

**i20S IP Voice Access
User Manual V3.0**



Document VER	Firmware VER	Explanation	Time
V1.0	2.0.0.2485	Initial issue	20160830
V2.0	2.1.1.2898	Add FDMS, video linkage function. Changed default in passive mode to the electric-lock.	20170726
V3.0	2.1.1.2898	Change company address and add IP scan tool download address in QIG	20171027

Safety Notices

1. Please use the specified power adapter. If you need to use the power adapter provided by other manufacturers under special circumstances, please make sure that the voltage and current provided is in accordance with the requirements of this product, meanwhile, please use the safety certificated products, otherwise may cause fire or get an electric shock.
2. When using this product, please do not damage the power cord either by forcefully twist it, stretch pull, banding or put it under heavy pressure or between items, otherwise it may cause damage to the power cord, lead to fire or get an electric shock.
3. Before using, please confirm that the temperature and environment is humidity suitable for the product to work. (Move the product from air conditioning room to natural temperature, which may cause this product surface or internal components produce condense water vapor, please open power use it after waiting for this product is natural drying).
4. Please do not let non-technical staff to remove or repair. Improper repair may cause electric shock, fire, malfunction, etc. It will lead to injury accident or cause damage to your product.
5. Do not use fingers, pins, wire, other metal objects or foreign body into the vents and gaps. It may cause current through the metal or foreign body, which may even cause electric shock or injury accident. If any foreign body or objection falls into the product please stop using.
6. Please do not discard the packing bags or store in places where children could reach, if children trap his head with it, may cause nose and mouth blocked, and even lead to suffocation.
7. Please use this product with normal usage and operating, in bad posture for a long time to use this product may affect your health.
8. Please read the above safety notices before installing or using this phone. They are crucial for the safe and reliable operation of the device.

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I. Product introduction

i20S voice access is a full digital network door phone, with its core part adopts mature VoIP solution (Broadcom chip), stable and reliable performance, hands-free adopting digital full-duplex mode, voice loud and clear, generous appearance, solid durable, easy for installation, comfortable keypad and low power consumption.

i20S voice access supports entrance guard control, voice intercom, ID card and keypad remote to open the door.

1. Appearance of the product



2. Description

Buttons and icons	Description	Function
	Numeric keyboard	Input password to open the door or to call.
	programmable keys	Can be set to a variety of functions, in order to meet the needs of different occasions
	induction zone	RFID induction area
	Lock Status	Door unlocking: On Door locking: Off
	Call/Ring status	Standby: Off Calls: On Ringing: Blink with 1s
	Network/SIP Registration	Network error: Blink with 1s Network running: Off Registration failed: Blink with 3s Registration succeeded: On

II. Start Using

Before you start to use the equipment, please make the following installation.

1. Confirm the connection

Confirm whether the equipment of the power cord, network cable, electric lock control line connection and the boot-up is normal. (Check the network state of light)

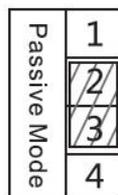
1) Power, Electric Lock, Indoor switch port

Voice access the power supply ways: 12v/DC or POE.

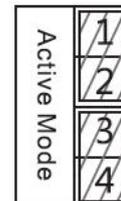
CN7						
1	2	3	4	5	6	7
+12V	VSS	NC	COM	NO	S_IN	S_OUT
12V 1A/DC		Electric-lock switch			Indoor switch	



2) Driving mode of electric-lock(Default in passive mode)



Jumper in passive mode



Jumper in active mode

【Note】 When the device is in active mode, it can drive 12V/700mA switch output maximum, to which a standard electric-lock or another compatible electrical appliance can be connected.

- When using the active mode, it is 12V DC in output.
- When using the passive mode, output is short control (normally open mode or normally close mode).

3) Wiring instructions

- NO: Normally Open Contact.
- COM: Common Contact.
- NC: Normally Close Contact.

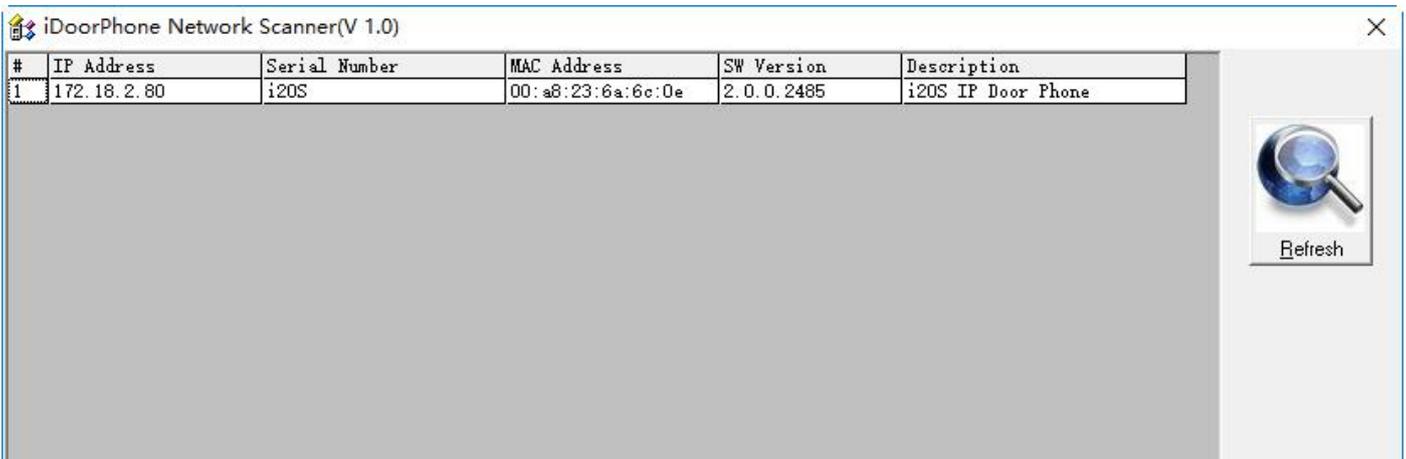
Driving Mode		Electric lock		Jumper port	Connections
Active	Passive	No electricity when open	When the power to open		
✓					<p>Electric-lock: No electricity when open the door</p>
✓			✓		<p>Electric-lock: When the power to open the door</p>
	✓	✓			<p>Electric-lock: No electricity when open the door</p>
	✓		✓		<p>Electric-lock: When the power to open the door</p>
	✓	✓			<p>Electric-lock: No electricity when open the door</p>

2. Quick Setting

The product provides a complete function and parameter setting. Users may need to have the network and SIP protocol knowledge to understand the meaning represented by all parameters. In order to let equipment users enjoy the high quality of voice service and low cost advantage brought by the device immediately, here we list some basic but compulsory setting options in this section to let users know how to operate without understanding such complex SIP protocols.

In prior to this step, please make sure your broadband Internet online can be normal operated, and complete the connection of the network hardware. The product factory default network mode is DHCP. Thus, only connect equipment with DHCP network environment that network can be automatically connected.

- Press and hold “#” key for 3 seconds and the door phone will report the IP address by voice, or use the "iDoorPhoneNetworkScanner.exe" software to find the IP address of the device.
(Download address <http://download.fanvil.com/tool/iDoorPhoneNetworkScanner.exe>)
- **Note:** when power on, 30s waiting is needed for device running.
- Log on to the WEB device configuration.
- In a Line page configuration service account, user name, parameters that are required for server address register.
- You can set DSS key in the Function key page.
- You can set Door Phone parameters in the Webpage (EGS Setting-> Features).



The screenshot shows the 'iDoorPhone Network Scanner(V 1.0)' application window. It features a table with the following data:

#	IP Address	Serial Number	MAC Address	SW Version	Description
1	172.18.2.80	i20S	00:a8:23:6a:6c:0e	2.0.0.2485	i20S IP Door Phone

Below the table, there is a large grey area and a 'Refresh' button with a magnifying glass icon.

III. Basic operation

1. Answer a call

When a call comes in, the device will answer automatically. If you cancel auto answer feature and set auto answer time, you will hear the bell ring at the set time and the device will auto answer after a timeout.

2. Call

Configure shortcut key as hot key and setup a number, then press shortcut key can call the configured number.

3. End call

Enable Release key hang up to end call.

4. Open the door operation

Through the following seven ways to open the door:

- 1) Input password on the keyboard to open the door.
- 2) Access to call the owner and the owner enter the remote password to open the door.
- 3) Owner/other equipment call the access control and enter the access code to open the door. (access code should be included in the list of access configuration, and enable for remote calls to open the door)
- 4) Swipe the RFID cards to open the door.
- 5) By means of indoor switch to open the door.
- 6) Private access code to open the door.

Enable for local authentication, and set private access code. Input the access code directly under standby mode to open the door. In this way, the door log will record corresponding card number and user name.

- 7) Active URL control command to open the door.

URL is "http://user:pwd@host/cgi-bin/ConfigManApp.com?key=F_LOCK&code=openCode"

- a. User and pwd is Web the user name and password.
- b. "openCode" is the remote control code to open the door.

Example: "http://admin:admin@172.18.3.25/cgi-bin/ConfigManApp.com?key=*"

If access code is input correctly, the device will play sirens sound to prompt access control and the remote user, while input error by low-frequency short chirp.

Password input successfully followed by high-frequency sirens sound, while input error is followed by

high-frequency short chirp.

When door has been opened, the device will play sirens sound to prompt.

IV. Page settings

1. Browser configuration

When the device and your computer are successfully connected to the network, enter the IP address of the device on the browser as `http://xxx.xxx.xxx.xxx/` and you can see the login interface of the web page management.

Enter the user name and password and click the [Logon] button to enter the settings screen.



The image shows a login form with the following fields and controls:

- User:** A text input field.
- Password:** A text input field.
- Language:** A dropdown menu currently set to "English".
- Logon:** A button to submit the login information.

2. Password Configuration

There are two levels of access: root level and general level. A user with root level access can browse and set all configuration parameters, while a user with general level can set all configuration parameters except server parameters for SIP.

- Default user with general level: The default is not set, are free to add.
- Default user with root level:
 - ◆ User name: admin
 - ◆ Password: admin

3. Configuration via WEB

(1) System

a) Information

The screenshot shows the Fanvil web interface with the 'Information' tab selected. The left sidebar contains a navigation menu with 'System' expanded. The main content area is divided into three sections:

- System Information:**
 - Model: i20S
 - Hardware: 2.1
 - Software: 2.1.1.2898
 - Uptime: 01 : 13 : 25
 - Last uptime: 00:00:00
 - MEMInfo: ROM: 0.8/8(M) RAM: 2.1/16(M)
- Network:**
 - Network mode: DHCP
 - MAC: 00:a8:34:68:24:81
 - IP: 172.18.3.102
 - Subnet mask: 255.255.0.0
 - Default gateway: 172.18.1.1
- SIP Accounts:**

Line	Number	Status
Line 1	5521	Registered
Line 2	N/A	Inactive

Information	
Field Name	Explanation
System Information	Display equipment model, hardware version, software version, uptime, Last uptime and MEMInfo.
Network	Shows the configuration information for WAN port, including connection mode of WAN port (Static, DHCP, PPPoE), MAC address, IP address of WAN port.
SIP Accounts	Shows the phone numbers and registration status for the 2 SIP LINES.

b) Account

Through this page, user can add or remove users depends on their needs and can modify existing user permission.

Change Web Authentication Password

Old Password:

New Password:

Confirm Password:

Add New User

Username

Web Authentication Password

Confirm Password

Privilege

User Accounts

User	Privilege	
admin	Administrators	<input type="button" value="Delete"/>

Account	
Field Name	Explanation
Change Web Authentication Password	You Can modify the login password to the account
Add New User	You can add new user
User Accounts	Show the existing user information

c) Configurations

Configurations

Field Name	Explanation
Export Configurations	Save the equipment configuration to a txt or xml file. Please note to Right click on the choice and then choose "Save Link As."
Import Configurations	Browse to the config file, and press Update to load it to the equipment.
Reset to factory defaults	This will restore factory default and remove all configuration information.

d) Upgrade

Upgrade

Field Name	Explanation
Software upgrade	Browse to the firmware, and press Update to load it to the equipment.

e) Auto Provision

Auto Provision

Field Name	Explanation
Common Settings	
Current Configuration Version	Show the current config file's version. If the version of configuration downloaded is higher than this, the configuration will be upgraded. If the endpoints confirm the configuration by the Digest method, the configuration will not be upgraded unless it differs from the current configuration
General Configuration Version	Show the common config file's version. If the configuration downloaded and this configuration is the same, the auto provision will stop. If the endpoints confirm the configuration by the Digest method, the configuration will not be upgraded unless it differs from the current configuration.
CPE Serial Number	Serial number of the equipment
Authentication Name	Username for configuration server. Used for FTP/HTTP/HTTPS. If this is blank the phone will use anonymous
Authentication Password	Password for configuration server. Used for FTP/HTTP/HTTPS.
Configuration File Encryption Key	Encryption key for the configuration file
General Configuration File Encryption Key	Encryption key for common configuration file
Save Auto Provision Information	Save the auto provision username and password in the phone until the server url changes

DHCP Option	
Option Value	The equipment supports configuration from Option 43, Option 66, or a Custom DHCP option. It may also be disabled.
Custom Option Value	Custom option number. Must be from 128 to 254.
SIP Plug and Play (PnP)	
Enable SIP PnP	If this is enabled, the equipment will send SIP SUBSCRIBE messages to a multicast address when it boots up. Any SIP server understanding that message will reply with a SIP NOTIFY message containing the Auto Provisioning Server URL where the phones can request their configuration.
Server Address	PnP Server Address
Server Port	PnP Server Port
Transportation Protocol	PnP Transfer protocol – UDP or TCP
Update Interval	Interval time for querying PnP server. Default is 1 hour.
Static Provisioning Server	
Server Address	Set FTP/TFTP/HTTP server IP address for auto update. The address can be an IP address or Domain name with subdirectory.
Configuration File Name	Specify configuration file name. The equipment will use its MAC ID as the config file name if this is blank.
Protocol Type	Specify the Protocol type FTP, TFTP or HTTP.
Update Interval	Specify the update interval time. Default is 1 hour.
Update Mode	<ol style="list-style-type: none"> 1. Disable – no update 2. Update after reboot – update only after reboot. 3. Update at time interval – update at periodic update interval
TR069	
Enable TR069	Enable/Disable TR069 configuration
ACS Server Type	Select Common or CTC ACS Server Type.
ACS Server URL	ACS Server URL.
ACS User	User name for ACS.
ACS Password	ACS Password.
TR069 Auto Login	Enable/Disable TR069 Auto Login.
INFORM Sending Period	Time between transmissions of “Inform” Unit is seconds.

f) FDMS

FDMS Settings

Enable FDMS	Enable/Disable FDMS configuration
FDMS Interval	The time to send sip Subscribe information to the FDMS server on a regular basis. Unit seconds

Doorphone Info Settings

Community Name	The name of the community where the device is installed
Building Number	The name of the building where the equipment is installed
Room Number	The name of the room where the equipment is installed

g) Tools

Syslog is a protocol used to record log messages using a client/server mechanism. The Syslog server receives the messages from clients, and classifies them based on priority and type. Then these messages will be written into a log by rules which the administrator has configured.

There are 8 levels of debug information.

Level 0: emergency; System is unusable. This is the highest debug info level.

Level 1: alert; Action must be taken immediately.

Level 2: critical; System is probably working incorrectly.

Level 3: error; System may not work correctly.

Level 4: warning; System may work correctly but needs attention.

Level 5: notice; It is the normal but significant condition.

Level 6: Informational; It is the normal daily messages.

Level 7: debug; Debug messages normally used by system designer. This level can only be displayed via telnet.

Tools	
Field Name	Explanation
Syslog	
Enable Syslog	Enable or disable system log.
Server Address	System log server IP address.
Server Port	System log server port.
APP Log Level	Set the level of APP log.
SIP Log Level	Set the level of SIP log.
Network Packets Capture	
Capture a packet stream from the equipment. This is normally used to troubleshoot problems.	
Reboot Phone	
Some configuration modifications require a reboot to become effective. Clicking the Reboot button will lead to reboot immediately.	
Note: Be sure to save the configuration before rebooting.	

(2) Network

a) Basic

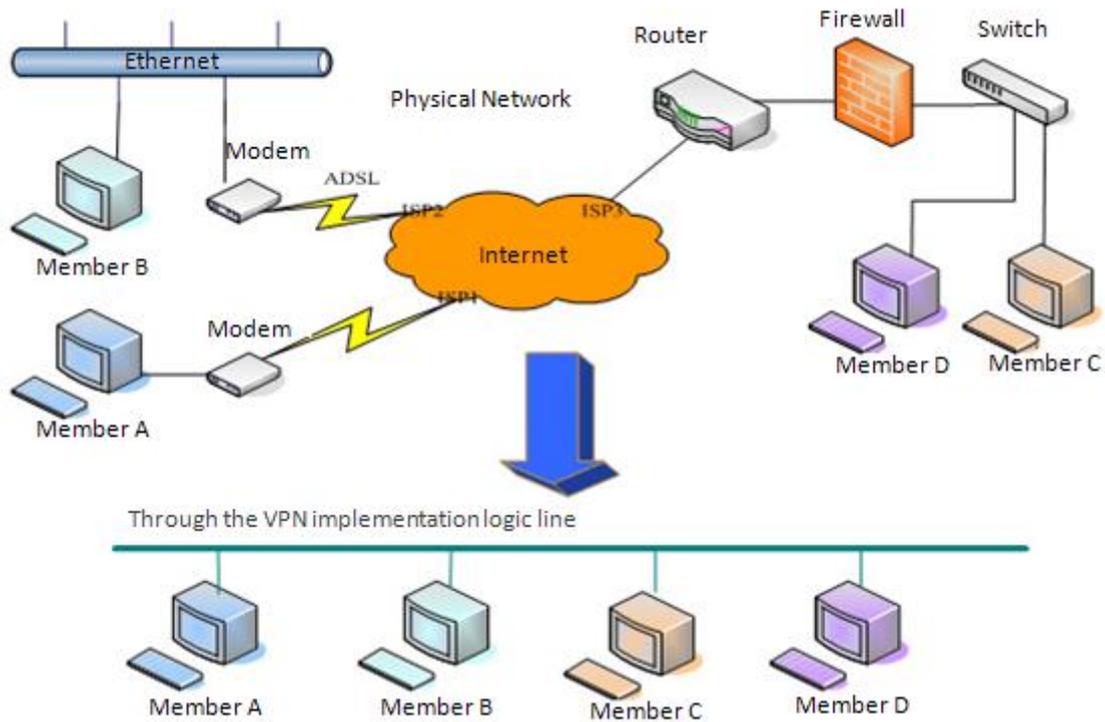
The screenshot shows the 'Basic' tab of the Fanvil network configuration interface. On the left is a navigation menu with options: System, Network (selected), Line, EGS Setting, EGS Access, EGS Logs, and Function Key. The main content area is divided into three sections: Network Status, Settings, and Service Port Settings. Network Status shows the current network configuration. Settings allow selecting between Static IP, DHCP, and PPPoE, and configuring DNS servers. Service Port Settings allow configuring the web server type and ports. At the bottom, there is a section for HTTPS Certification File with an 'Upload' and 'Delete' button.

Field Name	Explanation
Network Status	
IP	The current IP address of the equipment
Subnet mask	The current Subnet Mask
Default gateway	The current Gateway IP address
MAC	The MAC address of the equipment
MAC Timestamp	Get the MAC address of time.
Settings	
Select the appropriate network mode. The equipment supports three network modes:	
Static IP	Network parameters must be entered manually and will not change. All parameters are provided by the ISP.
DHCP	Network parameters are provided automatically by a DHCP server.
PPPoE	Account and Password must be input manually. These are provided by your ISP.
If Static IP is chosen, the screen below will appear. Enter values provided by the ISP.	
DNS Server Configured by	Select the Configured mode of the DNS Server.
Primary DNS Server	Enter the server address of the Primary DNS.

Secondary DNS Server	Enter the server address of the Secondary DNS.
After entering the new settings, click the APPLY button. The equipment will save the new settings and apply them. If a new IP address was entered for the equipment, it must be used to login to the phone after clicking the APPLY button.	
Service Port Settings	
Web Server Type	Specify Web Server Type – HTTP or HTTPS
HTTP Port	Port for web browser access. Default value is 80. To enhance security, change this from the default. Setting this port to 0 will disable HTTP access. Example: The IP address is 192.168.1.70 and the port value is 8090, the accessing address is http://192.168.1.70:8090.
HTTPS Port	Port for HTTPS access. Before using https, an https authentication certification must be downloaded into the equipment. Default value is 443. To enhance security, change this from the default.
<p>Note:</p> <ol style="list-style-type: none"> 1) Any changes made on this page require a reboot to become active. 2) It is suggested that changes to HTTP Port be values greater than 1024. Values less than 1024 are reserved. 3) If the HTTP port is set to 0, HTTP service will be disabled. 	

b) VPN

The device supports remote connection via VPN. It supports both Layer 2 Tunneling Protocol (L2TP) and OpenVPN protocol. This allows users at remote locations on the public network to make secure connections to local networks.



- > System
- > Network
- > Line
- > EGS Setting
- > EGS Access
- > EGS Logs
- > Function Key

Basic

VPN

Virtual Private Network (VPN) Status

VPN IP Address: 0.0.0.0

VPN Mode

Enable VPN

L2TP OpenVPN

Layer 2 Tunneling Protocol (L2TP)

L2TP Server Address:

Authentication Name:

Authentication Password:

OpenVPN Files

OpenVPN Configuration file:	client.ovpn	N/A	<input type="button" value="Upload"/>	<input type="button" value="Delete"/>
CA Root Certification:	ca.crt	N/A	<input type="button" value="Upload"/>	<input type="button" value="Delete"/>
Client Certification:	client.crt	N/A	<input type="button" value="Upload"/>	<input type="button" value="Delete"/>
Client Key:	client.key	N/A	<input type="button" value="Upload"/>	<input type="button" value="Delete"/>

Field Name	Explanation
VPN IP Address	Shows the current VPN IP address.
VPN Mode	
Enable VPN	Enable/Disable VPN.
L2TP	Select Layer 2 Tunneling Protocol
OpenVPN	Select OpenVPN Protocol. (Only one protocol may be activated. After the selection is made, the configuration should be saved and the phone be rebooted.)
Layer 2 Tunneling Protocol (L2TP)	
L2TP Server Address	Set VPN L2TP Server IP address.
Authentication Name	Set User Name access to VPN L2TP Server.
Authentication Password	Set Password access to VPN L2TP Server.
Open VPN Files	
Upload or delete Open VPN Certification Files	

(3) Line

a) SIP

Configure a SIP server on this page.

Advanced Settings >>

Subscribe For Voice Message	<input type="checkbox"/>		
Voice Message Number	<input type="text"/>		
Voice Message Subscribe Period	<input type="text" value="3600"/>	Second(s)	
Enable DND	<input type="checkbox"/>	Ring Type	<input type="text" value="Default"/>
Blocking Anonymous Call	<input type="checkbox"/>	Conference Type	<input type="text" value="Local"/>
Use 182 Response for Call waiting	<input type="checkbox"/>	Server Conference Number	<input type="text"/>
Anonymous Call Standard	<input type="text" value="None"/>	Transfer Timeout	<input type="text" value="0"/> Second(s)
Dial Without Registered	<input type="checkbox"/>	Enable Long Contact	<input type="checkbox"/>
Click To Talk	<input type="checkbox"/>	Enable Use Inactive Hold	<input type="checkbox"/>
User Agent	<input type="text"/>	Use Quote in Display Name	<input type="checkbox"/>
Response Single Codec	<input type="checkbox"/>		
Use Feature Code	<input type="checkbox"/>		
Enable DND	<input type="text"/>	DND Disabled	<input type="text"/>
Enable Blocking Anonymous Call	<input type="text"/>	Disable Blocking Anonymous Call	<input type="text"/>
Specific Server Type	<input type="text" value="COMMON"/>	Enable DNS SRV	<input type="checkbox"/>
Registration Expiration	<input type="text" value="3600"/>	Keep Alive Type	<input type="text" value="SIP Option"/>
Use VPN	<input checked="" type="checkbox"/>	Keep Alive Interval	<input type="text" value="60"/> Second(s)
Use STUN	<input type="checkbox"/>	Sync Clock Time	<input type="checkbox"/>
Convert URI	<input checked="" type="checkbox"/>	Enable Session Timer	<input type="checkbox"/>
DTMF Type	<input type="text" value="RFC2833"/>	Session Timeout	<input type="text" value="0"/> Second(s)
DTMF SIP INFO Mode	<input type="text" value="Send */#"/>	Enable Rport	<input checked="" type="checkbox"/>
Transportation Protocol	<input type="text" value="UDP"/>	Enable PRACK	<input checked="" type="checkbox"/>
Local Port	<input type="text" value="5060"/>	Auto Change Port	<input type="checkbox"/>
SIP Version	<input type="text" value="RFC3261"/>	Keep Authentication	<input type="checkbox"/>
Caller ID Header	<input type="text" value="PAI-RPID-"/>	Auto TCP	<input type="checkbox"/>
Enable Strict Proxy	<input type="checkbox"/>	Enable Feature Sync	<input type="checkbox"/>
Enable user=phone	<input checked="" type="checkbox"/>	Enable GRUU	<input type="checkbox"/>
Enable SCA	<input type="checkbox"/>	BLF Server	<input type="text"/>
Enable BLF List	<input type="checkbox"/>	BLF List Number	<input type="text"/>
SIP Encryption	<input type="checkbox"/>	RTP Encryption	<input type="checkbox"/>
SIP Encryption Key	<input type="text"/>	RTP Encryption Key	<input type="text"/>

Apply

SIP

Field Name	Explanation
Basic Settings (Choose the SIP line to configured)	
Line Status	Display the current line status at page loading. To get the up to date line status, user has to refresh the page manually.

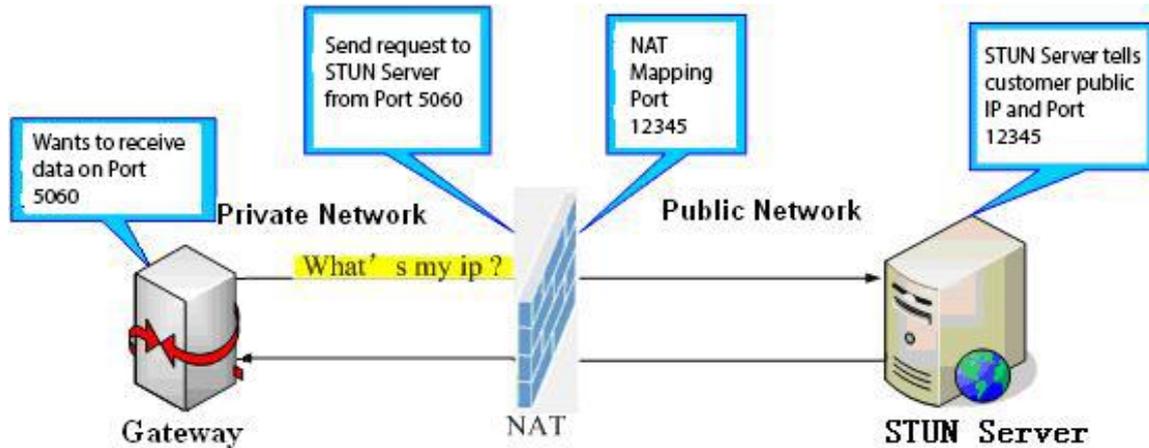
Username	Enter the username of the service account.
Display name	Enter the display name to be sent in a call request.
Authentication Name	Enter the authentication name of the service account
Authentication Password	Enter the authentication password of the service account
Activate	Whether the service of the line should be activated
SIP Proxy Server Address	Enter the IP or FQDN address of the SIP proxy server
SIP Proxy Server Port	Enter the SIP proxy server port, default is 5060
Outbound proxy address	Enter the IP or FQDN address of outbound proxy server provided by the service provider
Outbound proxy port	Enter the outbound proxy port, default is 5060
Realm	Enter the SIP domain if requested by the service provider
Codecs Settings	
Set the priority and availability of the codecs by adding or remove them from the list.	
Advanced Settings	
Call Forward Unconditional	Enable unconditional call forward, all incoming calls will be forwarded to the number specified in the next field
Call Forward Number for Unconditional	Set the number of unconditional call forward
Call Forward on Busy	Enable call forward on busy, when the phone is busy, any incoming call will be forwarded to the number specified in the next field
Call Forward Number for Busy	Set the number of call forward on busy
Call Forward on No Answer	Enable call forward on no answer, when an incoming call is not answered within the configured delay time, the call will be forwarded to the number specified in the next field
Call Forward Number for No Answer	Set the number of call forward on no answer
Call Forward Delay for No Answer	Set the delay time of not answered call before being forwarded
Hotline Delay	Set the delay for hotline before the system automatically dialed it
Enable Auto Answering	Enable auto-answering, the incoming calls will be answered automatically after the delay time
Auto Answering Delay	Set the delay for incoming call before the system automatically answered it
Subscribe For Voice Message	Enable the device to subscribe a voice message waiting notification, if enabled, the device will receive notification from the server if there is voice message waiting on the server
Voice Message Number	Set the number for retrieving voice message

Voice Message Subscribe Period	Set the interval of voice message notification subscription
Enable Hotline	Enable hotline configuration, the device will dial to the specific number immediately at audio channel opened by off-hook handset or turn on hands-free speaker or headphone
Hotline Number	Set the hotline dialing number
Enable DND	Enable Do-not-disturb, any incoming call to this line will be rejected automatically
Blocking Anonymous Call	Reject any incoming call without presenting caller ID
Use 182 Response for Call waiting	Set the device to use 182 response code at call waiting response
Anonymous Call Standard	Set the standard to be used for anonymous
Dial Without Registered	Set call out by proxy without registration
Click To Talk	Set Click To Talk
User Agent	Set the user agent, the default is Model with Software Version.
Use Quote in Display Name	Whether to add quote in display name
Ring Type	Set the ring tone type for the line
Conference Type	Set the type of call conference, Local=set up call conference by the device itself, maximum supports two remote parties, Server=set up call conference by dialing to a conference room on the server
Server Conference Number	Set the conference room number when conference type is set to be Server
Transfer Timeout	Set the timeout of call transfer process
Enable Long Contact	Allow more parameters in contact field per RFC 3840
Enable Missed Call Log	If enabled, the phone will save missed calls into the call history record.
Response Single Codec	If setting enabled, the device will use single codec in response to an incoming call request
Use Feature Code	When this setting is enabled, the features in this section will not be handled by the device itself but by the server instead. In order to control the enabling of the features, the device will send feature code to the server by dialing the number specified in each feature code field.
Specific Server Type	Set the line to collaborate with specific server type
Registration Expiration	Set the SIP expiration interval
Use VPN	Set the line to use VPN restrict route
Use STUN	Set the line to use STUN for NAT traversal
Convert URI	Convert not digit and alphabet characters to %hh hex code
DTMF Type	Set the DTMF type to be used for the line

DTMF SIP INFO Mode	Set the SIP INFO mode to send '*' and '#' or '10' and '11'
Transportation Protocol	Set the line to use TCP or UDP for SIP transmission
SIP Version	Set the SIP version
Caller ID Header	Set the Caller ID Header
Enable Strict Proxy	Enables the use of strict routing. When the phone receives packets from the server, it will use the source IP address, not the address in via field.
Enable user=phone	Sets user=phone in SIP messages.
Enable SCA	Enable/Disable SCA (Shared Call Appearance)
Enable BLF List	Enable/Disable BLF List
Enable DNS SRV	Set the line to use DNS SRV which will resolve the FQDN in proxy server into a service list
Keep Alive Type	Set the line to use dummy UDP or SIP OPTION packet to keep NAT pinhole opened
Keep Alive Interval	Set the keep alive packet transmitting interval
Enable Session Timer	Set the line to enable call ending by session timer refreshment. The call session will be ended if there is not new session timer event update received after the timeout period
Session Timeout	Set the session timer timeout period
Enable Rport	Set the line to add rport in SIP headers
Enable PRACK	Set the line to support PRACK SIP message
Keep Authentication	Keep the authentication parameters from previous authentication
Auto TCP	Using TCP protocol to guarantee usability of transport for SIP messages above 1500 bytes
Enable Feature Sync	Feature Syncn with server
Enable GRUU	Support Globally Routable User-Agent URI (GRUU)
BLF Server	The registered server will receive the subscription package from ordinary application of BLF phone. Please enter the BLF server, if the sever does not support subscription package, the registered server and subscription server will be separated.
BLF List Number	BLF List allows one BLF key to monitor the status of a group. Multiple BLF lists are supported.
SIP Encryption	Enable SIP encryption such that SIP transmission will be encrypted
SIP Encryption Key	Set the pass phrase for SIP encryption
RTP Encryption	Enable RTP encryption such that RTP transmission will be encrypted
RTP Encryption Key	Set the pass phrase for RTP encryption

b) Basic Settings

STUN – Simple Traversal of UDP through NAT –A STUN server allows a phone in a private network to know its public IP and port as well as the type of NAT being used. The equipment can then use this information to register itself to a SIP server so that it can make and receive calls while in a private network.



SIP
Basic Settings
Dial Peer

- > System
- > Network
- > Line
- > EGS Setting
- > EGS Access
- > EGS Logs
- > Function Key

SIP Settings

Local SIP Port:

Registration Failure Retry Interval: Second(s)

Enable Strict UA Match:

Enable DHCP Option 120:

STUN Settings

STUN NAT Traversal: FALSE

Server Address:

Server Port:

Binding Period: Second(s)

SIP Waiting Time: millisecond

TLS Certification File: sips.pem N/A

Basic Settings	
Field Name	Explanation
SIP Settings	
Local SIP Port	Set the local SIP port used to send/receive SIP messages.
Registration Failure Retry Interval	Set the retry interval of SIP REGISTRATION when registration failed.

Enable Strict UA Match	Enable or disable Strict UA Match
STUN Settings	
Server Address	STUN Server IP address
Server Port	STUN Server Port – Default is 3478.
Binding Period	STUN blinding period – STUN packets are sent at this interval to keep the NAT mapping active.
SIP Waiting Time	Waiting time for SIP. This will vary depending on the network.
TLS Certification File	
Upload or delete the TLS certification file used for encrypted SIP transmission.	
Note: the SIP STUN is used to achieve the SIP penetration of NAT, is the realization of a service, when the equipment configuration of the STUN server IP and port (usually the default is 3478), and select the Use Stun SIP server, the use of NAT equipment to achieve penetration.	

c) Dial peer

Import Dial peer Table	
Field Name	Explanation
Select File	Select an existing dialing rule file. The file type must be a .CSV
Add Dial Peer	
Number	In order to add an outgoing call number, the outgoing call number can be divided into two types: one is the exact match, and after the exact match, if the number is exactly the same as the user dialing the called number, the device will use the IP address of this number mapping or (This is the area code prefix function of the PSTN). If the number matches the N-bit (prefix number length) of the called number, the device uses the IP address or configuration mapped to this number.

	Make a call. Configuration prefix matching needs to be followed by a prefix number to match the exact match number; the longest support of 30 bits; also supports the use of x format and range of numbers.
Destination	Configure the destination address and, if configured as a point-to-point call, write the peer IP address directly. Can also be set to domain name, by the device DNS server to resolve the specific IP address. If it is not configured, the IP address is 0.0.0.0. This is an optional configuration item
Port	Configure the signaling port of the other party. This is an optional configuration item. The default is 5060v
Alias	Configure aliases, this is an optional item: the replacement number used when the prefix is prefixed, and no alias when configured
<p>Note: aliases are divided into four types and must be combined with the replacement length:</p> <ol style="list-style-type: none"> 1) add: xxx, add xxx before the number. This can help users save dialing length; 2) all: xxx, all replaced by xxx; can achieve speed dial, such as user configuration dial-up 1, then by configuring all: number to change the actual call out the number; 3) del, delete the number before the n bit, n by the replacement length set; 4) rep: xxx, the number n before the number is replaced by xxx, n is set by the replacement length. For example, if the user wants to dial the PSTN (010-62281493) through the floor service provided by the VoIP operator, and the actual call should be 010-62281493, then we can configure the called number 9T, then rep: 010, and then delete the length Set to 1. Then all users call the 9 at the beginning of the phone will be replaced with 010 + number sent. To facilitate the user to call the habit of thinking mode; 	
Call Mode	Configuration selection of different signaling protocols, SIP / IAX2;
Suffix	Configure the suffix, this is optional configuration items: that is, after the dial-up number to add this suffix, no configuration shows no suffix;
Deleted Length	Configure the replacement / delete length, the number entered by the user is replaced / deleted by this length; this is an optional configuration item;

(4) EGS Setting

a) Features

The screenshot displays the 'Features' configuration page in the Fanvil web interface. The left sidebar shows the 'EGS Setting' menu item selected. The main content area is organized into three sections:

- Common Settings:** Includes options for Switch Mode (Monostable), Enable Card Reader (Enable), Limit Talk Duration (Enable), Remote Password, APP Door Open (Disable), Enable Indoor Open (Enable), Description (i20S IP Door Phone), Address of Open Log Server (0.0.0.0), Door Unlock Indication (Long Beeps), Switch-On Duration (5 seconds), Card Reader Working Mode (Normal), Talk Duration (120 seconds), Local password, APP Password, Enable Access Table (Enable), Enable Open Log Server (Disable), Port of Open Log Server (514), and Remote Code Check Length (4).
- Basic Settings >>:** Includes options for Enable DND, Enable Intercom Mute (checked), Enable Auto Dial Out (checked), Enable Auto Answer (Lines and IP Call), No Answer Auto Hangup, Dial Fixed Length to Send (checked), Dial Number Voice Play (Disable), Enable Delay Start, Voice Read IP (Enable), Ban Outgoing, Enable Intercom Ringing (checked), Auto Dial Out Time (5 seconds), Auto Answer Timeout (0 seconds), Auto Hangup Timeout (30 seconds), Send length (4), Voice Play Language (English), Delay Start Time (1 second), and Press "*" to Send (checked).
- Block Out Settings >>:** Shows a 'Block Out List' table with an 'Add' button and a 'Delete' button.

Features

Field Name	Explanation
Common Settings	
Switch Mode	Monostable: there is only one fixed action status for door unlocking. Bistable: there are two actions and statuses, door unlocking and door locking. Each action might be triggered and changed to the other status. After changed, the status would be kept. Initial Value is Monostable
Switch-On Duration	Door unlocking time for Monostable mode only. If the time is up, the door would be locked automatically. Initial Value is 5 seconds.

Enable Card Reader	Enable or disable card reader for RFID cards.
Card Reader Working Mode	<p>Set ID card stats:</p> <p>Normal: This is the work mode, after the slot card can to open the door.</p> <p>Card Issuing: This is the issuing mode, after the slot card can to add ID cards.</p> <p>Card Revoking: This is the revoking mode, after the slot card can to delete ID cards.</p>
Limit Talk Duration	If enabled, calls would be forced ended after talking time is up.
Talk Duration	The call will be ended automatically when time up. Initial Value is 120 seconds
Remote Password	Remote door unlocking password. Initial Value is “*”.
Local password	Local door unlocking password via keypad, the default password length is 4. Initial Value is “6789”.
APP Door Open	Enable or disable the APP Door Open
APP password	APP door unlocking password. Initial Value is “*” .
Enable Indoor Open	Enable or disable to use indoor switch to unlock the door.
Enable Access Table	<p>Enable Access Table: enter <Access Code> for opening door during calls.</p> <p>Disable Access Table: enter <Remote Password> for opening door during calls.</p> <p>Default Enable.</p>
Description	Device description displayed on IP scanning tool software. Initial Value is “i20S IP Door Phone”.
Enable Open Log Server	Enable or disable to connect with log server
Address of Open Log Server	Log server address(IP or domain name)
Port of Open Log Server	Log server port (0-65535) , Initial Value is 514.
Door Unlock Indication	Indication tone for door unlocked. There are 3 type of tone: silent/short beeps/long beeps.
Remote Code Check Length	The remote access code length would be restricted with it. If the input access code length is matched with it, system would check it immediately. Initial Value is 4.
Basic Settings	
Enable DND	DND might be disabled phone for all SIP lines, or line for SIP individually. But the outgoing calls will not be affected
Ban Outgoing	If enabled, no outgoing calls can be made.
Enable Intercom Mute	If enabled, mutes incoming calls during an intercom call.

Enable Intercom Ringing	If enabled, plays intercom ring tone to alert to an intercom call.
Enable Auto Dial Out	Enable Auto Dial Out
Auto Dial Out Time	Set Auto Dial Out Time
Enable Auto Answer	Enable Auto Answer function
Auto Answer Timeout	Set Auto Answer Timeout
No Answer Auto Hangup	Enable automatically hang up when no answer
Auto Hangup Timeout	Configuration in a set time, automatically hang up when no answer
Dial Fixed Length to Send	Enable or disable dial fixed length to send.
Send length	The number will be sent to the server after the specified numbers of digits are dialed.
Dial Number Voice Play	Configuration Open / Close Dial Number Voice Play
Voice Play Language	Set language of the voice prompt
Enable Delay Start	Enable or disable the start delay
Delay Start Time	Set start delay time
Voice Read IP	Enable or disable voice broadcast IP address
Press "*" to Send	Enable or disable the Press "*" to Send, Initial Value is enable
Block Out Settings	
<p>Add or delete blocked numbers – enter the prefix of numbers which should not be dialed by the phone. For example, if 001 is entered, the phone would not dial any number beginning with 001.</p> <p>X and x are wildcards which match single digit. For example, if 4xxx or 4XXX is entered, the phone would not dial any 4 digits numbers beginning with 4. It would dial numbers beginning with 4 which are longer or shorter than 4 digits.</p>	

b) Audio

This page configures audio parameters such as voice codec, speak volume, mic volume and ringer volume.

Audio Setting	
Field Name	Explanation
First Codec	The first codec choice: G.711A/U, G.722, G.723.1, G.726-32, G.729AB
Second Codec	The second codec choice: G.711A/U, G.722, G.723.1, G.726-32, G.729AB, None
Third Codec	The third codec choice: G.711A/U, G.722, G.723.1, G.726-32, G.729AB, None
Fourth Codec	The forth codec choice: G.711A/U, G.722, G.723.1, G.726-32, G.729AB, None
DTMF Payload Type	The RTP Payload type that indicates DTMF. Default is 101
Default Ring Type	Ring Sound – There are 9 standard types and 3 User types.
G.729AB Payload Length	G.729AB Payload Length – Adjusts from 10 – 60 mSec.
Tone Standard	Configure tone standard area.
G.722 Timestamps	Choices are 160/20ms or 320/20ms.
G.723.1 Bit Rate	Choices are 5.3kb/s or 6.3kb/s.
Speakerphone Volume	Set the speaker calls the volume level.
MIC Input Volume	Set the MIC calls the volume level.

Broadcast Output Volume	Set the broadcast the output volume level.
Signal Tone Volume	Set the audio signal the output volume level.
Enable VAD	Enable or disable Voice Activity Detection (VAD). If VAD is enabled, G729 Payload length cannot be set greater than 20 mSec.

c) Video

Connection mode	Select external, click [Apply], restart the device
IP Camera Settings(External Mode)	
Field Name	Explanation
User name	External camera login required account
Password	External camera login password required
Camera type	Select the camera manufacturers
IP address	IP address of the camera, please use the camera matching scan tool to obtain the IP address
Port	Camera port number
RTSP information	Click [Apply], the connection automatically shows the camera does not show the reverse
Preview	Copy and paste the main stream or sub-stream Url into the VLC player, or click [Preview] to display the current camera video

d) MCAST

MCAST Settings

Priority:

Enable Page Priority:

Index/Priority	Name	Host:port
1	<input type="text"/>	<input type="text"/>
2	<input type="text"/>	<input type="text"/>
3	<input type="text"/>	<input type="text"/>
4	<input type="text"/>	<input type="text"/>
5	<input type="text"/>	<input type="text"/>
6	<input type="text"/>	<input type="text"/>
7	<input type="text"/>	<input type="text"/>
8	<input type="text"/>	<input type="text"/>
9	<input type="text"/>	<input type="text"/>
10	<input type="text"/>	<input type="text"/>

It is easy and convenient to use multicast function to send notice to each member of the multicast via setting the multicast key on the device and sending multicast RTP stream to pre-configured multicast address. By configuring monitoring multicast address on the device, monitor and play the RTP stream which sent by the multicast address.

MCAST Settings

Equipment can be set up to monitor up to 10 different multicast addresses, used to receive the multicast RTP stream sent by the multicast address.

Here are the ways to change equipment receiving multicast RTP stream processing mode in the Web interface: set the ordinary priority and enable page priority.

- **Priority:**

In the drop-down box to choose priority of ordinary calls the priority, if the priority of the incoming flows of multicast RTP, lower precedence than the current common calls, device will automatically ignore the group RTP stream. If the priority of the incoming flow of multicast RTP is higher than the current common calls priority, device will automatically receive the group RTP stream, and keep the current common calls in state. You can also choose to disable in the receiving threshold drop-down box, the device will automatically ignore all local network multicast RTP stream.

- **The options are as follows:**

- ✧ 1-10: To definite the priority of the common calls, 1 is the top level while 10 is the lowest
- ✧ Disable: ignore all incoming multicast RTP stream
- ✧ Enable the page priority:

Page priority determines the device how to deal with the new receiving multicast RTP stream

when it is in multicast session currently. When Page priority switch is enabled, the device will automatically ignore the low priority multicast RTP stream but receive top-level priority multicast RTP stream, and keep the current multicast session in state; If it is not enabled, the device will automatically ignore all receiving multicast RTP stream.

- Web Settings:

Index/Priority	Name	Host:port
1	ss	239.1.1.1:1366
2	ee	239.1.1.1:1367

The multicast SS priority is higher than that of EE, which is the highest priority.

Note: when pressing the multicast key for multicast session, both multicast sender and receiver will beep.

Listener configuration

Index/Priority	Name	Host:port
1	group 1	224.0.0.2:2366
2	group 2	224.0.0.2:1366
3	group 3	224.0.0.6:3366
4		
5		
6		
7		
8		
9		
10		

- **Blue part (name)**

"Group 1","Group 2" and "Group 3" are your setting monitoring multicast name.The group name will be displayed on the screen when you answer the multicast. If you have not set, the screen will display the IP: port directly.

- **Purple part (host: port)**

It is a set of addresses and ports to listen, separated by a colon.

- **Pink part (index / priority)**

Multicast is a sign of listening, but also the monitoring multicast priority. The smaller number refers to higher priority.

- **Red part (priority)**

It is the general call, non multicast call priority. The smaller number refers to high priority. The followings will explain how to use this option:

- ✧ The purpose of setting monitoring multicast "Group 1" or "Group 2" or "Group 3" launched a multicast call.

- ✧ All equipment has one or more common non multicast communication.
- ✧ When you set the Priority for the disable, multicast any level will not answer, multicast call is rejected.
- ✧ when you set the Priority to a value, only higher than the priority of multicast can come in, if you set the Priority is 3, group 2 and group 3 for priority level equal to 3 and less than 3 were rejected, 1 priority is 2 higher than ordinary call priority device can answer the multicast message at the same time, keep the hold the other call.

- **Green part (Enable Page priority)**

Set whether to open more priority is the priority of multicast, multicast is pink part number. Explain how to use:

- ✧ The purpose of setting monitoring multicast "group 1" or "3" set up listening "group of 1" or "3" multicast address multicast call.
- ✧ All equipment has been a path or multi-path multicast phone, such as listening to "multicast information group 2".
- ✧ If multicast is a new "group of 1", because "the priority group 1" is 2, higher than the current call "priority group 2" 3, so multicast call will can come in.
- ✧ If multicast is a new "group of 3", because "the priority group 3" is 4, lower than the current call "priority group 2" 3, "1" will listen to the equipment and maintain the "group of 2".

Multicast service

- **Send:** when configured ok, our key press shell on the corresponding equipment, equipment directly into the Talking interface, the premise is to ensure no current multicast call and 3-way of the case, the multicast can be established.
- **Lmonitor:** IP port and priority configuration monitoring device, when the call is initiated and incoming multicast, directly into the Talking interface equipment.

e) Action URL

Features	Audio	Video	MCAST	Action URL	Time/Date
Action URL Event Settings					
				Active URI Limit IP	<input type="text"/>
				Setup Completed	<input type="text"/>
				Registration Succeeded	<input type="text"/>
				Registration Disabled	<input type="text"/>
				Registration Failed	<input type="text"/>
				Off Hooked	<input type="text"/>
				On Hooked	<input type="text"/>
				Incoming Call	<input type="text"/>
				Outgoing calls	<input type="text"/>
				Call Established	<input type="text"/>
				Call Terminated	<input type="text"/>
				DND Enabled	<input type="text"/>
				DND Disabled	<input type="text"/>
				Mute	<input type="text"/>
				Unmute	<input type="text"/>
				Missed calls	<input type="text"/>
				IP Changed	<input type="text"/>
				Idle To Busy	<input type="text"/>
				Busy To Idle	<input type="text"/>
				<input type="button" value="Apply"/>	

Action URL Event Settings

URL for various actions performed by the phone. These actions are recorded and sent as xml files to the server. Sample format is `http://InternalServer/FileName.xml`

f) Time/Date

Features	Audio	Video	MCAST	Action URL	Time/Date
Network Time Server Settings					
				Time Synchronized via SNTP	<input checked="" type="checkbox"/>
				Time Synchronized via DHCP	<input type="checkbox"/>
				Primary Time Server	<input type="text" value="time.nist.gov"/>
				Secondary Time Server	<input type="text" value="pool.ntp.org"/>
				Time zone	(UTC+8) China, Singapore, Australia
				Resync Period	<input type="text" value="60"/> (1~5000)Second(s)
Date Format					
				Date Format	1 JAN MON

- › Network
- › Line
- › EGS Setting
- › EGS Access
- › EGS Logs
- › Function Key

Daylight Saving Time Settings

Location:

DST Set Type:

Fixed Type:

Offset: Minute

Start:

End:

Manual Time Settings

Time/Date	
Field Name	Explanation
Network Time Server Settings	
Time Synchronized via SNTP	Enable time-sync through SNTP protocol
Time Synchronized via DHCP	Enable time-sync through DHCP protocol
Primary Time Server	Set primary time server address
Secondary Time Server	Set secondary time server address, when primary server is not reachable, the device will try to connect to secondary time server to get time synchronization.
Time zone	Select the time zone
Resync Period	Time of re-synchronization with time server
Date Format	
Date Format	Select the time/date display format
Daylight Saving Time Settings	
Location	Select the user's time zone specific area
DST Set Type	Select automatic DST according to the preset rules of DST, or the manually input rules
Offset	The DST offset time
Month Start	The DST start month
Week Start	The DST start week
Weekday Start	The DST start weekday
Hour Start	The DST start hour
Month End	The DST end month

Week End	The DST end week
Weekday End	The DST end weekday
Hour End	The DST end hour
Manual Time Settings	
The time set by hand, need to disable SNTP service first.	

(5) EGS Access

- > System
- > Network
- > Line
- > EGS Setting
- > EGS Access
- > EGS Logs
- > Function Key

Import Access Table

Select File (accessList.csv)

Access Table >> [Click here to Save Access Table](#)

Total: 1 Page: 1

<input type="checkbox"/>	Index	Name	ID	Department	Position	Location Number	Fwd Number	Access Code	Double Auth	Profile	Type	Issuing Date	Card State
<input type="checkbox"/>	1	Hugo	0001231231					1234	Disable	None	Guest	2017/08/01 15:41:14	Enable

Add Access Rule

Name ★ Location ?

ID ID Number

Card State Fwd Number

Department Access Code ?

Position Double Auth ?

Type Profile

- > System
- > Network
- > Line
- > EGS Setting
- > EGS Access
- > EGS Logs
- > Function Key

Profile Setting

Profile Profile Name

Weekday	Statue	Start Time(00:00-23:59)	End Time(00:00-23:59)
Sunday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Monday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Tuesday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Wednesday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Thursday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Friday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Saturday	<input type="text" value="No"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>

Administrator Table >>

Add Admin Card Issuer

Total: 0 Page:

<input type="checkbox"/>	Index	ID	Issuing Date	Type
--------------------------	-------	----	--------------	------

EGS Access	
Field Name	Explanation
Import Access Table	
Click the <Browse> to choose to import remote access list file (access List.csv) and then clicking <Update> can batch import remote access rule.	

Access Table	
According to entrance guard access rules have been added, you can choose single or multiple rules on this list to delete operation.	
Add Access Rule	
Name(necessary)	User name
Location	Virtual extension number, used to make position call instead of real number. It might be taken with unit number, or room number.
ID	RFID card number. You can manually fill in the first 10 digits of the card number or select the existing card number
Number	User phone number
Card State	Enable or disable holder's RFID card
Fwd Number	Call forwarding number when above phone number is unavailable.
Department	Card holder's department
Access Code	1/ When the door phone answers the call from the corresponding <Phone Num> user, then the <Phone Num> user can input the access code via keypad to unlock the door remotely. 2/ The user's private password should be input via keypad for local door unlocking. The private password format is Location*Access Code .
Position	Card holder's position
Double Auth	When the feature is enabled, private password inputting and RFID reading must be matched simultaneously for door unlocking.
Type	Host: the door phone would answer all call automatically. Guest: the door phone would ring for incoming call, if the auto answer is disabled.
Profile	It is valid for user access rules (including RFID, access code, etc) within corresponding time section. If NONE is selected, the feature would be taken effect all day.
Profile Setting	
Profile	There are 4 sections for time profile configuration
Profile Name	The name of profile to help administrator to remember the time definition
Status	If it is yes, the time profile would be taken effect. Other time sections not included in the profiles would not allow users to open door
Start Time	The start time of section
End Time	The end time of section
Administrator Table	
Add Admin Card	You should input the top 10 digits of RFID card numbers. for example, 0004111806, selected the type of admin card , click <add>.
Type: Issuer and revocation When entrance guard is in normal state, swipe card (issuing card) would make entrance guard into the	

issuing state, and then you can swipe a new card, which the card would be added into the database; when you swipe the issuing card again after cards added done, entrance guard would return to normal state. Delete card operation is the same with issuing card.

The device can support up to 10 admin cards, 5000 copies of ordinary cards.

Note: in the issuing state, swiping deleted card is invalid.

Shows the ID, Issuing Date and Type of admin card

Delete	Clicking <Delete> would delete the admin card list of the selected ID cards.
--------	------------------------------------------------------------------------------

Delete All	Click <Delete All>, to delete all admin card lists.
------------	-----------------------------------------------------

(6) EGS Logs

According to open event log, can record up to 200,000 open event, after more than cover the old records. [Click here to Save Logs](#) Right click on the links to select save target as the door log can export CSV format.

Field Name	Explanation
Door Open Log	
Result	Show the results of the open the door (Success or Failed)
Time	Open the door of time.
Duration	Duration of open the door.
Access Name	If is the open the door for slot card or remote, will display remote access the name.
Access ID	<ol style="list-style-type: none"> 1. If open the door way to brush card shows card number 2. If the door way to open the door for the remote display the phone number of the door. 3. If open the door way to open the door for local, no display information.
Type	<p>Open type: 1. local, 2. Remote, 3. Brush card (Temporary Card, Valid Card and Illegal Card).</p> <p>Note: there are three kinds of credit card feedback results.</p> <ol style="list-style-type: none"> 1. Temporary Card (Only add the card number, without adding other rules) 2. Valid Card (Has been added access rules) 3. Illegal Card (Did not add information)

(7) Function Key

- > System
- > Network
- > Line
- > EGS Setting
- > EGS Access
- > EGS Logs
- > Function Key

Function Key Settings

Key	Type	Number 1	Number 2	Line	Subtype
DSS Key 1	Key Event ▼			SIP1 ▼	OK ▼

Advanced Settings

Use Function Key to Answer: Enable ▼ Enable Speed Dial Hangup: Enable ▼

Hot Key Dial Mode Select: ▼

Call Switched Time: (5~50)Second(s)

Day Start Time: (00:00~23:59) Day End Time: (00:00~23:59)

➤ Key Event

Set the key type to the Key Event.

Key	Type	Number 1	Number 2	Line	Subtype
DSS Key 1	Key Event ▼			SIP1 ▼	OK ▼

None
 Dial
 Release
OK
 Handfree

Type	Subtype	Usage
Key Event	None	No responding
	Dial	Dialing function
	Release	Delete password input, cancel dialing input and end call
	OK	identification key

➤ Hot Key

Enter the phone number in the input box, when you press the shortcut key, equipment will dial set telephone number. This button can also be used to set the IP address, press the shortcut key IP direct dial call.

Key	Type	Number 1	Number 2	Line	Subtype
DSS Key 1	Hot Key ▼			SIP1 ▼	Speed Dial ▼

Speed Dial
Speed Dial
 Intercom

Type	Number	Line	Subtype	Usage
Hot Key	Fill the called party's SIP account or IP address	The SIP account corresponding lines	Speed Dial	Using Speed Dial mode together with <code>Enable Speed Dial Hangup</code> <code>Enable</code> <input type="button" value="v"/> , can define whether this call is allowed to be hung up by re-pressing the speed dial key.
			Intercom	In Intercom mode, if the caller's IP phone supports Intercom feature, the device can automatically answer the Intercom calls

➤ Multicast

Multicast function is launched will voice messages sent to set the multicast address, all equipment to monitor the group multicast address can receive sponsors speech information, etc. Using multicast functionality can be simple and convenient to send notice to each member in the multicast.

Through the DSS Key configuration multicast calling WEB is as follows:

Key	Type	Number 1	Number 2	Line	Subtype
DSS Key 1	Multicast <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>	SIP1 <input type="button" value="v"/>	G.722 <input type="button" value="v"/> G.711A G.711U G.722 G.723.1 G.726-32 G.729AB

Type	Number	Subtype	Usage
Multicast	Set the host IP address and port number, the middle separated by a colon	G.711A	Narrowband speech coding (4Khz)
		G.711U	
		G.722	Wideband speech coding (7Khz)
		G.723.1	Narrowband speech coding (4Khz)
		G.726-32	
G.729AB			

✧ operation mechanism

Device through the DSS Key configuration of multicast address and port and started coding; set by WEB to monitor the multicast address and port; device sends a multicast, listens to the address of the device can receive the multicast content.

✧ calling configuration

The call is already exists, and three party or initiated multicast communication, so it will not be able to launch a new multicast call.

V. Appendix

1. Technical parameters

Communication protocol		SIP 2.0(RFC-3261)
Main chipset		Broadcom
Keys	DSS Key	1(Stainless steel)
	Numeric keyboard	Support
Audio	MIC	1
	Speaker	3W/4Ω
	Volume control	Adjustable
	Full duplex speakerphone	Support (AEC)
Speech flow	Protocols	RTP
	Decoding	G.729、 G.723、 G.711、 G.722、 G.726
Ports	Active Switched Output	12V/700mA DC
	WAN	10/100BASE-TX s Auto-MDIX, RJ-45
RFID/IC card reader		EM4100 (125Khz) MIFARE One(13.56Mhz)
Power supply mode		12V / 1A DC or PoE
PoE		PoE 802.3af (Class 3 - 6.49~12.95W)
Cables		CAT5 or better
Shell Material		Metal panel, ABS face-piece and back shell
Working temperature		-10°C to 60°C
Working humidity		10% - 90%
Storage temperature		-40°C to 70°C
Installation way		Wall-mounting
External size		160 x 93 x 35mm
Package size		209 x 118 x 64mm
Gross weight		420g

2. Basic functions

- 2 SIP Lines
- PoE Enabled
- Full-duplex speakerphone (HF)
- Numeric keypad (Dial pad or Password input)
- Intelligent DSS Keys (Speed Dial/intercom etc)
- Wall-mounting
- Integrated RFID Card reader
- 1 indoor switch interface
- 1 electric lock relay
- External power supply
- Door phone: call, password, RFID card, indoor switch
- Protection level: IP65, CE/FCC

3. Schematic diagram



VI. Other instructions

1. Open door modes

● Local control

1) Local Password

- ✧ Set <Local Password> (the password is "6789" by default) via DOOR PHONE\DOOR PHONE as above.
- ✧ Input password via keypad and press the "#" key, then the door will be unlocked.

2) Private access code

- ✧ Set <Add Access Rule\Access Code> and enable local authentication.
- ✧ Input access code via keypad and press the "#" key, then the door will be unlocked.

● Remote control

1) Visitors call the owner

- ✧ Visitors can call the owner via position speed dial or phone number. (After setting the speed dial key, visitors can press it to call direct.)
- ✧ The owner answers the call and presses the "*" key to unlock the door for visitors.

2) Owner calls visitors

- ✧ Owner calls visitors via SIP phone.
- ✧ SIP door phone answers the call automatically.
- ✧ Owner inputs corresponding <Access codes> via SIP phone keypad to unlock the door.

● Swiping cards

- ✧ Use pre-assigned RFID cards to unlock the door, by touching RFID area of the device.

● Indoor switch

- ✧ Press indoor switch, which is installed and connected with the device, to unlock the door.

Enable Indoor Open	<input type="text" value="Enable"/>	Enable Access Table	<input type="text" value="Enable"/>
Description	<input type="text" value="i20S IP Door Phone"/>	Enable Open Log Server	<input type="text" value="Disable"/>
Address of Open Log Server	<input type="text" value="0.0.0.0"/>	Port of Open Log Server	<input type="text" value="514"/>
Door Unlock Indication	<input type="text" value="Long Beeps"/>	Remote Code Check Length	<input type="text" value="4"/> (1~11)
<input type="button" value="Apply"/>			

2. Management of card

1) Administrator Table

<Issuer> and <Revocation>

Administrator Table >>

Add Admin Card Issuer

<input type="checkbox"/>	Index	ID	Issuing Date	Type
<input type="checkbox"/>	1	0003476384	2016/08/17 11:26:12	Issuer
<input type="checkbox"/>	2	0003408919	2016/08/17 11:26:23	Revocation

Total: 2 Prev Page: 1 Next

● Add Administrator cards

Input a card's ID, selected <Issuer> or <Revocation> in the types and Clicked <Add>, you can add administrator card.

Administrator Table >>

Add Admin Card Issuer

<input type="checkbox"/>	Index	ID	Issuing Date	Type
<input type="checkbox"/>				Issuer
<input type="checkbox"/>				Revocation

● Delete Administrator cards

Select the admin card of need to delete, click <Delete>.

Administrator Table >>

Add Admin Card Issuer

<input type="checkbox"/>	Index	ID	Issuing Date	Type
<input checked="" type="checkbox"/>	1	0003476384	2016/08/17 11:26:12	Issuer
<input type="checkbox"/>	2	0003408919	2016/08/17 11:26:23	Revocation

Total: 2 Prev Page: 1 Next

2) Add user cards

● Method 1: used to add cards for starters typically

✧ In web page < EGS Setting → Features → Card Reader Working Mode > option, select <Card Issuing>.

Switch-On Duration (1~600)Second(s)

Card Reader Working Mode

Talk Duration (20~600) Second (s)

✧ Click <Apply>, Card Reader would be entered the issuing status.

✧ Use new card to touch card reader induction area, and then you might hear the confirmed indication tone from the device. Repeat step can to add more cards.

✧ In web page < EGS Setting → Features → Card Reader Working Mode > option, select <Normal>.

Switch-On Duration (1~600)Second(s)

Card Reader Working Mode

Talk Duration (20~600) Second (s)

- ✧ Click <Apply>, Card Reader would be back to the Normal status.
- ✧ The issuing records can be found from the door card table list.

Access Table >> [Click here to Save Access Table](#)

Total: 2 Prev Page: 1 Next Delete Delete All

<input type="checkbox"/>	Index	Name	ID	Department	Position	Location	Number	Fwd Number	Access Code	Double Auth	Profile	Type	Issuing Date	Card State
<input type="checkbox"/>	1	joe	0000127423							Disable	None	Guest	2017/06/29 17:31:23	Enable
<input type="checkbox"/>	2	zhangsan	0123031310							Disable	None	Guest	2017/06/29 17:30:58	Enable

● **Methods 2:** used to add cards for professionals

- ✧ Use <Issuer admin card> to touch card reader induction area, and it would be entered issuing card status.
- ✧ Use new card to touch card reader induction area, and you might hear the confirmed indication tone from the device. Repeat step 2 to add more cards.
- ✧ Use <Issuer admin card> to touch card reader induction area again, it would be back to normal working status.

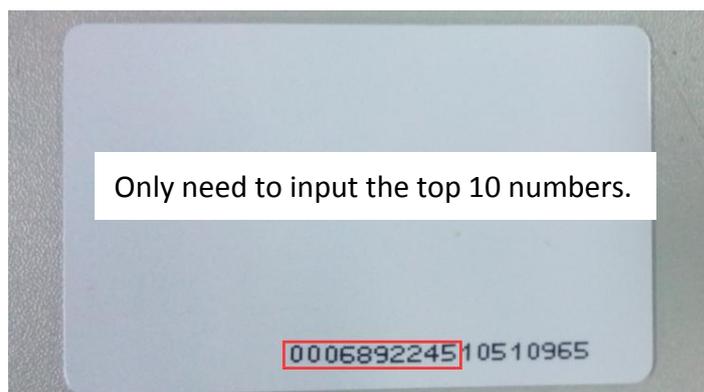
● **Method 3:** use to add few cards

- ✧ Input cards number in <EGS Setting\Add Access Rule\ID> page, and then click <Add>

Add Access Rule

Name	<input type="text"/>	★	Location	<input type="text"/>	?
ID	<input type="text"/>	▼	Number	<input type="text"/>	
Card State	Enable ▼		Fwd Number	<input type="text"/>	
Department	<input type="text"/>		Access Code	<input type="text"/>	?
Position	<input type="text"/>		Double Auth	Disable ▼	?
Type	Guest ▼		Profile	None ▼	
Add			Modify		

Note: you can also use the USB card reader connected with PC to get cards ID automatically.



3) Delete user cards

- **Method 1:** used to batch delete cards for starters.

✧ In web page < EGS Setting →Features →Card Reader Working Mode > option, select <Card Revoking>.

The screenshot shows a web interface with three fields: 'Card Reader Working Mode', 'Talk Duration', and 'Local password'. The 'Card Reader Working Mode' dropdown menu is open, showing three options: 'Normal', 'Card Issuing', and 'Card Revoking'. 'Card Revoking' is highlighted in blue. To the right of the dropdown, the text '0) Second(s)' is visible.

- ✧ Click <Apply>, Card Reader would be entered the revoking status.
- ✧ Use card to touch card reader induction area, and you might hear the card reader confirmed indication tone. Repeat step can to delete more cards.
- ✧ In web page <EGS Setting →Features →Card Reader Working Mode >option, select <Normal>.

The screenshot shows the same web interface as before. The 'Card Reader Working Mode' dropdown menu is open, and 'Normal' is now highlighted in blue. The other options, 'Card Issuing' and 'Card Revoking', are visible below it. The text '0) Second(s)' remains to the right.

- ✧ Click <Apply>, Card Reader would be back to the Normal status.

- **Method 2:** used to batch add cards for intermediates.

- ✧ Use < Revocation admin card> to touch card reader induction area, and it would be entered revoking card status.
- ✧ Use the cards you want to delete from system, to touch card reader induction area, and you might hear the card reader confirmed indication tone. Repeat step 2 to delete cards.
- ✧ Use <Revocation admin card> to touch card reader induction area, and it would be back to card read only status.

- **Method 3:** use to bulk delete or partially delete card records

✧ In web page<EGS Cards →Door Card Table>select the card ID and then click <Delete>.

Note: If you click <Delete All>, system will delete all the ID card records.

Access Table >>

[Click here to Save Access Table](#)

<input type="checkbox"/>	Index	Name	ID	Department	Position	Location	Number	Fwd Number	Access Code	Double Auth	Profile	Type	Issuing Date	Card State
<input checked="" type="checkbox"/>	1	joe	0000127423							Disable	None	Guest	2017/06/29 17:31:23	Enable
<input type="checkbox"/>	2	zhangsan	0123031310							Disable	None	Guest	2017/06/29 17:30:58	Enable