

SPON

IP NETWORK INTERCOM TERMINAL
User Manual



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Summarize

Safety precaution

Please abide by the warning and the relevant safety tips.

Please take this manual in convenient place after you reading the guide for future reference.

Warning



The sign means there is potential safety hazard, when operate wrong may result in death or serious injury.



The sign is used to remind the user that attached is the important operation and maintenance data.

Setting and Installation

- (1) Avoid being wet with the water.

Don't make the machine or exposed to rain water or other liquid contamination of the environment, or lead to fire or get an electric shock.

- (2) Don't use unspecified voltage.

Using the marked voltage on the machine.

Using more than the logo of voltage could lead to fire or shock.

- (3) Don't scratch the power cord.

Don't scratch the power cord or cut it.

Simultaneous, keep the power line far way from heated objects, put heavy things on it will lead to fires or electric shock.

Using machine

- (1) In case of the anomalies

Please turn off the power supply immediately when finding the abnormal phenomena, please connect with the agency. if you continue to use, it will likely fires or shock.

- The smoke or odor of the machine.
- The inside of the machine is flooded by water or foreign bodies intrusion.
- Machine falling or machine shell damage.
- The power cord damage(wire core is exposed or broken, etc)
- Fault(eg it can't network, no sound ect)

- (2) Don't open the machine internal or modify the machine.

Do not let foreign matters invade the machines internal.

Don't let the metal items or inflammable objects inserting machine such as foreign inserting machines or throw into the vents machines internal, otherwise will likely cause fires or electric shock.

- (3) Please do not touch it when thundering

To avoid electric shock, please do not touch the machine and the plug when lightning, etc.

- (4) Please do not place containers with liquid or small metal objects on machine above.

If gets upset containers, and let the fluid inflow to the machine that will likely fires or cause shock.

- (5) Do not open the machine internal or modify the machine.

The machine internal contains high voltage parts, once open the cover or modify the machine, it will likely fires or cause shock. All the maintenance and other machine modification should be operated by professional personnel.

- (6) Maintenance and the precautions for not using in a long time.

While maintenance, if the machine is not using for 10 days or more , please shut off power supply switch for safety. If do not comply with this provision, it will likely cause electric shock or fires.

Product Presentation

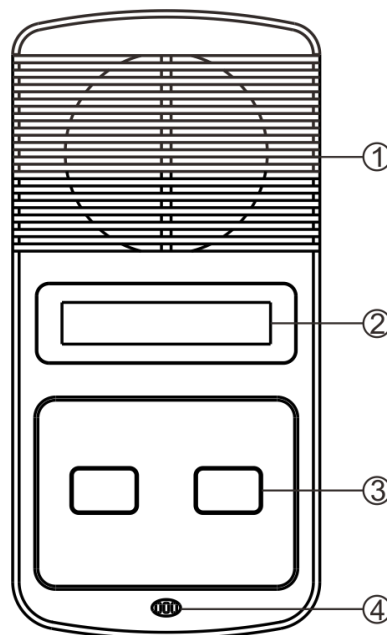
IP network intercom terminal is embedded with the independent intellectual property rights IP Audio digital network audio technology. The terminal equipped with power input interface、short circuit input and output、audio power output、audio line etc ports. Support full duplex intercom, receive broadcast etc functions.



- With a LCD display and a mini size, available to be table topped or wall-mounted.
- Double buttons, with a full-duplex intercom.
- With a built –in speaker and a microphone, available to make a hands-free call and receive the broadcast.
- With the audio output and the microphone input to connect the earphone.
- Works everywhere as long as Ethernet available.

Hardware Interface Introduction

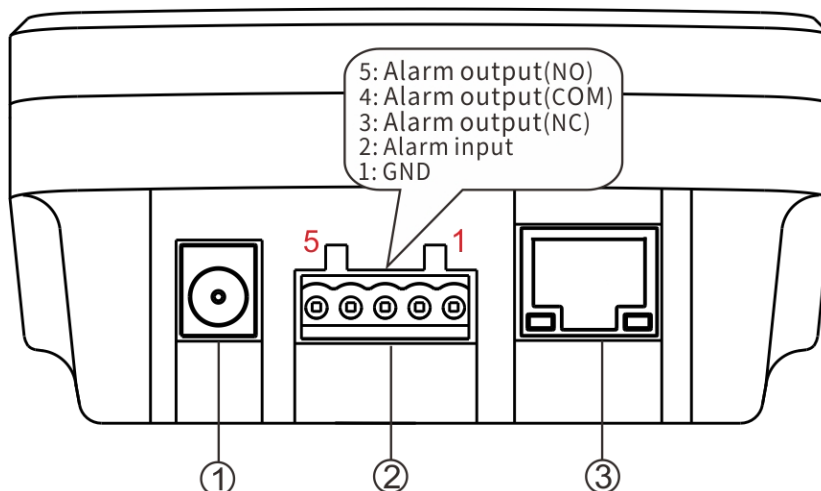
Front



- ①Speaker: Restore the remote live voice.
- ②LCD Screen: Show terminal status.
- ③Button: Calling buttons, Press button to call the server software preset terminal.

④Pickup microphone: Pick up the live voice.

Back



①Power input: connect to 12V DC power supply (with anti-power connection and anti-protection circuit).

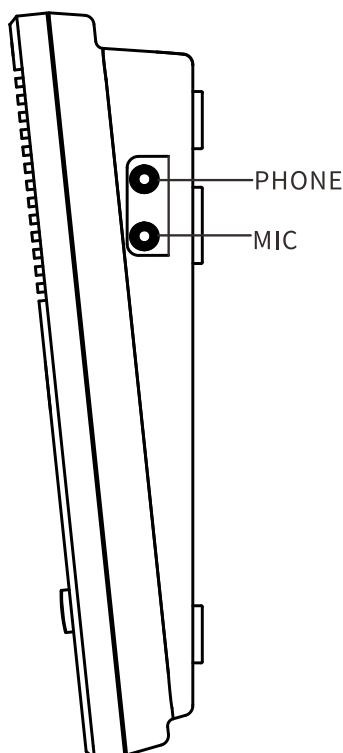
②Alarm input/ output:

Alarm input port has two pins, the two pins` state won`t affect the audio terminal working state in normal use, only when the two pins are short sub, then the audio terminal will make some special operations automatically (eg: generate an alarm signal and sent to the server or give an alarm from the local terminal etc.) Alarm button, signal generator all these devices can access to this port;

Alarm output port has three pins. Usually, pins 4 and 5 are in an open state. When the terminal receives an alarm output signal from the server, the two pins will be automatically shorted together to act as an alarm (Such as turning on the power. Control door lock). The maximum carrying current of the alarm output port is 500mA, and the maximum voltage is AC100V (or DC24V).

③Network input port: Use the cable to connect server and terminal.

Side

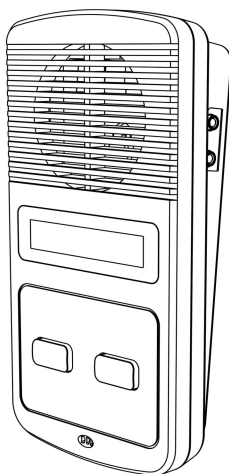


Introduction

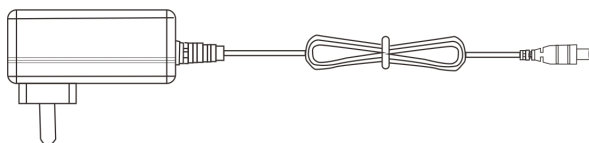
Packing List

IP network intercom terminal contains the following accessories. Please check the accessories before installation, if you find any missing, please contact your supplier.

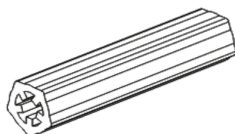
- (1) IP Network Intercom Terminal 1PCS



- (2) Power adapter (DC12V/2A) 1PCS



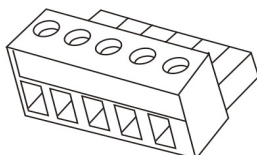
- (3) Plastic expansion suit (F7) 3PCS



- (4) Half round head Phillips screw (ST4*25) 3PCS



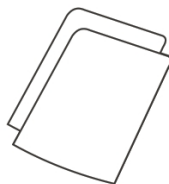
- (5) Wiring terminal (3.96-5P) 1PCS



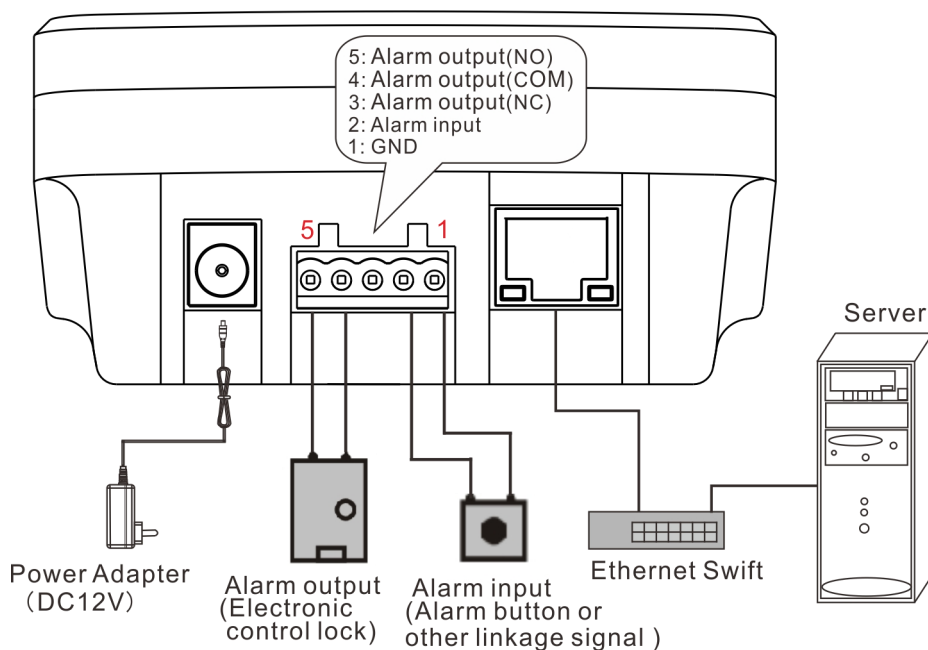
- (6) Certification 1PCS



(7) Quick Install Manual 1PCS



Connection Diagram



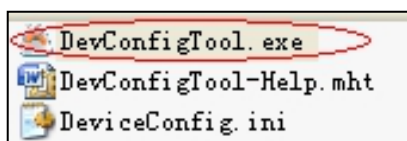
- (1) Connect one end of the power adapter to the DC12V of the IP network intercom terminal, and the other end to the power socket
- (2) Alarm output interface can be connected to the electric lock.
- (3) Alarm input interface can be connected to the alarm button or other correlation signals.
- (4) Terminal LAN interface connect to the switcher.

Basic Network Setting

Connected the terminal according to the "Quick Installation Guide", turn on the power, and setting the network parameters of the terminal according to the on-site use environment. There are two ways:

Terminal Equipment Scanning Tools

- (1) Run "IP Audio Terminal Configuration Tool" and enter the default password "123456".



- (2) From the right menu choose **【Mandatory method configuration】**, then in the **【terminal parameters】** fill in the correct parameters, click "send parameters" button to complete the IP parameters Settings.

Scan config Mandatory config

Note: All terminals support, used with caution.
Warning:
1. Make use of interconnection net cable;
2. When using net switch, only connect one terminal;

Terminal parameter

Terminal ID: 1

Server IP: 192 . 168 . 0 . 192

Terminal IP: 192 . 168 . 0 . 101

Gateway IP: 192 . 168 . 0 . 1

Subnet Mask: 255 . 255 . 255 . 0

Terminal Port: 2046 (Default 2046)
(special modify)

Server Port: 2048 (Default 2048)
(special modify)

Send parameters

☒ Safety checks (Check more than one terminal)

Note:

1. When using the Windows 7/Win 10 operating system, please use the administrator mode, and then shut down the firewall and the related software.
2. Terminal equipment scanning tools can only configure one terminal. When using this method, please make sure that a computer is only corresponding to one target terminal.
3. If you need IP audio terminal configuration tools, please contact our customer service.

Web Page Mode

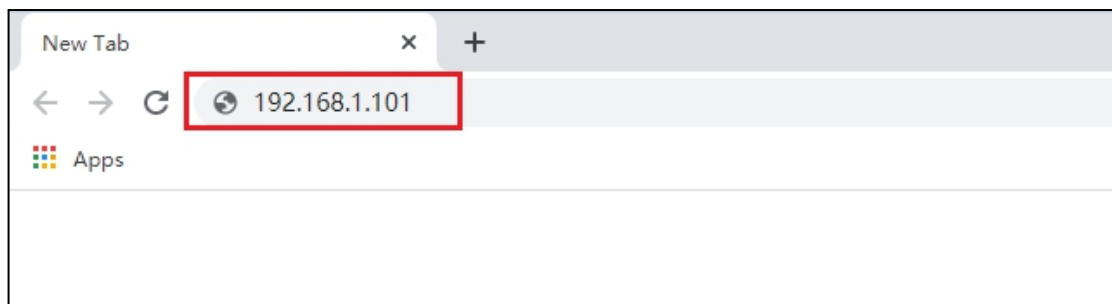
Enter the IP network intercom terminal web interface, then revise the terminal network parameters according to the live environment, after finish Setting, click "save".

The detailed operation steps please refer to the custom terminal network parameters setting.

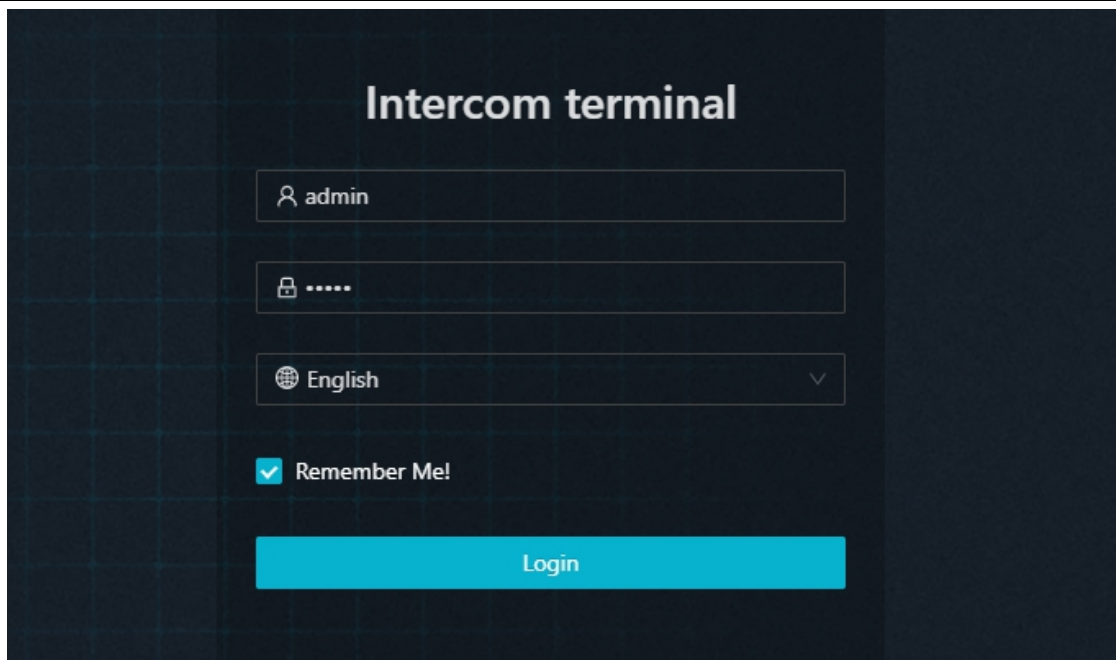
User-Define Terminal Parameters**Login Web Interface**

(1) Enter the IP address of the terminal in the browser address bar (the factory default IP is 192.168.1.101. When the network cable is not plugged in, press any key for about 10 seconds to broadcast the device IP information) and then press the enter key .

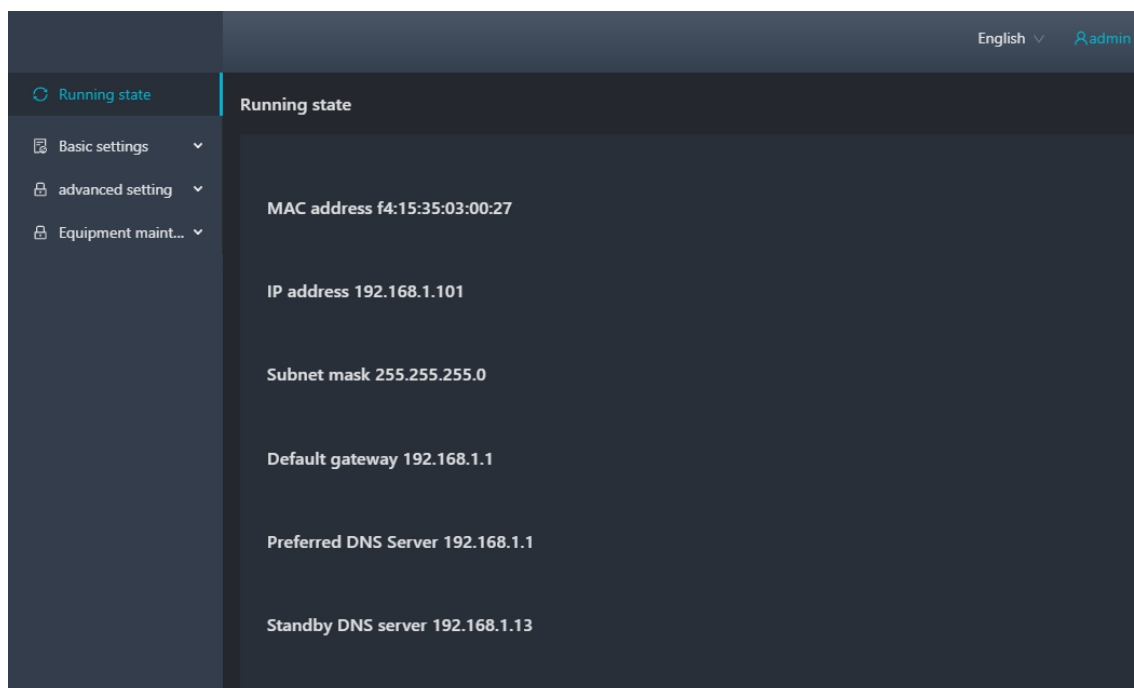
Note: Google browser is recommended, IE browser is not supported.



(2) Enter the user name and password in the login window (default is admin).



(3) Press [Login] to enter the IP network intercom terminal web page. The home page displays the running status of the terminal.



Basis Setting

Network Parameter

To set the network parameters, please modify the parameters in the network parameters according to the on-site environment. After the setting is completed, click [Save], the device will automatically restart, and it will take effect after restarting.

English Admin

Running state

Basic settings

Network param...

Protocol settings

Offline intercom

Intercom param...

Broadcast para...

listener paramet...

Alarm parameters

advanced setting

Equipment maint...

Network parameters

Save

MAC address

IP address

f4:15:35:03:00:27

192.168.1.101

Subnet mask

Default gateway

255.255.255.0

192.168.1.1

Preferred DNS Server

Standby DNS server

192.168.1.1

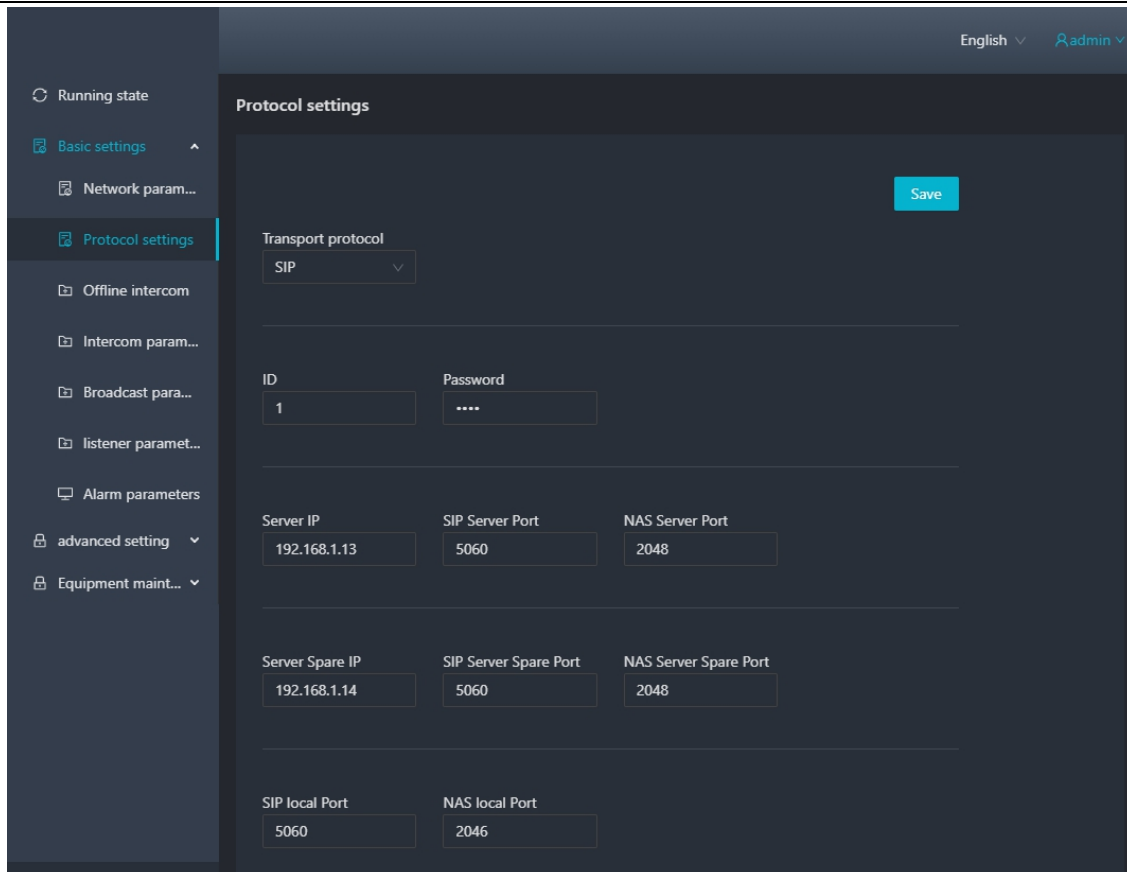
192.168.1.13

Parameters meaning as following:

MAC address	Terminal physical address, not editable.
IP address	Terminal IP address , the factory default is 192.168.1.101
Subnet mask	Terminal networking Subnet mask
Default gateway	Terminal network gateway
Preferred DNS server	Terminal networking preferred DNS server IP
Secondary DNS server	Terminal networking secondary DNS server IP

Protocol settings

Set the communication protocol between the terminal and the server, and the server platform parameters of the terminal login. After setting, click [Save], the device will be restarted automatically, and the reboot will take effect.



English Admin

Protocol settings

Save

Transport protocol
SIP

ID Password
1 ****

Server IP SIP Server Port NAS Server Port
192.168.1.13 5060 2048

Server Spare IP SIP Server Spare Port NAS Server Spare Port
192.168.1.14 5060 2048

SIP local Port NAS local Port
5060 2046

Parameters meaning as following:

Transport protocol	Set the protocol for the normal communication between the terminal and the server, support SIP and NAS (internal communication) protocol, the default is SIP protocol
Terminal ID	The unique number that identifies the device, cannot be repeated with the terminal or other hosts, the factory default is 1
Password	The password for the terminal to log into the SIP server. Default is 1234. NAS protocol has no password setting option. Note: The password must be the same as the password of the corresponding terminal on the server, otherwise the terminal cannot log in to the server.
Server IP	Set the server address where the terminal is located. The factory default is 192.168.1.13.
Server Port	If the communication protocol between the terminal and the server is SIP, only the SIP server port needs to be set (the default is 5060). If the communication protocol between the terminal and the server is NAS protocol, just set the NAS server port (default is 2048). Note: Port is not allowed to be modified except under special circumstances.
Standby server IP & Port	Alternate service IP and port for terminal login can be set. When the preferred server cannot be connected, you can log into the alternate server. After the preferred server can be connected, the terminal logs in the preferred server again.
Local port	Set the local communication port of the terminal. If the communication protocol between the terminal and the server is SIP protocol, just set the SIP local port (default is 5060). If the communication protocol between the terminal and the server is NAS protocol, just set the NAS local port (default is 2048).

Offline intercom

Sets whether the offline intercom function is enabled. After enabled, when the terminal is offline, it can call to the target terminal set by the offline intercom, and when disabled, it cannot be called offline.

To enable off-line intercom, the target terminal corresponding to the left and right keys must be set correctly in the format of ID+IP: port (SIP protocol sets SIP port, NAS protocol sets NAS port).

After the Settings are saved, manual restarting the device takes effect. (In the "Equipment Maintenance" - "System Tools" interface, press the "Restore" button to restart the device)





The screenshot shows the 'Offline intercom' configuration page. On the left is a sidebar menu with options: Running state, Basic settings (selected), Network param..., Protocol settings, Offline intercom (highlighted), Intercom param..., Broadcast para..., listener paramet..., Alarm parameters, advanced setting, and Equipment maint... The main content area is titled 'Offline intercom' and features a 'Save' button in the top right. The 'Enable' dropdown is set to 'open'. Below, there are two sections: 'Call by Left' and 'Call by Right'. Each section contains four input fields: ID, Server IP, SIP Port, and NAS Port. For 'Call by Left', the values are ID: 1, Server IP: 0.0.0.0, SIP Port: 5060, and NAS Port: 2046. For 'Call by Right', the values are ID: 2, IP: 0.0.0.0, SIP Port: 5060, and NAS Port: 2046.

Intercom Parameter

Set the terminal intercom parameters, click [Save] after modification, and the reboot will take effect.

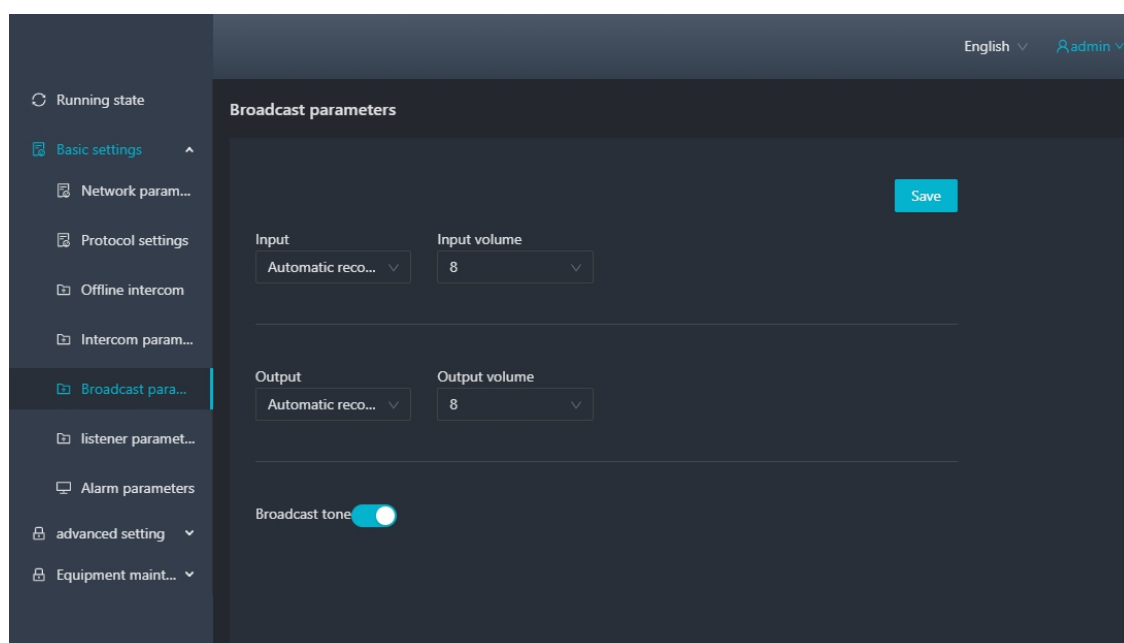
The screenshot shows the 'Intercom parameters' configuration page. The sidebar menu is identical to the previous page, with 'Intercom param...' highlighted. The main content area is titled 'Intercom parameters' and includes a 'Save' button. The settings are organized into three rows: 'Input' with 'Automatic reco...' and 'Input volume' (10), 'Output' with 'Automatic reco...' and 'Output volume' (8), and 'Ring' with 'Automatic reco...' and 'Ring volume' (8). At the bottom, there is a 'Receiving intercom' dropdown set to 'Auto answer', and two toggle switches for 'Echo cancellation' (turned on) and 'AGC' (turned off).

Parameters meaning as following:



Audio Import	Terminal intercom audio input mode, can choose microphone, line input, automatic recognition.
Input Volume	The total volume input by the terminal during the intercom, range: 0-15.
Audio output	Terminal intercom audio output mode, can choose microphone, line input, automatic recognition.
Output Volume	The total volume output by the terminal during the intercom, range: 0-15
Ringing output	When a call comes in, the ringing audio output mode can be selected from speaker, line output, and automatic identification.
Ringing Volume	When a call comes in, the ringing output volume, range 0-15
Receive Intercom	As the intercom receiver, you can choose to answer automatically or answer manually. The default is automatic answering. When manual answering is selected, you must press the intercom key to answer the intercom.
Enable echo cancellation	Enabled  : supported. Forbidden  : not supported.
Automatic gain	Enabled  : supported. Forbidden  : not supported.

Broadcast Parameters

Set the terminal broadcast parameters, click [Save] after the modification is complete, and restart the device to take effect.



Parameter meaning as following

Audio Input	Terminal broadcast audio input mode, can choose microphone, line input, automatic recognition.
Input volume	The terminal broadcasting total input volume, range:0-15
Audio output	Audio output mode of broadcasting, loudspeaker, line output and automatic recognition can be selected.
Output volume	The terminal broadcasting total output volume, range:0-15
Broadcasting prompt tone	Enabled  : Broadcast prompt will be played when a broadcast is initiated. Default is enabled. Forbidden  : There is no announcement tone when the broadcast is initiated.

Monitor Parameters

Set the terminal monitor parameters, click [Save] after the modification is complete, and restart the device to take effect.

listener parameters

Input: Automatic reco... Input volume: 10

Save

Parameter meaning as following:

Audio input	Audio input mode when terminal is monitored, microphone, line input and automatic recognition can be selected
Input Volume	When terminal is monitored ,the volume arrange is 0 to 15.

Alarm Input Parameters

Set the terminal alarm input parameters, click [Save] after the modification is complete, and restart the device to take effect.

Alarm parameters

Input channel: 1 Alarm type: Open

Save

Parameter meaning as following:

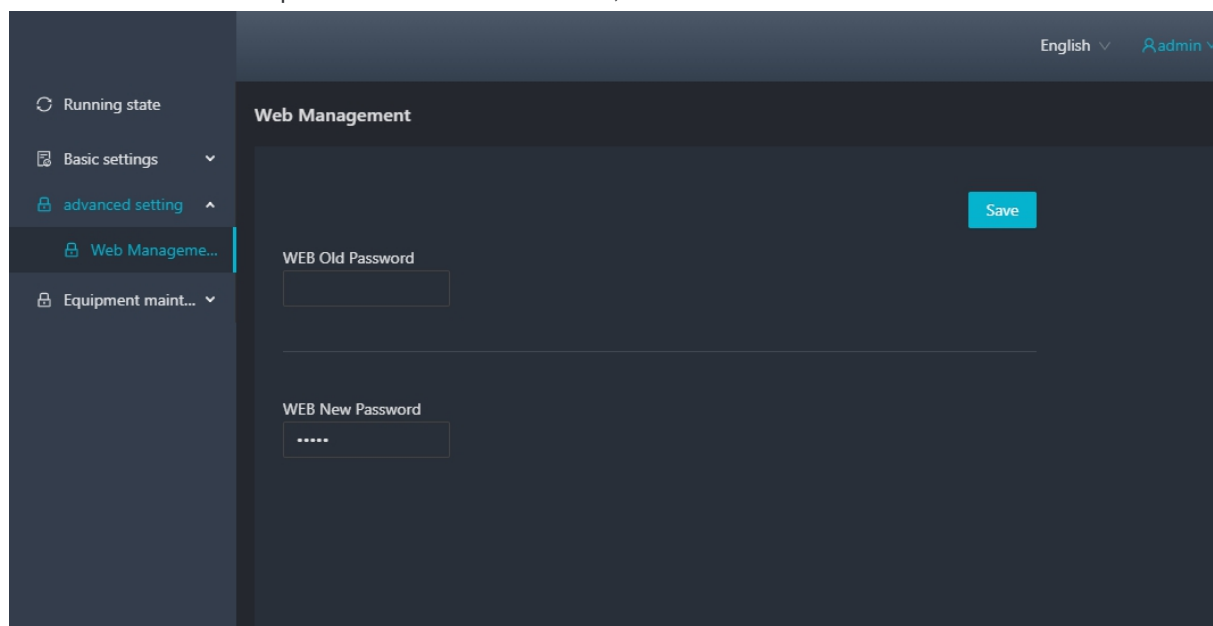
Input channel	According to the alarm parameters to obtain the corresponding channel
---------------	---

	number, the default is 1.
Alarm types	It have normally open and normally closed two types, the default is is normally open.
	Normally open: when closed, it send alarm input signal to server.
	Normally closed: when disconnected, it send alarm input signal to server.

Advanced Settings

Web Management

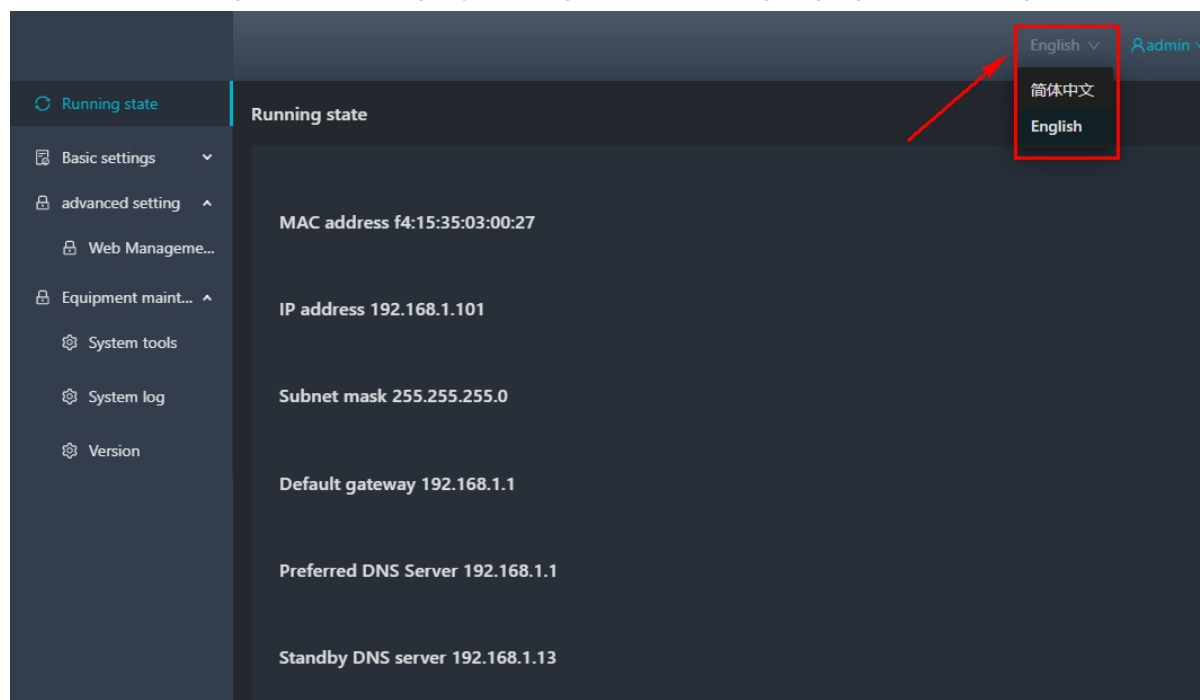
The password for logging in to the web page can be modified in the Web management parameters. The default password is "admin". After the password modification is saved, restart the browser to take effect.



Language Setting

In any interface, click the language on the upper right corner to set the display language of the terminal, which supports simplified Chinese and English.

Note: You can also log into the web page by selecting the corresponding language in the web login interface.



Equipment maintenance

System tools

(1) Reboot Device

In the [Device Maintenance]-[System Tools] interface, click the [Restart] button, and the device will restart.

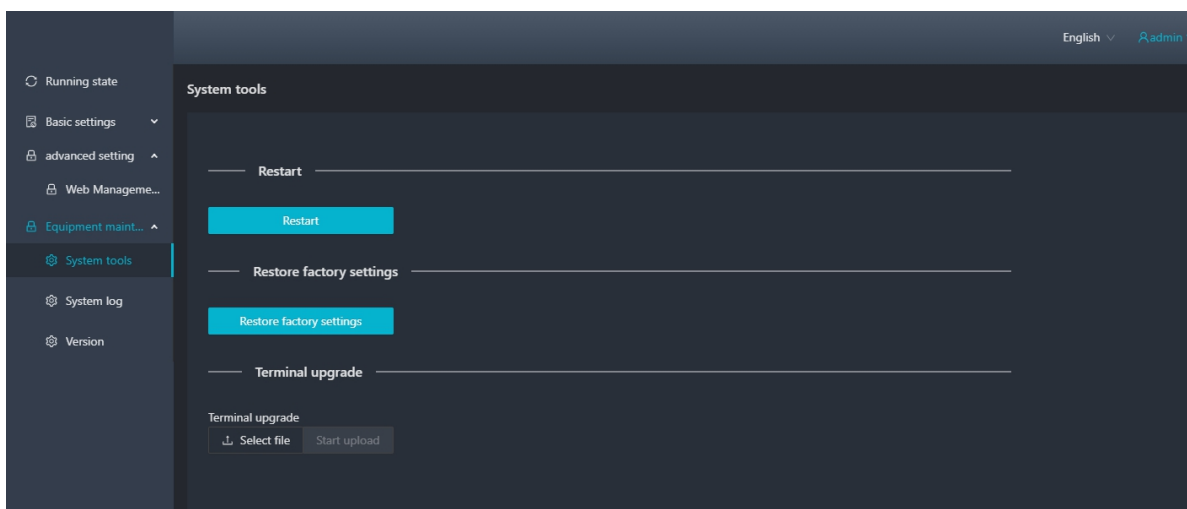
(2) Restore factory setting

In the [Device Maintenance]-[System Tools] interface, click the [Restore Factory Settings] button to restore all the device settings to the factory default state.

(3) Terminal Update

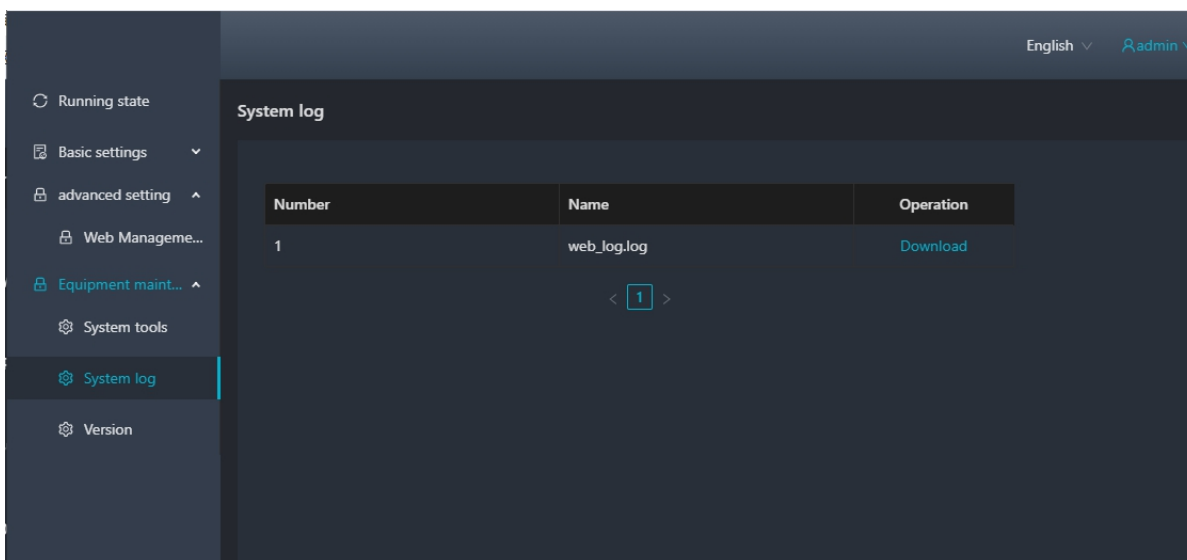
In the [Device Maintenance]-[System Tools] interface, click [Select File], select the firmware upgrade file provided by the manufacturer in the pop-up selection box, and press the [Start Upgrade] button to upgrade.

Note: Do not cut off the power during the upgrade process, otherwise the upgrade may fail and the device may malfunction. The upgrade process takes about 45s, and the device will automatically restart after the upgrade is completed. If you need to upgrade the firmware, please contact our company's technical support.



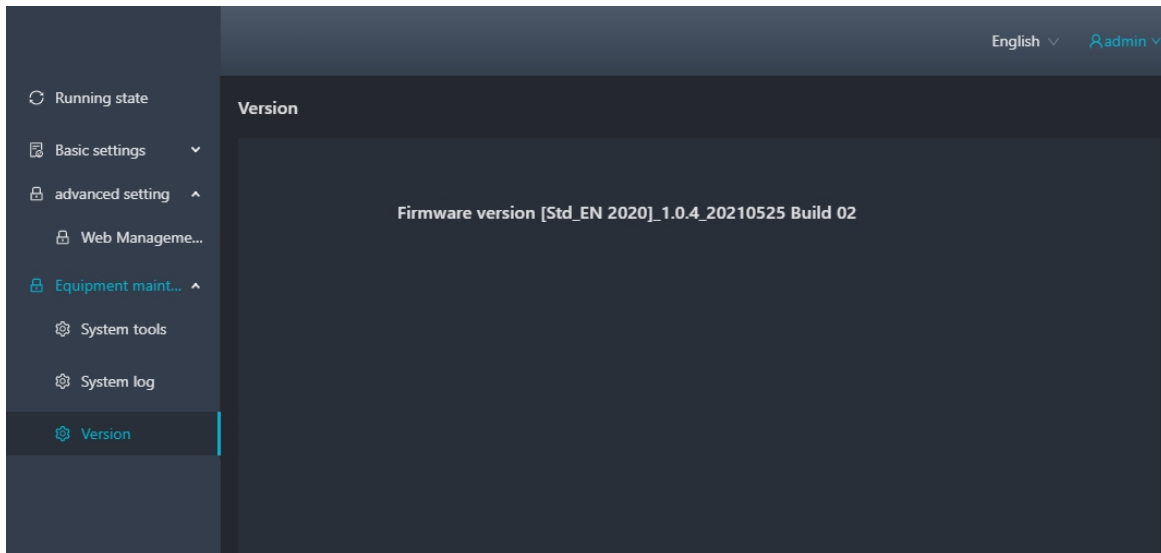
System Log

The terminal can record the operation of the equipment and generate a log. Click the [download] button on the right to download the system log for viewing (TXT format).



Version information

Enter the version information interface, you can view the terminal software version.



Basic Function

Initiate Intercom

Press the left key or the right key to directly call the called terminal designated by the server.

Remarks:

(1) If the communication protocol between the terminal and the server is the SIP protocol, the call destination of the left and right buttons can be set in the "terminal management" in the service software, "call destination" corresponds to the left button, and "extended call destination" corresponds to the right button, which can be set Multiple call targets, when the called party is busy, it can automatically transfer the call to the next one,

(2) If the communication protocol between the terminal and the server is the NAS protocol, the call destination of the left and right buttons can be set in the "Terminal Settings"- "Terminal Properties" in the service software, and the "call button" corresponds to the left button, and the "extended call button" Corresponding to the right button, multiple call targets can be set. When the called party is busy, the call to the next party can be automatically transferred.

For specific operations, please refer to the relevant service software operation guide.

Time	ID	Edit	Delete
unlimited	2,3		

SIP server call mapping settings

Call Sequence:

1:	1	(1-65000)
2:	2	4: 3
3:	1	5: 1

Extended Call Sequence:

1:	2	(1-65000)
2:	3	5: 2
3:	1	6: 1
4:	1	7: 1

NAS server call mapping settings

Offline Intercom

Enable offline mode in the "offline intercom" parameter on the web page, and correctly set the target terminal to be called when offline.

When the device is offline, press the left or right button of the terminal to initiate an offline intercom to the designated terminal.

Receive Intercom

The default is automatic answering. When other terminals call in, they will answer the call automatically after ringing.

If the answering method is set to manual answering in the "Intercom Parameters" on the Web page, you need to press the left or right button to accept the call request.

Receive Broadcast

In the case of server authorization, the terminal can receive server broadcasts and broadcasts initiated by other terminals.

Note: The broadcast output channel can be set in the "Broadcast Parameters" on the Web page.

Malfunction Test

The terminal is always offline

- 1). Check the software server and the main controller is normal opened or not. It's required to close all firewall before open the software server (including system built-in firewall and other antivirus software firewall)
- 2). Check the network connection is normal or not. after the terminal powered on, the network port green light is norm on, meantime the orange light will be short and fast flash, it means the network cable connect normal. If the network port green light is not on, it means the network hardware connection problem, please check the network cable and switcher of terminal whether they work normal, damaged and disconnect or not etc.
- 3). Check the terminal's IP setting. Please check the terminal ID, sever IP, local IP, gateway IP etc parameters

Web display is abnormal?

Clear the cache or change the browser.

Unable to conduct an offline intercom

1. Check whether the offline mode is enabled in "Basic Features"-"Offline Intercom" on the web page.
2. Check whether the call destination set in "Offline Intercom" is correct, and the correct format is ID+IP: port.
3. The other party's terminal does not support offline intercom.

How to change the account and password for logging in to the web page?

1. Click the password setting in the web page;
2. Enter the old user name and old password in the original user name and original password respectively;
3. Enter the new user name and password in the new user name and new password;
4. Enter the new password again in the password confirmation;
5. Click Save;

The new username and password will take effect after restarting the device.

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Wechat

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