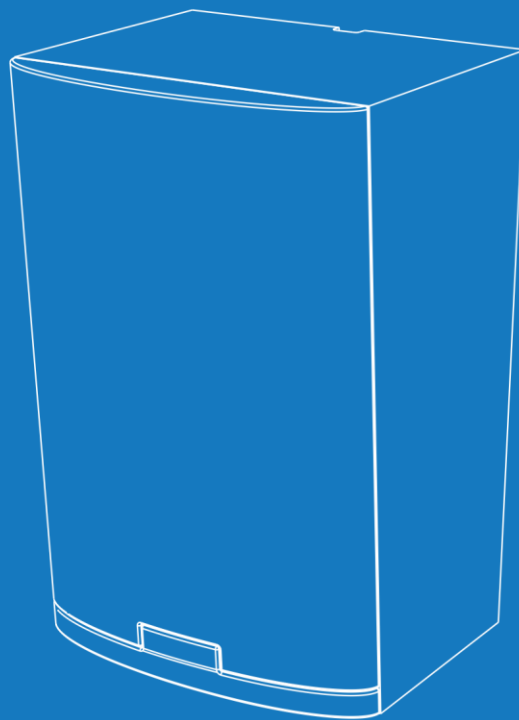


SPON

IP NETWORK ACTIVE SPEAKER

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 of broken, etc)
- Fault(eg: 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.

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 Introduction

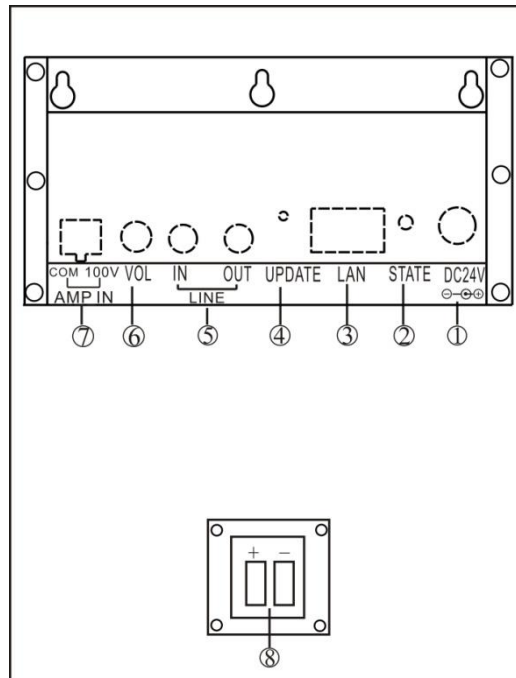
IP network active speaker which is embedded with the IP Audio digital network audio technology of independent intellectual property rights. It's equipped with power input interface, line input and line output interface, RJ45 network interface, 2.4G wireless module is available and deputy speaker output.



- High speed industrial grade dual-core (ARM+DSP) chips, run-up time ≤1 second.
- Support MP3, WAV audio decoding.
- With one analog input interface.
- Support 2.4 G wireless module with 2.4 G wireless VOD receiver work cooperatively (optional)
- Support constant voltage backup module, access to 100V constant voltage broadcast line as backup, when network abnormal, IP network active speakers can automatically or manually switch from "digital network broadcasting" to "constant voltage broadcasting". (optional)

Hardware Interface Introduction

【Back】



①DC24V: power input interface

②STATE: status indicator, the different indicator means the terminal indifferent states.

Status indicator	Terminal states
Red normally on	The terminal is on BIOS (bootstrap program) and waiting firmware update program.
Red fast flash	The terminal logined and within the conversation.
Flashing in red and green	The terminal is upgrading firmware.
Red slow flash	The terminal not log in and ask for log in

Green normally on	The terminal logined and in free status.
Green flash	The terminal logined and receiving broadcasting.

③LAN: The network interface, 10M/100M self-adaption.

④UPDATE: Force upgrade button or play the device IP.

⑤LINE: Line input/output interface.

IN: Line input interface

OUT: Line output interface

⑥VOL: Volume controller, it can control line input volume.

⑦AMP IN: Constant voltage input interface, it`s use for connect constant voltage backup power amplifier audio power output (100V).(Optional)

⑧Constant resistance output interface(Red for positive, black for negative): It`s use for connect the deputy speakers. (Optional)

Force upgrade

Use tweezers or small pin press the force update button.

Switch on the terminal power supply and wait for 5 seconds, then enter into the force update status (press this button will play the terminal IP and subnet mask information).

DRC Dynamic range compression

Support DRC dynamic range compression, make the output amplitude match the speaker dynamic range, thus reducing the clipping and distortion caused by excessive volume. In addition, the DRC function also can protect the speaker under high power from being damaged, so it can effectively avoid the live device failure.

2.4 G wireless module (optional)

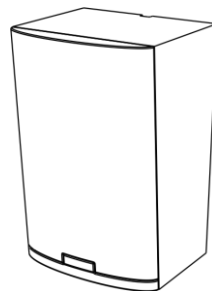
IP network active speaker add the 2.4G wireless module can work with 2.4G wireless VOD receiver to realize local broadcast, local radio, remote broadcasting, remote two-way radio and so on functions. Please refer to the 2.4 G wireless receiver manual for more details.

Introduction

Packing list

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

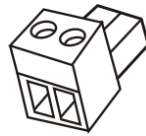
- (1) IP network active speaker 1pcs



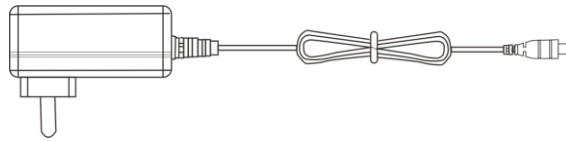
- (2) Double 3.5 audio line (2.5m) 1pcs



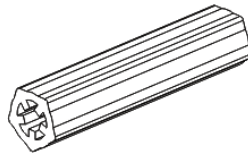
- (3) Terminal Connector (5.08-2P) 1pcs **(only for constant pressure backup)**



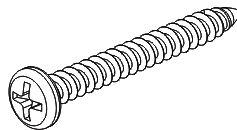
(4) The power adapter (DC24V/1A) 1pcs



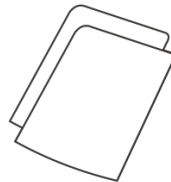
(5) Plastic expansion set 4pcs



(6) Tapping screw(4*35) 4pcs



(7) Quick installation guide 1pcs

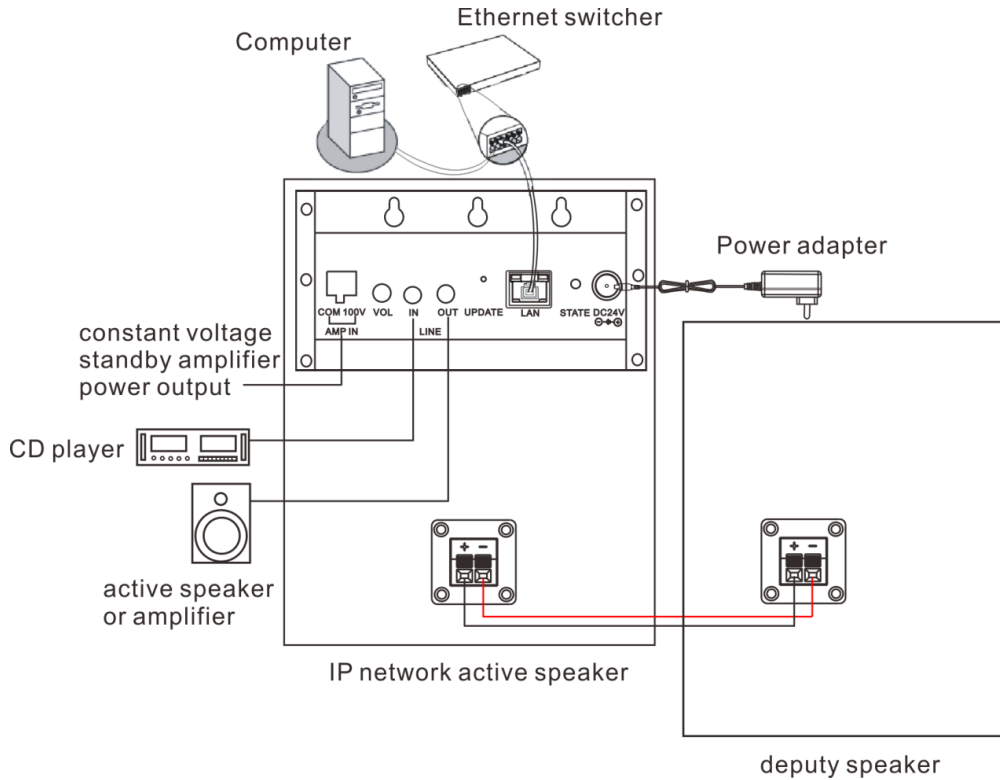


(8) Certification 1pcs



Wiring

- (1) Connect one port of the power adapter with IP network active speaker power interface, the other one connect to the outlet.
- (2) Connect one port of Ethernet Cable with IP network active speaker cable interface, the other one connect to switcher.
- (3) Connect the other devices with corresponding interface respectively.

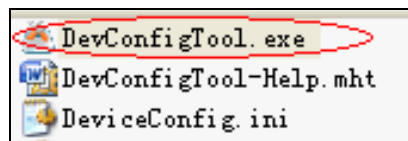


Basic Network Setting

Connect the cable and power on as per the installation manual, then revise the terminal network parameters according to the live environment, There have below two methods:

Terminal Equipment Scanning Tools

- 1. From [CD: \ tools \] directory to find and run "IP configuration tool" audio terminal, after start it , please enter the default password "123456".



- 2. From the right menu choose **【Mandatory config】**, then fill the correct parameters in the **【terminal 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. Please use the administrator mode to run and close the firewall or other related software when using the Windows7 operating system;
2. Terminal equipment scanning tools can only configure one terminal at one time. Please make sure that a computer only connect one target terminal when using this method.

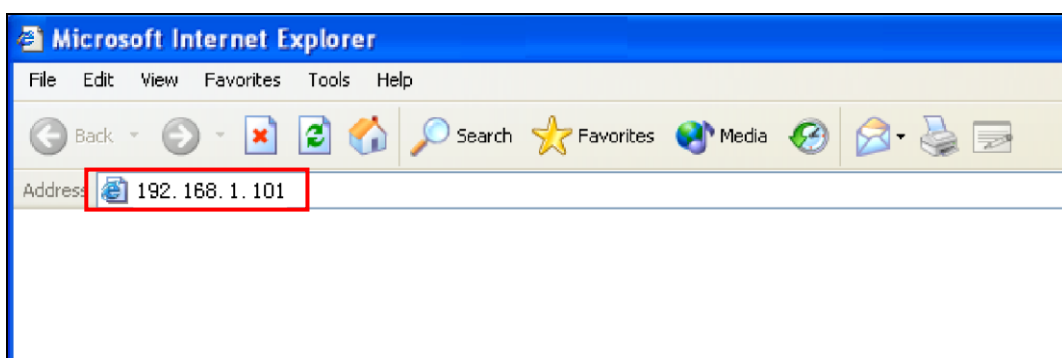
Webpage Mode

Enter into the IP network active speaker web interface, then modify the terminal each parameters according to the environment, after setting completed, click "save".

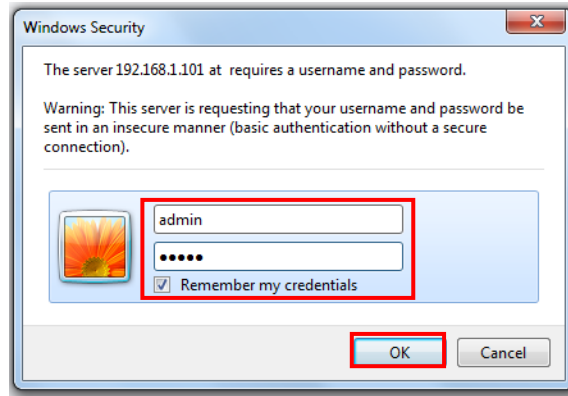
Specific operation steps please refer to custom terminal parameters in the network settings.

User-define terminal parameters**Login web interface**

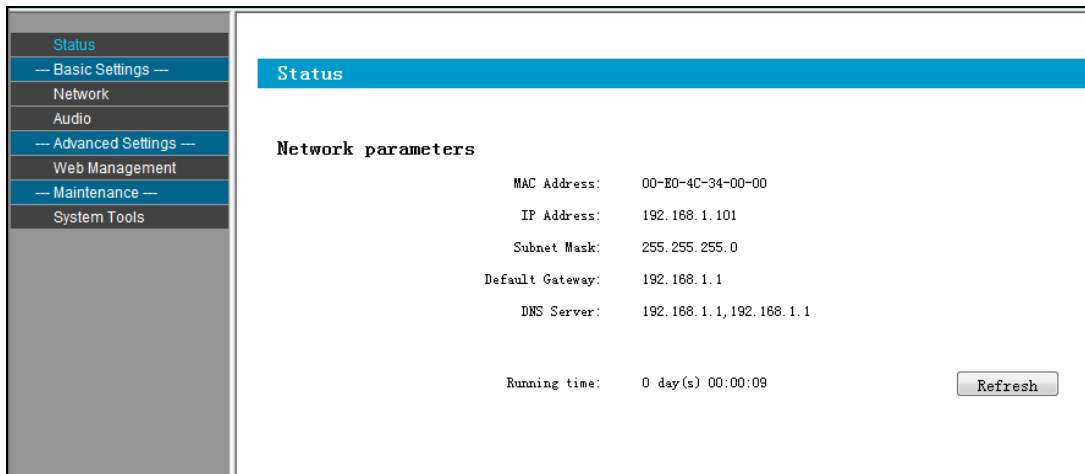
- (1) Please input the IP network active speaker to the address column of the browser (the factory default IP address is 192.168.1.101), then enter.



- (2) Enter the user name and password in the web page (the default user name and password is admin)

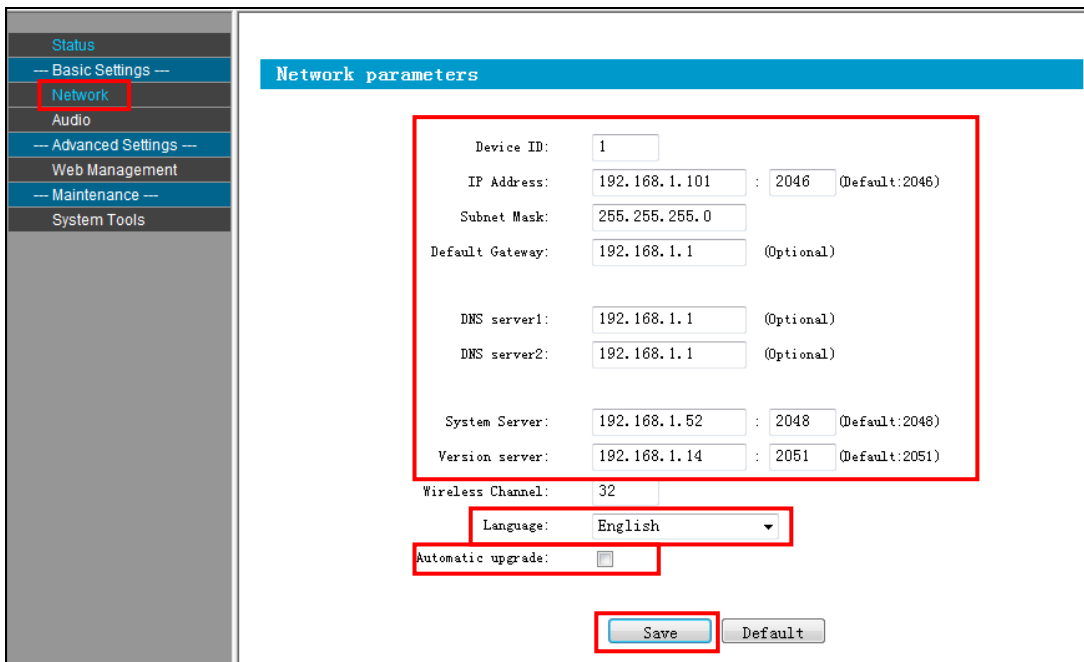


(3) Click OK to enter IP network active speaker web page.



Network Parameters

Click “network parameters” from the basic settings enter into the network parameters modification interface, it can modify the following network parameters, select the auto update, if started the version server, the terminal can automatically detect the current firmware whether it’s latest version or not during login the server, if it’s not the latest version, then it will update to the latest version automatically.



Device NO.	The only No. to identify host, it can't repeat with other device or hosts.
Terminal IP	Terminal IP address and port, the factory default IP address is 192.168.1.101

	Note: It can't revise except with the special situation (The default is 2046)
Subnet mask	The subnet mask of the terminal
Default gateway	The network gateway of the terminal
Preferred DNS server	The preferred domain name interpreter IP of terminal
Alternate DNS server	The standby domain name interpreter IP of terminal
Version server	Version server IP, terminal can connect the version server and auto-upgrade program when it's restarting(select the auto-upgrade option)
System server	IP address of IP PA system server

Setting the wireless channel (select 2.4G wireless module is available)

Enter into network parameters page and adjust wireless channel to a free channel (1-32 channel)

System Server: 192.168.1.52 : 2048 (Default:2048)
 Version server: 192.168.1.14 : 2051 (Default:2051)
 Wireless Channel: 32
 Language: English
 Automatic upgrade:

Language Setting

You can switch Web language between Chinese and English, it will be workable after restarting the web page.

System Server: 192.168.1.52 : 2048 (Default:2048)
 Version server: 192.168.1.14 : 2051 (Default:2051)
 Wireless Channel: 32
 Language: English
 Automatic upgrade:

Audio parameters

Enter into the "audio parameters" from "basic setting" can set audio coded format, volume, sampling rate and so on.

- Status
- Basic Settings ---
- Network
- Audio
- Advanced Settings ---
- Web Management
- Maintenance ---
- System Tools

Audio parameters

Encoding format:

Line input volume:

Line input source:

Line input level:

Intercom sampling rate:

Intercom output volume:

Broadcast sampling rate:

Broadcast output volume:

Voltage backup switch:

Wireless broadcast:

The Priority of Audio :

Power amplifier normally open :

College entrance examination mode(Only device with voltage backup):

The time of check net(100-3000): MS (default 500)

Coding mode	Intercom or broadcast code, PCM means uncompressed data, ACPCM means compressed data(Small amount of network data)
Line input volume	The volume of the audio line input
Line input sound source	IP network active speaker input audio source (microphone, line input)
Intercom sampling rate	IP network active speaker sampling rate of intercom (8000Hz, 22050Hz)
Intercom output volume	IP network active speaker total output volume of intercom (0~15,6 grade is 0dB)
Broadcast sampling rate	IP network active speaker sampling rate of broadcasting (8000Hz, 22050Hz)
Broadcast output volume	IP network active speaker total output volume of broadcasting 0~15,6 grade is 0dB)
Audio priority	It can select local and network priority, the default is network priority. Network priority: IP broadcast>PTT broadcast>ling input; local priority: line input>IP broadcast>PTT broadcast
Power amplifier normally open	Power amplifier normally on-off or power amplifier open configuration, it defaults to normally on-off. Normally on-off: when receiving server broadcast or line input audio, power amplifier open automatically. Power amplifier normally open: no matter the audio can be received or not, power amplifier will be open always.
Examination mode(only for constant voltage back-up device)	please select use the examination mode or not. Use: Start using the examination mode, the system will shield line input and 2.4G wireless handset function. Prohibition: normal mode Remarks: The user can batches setting on "WEB batches configuration tools" starting or prohibiting examination mode.
Network monitoring time	Setting network monitoring time, it is available only in the examination mode.

	Configuration coverage is between 100ms-3000ms, it defaults to 500ms.
--	---

Audio automatic detection function

In order to avoid line noise and sound resource produced noise output from the loudspeaker, when line input audio range less than a specific value (Line input threshold), the amplifier will be closed with 1 min. Line input threshold is set from audio parameters in web page, The audio range lowest level requirements is grade one, the highest is grade five.

Wireless amplification sampling rate (2.4G wireless module is available)

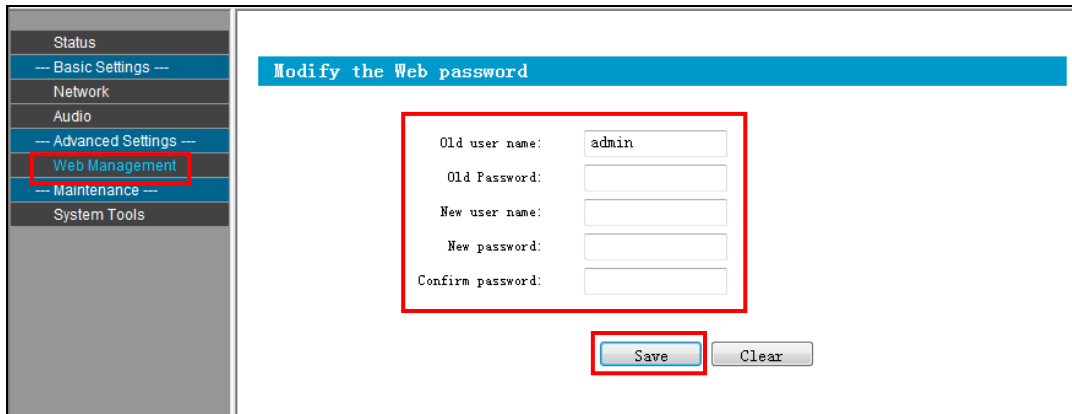
In web page, audio parameters can select different wireless amplification sampling rate, select the remote distance can acquire further transmission distance, select high quality can acquire higher tone quality, the distance is relatively shorter.

Constant voltage backup (constant voltage backup module is available)

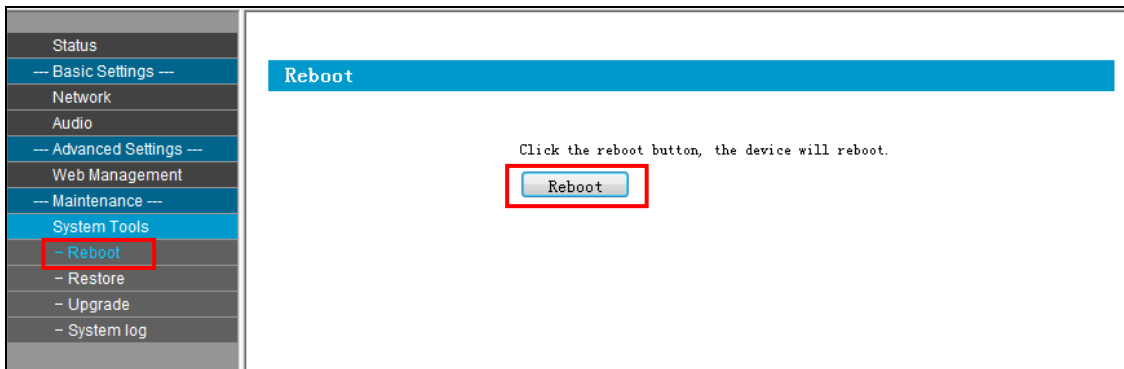
- (1) Constant voltage can be set in the web page for automatic backup, prohibit and compulsory this three modes, the default mode is prohibit.
- (2) Automatic: When IP network active speakers in abnormal network, power down, terminal failure. It will automatically switch the external constant voltage audio to the local speakers.
- (3) Prohibit: Power-up state can't use constant voltage backup function.
- (4) Compulsory: Use the constant voltage backup function at any time.

Password Setting

You can revise the web page logging account and password from the WEB management parameters.

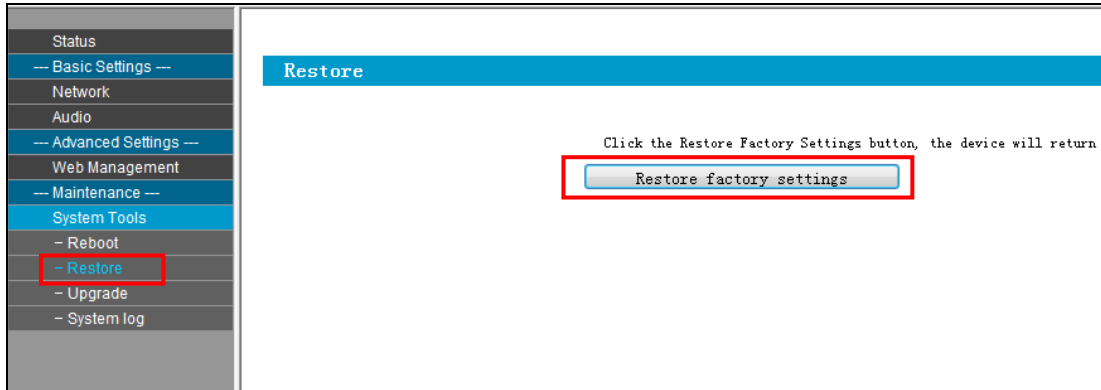


Reboot Device



Note: the revised parameters will be workable after the device restarted.

Restore Factory Setting



Restore factory setting: all parameters were restored to factory setting.

Firmware Upgrade

Visit the terminal Web pages from Web browser, click the "device maintenance" ->"system tools" ->"firmware upgrade", click "enter the firmware upgrade mode" button to enter the firmware update WEB page ,then choose the factory offered firmware update file , click "firmware upgrade" button to upgrade.



Receive broadcasting

Automatically answer without pressing any button.

Other functions

In addition to the above functions, IP network active speaker can cooperate with the server to realize timing ringing bell, real time broadcast, timing broadcast, for the specific operation please refer to the server software operation guide.

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.

How to solve the warning of “terminal network service (UDP)” failed during the process of the starting the service software?

Server local network connection is disconnected, connect the local network cable, exit the service software and Restart, it will be ok.

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 pass word.
3. Input the new account and new pass word.
4. Input the new password again for confirmation
5. Click save.
The new account and new password will be effective after reboot.

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