

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 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

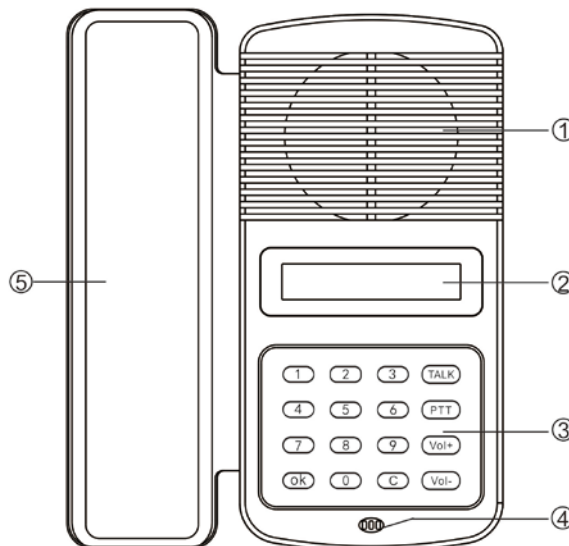
IP network intercom terminal is embedded with the independent intellectual property rights IP Audio digital network audio technology. The terminal equipped with power input interface、short circuit input and output、audio power output、audio line etc ports.



- With a LCD display and a mini size, available to be table topped or wall-mounted.
- Numeric button calling, it can call any one terminal to realize full-duplex talking.
- With a built –in speaker and a microphone, available to make a hands-free call and receive the broadcast.
- Built-in receiver, works for intercom and broadcast.
- With the audio output and the microphone input to connect the earphone
- Works everywhere as long as Ethernet available.

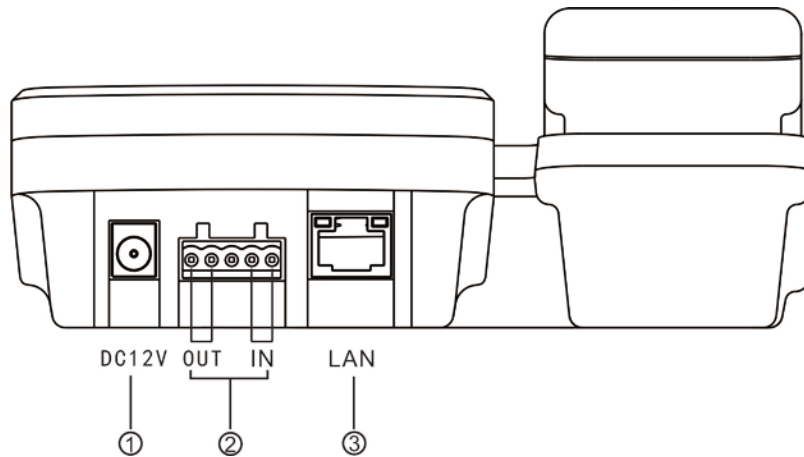
Hardware Interface Introduction

Front



- ①Speaker: Restore the remote live voice.
- ②LCD Screen: Show terminal status
- ③Button: Both are calling keys, Press any button to call the service software designated terminal.
- ④Pickup microphone: Pick up the live voice.
- ⑤ Receiver: Built –in Microphone and speaker, Restore and pick up the remote site voice.

Back



①Power input: connect to DC 12V/2 A power supply.

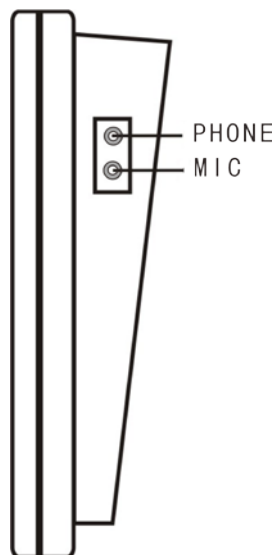
②Alarm input/output interface:

Short circuit input/output: short circuit input/output port has two pins, the state of the two pins won't affect the audio terminal working state in normal use, only when the two pins are short circuited, the audio terminal will automatically make some special operation (eg: generate an alarm signal and sent to the server or send the alarm from local terminal etc) . Alarm button, short circuit signal generator all these devices all can access to this port;

Short circuit output port with 2 pins, this two pins usually in open circuit state, when the terminal received an short circuit output signal from server, two pins will automatically short circuited together to make the short circuit function (eg: open the electronic door lock). The maximum load current of short circuit output is 1A, and the highest voltage is AC100V (or DC24V);

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

Side



Introduction

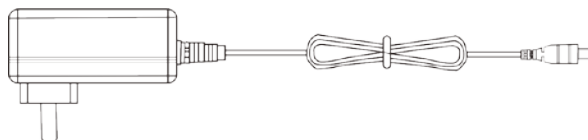
Packing List

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

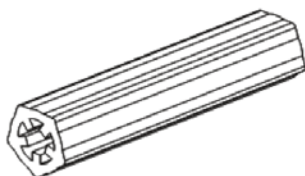
- (1) IP Network Intercom Terminal 1 pcs



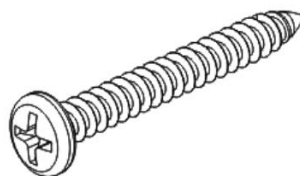
(2) AC Adapter (DC12V/2A) 1pcs



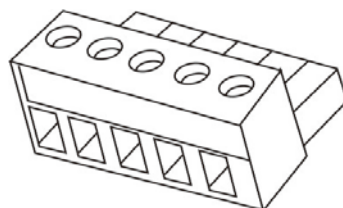
(3) Plastic expansion suit (F7) 3pcs



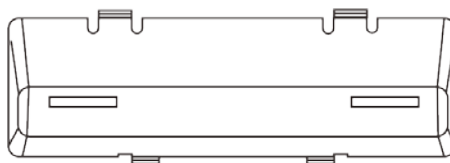
(4) Semi-circle self-drilling screw (M4*25) 3pcs



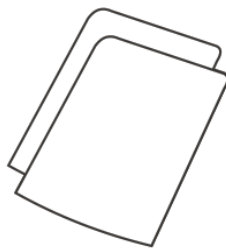
(5) Removable terminal ((3.96-5P) 1pcs



(6) Pedestal 1pcs



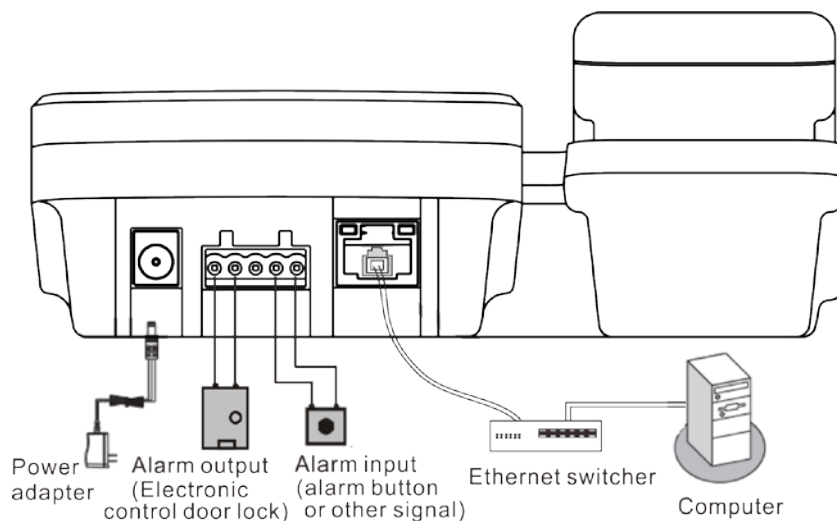
(7) Installation manual 1pcs



(8) Certification 1pcs



Wiring



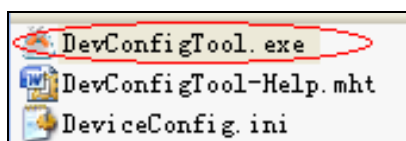
- (1) Using power adapter connect the IP network intercom terminal's power interface and the plug.
- (2) Alarm output interface can be connected to the electric lock.
- (3) Alarm input interface can be connected to the alarm button or other correlation signals.
- (4) Terminal LAN interface connect to the switcher.

Basic Network Setting

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、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 a computer is only corresponding to one target terminal.

Web Page Mode

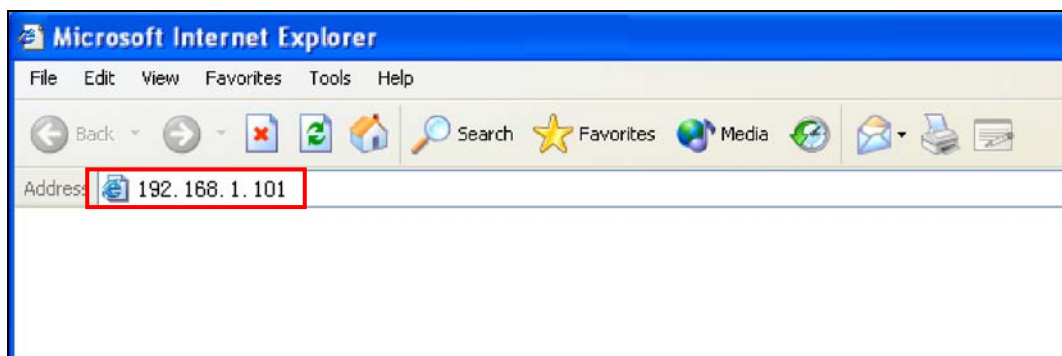
Enter the IP network video intercom terminal web interface, then revise the terminal network parameters according to the live environment, after finish Setting, click "save".

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

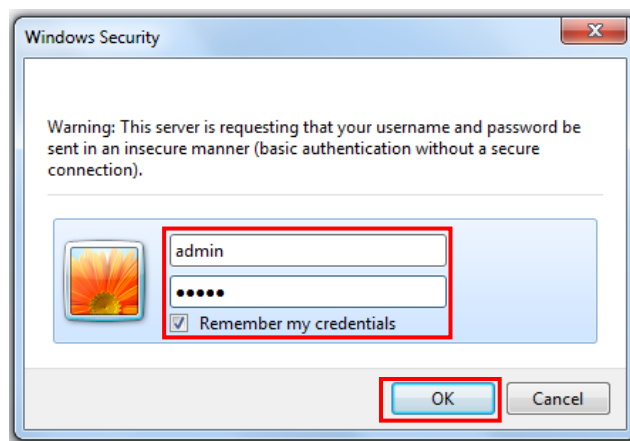
User-Define Terminal Parameters

Login Web Interface

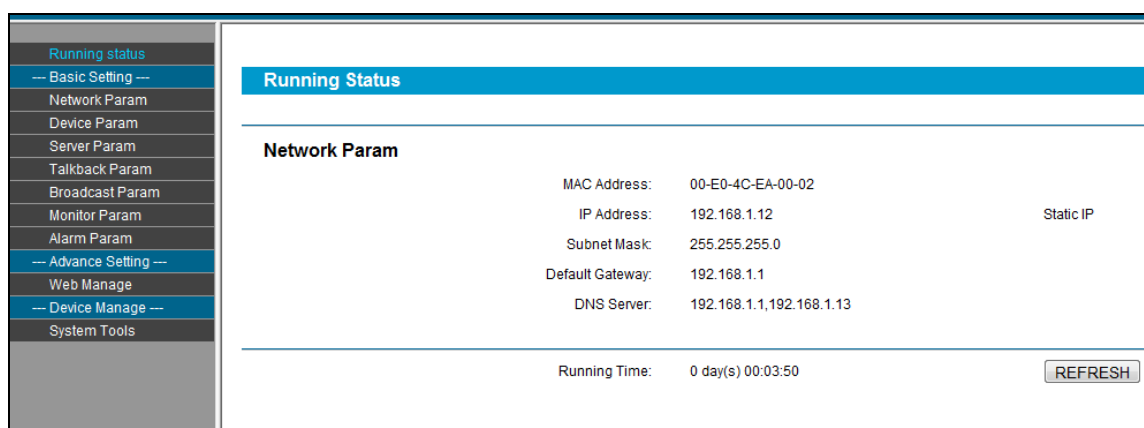
- (1) Enter the IP network intercom terminal IP address in the browser address bar, (The default IP is 192.168.1.101, Under the condition of no plug cable, take off the receiver, it will voice broadcast IP information)



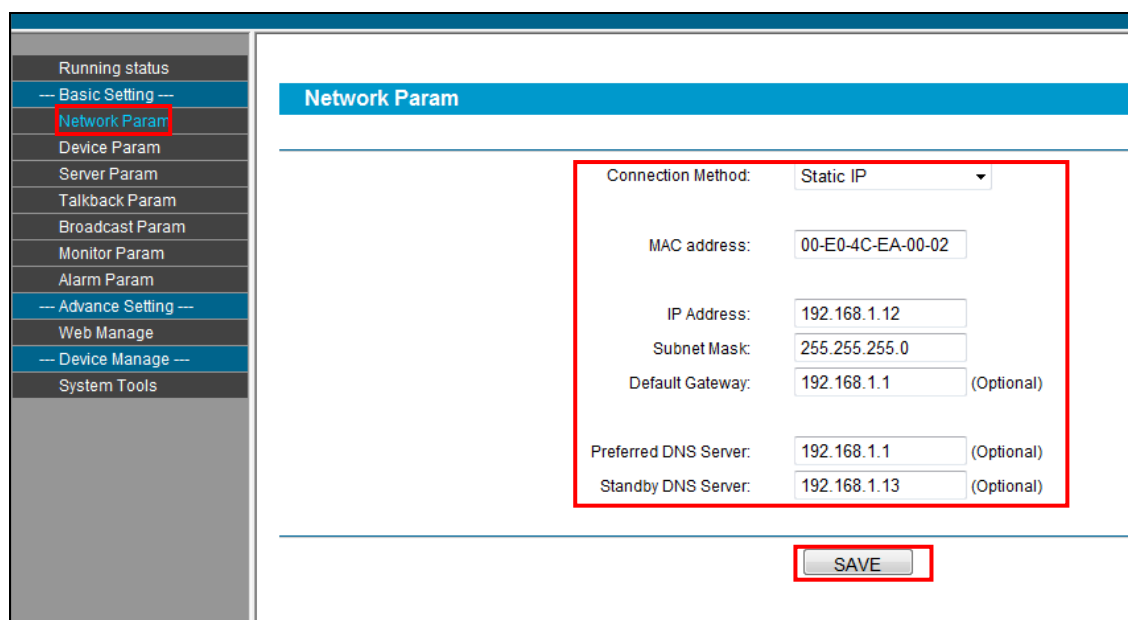
- (2) In the login window enter the user name and password (the default is admin)



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



Network Parameters



Parameter meaning as following:

Connection type	The default is static IP, IP user-defined parameters.
IP address	IP address of terminal itself.
Subnet mask	Subnet mask of terminal working place.
Default gateway	Network gateway of terminal working place.

Preferred DNS server	IP network preferred DNS server of terminal working place.
Standby DNS server	IP network secondary DNS server of terminal working place.

Device Parameters

The screenshot shows the 'Device Param' configuration page. The left sidebar contains a menu with the following items: Running status, -- Basic Setting --, Network Param, Device Param (highlighted), Server Param, Talkback Param, Broadcast Param, Monitor Param, Alarm Param, -- Advance Setting --, Web Manage, -- Device Manage --, and System Tools. The main content area has a blue header 'Device Param'. Below it, there are two input fields: 'Device ID' with the value '2' and 'Receive Port' with the value '2046'. A 'SAVE' button is located at the bottom right of the main area.

Parameter meaning as following:

Device number	Terminal ID, the only identity of device, the range from 1 to 999.The default is 1.
Accept port	Terminal communication port.

On-line Server Parameters

The screenshot shows the 'Online Sever Param' configuration page. The left sidebar contains a menu with the following items: Running status, -- Basic Setting --, Network Param, Device Param, Server Param, Online Service (highlighted), - Quick Call, Talkback Param, Broadcast Param, Monitor Param, Alarm Param, -- Advance Setting --, Web Manage, -- Device Manage --, and System Tools. The main content area has a blue header 'Online Sever Param'. Below it, there are three input fields: 'Perferred Server' with the value '192.168.1.13', 'Standby Server' with the value '192.168.1.14', and 'Login Request Send Interval' with the value '1Sec'. A 'SAVE' button is located at the bottom right of the main area.

Parameter meaning as following:

Preferred DNS Server	Terminal login server address .The default is 192.168.1.13.
Standby DNS Server	If can't connect to preferred DNS server, can login standby DNS server.
	The default is 192.168.1.14.
Login Interval	If can connect to preferred DNS server, login preferred DNS server again.
	When equipment offline, it ask log server's interval is from 1 to 30 seconds.
	The default is 1 sec.

Shortcut Call Parameters

Quick Call Param

Press <0>button quick call: - (Terminal No.)

Press <1>button quick call: - (Terminal No.)

Press <2>button quick call: - (Terminal No.)

Press <3>button quick call: - (Terminal No.)

Press <4>button quick call: - (Terminal No.)

Press <5>button quick call: - (Terminal No.)

Press <6>button quick call: - (Terminal No.)

Press <7>button quick call: - (Terminal No.)

Press <8>button quick call: - (Terminal No.)

Press <9>button quick call: - (Terminal No.)

SAVE

Parameter meaning as following:

shortcut keys parameters
setting

Setting numeric key "0—9" can build the mapping relationships, for intercom or broadcast to some designated terminal, the default is not mapping.

Intercom parameters

Talkback Param

Encode Format: PCM

Sampling: 8000Hz

Audio Input: Mic

Input Volume: 10

Audio Output: Speaker

Output Volume: 9

Ring Out: Speaker

Ring Volume: 9

Initiated Talkback: Enable Hang-up

Accept Talkback: Automatic Answer

Enable Hang-up

☒ Enable EchoCancel

SAVE DEFAULT

Parameter meaning as following:

Coding mode

Intercom coding, PCM means uncompressed data, ADPCM means compressed data (small network data).

Sampling rate	The master talking or monitoring sampling frequency (8000 Hz, 22050 Hz).
Audio input	The master audio input mode (Microphone, line input, automatic recognition), the defaults is Microphone input).
Input volume	The master input total volume within the conversation(0~15, 6 grade is 5dB).
Audio output	The master audio output mode (speakers, line output, automatic recognition), the defaults is speaker output).
Output volume	The master output total volume within the conversation(0~15, 6 grade is 5dB).
Ring output	Ringing audio output mode (speakers, line output, automatic recognition), the defaults is speaker output.
Ringing volume	The range of Ringing output volume is from 0 to 15, the default is 3.
Initiate the intercom	As the initiator,, can set whether to allow off the intercom.
Accept the intercom	As the receiver,, can set whether auto answer or be off the intercom.
Echo cancellation	It`s enable by default, it will have echo when it`s disable.

Broadcast Parameters

The screenshot shows the 'Broadcast Param' configuration page. The left sidebar lists various settings categories, with 'Broadcast Param' selected. The main area displays the following parameters:

- Encode Format: PCM
- Sampling: 22050Hz
- Audio Input: Mic
- Input Volume: 11
- Audio Output: Line Out
- Output Volume: 9
- ☒ Broadcast Tone

At the bottom of the configuration area are 'SAVE' and 'DEFAULT' buttons.

Parameter meaning as following:

Code format	Radio coding, PCM can't compress the data, ADPCM can compress data.
Sampling rate	The host broadcast sampling frequency (can choose 8000 Hz or 8000 Hz), the default is 22050 Hz.
Audio input	The default audio input mode of host intercom is receiver input.
input Volume	When host broadcast running, the range of innput volume is 0 to 15.The default is 11.
Audio output	The default audio output mode of host intercom is automatic identification.
Output Volume	When host broadcast running, the range of outnput volume is 0 to 15.
Prompt tone	The default prompt tone is chosen.

Monitor Parameters

Parameter meaning as following:

Audio input	When terminal be monitored, the default audio input is microphone input.
Input Volume	When terminal being monitored, the range of input volume is 0 to 15.The default is 11.

Alarm Input Parameters

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 will give the server sends an alarm input signal.
	Normally closed: when disconnected, it will give the server sends an alarm input signal.

Alarm Output Parameters

The screenshot shows the 'Alarm Short-Out Param' configuration interface. On the left, a sidebar menu lists various settings, with 'Alarm Short-Out' selected. The main content area features two dropdown menus: 'Short-out Channel' (set to 1) and 'Short-out Method' (set to Close). A 'SAVE' button is located at the bottom right of the configuration area.

Parameter meaning as following:

Output channel	According to the alarm parameters to obtain the corresponding channel number, the default is 1.
Alarm types	It have open alarm and CCTV alarm two modes, the default is CCTV alarm mode.
	Closed-circuit alarm: the default is normally open state, or it would be closed when triggered.
	Open circuit alarm: the default is normally closed state, it would disconnect when triggered.

Password Revise

In the Web management parameters can modify the login Web page account and password, the original user name and password are "admin".

The screenshot shows the 'Set Web Manage Account' configuration interface. On the left, a sidebar menu lists various settings, with 'Password Setting' selected. The main content area features five input fields for account management: 'Original User Name' (pre-filled with 'admin'), 'Original Password', 'New User Name', 'New Password', and 'Confirm Password'. 'SAVE' and 'CLEAN' buttons are located at the bottom right of the configuration area.

Port Setting

Web management port: access to the Web page's port.. If not port 80, visit the web page should add a corresponding port number (example: set the Web port 8888, then access the address should be: <http://xxx.xxx.xxx.xxx:8888>).

Running status

--- Basic Setting ---

Network Param

Device Param

Server Param

Talkback Param

Broadcast Param

Monitor Param

Alarm Param

--- Advance Setting ---

Web Manage

- Password Setting

- Port Setting

--- Device Manage ---

System Tools

Set Up Web Port

Web Manage Port: 80

SAVE

Firmware Upgrade

Click on the "maintenance" -> "system tools" -> "firmware upgrade", point "into the firmware upgrade mode" button, enter the firmware update Web pages; Choose the firmware update file, click "firmware upgrade" button.

If there is no refresh the Web page, please restart your browser, visit the Web page again

Running status

--- Basic Setting ---

Network Param

Device Param

Server Param

Talkback Param

Broadcast Param

Monitor Param

Alarm Param

--- Advance Setting ---

Web Manage

--- Device Manage ---

System Tools

Upgrade Firmware

- Restore the Settings

- Reboot the Device

- System Log

Upgrade Firmware

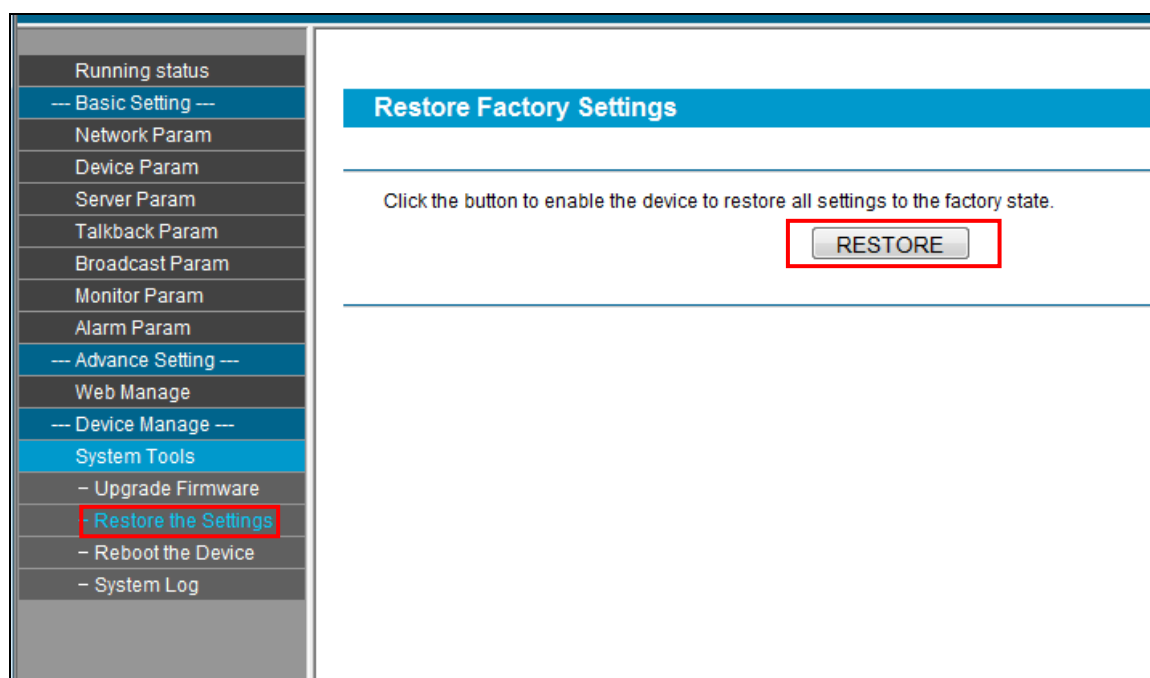
Software Version: 1.1.0 Build 140917

Hardware Version: 1.4 Rel.120201

Enter Upgrade

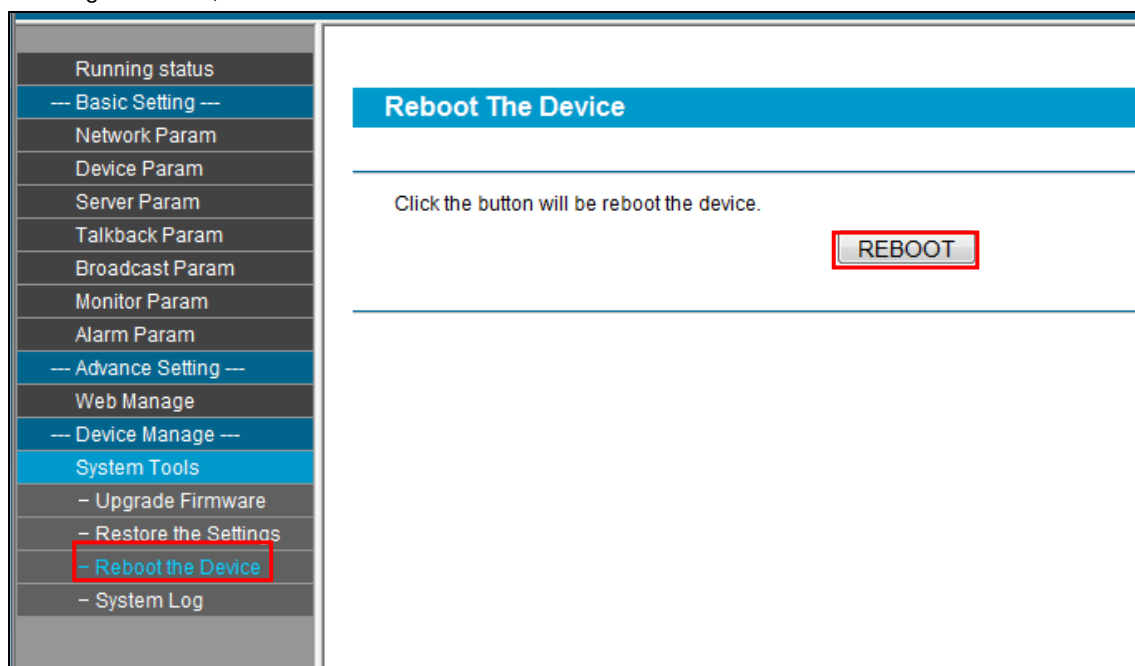
Note: if you need to upgrade the firmware, please contact the supplier.

Restore factory setting



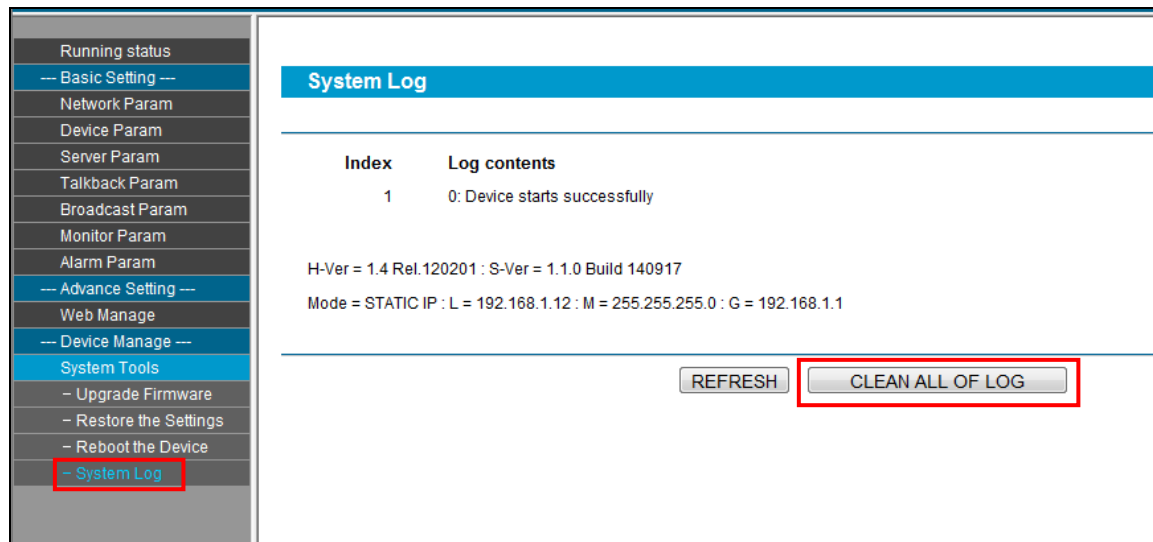
Reboot Device

After clicking the button, the device needs 3 to 10 seconds to restart.



System Log

Click "CLEAR ALL LOGS" button, it will remove all system logs.



Basic Function

Initiate Intercom

Click **【TALK】** button to enter the called terminal No. ,then click **【OK】** button to call;

If the called terminal is free, the terminal will play waiting sound waiting for the answer, the called terminal will play vibration ringtone, screen shows “To Call...”

If the called terminal no response, terminal will automatically hang up after play ten times ,screen shows “Busy...”.

If the other side reject answer, the terminal will automatically hang up after play eight times busy tone. screen shows “Called Hang Up...”

If the called terminal is offline, the screen shows “Called Offline”.

It can make hands-free talking by microphone; It also can pick up the receiver to talking, put down the receiver or press(C) button will hang up the talking.

Receive Intercom

When other terminal incoming call , the terminal will play vibration ringtone and auto-answer, The screen shows“Some Incoming...”.Press **【OK】** or **【Talk】** accept it,press **【C】** cancel it.

Note: It can set the answer and hang up mode in web page.

One-way intercom

Press **【PTT】** can realize one-way intercom within the conversation.

Real-time Broadcast

When terminal on free status, double click **【PTT】** can initiate all zone broadcast.

After press **【PTT】** , press **【0】** , then press **【OK】** also can initiate all zone broadcast.

After press **【PTT】** , press **【1】 — 【0】** , then press **【OK】** can initiate partial broadcast.

Press **【PTT】** or **【C】** can cancel the broadcast.

Off-line Broadcast

IP network intercom terminal can receive other terminal initiate's offline broadcast.

Receive Terminal Broadcasting, server task

Under the condition of server authorization:

Terminal can accept format of timing broadcast, real-time broadcast, timing ringing and fire alarm. it also can receive the other terminal initiate broadcast.

At receiving broadcast process, press any button can control the volume; Long press any keys can initiate the inter

com

When broadcasting, if calls , broadcast will suspended; After end the intercom, broadcast continue.

Note: :Radio parameters can be set up radio output channel in web page

Receive Monitor

Accept other terminal's initial monitor.

Fault Exclude

Why it appears "terminal network services (UDP) start fail" warning within the process of start server software?

Appearing this warning information, it's usually the local network connection has been disconnected, please connect the local network cable well and exit the software, then restart it.

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.

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