AC750 Wireless Dual-Band Router

CR2

User Manual

Version 1.0 | 4/25/2014

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Chapter 1 Introduction

Congratulations on your purchase of this outstanding AC750 Wireless Dual-Band Router. The Wireless Router using 2.4G and 5G dual-band concurrent technology, support latest 802.11ac standards, backward compatibility IEEE802.11a/b/g/n, 2.4GHz and 5GHz wireless transmission rate up to 750Mbps when concurrent operation, Integrated router, Wi-Fi access point, 4 ports 100M switch and firewall functions in one. Provide convenient and comprehensive network management functions, supports URL filtering, MAC address filtering and the QoS bandwidth control function, can effectively allocate the client's download rate. Supports wireless data encryption, and can guarantee the security of data transmission in wireless network.

1.1 Features

- Provides a 10/100M WAN interface, can be connected to xDSL modem, Cable modem and Ethernet.
- Provides four 10/100M LAN interfaces, can be connected to various Ethernet devices.
- 2.4G and 5G concurrent working wireless transmission rate up to 750Mbps.
- Supports the WPS one key encryption, easy to implementing network encrypted connection.
- Supports 64/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK, etc. encryption and security mechanism.
- Built-in Network Address Translation (NAT) supports virtual server, special application and DMZ host.
- Built-in DHCP server, and also supports static address allocation.
- Supports the VPN pass through, can build a VPN client.
- Built-in firewall functions, supports domain and MAC address filtering.
- Supports QoS bandwidth control function, can effectively allocate the client's download rate.
- Supports for dynamic DNS function, can provide domain name service for dynamic IP address.
- Supports access control based on MAC address, can effectively to control the Intranet user Internet access permissions.
- Supports remote Web management and software upgrades.

1.2 System Requirement

- An Ethernet-Based Cable or xDSL modem
- An Ethernet Card on PC
- TCP/IP network protocol for each PC
- RJ45 Twisted-pair

• Microsoft IE (or Firefox or Netscape)

1.3 Package Contents

Please unpack the box and check the following items:

- One AC750 Wireless Dual-Band Router
- One Power Adapter
- One User Manual

Chapter 2 Hardware Installation

2.1 Led indicators

The top panel contains LED indicators that show the status of the unit.

0	0	4 G C G 5 ³ 2.4 ³		
Name	Status	Indication		
()	Off	Power is off.		
Power	On	Power is on.		
SYS/WPS	Flashing	the LED flashes about two minutes during WPS working.		
Ø	Off	There is no device linked to the corresponding port.		
WAN	On	There is a device linked to the corresponding port but there is no activity.		
LAN(1-4)	Flashing	There is an active device linked to the corresponding port.		
_1))	Off	The wireless function is disabled.		
FlashingThe wireless function is enabled. The router is w5GHz5GHz radio band.				
2 (1))	Off	The wireless function is disabled.		
2.4GHz	Flashing	The wireless function is enabled. The router is working on 2.4GHz radio band.		

2.2 Back Rear Panel



The following parts are located on the rear panel.

LAN (1,2,3,4): These four LAN ports are where you will connect networked devices, such as PCs, print servers, remote hard drives, and anything else you want to put on your network. If you connect this product with the Hub (or Switchboard) correctly, the router's corresponding LED and the Hub's (or the Switchboard's) must be illuminates.

WAN: 10/100Mbps RJ45 port. The WAN port is where you will connect Cable/xDSL Modem or other LAN.

RESET: The Reset Button has two functions, WPS and Factory Default. With the router powered on, When selecting the WPS function, use a pin to press and hold the button about 2 seconds, the WPS LED will flash two minutes. The other one, use a pin to press and hold the button about 5 seconds, the router will restore to factory default.

POWER: The Power socket is where you will connect the power adapter. Please use the power adapter provided with this router.

Wireless antenna: To receive and transmit the wireless data.

2.3 Typical install

Before installing the router, make sure your PC is connected to the Internet through the broadband service successfully. If there is any problem, please contact your ISP. After that, please install the router according to the following steps. Don't forget to pull out the power plug and keep your hands dry.



- 1. Make sure all devices, including your PCs, modem, and router, are powered down.
- 2. Using an Ethernet network cable, connect the LAN or Ethernet network port of the cable or DSL modem to the router's WAN port.
- 3. Power on the cable or DSL modem, and power on the PC you wish to use to configure the router.

4. Connect the included power adapter to the router. And connect the other end of the adapter to an electrical outlet.

Chapter 3 Quick Installation Guide

The chapter mainly presents how to enter the router's Web page and simple router settings. After you have finished the hardware installation (Please refer to chapter 2), the following steps will assist you to set the network configurations for you computer.

3.1 Set the Network Configurations

1. On your computer desktop right click "My Network Places" and select "Properties".



2. Right click "local Area Network Connection" and select "Properties".



3. Select "Internet Protocol (TCP/IP)" and click "Properties".

eneral Advanced		
Connect using:		
Broadcom NetLin	k (TM) Gigabit Ether	Configure
This connection uses th	e following items:	
Client for Micro	coft Networks	
🗹 👼 File and Printe	r Sharing for Microsoft	Networks
R BQoS Packet S	cheduler	
Internet Protoc	tol (TCP/IP)	
Instal	Uninstat	Properties
Description		
Transmission Control	Protocol/Internet Pro	tocol. The default
wide area network pr across diverse interc	onnected networks	communication
- contrary of the second		
		betoe
Show icon in notifica	ation area when conn	u u u u u
Show icon in notification in Notify me when this	ation area when conn connection has limited	d or no connectivity
Show icon in notification in Notification in Notify me when this	ation area when conn connection has limited	d or no connectivity

4. Select "Obtain an IP address automatically" or select "Use the following IP address(S)".

A. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically". Click "OK".

eneral	Alternate Configuration	
You ca this cap the app	n get IP settings assigned ability. Otherwise, you ne ropriate IP settings.	d automatically if your network supports sed to ask your network administrator fo
0	otain an IP address autor	natically
OU	se the following IP addres	55:
IP at	dress:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Subr	net mask:	
Defa	ult gateway:	
0	otain DNS server address	s automatically
OU	se the following DNS serv	ver addresses:
Prete	med DNS server.	
Alter	nate DNS server	
		Advanced

B. "Use the following IP address (S)"

IP Address: 192.168.1.XXX: (XXX is a number from 2~254)

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.1

DNS Server: You need to input the DNS server address provided by you ISP. Otherwise, you can use the router's default gateway as the DNS proxy server.

Tip: If you are not sure of the DNS server address, we recommend you to select "Obtain an IP address automatically (O)" and "Obtain a DNS server address

eneral				
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.				
○ Dbtain an IP address automatically				
Output the following IP address	x			
IP address: 192.168.1.100				
S <u>u</u> bnet mask:	255 . 255 . 255 . 0			
<u>D</u> efault gateway:	192.168.1.1			
Objtain DNS server address automatically				
Use the following DNS serve	er addresses:			
Preferred DNS server:	192.168.1.1			
Alternate DNS server:				

automatically".

Click **"OK**" to save the configurations.

3.2 Getting Started



To access the configuration pages, open a web-browser such as Internet Explorer and enter the IP address of the router (**192.168.1.1**). The Default User/Password: **admin**

If successful, you can see the status page.

Hac Bi	roadband Ro	outer	
COLUMN 1	Statistics	lag	
Concenting Breads and Antischer a	Access Point Status The page should the com	int status and some basic settings of the device.	
Miroless 36 Miroless 36	Uptime Firmware Version Build Tane	0day:01:1m:41a WR1040v11a.12.01AC+C Tun, 15 Apr 2014 11:43:52 +0800	
Barver Balage Nacyrffy Doll	Mode Band SSID Channel Number	89 5 GHz (A+N+AC) 87% (30 AP 55 44	
Status	Encryption EISSID Associated Clients	Seathed 60 e6 Sc 81:92:22 0	
	Mode Band SSID Channel Number Encryption BSSID Asseciated Clients	ΔP 2.4 GHz (B+G+N) RTK 11n AP 2.4G 11 Disabled 00:e0:5c:81:92:d2 0	
	TCP/IP Configuration Attain IP Protocol IP Address Subnot Mark Default Catavay DHCP Server MAC Address WAR Configuration Attain IP Protocol IP Address	Fixed IP 192.168.1.1 255.255.0 192.168.1.1 Enabled 00:e0:4c:81:96:c1 Getting IP from DHCP server 0.0.0.0	
	Subnet Mask Default Gataway	0.0.0.0	

3.3 Setup Wizard

Click on "**Wizard**" pages, it will guide you to setup your router step by step in simple way. In this section, there are seven steps to do it.

Minned	Wizard
wnzaru	
Operating Mode	Setup Wizard
WAN Interface	The setup wizard will guide you to configure the Access Point for the first time.
LAN Interface	Welcome to the Setup Wizard.
Wireless 5G	The Wizard will guide you through the following steps. Begin by clicking on Next.
Wireless 2.4G	1. Setup Operating Mode
Server Setup	3. Setup LAN Interface
Security	4. Setup WAN Interface 5. Select Wireless Band
QoS	6. Wireless Basic Setting 7. Wireless Security Setting
System	
	Next>>
Status	
Logout	

Please follow the steps and complete the router configuration.

Step 1 Setup Operation Mode

The router supports three operation modes, **Gateway**, **Bridge** and **Wireless ISP**. And each mode is suitable for different use, please choose correct mode.

Wizard

Operating Mode			
You can setup diff bridging functions.	erent modes for the LAN and WLAN interfaces for NAT and		
● Gateway:	In this mode, the device connects to the internet via an ADSL/Cable Modem. NAT is enabled and PCs on LAN ports share the same IP Address to the ISP via the WAN port. The connection type can be setup on the WAN page using PPPOE, DHCP client, PPTP client, L2TP client, or static IP.		
O Bridge:	In this mode, all ethernet ports and wireless interfaces are bridged together and the NAT function is disabled. All WAN related functions, including the firewall, are not supported.		
○ Wireless ISP:	In this mode, all ethernet ports are bridged together and the wireless client will connect to the ISP access point. NAT is enabled and PCs on Ethernet ports share the same IP to the ISP via the wireless LAN. You can connect to the ISP's AP on the Site-Survey page. The connection type can be setup on the WAN page using PPPOE, DHCP client, PPTP client, L2TP client, or static IP.		
	WAN Interface: wlan1		
	Cancel < <back next="">></back>		

Step 2 Time Zone Setting

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. Daylight Saving can also be configured to automatically adjust the time when needed.

Wizard			
Time 2	Zone Settin	g	
You ca over th	n maintain th 1e Internet.	e system time by synchronizing with a public time server	
🗹 Ena	able NTP clier tomatically Ad	it Update djust for Daylight Saving	
Time Z	one Select:	(GMT+08:00)Taipei	*
NTP se	rver:	131.188.3.220 - Europe	

Cancel <<Back Next>>

Enable NTP client update: Check this box to connect NTP Server and synchronize internet time.

Automatically Adjust Daylight Saving: Check this box, system will adjust the daylight saving automatically.

Time Zone Select: Select the Time Zone from the drop-down menu.

NTP Server: Select the NTP Server from the drop-down menu.

Step 3 LAN Interface Setup

Setup the IP Address and Subnet Mask for the LAN interface.

Wizard			
LAN Inter	face Setup		
This page is used to configure the parameters for the local area network that connects to the LAN port of your Access Point. Here you may change the settings for IP addresss, subnet mask, DHCP, etc			
IP Address:	192.168.1.1		
Subnet Mas	k: 255.255.255.0		

Cancel	< <back< th=""><th>Next>></th></back<>	Next>>
--------	--	--------

IP Address: Enter the IP address of your router. (**factory default: 192.168.1.1**) **Subnet Mask:** An address code that determines the size of the network. Normally use 255.255.255.0 as the subnet mask.

Step 4 WAN Interface Setup

The router support five access modes in the WAN side, please choose correct mode according to your ISP Service.

Mode 1 DHCP Client

Wizard		
WAN	Interface Setu	р
This pa connec access of WAI	age is used to co cts to the WAN p method to stat N Access type.	nfigure the parameters for Internet network which ort of your Access Point. Here you may change the c IP, DHCP, PPPoE, PPTP or L2TP by click the item value
WAN A	ccess Type:	DHCP Client 💙
		Cancel < <back next="">></back>

Select DHCP Client to obtain IP Address information automatically from your ISP. This mode is commonly used for Cable modem services.

Mode 2 Static IP

Select Static IP Address if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The router will not accept the IP address if it is not in this format.

Wizard	
WAN Interface Se	tup
This page is used to connects to the WAI access method to st of WAN Access type	configure the parameters for Internet network which N port of your Access Point. Here you may change the atic IP, DHCP, PPPoE, PPTP or L2TP by click the item value
WAN Access Type:	Static IP 🔽
IP Address:	192.168.10.12
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.10.254
DNS :	59.51.78.211
	Cancel < <back next="">></back>

IP Address: Enter the IP address assigned by your ISP.

Subnet Mask: Enter the Subnet Mask assigned by your ISP.

Default Gateway: Enter the Gateway assigned by your ISP.

DNS: The DNS server information will be supplied by your ISP (Internet Service Provider).

Mode 3 PPPoE

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

Wizard						
WAN	Interface Setu	р				
This pa connec access of WAI	This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, PPTP or L2TP by click the item value of WAN Access type.					
WAN A	ccess Type:	PPP0E	*			
User N	ame:	3280354				
Passwo	ord:	•••••				
				Cancel	< <back< th=""><th>Next>></th></back<>	Next>>

User Name: Enter your PPPoE user name.

Password: Enter your PPPoE password.

Mode 4 PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with IP information and PPTP Server IP Address, of course it also includes a username and password. This mode is typically used for DSL services.

Wizard				
WAN Interface Set	tup			
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE, PPTP or L2TP by click the item value of WAN Access type.				
WAN Access Type:	PPTP 💌			
IP Address:	172.1.1.2			
Subnet Mask:	255.255.255.0			
Server IP Address:	172.1.1.1			
User Name:				
Password:				
	Cancel < <back next="">></back>			

IP Address: Enter the IP address.

Subnet Mask: Enter the subnet Mask.

Server IP Address: Enter the PPTP Server IP address provided by your ISP.

User Name: Enter your PPTP username.

Password: Enter your PPTP password.

Mode 5 L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password.

Wizard	
WAN Interface Set	tup
This page is used to o connects to the WAN access method to sta of WAN Access type.	configure the parameters for Internet network which port of your Access Point. Here you may change the atic IP, DHCP, PPPoE, PPTP or L2TP by click the item value
WAN Access Type:	L2TP
IP Address:	172.1.1.2
Subnet Mask:	255.255.255.0
Server IP Address:	172.1.1.1
User Name:	

IP Address: Enter the IP address.

Password:

Subnet Mask: Enter the subnet Mask.

Server IP Address: Enter the L2TP Server IP address provided by your ISP.

User Name: Enter your L2TP username.

Password: Enter your L2TP password.

Cancel

<<Back

Next>>

Step 5 Wireless 5GHz Basic Settings

This page is used to configure the basic parameters for 5GHz wireless network as the following screenshot:

Wizard

Wireless 5GHz Basic Settings					
This page is used to configure the parameters for wireless LAN clients that may connect to your Access Point.					
Band:	5 GHz (A+N+AC) 🔽				
Mode:	AP 💌				
Network Type:	Infrastructure 😪				
SSID:	RTK 11n AP 5G				
Channel Width:	80MHz 💌				
Control Sideband:	Auto 😒				
Channel Number:	Auto 💌				
Each Mar Class (Circle Ethemat Cliss)					

Enable Mac Clone (Single Ethernet Client)

Cancel	< <back< th=""><th>Next>></th></back<>	Next>>
--------	--	--------

Band: This filed determines the wireless mode which the router works on.

- 5GHz (A) Select if all of your wireless clients are 802.11a.
- 5GHz (N) Select if all of your wireless clients are 802.11n.
- 5GHz (A+N) Select if you are using both 802.11a and 802.11n wireless clients.
- 5GHz (AC) Select if all of your wireless clients are 802.11ac.
- 5GHz (N+AC) Select if you are using both 802.11n and 802.11ac wireless clients.
- 5GHz (A+N+AC) Select if you are using both 802.11a, 802.11n and 802.11ac wireless clients.

Mode: Support AP, Client, WDS and AP+WDS mode.

Network Type: This type is only valid in client mode.

SSID: Service Set Identifier, it identifies your wireless network.

Channel Width: Select the channel width from the drop-down list.

ControlSideband: This relates to the channel number used for your wireless network. An upper band represents higher channels and vice versa.

Channel Number: Indicates the channel setting for the router.

Enable Mac Clone: Enable or disable MAC clone option. (You can use the "Mac Clone" button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with this MAC address.)

Step 6 Wireless 5GSecurity Setup

Secure your wireless network by turning on the WPA or WEP security feature on the router. This section you can set WEP and WPA-PSK security mode.

The following picture shows how to set the WEP security.

Wizard	
Wireless 5G S	Security Setup
This page allow will help preven	s you setup wireless security. Using WEP or WPA Encryption Keys t unauthorized access to your wireless network.
Encryption: W	EP 💌
Key Length:	64-bit 🗸
Key Format:	Hex (10 characters) 💌
Key Setting	1234567890
	Cancel < <back next="">></back>

Key Length: Specify the Length of the key, 64-bit or 128-bit.

Key Format: Specify the format of the key, ASCII or Hex.

Key Setting: Enter the key here, its format is limited by the key format, ASCII or Hex.

The following picture shows how to set WPA-PSK security, you can select WPA (TKIP), WPA2 (AES) and Mixed mode.

Wizard					
Wirele	ess 5G Security	Setup			
This pa will hel	This page allows you setup wireless security. Using WEP or WPA Encryption Keys will help prevent unauthorized access to your wireless network.				
Encryp	tion: WPA2(AES)	~			
Pre-Sh	ared Key Format:	Passphrase	*		
Pre-Sh	ared Key:	•••••]	
			Cancel	< <back next="">></back>	

Pre-Shared Key Format: Specify the format of the key, passphrase or HEX. **Pre-Shared Key:** Enter the key here, its format is limited by the key format.

Click **"Next"** to set the 2.4GHz wireless network by the same method, and then click **"Finish"** button to complete the setting.

Through the wizard setup, you can complete the basic functions of a router settings to achieve Internet access. If you need more advanced setting of the router, please refer to the following chapters.

Chapter 4 Configuring the Router

4.1 WAN Interface

There are two submenus under the WAN Interface menu: **WAN Interface, DDNS**. Click any of them, and you will be able to configure the corresponding function.

4.1.1 WAN Interface

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to Static IP, DHCP Client, PPPoE, PPTP or L2TP by click the item value of WAN Access type.

	WAN Interface DD	NS		
Wizard				
Operating Mode	WAN Interface Setup			
WAN Interface	This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access			
LAN Interface	Access type.			
Wireless 5G	WAN Access Type:	DHCP Client 💌		
Wireless 2.4G				
Server Setup	Host Name:			
Security	MTU Size:	1500 (1400-1500 bytes)		
QoS	Attain DNS Autom	atically		
System	○ Set DNS Manually			
	DNS 1:	0.0.0.0		
Status	DNS 2:	0.0.0.0		
	Clone MAC Address:	0000000000		
	Enable uPNP			
	Enable IGMP Pro:	xy		
	Enable Ping Acce	ess on WAN		
	Enable Web Serv	ver Access on WAN		
	Enable IPsec pas	ss through on VPN connection		
	Enable PPTP pas	s through on VPN connection		
	Enable L2TP pass	s through on VPN connection		
	Enable IPv6 pass	through on VPN connection		
	Apply Reset			

4.1.2 DDNS

Dynamic DNS is a service that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly ever changing) IP-address.

WAN Interface	DDNS
Dynamic DNS	
Dynamic DNS is a domain name (ar	a service that provides you with a valid, unchanging, internet n URL) to go with a (possibly changing) IP-address.
Enable DDN	S
Service Provider:	DynDNS 🗸
Domain Name:	host.dyndns.org
User Name/Email:	
Password/Key:	
Note: For Oray DDNS, For DynDNS, you For TZO, you ca	<i>you can create your Oray account <u>here</u> u can create your DynDNS account <u>here</u> an have a 30 days free trial <u>here</u></i>

Service Provider: Select one from the drop-down menu, such as DynDNS, OrayDDNS or TZO.

Domain Name: Enter the domain name (Such as host.dyndns.org).

User Name/Email: Enter the user name or email the same as the registration name. **Password/Key:** Enter the password you set.

4.2 LAN Interface

There are three submenus under the LAN Interface menu: LAN Interface, Static DHCP, DHCP Client. Click any of them, and you will be able to configure the corresponding function.

4.2.1 LAN Interface

This page is used to configure the parameters for local area network which connects to the LAN port of your Access Point. Here you may change the setting for IP address, subnet mask, DHCP, etc..

	LAN Interface S	tatic DHCP	DHCP Client
wizard			
Operating Mode	LAN Interface S	etup	
WAN Interface	This page is used t	to configure th	he parameters for the local area network that
LAN Interface	connects to the LA settings for IP add	AN port of you resss, subnet	IF Access Point. Here you may change the mask, DHCP, etc
Wireless 5G	IP Address:	192.168.	.1.1
Wireless 2.4G	Subnet Mask:	255.255.	.255.0
Server Setup	Default Gateway:	0.0.0.0	
Security	DHCP:	Server	¥
QoS	DHCP Client Range	192.168	.1.100 - 192.168.1.200
System	DHCP Lease Time:	480	(1 ~ 10080 minutes)
	Domain Name:		
Status	Clone MAC Address	s: 0000000	00000
Logout	Apply Reset		

IP Address: Enter the IP address of your router (factory default: 192.168.1.1).

Subnet Mask: An address code that determines the size of the network. Normally use 255.255.255.0 as the subnet mask.

Default Gateway: Enter the gateway IP address of your router.

DHCP: Enable or Disable the DHCP server. If you disable the Server, you must have another DHCP server within your network or else you must configure the computer manually.

DHCP Client Range: The range of IP address the router DHCP server will assign to users and device connecting to the router.

DHCP Lease Time: The DHCP Lease Time is the amount of time a network user will be allowed connection to the router with their current dynamic IP Address. Enter the amount of time in minutes and the user will be "leased" this dynamic IP Address. After the time is up, the user will be automatically assigned a new dynamic IP address. The range of the time is 1 ~ 10080 minutes. The default value is 480 minutes.

Domain Name: Input the domain name of you network.

Clone MAC Address: You can configure the MAC address of the LAN.

4.2.2 Static DHCP

This page allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address.

LAN Interface	Static DHCP	DHCP Client		
Static DHCP	Setup			
This page allow network device address. This is still request an	is you reserve IP with a specified l s similar to having IP address from t	addresses and assi MAC address each a static IP addres he DHCP server.	gn the same IP addre time it requests an IP s except that the dev	ss to a ice must
Enable Sta	tic DHCP			
IP Address: MAC Address: Comment: Apply Reset				
Static DHCD	lict			
ID Addre	nes M/	C Address	Commont	Select
IF Addre	35 IVIA	AC Address	Connienc	Select
Delete Select	ed Delete All	Reset		

IP Address: Enter the IP address which needs to be bound.

MAC Address: Enter the MAC address of the computer you want to assign the above IP address.

Comment: You can add some comment for this item.

Click "Apply" to add the entry in the list.

4.2.3 DHCP Client

This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.

N Interface	Static DHCP	DHCP Client	
Active DHCP	Client Table		
This table show	is the assigned IP	address, MAC add	ress and time expired for eac
This table show DHCP leased cli	vs the assigned IP ent.	address, MAC add	ress and time expired for eac
This table show DHCP leased cli	is the assigned IP ent.	address, MAC add	ress and time expired for eac
This table show DHCP leased cli IP Address	vs the assigned IP ent. MAC Ad	address, MAC add	Time Expired(s)

Refresh: Click this button to refresh the data.

4.3 Wireless 5G

There are eight submenus under the Wireless 5G menu: **Basic, Advanced, Security, Access Control, WDS, Site Survey, WPS, Schedule**. Click any of them, and you will be able to configure the corresponding function.

4.3.1 Basic

This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

uniored	Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule					
wizard													
Operating Mode	Wirel	less Basic Set	ting-wlan 1										
WAN Interface	This p	age is used to	configure the p	parameters for wireles	s LAN clier	nts which may							
LAN Interface	conne settin	ect to your Acco gs as well as w	ess Point. Here ireless network	you may change wire parameters.	less encry	ption							
Wireless 5G		Disable Wireless LAN Interface											
Wireless 2.4G	Band:	nd: 5 GHz (A+N+AC) 💌											
Server Setup	Mode:	:	AP 💌	Multiple Al	P								
Security	Netwo	ork Type:	Infrastructure	*									
QoS	SSID:		RTK 11n AP 50	3	Add	to Profile							
System	Chann	nel Width:	80MHz 🛩										
	Contro	ol Sideband:	Auto ~										
Status	Chann	nel Number:	44 👻										
Logout	Broad	cast SSID:	Enabled 💌										
	WMM:		Enabled 🗠										
	Data I	Rate:	Auto	1									
	Assoc	iated Clients:	Show Activ	e Clients									
		Enable Mac Clor	ne (Single Ethe	met Client)									
	🗆 i	Enable Universa	l Repeater Mod	le (Acting as AP and o	lient simul	taneouly)							
	SSID	of Extended Int Add to Profile	erface: RTK	11n AP RPT0									

Disable Wireless LAN Interface: Check this box to to disable the router's wireless features; uncheck to enable it.

Band: Select one mode from the following. The default is 5GHz (A+N+AC) mode.

Mode: Support AP, Client, WDS and AP+WDS mode.

SSID: SSID (Service Set Identifier) is the unique name of the wireless network.

Channel Width: Select the channel width from the drop-down list.

ControlSideband: This relates to the channel number used for your wireless network. An upper band represents higher channels and vice versa.

Channel Number: Indicates the channel setting for the router.

Broadcast SSID: Select "Enable" to enable the device's SSID to be visible by wireless clients. The default is enabled.

WMM: It will enhance the data transfer performance of multimedia data when they're being transferred over wireless network.

Data Rate: Sets the maximum wireless data rate that your network will operate on.

Associated Clients: You can see the MAC Address, MAC address, transmission and reception packet counters for each associated wireless client.

4.3.2 Advanced

These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Wire	less Advanced	Settings-wl	an1				
These suffic unless	e settings are on ient knowledge a s you know what	ly for more teo about wireless : effect the ch	hnically advanced us: LAN. These settings anges will have on ye	sers who ha should not our Access	ive a be changed Point.		
Fragn	nent Threshold:	2346	(256-2346)				
RTS 1	Threshold:	2347	(0-2347)				
Beaco	on Interval:	100	(20-1024 ms)				
IAPP:		Enabled	O Disabled				
Prote	ction:	C Enabled	Oisabled				
Aggre	gation:	Enabled	Obisabled				
Short	GI:	Enabled	O Disabled				
WLAN	Partition:	C Enabled	Oisabled				
STBC	:	Enabled	Obisabled				
RF OL	itput Power:	100%	○70% ○50% ○	35% 🔘	15%		
Apply	Reset						

Fragment Threshold: This value is the maximum size determining whether packets will be fragmented. Setting the Fragmentation Threshold too low may result in poor network performance since excessive packets.

RTS Threshold: RTS stands for "Request to Send". This parameter controls what size data packet the frequency protocol issues to RTS packet. The default value of the attribute is 2347. It is recommended not to modify this value in SOHO environment.

Beacon Interval: Enter a value between 20-1024 milliseconds for Beacon Interval here. The beacons are the packets sent by the router to synchronize a wireless network. Beacon Interval value determines the time interval of the beacons.

IAPP: Inter-Access Point Protocol.

Short GI: This function is recommended for it will increase the data capacity by reducing the guard interval time.

STBC: Space Time Block Coding improves reception by coding the data stream in blocks.

RF Output Power: Here you can specify the rf output power of router.

4.3.3 Security

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Basic	Adva	nced	Security	Access Contro	I WDS	Site Survey	WPS	Schedule			
Wire	eless Sec	curity S	Getup-wlan1								
This Keys	page allov will help	ws you prevent	setup wireless unauthorized	security. Using W access to your wi	EP or WPA En eless network	cryption k.					
Selec	Select SSID: Root AP - RTK 11n AP 5G 💌 Apply Reset										
	Encryptic	on:	Disa	bled 🔽							
			Disat WEP	bled							
			WPA WPA WPA	.2 -Mixed							

4.3.4 Access Control

The Wireless MAC Address Filtering feature allows you to control wireless stations accessing the router, which depend on the station's MAC addresses.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Wire	less Access Co	ontrol -wlani	L				
If you are in Deny conn	u choose Allowed the access con Listed is selecte ect to the Acces	I Listed, only t trol list will be d, these wirele s Point.	hose clients whose w able to connect to y ass clients on the list	ireless MAC our Access will not be	addresses Point. When able to		
Wirel	ess Access Cont	rol Mode:	Disable 😽 👻				
MAC	Address:						
Comn	nent						
Appl	y Reset						
Curr	ent Access Co	ntrol List:					
	MAC Addr	ess	Comment		Select		
De	lete Selected	Delete All	Reset				

Wireless Access Control Mode: If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point. The MAC Address format is 001122334455.

4.3.5 WDS

Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, firstly you must set AP Mode to WDS or AP+WDS in basic setting, then enable WDS function and set another AP MAC which you wan to communicate with. The WDS supports WEP and PSK security mode. Of course in order to make APs work, you have to keep them the same channel and security mode.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
_							
WDS	Settings -wla	n1					
Wirel APs, and s table,	ess Distribution S as Ethernet does et the MAC addr , and then enable	System uses th a. To do this, y ress of other Al e WDS.	e wireless media to rou must set these A Ps that you want to	communicat APs to the sa communicat	e with other ame channel te with in the		
MAC A	Address:						
Data I	Rate:	Auto	*				
Comm	ent						
Apply	/ Reset	Set Security	Show Statistic	S			
Curre	ent WDS AP List						
	MAC Address:	Tx Ra	te (Mbps)	Comment	Select		
De	lete Selected	Delete All	Reset				

Enable WDS: Check this box to enable WDS function.

MAC Address: Enter the remote AP MAC address.

Data Rate: Sets the maximum wireless data rate that your network will operate on. **Comment:** You can add some comment for this item.

4.3.6 Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule					
Wirel This p IBSS i	Wireless Site Survey -wlan1 This page provides a tool to scan for wireless networks. If an Access Point or IBSS is found, you could choose to connect to it manually when client mode is											
enable Site	ed. e Survey											
	SSID	BSSID	Channel Type	Encryp	ot Signal							
	None											

4.3.7 WPS

WPS is designed to ease set up of security Wi-Fi networks and subsequently network management. This router supports WPS features for AP mode, AP+WDS mode, Infrastructure-Client mode, and the wireless root interface of Universal Repeater mode.

Basic	Advanced	Security	Access Con	ntrol N	VDS	Site Survey	WPS	Schedule
Wi-F	i Protected Se	etup						
This Using and e	page allows you I this feature allo easily and secure	to change the ows a wireless ely connect to	settings for Wi client to autom the Access Poi	PS (Wi-Fi I nically sync nt.	Protect ronize i	ed Setup). its settings		
	Disable WPS							
Appl	y Reset							
WPS	Status:	0	Configured 🤅	UnConfigu	ured			
			Reset to UnCo	nfigured				
Auto	-lock-down state	e Unlocked 🕕	nlock					
Self-	PIN Number:	897	729533					
Push	Button Configura	ation:	Start PBC					
STOP	WSC		Stop WSC					
Client	t PIN Number:			Start PIN				

Disable WPS: Check this box and clicking "Apply" will disable WPS function. WPS is turned on by default.

Self-PIN Number: It is AP's PIN.

Start PBC: Clicking this button will invoke the Push Button Configuration of WPS. If one station wants to connect to the AP, it must click its PBC button in two minute. You can see the WPS LED flash this time.

Client PIN Number: The length of PIN is limited to four or eight numeric digits. If the AP and Station input the same PIN and click "Start PIN" button in two minutes, they will establish connection and setup their security key.

4.3.8 Schedule

This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
	less Cabadula						
This p	age allows you s	setup the wirele	ess schedule rule. D	o not forget	to configure		
the s	stem time befor	e enabling this	feature.	5	U U		
En En	able Wireless Sc	hedule					
Days							
E	verday 🗌 Sun	Mon Tu	ue 🗌 Wed 🗌 Th	u 🗌 Fri 🗌	Sat		
Time							
0 2	4 Hours 💿	From 00 V	: 00 🗡 To 00	× : 00 ×	*		
Appl	Reset						

4.4 Wireless 2.4G

There are eight submenus under the Wireless 2.4G menu: **Basic, Advanced, Security, Access Control, WDS, Site Survey, WPS, Schedule**. Click any of them, and you will be able to configure the corresponding function.

4.4.1 Basic

This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.

Wizard	Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Operating Mode	Mire	Joce Bacic Sol	ting-wlan2					
WAN Interface LAN Interface	This conn setti	page is used to ect to your Acc ngs as well as w	configure the p ess Point. Here ireless network	parameters for wireles you may change wire parameters.	s LAN clier less encry	ts which may ption		
Vireless 5G		Disable Wireless	LAN Interface					
Vireless 2.4G	Band	=	2.4 GHz (B+G-	•N) 🛩				
erver Setup	Mode	:	AP 💌	Multiple AF	P			
curity	Netw	ork Type:	Infrastructure	1				
oS	SSID	:	RTK 11n AP 2	4G	Add	to Profile		
tem	Chan	nel Width:	40MHz 💌					
	Cont	rol Sideband:	Upper 💌					
s	Chan	nel Number:	11 💌					
ut	Broa	dcast SSID:	Enabled 💌					
	WMM	1:	Enabled M					
	Data	Rate:	Auto 💌					
	Asso	ciated Clients:	Show Activ	e Clients				
		Enable Mac Clor	ne (Single Ethe	met Client)				
		Enable Universa	l Repeater Mod	le (Acting as AP and o	lient simul	taneouly)		
	SSID	of Extended Int	erface: RTK	11n AP RPT1				
		Add to Profile						

Disable Wireless LAN Interface: Check this box to to disable the router's wireless features; uncheck to enable it.

Band: Select one mode from the following. The default is 2.4 GHz (B+G+N) mode.

Mode: Support AP, Client, WDS and AP+WDS mode.

Network Type: This type is only valid in client mode.

SSID: SSID (Service Set Identifier) is the unique name of the wireless network.

Channel Width: Select the channel width from the pull-down list.

ControlSideband: This relates to the channel number used for your wireless network. An upper band represents higher channels and vice versa.

Channel Number: Indicates the channel setting for the router.

Broadcast SSID: Select "Enable" to enable the device's SSID to be visible by wireless clients. The default is enabled.

WMM: It will enhance the data transfer performance of multimedia data when they're being transferred over wireless network.

Data Rate: Sets the maximum wireless data rate that your network will operate on.

Associated Clients: You can see the MAC Address, MAC address, transmission and reception packet counters for each associated wireless client.

4.4.2 Advanced

These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.

Basic	Advanced	Security	Access Contro	ol WDS	Site Survey	WPS	Schedule
Wire	eless Advanced	Settings-wla	in2				
These suffic unles	e settings are only cient knowledge ab is you know what o	for more tecl out wireless L effect the cha	hnically advance AN. These settir anges will have o	d users who l ngs should no n your Acces	have a It be changed Is Point.		
Fragn	ment Threshold:	2346	(256-2346)				
RTS	Threshold:	2347	(0-2347)				
Beac	on Interval:	100	(20-1024 ms)				
Pream	mble Type:	SLong Pread	amble 🔿 Short	Preamble			
IAPP:	:	Enabled	◯ Disabled				
Prote	ection:	○ Enabled	Oisabled				
Aggre	egation:	Enabled	◯ Disabled				
Short	t GI:	Enabled	◯ Disabled				
WLAN	N Partition:	O Enabled	Oisabled				
STBC	:	Enabled	○ Disabled				
20/40	OMHz Coexist:	○ Enabled	Oisabled				
RF Ou	utput Power:	100%	70% 050%	035%	15%		
Apply	Reset						

Fragment Threshold: This value is the maximum size determining whether packets will be fragmented. Setting the Fragmentation Threshold too low may result in poor network performance since excessive packets.

RTS Threshold: RTS stands for "Request to Send". This parameter controls what size data packet the frequency protocol issues to RTS packet. The default value of the attribute is 2347. It is recommended not to modify this value in SOHO environment.

Beacon Interval: Enter a value between 20-1024 milliseconds for Beacon Interval here. The beacons are the packets sent by the router to synchronize a wireless network. Beacon Interval value determines the time interval of the beacons.

IAPP: Inter-Access Point Protocol.

Short GI: This function is recommended for it will increase the data capacity by reducing the guard interval time.

STBC: Space Time Block Coding improves reception by coding the data stream in blocks.

RF Output Power: Here you can specify the rf output power of router.

4.4.3 Security

This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Wire This Keys Select	less Security page allows you will help preven t SSID: Root A	cryption c.					
	Encryption:	Disat Disat WEP WPA WPA WPA	oled led 2 -Mixed				

4.4.4 Access Control

The Wireless MAC Address Filtering feature allows you to control wireless stations accessing the router, which depend on the station's MAC addresses.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Wire	less Access Co	ontrol -wlan2	2				
If you are in Deny conne	a choose Allowed the access con Listed is selecte ect to the Acces	d Listed, only t atrol list will be ed, these wirele as Point.	hose clients whose w able to connect to y ass clients on the list	ireless MAC our Access will not be	addresses Point. When able to		
Wirel	ess Access Cont	rol Mode:	Disable 💌				
MAC A	Address:		lisable Ilow Listed				
Comn	nent	D	eny Listed				
Appl	y Reset						
Curr	ent Access Co	ntrol List:					
	MAC Addr	ess	Comment		Select		
De	lete Selected	Delete All	Reset				

Wireless Access Control Mode: If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point. The MAC Address format is 001122334455.

4.4.5 WDS

Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, firstly you must set AP Mode to WDS or AP+WDS in basic setting, then enable WDS function and set another AP MAC which you want to communicate with. The WDS supports WEP and PSK security mode. Of course in order to make APs work, you have to keep them the same channel and security mode.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
WDS	Settings -wla	n2					
Wirele APs, and s table,	ess Distribution S as Ethernet does et the MAC addr , and then enabl	System uses th s. To do this, y ress of other Al e WDS.	e wireless media to o rou must set these A Ps that you want to	communicate Ps to the sa communicat	e with other ame channel ce with in the		
E	nable WDS						
MAC A	Address:						
Data I	Rate:	Auto 🗸					
Comm	ent						
Apply	/ Reset	Set Security	Show Statistics	;			
Curre	ent WDS AP List						
	MAC Address:	Tx Ra	ite (Mbps)	Comment	Select		
De	lete Selected	Delete All	Reset				

Enable WDS: Check this box to enable WDS function.

MAC Address: Enter the remote AP MAC address.

Data Rate: Sets the maximum wireless data rate that your network will operate on. **Comment:** You can add some comment for this item.

4.4.6 Site Survey

This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.

Basic	Advance	d Security	Access Co	ontrol	WDS S	ite Survey	WPS	Schedule
Wire This I IBSS enabl	eless Site Su page provides is found, you led. e Survey	irvey -wlan2 s a tool to scan for i could choose to co	wireless net onnect to it i	works. If manually	an Access Po when client m	int or Iode is		
	SSID	BSSID	Channel	Туре	Encrypt	Signal		
	AP	00:e0:4c:81:92:d1	11 (B+G)	AP	WPA-PSK/WP A2-PSK	20		
FA	AST_9299FA	78:a1:06:92:99:fa	11 (B+G+N)	AP	no	16		
Ful	lriver WiFi 40	00:06:ac:11:22:34	8 (B+G+N)	AP	no	6		

4.4.7 WPS

WPS is designed to ease set up of security Wi-Fi networks and subsequently network management. This router supports WPS features for AP mode, AP+WDS mode, Infrastructure-Client mode, and the wireless root interface of Universal Repeater mode.

Basic	Advanced	Security	Access C	Control	WDS	Site Survey	WPS	Schedule
Wi-I	i Protected Se	tup						
This	page allows you	to change the	settings for	WPS (Wi-	Fi Protect	ed Setup).		
and e	easily and secure	ely connect to	the Access I	Point.	yncronize i	ts settings		
	Disable WPS							
Арр	ly Reset							
WPS	Status:		Configured	UnCon	figured			
			Reset to Un	Configured				
Auto	-lock-down state	e Unlocked 🛛	nlock					
Self-	PIN Number:	893	729533					
Push	Button Configura	ation:	Start PBC					
STOP	WSC		Stop WSC					
Clien	t PIN Number:			Start	PIN			

Disable WPS: Check this box and clicking "Apply" will disable WPS function. WPS is turned on by default.

WPS Status: When router's settings are factory default, it is set to open security and un-configured state, some registers such as Vista WCN can configure AP. Otherwise If it already shows "Configured", it means that the router has setup its security.

Self-PIN Number: It is AP's PIN.

Start PBC: Clicking this button will invoke the Push Button Configuration of WPS. If one station wants to connect to the AP, it must click its PBC button in two minute. You can see the WPS LED flash this time.

Client PIN Number: The length of PIN is limited to four or eight numeric digits. If the AP and Station input the same PIN and click "Start PIN" button in two minutes, they will establish connection and setup their security key.

4.4.8 Schedule

This page allows you setup the wireless schedule rule. Please do not forget to configure system time before enable this feature.

Basic	Advanced	Security	Access Control	WDS	Site Survey	WPS	Schedule
Wire	less Schedule						
This p the sy	age allows you s ystem time befor	setup the wirele e enabling this	ess schedule rule. Do feature.	not forget	to configure		
🗌 En	able Wireless Sc	hedule					
Days	:						
E	verday 🗌 Sun	Mon T	ue 🗌 Wed 🗌 Thu	Fri	Sat		
Time							
0 2	4 Hours 💿	From 00 🗸	: 00 🕶 To 00 '	~ : 00 ~	*		
Appl	Reset						

4.5 Service Setup

There are two submenus under the Server Setup menu: Port Forwarding, DMZ. Click

any of them, and you will be able to configure the corresponding function.

4.5.1 Port Forwarding

If you configure the router as Virtual Server, remote users accessing services such as Web or FTP at your local site via public IP addresses can be automatically redirected to local servers configured with private IP address. In other words, depending on the requested service (TCP/UDP port number), the router redirects the external service request to the appropriate server.

111 ² d	Port Forwarding DMZ
wizard	
Operating Mode	Port Forwarding
WAN Interface	Entries in this table allow you to automatically redirect common network services
LAN Interface	if you wish to host some sort of server such as a web server or mail server on
Wireless 5G	the private local network behind your Gateway's NAT firewall.
Wireless 2.4G	IP Address:
Server Setup	Protocol: Both 🗸
Security	Port Range:
QoS	Comment
System	Apply Reset
Status	
Logout	Current Port Forwarding Table:
Logout	Local IP Address Protocol Port Range Comment Select
	Delete Selected Delete All Reset

Enable Port Forwarding: Check this box will enable Port Forwarding function.

IP Address: That external User accesses the router will redirect to this local IP.

Protocol & Port Range: The packet with this protocol and port will be redirected to the local IP.

Comment: You can add some comment for this item.

Current Port Forwarding Table: The table shows all you have configured. You can delete one or all.

4.5.2 DMZ

If you have a client PC that cannot run Internet application properly from behind the NAT firewall or after configuring the Port Forwarding, then you can open the client up to unrestricted two-way Internet access.

Port Forwarding	DMZ	
DMZ		
A Demilitarized Z unauthorized acc contains devices FTP servers, SM	one is used to provide Internet services without sacrificing cess to its local private network. Typically, the DMZ host accessible to Internet traffic, such as Web (HTTP) servers, TP (e-mail) servers, and DNS servers.	
Enable DMZ		
DMZ Host IP Add	Iress:	
Apply Reset		

Enable DMZ: Check this box will enable DMZ function.

DMZ Host IP Address: Enter DMZ host IP Address may expose this host to a variety of security risks.

4.6 Security

The router provides extensive firewall protection by restricting connection parameters to limit the risk of intrusion and defending against a wide array of common hacker attacks.

There are four submenus under the Security menu: **Port Filtering, IP Filtering, URL Filtering, MAC Filtering**. Click any of them, and you will be able to configure the corresponding function.

4.6.1 Port Filtering

Port Filtering allows you to enable or disable TCP ports and UDP ports on computers or network devices. Port Filtering insulates your local computers form many TCP/IP security attacks, including internal attacks by malicious users.

Wizard	Port Filtering	IP Filtering	URL Filtering	MAC Filtering	
wizaru					
Operating Mode	Port Filterin	g			
WAN Interface	Entries in this	table are used t	o restrict certain ty	pes of data packets	from your
LAN Interface	local network can be helpfu	l in securing or re	stricting your local	network.	ese filters
Wireless 5G	Enable Po	ort Filtering			
Wireless 2.4G	Port Range:	[-		
Server Setup	Protocol:		Both 🛩		
Security	Comment				
0.05	Apply Res	set			
Q03					
System	Current Filte	r Table:			
	Port Ra	inge	Protocol	Comment	Select
Status					
Logout	Delete Selec	cted Delete	All Reset		

Enable Port Filtering: Check this box will enable Port Filtering function.

Port Range: The port range that you want to filter.

Protocol: The protocol that you want to filter, either TCP, UDP, or Both.

Comment: You can add some comment for this item.

Current Filter Table: The table shows all you have configured. You can delete one or all.

4.6.2 IP Filtering

IP Filtering is used to block internet or network access to specific IP addresses on your local network. The restricted user may still be able to login to the network but will not be able to access the internet. To begin blocking access to an IP address, enable IP Filtering and enter the IP address of the user you wish to block.

Port Filtering	IP Filtering	URL Filtering	MAC Filteri	ng
IP Filtering				
Entries in this local network can be helpfu	table are used to passing to the In I in securing or re	o restrict certain ty Iternet through the stricting your local	pes of data pa Gateway. Use network.	ckets from your of such filters
Enable IP	Filtering			
Loal IP Addres	ss:	-		
Protocol:	В	loth 🗸		
Comment				
Apply Res	set			
Current Filte	er Table:			
	Local IP Addres	S	Protocol C	omment Select
Delete Selec	ted Delete A	All Reset		

Enable IP Filtering: Check this box will enable IP Filtering function.

Local IP Address: The LAN device's IP address that you want to filter.

Protocol: The protocol that you want to filter, either TCP, UDP, or Both.

Comment: You can add some comment for this item.

Current Filter Table: The table shows all you have configured. You can delete one or all.

4.6.3 URL Filtering

URL filtering is used to deny LAN users from accessing the internet.

Port Filtering	IP Filtering	URL Filtering	MAC Filtering	
URL Filterin	9			
The URL filter URLs which co	is used to restric ontain keywords li	t LAN users access sted below.	to the internet. Blo	ock those
Enable UF	RL Filtering			
URL Address:				
Apply	et			
Current Filte	er Table:			
	URL Addr	ess	Sel	ect
Delete Selec	ted Delete A	Reset		

Enable URL Filtering: Check this box will enable URL Filtering function.

URL Address: The URL Address that you want to filter.

Current Filter Table: The table shows all you have configured. You can delete one or all.

4.6.4 MAC Filtering

MAC Filtering allows you to deny access to specific users connecting to the network. Each networking device has a unique address called a MAC address (a 12 digit hex number).

Port Filtering	IP Filtering	URL Filtering	MAC Filtering	
MAC Filterin	ıg			
Entries in this local network can be helpfu	table are used to passing to the In l in securing or re	o restrict certain ty iternet through the stricting your local	pes of data packets Gateway. Use of su network.	s from your uch filters
Enable M	AC Filtering			
MAC Address:	:]	
Comment				
Apply Res	set			
Current Filt	er Table:			
	MAC Address	C	omment	Select
Delete Selec	cted Delete A	All Reset		
Enable MAC Filteri	ng: Check this bo	ox will enable MAC	Filtering function.	

MAC Address: The LAN device's MAC address that you want to filter.

Comment: You can add some comment for this item.

Current Filter Table: The table shows all you have configured. You can delete one or all.

4.7 QoS

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

In order to complete this settings, please follow the steps below.

- 1. Enable this function.
- 2. Enter the total speed or choose automatic mode.
- 3. Enter the IP address or MAC address user want to control.
- 4. Specify how to control this PC with this IP address or MAC address, include Maximum or minimum bandwidth and its up/down speed.
- 5. Click Apply button to add this item to control table.

weend (205	
wizard		
Operating Mode	QoS	
WAN Interface	Entries in this table improve your on	line gaming experience by ensuring that your
LAN Interface		network trainc, such as FTP or web.
Wireless 5G	Mode:	Bandwidth Shaning WEQ
Wireless 2.4G	Uplink Speed (Kbps):	
Server Setup	Downlink Speed (Kbps):	512
Security	QoS Rule Setting:	
QoS	Address Type:	● IP ○ MAC
System	Local IP Address:	
	Protocol:	udp 😪
Status	Local Port:(1~65535)	-
Logout	MAC Address:	
	Weight	
	Mode:	Restricted maximum bandwidth 🔽
	Uplink Bandwidth (Kbps):	
	Downlink Bandwidth (Kbps):	
	Apply Reset	
	Current QoS Rules Table:	
	Local IP MAC Mode Valid Address Address	Uplink Downlink Weight Select Bandwidth Bandwidth
	Delete Selected Delete All	Reset

4.8 System

There are six submenus under the System menu: **Time Zone Setting, Upgrade Firmware, Save/Reload Settings, Password, Reboot, Language**. Click any of them, and you will be able to configure the corresponding function.

4.8.1 Time Zone Setting

You can maintain the system time by synchronizing with a public time server over the Internet.

	Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
Wizard						
Operating Mode	Time Zone Setti					
WAN Interface	You can maintain the Internet.	the system time by synchro	onizing with a public time serv	er over		
LAN Interface Wireless 5G	Current Time: Y	2014 Mon 4 Day 15	Hr13 Mn46 Sec 54]		
Wireless 2.4G	L	Copy Computer Time				
Server Setup	Time Zone Select:	GMT+08:00)Taipei		~		
Security	Enable NTP cl	ient Update				
QoS	Automatically	Adjust for Daylight Saving				
System	NTP server:	0.0.0.0 (Man	ual IP Setting)			
Status Logout	Apply Reset	Refresh				

Copy Computer Time: Enter your PC's current time into the above blanks.

Time Zone select: Select your local time zone from this pull down list.

Enable NTP client Update: Check this box to connect NTP Server and synchronize internet time.

NTP Server: Select the NTP Server, then the router will get the time form the NTP Server preferentially.

4.8.2 Upgrade Firmware

You can upgrade latest Firmware in this page.

Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
Upgrade Firmwa	re				
This page allows yo Please note, do not system.	ou to upgrade the Access t power off the device du	Point firmware to the latest ring the upload as it may cra	version. sh the		
Firmware Version:	WF	1044v11a.12.01AC-C			
Select File:		Browse.			
Upload Reset					

Firmware Version: This displays the current firmware version.

4.8.3 Save/Reload Settings

You can backup or restore the system configuration in this page.

Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
Save/Reload Set	ttinas				
This page allows yo from a file that was configuration to fac	ou to save current setting s saved previously. You c ctory defaults.	is to a file or reload the settir an also reset the current	ngs		
Save Settings to F	ile: Save				
Load Settings from	File:	Browse Uploa	d		
Reset Settings to [Default: Reset				

Save Settings to File: Get the router's settings and store it in your local computer. **Load Settings from File:** Restore the settings from the file you backup before from your local computer, the router will go to the former settings.

Reset Settings to Default: Restore the system settings to factory default.

4.8.4 Password

To ensure the router's security, you will be asked for your password when you access the router's Web-based Utility. The default user name and password is **"admin"**. This page will allow you to modify the User name and passwords.

Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
Password Setup					
This page is used t Point. An empty us	o setup an account to ac er name and password wi	cess the web server of the A II disable password protection	ccess		
User Name:					
New Password:					
Confirm Password:					
Apply Reset]				

4.8.5 Reboot

You can reboot device via clicking the **Apply** button.

Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
			_		
Reboot	upply button to report the	routor			
		router.			
Apply					
Apply					

4.8.6 Language

You can select Language in this page.

Time Zone Setting	Upgrade Firmware	Save/Reload Settings	Password	Reboot	Language
Language Settin	g				
Language	English 🔽				
Apply Reset					

Chapter 5 Status

There are three submenus under the Status menu: **Status, Statistics, Log**. Click anyone, you will see the following status.

5.1 Status

The System Status provides you with a snapshot of your router's current connections and settings.

The System Information section provides you with the router's firmware version and build. This is used to help our support department determine what firmware version your device is running. The Current Date / Time is the setting for the system clock.

The Wireless Configuration shows the details of the 5.0GHz and 2.4GHz wireless networks.

The TCP/IP Configuration displays the current configurations for local network IP address and DHCP server settings.

The WAN Configuration displays the information from your Internet Provider. If for some reason your Internet connection stops working, you may try running through the Smart Setup Wizard again.

Winned	Status	Statistics	Log	
wizaru				
Operating Mode	Acces	s Point Status		
WAN Interface	This pa	ige shows the c	urrent sta	atus and some basic settings of the device.
	Syste	m		
LAN Interface	Uptime	1		0day:0h:1m:41s
Wireless 5G	Firmwa	are Version		WR1046v11a.12.01AC-C
Wireless 2.4G	Build T	ime		Tue, 15 Apr 2014 11:43:52 +0800
	Wirele	ss 1Configura	tion	
Server Setup	Mode			AP
Security	Band			5 GHz (A+N+AC)
0.05	SSID			RTK 11n AP 5G
1200	Channe	el Number		44
System	Encryp	tion		Disabled
	BSSID			00:e0:5c:81:92:c2
	Associ	ated Clients		0
Status	Wirele	ss 2Configura	tion	
Logout	Mode			AP
	Band			2.4 GHz (B+G+N)
	SSID			RTK 11n AP 2.4G
	Channe	el Number		11
	Encryp	tion		Disabled
	BSSID			00:e0:5c:81:92:d2
	Associ	ated Clients		0
	тср/і	P Configuration	n	
	Attain	IP Protocol		Fixed IP
	IP Add	ress		192.168.1.1
	Subne	t Mask		255.255.255.0
	Defaul	t Gataway		192.168.1.1
	DHCP 5	Server		Enabled
	MAC A	ddress		00:e0:4c:81:96:c1
	WAN	Configuration		
	Attain	IP Protocol		Getting IP from DHCP server
	IP Add	ress		0.0.0.0
	Subnet	t Mask		0.0.0.0
	Defaul	t Gataway		0.0.0.0

5.2 Statistics

This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.

The Wireless 1/2 LAN connection statistics shows all data activity for both the 5.0GHz and 2.4GHz wireless networks separately.

The Ethernet LAN connection statistics shows all data activity for all users physically connected to the wired ports on the router.

The Ethernet WAN connection statistics shows the data activity for all upload and download data over your Internet connection.

atus	Statisti	cs Log			
Statis	tics				
This pa wireles	age shows f s and Ether	the packet co rnet networks	unters f	or transmissio	on and reception pertaining to
		Sent Packe	ts	0	
WIREIESS 1LAN		Received P	ackets	2682	
Wireless 2LAN		Sent Packe	ets	75	
		Received P	ackets	3180	
C the area		Sent Packe	ts	581	
Ethem	et lan	Received P	ackets	532	
Se Se		Sent Packe	ts	182	
Ethem	et wan	Received P	ackets	0	
Refres	h				

5.3 Log

The System Log is useful for viewing the activity and history of your router. The System Log is also used by Amped Wireless technicians to help troubleshoot your router when needed. It is recommended that you enable logs in the event that troubleshooting is required. Click the **"Refresh"** to update the log. Click **"Clear"** to clear all shown information.

atus Statistics	Log		
System Log			
This page can be used Enable Log	l to set a remote log serv	ver and view the system log.	
System All	Wireless	DoS	
Apply			
L			

Enable Log: Click this box to enable Log.

Chapter 6 Logout

Wizard	Logout
wizaru	
Operating Mode	Logout
WAN Interface	This page is used to logout.
LAN Interface	Do you want to logout ?
Wireless 5G	Apply
Wireless 2.4G	
Server Setup	
Security	
QoS	
System	
Status	
Logout	

Choose "Logout", and you will be back to the login screen.

Chapter 7 FCC ID Warning:

To operate the equipment

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT.SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

NOTE: 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 RF radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. To comply with FCC RF exposure compliance requirements, this grant is applicable to only Mobile Configurations. The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter."