RT880 Wireless Router&Access Point



User Manual

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Chapter 1: Product Overview 1.1 Introduction

Thanks for purchasing RT880 broadband router. This router, equipped with the latest 4G and Wireless-N technology, is a full function network equipment. It can support you to freely access network connection in different occasions, such as meeting, exhibition, factory, or home. When using SIM card to access network, you could also make phone calls or send text messages simultaneously. RT880 has extraordinary performance, and is very easy to use and manage. It supports multiple devices sharing one broadband link and ISP account, to offer you great convenience and cost efficiency. In the meanwhile, it provides multiple management functions, to configure system, DHCP server, firewall, static route table. RT880 broadband router is easy to configure, so non-professionals could configure the device. Before you start to configure RT880, please read this user guide, to fully understand the functions of RT880.

1.2.1 Product Layout





Number	LED	Description
1	Power	When build-in battery has low power, the light is yellow. When power is on or the build-in battery is full, the light is green.
2	WIFI	Light up in green when WIFI is enabled; blink when data transfer.
3	Internet	Light up in green when Internet is enabled. Blink when data transfer.
4	USB	Light up in green when USB is inserted.
5	Tel	Light up in green when you make a phone call.
6	Signal	Show signal strength.

Number	Connections	Description
		Connect Power to DC-Jack 5V/3A Power Adapter. Using power
7	Power Adapter	supplies with a different voltage from the one included with the
		RT880 will cause damage and void the warranty.
0	UCD	Insert flash drive for file sharing only. No address info is
8	USB	exchanged between device and PC/LAPTOP by a USB cable.
9	LAN1-4	LAN ports provide connections to Ethernet enabled devices.
10	M7 A NT	WAN port provides connection to the Ethernet cable or DSL
10	WAN	modem.
11	TEL	Connect the telephone

Number	Connections	Description
12	SIM	Connect SIM card.
13	T-Flash	Insert T-Flash for file sharing, up to 64GB.
14	WPS	Click this button to start WPS encryption.
15	LED	Turn on/off front and back LED light.
16	Power	Turn on/off the router.
17	Pagat	Press the reset button 3 seconds to restore the device to its factory
1/	Keset	default settings.

Chapter 2: Quick Setup Guide

2.1 System Requirements

- Ethernet ADSL/Cable with an Ethernet port (RJ-45) **OR** Internet SIM card
- Computer with Windows, Macintosh, or Linux-based operating system with an installed Ethernet adapter.
- Internet Explorer version 8.0 or above, Google Chrome, Safari, Firefox, Opera.

2.2.1 RT880 Placement

You can place RT880 on a desk or other flat surface. Please keep RT880 away from heating. For optimal performance, please place your RT880 in the center of your home (office), in a location that is away from any potential interference source, such as metal walls or microwave oven.

2.2.2Network Setup

2.2.2.1 WAN Setting



- 1) Connect Ethernet cable between your PC/Notebook and one of the four available LAN ports on RT880.
- Connect Ethernet cable between WAN ports of your ADSL/CABLE modem and WAN port of RT880. Please make sure your ADSL/CABLE modem is working properly. Contact your ISP if you have any question.
- 3) Power up RT880.

2.2.2.2 3G/4G Setting

When using SIM card to access network, you could also make phone calls or send text messages.



- 1) Insert SIM card into the port.
- 2) Power up RT880. Press Power button, then front panel will light up and remain stable.

Chapter 3: Product Setting

3.1Configuration wizard

3.1.1 TCP/IP Setting

Enter [Start Menu]—Select [Control panel]—Select [Network]—Select [Local Area Connection]—Select [Properties]



Select [Internet Protocol (TCP/IP)]—Click [Properties]

Realtek	PCIe GBE Family Controller	
		Configure
This connectio	n uses the following items:	
Micros	soft LLDP Protocol Driver	No. Contraction of the local sector
✓	soft LLDP Protocol Driver ayer Topology Discovery Map ayer Topology Discovery Res et Protocol Version 6 (TCP/IP) et Protocol Version 4 (TCP/IP)	per I/O Driver ponder v6) v4)
✓ Micros ✓ Micros ✓ Link-L ✓ ▲ Link-L ✓ ▲ Intem ✓ ▲ Intem ✓ Install	soft LLDP Protocol Driver "ayer Topology Discovery Map "ayer Topology Discovery Res et Protocol Version 6 (TCP/IP) et Protocol Version 4 (TCP/IP) Uninstall	per I/O Driver ponder v6) v4) >
	soft LLDP Protocol Driver "ayer Topology Discovery Res ayer Topology Discovery Res et Protocol Version 6 (TCP/IP) et Protocol Version 4 (TCP/IP) Uninstall	per I/O Driver ponder r6) (4) v Properties

RT880 supports [DHCP] function, please select both [Obtain an IP address automatically] and [Obtain DNS server address automatically].

Seneral	Alternate Configuration					
You car this cap for the	n get IP settings assigned a bability. Otherwise, you ne appropriate IP settings.	automatica ed to ask	ally if your r	your n networ	etwork k admi	supports nistrator
	btain an IP address automa	atically				
OU	se the following IP address	:				
IP a	ddress:		3	- W	\tilde{V}	
Subr	net mask:					
Defa	ult gateway:		9	8	<i>1</i> .	
	btain DNS server address a	automatica	lly			
-OU:	se the following DNS server	r addresse	s:			
Pref	erred DNS server:		4	a.	12	
Alter	mate DNS server:		4		í.	
V	alidate settings upon exit				Adv	/anced

3.1.2 Log In

Whenever you want to configure your network or the RT880, you can access the Configuration Menu by opening the web-browser and typing in the IP Address of the RT880.

For example, <u>http://192.168.1.1</u> Note: If you changed the default IP Address assigned to the RT880, make sure to enter the correct IP Address.



You will go to the overview and log in page. The Factory default user name and password are **admin.** It is recommended to change the admin password for security purpose. Please refer to Administrator Settings to change the admin password.

User Login Account	3G/4G		<u>^</u>
admin	Modem Status	Modem Ready	
Password	ISP	China Unicom	
•••••	REG Status	Home/Home	E
	Signal Strength	-85	
Login	Signal Type	UMTS	
	Cell Broadcast	N/A	_
	WAN		
	Connected Type	3G/4G	
	WAN IP Address		
	Subnet Mask		

3.2 Internet Setting3.2.1 WAN Mode Setting

- 1) Select "Wizard. Click
 - "Next".



2) Choose you Internet Access Type and click "Next."

Overview	Wizard Internet Settings
Wizard	
Internet Settings	WAN
Wireless Settings	Choose this, user need to configure WAN Settings.
Firewall	○ 3G/4G
3G/4G Modem	Choose this, user need to configure 3G/4G Settings.
Storage	
Administration	Back Next Cancel Apply

3) If you choose WAN internet type, please select the type of internet connection for your router. Choose the appropriate selection and click "Next."

Overview	Wizard Internet Settings
Wizard	
Internet Settings	Choose this ISP automatically configure this device.
Wireless Settings	Static Mode (fixed IP)
Firewall	Choose this, user need to configure this device manually.
3G/4G Modem	O PPPOE (ADSL)
Storage	Choose this, user must input a username and password for ISP authenticator.
Administration	L2TP Client
	PPTP PPTP Client
	Back Next Cancel Apply

• DHCP: A dynamic IP address connection that configures the router to automatically obtain IP address from a DHCP server on the ISP's network. Enter the name for your wireless network (SSID) and security key. For safety, we suggest you choose WEP, WPA-PSK/WPA2-PSK for encryption.

Overview	Wizard Internet Settings			
	Marley Cation			
Internet Settings	Network Name (SSID)		(
Wireless Settings	Security		Dicable	×
Firewall	Security		Disable	
3G/4G Modem	Back	Cancel	WEP	
Storage		cuncer	WPA-PSK/WPA2-PSK	
Administration				

• Static Mode: Please enter the IP address information provided to you by your ISP. The Subnet Mask for RT880 is preconfigured to 255.255.255.0. Other configurations can be made, but not recommended. This feature is for advanced users. Your ISP should also provide the Default Gateway, Primary DNS and Secondary DNS (optional).

Wizard Internet Settings	
Chulo Mada (Guid ID)	
Static Mode (fixed IP)	
IP Address	192.168.1.100
Subnet Mask	255.255.255.0
Default Gateway	
Primary DNS	168.95.1.1
Secondary DNS	8.8.8.8
	Wizard Internet Settings Static Mode (fixed IP) IP Address Subnet Mask Default Gateway Primary DNS Secondary DNS

 PPPoE: Please enter the PPPoE username and password assigned by your ISP. Choose the Operation Mode; enable the Keep Alive option to automatically re-establish the connection when an application attempts to access the Internet again. The On Demand Mode Idle Time is a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is in activate longer than the Maximum Idle Time, it will be dropped.

Overview	Wizard Internet Settings	
Internet Settings	PPPot Mode	
Wireless Settings	User Name	
Firewall	Password	
3G/4G Modem	Verify Password	
Storage	Operation Mode	Keep Alive
Administration	Redial Period	60 seconds
	On Demand Mode Idle Time	5 minutes
	Back Next Canc	el Apply

• L2TP: If your ISP using L2TP to provide your Internet connection, the ISP will give you the necessary information to configure the router. Please enter Server IP Address, User Name, Password, you IP Address, Subnet Mask, Default Gateway. Choose Address Mode and Operation Mode. Enter a Redial Period which Internet connection is maintained during inactivity. Then click

"Apply."

Overview	Wizard Internet Settings			
Internet Settings	L2TP Mode			
Wireless Settings	L21P Server IP Address			
Firewall	User Name			
3G/4G Modem	Password			
Storage	Address Mode	Static	*	E
Administration	IP Address			
Administration	Subnet Mask			
	Default Gateway			
	Operation Mode	Keep Alive	*	
	Keep Alive Mode Redial Period	60 sec	onds	

• PPTP: PPTP allows the secure connection over the Internet by simply dialing in a local point provided by your ISP. Enter Server IP Address, User Name, Password, you IP Address,

Subnet Mask, Default Gateway. Choose Address Mode and Operation Mode. Enter a Redial Period in which Internet connection is maintained during inactivity.

Overview	Wizard Internet Settings			
Wizard				
Internet Settings	PPTP Mode			
Wireless Settings	lizer Name			
Firewall	Deserverd			
3G/4G Modem	Address Made	Static		
Storage		Static		=
Administration	School Made			
	Derault Gateway	14 A 14	1.0	
	Operation Mode	Keep Alive	v	
	Keep Alive Mode Redial Period	60 sec	onds	

3.2.2 SIM Card Setting

If you choose 3G/4G SIM card to access the network, please enter "APN,""Dial Number" "Auth," user name and password, which are provided by your mobile network operator. Click "Default" and "Next."

Overview	Wizard Internet Settings		
Internet Settings	Account User	Custom 👻	Default
Wireless Settings	APN		
Firewall	Dial Number		
3G/4G Modem	User Name		
Storage	Password		
Administration	Auth	E 🗸	
SMS			
	Back	Cancel Appl	y

3.2.3 WAN

You will be prompted to select the type of internet connection for your router. If you are an entry-level user, please do not change any of these settings.

Overview	WAN Settings	
Wizard		
Internet Settings	WAN Connection Type	DHCP (Auto Config)
Internet Type	Hostname	
WAN		
LAN		Apply Cancel
DHCP		Apply
DHCP Static		
DHCP Clients		
Advanced Routing		

3.2.4 LAN

The LAN Tabs reveals LAN settings that can be altered at will. If you are an entry-level user, try accessing a website from your browser. If you can access website successfully, please do not change any of these settings.

Overview	LAN Settings	
Wizard	IP Address	192.168.1.1
Internet Setangs Internet Type WAN LAN DHCP DHCP Static DHCP Clients Advanced Routing	Subnet Mask	255.255.255.0 Apply Cancel

3.2.5 DHCP

The DHCP will automatically assign an IP address to the computers on the LAN private network. Be sure to set your computer to be DHCP clients by setting their TCP/IP settings to "Obtain an IP Address Automatically." When you turn you computer on, they will automatically load the proper TCP/IP settings provided by the RT880. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Overview	DHCP Settings	
Wizard		
Internet Settings	DHCP Type	Server 🗸
Internet Type	Start IP Address	192.168.1.100
WAN	End IP Address	192.168.1.200
LAN	Subnet Mask	255.255.255.0
DHCP Static	Primary DNS	168.95.1.1
DHCP Clients	Company DNIS	0.0.0
Advanced Routing	Secondary DINS	8.8.8.8
Vireless Settings	Default Gateway	192.168.1.1
Firewall	Lease Time	86400 seconds
3G/4G Modem		
Storage		Apply Cancel
Administration		

3.2.6 DHCP Static

RT880 supports static IP address assignment.

Overview	DHCP Static Settings		
Wizard	NO		10
Internet Settings	NO.	MAC	IP
Internet Type WAN	2.		
LAN DHCP	3.		
DHCP Static			
DHCP Clients Advanced Routing		Apply	Cancel

3.2.7 DHCP Clients

This page shows all DHCP clients (LAN PCs) currently connected to your network.

Overview	DHCP Clients			
Wizard			10.4.1.1	
Internet Settings	bm-PC	20:CF:30:90:BE:7E	192.168.3.100	23:57:39
Internet Type				
WAN				
LAN				
DHCP				
DHCP Static				
DHCP Clients				
Advanced Routing				

3.2.8Advanced Routing

You can set enable Static Routing to let the router forward packets by your routing policy. Enter the destination LAN IP address, Default Gateway and Interface of static routing rule

Overview	Add Static Routing Current	Routing Table Dynamic Ro	outing Settings	
Wizard	Destination			
Internet Type WAN LAN DHCP DHCP Static DHCP Clients Advanced Routing	Range Gateway Interface	Host	~	
Wireless Settings		Apply	Reset	
Wizard	Add Static Routing Current	Routing Table Dynamic Ro	uting Settings	
Internet Settings Internet Type WAN LAN DHCP DHCP Static DHCP Clients Advanced Parting	No. Destination 1 255.255.255.255 2 192.168.3.0 3 192.168.2.0 4 0.0.0.0	Netmask 255.255.255.255 255.255.255.0 255.255.255.0 0.0.0.0 Delete	Gateway 0.0.00 0.0.00 0.0.00 192.168.2.1 Reset	Interface LAN(br0) LAN(br0) WAN(eth2.2) WAN(eth2.2)

RIP (Routing Information Protocol) is a distance-vector protocol that uses hop count as its metric. RIP is widely used for routing traffic in the global Internet and is an interior gateway protocol (IGP), which means that routing is done within a single autonomous system.



3.3Wireless Setting

3.3.1Basic Setting

You can set parameters that are used for the wireless stations to connect to this router. The parameters include Network Mode, SSID, AP Isolation and Frequency. Enables the wireless network name to be broadcast publicly to any wireless users within wireless range of your network. Disabling the SSID broadcast makes the network name private and provides enhanced security by requiring wireless users to enter the network name manually when

creating a wireless network profile on their computer. If you enable AP Isolation every client on your guest Wi-Fi network will be totally isolated from each other.

Basic	
WiFi ON/OFF	WiFi OFF
Network Mode	11b/g/n mixed mode
	R610
Network Name(SSID)	Hidden 🗌 Isolated 🗌
Broadcast Network Name (SSID)	● Enable ○ Disable
AP Isolation	◯ Enable ④ Disable
BSSID	80:FF:FF:FF:FF
Frequency (Channel)	2412MHz (Channel 1)
Appl	v Cancel
	Basic WiFi ON/OFF Network Mode Network Name(SSID) Broadcast Network Name (SSID) AP Isolation BSSID Frequency (Channel)

3.3.2 Wireless Security Setting

Choose your wireless network (SSID) and security key. For safety, we suggest you choose WPA-PSK/WPA2-PSK for encryption.

Overview	Wireless Security Settings	Access Policy		
Wizard	and the second s	n		1.00
Internet Settings	SSID Choice		123456	*
Wireless Settings	Security Mode		WPAPSKWPA2PSK	*
Basic	WPA Algorithms		⊖TKIP ⊖AES ⊙	TKIPAES
Security	Pass Phrase		123456789	
WDS	Key Renewal Interval		3600	
WPS Firewall	Rey Renewar Interval		seconds (0 ~ 4194	303)
3G/4G Modem			Apply Can	cel
Storage				
Administration				

RT880 router supports wireless access policy setup. Enter the wireless clients' MAC address which you would like to disable or enable access to the router.

Overview	Wireless Security Settings	Access Policy
Wizard		
Internet Settings	Policy	Disable
Wireless Settings	MAC Address	
Basic Security WDS WPS		Apply Cancel

3.3.3 WDS

Overview	WDS Settings		
Wizard			1.0
nternet Settings	WDS Mode	Disable	~
Wireless Settings Basic		lazy Mode Bridge Mode	
Security		Repeater Mode	
WPS			

- Repeater Mode: When you choose repeater mode, each router is on its own subnet with its client devices. Allows different SSID on repeated network.
- Bridge Mode: the device in bridge mode can act as a bridge and also filter/inspect
 packets. It has all the interfaces belonging to the same LAN segment and you do not
 have to change other network setting when you add a transparent device to the network.
 It is usually used for connecting a private network behind an existing firewall or a
 router.
- Lazy Mode: the router will automatically search the nearby routers that have the same SSID, Port, security mode and PHY mode.

Note: To obtain good compatibility, please use the same type of products.

3.3.4 WPS

WPS is the simplest way to establish a connection between the wireless clients and the wireless router. You do not have to select the encryption mode and fill in a long encryption passphrase every time when you try to setup a wireless connection. You only need to select enable on WPS configuration and press a button on wireless.

Overview	WPS Config			
Wizard	LUIDE.	P: 11	les!	
Internet Settings	WPS	Disable	*	
Wireless Settings		Disable		
Basic Security WDS WPS	Apply			

WPS menu displays the current state of WPS, WPS current recognition information, SSID's name, WPS authorization mode, WPS encryption type, WPS encryption key, AP random password, etc.." Generate "Generate Reset" of box "configure out," OOB ", the 8 bit password that is currently generated randomly, and the new password can be retrieved.

Overview	WPS Config	WPS Summary	WPS Progress	WPS Status	
Wizard	14/05 0			• 0	
Internet Settings	WPS Curren	nt Status:		Idle	
Wireless Settings	WPS COMING	WPS SSID:			
Basic	WPS Auth M	Mode:		WPA-PSKWPA2-PS	sk
Security	WPS Encry	р Туре:		TKIPAES	
WPS	WPS Defau	lt Key Index:		2	
Firewall	WPS Key(A	SCII)		159357258	
3G/4G Modem	AP PIN:			67772155	generate
Storage					
Administration	Reset O	OB			

3.4Firewall

3.4.1 MAC/IP/Port Filtering

a) Click enable if you want to open the filters.

Overview	Basic Settings MAC/IP/Port Filtering Current MAC/IP/Port Filtering Rules In Syste	m
Wizard		100
Internet Settings	MAC/IP/Port Filtering Disable	~
Wireless Settings	Default Policy The packet that don't match with any rules would be Droppe	d ¥
Firewall		
MAC/IP/Port Filtering Port Forwarding	Apply Reset	

- MAC Filters are used to deny or allow LAN computers from accessing the Internet and network by their MAC address.
- IP filters can allow or deny computers access to the Internet based on their IP address.
- Port filters can allow or deny computers access to the Internet based on their ports.
- b) Enter at least one option below, to allow or deny computer access to Internet.

Overview	Basic Settings	MAC/IP/Port Filtering	Current M	AC/IP/Port	Filtering F	Rules In Syste	m
Wizard	and the store		Hard and a second second		-		
Internet Settings	Source MAC	Address					
Wireless Settings	Dest IP Add	ress					
Firewall	Source IP Ac	ldress					
MAC/IP/Port Filtering	Protocol			None		*	
Port Forwarding	Dest Port Ra	nge					
DMZ System Security	Source Port	Range			•		1
Content Filtering	Action			Accept		*	
3G/4G Modem	Comment			-		_	
Storage	(The maximu	im rule count is 32.)					
Administration							
			Apply	Re	eset		

c) List of current MAC/IP/Port filtering rules in system.

Overview	Basic Settings	MAC/IP/Port Fil	tering Cu	rrent MAC/IF	/Port Filterin	g Rules In	System		
Wizard			1						
Internet Settings	No. Source	MAC Dest IP	Source	P Protocol	Dest Port	Port	Action	Comment	Pkt
Wireless Settings			Other	would be d	ropped	Range			-
Firewall					. oppro				
MAC/IP/Port Filtering Port Forwarding			D	elete Selected	Res	et			

3.4.2 Port Forwarding

Port Forwarding: use the Port Forwarding (Virtual Server) function when you want different servers/client in your LAN to handle different service/Internet application type (e.g. Email, FTP, Web Server etc) from the Internet.

Overview	Port Forwarding	Port Forwarding Rules	Virtual Server	Virtual Server Rules
Wizard				M
Internet Settings	Port Forwardin	g	Disable	*
Wireless Settings	IP Address			
Firewall	Port Range			-
MAC/IP/Port Filtering	Protocol		TCP/UDP	~
Port Forwarding	Comment			
DMZ System Security Content Filtering	(The maximum	rule count is 32.)		
3G/4G Modem			Apply	Reset

List of port forwarding

rules.

Overview	Port Forwarding	Port Forwarding Rules	Virtual Server	Virtual Server Rules	
Wizard		15 4 14	00		· ·
Internet Settings	No.	IP Address	Port Kange	Protocol	Comment
Wireless Settings			elete Selected	Reset	
		10			
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering					

Virtual server

The Virtual Server allows you to re-direct a particular service port number (from the Internet/WAN Port) to a particular LAN private IP address and its service port number.

Overview	Port Forwarding Port Forv	varding Rules Virtual Serve	er Virtual Server Rules
Wizard			land land
Internet Settings	Virtual Server	Disable	Y
Wireless Settings	IP Address		
Firewall	Public Port		
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering	Private Port Protocol Comment (The maximum rule count	TCP/UDP	×.
3G/4G Modem			
Storage		Apply	Reset
Administration			

rules.

Overview	Port Forw	arding Port Forv	warding Rules Vir	tual Server	Virtual Server	Rules	
Wizard	No	TD Address	Dublis Dart	D .1.11	. D	internal.	Comment
Internet Settings	NO.	IP Address	Public Port	Privat	te Port P	rotocol	Comment
Wireless Settings			Delet	e Selected	Reset		
Firewall							

3.4.3 DMZ

If you have a client PC that cannot run an Internet application (e.g. Games) properly due to the NAT firewall, then you can release the firewall restrictions to unrestricted two-way Internet access by defining a DMZ Host. The DMZ function allows you to re-direct all packets going to your WAN port IP address to a particular IP address in your LAN.

Overview	DMZ Settings		
Wizard		and the local	
Internet Settings	DMZ Settings	Disable	
Wireless Settings	DMZ Address		
Firewall			TCP Port 80 Excluded
MAC/IP/Port Filtering Port Forwarding DMZ		Apply Reset	

3.4.4 System Security

Overview	System Security Settings Service Fire	wall Settings	
Wizard			
Internet Settings	Remote Management (via WAN)	Oeny Allow	
- internet octaings	Ping From WAN Filter	⊙ Disable ○ Enable	
Wireless Settings	Block Port Scan	⊙ Disable ◯ Enable	
Firewall	Block SYN Flood	⊙ Disable ◯ Enable	
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering	SPI Firewall Apply Rese	⊙ Disable ○ Enable	

The RT880 router's firewall can block common hacker attacks, including:

- Remote Management: Remote management allows you to manage the router from a remote location.
- Ping From WAN Filter: The router's WAN port will not respond to any ping requests.
- Block Port Scan: Protects the router from port scans.
- Block SYN Flood: Protects the router from SYN flood attack.
- SPI Firewall: Allows for robust protection from malicious attacks over the internet. There is Service Firewall Settings ,it can way to config security for specific services, like HTTP, FTP and Telnet.

Overview	System Security Settings S	ervice Firewall Settings	
Wizard	Services	LAN	WAN
nternet Settings	НТТР	Enable	Enable
Vireless Settings	FTP	Enable	Enable
Firewall	Telnet	Enable	Enable
MAC/IP/Port Filtering Port Forwarding DMZ System Security	Apply	Reset	

3.4.5 Web Content Filter

These security options in RT880 can block websites from installing add-ons.

Overview	Webs Content Filter	Add URL Filter	URL Filters	Add Host Filter	Website Host Filters	
Wizard	-1			II. CONTRACTOR CONTRACTOR	1	
Internet Settings	Filters		a ActiveX			
Wireless Settings	Apr	ly Res	et			
Firewall			572.			
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering						

You can block access to some websites from particular PCs by entering a full URL address of the

website.

Overview	Webs Content Filter	Add URL Filter	URL Filters	Add Host Filter	Website Host Filters
Wizard					0
Internet Settings	URL				
Wireless Settings					
Firewall	Ado	t Kes	et		
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering					

List of URL

filters.

Overview	Webs Conte	nt Filter	Add URL Filter	URL Filters	Add Host Filter	Website Host Filters	
Wizard	Ne	LID		1			
Internet Settings	NO	UK					
Wireless Settings		Dele	te Res	et			
Firewall							
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering							

You can block access to some websites from particular PCs by entering keywords of the website

hosts.

Overview	Webs Content Filter	Add URL Filter	URL Filters	Add Host Filter	Website Host Filters	
Wizard			1	1		
Internet Settings	Keyword					
Wireless Settings		d Par	at l			
Firewall	Ad	u Kes	et			
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering						

List of website host

filters.

Overview	Webs Conten	t Filter Add URL Filter	URL Filters	Add Host Filter	Website Host Filters
Wizard					
Internet Settings	No	Host(Keyword)			
Wireless Settings			Delete	Reset	
Firewall					
MAC/IP/Port Filtering Port Forwarding DMZ System Security Content Filtering					

3.5 3G/4G

3.5.1.1 3G/4G Setting

If you choose 3G/4G SIM card to access network, please set "APN,""Dial Number," "Auth," User Name and Password which are provided by your mobile network operator, and click

'Appl	ly.
-------	-----

Overview	3G/4G Settings Operation N	Node Settings Antenna Set	ttings
Wizard		5 I	0 1
Internet Settings	Account	System	~
Wireless Settings	APN	cmnet	
Firewall	User Name		
3G/4G Modem	Password		
3G/4G 3G/4G Status Call Management	Auth Roaming Network	NONE ⊜Yes ⊛No	~
Pin Management Storage			
		~ppij	

3.5.1.2 Operation Mode Setting

There is way to config operation mode to auto or manual.

Verview	3G/4G Settings Operat	tion Mode Settings	Antenna Sett
zard			
ernet Settings	Operation Mode	Automatic	*
Wireless Settings		Automatic	
Firewall		Manual	
3G/4G Modem			
3G/4G			
3G/4G Status Call Management			
Pin Management			

3.5.1.3 Antenna Setting

Antenna: choose External/Internal Antenna. RT880 is equipped with internal Antenna, but you can connect External Antennal if needed.

Overview	3G/4G Settings Antenna Settings
Wizard	
Internet Settings	External Antenna 🔘
Wireless Settings	Internal Antenna 💿
Firewall	Apply Carcel
3G/4G Modem	Appy Carcer
3G/4G 3G/4G Status	
Storage	
Administration	

3.5.2 3G/4G Status

3G/4G status allows you to monitor the current wireless connection status, such as Modem Status, SIM Card Status, Net Info; you can also choose you network mode.

3.5.2.1 Modem Status

This page shows the status of 3G modem, device IMEI and power level as below gage:

Overview	Modem Status	Sim Card Status	Net Info	NetWork Mode	
Wizard					
Internet Settings	Modem IMEI/N	VEID 3	5518903655	ay 54568 / NO MEID	
Wireless Settings	Power Level	н	ligh		
Firewall	Back Hom	0			
3G/4G Modem	Duck Hom				
3G/4G 3G/4G Status					

3.5.2.2 SIM Card Status

This page shows the status of the SIM card status, IMSI and cell broadcast:

Overview	Modem Status	Sim Card Status	Net Info	NetWork Mode			
Wizard		-					
Internet Settings	IMSI	4	im Ready	57856			
Wireless Settings	Cell Broadcast	N	N/A				
Firewall	Pack Home						
3G/4G Modem	Back Home						
3G/4G 3G/4G Status							

3.5.2.3 Net Info

This page shows the registration information of the network, including the operator information, the registered domain, the signal strength and the network

Overview	Modem Status Sim Card Statu	us Net Info NetWork Mode
Wizard	100	
Internet Settings	REG Status	CMCC Home/Home
Wireless Settings	Signal Strength	-53
Firewall	Signal Type	LTE
3G/4G Modem	Back Home	
3G/4G 3G/4G Status		

3.5.2.4 Network Mode

There is way to set the network mode. And the option can work only when the SIM card is inserted and the 3G/4G is not connected to the network.

Overview	Modem Status	Sim Card Status	Net Info	NetWork Mode	
Wizard					1
Internet Settings		NetWork M	ode AUTO		~
Wireless Settings					
Firewall				Apply	
3G/4G Modem		Could	d only chang	je netmode when c	disconnected!
3G/4G					
3G/4G Status					
Pin Management					

3.5.3 Call Management

Call forwarding : Here you can set the call forwarding number (forward unconditionally, forward on "no answer", forward on "out of reach", forward on "busy").

This feature requires operators to support, when the call is transferred, the call will be automatically transferred to the pre-set phone number.

Overview	Call Management	
Wizard	Call Forwarding	
Internet Settings		
Wireless Settings	Forward all calls to phone number:	enable
Firewall	Forward if not answered to phone number:	enable
3G/4G Modem	Forward if out of reach to phone number:	enable
3G/4G 3G/4G Status Call Management	Forward if busy to phone number:	enable

Call barring : This feature requires operators to support.

Overview	Call Barring	
Wizard		
Internet Settings	Barr All Outgoting Calls	enable
Wireless Settings	Barr Outgoting International Calls	enable
Firewall	Barr Outgoting International Calls except to Home Country	enable
3G/4G Modem	Barr All Incoming Calls	enable
3G/4G 3G/4G Status Call Management	Barr Incoming Calls when Roaming outside the home country	enable

Other function: Call conference : This feature requires operators to support. And you should enable call waiting first.

Call waiting : This feature requires operators to support.

Do not send my phone number : This feature requires operators to support.

Warm line : It is the same as automatic call, it is done a call to the configured number in the configured timer. If user hang up the phone and waits the warm line timer, it will be done an automatic call to the configured number.

Anonymous call blocking : It is related to the network is sending a call without Calling ID and then, router block the call.

Do not disturb : The phone will not ringing when incoming call, but the phone lights still flashing.

3.5.4 PIN Management

Here you can enable/disable PIN.

Overview	PIN Management					
Wizard	DIN Status					
Internet Settings	PIN status	PIN Status				
Wireless Settings	PIN Enable/Disable(0)		PIN ON			
Firewall		Save PIN Code				
3G/4G Modem						
3G/4G 3G/4G Status Call Management Pin Management						

3.6 Storage

3.6.1 FTP Server

FTP is a file transfer protocol for exchanging files over any TCP-based computer network. A

FTP client may connect to a FTP server to control files on that server. As there are many FTP client and server programs available for different operating systems, FTP is a popular choice for exchanging files independent of the operating systems involved. RT880 provides USB and T-Flash port that you can insert U-Disk or T-Flash. Enter your FTP Server Name, Port and Session. Then "Apply."

Overview	FTP Settings	
Wizard	ETD Conver	Ofestile @Disable
Internet Settings	FTP Server Name	3G/4GRouterFTP
Wireless Settings		
Firewall	FIP Port	24
3G/4G Modem	Max Sessions	10
Storage		Auch
FTP Server		Apply Reset

3.7 Administration

3.7.1 Management

Language Setting: select your language (default language is English)

Overview	Language Settings Administrator Set	tings NTP Settings	7)	
Wizard			- International Action	
Internet Settings	Select Language	English	×.	
Wireless Settings	Apply			
Firewall	Арріу Санс	21		
3G/4G Modem				
Storage				
Administration				
Management				

Administrator Settings: You can change the Account and Password required to log into the router's web-based management system.

Overview	Language Settings	Administrator Settings	NTP Settings
Wizard	Lancoura -		
Internet Settings	Account	admin	
Wireless Settings	Password	•••••	
Firewall		casel	
3G/4G Modem	Ap	Cancer	
Storage			
Administration			
Management			

NTP Setting: Select the time zone of the country you are currently in and set the IP Address of the Local NTP Server. Press "Sync with host" to synchronize with the NTP Server.

Overview	Language Settings Administrat	or Settings NTP Settings	
Wizard	1		
Internet Settings	Current Time	Thu Jan 1 18:27:01 UTC 1970	0 Sync with host
Wireless Settings	Time Zone	(GMT-11:00) Midway Island,	Samo 👻
Firewall	NTP Server		ex: time.nist.gov
3G/4G Modem			ntp0.broad.mit.edu
Storage			time.stdtime.gov.tw
Administration	NTP Synchronization(Hours)		
Management Upload Firmware Settings Management Status	Apply	Cancel	

3.7.2 Upload Firmware

The page allows you to upgrade the router's firmware. To upgrade the firmware of your router, you need to download the firmware file to your local hard disk, and enter that file name and path in the appropriate field on this page. You can also use the Browse button to find the firmware file on your computer.

Overview	Upload Firmware		
Wizard		(340K	
Internet Settings	Location	····汉明····	
Wireless Settings	Apply		
Firewall			
3G/4G Modem			
Storage			
Administration			
Management Upload Firmware			

3.7.3 Settings Management

This page allows you to save the current router configurations by using Export Setting. When you save the configurations, you also can re-load the saved configurations into the router through the Import Setting.

3.7.3.1 Export Settings

The page you can set your personality to export, before you have to restore the factory settings

Overview	Export Settings Import Settings	Load Factory Defaults
Wizard		
Internet Settings	Export Button	Export
Wireless Settings		
Firewall		
3G/4G Modem		
Storage		
Administration		
Management		
Settings Management		
Status		
SMS		

3.7.3.2 Import Settings

The page you can set up your personality to import, restore before setting

Overview	Export Settings In	nport Settings Load Factory	Defaults	
Wizard				्रमण्ड
Internet Settings	Settings File Loca	tion		测见…
Wireless Settings	Imp	port Cancel		
Firewall				
3G/4G Modem				
Storage				
Administration				
Management Upload Firmware Settings Managemen	ıt			
ð	Choose File t	to Upload		×
🕘 🔹 🕈 📕 ৮ Ca	omputer → D (D:) → 1201	✓ C Search	1201	Q
Organize 👻 New folde	r			
Favorites	Name	Date modified	Туре	Size
Desktop	I	11/30/2015 4:45 PN	1 PNG File	
퉳 Downloads	2	11/30/2015 4:45 PN	1 PNG File	
💹 Recent places	3	11/30/2015 4:46 PM	1 PNG File	
	4	11/30/2015 4:46 PM	1 PNG File	
词 Libraries	5	11/30/2015 4:47 PM	1 PNG File	
Documents	6	11/30/2015 4:51 PM	1 PNG File	
J Music	7	11/30/2015 4:52 PM	1 PNG File	
Pictures	8	11/30/2015 4:54 PM	1 PNG File	
Videos	9	11/30/2015 4:54 PM	1 PNG File	
	RT880_Settings.dat	11/30/2015 4:54 PM	1 DAT File	
I Computer				
📬 Network 🗸 👻	<			>
File na	ame: RT880_Settings.dat	✓ All File	s (*.*)	~
	L			-

3.7.3.3 Load Factory Defaults

Load Factory Defaults: You can reset the broadband router when system stops responding correctly or stop functions.

Overview	Export Settings	Import Settings	Load Factory Defaults	
Wizard				
Internet Settings	Load Default		Load Default	
Wireless Settings				

3.7.4 Status

System status session allows you to monitor the current status of your router.

Overview	System Info	Internet Configurations	Local Network	
Wizard		-		
Internet Settings	WAN IP Ar	Idress	PPP	OE .
Wireless Settings	Subnet Ma	isk		
Firewall	Default Gateway Primary DNS Secondary DNS			
3G/4G Modem				
Storage				
Administration	MAC Addr	ess	00:	UC:43:28:80:HB
Management Upload Firmware Settings Management Status	Back	Home		

3.8 SMS

When using SIM card to access network, you could not only make phone calls, but also send text messages at the time.

Note: The SMS storage is limited, please refresh and delete unwanted SMS periodically.

3.8.1 SMS Inbox

All received messages will be saved in inbox.

Overview	SMS Inbox	
Wizard	SMS Storage Status :2/150	
Internet Settings	State Date Number Content	Mark
Wireless Settings	2015-12-01 10:17:20 +8613817487535ready	
Firewall	Mark All Unmark All Refresh Delete	
3G/4G Modem		
Storage		
Administration		
SMS		
Inbox		
SMS Write		
Draft		

3.8.2 SMS Write

Here you can edit SMS content and phone number, then send or save.

Overview	SMS Write	
Wizard	Number	
nternet Settings	Number	
Vireless Settings	Content	*
Firewall		
3G/4G Modem		
Storage		
Administration		
SMS		Ŧ
Inbox	Characters Left: 140	
SMS Write		
Outbox	send	ave
Draft		

3.8.3 Outbox

Overview SMS Outbox SMS Storage Status :2/150 Internet Settings State Date Number Content Mark 2015-11-30 22:17:20 13817487535... ready Wireless Settings Mark All Unmark All Refresh Delete Firewall 3G/4G Modem Storage Administration Inbox SMS Write Outbox Draft

All sent messages will be saved in outbox.

3.8.4 Draft

Overview	SMS Draft	
Wizard	SMS Storage Status :5/150	
Internet Settings	State Date Number Content	Mark
Wireless Settings	2015-11-28 03:14:11 10086 xczvxvxcvx	
Firewall	Mark All Unmark All Refresh Delete	
3G/4G Modem		
Storage		
Administration		
SMS		
Inbox		
Outbox		
Draft		

Appendix I:

Call function:

This device provides call and text message functions. When you browse internet, you can keep connection with your family and friends.

The steps are as follows:

- 1) Insert 3G SIM card, and open the device
- 2) Connect the telephone through the RJ11 port of the device
- 3) When phone function is booted up, your telephone's signal LED will turn on. Then you can start to use the call functions.



Caution:

- 1. Please make sure that your SIM card supports voice call service
- 2. Please start to use the call functions; after call function is fully booted up (all text messages are received)

Appendix II:

FAQ:

This Appendix provides solutions to some problems that could be seen when install and use the device. Please read the following instruction, it will help you to solve these problems. If you fail to solve your issues from this FAQ, please contact us.

Problem	Solution		
	Please make sure the wireless function of your PC is		
	turned on. If it is already on, please refresh the		
	network list.		
Wireless device cannot connect	Please make sure your PC is in the wireless signal		
to SSID.	coverage of the device.		
	Please make sure your device is away from the		
	electromagnetic interference.		
	Please make sure your device's wireless function is		
	turned on.		

	If the problem is still not solved, please try to reset your device to default settings.	
Cannot Access internet:	 Please make sure your PC is in the wireless signal coverage of the device. Please make your device's DHCP function is turned on. Please make sure your firewall is turned off. If the problem is still not solved, and your PC has got connected to the network, but the wireless icon shows an yellow exclamation mark. It means your wireless card could not be allocated an IP address. Please use the static IP settings, and fill DNS and gateway according to instructions of your operator. 	
Input IP, but fail to login to the administration page.	 Please make sure the problem is not caused by the Cache of the internet browser, please clean up the Cache. Please make sure the network connection is good, and the light of connected ports are on. Please make sure the username and password are correct If the problem is still not solved, and your PC already gets the IP address. You can try to use wireless connection or static IP methods to try it again. If connected via wireless connection, please try to ping 192.168.1.1 to see if there is any response. If responses are received, please check if you set an agent server for connection. If no agent server is set, then please not to set an agent server, and reset the device. 	
IP conflict ion when turn on the device:	 Please make sure if your LAN has other DHCP servers. Please make sure that IP address is not occupied by other computers or devices. If occupied, please change the IP address of that device to avoid the IP conflicts. 	

Appendix III: Safety warning: Read the user guide: Please read the user guide before using this device.

Stay away from interference:

All the wireless devices could be possibly interfered, and it will affect the performance of the device

Turn off the device in restricted area:

Please follow any instruction, turn off the device around airplanes, medical devices, gases, chemicals or explosive areas

Qualified services:

Please don't disassemble this device yourself. Please contact professionals to repair and install the device.

Accessories and batteries:

Please don't touch the device using wet hands, when it is in charge. Please only use the accessories and batteries that are recognized to be compatible to the device.

Operating temperature:

 $0^{\circ}\text{C}{\sim}45^{\circ}\text{C}$, Storage temperature: -20°C~65°C and Please use the standard 5V/3A power supply accessories

Danger of explosion:

Turn off your device in any areas that explosion could possibly happen. Please follow all the notices in the areas where spark could cause fire or explosion.

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 30 cm between the radiator and your body.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.