E15860





LSER MANUAL ROG Rapture GT-AC5300



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1 Getting to know your wireless router

1.1 Welcome!

Thank you for purchasing ROG Rapture GT-AC5300 Wireless Router!

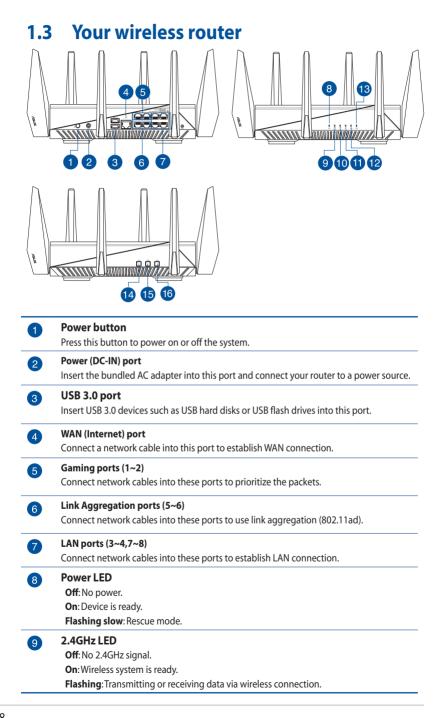
The stylish GT-AC5300 features 2.4GHz, 5GHz-1 and 5 GHz-2 triple bands for an unmatched concurrent wireless HD streaming; SMB server, UPnP AV server, and FTP server for 24/7 file sharing; a capability to handle 300,000 sessions; and the ASUS Green Network Technology, which provides up to 70% power-saving solution.

1.2 Package contents

- GT-AC5300 Wireless Router
- ☑ Network cable (RJ-45)
- AC adapter
- Quick Start Guide

NOTES:

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



10	5GHz LED
	Off: No 5GHz signal.
	On : Wireless system is ready.
	Flashing: Transmitting or receiving data via wireless connection.
(1)	WAN (Internet) LED
	Red: No IP or no physical connection.
	On : Has physical connection to a wide area network (WAN).
12	LAN LED
	Off : No power or no physical connection.
	On : Has physical connection to a local area network (LAN).
13	WPS LED
	Off: WPS verification process is off or completed.
	Flashing: WPS verification process is activated.
14	LED On/Off button
	Press this button to turn on/off the LEDs on the panel.
15	WPS button
•	This button launches the WPS Wizard.
16	Wi-Fi On/Off button
	Press this button to turn on /off the Wi-Fi connection.

NOTES:

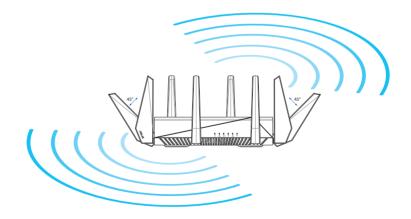
- Use only the adapter that came with your package. Using other adapters may damage the device.
- Specifications:

DC Power adapter	DC Output: +	19V with max 3	.42A current
Operating Temperature	0~40°C	Storage	0~70°C
Operating Humidity	50~90%	Storage	20~90%

1.4 Positioning your router

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

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



1.5 Setup Requirements

To set up your wireless network, you need a computer that meets the following system requirements:

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

NOTES:

- If your computer does not have built-in wireless capabilities, you may install an IEEE 802.11a/b/g/n/ac WLAN adapter to your computer to connect to the network.
- With its triple band technology, your wireless router supports 2.4GHz, 5GHz-1 and 5GHz-2 wireless signals simultaneously. This allows you to do Internet-related activities such as Internet surfing or reading/writing e-mail messages using the 2.4GHz band while simultaneously streaming high-definition audio/video files such as movies or music using the 5GHz band.
- Some IEEE 802.11n devices that you want to connect to your network may or may not support 5GHz band. Refer to the device's manual for specifications.
- The Ethernet RJ-45 cables that will be used to connect the network devices should not exceed 100 meters.

2 Getting started

2.1 Router Setup

IMPORTANT!

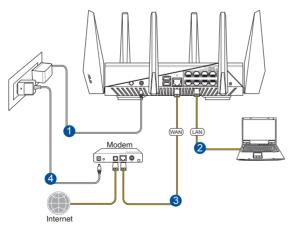
- Use a wired connection when setting up your wireless router to avoid possible setup problems.
- Before setting up your ASUS wireless router, do the following:
- If you are replacing an existing router, disconnect it from your network.
- Disconnect the cables/wires from your existing modem setup. If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

A. Wired connection

NOTE: You can use either a straight-through cable or a crossover cable for wired connection.

To set up your wireless router via wired connection:

1. Plug your router into a power outlet and power it on. Connect the network cable from your computer to a LAN port on your router.



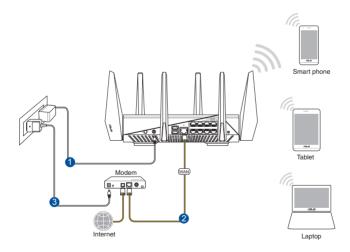
- 2. The web GUI launches automatically when you open a web browser. If it does not auto-launch, enter <u>http://router.asus.com</u>
- 3. Set up a password for your router to prevent unauthorized access.



B. Wireless connection

To set up your wireless router via wireless connection:

1. Plug your router into a power outlet and power it on.



2. Connect to the network name(SSID) shown on the product label on the back side of the router. For better network security, change to a unique SSID and assign a password.



2.4G Wi-Fi Name (SSID):	ASUS_XX_2G
5G-1 Wi-Fi Name (SSID):	ASUS_XX_5G
5G-2 Wi-Fi Name (SSID):	ASUS_XX_5G_Gaming

* XX refers to the last two digits of 2.4GHz MAC address. You can find it on the label on the back of your ROG router.

- 3. Once connected, the web GUI launches automatically when you open a web browser. If it does not auto-launch, enter <u>http://router.asus.com</u>.
- 4. Set up a password for your router to prevent unauthorized access.

NOTES:

- For details on connecting to a wireless network, refer to the WLAN adapter's user manual.
- To set up the security settings for your network, refer to the section Setting up the wireless security settings in Chapter 3 of this user manual.



2.2 Quick Internet Setup (QIS) with Autodetection

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

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

To use QIS with auto-detection:

- Launch a web browser. You will be redirected to the ASUS Setup Wizard (Quick Internet Setup). If not, key in <u>http://router.asus.com</u> manually.
- 2. On the **Login Information Setup** page, change the router's login password to prevent unauthorized access to your wireless router.

RHF	TLIRE GT-AC5300		English •
Turbits C Stability Windf Cold School Windf Cold School School Cold School School Cold Scho	Welcome to the ASUS Networking Family ASUS GT-AC5500 Para plag in the cable to VMV part. Sy- para relative comp adoutcable para relative comp adout adout Atomatic Carting Expert mode, allow writery. Homad Secting	A	
INTEL OF	Nou me a viveless networking especia and summaby of up abarroed outer settings of CR2 (association) to baid saved certification of the setting of the set of the setting of		Angeleration of the angeleration of the second s
C Skip Setup Wizard Quick Internet Setup	Login Information Sotup Change the router password to prevent unau	thorized access to your ASU	15 wireless router.
Check	Router Login Name New Password		Very Weak
Competition	Retype Password		Show password
Conternet Setup	 Your router login information is us accessing your router's administr settings. 		
A DESCRIPTION OF			

NOTE: The wireless router's login username and password is different from the 2.4GHz/5GHz network name (SSID) and security key. The wireless router's login username and password allows you to log into your wireless router's Web GUI to configure your wireless router's settings. The 2.4GHz/5GHz network name (SSID) and security key allows Wi-Fi devices to log in and connect to your 2.4GHz/5GHz network.

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

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

for Automatic IP (DHCP)

🕵 Skip Setup Wizard	Please select the Internet connection type that your ISP	provided.
Quick Internet Setup		
Check Connection	Does your Internet connection require user name and	Reader Connection Scenario 1
🕘 Internet Setup 🔹	e Automatic IP (DHCP)	6- (111)
Router Setup	The type allows your GT-AC5300 to obtain IP address automatically. This connection type is often used by cable service providers.	Remon Case
	Static IP Static IP address	Benefic Connection Scenario 2
	provided by your ISP. Special Requirement from ISP	
	Previous Next	
	* If you do not know the Internet connection type, please con	lad your ISR

for PPPoE, PPTP and L2TP

ittep		
Username () Account Name	ternet Setup Username () water Setup Paseword () Enable VPN client	rest and and the set of the set o

NOTES:

- The auto-detection of your ISP connection type takes place when you configure the wireless router for the first time or when your wireless router is reset to its default settings.
- If QIS failed to detect your Internet connection type, click Skip to manual setting and manually configure your connection settings.

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

GREEKS	
🕵 Skip Setup Wizard	Wireless Setting
Quick Internet Setup	
Check Connection	
Internet Setup	Assign a unique name or SSD (Service Set Identifier) to help identify your wireless network.
	2.4 GHz - Security
🔄 Router Setup 😱	Network Name (SSID) ① ASUS_64_26
	Password (2)
	5 GHz-1 - Security
	Network Name (\$SID) ① ASUS_64_SG
	Password (7)
	5 GHz 2 - Security
	Network Name (SSID) () ASUS_64_SG_Gaming
	Password (1)
	Finite anatomic key planeme it and 63 characterizations reprinting a constrainting of 64 ne. degrees. The characterization constraints, WHX Planeme ALS Is provide on the set to be the pretensis security, keene the security key kind blank, but this represes your network to unsufficient access.
	Apply

5. Read the feature introduction for GT-AC5300, especially the Game IPS to get more information. We highly recommend that you enable the Game IPS at the first time to improve the security.

🕵 Skip Setup Wizard	All and a second second second	P P
Quick Internet Setup	Game IPS	
Check Connection		
Internet Setup		
Router Setup		
	Game IPS is a dedicate gaming networking protection system of ROG GT-AC5300, in order to protect your gaming network form outside attacks and backdoor daemons. = Enable Game IPS	Next

6. Your wireless settings display on the screen. Click **Next** to go to ROG Gaming Center.

😨 Skip Setup Wizard	
Quick Internet Setup	
Check Connection	You can now follow information below and connect to the Wi-Fi network
Connection	2.4 GHz SSID_ASUS_64_26
Internet Setup	Solu: ASUS_64_26 Password: anne1234
Router Setup	5 GHz-1
Monter Secur	SSID: ASUS: 64-50 Password: anne1234
	5 GHz-2
	SSID: ASUS_64_5G_Gaming Password: anne1234
	Use router asus com to login the device
	Next

2.3 Connecting to your wireless network

After setting up your wireless router via QIS, you can connect your computer or other smart devices to your wireless network.

To connect to your network:

- 1. On your computer, click the network icon display the available wireless networks.
- 2. Select the wireless network that you want to connect to, then click **Connect**.
- 3. You may need to key in the network security key for a secured wireless network, then click **OK**.
- 4. Wait while your computer establishes connection to the wireless network successfully. The connection status is displayed and the network icon displays the connected status.

NOTES:

- Refer to the next chapters for more details on configuring your wireless network's settings.
- Refer to your device's user manual for more details on connecting it to your wireless network.

3 Configuring the General Settings of ROG Gaming Center

3.1 Logging into the Web GUI

Your ROG wireless router comes with an intuitive web graphical user interface (GUI) - ROG Gaming Center, which gives you total network control, with need-to-know information such as connected device status and worldwide game-server ping values, and instant access to all the amazing gaming features.

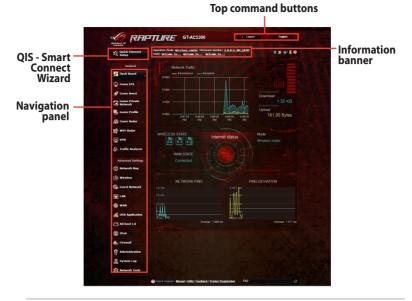
NOTE: The features may vary with different firmware versions.

To log into the web GUI:

- 1. On your web browser, manually key in the wireless router's default IP address: <u>http://router.asus.com</u>.
- 2. On the login page, key in the default user name (**admin**) and the password that you have set in **2.2 Quick Internet Setup** (QIS) with Auto-dection.

Sign In GT-AC5300	
Sign in with your ASUS router account	
Sign In	

3. You can now use the Web GUI to configure various settings of your ASUS Wireless Router.

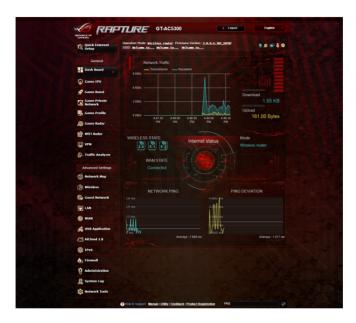


NOTE: If you are logging into the Web GUI for the first time, you will be directed to the Quick Internet Setup (QIS) page automatically.

20

3.2 Dash Board

Dash Board allows you to monitor the real-time traffic for your networking environment and analyze the real-time network ping and ping deviation.



Network ping refers to online game experiences. Higher ping means higher latency for real-time games. For most online games, network ping that is less than 99 ms is considered good quality. If network ping is less than 150 ms, the quality is acceptable. Generally, if network ping is more than 150 ms, it is hard to play game smoothly.

Ping deviation is also highly related with online game experiences. With higher ping deviation, it is much easier causing possible toggle when playing online game. There is no baseline for ping deviation. However, lower ping deviation is better.

NETWORK PING	PING DEVIATION
18 ms	
15 ms	
	3.99 M s
Average: 9.317 ms	Average: 1.908 ms

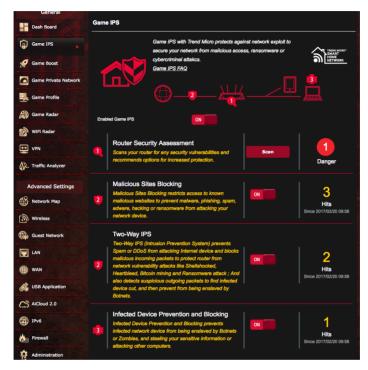
3.3 Game IPS

Game IPS provides real-time monitoring that detects malware, spyware, and unwanted access. It also filters unwanted websites and apps and allows you to schedule Internet access time for a connected device.



3.3.1 Configuring Game IPS

Game IPS prevents network exploits and secures your network from unwanted access.



To Configure Game IPS:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click **Network Protection**.
- 3. From the Network Protection tab, click Scan.

The search results are displayed on the **Router Security Assessment** page.

	secure ycRouter Security Assessment arrivare or		
	Default router login username and password changed -	<u>No</u>	
	Wireless password strength check -	Strong	
	Wireless encryption enabled -	Strong	
	WPS disabled -	<u>No</u>	
	UPnP service disabled -	<u>No</u>	
abled	Web access from WAN disabled -	Yes	
	PING from WAN disabled -	Yes	
F	DMZ disabled -	Yes	
. 8	Port trigger disabled -	Yes	
r	Port forwarding disabled -	Yes	Dange
1	Anonymous login to FTP share disabled -	Yes	
N	Disable guest login for Network Place Share -	Yes	
٨	Malicious Website Blocking enabled -	Yes	
n s	Vulnerability Protection enabled -	Yes	Hits
r	Infected Device Prevention and Blocking -	Yes)17/02/2
Т	Wo-Way IPS Close Secure Your Router		

IMPORTANT! Items marked with **Yes** on the **Router Security Assessment** page are considered to be safe.

- 4. (Optional) From the **Router Security Assessment** page, manually configure the items marked as **No**, **Weak**, or **Very Weak**. To do this:
 - a. Click an item to go to the item's setting page.
 - b. From the item's security settings page, configure and make the necessary changes and click **Apply** when done.
 - c. Go back to the **Router Security Assessment** page and click **Close** to exit the page.
- 5. To automatically configure the security settings, click **Secure Your Router**.
- 6. Click **OK** on the confirmation message.

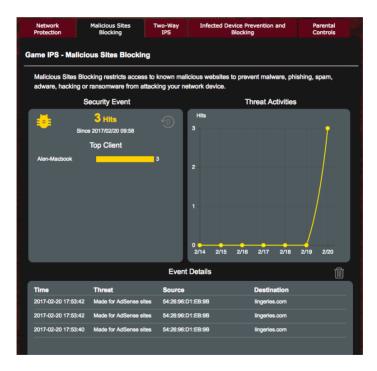
3.3.2 Blocking Malicious Sites

This feature restricts access to known malicious websites in the cloud database for an always-up-to-date protection.

NOTE: This function is automatically enabled if you run the Router Weakness Scan.

To enable Malicious Sites Blocking:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click Network Protection.
- 3. From the Malicious Sites Blocking pane, click **ON**.



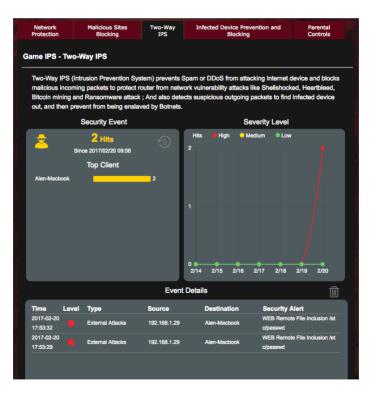
3.3.3 Two-Way IPS

This feature resolves common exploits within the router configuration.

NOTE: This function is automatically enabled if you run the Router Weakness Scan.

To enable Two-Way IPS:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click Network Protection.
- 3. From the Two-Way IPS pane, click **ON**.



3.3.4 Infected Device Prevention and Blocking

This feature prevents infected devices from communicating personal information or infected status to external parties.

NOTE: This function is automatically enabled if you run the Router Weakness Scan.

To enable infected device prevention and blocking:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click Network Protection.
- 3. From the Infected Device Prevention and Blocking pane, click **ON**.

To configure Alert Preference:

- 1. From the Infected Device Prevention and Blocking pane, click **Alert Preference**.
- 2. Select or key in the e-mail provider, e-mail account, and password then click **Apply**.

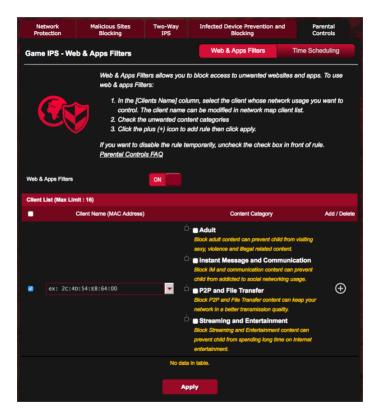
Network Protection	Malicious Sites Blocking	Two-Way IPS	Infected D	evice Prevention and Blocking	Parental Controls
iame IPS - Inf	ected Device Preve	ntion and Blo	cking		
	e Prevention and Blocki stealing your sensitive ir				ived by Botnets or
	Security Event			Threat Activitie	es
	1 Hits Since 2017/02/20 09:58	0	Hits		7
Alen-Macbook	Top Client	1			
			0 2/14 2/15	2/16 2/17 2/18	3 2/19 2/20
		Event	Details		
Time	Threat	Source		Destination	
			01:EB:9B	alphacti.com	

3.3.5 Setting up Parental Control

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

To enable Two-Way IPS:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click Parental Controls tab.



Web & Apps Filters

Web & Apps Filters is a feature of Parental Controls that allows you to block access to unwanted web sites or applications.

To configure Web & Apps Filters:

- 1. From the navigation panel, go to **General** > **Game IPS**.
- 2. From the Game IPS main page, click **Parental Controls** icon to go to the Parental Controls tab.
- 3. From the Enable Web & Apps Filters pane, click ON.
- 4 When the End Users License Agreement (EULA) message prompt appears, click **I agree** to continue.
- 5. From the **Client List** column, select or key in the client's name from the dropdown list box.
- 6. From the **Content Category** column, select the filters from the four main categories: **Adult**, **Instant Message and Communication**, **P2P and File Transfer**, and **Streaming and Entertainment**.
- 7. Click 🕑 to add the client's profile.
- 8. Click **Apply** to save the settings.

Time Scheduling

Time Scheduling allows you to set the time limit for a client's network usage.

NOTE: Ensure that your system time is synchronized with the NTP server.

Network Protection	Malicious Sites Blocking	Two-Way IPS	Infected D	evice Prevention an Blocking	d Parental Controls
Game IPS - Tin	ne Scheduling		Web 8	Apps Filters	Time Scheduling
	Time Schedulin Time Schedulin		set the time lim	nit for a client's netw	vork usage. To use
		/ou may also key		e client whose netw MAC address in th	ork usage you want to e [Clients MAC
	2. In the [A	dd / Delete] colui	mn, click the p	lus(+) icon to add ti	he client.
					it the Active Schedule.
	4. Select th Ionaer tir		ots for allowed	l access times. Dra	g and hold to create
	· · · · · · · · · · · · · · · · · · ·	() to save the set	tinas made.		
	Note: 1. Clients that by default.	are added to Pa	rental Controls	s will have their inte	rnet access restricted
Enable Time Schedu	ling	ON			
System Time		Mon, Feb 20 1	7:56:14 2017		
Client List (Max Lin	nit : 16)				
•	Client Name (M	IAC Address)		Time Management	Add / Delete
	ex: 2C:4D:54:E8:64	:00	-		\oplus
		No data	ı in table.		
		Ар	ply		

To configure Time Scheduling:

- 1. From the navigation panel, go to **General** >**Game IPS** > **Parental Controls** > **Time Scheduling**.
- 2. From the Enable Time Scheduling pane, click ON.
- 3. From the **Clients Name** column, select or key in the client's name from the dropdown list box.

NOTE: You may also key in the client's MAC address in the Client MAC Address column. Ensure that the client name does not contain special characters or spaces as these may cause the router to function abnormally.

- 4. Click 🕑 to add the client's profile.
- 5. Click **Apply** to save the settings.

3.4 Game Boost

This feature allows you to enable Game Boost with one click. When Game Boost is enabled, GT-AC5300 puts the gaming packet as the top priority to provide you with the best gaming experience.

REPUBLIC OF CRIMERS	Operation Mode: Wireless router Firmware Wesion: 3.0	0.4.187.10197
Quick Internet Setup	SSID: Welcome to Welcome to Welcome to	± 1 2 € \$
General	Game Boost QoS Web History	
Dash Board	QoS - WAN/LAN Bandwidth Monitor	Apps analysis 🚺 🔐
	Upload Bandwidth	Download Bandwidth
Game 1PS	10 autor 10 30.	10400 100 30.
🚀 Game Boost ,	5, and Mbps 1, 50.	5. John Mbps 160.
Game Private Network	1	1-m 0.00 000
Game Profile	0.00 100.	0.00
Game Radar	Enabled Game Boost	
WiFi Radar	Highest	High Medium Default Lowest
VPN		3.1 Kb 🔺
A. Traffic Analyzer	AA13N616-N82	1.4 Kb V
Advanced Settings	android(Sony)	0.0 Kb 🔺 0.0 Kb 🔻
Network Map	HUANEI_MOLE_7	0.0 Kb 🔺
Wireless		0.0 Kb 🔻
Guest Network	parmike	0.0 Кb ▲ 0.0 Кb ▼
🕎 LAN		
() WAN		
USB Application		
AiCloud 2.0		
19v6		
Firewall	WANG AN Bandwidth Meniter FAQ	Apphy
Administration		
System Log		
Network Tools		

Apps analysis To enable Apps analysis:

From the **Game Boost** tab, go to the **Apps Analysis** pane, and click **ON**.

3.4.1 QoS

This feature ensures bandwidth for prioritized tasks and apps.



To enable the QoS function:

- From the navigation panel, go to General > Game Boost> QoS tab.
- 2. From the **Enable QoS** pane, click **ON**.
- 3. Fill in the upload and download bandwidth fields.

NOTE: Get the bandwidth information from your ISP. You can also go to <u>http://speedtest.net</u> to check and get your bandwidth.

4. Select the QoS Type (Adaptive, Traditional or Bandwidth limiter) for your configuration.

NOTE: Refer to the QoS tab for the definition of the QoS Type.

5. Click Apply.

3.4.2 Web History

This feature displays the history and details of the sites or URLs that the client visited.

Generation of Contract Setup	Operation Mode: <u>Wire-Less_reader</u> Filmware Version: <u>3.0.0.4.387_10597</u> SSID: <u>Witcome ton.</u> , <u>Witcome ton.</u> , <u>Witcome ton.</u> Game Boost QoS Web Holzery	
General		
Dash Board	QoS - Web History	
Game IPS	Web History shows clients Web Surfing history.	
🥩 Game Boost ,	All client	
Game Private Network	Access Time MAC Address / Client's Name Domain Name	
Game Profile		
Game Radar		
WiFi Radar		
VPN		
Traffic Analyzer		
Advanced Settings		
Network Map		
Wireless		
Guest Network		
E LAN		
() WAN		
🔗 USB Application		
AiCloud 2.0	Refresh	
() IPv6		
Eirewall		
Administration		
System Log		
Network Tools		

To view the Web History:

- 1. From the navigation panel, go to **General** > **Game Boost**> **Web History** tab.
- 2. (Optional) Click **Refresh** to clear the list.

3.5 Game Private Network

The WTFast-powered Gamers Private Network (GPNTM) reduces your average game latency and helps reduce flux spikes and packet losses with your connection. You can enjoy a faster, smoother, and more responsive connection with virtually all MMO games.



To update the firmware:

- 1. Launch the web browser and key in <u>http://router.asus.com</u>, enter the router's default login name and password (admin/admin) to enter ASUSWRT GUI.
- 2. Go to **Administration** > **Firmware Upgrade** and click **Check** and follow the onscreen instructions to upgrade the firmware.

You can also download the latest firmware from <u>http://support.asus.com/ServiceHome.aspx</u> to upgrade the firmware manually.

To useWTFast:

- 1. From the navigation panel, go to **General** > **Game Boost**.
- 2. Create a free WTFast account via https://www.wtfast.com/.
- 3. Log into the WTFast account.
- 4. From the **WTFast Rules** list, create the profile for the device that you want to use WTFast GPN on.
- 5. Select a GPN server according to your location or select "Auto" and "Apply" settings.
- 6. Enable GPN profile BEFORE you launch the game.

NOTE: Free account supports one device, if you would like to upgrade to multiple devices, click **Upgrade** to make subscription.

3.6 Game Profile

When playing PC or console games, there may be some connection issues due to the ISP or router settings in your environment such as NAT and port blocks. Game Profile helps ensure that GT-AC5300 is not blocking the game connection.

C Quick Internet Setup	Coperation Mode: Wireless router Firmware Version: 3.0.0.4.382.9588 SSID: AXE: 64.36 AXE: 64.56 AXE: 64.56 Geming
General	Game Profile
Dash Board	How will Profiles benefit me?
Game IPS	When playing console games, choosing a profile for this game will optimize your routing from this console to your modern. You don't
🚀 Game Boost	need to have deep knowledge of networking, just by linger taps, it will help you to get this down.
Game Private Network	STATUTATT CALL DUTY
🛃 Game Profile 🔹	A ASSASSINGS (WARRAND)
Game Radar	
Wifi Radar	
VPN	All game trademarks, service marks, trade names, product names and logos appearing on this page are the property of their respective owners.
A. Traffic Analyzer	powerer by Portforwarding.org
Advanced Settings	Basic Config Enable Port Forwarding
Network Map	Famous Game List Please select
Wireless	Port Forwarding List (Max Limit : 32)
Guest Network	Add / Service Name Source Target Port Range Local IP Local Port Protocol Deteile
LAN	· · · · · · · · · · · · · · · · ·
() WAN	No data in table.
🔗 USB Application	Apply
AiCloud 2.0	
1Pv6	
trewal	
Administration	
System Log	
Network Tools	

To use Game Profile:

- 1. From the navigation panel, go to **General** > **Game Profile** and tick **Yes** to enable port forwarding.
- 2. Choose a game from **Famous Game List**, which will be updated from time to time.

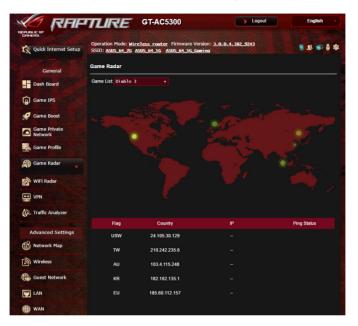
Enable Port Forwarding		• Yes • No					
Famous Game List		Please select		2.			
Port Forwarding List	Max Limit : 32	Please select Call of Duty 4 Call of Duty 4	AW (PC) AW (P54)				
Service Name		Call of Duty 4 Left 4 Dead (PC Left 4 Dead (XE	AW (XBOX) =)	Local	Port	Protocol	Add Dele
		Destiny (PS4) Destiny (XBOX 3 Assassins Cree				тср 🔹	Ð
		Assassins Cree					
		Assassins Creed Halo 5: Guardia	d Unity (XBOX ONE)				
		CS GO (PC) CS GO (PS 3) CS GO (XBOX 360	2)				
		League of Leger	nds				
		Uncharted 4: A Overwatch FIFA 17					

- 3. Click 🕑 to add the game.
- 4. Click **Apply** to apply all the profiles.

Basic Config						
Enable Port Forwarding		• Yes • No				
Famous Game List		Assassins Creed U	nity (PC)	2		
Port Forwarding List	(Max Limit : 32)					
Service Name	Source Target	Port Range	Local IP	Local Port	Protocol	Add / Delete
Assassins Creed		3074,13000,1	192.168.1.24		BOTH •	Ð
		No data in ta	ble.			
		4. Apply				

3.7 Game Radar

Game Radar is a diagnostic tool that helps you identify the connection quality of servers for specific games.



To use Game Radar:

1. From the navigation panel, go to **General** > **Game Radar** and select a game from the game list.

	TLIRE GT-AC5300
Quick Internet Setup	Operation Mode: Wireless_router Firmware Version: 3.0.0.4.382.9246 SSID: 5300 5300.56-1 5300.56-2
General	Game Radar
Dash Board	Game List Diablo 3
Game IPS	League of legends Hero of the Storm
🔗 Game Boost	Overwatch Garena LOL Starcraft 2
Game Private Network	World of Warcraft Hearthstone World of tanks
Game Profile	World of Marplanes
🎒 Game Radar ,	
🔊 WiFi Radar	
VPN	

- 2. Check the Ping Status of each server.
- 3. For a smooth online gaming experience, select a game server with low ping status.

3.8 WiFi Radar

Wi-Fi Radar, an advanced analysis tool for your wireless network, delves deep into the channels and packet data for troubleshooting.

NOTE: Enabling WiFi Radar may result to a drop wireless performance. Only enable Wi-Fi Radar when needed.

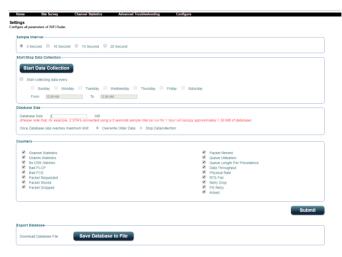


To use WiFi Radar:

- 1. Go to Settings and configure all the WiFi Radar parameters,
- 1. From the navigation panel, go to **General** > **WiFi Radar** and set the schedule for data recording.



- 2. Click Start Data Collection.
- 3. Click Submit after you set all the parameters.



3.8.1 WiFi Site Survey

WiFi Site Survey allows you to search for wireless networks in your environment.



3.8.2 Wireless Channel Statistics

This feature shows channel usage of all bands and channel distribution statistics in your environment.



3.8.3 Advanced Troubleshooting

This feature shows WiFi glitch statistics in your environment.



3.9 VPN

A virtual private network (VPN) provides a secure communication with a remote computer or network over a public network such as the Internet.

NOTE: Before setting up a VPN connection, you would need the IP address or domain name of the VPN server.

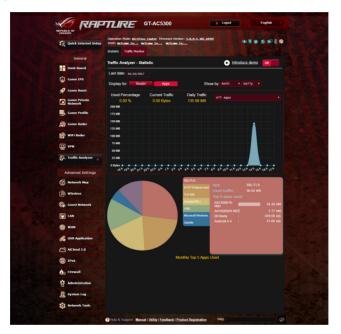
	Operation Mode	e Wireless rout	er Firmware Version:	3 0 0 4 382 1	0397		
Quick Internet Setup			to Welcome to.				P 🖬 🖗 🕸
	VPN Server	VPN Client					
	VPN Server	VPN Clent					
General							
Dash Board	VPN Server	- PPTP				PPTP	OpenVPN
	The udrolese rea	utor currently upon	a private WAN IP add		10 × × × × 172 ·		figure DDNS
Game IPS		starting the VPN se		ess (192, 100, x.)	(, TU.X.X.X, OF 172.)	io.x.x). Please cor	lingure DDNS
Game Boost	Basic Config						
*	Enable PPTP V	PN Server	ON				
Game Private							
Network	VPN Details		General				
Game Profile	Network Place ((Samba) Support	O Yes O	No			
A	The VPN convol	r allows you to acc	cess your home networ	k anutimo, anus	horo		
Game Radar				, any anc, any m	incre.		
		server. Please fol	low these steps.				
WiFi Radar		PTP VPN server	laximum 30 clients)				
			word for VPN client.				
VPN »			aram on your computer	or smartphone.			
			tion and the VPN serve		168.123.122		
A. Traffic Analyzer	(6) If your WAN	IIP address is dy	namic, <u>please clic</u>	k here to se	t the DDNS.		
	(7) If you canno	t use ASUS DDNS	6 services, please go t	http://ipla	okup.asus.com/	'nslookup.php t	o reach your
Advanced Settings		ess to use this ser	vice.				
	• <u>VPN_Serve</u>	r FAQ					
Network Map	Usemamo an	d Password (Ma	x Limit : 16)				
Wireless	Connection State	us l	Usemame		Password	Add / Dele	te Edit
						(Ŧ)	
Guest Network							

To set up access to a VPN server:

- 1. From the navigation panel, go to **General** > **VPN**.
- 2. On the Enable PPTP VPN Server field, select ON.
- 3. On the **VPN Details** dropdown list, select **Advanced Settings** to configure the advanced VPN settings such as broadcast support, authentication, MPPE Encryption, and Client IP address range.
- 4. On the Network Place (Samba) Support field, select Yes.
- 5. Enter the user name and password for accessing the VPN server. Click .
- 6. Click **Apply**.

3.10 Traffic Analyzer

Traffic Analyzer gives you an at-a-glance view of what's happening on your network on a daily, weekly, or monthly basis. It lets you to quickly see each user's bandwidth usage or the device or app used, helping you reduce the bottlenecks in your Internet connection. It's also a great way to monitor the users' Internet usage or activities.



To configure the Traffic analyzer:

- 1. From the navigation panel, go to **General** > **Traffic Analyzer**.
- 2. From the **Traffic Analyzer** main page, turn on traffic analyzer statistic.
- 3. Select the date whose chart you want to display.
- 4. On the **Display for** field, select Router or Apps to display the traffic information.
- 5. On the Show by field, select how you want to display the traffic information.

4 Configuring the Advanced Settings

4.1 Using the Network Map

Network Map allows you to configure your network's security settings, manage your network clients, and monitor your USB device.

	GTLIRE GT-#		> Logout	English
C Quick Internet	Operation Mode: <u>Wireless ro</u> SSID: <u>Welcome to</u> <u>Welcom</u>	auter Firmware Version: 3.0.0 me to Welcome to	1.4.382_10397	(n) 🖹 🗶 💭 (
General	In	iternet status:		n Status
Dash Board		onnected AN IP: 192.168.123.122	2.4GHz 5GHz-1 Network Name (SSI	
Game IPS	Di	DNS: <u>GQ</u>	Welcome to test	
🧭 Game Boost			Authentication Meth WPA2-Personal	od •
Game Private	Wfreless:	Security	WPA Encryption	
Game Profile	- 🗈 🖻 🔸 📻	WPA2-	AES +	
Game Radar		Personal ⁽¹⁾	••••••	
				Apply
WiFi Radar			LAN IP	
	2	•	192.168.1.1	
Traffic Analyzer			PIN code 06763169	
Advanced Settings	Clients: NaN	USB 3.0 No Device	LAN MAC address	
Network Map	View List		2C:4D:54:E8:64:	
(a) Wireless			2C:4D:54:E8:64:	
		USB 3.0		
Guest Network		No Device		
E LAN				
WAN				
🔗 USB Application				
AiCloud 2.0				
IPv6				
irewall				
Administration				
System Log				

4.1.1 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:

- From the navigation panel, go to Advanced Settings > Network Map.
- 2. On the Network Map screen and under **System status**, you can configure the wireless security settings such as SSID, security level, and encryption settings.

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

2.4GHz security settings



5GHz-2 security settings



5GHz-1 security settings

	System	Status	
2.4GHz	5GHz-1	5GHz-2	Status
Network	Name (SSID)		
Welcome	to test_50	G	
Authentic	ation Method	1	
WPA2-Per	sonal		
WPA Enc	ryption		
AES 🔻			
WPA-PSK	key		
•••••	•		
	A	pply	

- 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 High Throughput with WEP or WPA-TKIP as the unicast cipher. If you use these encryption methods, your data rate will drop to IEEE 802.11g 54Mbps connection.

5 Click Apply when done.

4.1.2 Managing your network clients



C Quick Internet	SSID: Welcome to Welcom	to Welcome to	System Sta	No USB disk detected.
General Dash Board		ernet status: <u>inected</u> N IP: 192.168.123.122 NS: <u>GO</u>	2.4GHz 5GHz-1 5G Network Name (SSID)	Hz-2 Status
Game IPS		no. <u>90</u>	Welcome to test_SG-2	
🚀 Game Boost			Authentication Method MPA2-Personal •	
Game Private Network	Wireless:	Security level:	WPA Encryption	
Game Profile		WPA2-	WPA-PSK key	
Game Radar		Personal 🗖		
WiFi Radar			Apply	
+ VPN			LANIP	
	02	(🛊)	192.168.1.1	
A. Traffic Analyzer			PIN code 06763169	
Advanced Settings	Clients: NaN	USB 3.0 No Device	LAN MAC address	
Network Map	View List		2C:4D:54:E8:64:E0 Wireless 5GHz-2 MAC add	***
() Wireless			2C:4D:54:E8:64:E8	
Guest Network		USB 3.0 No Device		1
By interface				

All list									[Hide]
Internet	lcon	Clients Name	Clients IP Addre	ss	Clients MAC Address	Interface	Tx Rate (Mbps)	Rx Rate (Mbps)	Access time
		android(Sony)	192.168.1.116	DHCP	A0:E4:53:FC:42:CA		433.3	40.5	02:50:55
	HUANNES	HUAWEI_Mate_7	192.168.1.201	DHCP	E0:19:1D:EC:62:D7		150	13.5	02:31:02

To manage your network clients:

- From the navigation panel, go to Advanced Settings > Network Map tab.
- 2. On the **Network Map** screen, select the **Clients** icon to display your network client's information.
- 3. Click View List below the **Clients** icon to display all the clients.
- 4. To block a client's access to your network, select the client and click the open lock icon.

4.1.3 Monitoring your USB device

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



NOTES:

- To use this feature, you need to plug a USB storage device, such as a USB hard disk or USB flash drive, to the USB 3.0/2.0 ports on the rear panel of your wireless router. Ensure that the USB storage device is formatted and partitioned properly. Refer to the Plugn-Share Disk Support List at <u>http://event.asus.com/networks/</u> <u>disksupport</u>
- The USB ports support two USB drives or one printer and one USB drive at the same time.

IMPORTANT! You first need to create a share account and its permission /access rights to allow other network clients to access the USB device via an FTP site/third-party FTP client utility, Servers Center, Samba, or AiCloud. For more details, refer to the section **4.6** Using the USB Application and **4.7** Using AiCloud 2.0 in this user manual.

To monitor your USB device:

- From the navigation panel, go to Advanced Settings > Network Map.
- 2. On the Network Map screen, select the **USB Disk Status** icon to display your USB device's information.
- 3. On the AiDisk Wizard field, click **GO** to set up an FTP server for Internet file sharing.

NOTES:

- For more details, refer to the section **4.6.2 Using Servers Center** in this user manual.
- The wireless router works with most USB HDDs/Flash disks (up to 4TB size) and supports read-write access for FAT16, FAT32, NTFS, and HFS+.

Safely removing the USB disk

IMPORTANT: Incorrect removal of the USB disk may cause data corruption.

To safely remove the USB disk:

- From the navigation panel, go to Advanced Settings > Network Map.
- In the upper right corner, click Sector > Eject USB disk. When the USB disk is ejected successfully, the USB status shows Unmounted.



4.2 Wireless

4.2.1 General

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

Quick Internet Setup	SSID: Welcome to Welcome to	irmware Version: <u>3.0.0.4.382_10397</u> . <u>Welcome to</u>
	General WPS WDS Wireless	MAC Filter RADIUS Setting Professional
General	Wireless - General	
Dash Board	Set up the wireless related information I	below.
Game IPS	Enable Smart Connect	
🧭 Game Boost	Band	2.4GHZ •
Game Private Network	Network Name (SSID)	Welcome to test
Game Profile	Hide SSID	● Yes ● No
Game Radar	Wireless Mode	Auto 🔹 🗖 Oplimized for Xbox 🗹 big Protection
WiFi Radar	Channel bandwidth	20/40 MHz • Auto • Current Control Channel: 5
VPN	Extension Channel	Auto Y
A. Traffic Analyzer	Authentication Method	WPA2-Personal
Advanced Settings	WPA Encryption	AES •
	WPA Pre-Shared Key	12345678
Network Map	Protected Management Frames	Disable 💌
ک) Wireless »	Group Key Rotation Interval	3600

To configure the basic wireless settings:

- 1. From the navigation panel, go to **Advanced Settings** > **Wireless** > **General** tab.
- 2. Select 2.4GHz or 5GHz as the frequency band for your wireless network.
- 3. If you want to use the Smart Connect function, move the slider to **ON** in the **Enable Smart Connect** field. This function automatically connect the clients in your network to the appropriate band 2.4GHz or 5GHz for optimal speed.

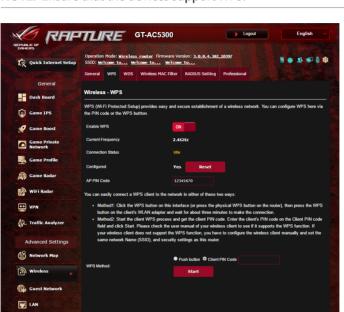
4. Assign a unique name containing up to 32 characters for your SSID (Service Set Identifier) or network name to identify your wireless network. Wi-Fi devices can identify and connect to the wireless network via your assigned SSID. The SSIDs on the information banner are updated once new SSIDs are saved to the settings.

NOTE: You can assign unique SSIDs for the 2.4 GHz and 5GHz frequency bands.

- 5. 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.
- 6. 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, and 802.11b devices to connect to the wireless router.
 - **N only**: Select **N only** to maximize wireless N performance. This setting prevents 802.11g and 802.11b devices from connecting 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.
- 7. Select the operating/control channel for your wireless router. Select **Auto** to allow the wireless router to automatically select the channel that has the least amount of interference.
- 8. Select the channel bandwidth to accommodate higher transmission speeds.
- 9. Select the authentication method.
- 10.When done, click **Apply**.

4.2.2 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.
- WPS uses 2.4GHz by default. If you want to change the frequency to 5GHz, turn OFF the WPS function, click Switch Frequency in the Current Frequency field, and turn WPS ON again.

NOTE: WPS supports authentication using Open System, WPA-Personal, and WPA2-Personal. WPS does not support a wireless network that uses a Shared Key, WPA-Enterprise, WPA2-Enterprise, and RADIUS encryption method.

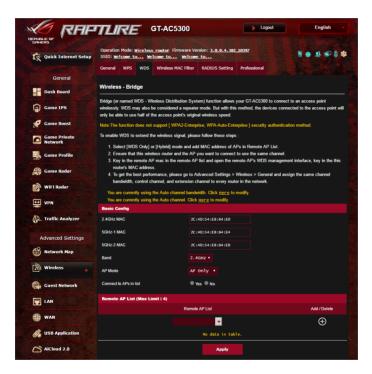
- 3. In the WPS Method field, select **Push Button** or **Client PIN** code. If you select **Push Button**, go to step 4. If you select **Client PIN** code, go to step 5.
- 4. To set up WPS using the router's WPS button, follow these steps:
 - a. Click **Start** or press the WPS button found at the rear of the wireless router.
 - b.Press the WPS button on your wireless device. This is normally identified by the WPS logo.

NOTE: Check your wireless device or its user manual for the location of the WPS button.

- c. The wireless router will scan for any available WPS devices. If the wireless router does not find any WPS devices, it will switch to standby mode.
- 5. To set up WPS using the Client's PIN code, follow these steps:
 - a. Locate the WPS PIN code on your wireless device's user manual or on the device itself.
 - b.Key in the Client PIN code on the text box.
 - c. Click **Start** to put your wireless router into WPS survey mode. The router's LED indicators quickly flash three times until the WPS setup is completed.

4.2.3 Bridge

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:

- 1. From the navigation panel, go to **Advanced Settings** > **Wireless** > **WDS** tab.
- 2. Select the frequency band for the wireless bridge.

- 3. In the **AP Mode** field, select any of these options:
 - AP Only: Disables the Wireless Bridge function.
 - **WDS Only**: Enables the Wireless Bridge 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.

NOTE: In Hybrid mode, wireless devices connected to the ASUS wireless router will only receive half the connection speed of the Access Point.

- 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.
- 5. By default, the operating/control channel for the wireless bridge is set to **Auto** to allow the router to automatically select the channel with the least amount of interference.

You can modify the **Control Channel** from **Advanced Settings** > **Wireless** > **General** tab.

NOTE: Channel availability varies per country or region.

NOTE: Any Access Point added to the list should be on the same Control Channel as the ASUS wireless router.

7. Click Apply.

4.2.4 Wireless MAC Filter

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

EPUBLIC OF CRIMERS	Operation Mode: Wireless	outon Firmwara Vor	100: 2 0 0 4 292	10207	
😨 Quick Internet Setup	SSID: Welcome to Welc				******
	General WPS WDS	Wireless MAC Filter	RADIUS Setting	Professional	
General					
Dash Board	Wireless - Wireless MA	C Filter			
	Wireless MAC filter allows yo	u to control packets fro	m devices with sp	cified MAC address in y	your Wireless LAN.
Game IPS	Basic Config				
🤵 Game Boost	Band	2.46	HZ T		
Game Private Network	Enable MAC Filter	• Yes	5 🔍 No		
Game Profile	MAC Filter Mode	Acce	pt •		
Game Radar	MAC filter list (Max Limit	: 64)			
Game Radar		Client Name (M	AC Address)		Add / Delete
WiFi Radar				-	\oplus
++ VPN			No data in tab		

To set up the Wireless MAC filter:

- 1. From the navigation panel, go to **Advanced Settings** > **Wireless** > **Wireless MAC Filter** tab.
- 2. Tick Yes in the Enable Mac Filter field.
- 3. 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 (b)** button and key in the MAC address of the wireless device.
- 5. Click **Apply**.

4.2.5 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.

Contras	Operation Mode: Wineles SSID: Welcome to	ss router Firmware Ve		<u>_10397</u>	1 4 1 4 1
	General WPS WDS	Wireless MAC Filter	RADIUS Setting	Professional	
General Dash Board	Wireless - RADIUS S	Setting			
	This section allows you to	set up additional param	eters for authorizing	wireless clients through R	ADIUS server. It is required
Game IPS	while you select "Authenti	cation Method" in "Wirel	ess - General" as "W		
-	while you select "Authenti Band		ess - General" as "W 4GHz ¥		
	Band Server IP Address	2.4	\$GHZ ▼		
Game Boost	Band		\$GHZ ▼		
Game Boost	Band Server IP Address Server Port:	2.4	\$GHZ ▼		

To set up 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 **4.2.1 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.

4.2.6 Professional

The Professional screen provides advanced configuration options.

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

	TLIRE GT-AC53	00	> Logout	English •
Quick Internet Setup	Operation Mode: <u>wireless router</u> Firmy SSID: <u>Welcome to</u> <u>Welcome to</u>		0.197	*******
	General WPS WDS Wireless MAC	Filter RADIUS Setting	Professional	
General				
Dash Board	Wireless - Professional			
Game IPS	Wireless Professional Setting allows you to Band	set up additional parameters f	for wireless. But default	values are recommended.
🧭 Game Boost	Enable Radio	O Yes ● No		
Game Private Network	Enable wireless scheduler	• Yes • No		
Game Profile	Set AP isolated	• Yes • No		
Game Radar	Roaming assistant	Disable 🔻		
WiFi Radar	Bluetooth Coexistence	Disable 🔻		
. WIFI Kauai	Enable IGMP Snooping	Disable 🔻		
Ŧ VPN	Multicast Rate(Mbps)	AUTO *		
A. Traffic Analyzer	Preamble Type	Long •		
Advanced Settings	AMPDU RTS	Enable 🔻		
-0	RTS Threshold	2347		
Network Map	DTIM Interval			
) Wireless »	Beacon Interval	100		
Guest Network	Enable TX Bursting	Enable 🔻		
	Enable WMM APSD	Enable 🔻		
	Reducing USB 3.0 interference	Disable 🔻		
🕀 wan	Optimize AMPDU aggregation	Disable 🔻		
USB Application	Modulation Scheme	Up to MCS 11 (Nitro	QAM/1024-QAM) *	
AiCloud 2.0	Airtime Fairness	Enable 🔻		
1Pv6	Mulli-User MIMO	Enable 🔻		
Firewall	Explicit Beamforming Universal Beamforming	Enable •		
Administration				

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.
- 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 many guests frequently join or leave your network. Select **Yes** to enable this feature or select **No** to disable.
- Roaming Assistant: In network configurations that involve multiple Access, Points or wireless repeater, wireless clients sometimes cannot connect automatically to thefts available AP because they are still connected to the main wireless router. Enable this setting so that the client will disconnect from the main wireless router if the signal strength is under a specific threshold and connect to a stronger signal.
- **Enable IGMP Snooping:** Enable this function allows the IGMP (Internet Group Management Protocol) to be monitored among devices and optimizes wireless multicast traffic.
- **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**: Enable this function allows to build a group of frames before they are transmitted and use RTS for every AMPDU for communication among 802.11g and 802.11b devices.
- **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**: Enable WMM APSD (Wi-Fi Multimedia Automatic Power Save Delivery) to improve power management between wireless devices. Select **Disable** to switch off WMM APSD.
- **Reducing USB 3.0 interference**: Enable this function ensures the best wireless performance on the 2.4 GHz band. Disabling this feature increase USB 3.0 port's transmission speed and may affect the 2.4 GHz wireless range.
- **Optimize AMPDU aggregation**: Optimize the max number of MPDUs in an AMPDU and avoid packets get lost or corrupted during transmission in error-prone wireless channels
- **Optimize ack suppression**: Optimize the max number of ack to suppress in a raw.
- **Turbo QAM**: Enable this function allows to support 256-QAM (MCS 8/9) on the 2.4GHz band to achieve better range and throughput on that frequency.
- Airtime Fairness: With airtime fairness, the speed of the network is not determined by the slowest traffic. By allocating time equally among clients, Airtime Fairness allows every transmission to move at its highest potential speed.

- **Explicit Beamforming**: The client's WLAN adapter and router both support beam forming technology. This technology allows these device to communicate the channel estimation and steering direction to each other to improve download and uplink speed.
- **Universal Beamforming**: For legacy wireless network adapter that do not support beam forming, the router estimates the channel and determines the steering direction to improve the downlink speed.
- **TX Power adjustment**: TX Power adjustment refers to the milliWatts (mW) needed to power the radio signal output of the wireless router. Enter a value between 0 to 100.

NOTE: Increasing the TX Power adjustment values may affect the stability of the wireless network.

4.3 Creating a 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.

NOTE: GT-AC5300 supports up to nine SSIDs (three 2.4GHz, three 5GHz-1 and three 5GHz-2).

To create a guest network:

- 1. From the navigation panel, go to **Advanced Settings** > **Guest Network**.
- 2. On the Guest Network screen, select 2.4Ghz or 5Ghz frequency band for the guest network that you want to create.
- 3. Click Enable.

Suest Network			
	Guest Network provides Inter ur local network.	rnet connection for guests b	ut restricts access
2.4GHz			
Network Name (SSID)			
Authentication			
Method Network Key			
Time Remaining	Enable	Enable	Enable
Access Intranet			
Network Name (SSID)			
Authentication Method			
Network Key	Enable	Enable	Enable
Time Remaining			
Access Intranet			
Network Name (SSID)			
Authentication			
Method			
Network Key	Enable	Enable	Enable
Time Remaining			
Access Intranet			

- 4. To change a guest's settings, click the guest settings you want to modify. Click **Remove** to delete the guest's settings.
- 5. Assign a wireless name for your temporary network on the Network Name (SSID) field.

uest Network			
The Guest Network provides Internet connection for guests but restricts access to your local network.			
Network Name (SSID)	ASUS_E0_2G_Guest		
Authentication Method	Open System		
Network Key	None	Enable	Enable
Time Remaining	Unlimited access		
Access Intranet	of		
	Remove		
Network Name (SSID)	ASUS_E0_5G_Guest		
Authentication Method	Open System		
Network Key	None	Enable	Enable
Time Remaining	Unlimited access		
Access Intranet			
	Remove		
Network Name (SSID)	ASUS_E0_5G_Gaming		
Authentication Method	Open System		
Network Key	None	Enable	Enable
Time Remaining	Unlimited access		
Access Intranet			
	Remove		

- 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.When done, click **Apply**.

4.4 LAN

4.4.1 LAN IP

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:

- 1. 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**.

4.4.2 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.

	TLIRE GT-AC5	500	Logout	English
Quick Internet Setup	Operation Mode: <u>Wireless router</u> Fir SSID: <u>Welcome to</u> <u>Welcome to</u>		<u>10397</u>	• * • •
	LAN IP DHCP Server Route IP	TV Switch Control		
General	LAN - DHCP Server			
Dash Board	DHCP (Dynamic Host Configuration Prot	eed) is a protocol for the outer	natio configuration used on ID not	under The DHCD
Game IPS	server can assign each client an IP addr supports up to 253 IP addresses for you	ess and informs the client of th		
🤗 Game Boost	Basic Config			
Game Private Network	Enable the DHCP Server	🛛 Yes 🍽 No		
Game Profile	GT-AC5300's Domain Name			
Game Radar	IP Pool Starting Address	192.168.1.2		
My Game Radar	IP Pool Ending Address	192.168.1.254		
🔊 WiFi Radar	Lease time	86400		
VPN	Default Gateway			
A. Traffic Analyzer	DNS and WINS Server Setting			
	DNS Server			
Advanced Settings	WINS Server			
Network Map	Enable Manual Assignment			
(in) Wireless	Enable Manual Assignment	• Yes • No		
Guest Network	Manually Assigned IP around the D	HCP list (Max Limit : 64)		Add /
	Client Name (M	AC Address)	IP Address	Delet
• • • •) –		Ð
WAN		No data in tabl		

To configure the DHCP server:

- 1. 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.

4.4.3 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.

Quick Internet Setup	Operation Mode: Wirele SSID: Welcome to W		Version: <u>3.0.0.4.382_10397</u>		141 🗄 🚳	12 🗊 🌡 🕸
inger-and	LAN IP DHCP Server	Route IPTV S	witch Control			
General						
Dash Board	LAN - Route					
Game IPS	This function allows you to share the same connection		GT-AC5300. It is useful if you co	nnect several ro	outers behind G	T-AC5300 to
Game Boost	Basic Config					
Game Private	Enable static routes	•	Yes O No			
Network	Static Route List (Max	Limit : 32)				
Game Profile	Network/Host IP	Netmask	Gateway	Metric	Interface	Add / Delete
Game Radar				•	LAN •	Ð
			No data in table.			
WiFi Radar			Apply			
WiFi Radar						

To configure the LAN Routing table:

- 1. 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** (f) or **Delete** button to add or remove a device on the list.
- 4. Click Apply.

4.4.4 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.

FRUGUE OF	Operation Mode: Wireless router Firmw SSID: Welcome to Welcome to b LAN IP DHCP Server Route IPTV	
General	LAN - IPTV	
Game IPS	To watch IPTV, the WAN port must be conn assigned to primary WAN.	ected to the Internet. Please go to <u>WAN - Dual WAN</u> to confirm that WAN port is
🥑 Game Boost	LAN Port	
Game Private Network	IPTV/ VoIP Port Settings	LANL/ LAN2 Gaming Ports are set up in LAN1 and LAN2. If you would like to use Gaming Ports, please choose LAN 5/ LAN 6 for your IPTV or VoIP port.
Game Profile	Select ISP Profile	None
Game Radar	Choose IPTV STB Port	None
🗭 WiFi Radar	Special Applications	
UPN	Use DHCP routes	Microsoft •
Traffic Analyzer	Enable multicast routing (IGMP Proxy) Enable efficient multicast forwarding (IGMP Snooping)	Disable •
Advanced Settings	UDP Proxy (Udpxy)	
Network Map		Apply
) Wireless		
Guest Network		

4.5 WAN

4.5.1 Internet Connection

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

	TLIRE GT-AG	C5300 Logout English
Quick Internet Setup	SSID: <u>Welcome to</u> <u>Welcome to</u>	
	Internet Dual Connection WAN	Port Virtual Server / Port DMZ DDNS NAT Trigger Forwarding Passthrough
General	WAN - Internet Connection	
Dash Board	GT-AC5300 sunnorts several conner	tion types to WAN (wide area network) These types are selected from the dropdown m
Game IPS		setting fields differ depending on the connection type you selected.
🥑 Game Boost	Configure the Ethernet WAN settings	of GT-AC5300.
Game Private	Basic Config	
Network	WAN Connection Type	Automatic IP •
Game Profile	Enable WAN	© Yes ● No
Game Radar	Enable NAT	O Yes O No
-	Enable UPnP UPnP FAQ	O Yes O No
WiFi Radar	WAN DNS Setting	
VPN	Connect to DNS Server automatically	O Yes O No
A. Traffic Analyzer	Account Settings	
Advanced Settings	Authentication	None V
-0	Host-Uniq (Hexadecimal)	
Network Map	Special Requirement from ISP	
الله Wireless الله	Host Name	
Guest Network	MAC Address	MAC Clone
🕎 LAN	DHCP query frequency	Aggressive Mode •
💮 wan	Extend the TTL value	● Yes ♥ No
	Spoof LAN TTL value	● Yes ● No
USB Application		Apply
AiCloud 2.0		

To configure the WAN connection settings:

- 1. From the navigation panel, go to **Advanced Settings** > **WAN** > **Internet Connection** tab.
- 2. 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:
 - 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.

4.5.2 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.
- Load Balance Mode: Select this mode to optimize bandwidth, minimize response time and prevent data overload for both primary and secondary WAN connections.

EPUBLIC OF	TLIRE	GT-AC530		00000000000	Logout		English	
Quick Internet Setup	Operation Mode: Wireless SSID: Welcome to We			<u>4. 382_10397</u>		(4)	.	.
		Dual Port VAN Trigge		Server / Port	DMZ	DDNS	NAT Passthrough	
General								
Dash Board	WAN - Dual WAN							
Game IPS	GT-AC5300 provides Dual V Load Balance mode to optin WAN connections.							
🤵 Game Boost	Basic Config							
Game Private Network	Enable Dual WAN		ON					
Game Profile	Primary WAN		WAN					
Game Radar	Secondary WAN Dual WAN Mode		USB Fail Over	🔹 🗖 Allow failbac				
😰 WiFi Radar	Auto Network Detection	•						
	Detect Interval		5 seconds					
A. Traffic Analyzer	Failover Execution Time		Continous 12 t	mes (= 60 second:	s) detect net	vork failed.		
	Enable Ping to Internet		• Yes • No					
Advanced Settings			App	lv				
Network Map								
Wireless								
Guest Network								
LAN .								
@ wan								

4.5.3 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.

Quick Internet Setup	Operation Mode: Wirel SSID: Welcome to							.
-	Internet Connection	Dual WAN	Port Trigger	Virtual Server / Port Forwarding	DMZ	DDNS	NAT Passthr	
General								
Dash Board	WAN - Port Trigger							
Game IPS	Port Trigger allows you to two methods for opening	incoming da	ta ports: port forw	arding and port trigger. F	ort forwarding o	pens the s	pecified da	ta ports al
🧭 Game Boost	the time and devices mu access to the trigger port forwarding allows multiple	. Unlike port	forwarding, port to	igger does not require s	atic IP address	es for LAN	devices. F	ort
Game Private Network	port. Port Trigger FAQ							
Game Profile	Basic Config							
Game Radar	Enable Port Trigger		• Yes	No No				
ay come noon	Well-Known Applications		Please	select 🔻				
WiFi Radar	Trigger Port List (Max Lin	nit:32) (+)					
	Description		Trigger Port	Protocol	Incoming Por		Protocol	Delete
VPN								
VPN				No data in table.				

To set up Port Trigger:

- 1. From the navigation panel, go to **Advanced Settings** > **WAN** > **Port Trigger** tab.
- 2. On the Enable Port Trigger field, tick Yes.
- 3. On the **Well-Known Applications** field, select the popular games and web services to add to the Port Trigger List.

- 4. 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** ⊕ 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.

4.5.4 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.

	TLIRE	GT-AC5300		> Logout		English
GAMERS			Version: 3.0.0.4.382_10	<u>397</u>		a. 11. 110 5
🕅 Quick Internet Setup	SSID: Welcome to					8 T 8 8
General	Internet Connection	Dual Port WAN Trigger	Virtual Server / Forwarding	Port DMZ	DDNS	NAT Passthrough
Dash Board	WAN - Virtual Serve	r / Port Forwardi	ng			
Game IPS	network (LAN). For a fast	er connection, some F	omputers to connect to a sp 2P applications (such as B ication's user manual for de	itTorrent), may also	require that y	ou set the port
🤵 Game Boost	ports in router and redirec	t data through those p	orts to a single client on yo on the same network, enter	ur network.		
Game Private Network	the LAN IP address, and					
Game Profile			you set 80 as the HTTP set T-AC5300's web user interfa		your WAN set	tup, then your htt
Game Radar	When you set 20:21 as AC5300's native FTP s virtual server / Po	erver.	rt range for your WAN setup AQ	, then your FTP se	rver would be	in conflict with G
🗭 WiFi Radar	Basic Config					
VPN	Enable Port Forwarding		• Yes • No			
Traffic Analyzer	Famous Server List		Please select 🔹			
	FTP Server Port		2021			
Advanced Settings	Port Forwarding List (Max Limit : 32)				
Network Map	Service Name	Source Target	Port Range	Local IP	Local Port	Protocol De
				-		тср т (
() Wireless						
🔊 Wireless			No data in table.			
			No data in table. Apply			

To set up Port Forwarding:

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

- 3. 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 **4.4 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.

4.5.5 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.
- 2. 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:

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

4.5.6 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.

🕵 Quick Internet Setup	Operation Mode: Wireless router Fir SSID: Welcome to Welcome to		97	******
	Internet Dual Connection WAN	Port Virtual Server / Po Trigger Forwarding	ort DMZ	DDNS NAT Passthrough
General				
Dash Board	WAN - DDNS			
			when the second state	the wireless router even with a
Game IPS	DDNS (Dynamic Domain Name System dynamic public IP address, through its r and other DDNS services.			
Game IPS	dynamic public IP address, through its r	, registered domain name. The wireles	s router is embede	ded with the ASUS DDNS servi
	dynamic public IP address, through its r and other DDNS services. If you cannot use ASUS DDNS services IP address to use this service. The wireless router currently uses a priv	, registered domain name. The wireles s, please go to <u>http://iplookup</u> , vate WAN IP address.	srouterisembeda asus.com/nsla	ded with the ASUS DDNS servi
Game Boost	dynamic public IP address, through its r and other DDNS services. If you cannot use ASUS DDNS services IP address to use this service.	, registered domain name. The wireles s, please go to <u>http://iplookup</u> , vate WAN IP address.	srouterisembeda asus.com/nsla	ded with the ASUS DDNS servi
Game Boost	dynamic public IP address, through its n and other DDNS services. If you cannot use ASUS DDNS services IP address to use this service. The wireless router currently uses a priv This router may be in the multiple-NAT of	egistered domain name. The wireles s, please go to <u>http://iplookup</u> , vate WAN IP address. environment and DDNS service cann	srouterisembeda asus.com/nsla	ded with the ASUS DDNS servi

To set up DDNS:

- 1. From the navigation panel, go to **Advanced Settings** > **WAN** > **DDNS** tab.
- 2. 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.

4.5.7 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.

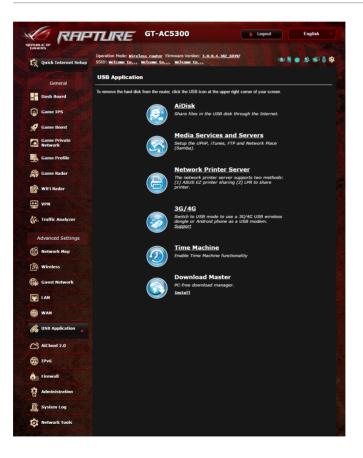
To enable / disable the NAT Passthrough settings, go to the **Advanced Settings** > **WAN** > **NAT Passthrough** tab. When done, click **Apply**.

	ILIKE	GI-AC5500	,		Logout		English
Quick Internet Setup	Operation Mode: Wirele SSID: Welcome to)			<u>). 0. 4. 382_10397</u>		(4) 🖥	• & • i
	Internet Connection	Dual Port WAN Trigge		tual Server / Port Forwarding	DMZ	DDNS	NAT Passthrough
General	WAN - NAT Passthr	ough					
Dash Board	Enable NAT Passthrough	to allow a Virtual Pri	vate Network (VPN) connection to	ass through	he router to	the network clients
Game IPS	PPTP Passthrough		Enable 🔻				
🦪 Game Boost	L2TP Passthrough		Enable 🔻				
Game Private Network	IPSec Passthrough		Enable 🔻				
Game Profile	RTSP Passthrough		Enable 🔻				
Game Radar	H.323 Passthrough		Enable 🔻				
🔊 WiFi Radar	SIP Passthrough Enable PPPoE Relay		Enable v Disable v				
VPN				Apply			
A. Traffic Analyzer							
Advanced Settings							
Network Map							
Wireless							
Guest Network							
UAN							
(wan							

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 <u>http://event.asus.com/2009/networks/disksupport/</u> 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 **Advanced Settings** > **USB application**, then click the **AiDisk** icon.
- 2. From the Welcome to AiDisk wizard screen, click Go.

General	Welcome to AlDisk wizard
Dash Board	AiDisk enables you to:
Game IPS	Share files in the USB disk through the Internet. Create your own domain name for the FTP server.
🥩 Game Boost	For advanced file-sharing configuration. Click here
Game Private Network	If you cannot use ASUS DDNS services, please go to <u>http://iplookup.asus.com/nslookup.php</u> to reach your internet IP address to
Game Profile	use this service. • Terms of Use Notice
Game Radar	
Wifi Radar	
UPN	
Traffic Analyzer	

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

Ceneral Dash Baard Cane 195 Cane Boal Cane Boal Retwork Cane Brothe Cane Prothe	Wy FTP server is shared : Dec Ny FTP server is shared : Dec N eden rights • Initios access rights	2 III C	3)		
Game Radar	Account	Password	Read	Write	
😥 Wifi Radar	admin		2	2	
VPN					
. Traffic Analyzer		Previous Next			
Advanced Settings					
#9					

 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.

- 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 router's network.

CONHERS	TLIRE GT-AG	Firmware Version: 3.0.0.4.382 10597	
🙀 Quick Internet Setup	SSID: Welcome to Welcome to		1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 +
	Media Server Network Place (Sar	nba) Share / Cloud Disk FTP Share	
General	Media Server		S)
Dash Board	Setup the iTunes and UPnP media s	ervec	
Game IPS	illunes Server		
Game Boost	Enable (Tunes Server?		
	Media Server		
Game Private Network	Enable UPnP Media Server	ON	
Game Profile	Media Server Name	GT-AC5300-64E0	
Game Radar	Media Server Status		
WiFi Radar	Media Server Path Setting	 All Disks Shared Manual Media Server Apply 	Path
UPN VPN			
Traffic Analyzer			
Advanced Settings			
Network Map			
Wireless			
Guest Network			
🕎 LAN			
# WAN			

To launch the Media Server setting page, go to **Advanced Settings** > **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.

Using Network Place (Samba) Share service

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

🕼 Quick Internet Setup	Operation Mode: <u>Wire</u> SSID: <u>Welcome to</u>		re Version: <u>3.0.0.4.382_10</u> Icome to	9997	
	Media Server Netwo	xrk Place (Samba) Sh	are / Cloud Disk FTP Shar		
General Dash Board	USB Application	- Network Place (Samba) Share / Cloud	Disk	5
	Set the account and pe	rmission of network p	laco(samba) service.		
Game IPS	Enable Share		ON		
🥩 Game Boost	Allow guest login		Usemane a place(Sant	ind password is necessary b	a log in network
Game Private Network	Device Name		GT-AC5300-64E0		
Game Profile	Work Group		MORECERCUP		
Game Radar	NTFS Sparse Files Sup	oport	Disable •		
Wifi Reder			Apply		
VPN	⊕ ∈				B B 🕅
A. Traffic Analyzer	2 edmin	GT-AC530	9-64EO meric USB Flash Disk	R/W R	No
Advanced Settings			Sa	re Permission	
Network Map					
Wireless					
Guest Network					
EAN					

To use Samba share:

 From the navigation panel, go to Advanced Settings > 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 🕑 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.

Media Garver Add new accourt		
	has no read/write access rights.	
	count: Include Street County County	
Set the account of provide Pase	sword:	
Retype pes	sword:	
	Add	

To delete an existing account:

- a) Select the account that you want to delete.
- b)Click \varTheta.
- 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.

Nedia Server Add new folder in s	da) Share / Coud Dick. FTP Share 🗙	
	cess rights for a new folder is read/write.	
USB Application - Network F	lace (Samba) Share / Cloud Disk	
Folder Name:	week place(samba) service	
Enable Share	Add	

- 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.

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 4.1.3 Monitoring your USB device.

	Operation Mode: Wireless router Firmware Version: 3.0.0.4.332 10397 SSID: Welcome to Welcome to Welcome to	
C Quick Internet Setup	Media Server Network Place (Samba) Share / Cloud Disk FTP Share	
General		
Dash Board	USB Application - FTP Share	<u>`</u>
Game IPS	Set the account and permission of FTP service.	
🚀 Game Boost	Allow anonymous login OFF Username and password is	necessary to log in FTP service.
Game Private Network	Maximum number of concurrent connections 5	
Game Profile	Character set on FTP Server	
Game Radar	Apply	
🔊 Wifi Radar	$\odot \bigcirc \oslash$	B 🖹 🕅
VPN	Ladain GT-AC5300 R/W	V W R No
A. Traffic Analyzer	deserio OSB Flash Disk	
Advanced Settings	Save Permission	-

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**.

- 1. From the navigation panel, click **Advanced Settings** > **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.

4.6.3 3G/4G

3G/4G USB modems can be connected to the router to allow Internet access.

NOTE: For a list of verified USB modems, please visit: <u>http://event.asus.com/2009/networks/3gsupport/</u>

To set up 3G/4G internet access:

- 1. From the navigation panel, click **Advanced Settings** > **USB** application > **3G/4G**.
- 2. In the Enable USB Modem field, select Yes.
- 3. 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 and PIN code**: The 3G/4G provider's access number and PIN code for connection.

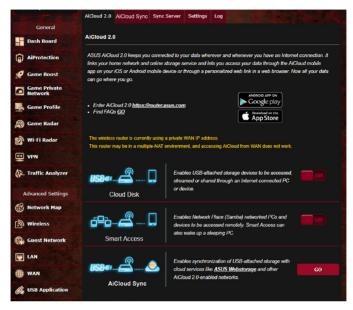
NOTE: PIN code may vary from different providers.

- **Username / Password:** The username and password will be provided by the 3G/4G network carrier.
- **USB Adapter**: Choose your USB 3G / 4G adapter from the dropdown list. If you are not sure of your USB adapter's model or the model is not listed in the options, select **Auto**.
- 4. Click **Apply**.

NOTE: The router will reboot for the settings to take effect.

4.7 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.

4.7.1 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 <u>https://router.asus.com</u> and enter the router login account and password. For better user experience, we recommend that you use **Google Chrome** or **Firefox**.

AiCloud	
Welcome. Who's coming home?	
Your Name. Your Password.	
•	

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.



4.7.2 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 **4.5.6 DDNS**.
- By default, AiCloud provides a secure HTTPS connection. Key in <u>https://[yourASUSDDNSname].asuscomm.com</u> for a very secure Cloud Disk and Smart Access usage.

4.7.3 AiCloud Sync

the second second	AiCloud 2.0	AiCloud Sync	Sync Server	Settings	Log		Sec. 1	
General								
Dash Board	AiCloud 2.0) - AiCloud Sy	nc					
AiProtection	IISB e :_							
🥩 Game Boost	000	- 📶 🖒	Series Ena AQ	bles AiCloud	d Sync fun	ctionality. For ste	p-by-step istructions	s, go to <u>F</u>
Game Private Network								
Game Profile	Cloud List							
Game Radar	Provider	Usernar	ne i	Rule	Fol	der Name	Connection Status	Delete
😥 Wi-Fi Radar				No USB dis	sk detect	:ed.		
VPN								
Traffic Analyzer					l new count			

To use AiCloud Sync:

- 1. Launch AiCloud, click **AiCloud Sync** > **Go**.
- 2. Select **ON** to enable AiCloud Sync.
- 3. Click Add new account.
- 4. Enter your ASUS WebStorage account password and select the directory that you want to sync with WebStorage.
- 5. Click **Apply**.

4.8 IPv6

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.

	romter Firmware Version: <u>3.0.0.4.382 10397</u> come to Welcome to
IPv6	
Configure the IPv6 Internet s <u>IPv6_FAQ</u>	etting of GT-AC5300.
Basic Config	
Connection type	oisable •
	Apply
	SSID: <u>Welcome to</u> Welf IPv6 Configure the IPv6 Internet s <u>IPv6 FAQ</u> Basic Config

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.

4.9 Firewall

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

NOTE: The Firewall feature is enabled by default.

4.9.1 General

To set up basic Firewall settings:

- 1. 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.

4.9.2 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 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 URL Filter.

To set up a URL filter:

- 1. 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**.

4.9.3 Keyword filter

Keyword filter blocks access to webpages containing specified keywords.

CRINERS	Operation Mode: Wire SSID: Welcome to General URL Filter		ware Version: <u>3.0.0.4.38</u> Welcome to Network Services Filter	2 <u>10397</u> IPvő Firewall	1010 (C
General	Firewall - Keyword	d Filter			
Game IPS	Keyword Filter allows y Limitations of the filtering		its' access to webpages co	intaining the specified keyw	vrds.
🤗 Game Boost	1. Compressed we 2. Https webpages		TP compression technolog	y cannot be filtered. <u>See he</u>	ere for more details.
Game Private Network	Basic Config				
	Enable Keyword Filter		Enabled Disable	4	
Game Profile	Enable Reyword Piller			2	
Game Profile	Keyword Filter List	(Max Limit : 64)		-	
			Keyword Filter List		Add / Delete
Game Radar			Keyword Filler List No data in ta		
🐨 Game Radar					
Game Radar WiFi Radar			No data in ta		

To set up a keyword filter:

- 1. 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.

4.9.4 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.

	TLIRE GT-AC53	100	> Logout	English
Quick Internet Setup	Operation Mode: <u>Wireless router</u> Firm SSID: <u>Welcome to</u> <u>Welcome to</u>		10197	
	General URL Filter Keyword Filter	Network Services Filter	IPv6 Firewall	
General	Firewall - Network Services Filte	-		
Dash Board				
Game IPS	The Network Services filter blocks the LAI services.			
🥖 Game Boost	For example, if you do not want the device 80 will be blocked. Leave the source IP field blank to apply th		key in 80 in the destination	an port. The traffic that uses po
Game Private	Black List Duration : During the schedule		ck List cannot use the sp	ecified network services. After
	the specified duration, all the clients in LA White List Duration : During the schedule			specified naturals species
Game Profile	After the specified duration, clients in the 1			
Game Radar	Internet service.			
😰 WiFi Radar	NOTE : If you set the subnet for the White Internet service.	Ust, IP addresses outside	the subnet will not be able	to access the Internet or any
** VPN	Network Services Filter			
	Enable Network Services Filter	• Yes • No		
A. Traffic Analyzer	Filter table type	Black List 🔻		
Advanced Settings	Well-Known Applications	User Defined •		
A Network Map	Date to Enable LAN to WAN Filter	Mon 🖬 Tue 🖬 Wed	🖬 Thu 🖬 Fri	
Network Map	Time of Day to Enable LAN to WAN Filter			
Wireless	Date to Enable LAN to WAN Filter	Sat 🖬 Sun		
Guest Network	Time of Day to Enable LAN to WAN Fifter			
🕎 LAN	Filtered ICMP packet types			
# WAN	Network Services Filter Table (Max I	Limit : 32)		
	Source IP Port Range	Destination IP	Port Range	Protocol Add / Delete
USB Application				• • (
AiCloud 2.0		No data in tal	le.	
IPv6		Apply		
👌 Firewall				

To set up a Network Service filter:

- 1. 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.

4.9.5 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.

Wiri Radar							
Centreral Firewall - IPv6 Firewall Image: Dash teard Firewall - IPv6 Firewall Image: Dash teard A catbanet futific comptignent Pv6 hots on your LN is allowed, as well as related intoard traffic. Any other inboard mum to seguritary allowed traffic tearmaph) Image: Dash teard Comptignent Pv6 hots on your LN is allowed, as well as related inboard traffic. Any other inboard mum to seguritary allowed traffic tearmaph) Image: Dash teard Comptignent Pv6 hots on your LN is allowed, as well as related inboard traffic. Any other inboard mum to seguritary to allow traffic itom any remote host. A subnet can also be specified. Image: Dash teard Comptignent Pv6 hots on your LN is allowed, as well as related inboard traffic. Any other inboard mum to seguritary to allow traffic itom any remote host. A subnet can also be specified. Image: Dash teard Comptignent Pv6 firewall Pves ● file Image: Dash teard Pves ● file Filewall * Pves € file Image: Dash teard firewall filewall teards PVCDR Local IP PvetRampe PvetR	🕵 Quick Internet Setup				8 <u>2 10397</u>	•• 8 •	B 📾 🌢 1
Image: Second		General URL Filte	er Keyword Filter	Network Services Filter	IPv6 Firewall		
	General						
Image: Came IPS must be specifically allowed here. Image: Came Boost Course there there model IP endy to allow traffic from any remote host. A subnet cam also be specified. Image: Came Boost Course there there model IP endy to allow traffic from any remote host. A subnet cam also be specified. Image: Came Boost Course there there model IP endy to allow traffic from any remote host. A subnet cam also be specified. Image: Came Drivate Basic Courting Image: Came Provide Enable IP-6 Frewall Image: Came Rodar Please select ▼ Image: Came Rodar Image: Provide Image: Probable Add // Image: Came Rodar Service Name Image: Service Name Remodel IPCIDR Image: Vorw No data in table.	Dash Board	Firewall - IPv6 F	irewali				
Came Profile Come Frida Passe Carling Came Profile Dasse Carling Came Profile Please select + Came Ander Findual Shree List Came Ander Please select + Came Ander Service Name Nicit Rader Service Name Service Name Remote PrCIDR Local IP Pol Range Yorn	Game IPS	must be specifically	allowed here.				inbound traffic
	🧭 Game Boost			w traffic from any remote ho	ost. A subnet can also be :	specified.	
Game Profile Fancos Stover Ltst Please select • Game Roder Inbound Firewall Rules (Max Limit 128) Wirif Roder Service Name Runces PCLDR Local IP Port Range Portocol Add /f VPN No data in table. Roder •		Basic Config					
Famous Sover List Please select * Game Roder Miri Roder Wiri Roder Viri Roder Vir	- INALIAN S	Enable IPv6 Firewall		O Yes O No			
WiFi Radar Service Name Remole PCIDR Local P Port Range Produce Add // TCP () Traffic Analyzer	Game Profile	Famous Server List		Please select •			
VIN V							
VVN No data in table. (A. Traffic Analyzer	Game Radar	Inbound Firewall		128)	Port Range	Protocol	Add / Delete
(A, Traffic Analyzer	Game Radar	Inbound Firewall		128)	Port Range		
	Game Radar	Inbound Firewall		128)	Port Range		Add / Deleta
	Game Radar	Inbound Firewall		128) Local IP			
Advanced Settings	Game Radar	Inbound Firewall		128) Local IP No data in ta			
A Network Map	Game Radar Wifi Radar T VPN	Inbound Firewall		128) Local IP No data in ta			

4.10 Administration

4.10.1 Operation Mode

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

Central Administration - Operation Mode Readow/Swe/Upload Setting Feedback Central Administration - Operation Mode Readow/Swe/Upload Setting Feedback Central Administration - Operation Mode Endow/Swe/Upload Setting Feedback Central TPS Crack Board Crack Stable spectral operation modes to meet different requirements. Please solect the mode that match y mode states requirements. Please solect the mode that match y enterest respective to the sole sole of the sole of soles the sole of the sole of soles the sole of the sole of the sole of the sole sol	PUBLIC OF	GT-AC5300 Logout English
	🕅 Quick Internet Setup	SSID: Helcome to Helcome to
Came DPS Came Book Came TPS Came Book Came TPS Came Book Came Troffle Came Roder Came Roder Came Roder Came Roder Wirit Roder Wirit Roder Came Roder Wirit Roder Came Roder	General	Administration - Operation Mode
Came 195 Came Boot Came Fordin Came Roder Virifi Reder	Dash Board	
Come Priorite Come Priorite Come Profile Come Profile Come Roder Wirit Roder Wirit Roder Wirit Roder	Game IPS	GT-AC5300 supports several operation modes to meet different requirements. Please select the mode that match your situat
Conse Brodie Wirki Roder Wirki Roder Wirki Roder Wirki Roder Wirki Roder	🧭 Game Boost	
Came Profile Came Profile Came Profile Came State Came State		
Came Radar dwreiss roubrs.	Game Private Network	
	Network	In wireless router IP sharing mode, GT-AC5300 connects to the Internet via PPPVE, DHCP, PPTP, L2TP, or Static IP and shares the wireless network to LAN clents or devices. In this mode, NAT, trevail, and DHCP server are enabled by detault. UPAT and Dynami
	Game Profile	In wireless router/IP sharing mode, GT-ACS300 connects to the internet via PPPOE, DHCP, PPTPL2TP, or Static IP and shares the wireless network to LAN clients or devices. In this mode, NAT, Rewall, and DHCP server are enabled by default, UPAP and Dynam c DNS are supported for SCHO and home users. Select this mode if you are a first time user or you are not currently using any wire
	Network Game Profile Game Radar	In wireless router/IP sharing mode, GT-ACS300 connects to the internet via PPPOE, DHCP, PPTPL2TP, or Static IP and shares the wireless network to LAN clients or devices. In this mode, NAT, Rewall, and DHCP server are enabled by default, UPAP and Dynam c DNS are supported for SCHO and home users. Select this mode if you are a first time user or you are not currently using any wire
A. Traffic Analyzer	Network Game Profile Game Radar WiFi Radar	In wireless router/IP sharing mode, GT-ACS300 connects to the internet via PPPOE, DHCP, PPTPL2TP, or Static IP and shares the wireless network to LAN clients or devices. In this mode, NAT, Rewall, and DHCP server are enabled by default, UPAP and Dynam c DNS are supported for SCHO and home users. Select this mode if you are a first time user or you are not currently using any wire
Advanced Settings	Network Game Profile Game Radar WiFi Radar VPN	In wireless router/IP sharing mode, GT-ACS300 connects to the internet via PPPOE, DHCP, PPTPL2TP, or Static IP and shares the wireless network to LAN clients or devices. In this mode, NAT, Rewall, and DHCP server are enabled by default, UPAP and Dynam c DNS are supported for SCHO and home users. Select this mode if you are a first time user or you are not currently using any wire

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.
 - Access Point mode: In this mode, the router creates a new wireless network on an exising 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.

4.10.2 System

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

To set up the System settings:

- 1. 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.
 - 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.
 - Client List: Enter the WAN IP addresses of networking devices allowed to access the wireless router settings. This list will be used if you clicked Yes in the Only allow specific IP item.
- 3. Click **Apply**.

4.10.3 Firmware Upgrade

NOTE: Download the latest firmware from the ASUS website at <u>http://www.asus.com</u>

To upgrade the firmware:

- From the navigation panel, go to Advanced Settings > Administration > Firmware Upgrade tab.
- 2. 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**.

4.10.4 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.

4.11 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:

- 1. From the navigation panel, go to **Advanced Settings** > **System Log**.
- 2. You can view your network activities in any of these tabs:
 - General Log
 - DHCP Leases
 - Wireless Log
 - Port Forwarding
 - Routing Table

Quick Internet Setur	Operation Mode: <u>Wirel</u> SSID: <u>Welcome to</u>				<u> 2397</u>	(A) 🖥 🖨	1
	General Log Wireless	Log DHCP leases	IPv6	Routing Table	Port Forwarding	Connections	
General							
Dash Board	System Log - Gene	eral Log					
_	This page shows the de	tailed system's activiti	es.				
Game IPS	System Time		Mon, Apr	10 15:24:24	2017		
🥑 Game Boost	Uptime			hours 22 minute(s)	f 0 d-		
Game Private			3 days 21 f	nours ZZ minule(s,	56 seconds		
Network	Apr 10 13:45:22 kern Apr 10 13:45:22 kern	el: jffs2: warning:	(14162)	jffs2_sum_wri	te_data: Not enou	gh space for	summary, pads
Game Profile	Apr 10 13:45:22 kern Apr 10 13:45:23 kern	el: jffs2: warning:	(14162)	jffs2 sun wri	te_data: Not enou	gh space for	summary, pads
-	Apr 10 13:45:23 kern Apr 10 13:45:43 kern	el: jffs2: warning:	(14183)	jffs2_sun_wri	te_data: Not enou	gh space for :	summary, pads
Game Radar	Apr 10 13:47:23 kern Apr 10 06:37:37 dnam	asg-dhcp[1663]: Igs	noring do	main corpnet.a	aus for DHCP host	name X15167-1	NB
WiFi Radar	Apr 10 06:37:40 dnsm Apr 10 06:37:47 dnsm Apr 10 14:45:24 rc s	asg-dhcp[1663]: Igs	noring do	main corpnet.a			
	Apr 10 14:45:24 FC 8 Apr 10 14:45:24 FTP Apr 10 14:45:24 FTP	Server: daemon is a	stoped	restart_repd			
THE VPN	Apr 10 14:45:24 minin Apr 10 14:45:24 star	upnpd[14154]: shutt	ing down		rules eth0 eth0)		
A. Traffic Analyzer	Apr 10 14:45:24 minis Apr 10 14:45:24 minis	upnpd[17141]: vers	ion 1.9 s	tarted			
· · · · · · · · · · · · · · · · · · ·	Apr 10 14:45:24 mini: Apr 10 14:53:49 rc s					51	
Advanced Settings	Apr 10 14:53:49 MEBD Apr 10 14:53:49 minis						
A Network Map	Apr 10 14:53:49 star Apr 10 14:53:49 WEBD	AV server: daemon :	is starte		_rules_eth0_eth0)		
	Apr 10 14:53:49 mini Apr 10 14:53:49 mini	upnpd[17578]: HTTP	listenin	g on port 5273			
Wireless	Apr 10 14:53:49 mini	apapa[1/5/8]: Liste	ining for	NAT-PMP/PCP t	raffic on port 53	51	
Guest Network	<	_				_	•
C.W.		Clear		Save	Refresh		

4.12 Smart Connect

Smart Connect is designed to automatically steer clients to one of three radios (one 2.4 GHz, one lowband 5 GHz, one high-band 5 GHz) to maximize total wireless throughput use.

4.12.1 Setting up Smart Connect

You can enable Smart Connect from the Web GUI through the following two ways:

- Via the Wireless screen
- 1. On your web browser, manually key in the wireless router's default IP address: <u>http://router.asus.com</u>.
- 2. On the login page, key in the default user name (**admin**) and password (**admin**) and click **OK**. The QIS page launches automatically.
- 3. From the navigation panel, go to **Advanced Settings** > **Wireless** > **General** tab.
- 4. Move the slider to **ON** in the **Enable Smart Connect** field. This function automatically connect the clients in your network to the appropriate band for optimal speed.



4.12.2 Smart Connect Rule

ASUSWRT provides default condition settings to trigger switching mechanism. You can also change the trigger conditions according to your networking surroundings. To change the settings, go to the **Smart Connect Rule** tab on the Network Tools screen.

🖉 RAP	TLIRE	GT-AC5300	Logout	English
Ganeres		ess router Firmware Version: 3 Welcome to Welcome to	.0.0.4.382_10397	* * * * * * *
	Network Analysis No	ststat Wake on LAN Smart O	Connect Rule	
General	Wireless - Smart C	onnect Rule		
	Set up the Smart Conne	ct related information below.		View List
Game IPS	Steering Trigger Con	dition		
🧭 Game Boost	Band	2.4GHz	5GHz-1	5GH2-2
Game Private	Enable Load Balance	• Yes • No	• Yes • No	• Yes • No
Game Profile	Bandwidth Utilization	0%	 80%	0%
	RSSI	Greater 🔻 -52 dBm	Less • -82 dBm	Less V -82 dBm
Game Radar	PHY Rate Less	Disable	Disable	Disable
WiFi Radar	PHY Rate Greater	> 110 Mbps	Disable	Disable
VPN	VHT			AC only •
Traffic Analyzer	STA Selection Policy			
	RSSI	Greater • -52 dBm	Less • -82 dBm	Less • -82 dBm
Advanced Settings	PHY Rate Less	Disable	Disable	Disable
Network Map	PHY Rate Greater	↓ 110 Mbps	Disable	Disable
Wireless	VHT		not-allowed •	AC only •
Guest Network	Interface Select and	Qualify Procedures		
LAN	Target Band	1: 5GHz-2 • 2: 5GHz-1 •	1: 2.4GHz • 2: 5GHz-2 •	1: 2.4GHz • 2: 5GHz-1 •
	Bandwidth Utilization	0%	60%	0%
WAN	VHT			AC only •
USB Application	Bounce Detect			
AiCloud 2.0	Window Time	180 seconds		
IPv6	Counts			
Firewall	Dwell Time	3600 seconds		
Administration		Default	Apply	

Smart Connect Rule controls are divided into four sections:

- Steering Trigger Condition
- STA Selection Policy
- Interface Select and Qualify Procedures
- Bounce Detect

Steering Trigger Condition

This set of controls sets the criteria to initiate band steering.

Steering Trigger Con	dition		
Band	2.4GHz	5GHz-1	5GHz-2
Enable Load Balance	• Yes • No	• Yes • No	• Yes • No
Bandwidth Utilization	0%	 80%	0%
RSSI	Greater V -52 dBm	Less V -82 dBm	Less V -82 dBm
PHY Rate Less	Disable	Disable	Disable
PHY Rate Greater	> 110 Mbps	Disable	Disable
VHT	A]] •	A]] 🔹	AC only •

Bandwidth Utilization

When bandwidth use exceeds this percentage, steering will be initiated. Broadcom's documentation does not say how utilization is measured.

Enable Load Balance

This controls load balancing. Broadcom's documentation does not indicate how balancing is done.

RSSI

If the received signal level of any associated client meets this criteria, steering will be triggered.

• PHY Rate Less / PHY Rate Greater

These controls determine STA link rates that trigger band steering.

• VHT

This controls determines how 802.11ac and non-ac clients are handled.

- ALL (default) means any type of client can trigger steering.
- AC only means a client must support 802.11ac to trigger steering.
- **Not-allowed** means only non-802.11ac clients will trigger steering, i.e. 802.11a/b/g/n.

STA Selection Policy

Once steering has been triggered, ASUSWRT will follow the STA Selection Policy to select a client(STA) that is going to be steered to the most appropriate band.

STA Selection Policy						
RSSI	Greater 🔻 -	-52 dBm	Less 🔻	-82 dBm	Less 🔻	-82 dBm
PHY Rate Less	—	Disable	•	Disable	•——	Disable
PHY Rate Greater	•	> 110 Mbps	•	Disable	•——	Disable
VHT	A11		not-allowed	i v	AC only▼	

Interface Select and Qualify Procedures

These controls determine where the steered client will end up. The **Target Band** controls specify first and second choice of steering targets. Clients meeting the STA selection policy criteria for the radio will be steered to the first target if that radio's **Bandwidth Utilization** is less than the set value. Otherwise, the client will be sent to the second **Target Band** radio.



Bounce Detect

This set of controls determines how often a client can be steered. This is intended to prevent clients from constantly moving around. It does not, however, prevent clients from disconnecting on their own, or counting them as bounces if they do. Each client can be steered N **Counts** within the **Window Time**. When the Count limit is hit, the client will not be steered again for **Dwell Time**.

Window Time	180	seconds
Counts		
Dwell Time	3600	seconds

5 Utilities

NOTES:

- Download and install the wireless router's utilities from the ASUS website:
- Device Discovery v1.4.7.1 at <u>http://dlcdnet.asus.com/pub/ASUS/ LiveUpdate/Release/Wireless/Discovery.zip</u>
- Firmware Restoration v1.9.0.4 at <u>http://dlcdnet.asus.com/pub/</u> <u>ASUS/LiveUpdate/Release/Wireless/Rescue.zip</u>
- Windows Printer Utility v1.0.5.5 at <u>http://dlcdnet.asus.com/pub/</u> <u>ASUS/LiveUpdate/Release/Wireless/Printer.zip</u>
- 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 > GT-AC5300 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.

Firmware Restor	ation		×
<u>F</u> ilename:	I		<u>B</u> rowse
Status			
After locating t	he firmware file, click Uplo	ad.	
[
	Upload	Close	
			j

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

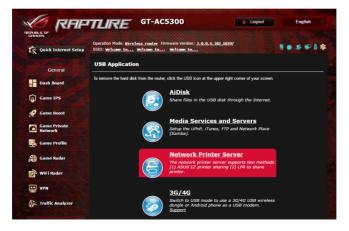
- From your computer's desktop, click
 Start > All Programs > ASUS Utility GT-AC5300 Wireless
 Router > Firmware Restoration.
- 5. Specify a firmware file, then click **Upload**.

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.



NOTE: The print server function is supported on Windows[®] XP, Windows[®] Vista, and Windows[®] 7.

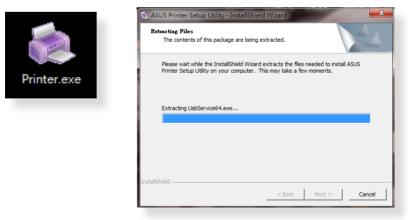
To set up the EZ Printer sharing mode:

- 1. From the navigation panel, go to Advanced Settings > USB Application > Network Printer Server.
- 2. 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**.

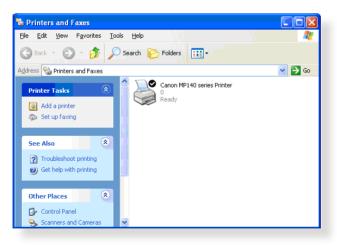


- 5. Wait a few minutes for the initial setup to finish. Click **Next**.
- 6. Click **Finish** to complete the installation.

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.

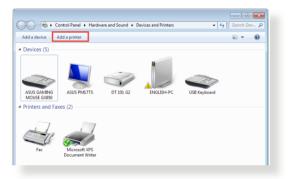


5.3.2 Using LPR to Share Printer

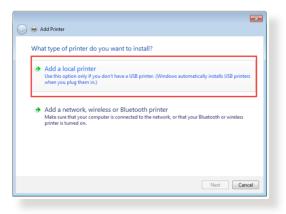
You can share your printer with computers running on Windows[®] and MAC operating system using LPR/LPD (Line Printer Remote/ Line Printer Daemon).

Sharing your LPR printer To share your LPR printer:

1. 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.



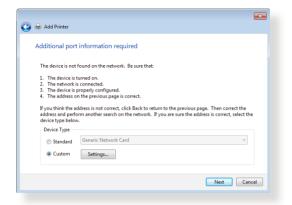
3. Select Create a new port then set Type of Port to Standard TCP/IP Port. Click New Port.

连 🖶 Add Printer		<u>-</u>
Choose a printer port		
A printer port is a type of con	nnection that allows your computer to exchange information with a printer.	
Use an existing port:	LPT1: (Printer Port)	
Create a new port:		1
Type of port:	Standard TCP/IP Port 👻	
		1
	Next Cancel	

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

Ġ 🖶 Add Printer		
Type a printer hostnam	ne or IP address	
Device type:	TCP/IP Device	Ŧ
Hostname or IP address:	192.168.1.1	
Port name:	192.168.1.1	
Query the printer and auto	matically select the driver to use	
	Next	Cancel

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



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

Port Name:	192.168.1.1
Printer Name or IP Addres	s: 192.168.1.1
Protocol	
Raw	UPR
Raw Settings	
Port Number:	9100
LPR Settings	
Queue Name:	LPRServer
LPR Byte Counting E	nabled
SNMP Status Enable	1
Community Name:	public
SNMP Device Index:	1

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

Additional port	t information required	
The device is not 1. The device is	found on the network. Be sure that: turned on.	
	s connected. properly configured. in the previous page is correct.	
 The address of 	in the previous page is correct.	
If you think the a	ddress is not correct, click Back to return to the previous page. Then correct the orm another search on the network. If you are sure the address is correct, select the	•
If you think the a address and perfo	ddress is not correct, click Back to return to the previous page. Then correct the orm another search on the network. If you are sure the address is correct, select the	2
If you think the a address and perf device type below	ddress is not correct, click Back to return to the previous page. Then correct the orm another search on the network. If you are sure the address is correct, select the	2
If you think the a address and perfe device type below Device Type	ddress is not correct, click Back to return to the previous page. Then correct the orm another search on the network. If you are sure the address is correct, select the w.	

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.

连 🖶 🧿	Printer	
Install		rom the list. Click Windows Update to see more models. om an installation CD, click Have Disk.
	a	

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

😋 🖶 Add Printer		X
Type a printer n	ame	
Printer name:	Lexmark X544 PS (MS)	
This printer will be in	stalled with the Lexmark X544 PS (MS) driver.	
		Next Cancel

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

🅞 🖶 Add Printer
You've successfully added Lexmark X544 PS (MS)
To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.
Finish Cancel

5.4 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:

1. Click Advanced Settings > 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 **5.4.1 Configuring the Bit Torrent download settings**.

5. Use the navigation panel to configure the advanced settings.



5.4.1 Configuring Bit Torrent download settings

/ISUS		
Task	Bit Torrent Setting	
🧾 Task	Port	
Settings	Use the default port Use the following port	
General	Incoming port Speed Limits:	
	Maximum download speed:	KB/S
Bit Torrent	Maximum upload speed:	KB/S
	BilTorrent Network setting	
X NZB	BitTorrent protocol encryption	Encryption disabled
	Max peers allowed per torrent	100 Enable DHT to activate trackless torrent download.
	DHT network	Litable DTT to adviate valuess torrelit download.
		Apply
		Apply

To configure BitTorrent download settings:

- 1. From Download Master's navigation panel, click **Bit Torrent** to launch the **Bit Torrent Setting** page.
- 2. Select a specific 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.

5.4.2 NZB settings

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

/isus			
Task	NZB Setting		
Task 🔤	Setup USENET server to download NZB files:		
Settings	USENET Server		
X &	USENET Server Port	119	
General	Maximum download speed	KB/S	
🔆 Bit Torrent	SSL/TLS connection only		
12.2	User name		
NZB	Password		
	Confirm Password		
	Number of connections per NZB tasks	2	
		Apply	
			2011 ASUSTEK Computer Inc. All rights reserved.

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:

<u>https://www.asus.com/support/</u> 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 <u>http://www.asus.com/Networks/Wireless_Routers/GTAC5300/#download</u> to download the latest firmware.
- 3. 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 poweredon 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.

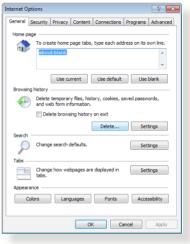
- Each client on the network should have a valid IP address. ASUS recommends that you use the wireless router's DHCP server to assign IP addresses to computers on your network.
- Some cable modem service providers require you to use the MAC address of the computer initially registered on the account. 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 Advanced Settings > Network Map> Clients and search for the device that you want to connect to the router.
 - 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.

	TLIRE GT-AC	5300	> Logout	English -
Quick Internet Setup	Operation Mode: <u>Wireless router</u> SSID: <u>Welcome to</u> Welcome to.	Welcome to	97	L = 4
	LAN IP DHCP Server Route	IPTV Switch Control		
General	LAN - DHCP Server			
Game IPS	DHCP (Dynamic Host Configuration P server can assign each client an IP ac	dress and informs the client of the of		
🔮 Game Boost	supports up to 253 IP addresses for y Basic Config	our local network.		
Game Private Network	Enable the DHCP Server	O Yes O No		
Game Profile	GT-AC5300's Domain Name			
Game Radar	IP Pool Starting Address IP Pool Ending Address	192.168.1.2		
😥 WiFi Radar	Lease time	86400		
VPN	Default Gateway			
A. Traffic Analyzer	DNS and WINS Server Setting	DNS and WINS Server Setting		
	DNS Server			
Advanced Settings	WINS Server			
Network Map	Enable Manual Assignment			
Wireless	Enable Manual Assignment	• Yes • No		
Guest Network	Manually Assigned IP around the			Add /
🕎 LAN 👋	Client Name (IP Address	Delete
() WAN		E0 💌		Ð
USB Application		Apply		
03 state 1 a a				

 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.

General		
Dash Board	Wireless - General	
Game IPS	Set up the wireless related information	below.
🔗 Game Boost	Enable Smart Connect Band	0ff
Game Private Network	Network Name (SSID)	Welcome to test
Game Profile	Hide SSID	• Yes • No
Game Radar	Wireless Mode	Auto V Optimized for Xbox 🗹 b/g Protection
🔊 WiFi Radar	Channel bandwidth	20/40 MHz •
VPN	Extension Channel	Auto •
Traffic Analyzer	Authentication Method	WPA2-Personal
Advanced Settings	WPA Encryption	AES T
Network Map	WPA Pre-Shared Key Protected Management Frames	12345678 Disable •
ک Wireless »	Group Key Rotation Interval	3600

- 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.

- Ouick Totornot	Operation Mode: Wirele	s router Firmware Ve	rsion: 3.0.0.4.382_10766	1 S 1 1 1 1
C Quick Internet	SSID: ASUS 64 2G ASUS			
	Operation Mode System	Firmware Upgrade	Restore/Save/Upload Setting	Feedback
General				
Dash Board	Administration - Restore	/Save/Upload Setting		
Game IPS	This function allows you to s	ave current settings of GT-	AC5300 to a file, or load settings	from a file.
🔗 Game Boost	Factory default	Restore		
Game Private Network	Save setting	Save		
🛃 Game Profile	Restore setting	Upload	選擇檔案 未遂擇任何檔案	
Game Radar				
😰 WiFi Radar				
딸 VPN				
🖗. Traffic Analyzer				
Advanced Settings				
Network Map				

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 Advanced Settings> 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 > Game IPS > Parental Controls tab 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.

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:	http://router.asus.com (or 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

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



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

Automatic configuration Automatic configuration ma use of manual settings, disa			
Automatically detect set	ttings		
Use automatic configura	ation script		
Address			
roxy server Use a proxy server for		e settings	will not apply to
dial-up or VPN connection	ons). Port:	80	Advanced
Bypass proxy serve	r for local addre	sses	

MAC OS

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

		Loca	tion: A	utomatic		:		
		s	now: B	uilt-in Ether	net	•		
	(T	CP/IP	PPPof	AppleTa	lk Proxie	es Etherne	at	
	_							
	proxy s	erver t	o config	ure:	FTP Proxy	Server		_
	P Proxy b Proxy (HTTP		n			2	
	ure Web		HTTPS)		Proxy	server requir	res passwor	d
🗌 Str	eaming P	roxy (R	TSP)	U		Set Passwo	rd)	
	CKS Prox			4				
	pher Pro>			4				
	proxy se osts & D							
		onnann						
√ Use	Passive F	TP Mo	de (PAS)	0				(?)
								0

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

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

Windows[°] 7

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

nect using: Preatek PCIe GBE Family Controller Configure connection uses the following items:	
Configure	
A CONTRACTOR OF A CONTRACTOR O	
A CONTRACTOR OF A CONTRACTOR O	1
Client for Microsoft Networks	٦.
QoS Packet Scheduler	
File and Printer Sharing for Microsoft Networks	
- Rawether NDIS 6.X SPR Protocol Driver	
- Internet Protocol Version 6 (TCP/IPv6)	
Internet Protocol Version 4 (TCP/IPv4)	
Link-Layer Topology Discovery Mapper I/O Driver	
Link-Layer Topology Discovery Responder	
Install Uninstall Properties	
escription	
vide area network protocol/internet Protocol. The default	
cross diverse interconnected networks.	

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

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

4. Click OK when done.

eneral	Alternate Configuration				
this cap	n get IP settings assigned automat vability. Otherwise, you need to as appropriate IP settings.				
00	otain an IP address automatically				
OU	e the following IP address:				
IP a	ddress:			2	
Subr	net mask:	÷.		x	
Defa	ult gateway:	κ.	10	3	
00	otain DNS server address automat	ically			
OU	e the following DNS server addres	sses:			
Pref	erred DNS server:			2	
Alter	nate DNS server:				
V	alidate settings upon exit			Adv	anced
		_	OK		Cancel

MAC OS

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

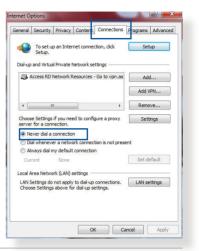
	Location: Automatic	•
	Show: Built-in Ethernet	•
ТС	P/IP PPPoE AppleTalk Proxies	Ethernet
Configure IPv4	I: Using DHCP	•
IP Address	5: 192.168.182.103	Renew DHCP Lease
Subnet Mask	c: 255.255.255.0 DHCP Client IE	
Route	r: 192.168.182.250	(If required)
DNS Server	5: 192.168.128.10	(Optional)
Search Domain:	5:	(Optional)
IPv6 Address	5: fe80:0000:0000:0000:0211:24ff:fe32	b18e
	Configure IPv6	(?)

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

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

Windows[°] 7

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



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

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 <u>http://csr.asus.com/english/Takeback.htm</u> 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.

FCC Radiation Exposure Statement

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

IMPORTANT! This device is restricted for indoor use.

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.

Prohibition of Co-location

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

Safety Information

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

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.

Canada, Industry Canada (IC) Notices

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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 31cm 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 31cm de distance entre la source de rayonnement et votre corps.

Canada, avis d'Industry Canada (IC)

Le présent appareil est conforme aux normes CNR d'Industrie Canada applicables aux appareils radio exempts de licence.

Son utilisation est sujette aux deux conditions suivantes : (1) Cet appareil ne doit pas créer d'interférences nuisibles, et

(2) Cet appareil doit tolérer tout type d'interférences, y compris celles susceptibles de provoquer un fonctionnement non souhaité de l'appareil.

WARNING!

- This radio transmitter (3568A-RTGZ00) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.
- Le présent émetteur radio (3568A-RTGZ00) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

A	Brand Model Name		Automa Tura	Commenter	Gain (dBi)		
Ant.	Brand	Model Name	Antenna Type	Connector	2.4GHz	5GHz	
1	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
2	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
3	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
4	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
5	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
6	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
7	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	
8	Whayu	C660-510391-A	Dipole Antenna	Reversed-SMA	2.14	2.98	

Table for filed antenna

- For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.
- Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible.
- This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.
- Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.
- The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.
- Les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

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「產品之限用物質含有情況」之相關資訊,請參考下表:

			限用	物質及	其化學符號	虎
單元	如	汞	鎘	六價 銘	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
印刷電路板及 電子組件	-	0	0	0	0	0
外殼	0	0	0	0	0	0
天線	-	0	0	0	0	0
其他及其配件	0	0	0	0	0	0
備考1. "〇"係指該項限用物質之百分比含量未超出百分比						
含量基準值。						
備考2."-"係打	旨該項	眼用	物質》	岛排除邛	貢目。	

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Version 2, June 1991

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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.

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