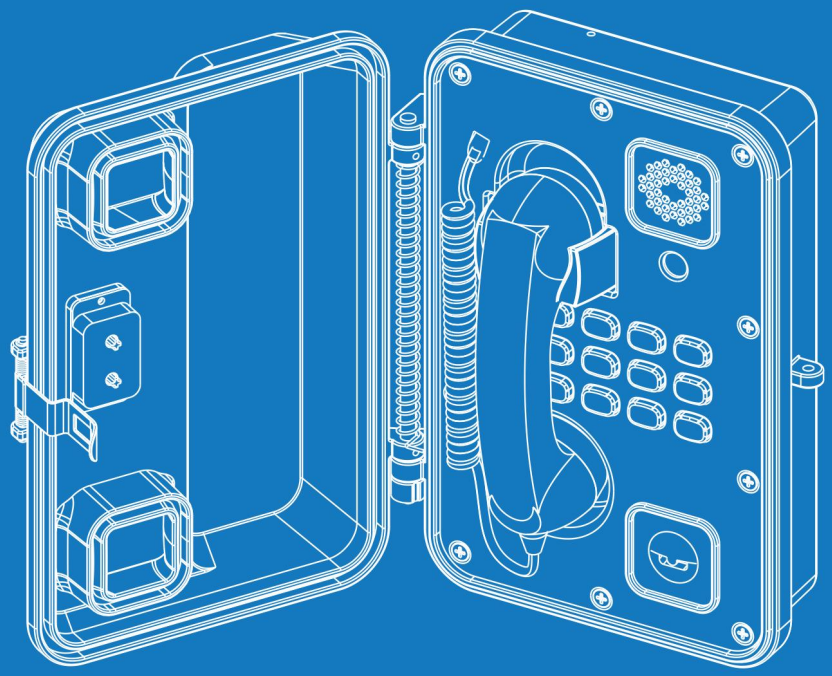
SPON

IP NETWORK VIDEO INTERCOM TERMINAL

User Manual



IP NETWORK INTERCOM SYSTEM

Contents

Summary **1**
Safety Precaution 1
Product Introduction 2
Interface Description 2
Introduction **3**
Packing List 3
Basic Network Setting 4
User-Define Terminal Parameters **5**
Login Web Interface 5
Net Options 6
SIP Options 7
Video Options 8
Audio Options 9
Talk Options 10
Alarm Options 11
Video Preview 11
Password Setting 12
Language Setting 13
Update Firmware(Note: Do not upgrade the firmware unless you have special needs) 13
Factory Reset 14
Reboot 14
System Logs 15
Basic Functions **16**
Emergency Call 16
Initiate Talk 16
Accept Talk 16
Hands-free Talk 16
Receive Terminal Broadcast、Server Tasks 16
Initiate Broadcast 16
Broadcast Callback 16
Accept Monitoring/Listening 16
Conference Function 17
Fault Exclude **17**
Copyright Statement **18**

Summary

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 user of this equipment is attached the important data of operation and maintenance.

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 voltage outside of the designation

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 away from heated objects, put heavy things on it will lead to fires or electric shock.

Using machine

（1）Once the anomalies

In use, immediately cut off power supply 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 of broken, etc)

·Fault (eg it can’t network, no sound ect)

（2）Don’t open the machine internal or modification of 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 thunder

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 modification of the machine.

The machine internal contains high voltage parts, once the open cover, or modification of the machine, it will likely fires or cause shock. All about maintenance and other such matters within the machine to transform should be operated by professional personnel.

（6）Maintenance or the precautions when not in use for long time.

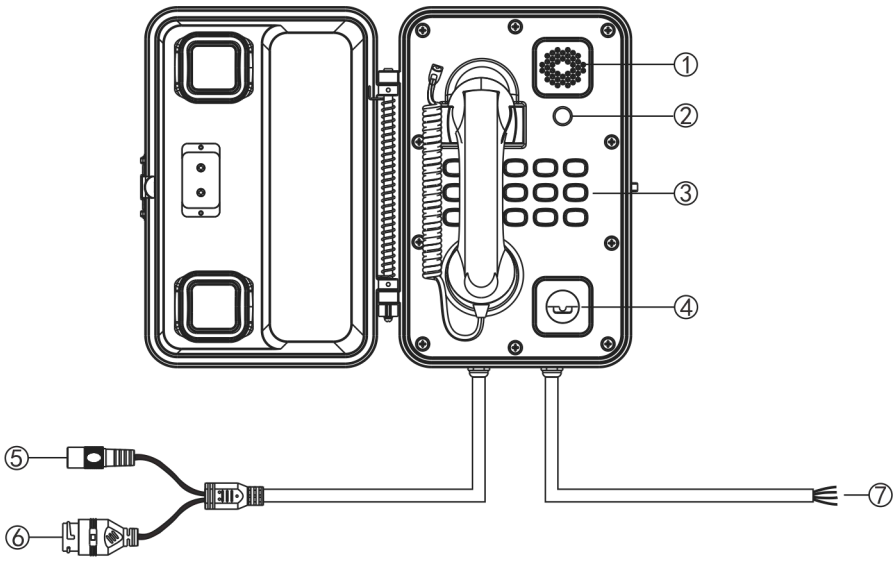
When Maintenance, if the machine not in use in 10 days or more than 10 days, in order to ensure the safe, please shut off power supply switch, and will power plug. If failure to comply with this provision, it will likely cause electric shock or fires.

Product Introduction

IP network video intercom terminal embedded SPON independent intellectual property rights - IP audio digital network audio technology, the terminal is equipped with power input interface, audio power output and other ports. Suitable for extremely harsh environments (such as: high noise, high dust and dust, strong acid and alkali, high temperature and low temperature, etc.) communication.

- Aluminum alloy casing, the surface is treated with baking varnish, wall-mounted installation, with dustproof, anti-noise, anti-riot, corrosion resistance and other characteristics.
- Built-in high-definition, wide-angle camera, support multiple resolution video output;
- Digital key dialing, call any terminal to achieve full-duplex talk.
- With emergency call button, you can call to the preset target with one button;
- Support offline talk with no server;
- Web page can directly browse terminal video;
- Support standard Onvif protocol to output video to third-party platform display;
- Support for initiating broadcast and receiving broadcast functions;
- With one way alarm output port, one way power amplifier output port, external alarm light and speaker.
- You can access the Ethernet interface, cross-network segment and cross-route.
- Support POE power supply.

Interface Description



①Speaker

②Camera

③Function button

Button	Function
“0-9” Number button	Used for input target ID when initiate intercom.
“#”、“*” Button	“Ok” button, “Cancel” button
“ ” Button	Hands-free call button
“CALL” Button	Emergency call button, press it to call the server mapping target ID directly.
“PA” Button	Initiate broadcast.

Note: When picking up the handset, the digital zone light is normally on, and it is normally off when the handset is put down.

When offline, the hands-free, emergency call, and broadcast three function button lights flash slowly, and the lights are always on when the line is idle.

④Pick-up mic

⑤Power input interface: 24V/2.7A power input

⑥Network interface: insert cable to connect with the switcher, so that the terminal can normally login to server.**(The device supports power supply by POE, so it don’t need any power supply if the network interface has already connected POE switcher.)**

⑦Six-core tail line, the relevant interface functions are as follows:

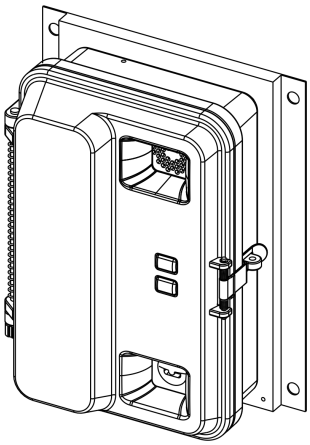
Black line, white line: alarm output port, connected to the police light. The white line is connected to the positive (+) and the black line is connected to the negative (-). (Alarm output voltage: 12V ± 5%, maximum current: 500mA)
Brown line, yellow line: power amplifier output port 1, brown line is the speaker positive (+), yellow line is the speaker negative (-).
Blue line, green line: power amplifier output port 2, Blue line is the speaker positive (+), green line is the speaker negative (-).

Introduction

Packing List

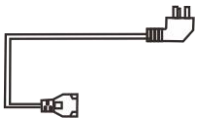
The IP network video intercom terminal contains the following accessories. Please check the accessories before installation. If any accessories are missing, please contact with your dealer.

(1)IP network video intercom terminal 1pce (with mounting plate)



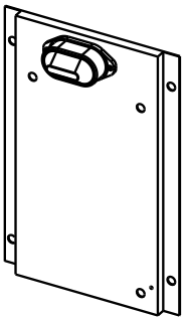
(2)AC Adapter（DC24V/2.7A Female）1pce

(3)Power cord 1pce**(Optional)**



(4) Waterproof connector 1sets

(5) Police light and supporting mounting plate 1sets (including assembly screws)(optional)



(6) Certification 1pce

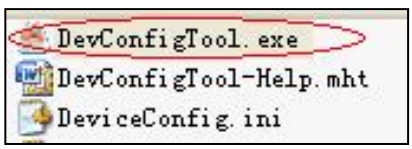
(7) Installation Instructions 1pce

Basic Network Setting

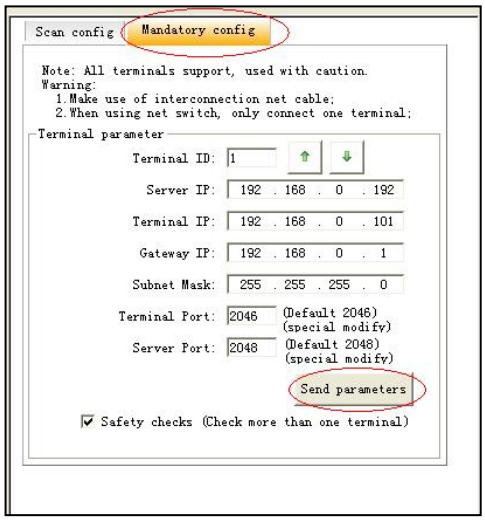
After the terminal is connected according to the Installation Instruction, turn on the power and change the network parameters of the terminal according to the environment in the field.

Terminal Equipment Scanning Tools

（1）In [CD: \ tools \] directory, find and run "DevConfigTool" , start it , then enter the default password "123456".



（2）From the right menu choose【Mandatory config】, then in the【Terminal parameter】 fill in the correct parameters, click "Send parameters" button to complete the IP parameters Settings.



Note:

1、When using the Windows 7 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 the computer is only corresponding to one target terminal.

Web Page Mode

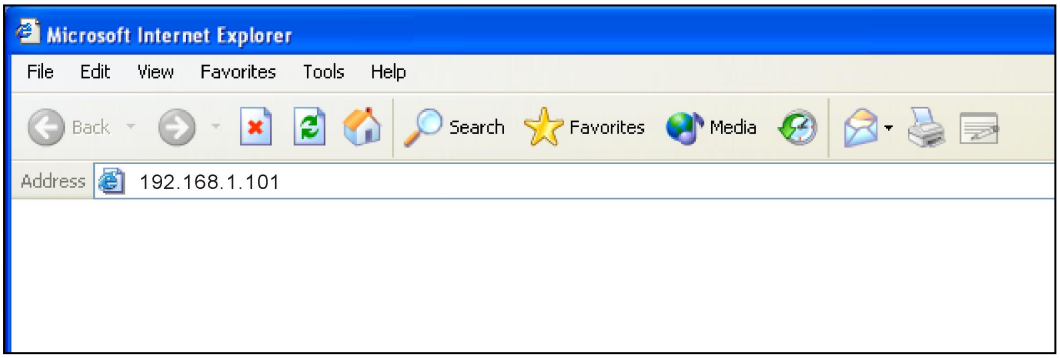
Enter the IP network video intercom terminal web interface, then revise the terminal network parameters according to the live environment, after finish setting, click "save".

For details, refer to the network parameter settings in the custom terminal parameters.

User-Define Terminal Parameters

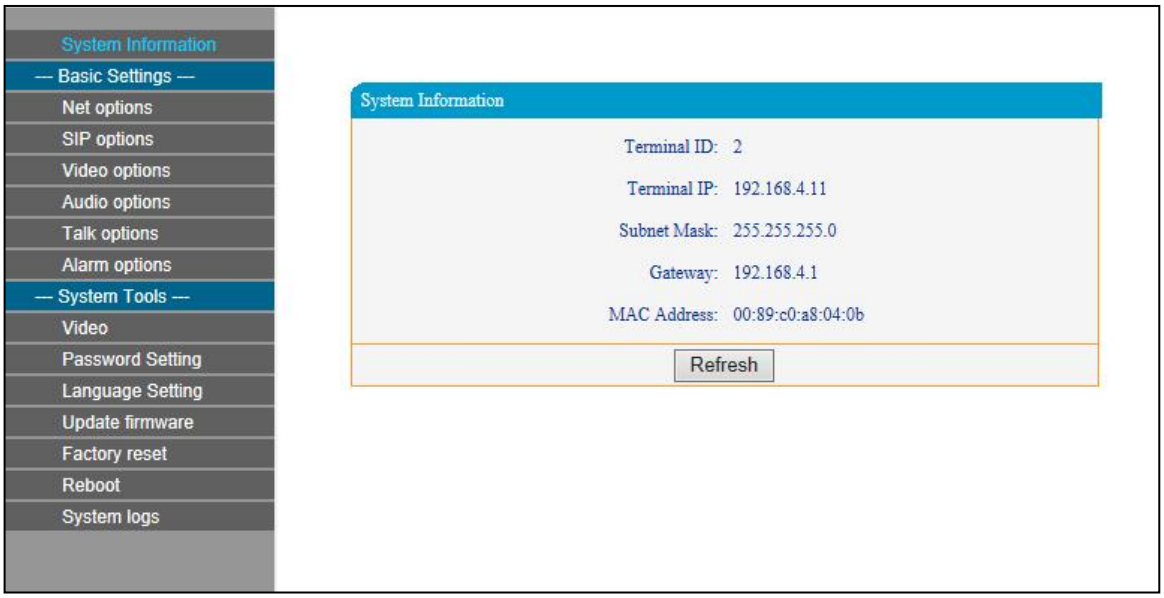
Login Web Interface

（1）Enter the IP address of the IP network video intercom terminal in the address bar of the browser (the factory default IP address is 192.168.1.101. In the case of no network cable, press the button to voice broadcast the IP information).



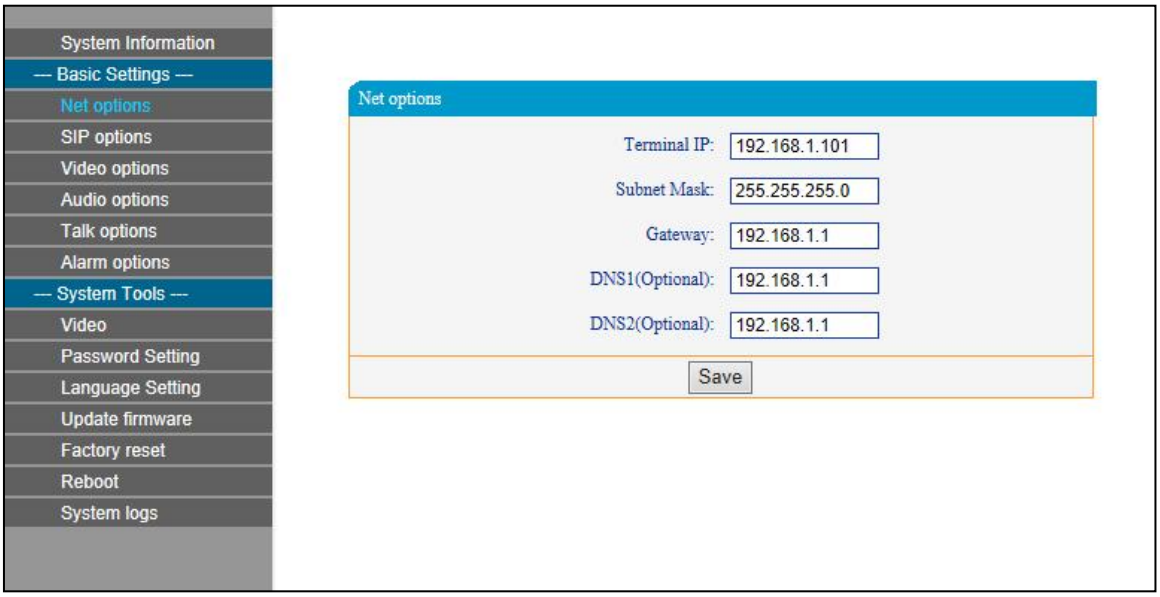
（2）In the login window enter the user name and password (the default is admin).

（3）After Press OK, it can enter IP video network intercom terminal's Web page.



Net Options

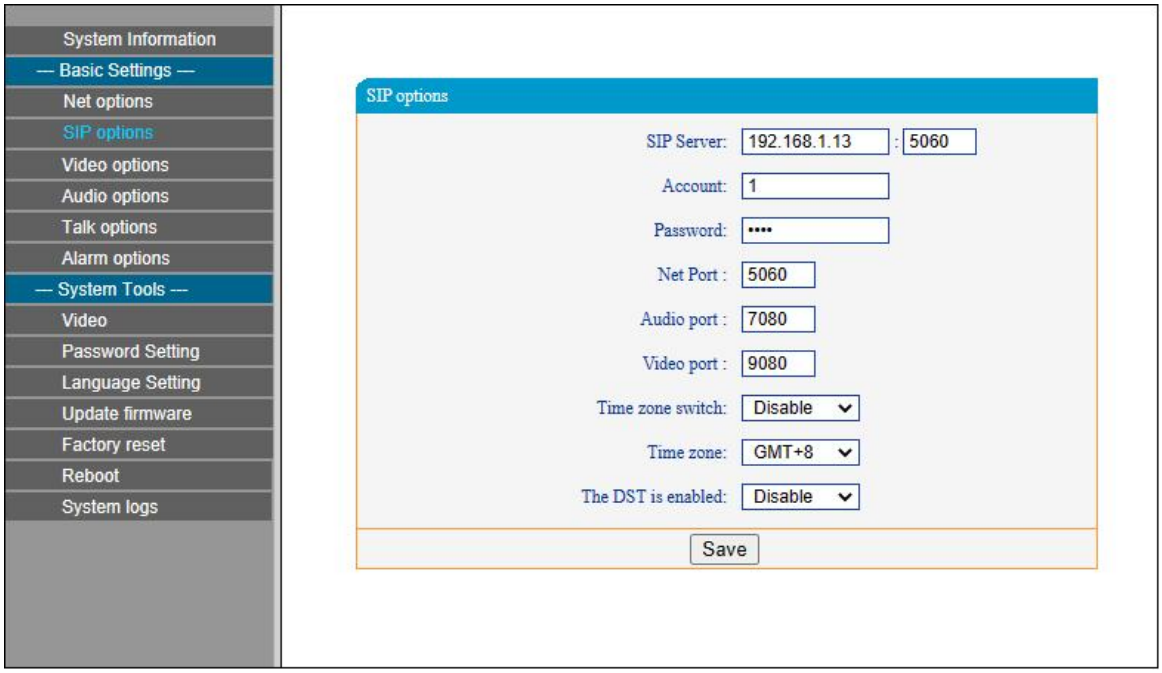
Set the local IP address (factory default IP is 192.168.1.101), subnet mask, default gateway and other related parameters.



SIP Options

Set the SIP server IP (the default IP address is 192.168.1.13), the account number (that is, the local ID number), the password and the network port.

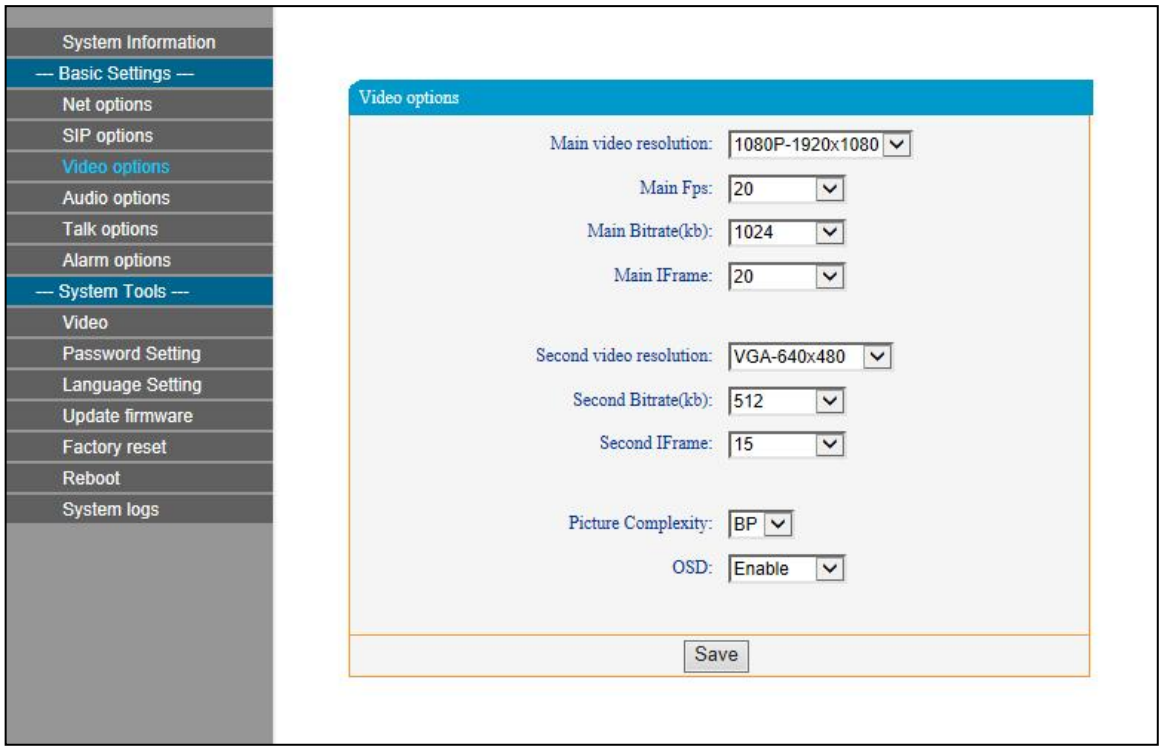
Support registering to a third-party standard SIP server.



Parameters as following:

SIP server	SIP server address where terminal is located, please input correct SIP server IP address or domain name to avoid call failure. Please do not modify the port (the default is 5060) without any special situation.
Account/password	SIP account and password of terminal, it can`t repeat with other terminals.
Network port	Set network port according to the situation
Audio port	Set audio port according to the situation
Time zone switch	Set whether to enable Time Zone setting function.
Time zone	Select the Time Zone
The DST is enabled	Set whether to enable DST function.

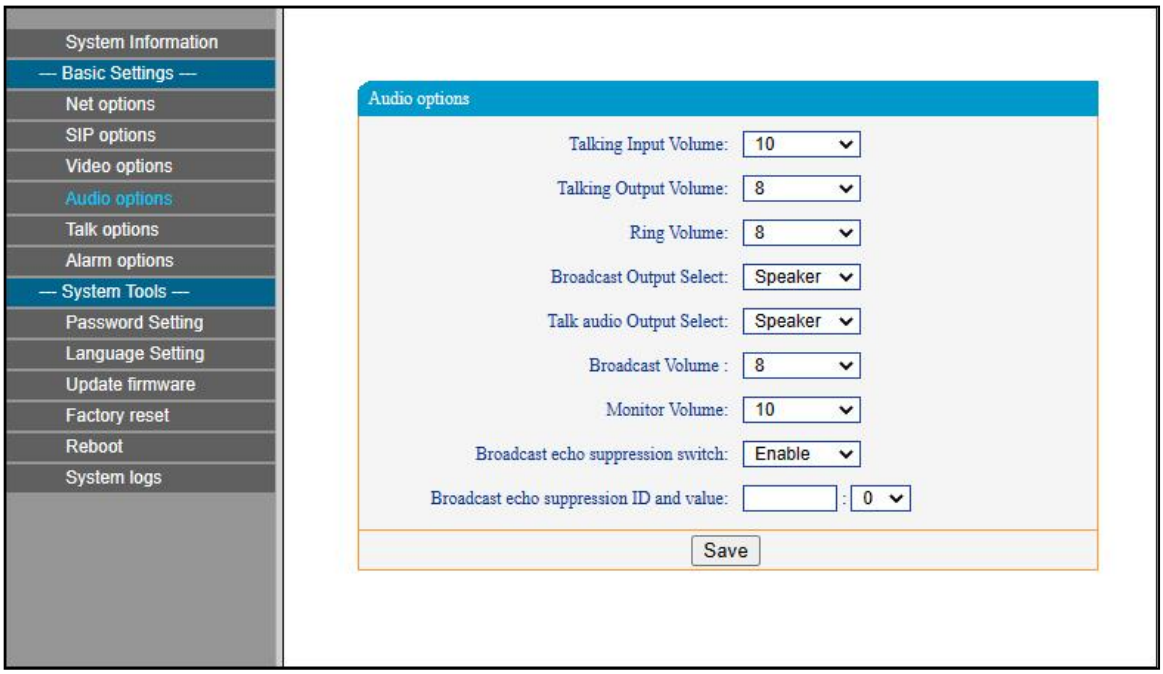
Video Options



The parameters are as follows

Precautions	1. Video main resolution, main frame rate (FPS), main stream code rate (kb), main I frame interval setting is the quality parameter when using NVR (or other related software) to pull video. 2. Video auxiliary resolution, auxiliary code stream rate (kb), secondary I frame interval, and set quality parameters of the video when intercommunicating with other terminals. **[Please set relevant parameters according to the actual network conditions]**
Video resolution	Choose VGA-640*480、720P-1280*720、1080P-1920*1080
Frame rate	The optional range (10~30), the higher the frame rate, the smoother the video.
Code stream rate（kb）	The video bit rate is the number of data bits transmitted per unit time during data transmission, and the range is (128kb~10240kb). At the same resolution, the larger the video stream, the smaller the compression ratio and the better the picture quality. Similarly, the larger the CPU usage of the terminal may cause the video to be stuck, so the code stream needs to be adjusted according to the actual network conditions.
I frame interval	I frame is also called key frame, I frame is the basis of interframe compression, optional range (1~29); The smaller the value, the finer the quantization, the higher the image quality, and the longer the code stream is generated.
Picture complexity	H.264 encoding type, you can set BP (Baseline), MP (Main profile), HP (High profile)
OSD	Enable OSD, display terminal name and time information on the sending video, and do not display when disabled.

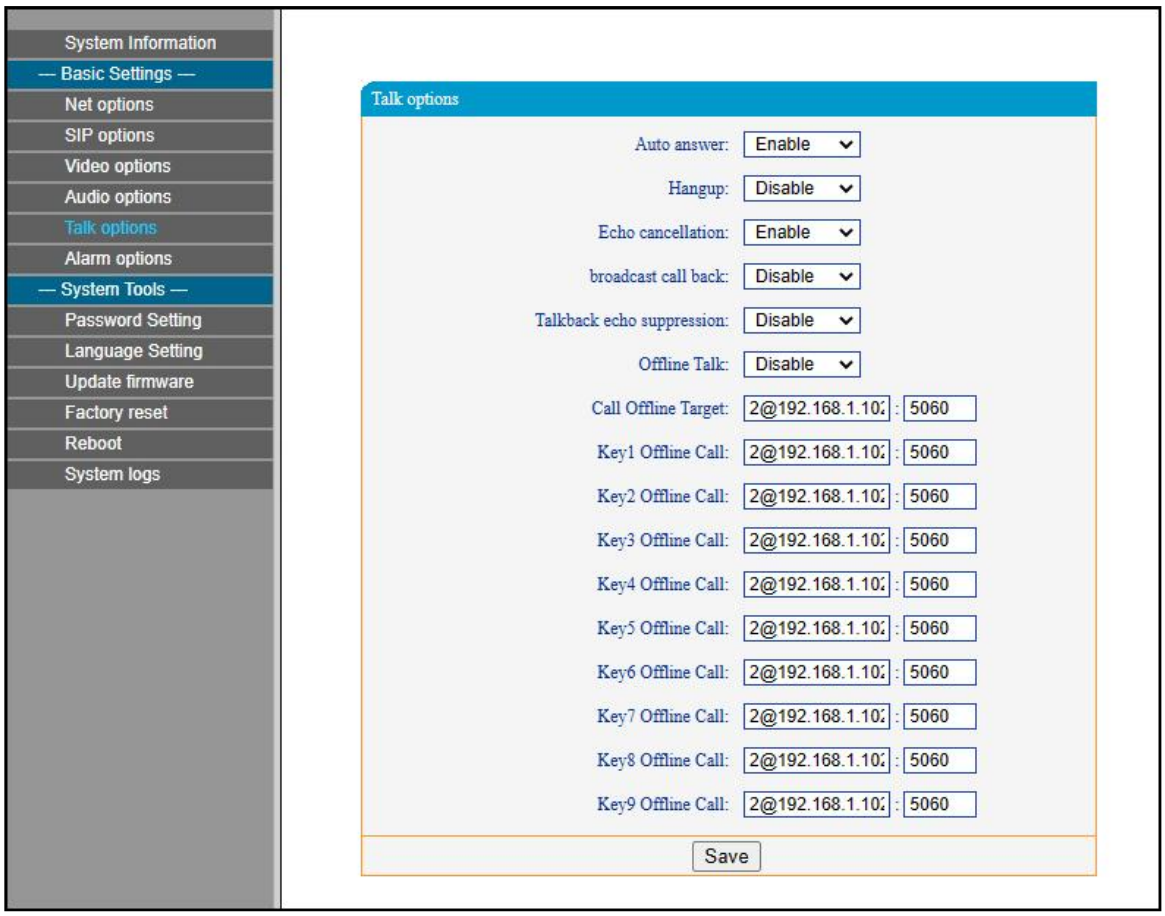
Audio Options



The parameters are as follows:

Talking Input Volume	The total volume (0~15) entered by the terminal during talk Note: This setting is only effective when the terminal is offline, and the volume is controlled by the server when the terminal is online.
Talking Output Volume	The total volume (0~15) output by the terminal during talk Note: This setting is only effective when the terminal is offline, and the volume is controlled by the server when the terminal is online.
Ring Volume	Ringing volume when receiving an incoming call
Broadcast Output Select	When the terminal is broadcasting, the audio source output mode (speaker, line output), the default is the speaker output.
Broadcast Volume	The total volume (0~15) output by the terminal during broadcast
Monitor Volume	The total volume (0~15) that the terminal inputs when it is being monitored.
Broadcast echo suppression switch, Broadcast echo suppression ID and value	Set whether to enable broadcast echo suppression function.

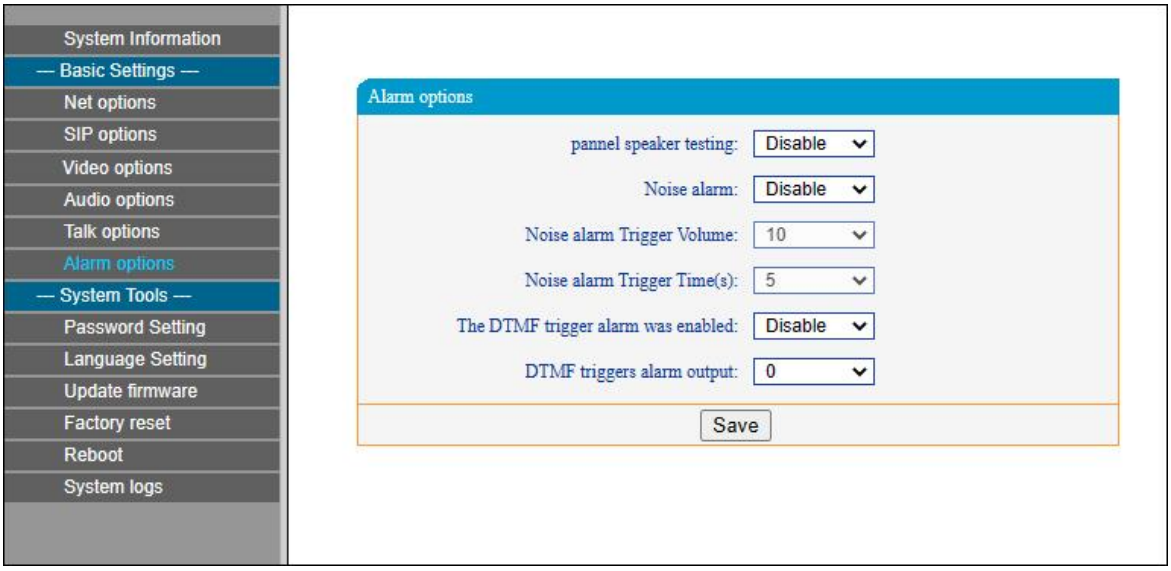
Talk Options



The parameters are as follows:

Auto Answer	Set the way the terminal answers the talk. When it is enabled, it is automatically answered. If it is disabled, you need to pick up the handset or press the “Hands-free” button to connect the talk.
Hangup	Set the mode for terminal to hang up the talk. When disabled, you can't hang up the talk. You can hang up when it is enabled.
Echo Cancellation	When enabled, the talk echo cancellation feature is supported. (The default is enabled. When disabled, there will be an echo during the talk process)
Broadcast call back	Set whether to enable the broadcast callback function. The function is disabled by default.
Talkback echo suppression	Set whether to enable talkback echo suppression function.
Offline Talk	Enable offline talk and set the IP address and port for the call when offline (in the format: terminal ID@IP+ port, for example: 2@192.168.1.102:5060) in the "Call Target" parameter. When the terminal is offline, press the corresponding key to call the preset target with one button.

Alarm Options

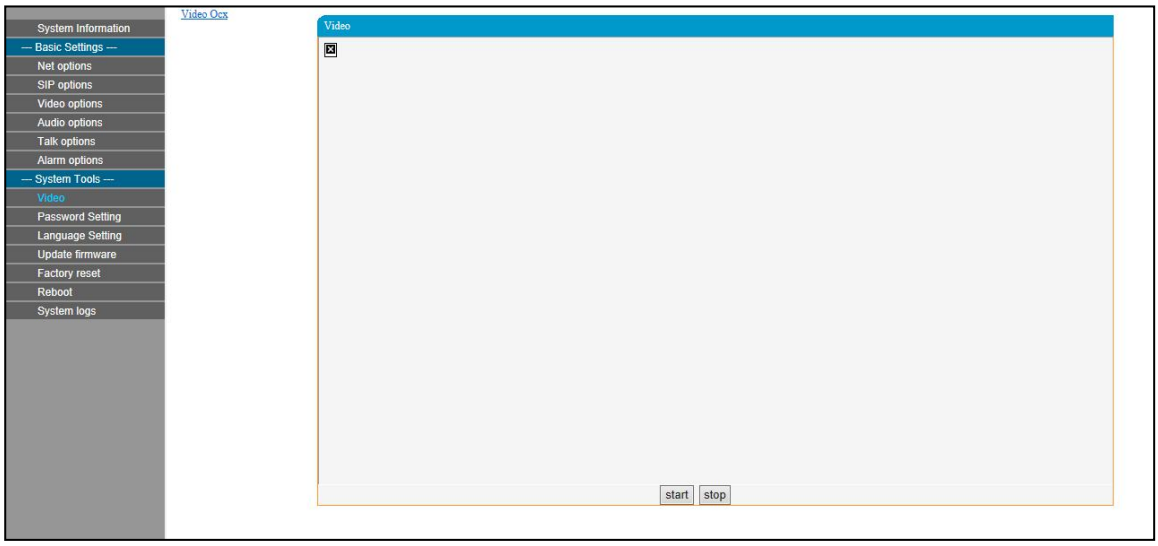


The parameters are as follows:

Pannel speaker testing	When enabled, the device will sound "drop" when it starts successfully.
Noise alarm	When enabled, the ambient volume of the terminal reaches a certain level and the terminal will automatically alarm for a certain period of time;
Noise alarm trigger volume	The volume of the environment noise reaches the alarm level.
Noise alarm trigger time	Environment noise duration in seconds.
The DTMF trigger alarm was enabled	Set whether to enable DTMF remote door unlocking function. The default is disable.
DTMF triggers alarm output	Set the DTMF triggers alarm output.

Video Preview

Click "Start" on the video preview web page to play the current video of the terminal camera.



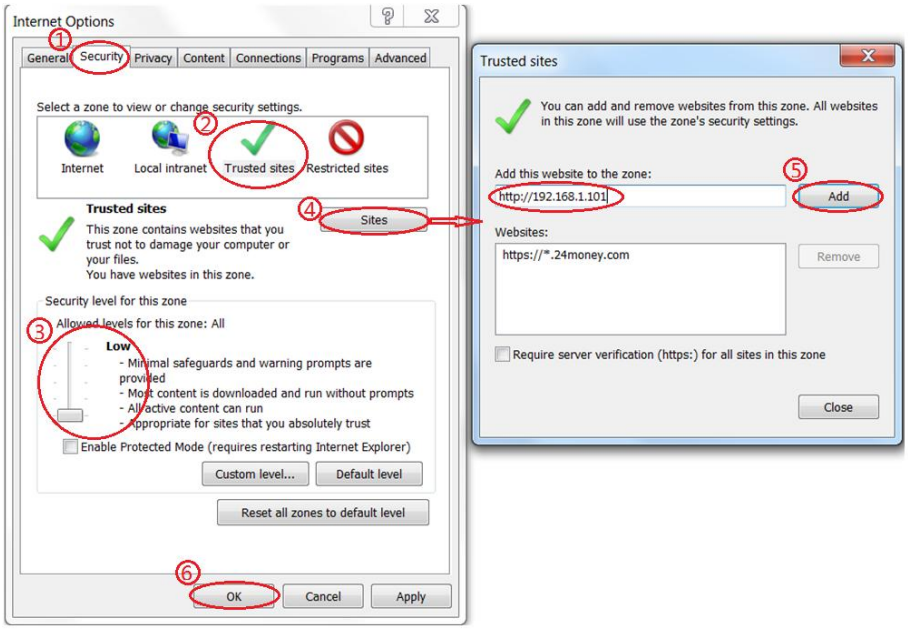
To use the video preview function, you need to install the video software. The specific settings are as follows:

Step 1: Install the video preview control "IPNBSVideo_Plugin_setup";

Step 2: Open the browser and click on Internet Options - Security - Trusted Sites to minimize the security level. (Note:

The operating interface of different systems may be slightly different. This setup uses the win7 system as an example.)

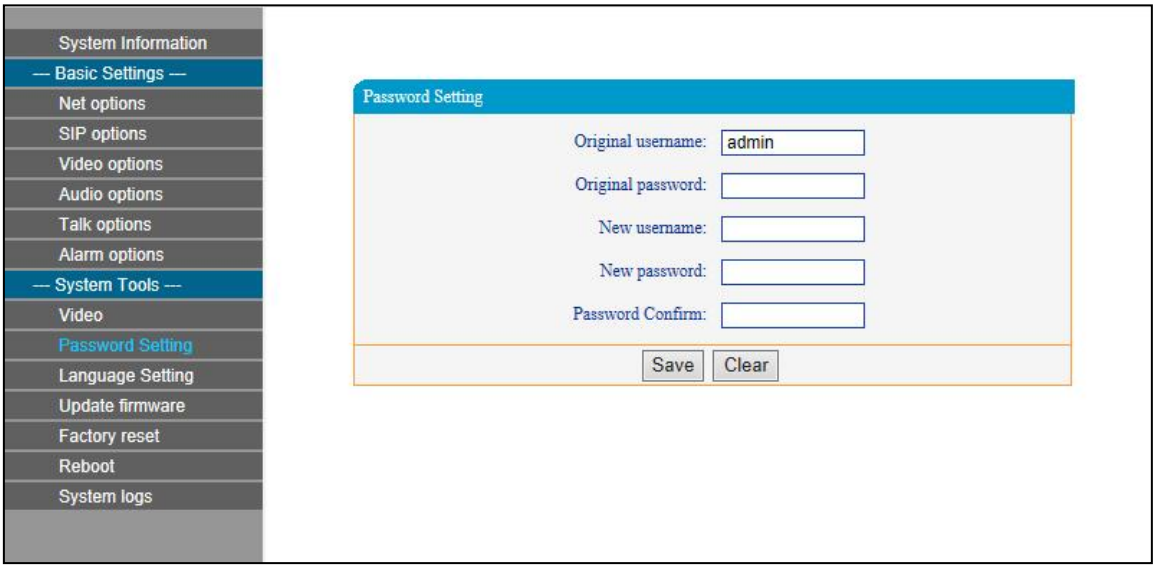
Step 3: Click “Site” and add the IP address of the IP network video intercom terminal to the trusted site in the pop-up dialog box, as shown in the figure below.



Step 4: Restart the browser.

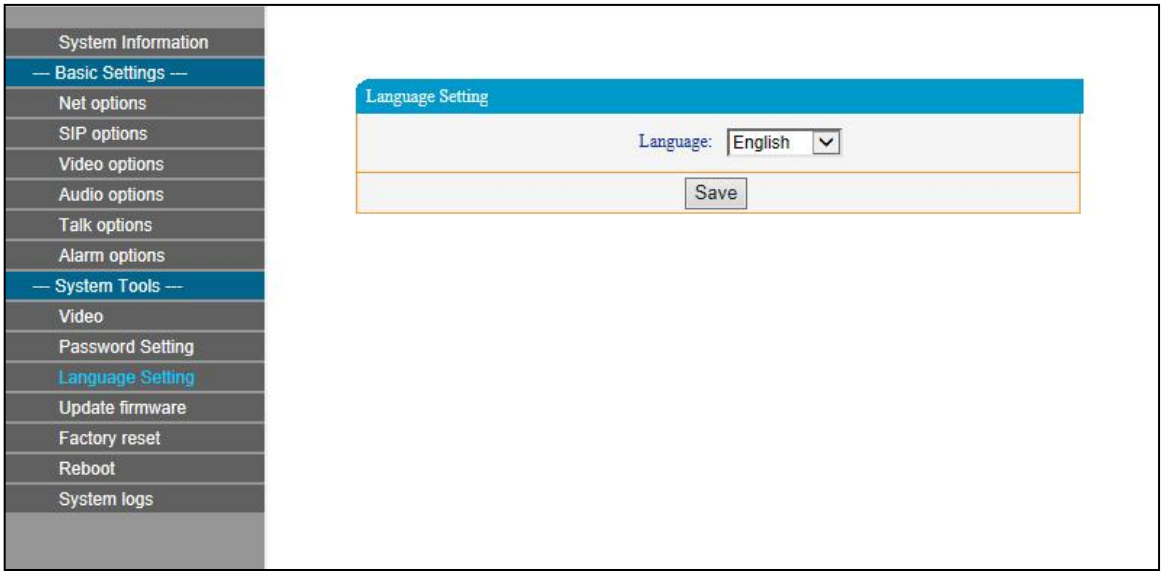
Password Setting

In the Web management parameters can modify the login Web page account and password.



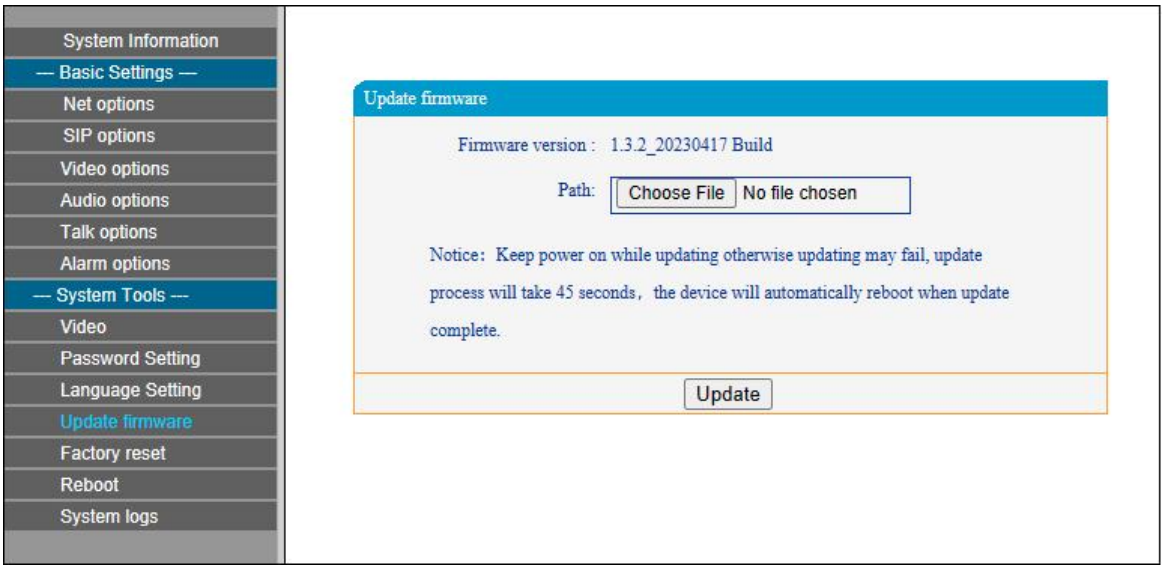
Language Setting

The language of the web page can be switched between Chinese and English, the language setting takes effect when the device is restarted after saving.



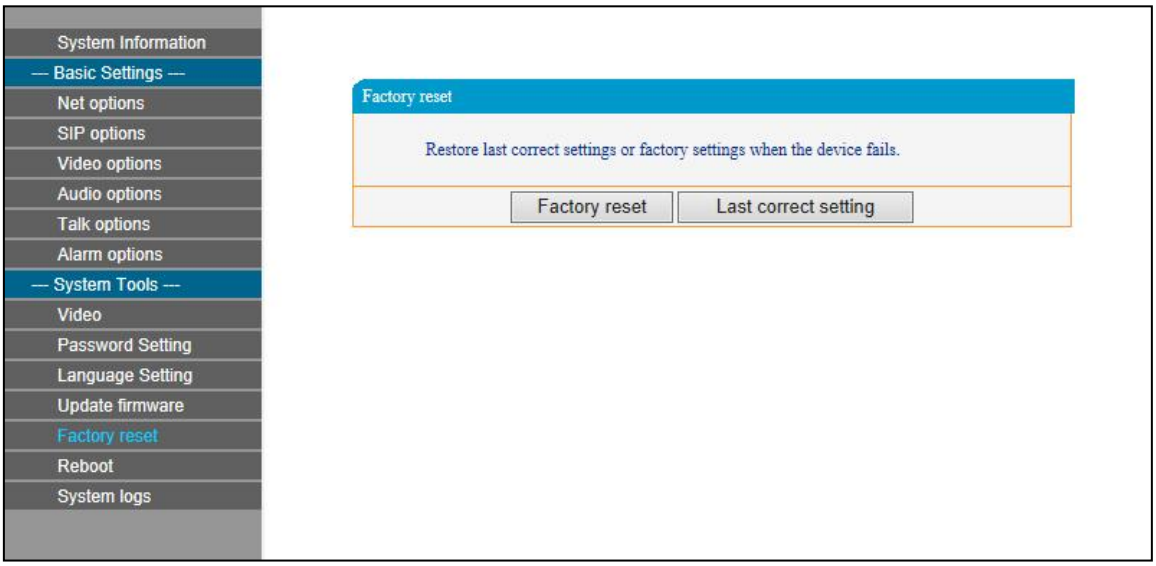
Update Firmware(Note: Do not upgrade the firmware unless you have special needs)

On the update firmware page, click "Choose File" button, select the upgrade file provided by the manufacturer, and then click the "Update" button to start the update. Note: Do not power off during the update process. Otherwise, the update may fail and the device may fail. The update process takes about 45 seconds, and the device will restart automatically after the update. (Recommended to use Google Chrome or built-in browser).



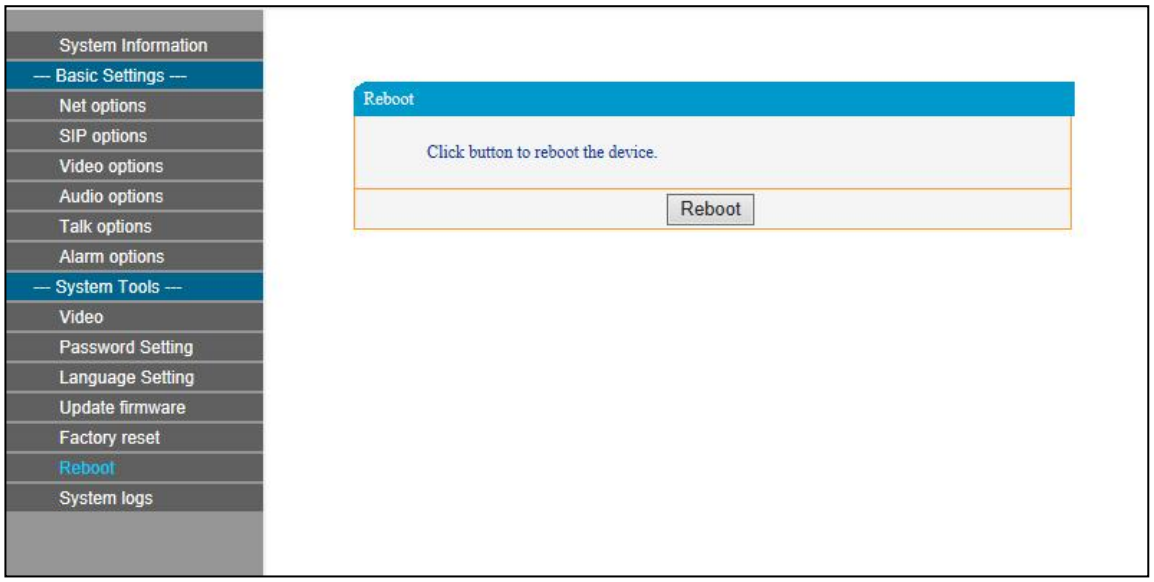
Factory Reset

Factory reset: All parameters are restored to factory settings; Last correct configuration: Revert to the last parameter that can log into the server.



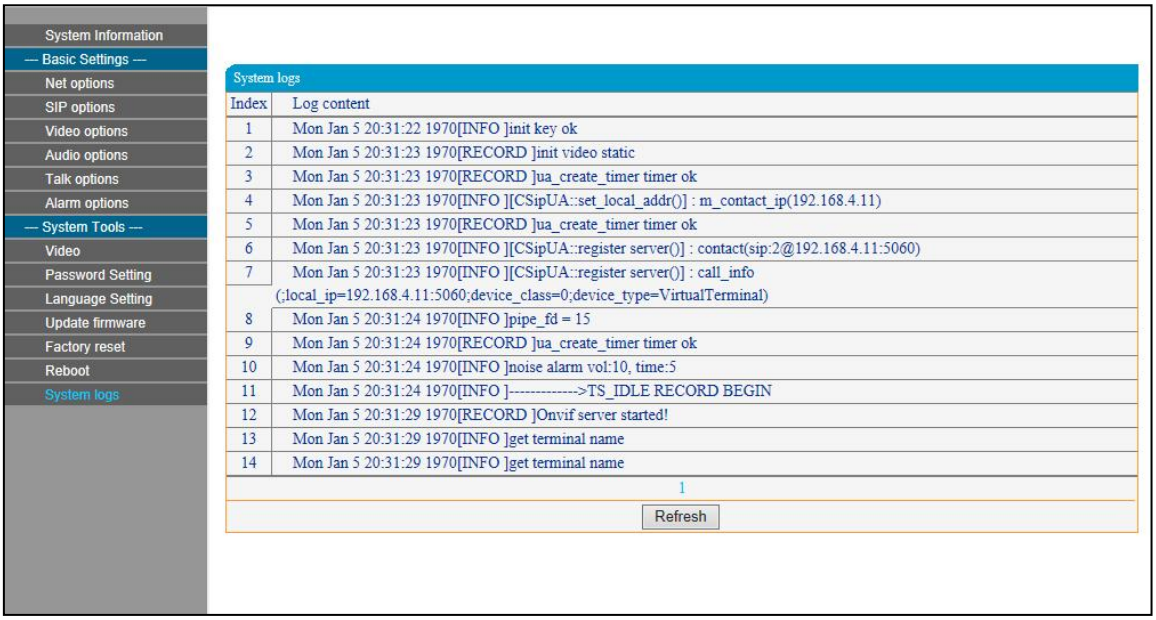
Reboot

Click "Reboot" to manually restart the terminal.



System Logs

The terminal can record the running status of the device and generate a log, and the user can browse the system log on the web page.



Basic Functions

Emergency Call

Press the [CALL] button, call the target terminal specified by the service software with one button, and press the [CALL] button again to end the talk.

Initiate Talk

. Pick up the handset, press the number keys to enter the target terminal ID number, press the "Confirm" button to initiate the call, press the cancel button or hang up the handset to end the call.

Accept Talk

Manual or automatic answering can be set on the web page.

When set to auto answer, when there is a terminal call, it will automatically enter the intercom mode after ringing.

When set to manual answer, you need to pick up the handset to answer the intercom (or press the “hands-free button” to answer the call).

Hands-free Talk

During the call using the handset, press the [Hands-free] button to switch to the hands-free calling mode, and press the [Hands-free] button again to hang up the talk.

Receive Terminal Broadcast、Server Tasks

In the case of server authorization:

The terminal can accept tasks initiated by the server, scheduled tasks, real-time broadcasts, etc., and can also receive broadcasts initiated by other terminals;

Initiate Broadcast

Broadcasting in the whole area: Pick up the handset and press the 0+[PA] button (or press the [PA] button twice) to start the whole area broadcast.

Partition broadcast: Pick up the handset, press the number keys to enter the target partition, and then press the [PA] key to initiate the partition broadcast.

Cancel the broadcast: Press the [PA] button or put down the microphone to cancel the broadcast.

Broadcast Callback

When the broadcast callback function is enabled, a terminal can press the CALL key to interrupt the broadcast and CALL back the party that initiated the broadcast.

(Note: 1. Both the receiver and the initiator need to enable the callback function. To enable the callback function, perform the following steps: Enable the Callback function under Intercom parameters on the WEB UI.

2. On the SIP server, perform the following configurations for the terminal that initiates broadcast: Choose Basic Settings > Terminal Management > Priority, set “Receive Intercom > Receive Broadcast”.)

Accept Monitoring/Listening

It can receive listeners from other terminals.

Conference Function

Supports video/audio conferencing initiated by the receiving server or IP network visualization console.

Fault Exclude

The button area light is off and the terminal is not powered.

1. If using the power adapter for power supply, please check if the power input plug is loose and the power cable is good.
2. If you use POE power supply, check whether you select the appropriate POE switch and check whether the power of the terminal exceeds the maximum power of the POE switch port. At the same time, check whether the quality of the network cable is over. It is recommended to use TCL super five or more wires.

The terminal cannot log in to the server normally.

1. Check if the network cable is plugged in. When the network cable is not plugged in, the network status light is always on.
2. Check if the service software and the main control unit are normally turned on. Before you open the service software, you need to turn off all firewalls (including the firewall that comes with the system and other firewalls included in the anti-virus software).
3. Check the IP settings of the terminal. Check whether the terminal ID, service IP, local IP, and gateway IP are set correctly.

Amplifier has no output

1. The “Broadcast Output Selection” in the web page audio parameters defaults to the speaker output. Please switch it to “Line Output”. After saving, restart the device to take effect.
2. Please check if the broadcast output volume is adjusted to the minimum. If yes, please increase the volume.

The sound is not normal when intercoming with the IP network visualization console

Go to the IP network visualization console web page and change the encoding format to PCM-U in the "Talk Options" setting.

Custom ringtone does not play properly

Check if the set ringtone meets the requirements. Custom ringtone only support 8k wav format.

Forgot web page login password

Power on when short firmware backup interface, and restore the factory settings. After reset, the username and password are both admin.

Can't put down the receiver or press the corresponding function key to hang up the intercom?

Check the talk parameter on the web to see if it is set to forbid hanging up.

Copyright Statement

Copyright

The manual, which is created or developed on the basis of SPON copyright, is the intellectual property of SPON. Without prior written consent by SPON， any reproduction, modification, or retransmission, in any form or by any means, is illegal and strictly prohibited.

In accordance with relevant laws, translation and conversion are contained in reproduction.

Only for private use, downloading and printing of the manual is not prohibited when it is spreading on internet and media.

No part of the manual is allowed to be reproduced or used for commercial purpose. And SPON shall take no responsibility for any losses or damages caused by the illegal reproduction and conversion of the manual.

Warranty

The manual is subject to modification, and there is no further notice if it is modified. Accurate statement, information and suggestion are provided in the manual to the best. But any expression or implication are not guaranteed by SPON, and users bear full responsibility for the application of product.

SPON made no guarantee about the manual, including but not limited to any contained marketability or specific guarantees.

SPON bears no responsibility for any indirect or incidental losses caused by improper use of the manual.

Wechat

SPON Communications Co., Ltd.
www.sponcomm.com
Service Hotline：+86-731-85570190
Reserve the amendment right without notice

V3.1B230419