +90 212 3567070

Address: CEMAL SURURI CD. HALIM MERIC IS MERKEZI

No: 15/C D:5-6 34394 MECIDIYEKOY/

**ISTANBUL** 

KOYUNCU ELEKTRONIK BILGI ISLEM SIST. SAN. VE DIS TIC.

A.S.

**Tel. No.:** +90 216 5288888

**Address:** EMEK MAH.ORDU CAD. NO:18, SARIGAZi,

SANCAKTEPE ISTANBUL

AEEE Yönetmeliğine Uygundur.

## **ASUS Contact information**

#### **ASUSTEK COMPUTER INC. (Asia Pacific)**

Address 15 Li-Te Road, Peitou, Taipei, Taiwan 11259

Website www.asus.com.tw

**Technical Support** 

Telephone +886228943447 Support Fax +886228907698 Online support support.asus.com

#### **ASUS COMPUTER INTERNATIONAL (America)**

Address 800 Corporate Way, Fremont, CA 94539, USA

Telephone +15107393777
Fax +15106084555
Website usa.asus.com
Online support support.asus.com

#### **ASUS COMPUTER GmbH (Germany and Austria)**

Address Harkort Str. 21-23, D-40880 Ratingen, Germany

Support Fax +49-2102-959931 Website asus com/de

Online contact eu-rma.asus.com/sales

#### **Technical Support**

Telephone (Component) +49-2102-5789555

Telephone Germany

(System/Notebook/Eee/LCD) +49-2102-5789557

Telephone Austria

(System/Notebook/Eee/LCD) +43-820-240513 Support Fax +49-2102-959911 Online support support.asus.com

## **Networks Global Hotline Information**

Region	Country	Hotline Number	Service Hours
	Cyprus	800-92491	09:00-13:00 ; 14:00-18:00 Mon-Fri
	France	0033-170949400	09:00-18:00 Mon-Fri
		0049-1805010920	
	Germany	0049-1805010923	09:00-18:00 Mon-Fri
		(component support)	10:00-17:00 Mon-Fri
		0049-2102959911 (Fax)	
	Hungary	0036-15054561	09:00-17:30 Mon-Fri
	Italy	199-400089	09:00-13:00 ; 14:00-18:00 Mon-Fri
	Greece	00800-44142044	09:00-13:00 ; 14:00-18:00 Mon-Fri
	Austria	0043-820240513	09:00-18:00 Mon-Fri
	Netherlands/ Luxembourg	0031-591570290	09:00-17:00 Mon-Fri
	Belgium	0032-78150231	09:00-17:00 Mon-Fri
Europe	Norway	0047-2316-2682	09:00-18:00 Mon-Fri
	Sweden	0046-858769407	09:00-18:00 Mon-Fri
	Finland	00358-969379690	10:00-19:00 Mon-Fri
	Denmark	0045-38322943	09:00-18:00 Mon-Fri
	Poland	0048-225718040	08:30-17:30 Mon-Fri
	Spain	0034-902889688	09:00-18:00 Mon-Fri
	Portugal	00351-707500310	09:00-18:00 Mon-Fri
	Slovak Republic	00421-232162621	08:00-17:00 Mon-Fri
	Czech Republic	00420-596766888	08:00-17:00 Mon-Fri
	Switzerland-German	0041-848111010	09:00-18:00 Mon-Fri
	Switzerland-French	0041-848111014	09:00-18:00 Mon-Fri
	Switzerland-Italian	0041-848111012	09:00-18:00 Mon-Fri
	United Kingdom	+44-1442265548	09:00-17:00 Mon-Fri
	Ireland	0035-31890719918	09:00-17:00 Mon-Fri
	Russia and CIS	008-800-100-ASUS	09:00-18:00 Mon-Fri
	Ukraine	0038-0445457727	09:00-18:00 Mon-Fri

## **Networks Global Hotline Information**

Region	Country	Hotline Numbers	Service Hours	
	Australia	1300-278788	09:00-18:00 Mon-Fri	
	New Zealand	0800-278788	09:00-18:00 Mon-Fri	
	Japan	0800-1232787	09:00-18:00 Mon-Fri	
			09:00-17:00 Sat-Sun	
		0081-570783886	09:00-18:00 Mon-Fri	
		( Non-Toll Free )	09:00-17:00 Sat-Sun	
	Korea	0082-215666868	09:30-17:00 Mon-Fri	
	Thailand	0066-24011717	09:00-18:00 Mon-Fri	
		1800-8525201		
	Singapore	0065-64157917	11:00-19:00 Mon-Fri	
Asia-Pacific		0065-67203835	11:00-19:00 Mon-Fri	
		( Repair Status Only )	11:00-13:00 Sat	
	Malaysia	0060-320535077	10:00-19:00 Mon-Fri	
	Philippine	1800-18550163	09:00-18:00 Mon-Fri	
	India	1800-2090365	09:00-18:00 Mon-Sat	
	India(WL/NW)	1600-2090303	09:00-21:00 Mon-Sun	
	Indonesia	0062-2129495000	09:30-17:00 Mon-Fri	
		500128 (Local Only)	9:30 – 12:00 Sat	
	Vietnam	1900-555581	08:00-12:00 13:30-17:30 Mon-Sat	
	Hong Kong	00852-35824770	10:00-19:00 Mon-Sat	
	USA	1-812-282-2787	8:30-12:00 EST Mon-Fri	
Americas	Canada	1-012-202-2/0/	9:00-18:00 EST Sat-Sun	
	Mexico	001-8008367847	08:00-20:00 CST Mon-Fri	
			08:00-15:00 CST Sat	

## **Networks Global Hotline Information**

Region	Country	Hotline Numbers	Service Hours	
	Egypt	800-2787349	09:00-18:00 Sun-Thu	
	Saudi Arabia	800-1212787	09:00-18:00 Sat-Wed	
Middle	UAE	00971-42958941	09:00-18:00 Sun-Thu	
East +	Turkey	0090-2165243000	09:00-18:00 Mon-Fri	
Africa	South Africa	0861-278772	08:00-17:00 Mon-Fri	
	Israel	*6557/00972-39142800	08:00-17:00 Sun-Thu	
		*9770/00972-35598555	08:30-17:30 Sun-Thu	
	Romania	0040-213301786	09:00-18:30 Mon-Fri	
	Bosnia Herzegovina	00387-33773163	09:00-17:00 Mon-Fri	
	Bulgaria	00359-70014411	09:30-18:30 Mon-Fri	
Balkan		00359-29889170	09:30-18:00 Mon-Fri	
Countries	Croatia	00385-16401111	09:00-17:00 Mon-Fri	
	Montenegro	00382-20608251	09:00-17:00 Mon-Fri	
	Serbia	00381-112070677	09:00-17:00 Mon-Fri	
	Slovenia	00368-59045400	08:00-16:00 Mon-Fri	
		00368-59045401		
	Estonia	00372-6671796	09:00-18:00 Mon-Fri	
	Latvia	00371-67408838	09:00-18:00 Mon-Fri	
	Lithuania-Kaunas	00370-37329000	09:00-18:00 Mon-Fri	
	Lithuania-Vilnius	00370-522101160	09:00-18:00 Mon-Fri	

**NOTE**: For more information, visit the ASUS support site at: <a href="http://support.asus.com">http://support.asus.com</a>

Manufacturer:	ASUSTeK Computer Inc.	
	Tel:	+886-2-2894-3447
	Address:	4F, No. 150, LI-TE RD., PEITOU,
		TAIPEI 112, TAIWAN
Authorised	ASUS Computer GmbH	
representative	Address:	HARKORT STR. 21-23, 40880
in Europe:		RATINGEN, GERMANY