GT202-WiFi/ GT202N Instructions V1.0 version

1. Brief introduction

GT202, a type of wireless VoIP routing gateway, integrates VoIP phone function and wireless routing function and uses for the construction of internet call and wireless network.

GT202N is a VoIP routing gateway, VoIP phone and cable routing functions into an organic whole, used for Internet phone and cable network structures.

This instruction is used for guiding the users to install, connecting and allocating GT202, and it simply summarizes the common function, allocation method, and usage of GT202.

GT202 is a type of device which can work independently, that is, it can be made communication by network without computer. Its clear and reliable speech quality brings users high-quality experience. What is more, it concludes most of systems and equipment which support SIP and Gtalk agreement and so on, which is the right choice for users. At the same time, GT202 supports 802.11b/g/c wireless agreement, so users can use it to construct wireless network.

1.1 Packing configuration

The packing of GT202 includes the following accessories:

● When a GT202 voice gateway
● A power adapter
● A strip of network cable

If the packing is lack of one of the above accessories, please contact manufactures.

2 Preview of equipment

2.1 Hardware characteristics

Project	Character
Power adapter	100-240V AC，50-60Hz Input: 12V，1A DC Output:
Port	WAN：1 个，10/100 Base_T，RJ-45 LAN：1 个，10/100 Base_T ,RJ-45 FXS：2 个，RJ-11， Telephone interface
Operating temperature	5~45℃（41~113℉）
Storage temperature	-25~85℃（-13~185℉）
Relative humidity	10~90% No condensation
Size	100*100*22mm
Weight	0.4kg
Identification	CE/FCC

2.2 Introduction of indicator light

LED light	Color	State	Description
System light	Green	Always lighting	It will light after switching on
WAN light	Green	Does not light	Network cable does not connect
		Blink	The data has normal exchange
Wi-Fi light	Green	Always lighting	Wi-Fi function has already been started up
		Blink	Wi-Fi was started up, and data has normal exchange
	Does not light		Wi-Fi function was closed or damaged
Phone1	Green	Always lighting	Account number was registered successfully
	Does not light		Account number was registered unsuccessfully or can not allocate account number
Phone2	Green	Always lighting	Account number was registered successfully
	Does not light		Account number was registered unsuccessfully or can not allocate account number

2.3 Introduction of socket

Name	Purpose
Reset	If you press it for 5s, it will recover factory default setting
Phone1	RJ11 telephone interface can connect analog station or fax machine
Phone2	RJ11 telephone interface can connect analog station or fax machine
Ethernet	LAN interface connects to computer or the subordinate local area network of equipment module
Internet	WAN interface connects internet or router
Power	Power interface, DC12V, 1A output

3 Installation

This chapter mainly introduces the procedures of equipment installation.

3.1 Installing topological graph
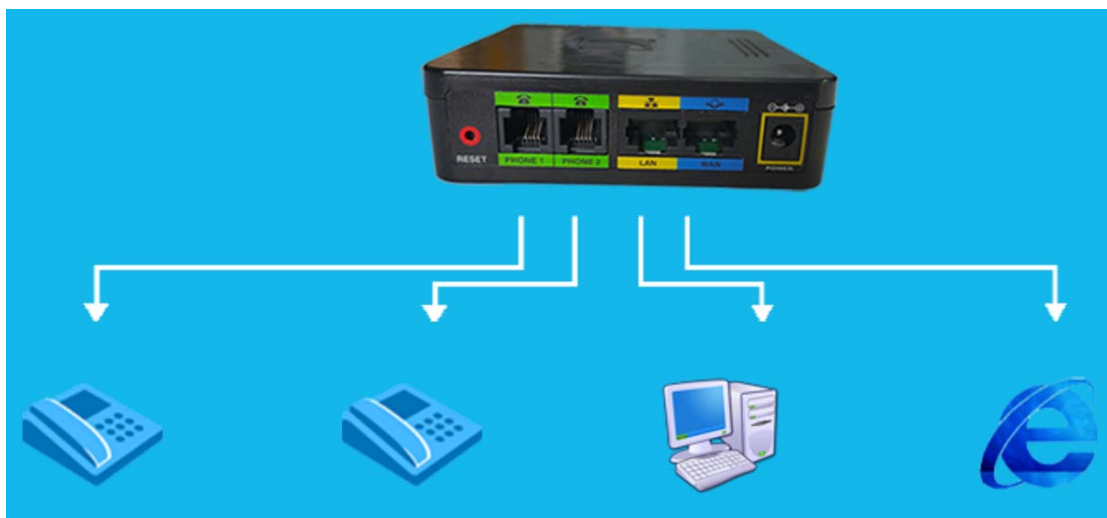
3.2 Installation procedure

Preparatory work

Ensure you own the following conditions:

Effective Internet connection

Effective Internet telephone service account and proper setting

A cable/ DSL modulator-demodulator

A computer used for allocating phone adaptor

A set of analog station or fax machine with RJ-11 telephone wire

1. Connect phone adaptor

A: turn off network device power supply including modulator-demodulator and computer.

B: Connect one end of RJ-11 telephone wire to the PHONE 1 port of phone adapter. Connect the other end to analogue phone or fax machine. (Important note: please do not connect PHONE port to the phone wall socket, and ensure that you only connect one set of phone or fax machine to PHONE port. Otherwise, phone adapter or phone wire in your home or office probably was damaged.)

C: If you need to connect other phone or fax machine, please repeat step B on PHONE 2 port.
D: Connect one end of Ethernet cable (attached) to the ETHERNET port of phone adapter. Connect the other end to Ethernet port of your PC. (**The default IP of LAN is 192.168.10.1, can directly log in after connecting to PC**)

E: Connect one end of another Ethernet cable to the ETHERNET port of phone adapter. Connect

the other end to your cable/DSL modulator-demodulator.
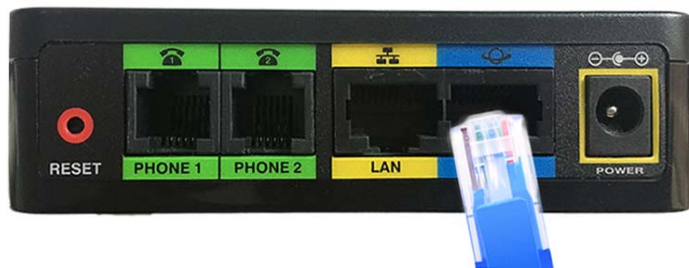
F: Turn on cable/DSL modulator-demodulator.

G: Connect attached power adapter to power port of phone adapter, then insert power adapter into power socket. After opening the power supply of phone adapter, the power light on front panel will light.
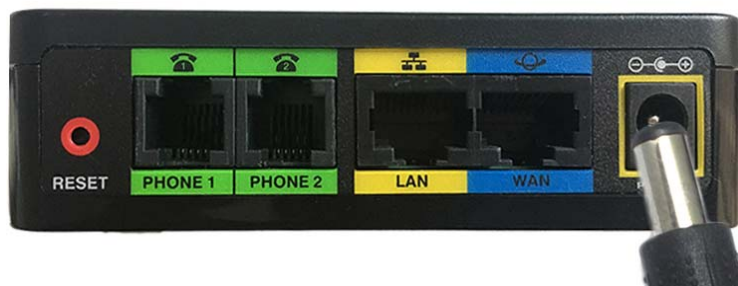
H: Turn on your PC power supply.

Note: guarantee that PC Ethernet adaptor was set as automatically acquire IP address. The detailed information refers to Windows help file.

4 IVR

Apply interactive voice prompt menu

This section introduces how to use interactive voice prompt menu to allocate network setting of phone adaptor. You can apply input command on phone key pad and select the option, then phone adaptor will use voice prompt.

4.1 IVR operating steps

1) Connect equipment well, and switch on; then wait for 120 seconds

2) For the off hook of analog station, press****, users will hear "Voice Menu ：**(1 WAN Port connection type), (2 WAN Port IP Address), (3 WAN Port Subnet Mask), (4 WAN Port Gateway Address)，(5 for DNS), (6 LAN Port IP Address),（7 Web Access Port),（8 Firmware version),（9 Factory default),(0 Reboot).**

3) We can press relevant numbers (0-9) to view relevant information, and the detailed functions and relevant numbers refer to 4.2.

4.2 IVR   Introduction
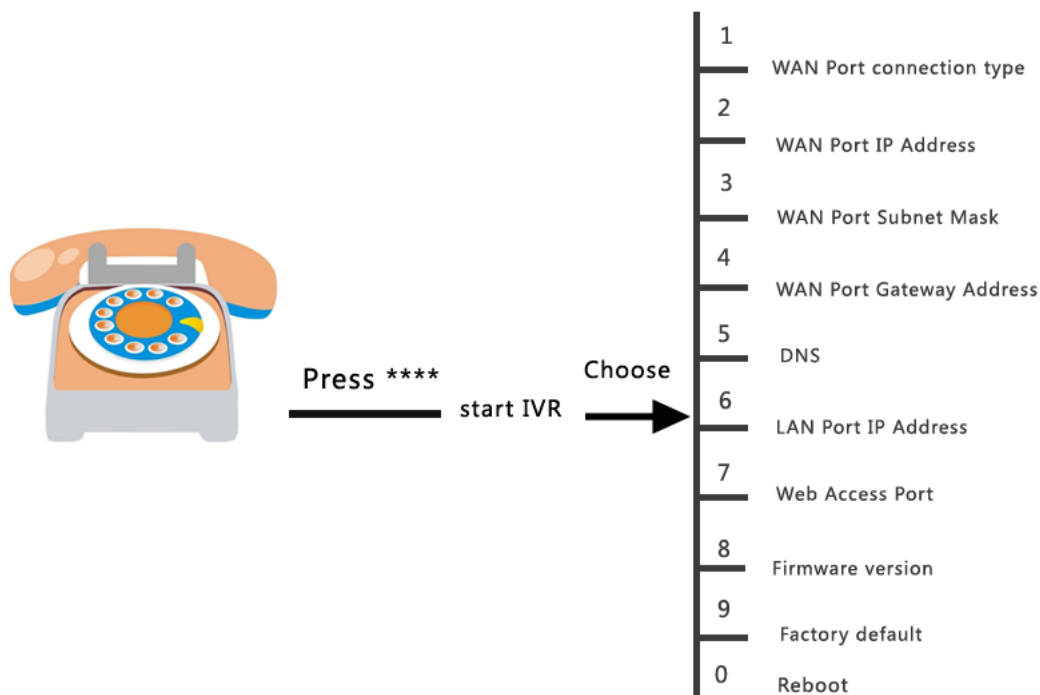
1. Log in from WAN interface

The WAN port state of GT202 is DHCP mode by default, we connect equipment well and press ******** on phone, after the hint of broadcasting voice menu, select the 2 option to obtain IP address information, then input IP address into browser, such as http://192.168.0.101, after clicking Enter, we can see the login interface of GT202, next, input GT202 user name and password which is user/user by default and select language, finally click Login.

2. Log in from LAN interface

A: Turn on Web browser on PC.

B: Input http://192.168.10.1/ on Address field, then press Enter key. (192.168.10.1 is the IP address of phone adaptor by default).

C: 如果您的 Internet 技术服务提供商 (ITSP) 未提供密码，您将不会看到登录屏幕。前进到步骤 D。如果您的 ITSP 提供了密码，您将看到登录屏幕。在 User Name （用户名）字段输入 user，这是用户访问使用的默认用户名 （不可更改） 。然后输入您的 ITSP 提供的

C: If your Internet technical services provider (ITSP) does not provide password, you will not see the login interface. Go forward to step D. If your Internet technical services provider (ITSP) provides password, you will see the login interface. Input user on User Name field, and it is the default user name (can not be changed). Then input the password provided by Internet technical services provider.

D: The login interface is as follows, input the user name and password (default user name is user,

and default password is user), select required language, and click on Login to log in.
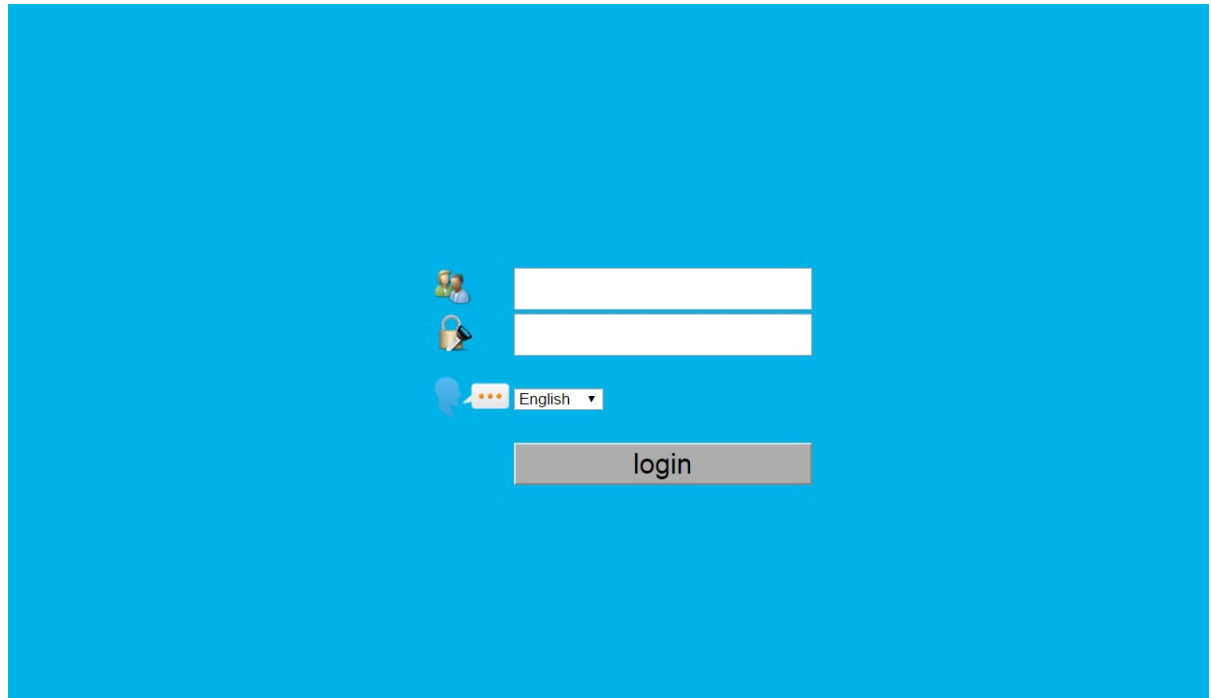
E: After successfully log in web interface of GT202, it will skip to home page. In web home page, users can view some parameters of equipment, such as the mode of Wi-Fi, SSID, password, account number state on FXS port, IP address of WAN and LAN port, and system time and so on.

The upside of GT202 home page is configuration navigation bar, and the list on the left side is rapid configuration navigation key for part of functions. Click relevant column to enter configuration interface of relevant functions, such as Network configuration, Wireless configuration, VoIP configuration, Internet configuration and VPN configuration and so on.

F: Switch to the relevant description of proper Internet connection type (DHCP, static IP or PPPoE).

DHCP

1 Select DHCP connection type

2 If you use cable modem, may need to allocate MAC Clone Settings (MAC clone settings). (Please contact your ISP to obtain detailed information.)

Enable MAC Clone Service (start using MAC clone service). If your service uses certain PC MAC address, please select "Yes" on the setting of Enable MAC Clone Service (start using MAC clone service). Then, input PC's MAC address in the Cloned MAC Address field.

3 Click on Apply (submit all changes)

Static IP

1 Select Static Mode（fixed IP）connection type.

2 For section of the Static IP Settings, please input IP address in IP address (static IP) field, input subnet mask in Subnet Mask field, then input default gateway IP address in Default Gateway (gateway) field. Please input DNS server address in Primary DNS Server and Secondary DNS Server field.

3 Click on Apply. (Submit and confirm)

PPPoE (most DSL users)

1   Select connection type of PPPoE.

2 Input user name in PPPoE Login Name field, and input password in PPPoE Login Password field.

3 Click on Apply.

If your ITSP has already preset phone adaptor, you do not need to change any default voice setting. The relevant detailed information refers to the document provided Internet service provider (ISP). If you want to change Internet phone service setting, please contact provider.

IPv6

GT202 supports IPv6 which has two modes: DHCP and Static, and DHCP mode by default. Click Internet→IPv6 to enter configuration interface.
1）DHCP
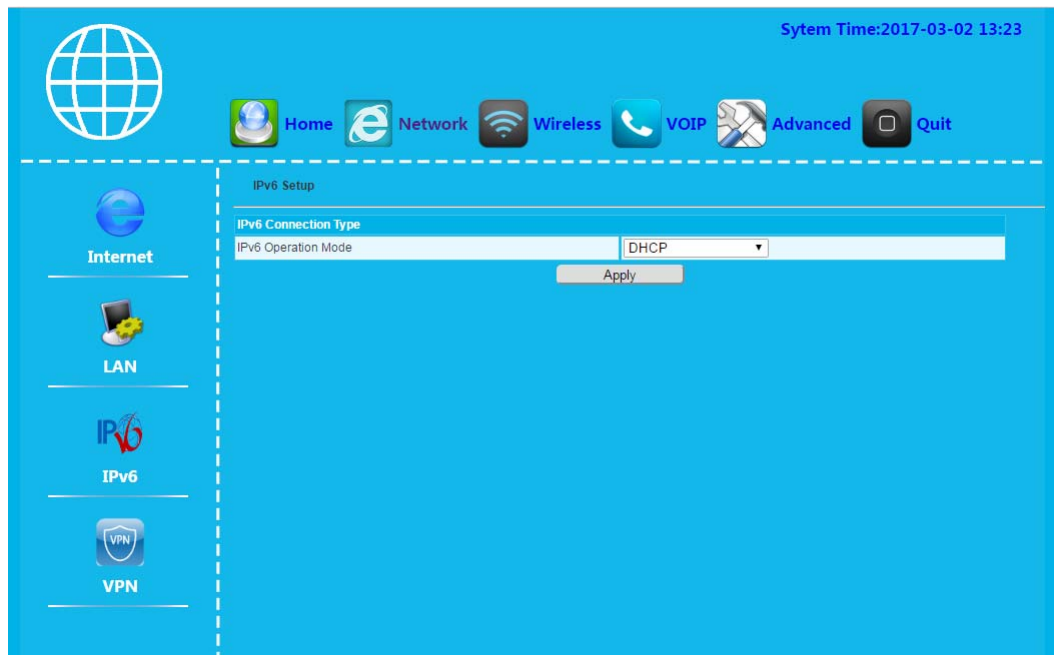
2）Static
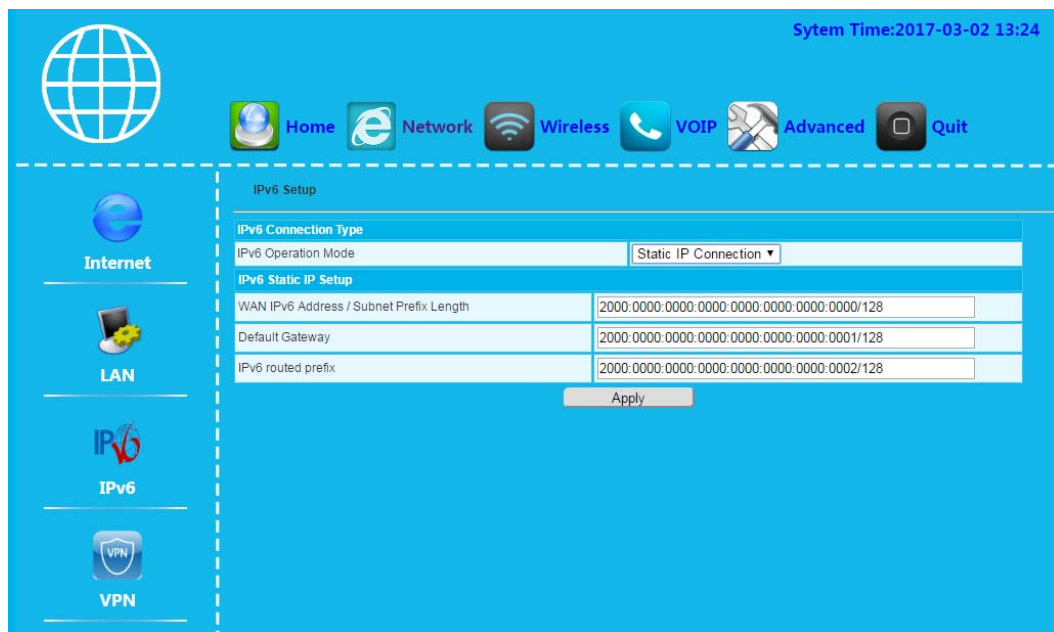
Use IPv6 function, please ensure that network of equipment supports this agreement.

VPN

GT202 supports four types of VPN, such as Open VPN, IP Sec, PPTP and L2TP. Enter Internet→VPN to enter the VPN configuration interface.
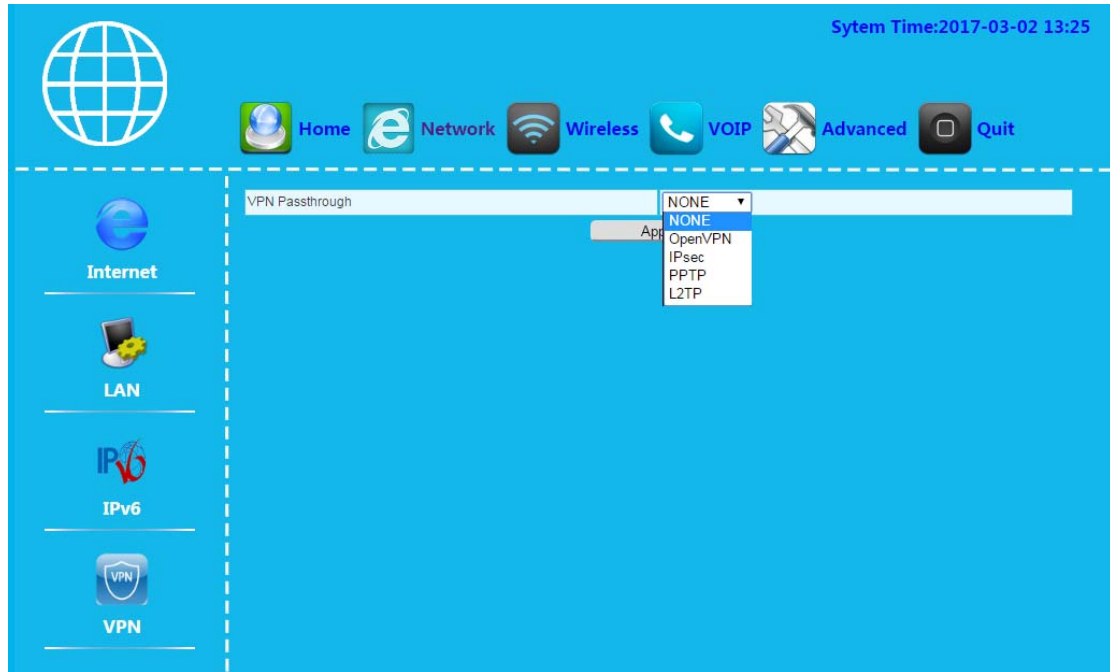
1）OpenVPN

Allocate relevant Open VPN parameter and upload key document, after saving, restart equipment to take effect.

2）IPsec

Allocate relevant parameter, and upload relevant key document, then it will take effect after saving the configuration.

3）PPTP

Select PPTP mode, and input relevant server address, user name and password, after saving configuration, restart equipment to take effect.

4）L2TP
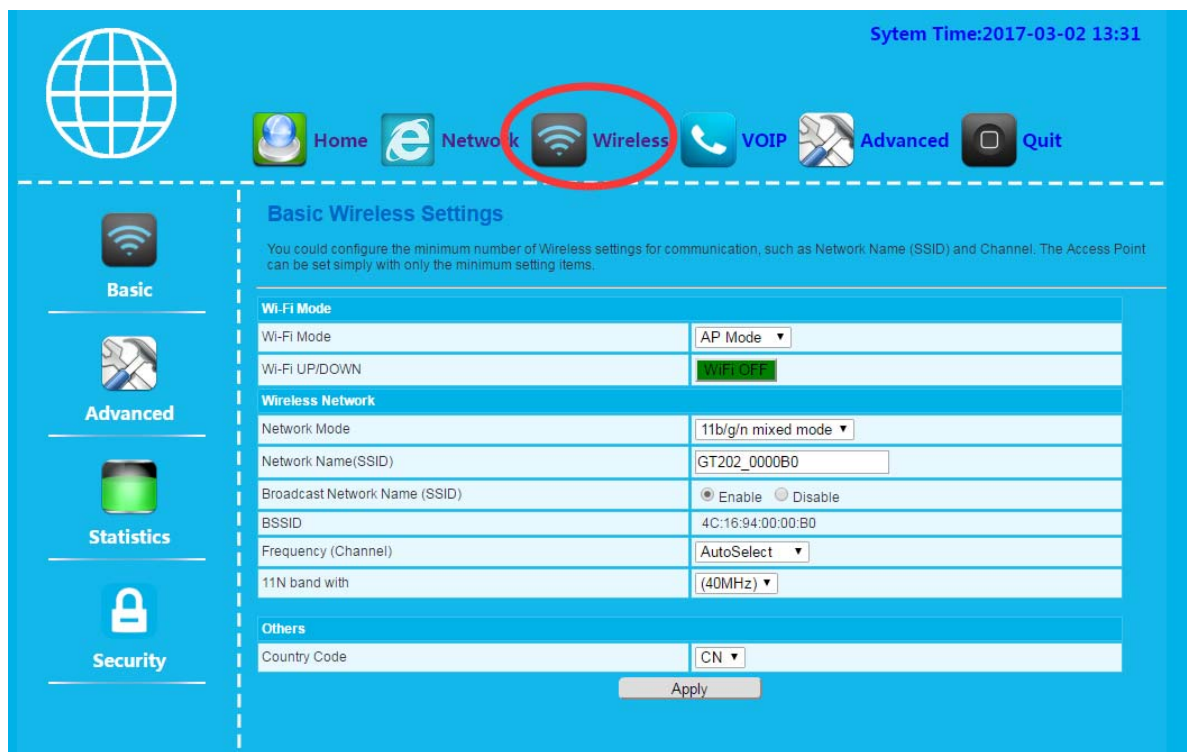
Select L2TP mode, and input relevant server address, user name and password, after saving configuration, restart equipment to take effect.

Wireless network configuration

GT202N does not support WiFi function

In Wireless→Basic interface, users can choose Wi-Fi mode as AP or STA, and AP mode is default.

AP mode

Enter Wireless→Basic and select Wi-Fi mode as AP and users also can turn on/off Wi-Fi in this interface; the network model of configuration GT202 is 802.11b/g/n or 802.11b/g, change the name of SSID, whether configuration can broadcast SSID and allocate wireless gallery and frequency band and so on.

Users can allocate relevant parameters on other relevant interfaces, such as Wi-Fi password and way of encryption and so on.

Enter Wireless→Advanced interface, users can view and change Beacon Interval，Fragment Threshold，RTS Threshold，TX Power and Country Code and so on.

Enter Wireless→Statistics interface, users can view some running data of wireless network, using for diagnosing problems.

Enter Wireless→Security interface and allocate safe mode (WPA2-PSK mode by default), wireless encryption algorithm and password.

1）Disable

Set Security Mode as Disable, then the Wi-Fi is public Wi-Fi which does not need to input password.
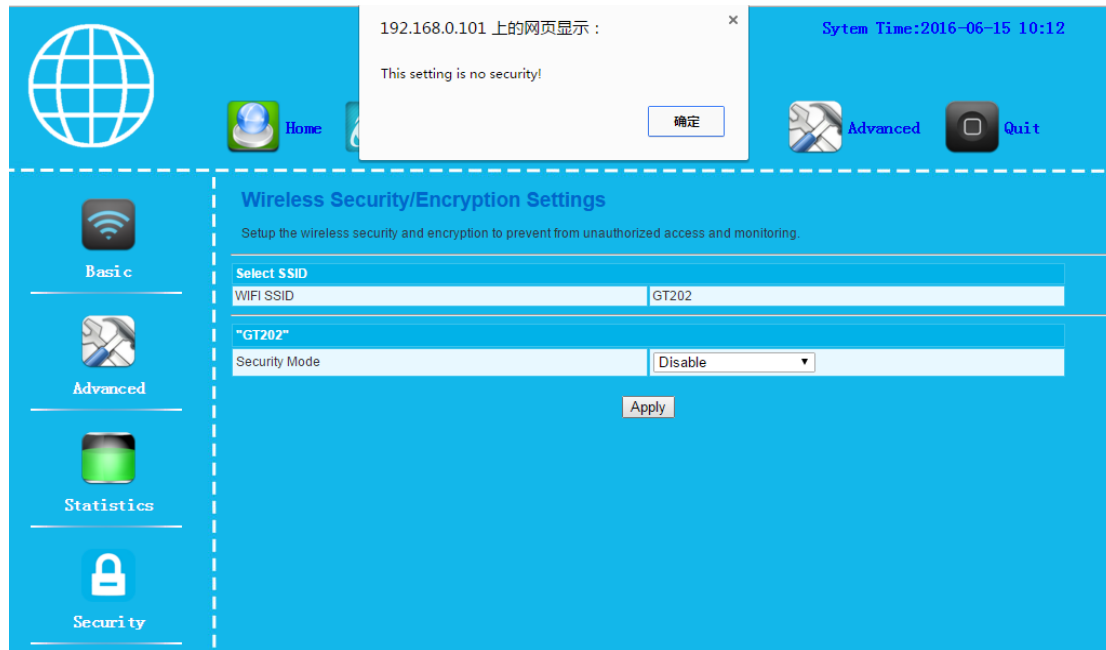
2）Open WEP

Set Security Mode as Open WEP mode, and please at least allocate one password and its length accords with Open WEP algorithm (five digits or 13 digits), finally save configuration to take effect.

3）WPA-PSK

Select WPA-PSK mode, input encryption algorithm and relevant password, and save configuration to take effect.

4）WPAPSKWPA2PSK

Select WPAPSKWPA2PSK mode, input encryption algorithm and relevant password, and save configuration to take effect.

STA mode

In Wireless→Basic interface, users can switch Wi-Fi mode to STA, and also can turn off Wi-Fi.

Enter Wireless→Station Manager, users can view wireless connection state of equipment under STA mode, and its name and address and so on; users can also make Wi-Fi scanning and allocate required Wi-Fi.

Click Wifi scan to make Wi-Fi scan, then the list will display scanning Wi-Fi name.
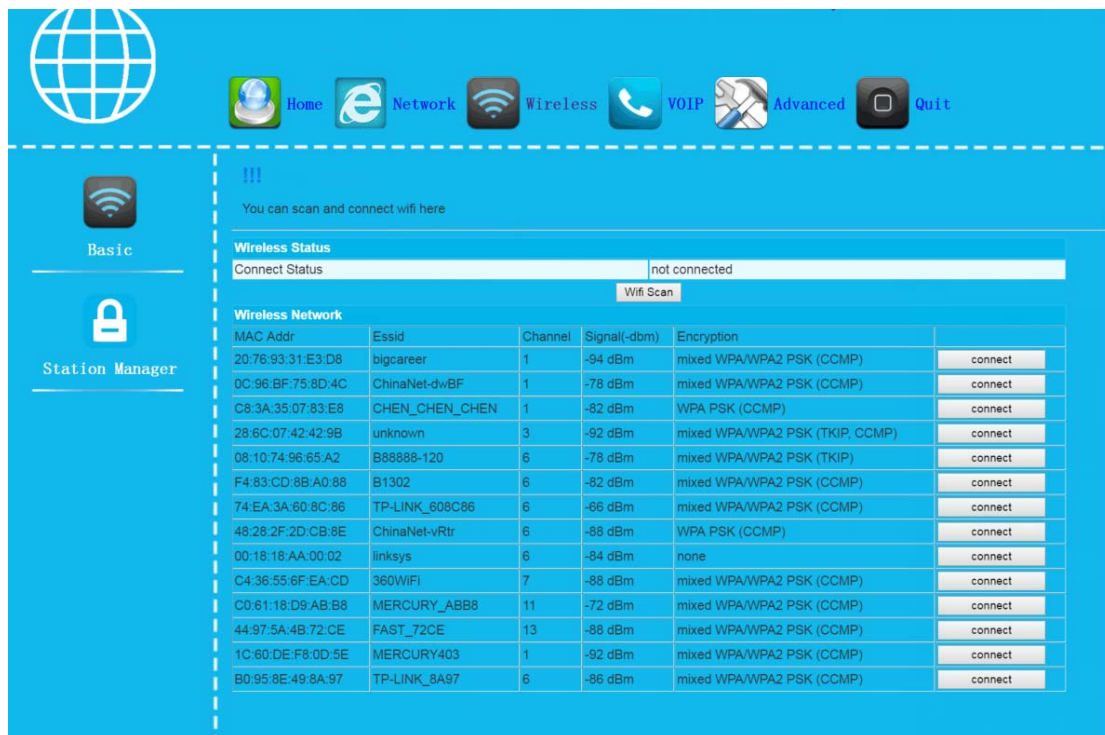
Click "connect" in the back of relevant Wi-Fi name, then input relevant password according to hint, and the equipment will begin to connect Wi-Fi.

If the wrong password cause the connection fail, the web interface will display the following hint.

If it was connected successfully, the page will hint connection is successful and display acquired IP address and connected Wi-Fi name.

You can click "disconnect" to turn off current Wi-Fi connection. Click "connect" in the back of SSID of connected Wi-Fi, the key will turn to green.

Configuration of VOIP

GT202-WiFi/GT202N supports two agreements: SIP and Gtalk, and click VOIP to enter its relevant configuration interface.

1.1 General Settings

In the page of VoIP→General Settings, users can set the type of agreement for the two ends of GT202, the area like dial tone, and dial end key and so on.

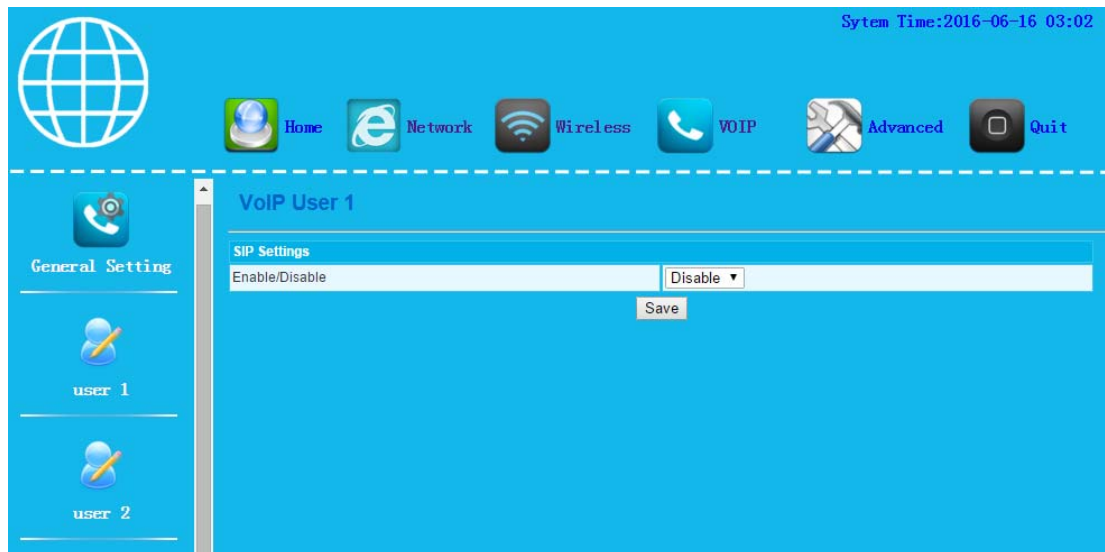The relevant port of User1 is phone1, and it will automatically choose SIP; the relevant port of User2 is phone2 and Gtalk is default.

1.2 Configuration of User1 and User2

Enter VoIP→User1/User2 interface, user can start using or forbid using account number, and allocate account information and speech coding of VoIP.

1）SIP

If disables the port, the port will not call out.

If enables the port, it will begin to allocate the information of this port.

The Address of the sip Server and the communication port number of SIP are filled in the Server Address and the default port number is 5060. If the port needs to be changed, the corresponding port should be added on the back of the IP Server address with the following operations: 192.168.1.168:6060. If the server needs proxy, the address of the proxy server and the corresponding port number should be filled in the proxy option and the default port number is 5060. If the port needs to be changed, the corresponding port should be added on the back of the IP Server address with the following operations: 192.168.1.168:6070.

The option of Account Setting uses for the account information of this port, such as user name, password and dialing rules and so on.

*Note: dialing rules defines the rule of dial, so please pay attention to it during configuration. If has no special requirement, can use （*xx|x.）rule.*

In column of Codec Settings, users can set the way of speech coding, such as G.711u/a，G.729，G.726，GSM and Opus.

2）Gtalk

Enable/Disable uses for starting and forbidding account number.

Please fill in relevant server address in Server Host, fill in server port in gtalk local port, fill in account number in Authentication Name, and fill in relevant password of account in Password.

Codec Settings uses for setting the way of speech coding and can select G.711a/u, GSM, G.726, G.729, which is same as SIP.

In Misc, you can set length of overtime for ring-back tone and the leave words and so on.

Note: this page's configuration needs to save and restart equipment to take effect.

Configuration of FXS Port1 and FXS Port2

In the page of FXS Port1/FXS Port2, users can set the volume, the type of Caller Identification, the type of DTMF (second dial) and impedance etc. of relevant port.

Phone	
RINTG VOLTAGE(v)	140 ▼
Hook Current(ma)	20 ▼
Voice Tx Level	0 ▼
Voice Rx Level	0 ▼
Ring Impedance	USA--600ohms ▼
Caller ID	
Caller ID Type	FSK Bellcore ▼
Caller ID Display	After Ring ▼
Caller ID Power Level	1 ▼
Others	
DTMF mode	rfc2833 ▼
Save	

FAX

GT202 supports two types of fax: G.711 unvarnished transmission and T.38. Users can set the relevant fax account number in user interface and select type of fax in VoIP→FAX interface. ***Note: if you want to use the fax function, need to get the support of relevant server.***

VoIP Qos

In VoIP→VoIP QoS page, users can enable/disable QoS function, and "enable" is default.
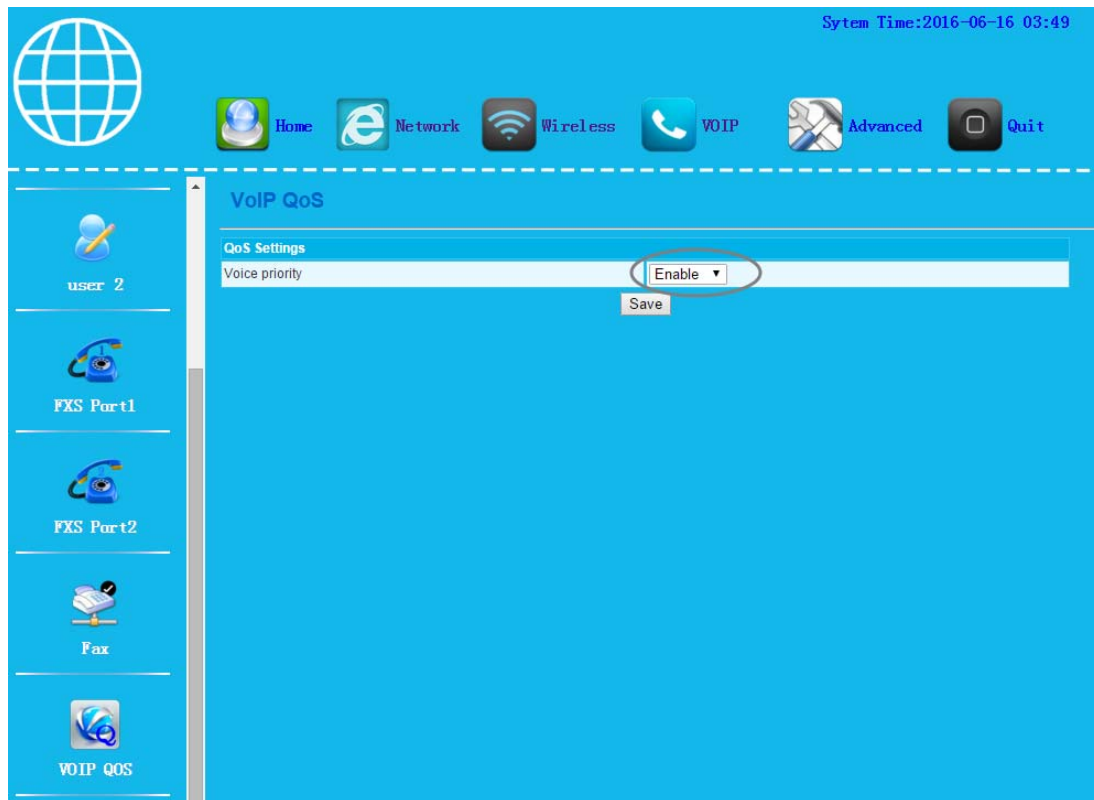
Speed Dial

Enter VoIP→Speed Dial page, users can turn on, turn off and set the speed dial function.
When choose Disable, it will turn off speed dial function.

When you select Enable, it will turn on speed dial function; and users can set relevant dialing sequence of each digital keys.
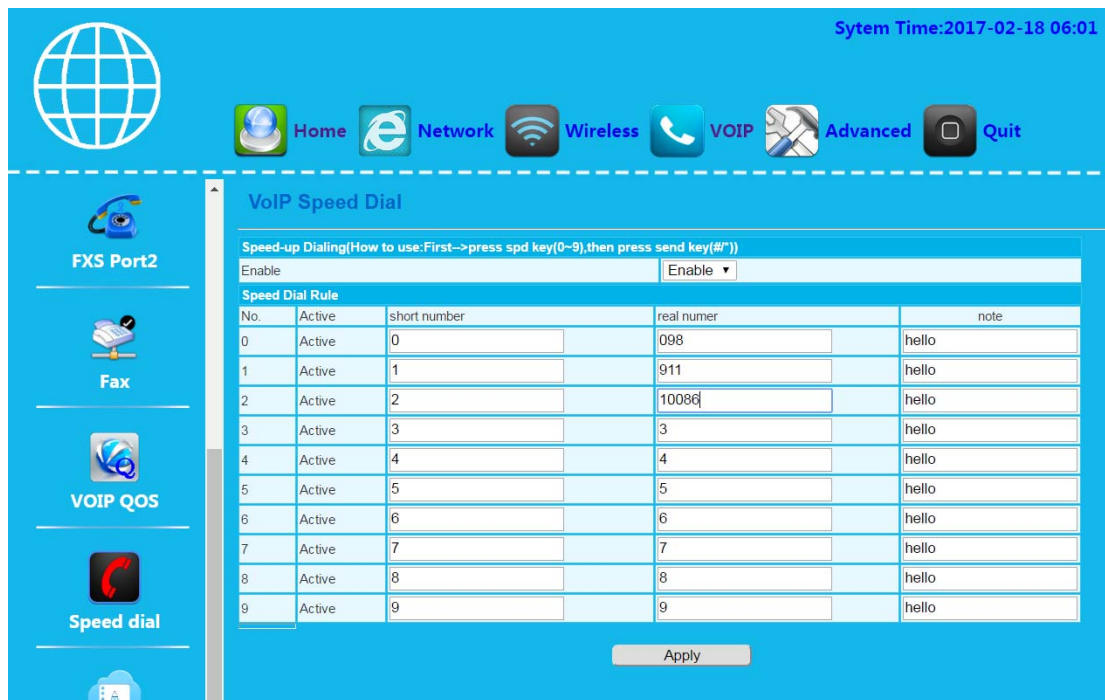
Call Log

In VoIP→Call Log page, users can view call log.
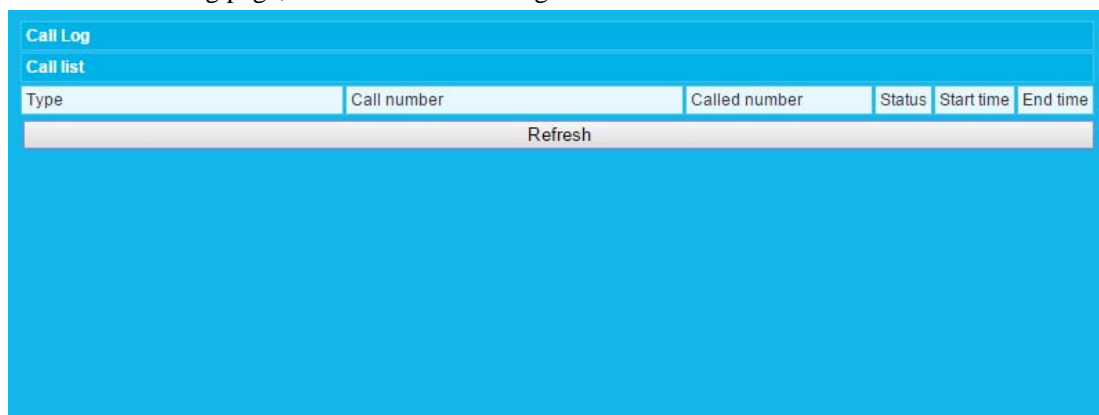
Advanced

Advanced page mainly concludes the using functions for users' management equipment, and users also can change password, update software, set provision and TR069 etc. in this page.

Management

Enter Advanced→Management page, users can change login password and time zone of equipment.

Settings

In Advanced→Settings page, users can import and export configuration files, recover factory default settings, and restart equipment.

Statistic

Enter Advanced→Statistic page, users can view the running data of equipment.

Firmware Upload

Enter Advanced→Firmware Upload page, users can update the software for equipment.

Select files from computer terminal and click "apply", the equipment will automatically finish update and restart.

Note: please select correct updating file, because wrong files may lead to the dead halt of equipment. Do not turn off the electricity during update.

Provisioning

Automatic configuration uses for batch management of equipment and batch update of configure,

and GT202 supports two types of provision: http and tftp. If you want to use provisioning function, please construct relevant server.

Start up provision function, and fill in relevant files to obtain pathway and save it with files, and then save it and restart it to take effect.

TR069

TR069 function is used for uniformly managing equipment through TR069 server. Users need to rent TR069 server to use this function.

Start up TR069 function and fill in relevant server address, account number and password, and then save configuration and restart it to take effect. If it has requirement for certificate, please upload relevant certificate file.

System log

In Advanced→System Log page, users can view the running log and kernel log of equipment.
Click Savelog button can save the two types of log into local files.
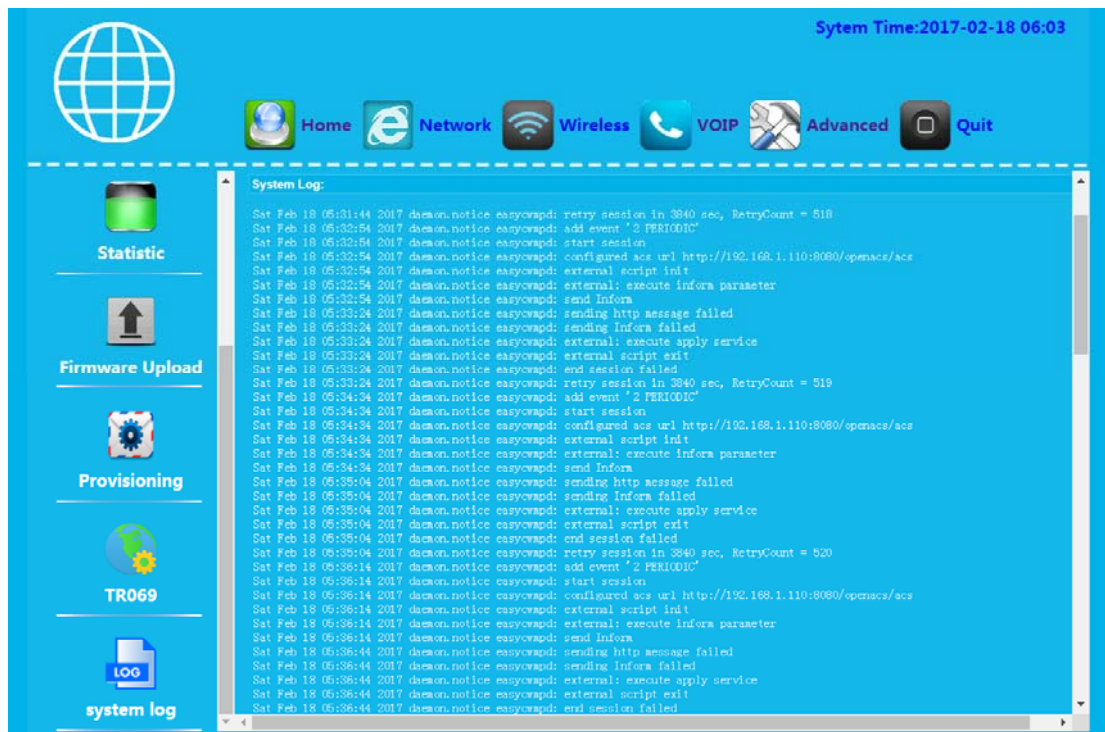
Quit

Click Quit, it will quit the login of web.

Call function

1.1 Call

● Dial and wait for five seconds;
● Dial and end with #, after GT202 receives #, it will immediately send out the number; (the system default # as dialing end key, if users change it, the changed key shall prevail)
● Dial, if the number completely matches some dialing rules, the GT202 will immediately send out the number.

1.2 Call waiting

1.3 Call on hold

1.4 Call forwarding

1.5 Three-party conference

1.6 Call divert

1.7 Directly dial IP communication

1.8 Speed dial

In VoIP→Speed Dial page, set speed dial, if make off hook and dial zero, the GT202 will call 233, if dial one, the GT202 will call 911.

1.9 Software upgrading

Enter Advanced→Firmware Upload page, after selecting file, click Apply and the equipment will automatically finish update.

Note: please select correct updating files; can not turn off the electricity during update.

Please do not power off during the upgrading!

9%

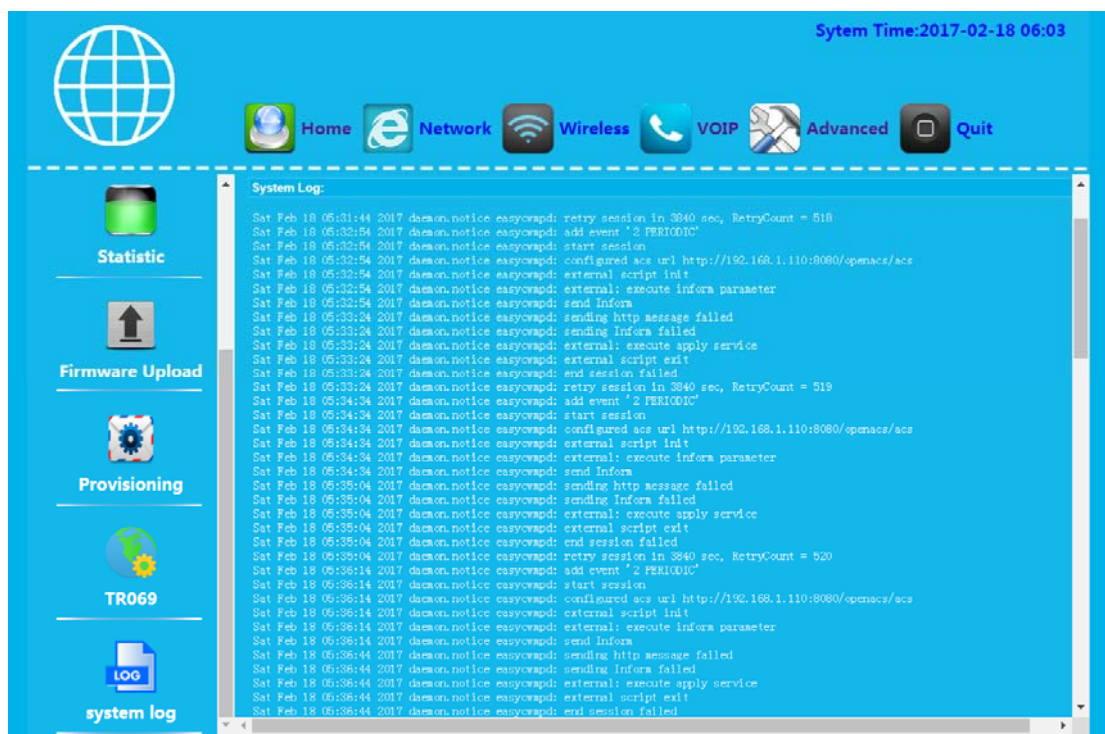## 1.10 System log

Enter Advanced→System log page, users can view log.

Warning:

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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. changes or modifications not expressly approved by the party responsible for compliance 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.

RF Exposure Statement

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be

installed and operated with minimum distance of 20cm the radiator your body. This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter