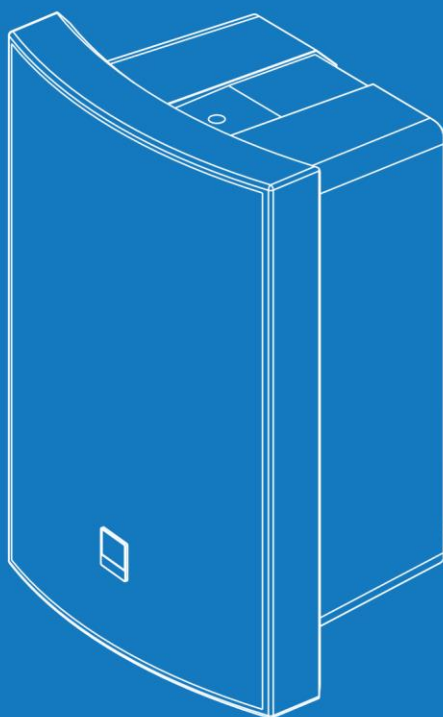


***SPON***

# IP WALL MOUNTED SPEAKER

User Manual



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## 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 the user that attached is the important operation and maintenance data.

### Settings 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.

Simultaneously, 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 of broken, etc)
- Fault (e.g it can't network, no sound etc.)

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

Do not let foreign matters invade the machines internal.

Please don't put the metal or inflammable objects into the machine, otherwise it may 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.

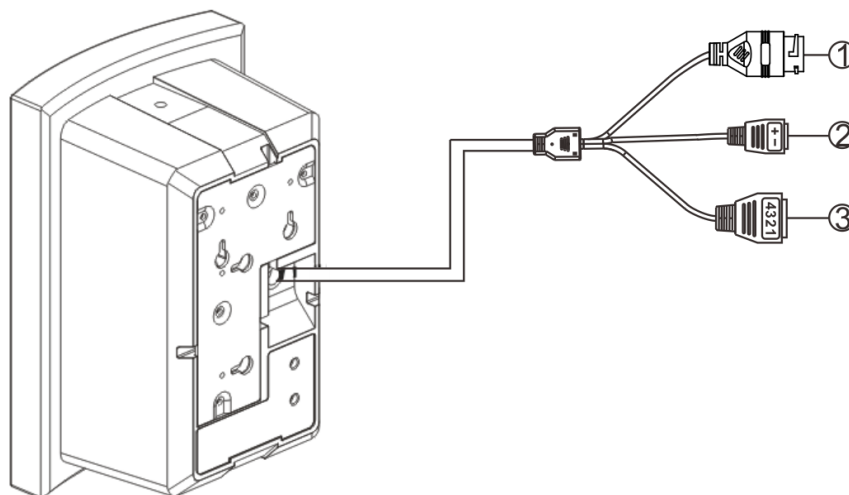
## Product Introduction

IP wall mounted speaker embedded with the IP audio digital network audio technology of independent intellectual property right, can receive other terminals or server launched broadcast, support function settings via browser. It has the function of loop detection, can detect the working state of the speaker and display it on the server software.



- Received broadcast: IP wall mounted speaker can received broadcast from servers or other terminals.
- Loop detection: IP wall mounted speaker has self checking function, and can detect the working state of speakers through the loop
- The timing program plays: upload the audio source every day needed to the server, programmer the playback plan, and the IP horn speaker can be automatically broadcast according to the planned tasks assigned by the server.
- System settings through browser: users can configure parameters of the IP wall mounted speaker, such as the network parameters , audio parameters, amend the login password and so on through the browser to realize the personalized configuration.
- Support POE power supply

## Interface Description



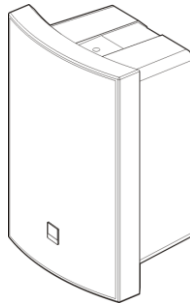
- ① Network interface: insert a cable to the switch or POE switch.
- ② Power interface: DC24V/1A, supply for the IP wall mounted speaker. (The device supports POE, need no more power supply if the network interface are already connected with POE switch.)
- ③ Amplifier output port: (note: 1 and 2 ports for amplifier output port, 3 and 4 ports for reservation)

## Introduction

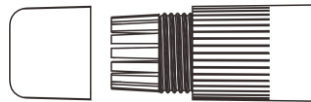
### Packing List

IP wall mounted speaker is including the following fittings, please check all the fittings before installation. Please contact your supplier if there is any missing.

- (1) IP wall mounted speaker 1PCS



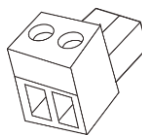
- (2) waterproof connector 1 Set



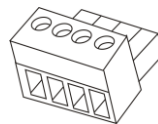
- (3) Installing bracket 1PCS



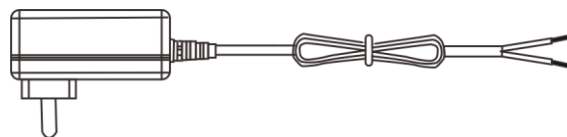
- (4) Wiring terminal (3.81-2P) 1PCS



- (5) Wiring terminal (3.5-4P) 1PCS



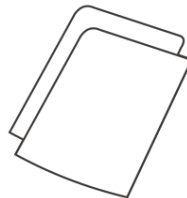
- (6) Power adaptor (DC24V/1A) 1PCS **(optional)**



- (7) certification 1 PCS



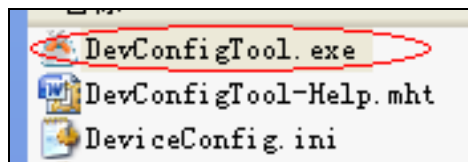
(8) Quick installation guide 1PCS



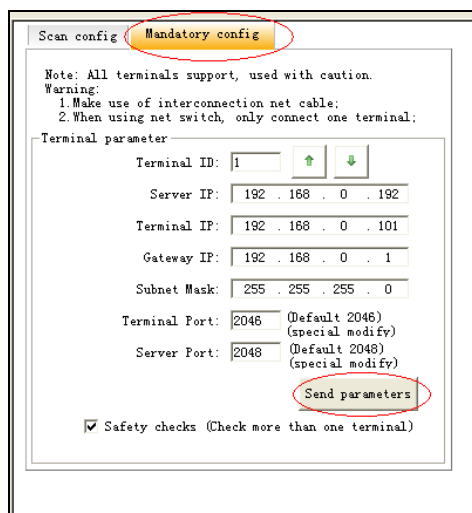
## Basic network settings

### Terminal devices scanning tool

(1) Under the menu of [optical disc:\tool software\] found "Devconfigtool.exe" and run it, after starting, input the defaulted password "123456"



(2) Please select the [mandatory config] from the right menu, then fill each correct parameters in the [terminal parameter], it will be finished IP parameter configuration once pressed "send parameters"



#### Note:

- 1、 If use Win7 system operating, please taking the administrator mode to run and close all the firewall and related software.
- 2、 The terminal scanning tools can only set the network parameter configuration to one terminal at one time, so please ensure one computer only connect with the one target terminal.

### Web page mode

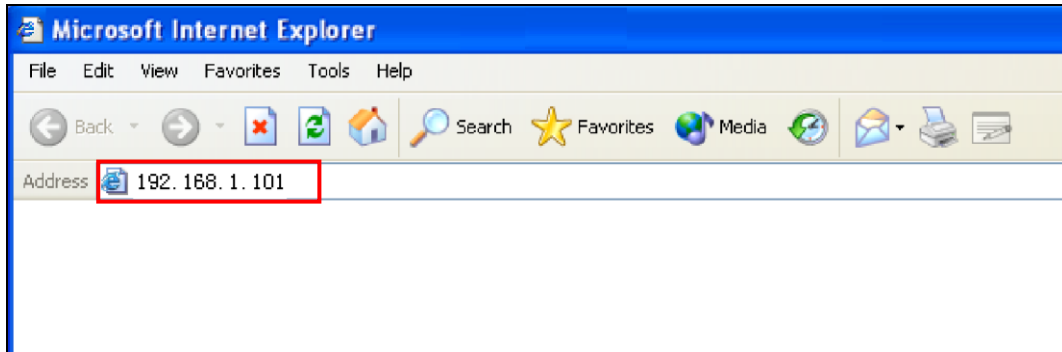
Enter the web interface of the IP wall mounted speaker, modify the parameters of the network parameters according to the scene environment, and click "save" after setting up.

The specific operation steps refer to the network parameters settings in the user-define terminal parameters.

## User-Define Terminal Parameters

### Login web interface

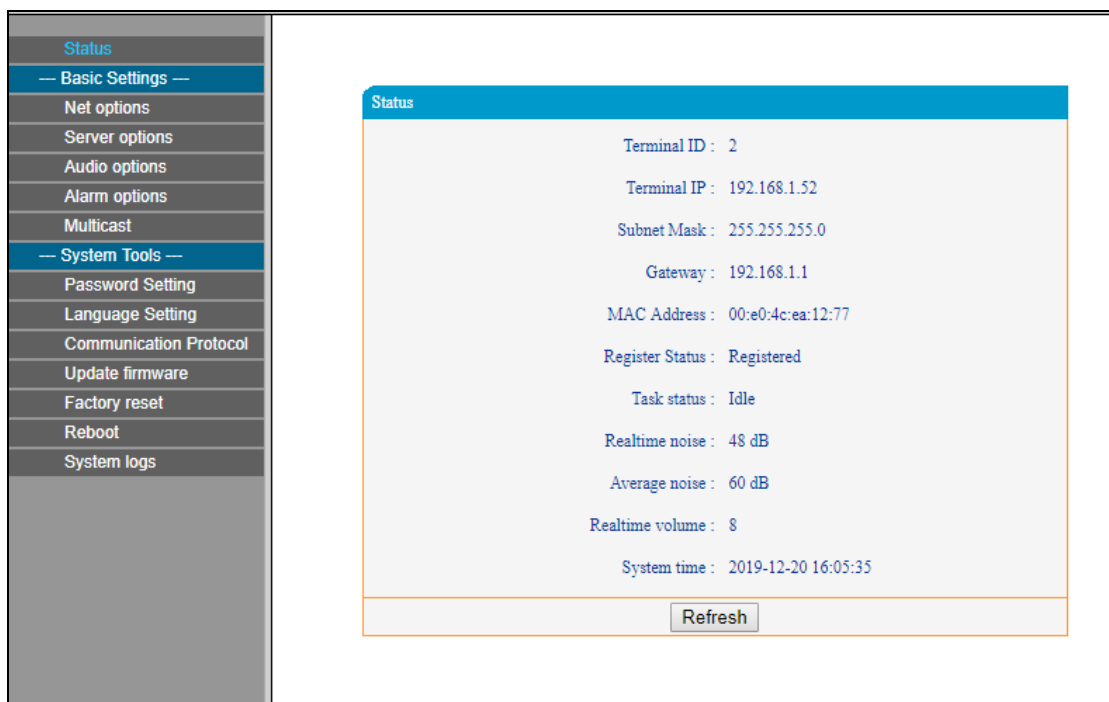
(1) Please enter the IP wall mounted speaker column IP address to the browser address column( the factory default IP address is 192.168.1.101), then enter.



(2) Enter the username and password in the web page login window (the default is admin).



(3) Click OK to enter the web page of the IP wall mounted speaker.



## Protocol

This device supports spon protocol (NAS) and SIP protocol (the default is SIP protocol), please select the corresponding protocol as per the server type of the log-in terminal, then set up accordingly. After completing setting and saving it, please restart the device . At the same time, it is necessary to restart the browser.

Note: The web pages for different protocols are slightly different. Please refer to the actual interface.

The screenshot shows the 'Communication Protocol' configuration page. On the left is a sidebar menu with options: Status, Basic Settings, Net options, Server options, Audio options, Alarm options, Multicast, System Tools, Password Setting, Language Setting, Communication Protocol (selected), Update firmware, Factory reset, Reboot, and System logs. The main content area displays the 'Communication Protocol' settings. It includes a dropdown menu for 'Protocol Name' which is currently set to 'NAS', and a 'Save' button at the bottom.

## Network Parameters

The screenshot shows the 'Net options' configuration page. The left sidebar menu is the same as in the previous screenshot, with 'Net options' now selected. The main content area displays the 'Net options' settings. It includes input fields for 'Terminal IP' (192.168.1.52), 'Subnet Mask' (255.255.255.0), 'Gateway' (192.168.1.1), 'DNS1(Optional)', and 'DNS2(Optional)', along with a 'Save' button.

parameters as following:

IP address	IP address of the device, the factory default is 192.168.1.101
Subnet mask	Please set the subnet mask (factory default: 255.255.255.0)
Default gateway	The gateway of the network where the device is located (factory default: 192.168.1.1)
Preferred DNS server	The preferred domain name interpreter IP of the terminal
Alternate DNS server	The standby domain name interpreter IP of the terminal



## Server Parameters

Status	<div> <div>Server options</div> <div> Terminal ID : <input type="text" value="2"/>  Local Port : <input type="text" value="2046"/>  Primary Server : <input type="text" value="192.168.1.13"/> : <input type="text" value="2048"/>  Secondary Server : <input type="text" value="192.168.1.14"/> : <input type="text" value="2048"/>  Version Server : <input type="text" value="192.168.1.13"/> : <input type="text" value="2051"/>  FTP Server : <input type="text" value="192.168.1.13"/> : <input type="text" value="21"/>  FTP Username : <input type="text" value="admin"/>  FTP Password : <input type="password" value="....."/>  Login Interval(s) : <input type="text" value="3"/> ▼  <div>Save</div> </div> </div>
— Basic Settings —	
Net options	
Server options	
Audio options	
Alarm options	
Multicast	
— System Tools —	
Password Setting	
Language Setting	
Communication Protocol	
Update firmware	
Factory reset	
Reboot	
System logs	

Parameters as following

Terminal ID	The only number to identify terminal, it can not repeat with other terminals or hosts, the factory default is 1.
Device Port	The device port number defaults to 2046. Do not modify without special situation.
Preferred server	IP address of the IP broadcast server. The default port is 2048.
Alternate server	Login alternate DNS server, when the preferred DNS server can not be connected. When preferred DNS server can be connected, terminal relogin the preferred server.
Login interval	Set time interval of login sever

## SIP Parameters

Status	<div> <div>Sip options</div> <div> Sip Server: <input type="text" value="192.168.1.13"/> : <input type="text" value="5060"/>  Account: <input type="text" value="71"/>  Password: <input type="password" value="....."/>  Local Port: <input type="text" value="5060"/>  Audio port: <input type="text" value="7080"/>  Switch To Multicast: <input type="text" value="Enable"/> ▼  Audio Codec: <input type="text" value="G711.a"/> ▼  Destination Multicast Address: <input type="text" value="238.0.0.1"/> : <input type="text" value="8060"/>  Assistant Ringing Account: <input type="text" value="Enable"/> ▼  Ringing SIP Account: <input type="text" value="72"/>  Ringing SIP Password: <input type="password" value="....."/>  <div>Save</div> </div> </div>
— Basic Settings —	
Net options	
Server options	
Sip options	
Audio options	
Alarm options	
Multicast	
— System Tools —	
Password Setting	
Language Setting	
Update firmware	
Factory reset	
Reboot	
System logs	

Parameters as following:

SIP Server	The address of the SIP server of the device. Please fill in the IP address or domain name of the SIP server correctly. Do not modify without special situation (default is 5060).
Account	The SIP account of the terminal, it can not repeat with other terminals.
Password	The password for the terminal to log in to the SIP server must not be duplicated with other terminals.
Local Port	Configure the local port according to actual situation.
Audio Port	Configure the audio port according to actual situation.
Calling to Multicast	Calling transfer to multicast can be enabled settings (calling transfer to multicast, when receiving the SIP call initiated by IP phones, the multicast streams will be send to itself and SIP speakers).
Destination multicast address	Enable calling transfer to multicast, when IP phone initiate call to SIP account, it is available to initiate multicast to "destination multicast address and port", other terminals under the multicast address will receive multicast broadcasting.
Assistant ringing account	Enable and set up the assistant ringing SIP account, once any talk or broadcast to the assistant ringing account, the speaker will output the ringing sound. The ringing SIP account and the SIP phone can be put into a group. When calling to group phone, all terminals in the same group will be ringing. The ringing will be stopped after the call be connected. XC server software ringing group configuration: add ringing group in server software of [basic Settings] - [Talk Settings].
Ringing SIP account/password	set Ringing SIP account /password

## Audio Parameters

<div> <div>Status</div> <div>— Basic Settings —</div> <div>Net options</div> <div>Server options</div> <div>Audio options</div> <div>Alarm options</div> <div>Multicast</div> <div>— System Tools —</div> <div>Password Setting</div> <div>Language Setting</div> <div>Communication Protocol</div> <div>Update firmware</div> <div>Factory reset</div> <div>Reboot</div> <div>System logs</div> </div>	<div>Audio options</div> <div> Broadcast Volume : 8 ▼  Buffer time : 0 ▼  Audio check : Disable ▼  Dynamic volume adjust : Disable ▼  Wan Audio Buffering : Disable ▼  Network Audio Synchronization : Enable ▼  Noise detect adjust(dB) : 16  Noise Reference(dB) : 60  Noise detect interval(s) : 30 </div> <div>Save</div>
---	---

Parameters as following:

Broadcast output volume	The total volume of audio input by the device during broadcasting, range: 0-15;
Buffer time	Set the broadcast playback buffer time (that is, how many seconds later to broadcast after the broadcast task is received), to ensure the broadcast output quality when the network environment is poor.
Loop detection	Enable: when the real-time noise of the device is less than or equal to the

	average noise, the server will pop up the window to display the fault information; Disable, loop detection is disable;
Dynamic volume adjustment	Enable: based on the noise level, the device adjusts the output volume during broadcasting. Disable: the dynamic volume is disable, and the web page "Run Status" page displays the real-time volume level.
WAN Audio Buffering	After enable WAN Audio buffering function which showed on above shootscreen picture, it will ensure audio quality under poor network environments.
WAN Audio Synchronization	After enable WAN Audio Synchronization function , it will ensure no postponement when receiving network broadcasts. However, if under very poor network environment , voice will occur discontinuities. Note: While Enabling WAN Audio Buffering, WAN Audio Synchronization will be turned off.
Noise monitoring and calibration (dB)	Set the noise detection calibration value (default is 16dB). The larger the value, the larger the detected real-time noise value. Note: Noise detection calibration value = noise dB of the decibel meter test when the calibration value is 0 - the average noise decibel value detected by the device.
Reference noise (dB)	Under normal situation, the average noise decibel value, the default is 60dB
Noise monitoring interval (S)	Set the average noise detection interval, the default is 30 seconds. Average noise varies according to set time.

## Multicast Setting

Status  
— Basic Settings —  
Net options  
Server options  
Audio options  
Alarm options  
Multicast  
— System Tools —  
Password Setting  
Language Setting  
Communication Protocol  
Update firmware  
Factory reset  
Reboot  
System logs

Multicast Setting

Multicast Function  Beep Sound

Priority Leven	IP Address	Port	Audio Codec	Beep
1	239.255.0.1	8060	Auto	Enal
2	239.255.0.2	8070	Auto	Enal
3	239.255.0.3	8080	Auto	Enal
4	239.255.0.4	8090	Auto	Enal
5	239.255.0.5	8100	Auto	Enal
6	239.255.0.6	8110	Auto	Enal
7	239.255.0.7	8120	Auto	Enal
8	239.255.0.8	8130	Auto	Enal
9	239.255.0.9	8140	Auto	Enal
10	239.255.0.10	8150	Auto	Enal

Save

Parameters as following:

Multicast Address	Set whether to enable multicast or not. In the case where there are multiple servers in the LAN, different servers must fill in different addresses and port numbers when they initiate multicast broadcasts without interference. Support up to 10 multicast addresses as maximum and priority settings (priority from high to low is 1-10).
-------------------	--

Prompt Tone	Set whether to enable the broadcast prompt tone or not.
-------------	---

## Password Settings

The account and password of the login web page can be modified in the WEB management parameters.

Status	<div><div>Password Setting</div><div><div>Original username : <input type="text" value="admin"/></div><div>Original password : <input type="password"/></div><div>New username : <input type="text"/></div><div>New password : <input type="password"/></div><div>Password Confirm : <input type="password"/></div><div><div>Save</div><div>Clear</div></div></div></div>
— Basic Settings —	
Net options	
Server options	
Audio options	
Alarm options	
Multicast	
— System Tools —	
<b>Password Setting</b>	
Language Setting	
Communication Protocol	
Update firmware	
Factory reset	
Reboot	
System logs	

## Language Settings

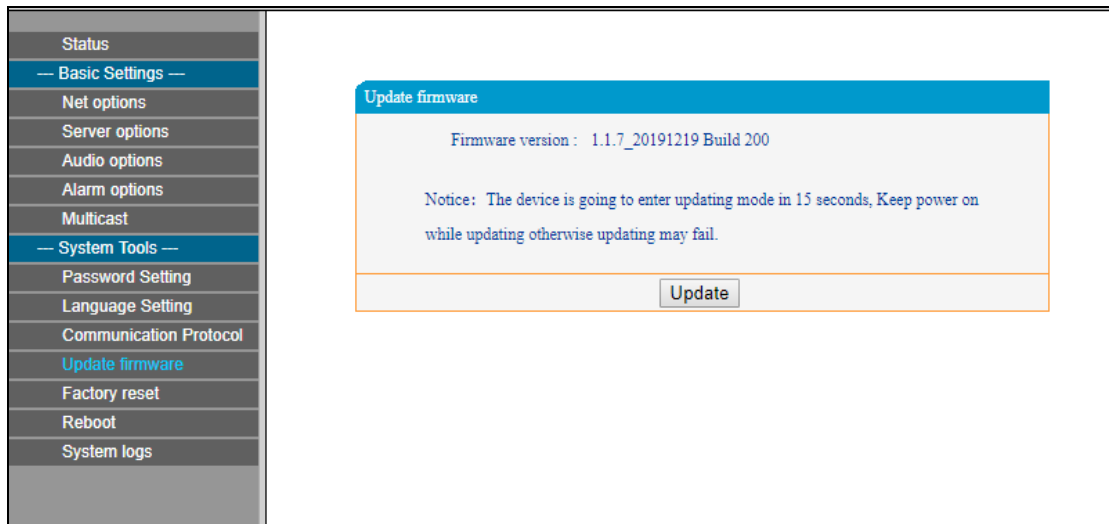
The language of the web page can be switched between Chinese and English

Status	<div><div>Language Setting</div><div><div>Language : <input type="text" value="English"/></div><div><div>Save</div></div></div></div>
— Basic Settings —	
Net options	
Server options	
Audio options	
Alarm options	
Multicast	
— System Tools —	
Password Setting	
<b>Language Setting</b>	
Communication Protocol	
Update firmware	
Factory reset	
Reboot	
System logs	

## Firmware Upgrade

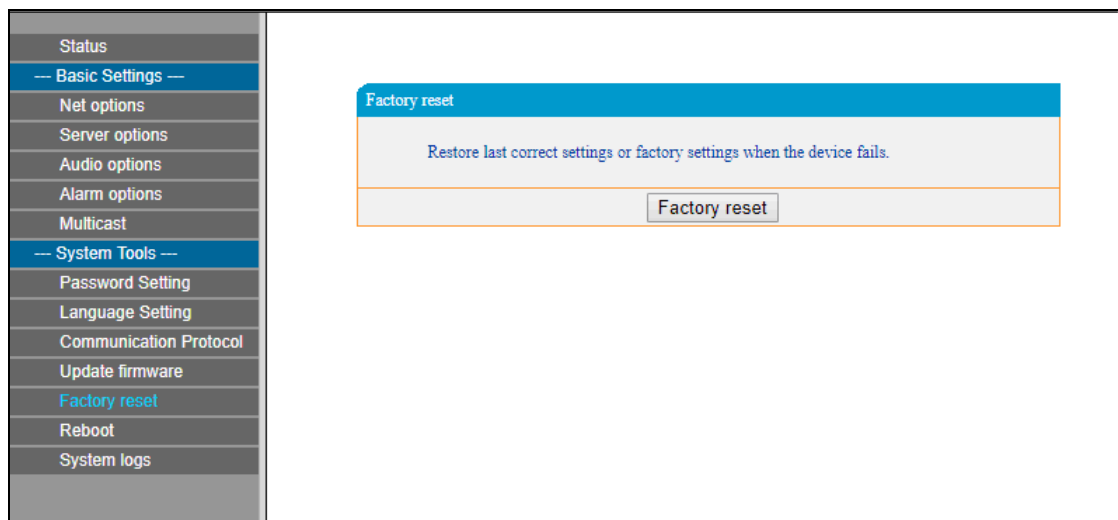
Click the "Upgrade" button, you will enter the firmware upgrade mode after 15 seconds, click "Browser", select the upgrade file provided by the manufacturer, and click "Upgrade" to start the upgrade.

**Note: Do not power off during the upgrade process, otherwise the upgrade may fail and the device fails.**



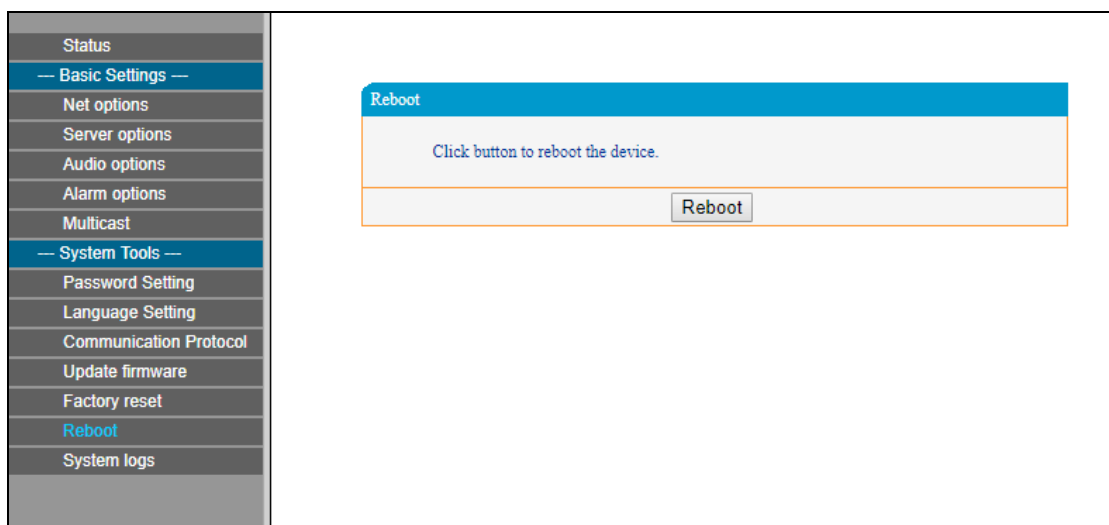
## Reset to Defaults

Reset to defaults: all parameters need to be reset to defaults.



## Reboot Device

User can click "Reboot" to reboot the device.



## Fault Exclude

### Why the terminal is still "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 hard-connected normal. If the network port green light is not on, it means the network hard-connected problem, please check the terminal network cable and switcher whether they work normal, damaged and disconnect or not etc.
- 3).Check the terminal IP setting. Please check the terminal ID, sever IP, local IP, gateway IP ...etc parameters.

### When web show abnormal?

Please clear the caches or change the browser.

### How to change the web login account and password?

- 1 .Click the password setting in web page .
2. Input the old account and old password.
3. Input the new account and new password.
4. Input the new password again for confirmation
- 5.Click save .

The new account and new password will be effective after reboot.

### Why unable to login the sever after power on ?

The reason of raising this phenomenon is the conflict of IP address or gateway wrong, you can use IP configuration tool to mandatory set IP.

### why device can not be power on and the network indicator always off?

The reason of raising this phenomenon is power adaptor failed or cable loosen, you can change power adaptor or re-insert/change cable to solve this problem.

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