Public Address System

Fire Emergency Broadcast System

EN54-16

User Manual

Thank you for using our DSPPA public address system. Please read this User Manual carefully to make better use of this equipment.

Guangzhou DSPPA Audio Co., Ltd.

http://www.DSPPA.com
http://www.dsppatech.com

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About this User Manual

This User Manual is available and effective upon completion of development of the EN54-16 Voice Evacuation System. The User Manual includes system description, matters needing attentions in use, instructions on system connection, instructions on use of product and technical specifications of the EN54-16 Voice Evacuation System. Please read this User Manual carefully before connection, installation and use and operate in accordance with corresponding instructions in the Manual.

This symbol on the rear panel indicates matters needing attentions. Please use or operate the product in accordance with corresponding instructions.

Please keep this User Manual in good custody for future use.

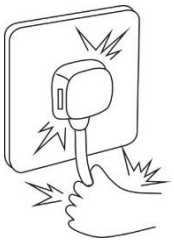
EN54—V0.5
Facture 2020-6-19

⚠ Caution

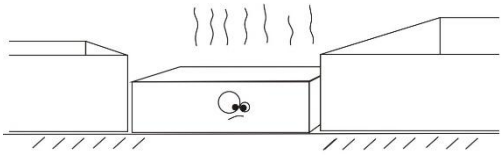
To assure the finest performance, please use or operate the product in accordance with corresponding instructions.

This symbol indicates "forbidden content" **This symbol indicates "compulsory content"**

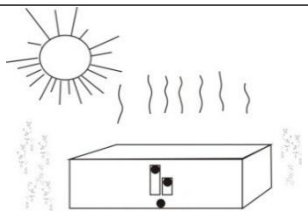
■ Please make sure that the power wire is NOT damaged. Do NOT unplug the equipment by pulling the power wire; otherwise it may cause electric shock, short circuit or fire.



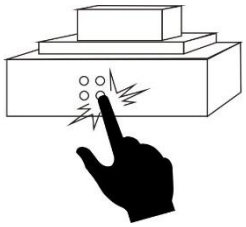
■ When the equipment is in use, DO NOT block the air outlet which should be kept clear, in order to avoid overheat.



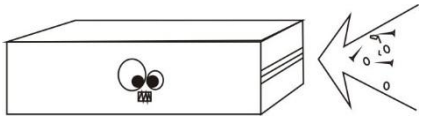
■ Do NOT store this equipment in any place with heavy dust or vibration, or where it is extremely cold or hot.



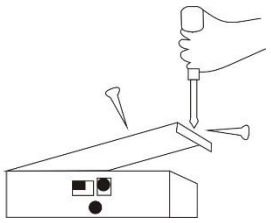
■ Please do NOT place any heavy article on this equipment. Please operate switches, buttons or external audio source carefully.



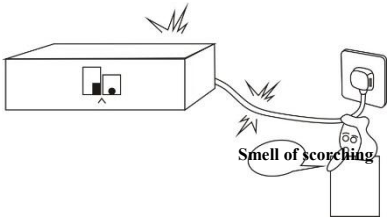
■ Please prevent foreign matters (such as paper, metal etc.) entering the equipment through the gaps or opening, in such cases, please cut off the power supply immediately.



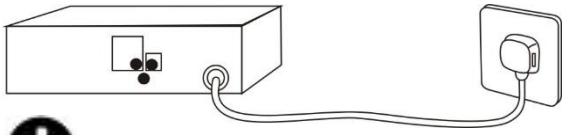
■ Do NOT attempt to remove any internal component from the equipment, or to modify the equipment in whatever manner.



■ In case that sound is suddenly off or there is abnormal odor or smoke, please unplug the equipment from the power socket to avoid potential electric shock, fire or other accident. The equipment should be inspected by professional personnel.



■ If the equipment is not in use for a long period, please unplug it from the AC power socket to realize zero energy consumption.



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About the Manual

EN54-16 Voice Evacuation System Manual contains detailed installation and operation instructions for all equipment of the system. It mainly contains the function description, interface description, connection diagram between the equipment, system setup, operation instructions, matters needing attention in use and technical indicators of all the equipment in EN54-16 series. In order to properly install and use the equipment, please read this manual carefully before installation and use.

Please keep this manual properly for future reference.

This manual lists all functions of the system, including system host, extended host, remote paging mic, fireman broadcast MIC and PC control software. The corresponding model and name are as follows:

PAVA8501 (System host)

PAVA8500E (Extended host)

PAVA8008 (Remote paging MIC)

PAVA8008E (Extended keyboard for remote paging MIC)

PAVA8000 (Controlling software)

PAVA8009 (Fireman MIC)

1. System Overview

1.1 Overview

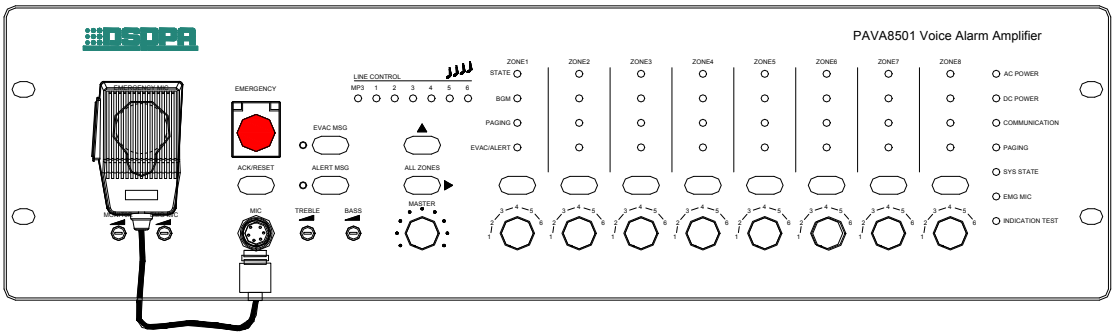
EN54-16 is a Voice Evacuation System which supports timing programming and manual operation, and is manually prioritized; it supports real-time detection of equipment operation status and operation log records. It meets the standards of “EN54 - Part 16 Voice Alarm Control and Indicating Equipment” Automatic Control System for Fire Protection”. This broadcast system can be used in fire emergency broadcast, daily business broadcast and background broadcast. It is a small emergency broadcast system, mainly used in small shopping malls, office buildings and exhibition halls.

1.2 Features

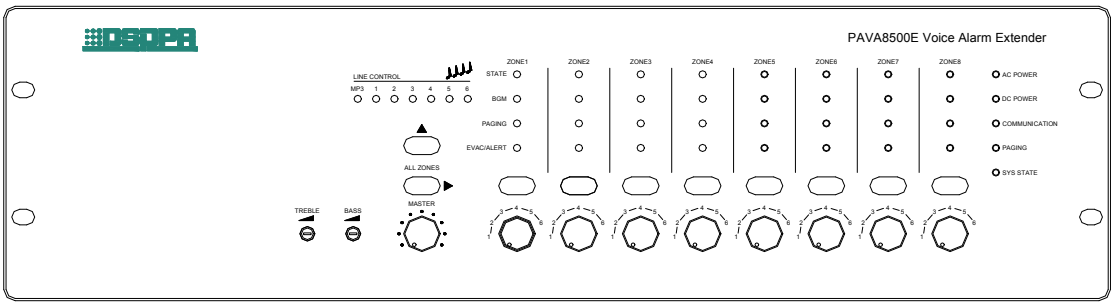
- Meet the GB16806-2006 standard, European Voice Alarm Control and Indicating Equipment Standards and 3CF Certificate;
- With one-key alarm and two editable alarm voices; with EMC MIC for on-site guidance in emergencies;
- Support Automatic fault diagnosis, data backup, line redundancy and record fault status;
- With LED display to indicate the system connection and failure status;
- Support programming to the zone, and manual, automatic, zoning, grouping operation;
- Support Visual man-machine interface operation and control; support multi-windows man-machine interface simultaneous login and control; can work offline after configuration;
- Support automatic playback and timing function, fixed time and area playback, and unattended function;
- Support emergency broadcast dual-audio output and background broadcast without mutual interference;
- Support remote paging zone, packet broadcast, and extended keyboard;
- Support standby amplifier backup, and extended zones;
- Support switching to standby power for hot backup;
- Can integrate with third-party systems through dry contact inputs, such as fire alarm system;
- With dry contacts and override plug-in power output to provide trigger signal sources for third-party systems;
- Can connect 19 extended hosts and 32 remote paging stations, with a total of 160 zones
- Support monitoring function;
- With Built-in 8GB memory to store audio files, record files, configuration data, log files, etc.;
- With 6 external audio inputs and 1 XLR output;

2. PAVA8501 Host/ PAVA8500E Extended Host

2.1 Product display



PAVA8501 Host



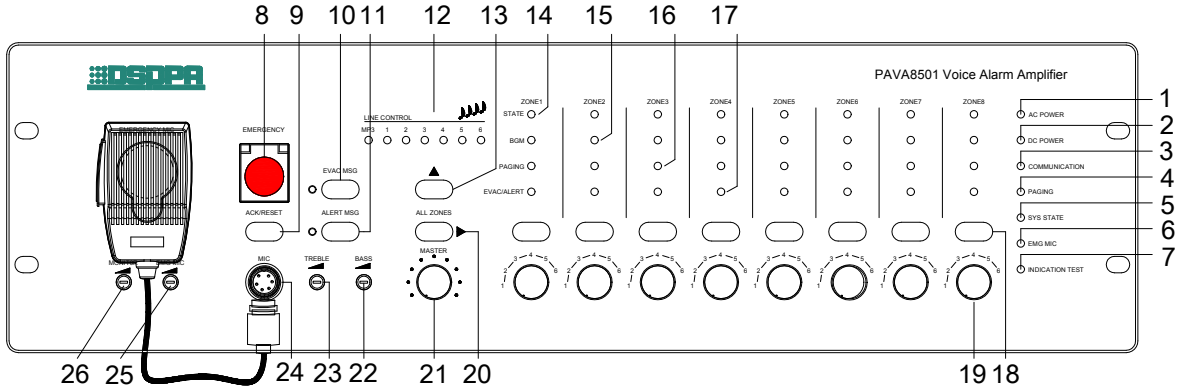
PAVA8500E Extended Host

2.2 Features

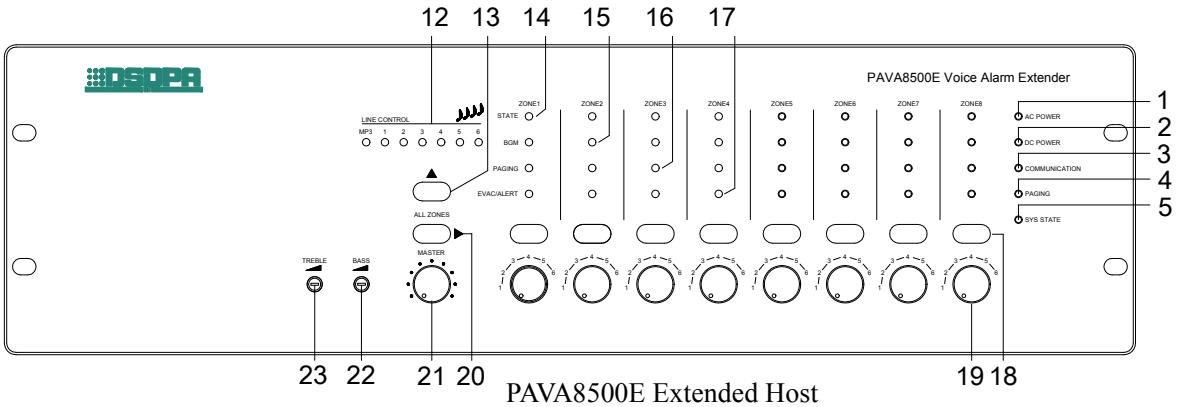
- With one-key alarm and two editable alarm voices; with EMC MIC for on-site guidance in emergencies;
- Built-in EVAC voice message and Chimes management, real-time monitoring;
- Built-in 500W digital power amplifier, and can be connected to a standby amplifier simultaneously, backup automatically;
- 8 zones with A & B circuit output, independent switch and volume control with master volume and treble and bass adjustment for each zone; each zone can output 500W, the total power of 8 zones ≤ 500W;
- 6 external inputs, including 2 differential inputs, 4 non-parallel inputs for background music playback; 1-channel output to connect extender or backup records;
- Support built-in audio playback (mp3, wav);
- Support extended zones for extended equipment, supporting up to 160 zones;
- Support automatic playback and timing function, fixed time and area playback, and unattended function;
- Support remote microphone paging, and zone and group broadcast; can connect a maximum of 32 units at the same time;
- 8 trigger inputs (dry contacts and electrical level optional); 8 dry contacts trigger outputs, 8 24V override outputs;

- Support computer remote detection and control, audio priority setting, operation record view and impedance testing parameters setting;
- Support speaker line detection (grounding, open circuit, short circuit), and system detection (extended equipment, off-line MIC);
- Support AC power supply and DC 24V power supply, can automatically identify and switch; AC power supply is usually the main power supply;
- With AC, DC power connection detection and warn functions;
- Built-in battery charging module, with short circuit, overload, over voltage, under voltage protection, under voltage warning function;
- Dial-up code setting, system equipment general detection / trigger mode configuration / host IP address selection / host IP address reset option / speaker loop calibration modeling;
- Support system failure, emergency output, emergency reset input;
- Equipment working status display: work/ fault /normal;
- External SD card interface, which can expand 8G storage space; external audio source, recording, log, built-in EVAC voice, etc.;
- With monitoring function, built-in recording function, built-in timing programming function, which can regularly program dry contacts to control power sequencer switch ;
- Can output dual audio simultaneously to ensure background playback is not affected by emergency or business broadcast;

2.3 Front panel



PAVA8501 Host



PAVA8500E Extended Host

1—Host/extended host AC power indicator;

- Green - indicates the host/extended host AC power is normal;
- Yellow - indicates the host/extended host AC power is faulty;

2—Host/extended host backup power indicator;

- Green- indicates the host/extended host backup power supply is normal;
- Off - indicates the host/extended host backup power is not configured;
- Yellow - indicates the host/extended host backup power is faulty;

Instruction: The host backup power is configured on the system control software interface.

3—Host / extended host connection status indicator;

- Green - indicates the equipment is connected properly;
- Off - indicates the extended host has not established a logical or physical connection with PAVA8501;

  a. Host: not connected with PAVA8000 and normally connected with extended host

  b. Extended host: not established a logical or physical connection with the host
- Yellow- indicates the host has not established a logical or physical connection with extended host;

4—Remote paging mic connection status indicator;

- Green - indicates the equipment is working now;
- Off - indicates the equipment is connected in normal condition;
- Yellow- indicates the equipment has not established a logical or physical connection with the host;

5—System status indicator;

- Off – indicates every module is working properly ;
- Yellow - indicates the system is faulty;

Notes: if the general detection switch is disabled, the indicator will also be off, but it does not mean that all modules are normal

6—Emergency MIC status indicator;

- Green - indicates the MIC is working;
- Off - indicates the MIC is on standby;
- Yellow - indicates the MIC is faulty;

7—System equipment LED tester (mainly test LED panel of the host, extended host and remote paging station);

Notes: If the system is equipped with extended host and remote paging station, it will enter the LED test mode synchronously after pressing the key;

8—Voice evacuation switch;

- Flashing red - indicates the system is currently in emergency mode;
- Off - indicates the system is currently in normal mode;

9—Multi-function switch;

- Response status;

a. If the equipment is working normally or the system diagnosis is abnormal and press this key, when the "FAULT" indicator is on and press this key again, the system will be normal ;

b. If the equipment is diagnosed as abnormal, the indicator of "FAULT" flashes intermittently. After pressing this key, "FAULT" will be on and no longer have flashing, indicating the FAULT state of the equipment. The buzzer stops until the system detects a new abnormal state and then flashes again.

c. If the current system executes the timing point, press this key to close the current timing point;

10/11—EVAC voice message status indicator;

- Green - "EVAC MSG/ALERT MSG" is broadcasting;
- Off - "EVAC MSG/ALERT MSG" is not broadcasting;
- Yellow - "EVAC MSG/ALERT MSG" is lost or SD card is faulty;

12/13—Line audio source indicator / selection key;

- Mainly used to display the audio output from the working zone;
- The MP3 on the host corresponds to the SD card audio on the rear panel; the MP3 on the extended host corresponds to BGM of the host;
- 1-6 channels corresponds to the 6 external input audio of 17, 19 on the rear panel;

Instruction: The line audio source key is for switching among MP3-6 channels external lines. The LED indicates the status synchronously, and it can be displayed on the PAVA8000 control interface and can change the audio output of the zone.

14—Speaker zone status indicator;

- Yellow - speaker zone is faulty, indicating the speaker zone circuit impedance changes, which can be an open circuit or a short circuit;

- Off - the speaker zone circuit impedance changes within the impedance range of the speaker zone modeling;

15—Zone background playback indicator;

16—Zone emergency MIC or remote paging station indicator;

Instruction: When paging, you can manually close zones that do not need to be paged or add new zones;

17—Zone "EVAC" voice message indicator;

Instruction: you can manually close zones that do not need to be paged or add new zones;

18—Zone switch；

Instruction:

a. When the zone output indicator is off, it will be turned on after pressing the key;

b. When the zone output indicator is on, it will be turned off after pressing the key;

19—Volume control of zone output;

Instruction: it is divided into 6 gears

20—All zones on / off selector;

21—Master volume controller;

22/23—Treble / Bass controller;

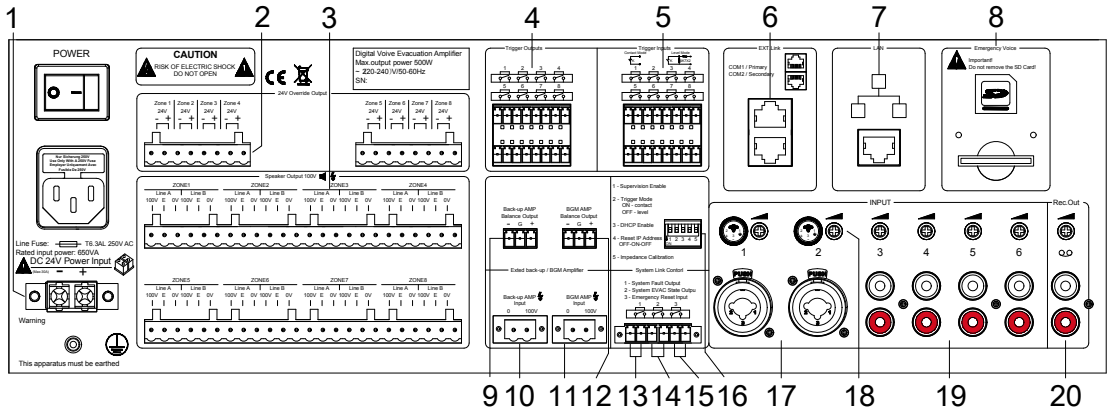
24—Aviation socket;

Instruction: mainly used to connect and fix emergency MIC;

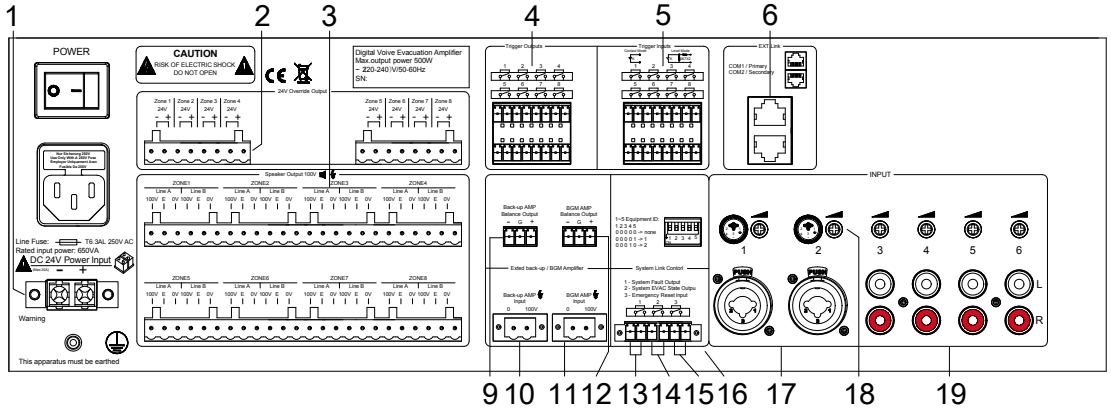
25—Emergency MIC sensitivity controller;

26—Monitor speaker output volume controller;

2.4 Rear panel



PAVA8501 Host



PAVA8500E Extended Host

1—Backup DC 24V power input;

- External battery interface, and the battery capacity is configured based on actual requirements;

2—8 channel DC 24V power outputs;

- External 4-line volume controller is connectable;
- Rated output current of each output is 0.2A;

Note: The total output power must ≤ 38W;

3—8 channel A&B circuit outputs;

- External custom speaker or 3-wire volume controller;
- Output voltage is 0 -100 v;

Note: At least one speaker loop modeling is needed after the system is connected; zones without horn can be suspended, or its output can be banned on PAVA8000 (please refer to the relevant section of PAVA8000 for specific operation);

4—8 channel programmable dry contacts outputs;

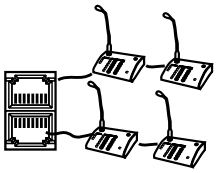
- Any contacts are programmable and configurable regularly;
- Any contacts triggered by fire alarm signal are configurable;

5—8 channel programmable inputs;

- Dry contacts input and level input are configurable optionally;

6—Extended host and remote paging station interface;

- Support star topology topology;



star connection

7—Ethernet interface;

- Mainly used to connect PAVA8000;
- Used to remotely upgrade firmware;

Description:

1) the default IP address of the device is 192.168.5.192, and the communication port number is 10086;

2) if the modified IP by PAVA8000 is forgotten, the default IP address can be restored by dialing down the fourth bit of "16" and then dialing up;

3) support the computer to connect directly to PAVA8501, and automatically identify TIE/EIA-568B and TIE/EIA-568A standards. In order to unify the interface, TIE/EIA-568B standard connection method is recommended;

8—SD card;

- Real-time detection of equipment;
- Store recorded files;

9/10—Backup amplifier interface;

- "9" audio signal output and receive backup amplifier signal input;
- "10" backup amplifier power signal input;

11/12—Background amplifier interface;

- "11" background amplifier power signal input;
- "12" audio signal output and receive background amplifier signal input;

13—System fault output；

- When the system is faulty, the output is disconnected, and vice versa;

14—System status output;

- When the system is in the fire alarm status, the output is closed, and vice versa;

15—Fire reset input;

- The equipment is working in fire alarm mode, reset to normal mode;
- The equipment is working in normal mode, without processing;

16—System host / extended host module configuration switch (down for "Enable", up for "closed");

- System host:

"1"—indicates the general detection switch, and "Enable"" means the working status of each module is allowed to be monitored, otherwise "closed";

"2"—indicates configuration switch in trigger mode, and "Enable" means triggering by short-circuit, "closed" means triggering by electrical level;

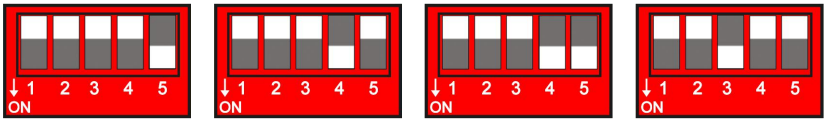
"3"—N/A;

"4"—Reset host IP address to initial value: IP address: 192.168.5.192, port number: 10086;

"5"—Speaker loop impedance calibration switch. When there is a change in impedance, the status light is yellow. Pull this switch up and then pull it down to recalibrate the impedance. (refer to front panel "14" - speaker zone status indicator"), please ensure the zone is closed when calibrating the model;

- extended host:

"1~5"—indicates the equipment online ID, the following equipment ID are: (i.e. the binary value of equipment ID1~5 is increased by 1, pull down as "1", pull up as "0"). Note: "1" on the switch is the highest binary bit and "5" is the lowest binary bit. For the correspondence between the device address order and the binary value, please refer to the "Schedule: Zone Address and Dial Code Setting Comparison Table".



1 2 3 4

17—XLR input;

- Connects to MIC input signal;

18—Connects to input audio sensitivity controller, used with "17, 19, 20";

19—Connects to line input, used with "18";

20—Host audio output;

- This interface output the audio which the current amplifier output;

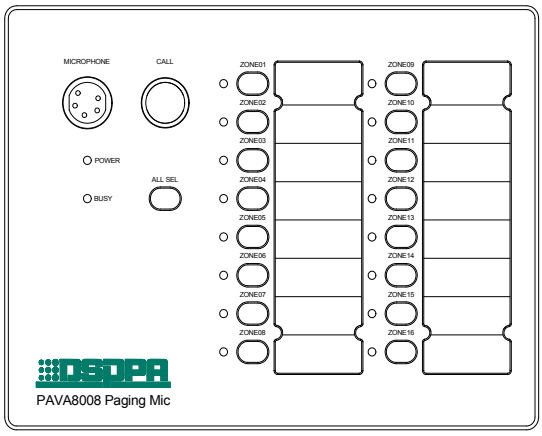
2.5 Specifications

Model			PAVA8501	PAVA8500E
Rated output power			≥500W（100V）	
Input sensitivity	Emergency mic		5mV 600Ω	——
	Line		1000mV 10kΩ	
Harmonic distortion	Emergency mic		<1% 1kHz	——
	Line		<1% 1kHz	
Freq. response	Emergency mic		80Hz-15kHz（±3dB）	——
	Line		50Hz-18kHz（±3dB）	
Signal to noise ratio	Emergency mic		>75dB（A weighting）	——
	Line		>80dB（A weighting）	
Line output	Output voltage		1000mV	——
	Frequency range		80Hz-15kHz（±3dB）	——
	Harmonic distortion		<1% 1kHz	——
System connection control contact output/input	System fault relay output		Short circuit, no voltage	
	Emergency mode relay output		Short circuit, no voltage	
	Fire reset input		Short circuit, t≥0.5S, no voltage	
	8 channel dry contact output		Short circuit, no voltage	
	8 dry contact input	Short circuit mode	Short circuit input, no voltage	
		Level mode	3.3V~24V	
Voice message	Data format		WAV	——
	Storage form		SD card	——
	Storage time		>10 years	——
Battery charging / discharging	Rated current		3.8A	——
	Maximum amplified current		5A	——
	Low voltage protection		20±1V	——
Working power	AC		AC 220-240V/50-60Hz	
	DC		DC 24V/30A	
Package size (L*W*H)			550×510×215mm	
Machine size (L*W*H)			483×420×132mm	
G.W.			14kg	13.3kg
N.W.			12.05kg	11.75kg

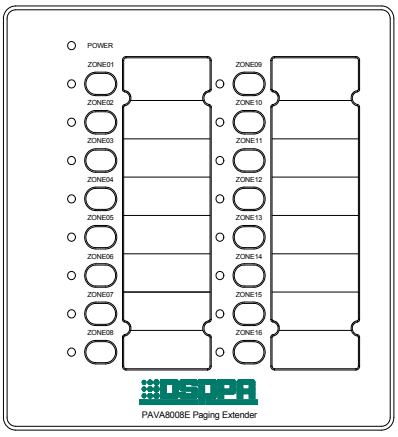
This specification is subject to change without notice.

3. PAVA8008 / PAVA8008E (Remote paging MIC/ Extended keyboard)

3.1 Product display



PAVA8008 Remote pager

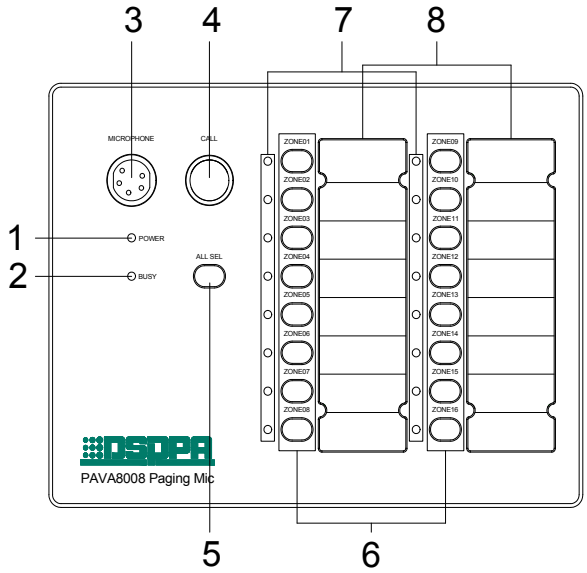


PAVA8008E Extended keyboard

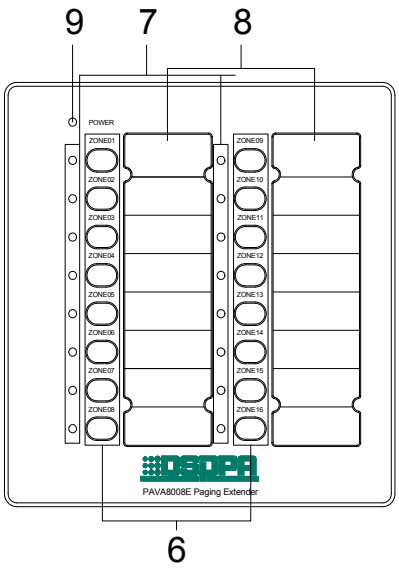
3.2 Features

- 16 paging zones for single, multiple area paging, group paging, and full area paging;
- Dialing code address setting, which can connect a total of 32 remote MIC;
- Extended external keyboard for up to 9 keyboards;
- MIC has 1 AUX input, which can be used as a signal input for paging;
- Up to 32 remote paging MIC can be connected; with RJ45 interface and Dante protocol, support for loop connection;
- Support key custom grouping function.

3.3 Front panel



PAVA8008 Remote pager



PAVA8008E Extended keyboard

1—Power indicator;

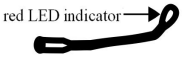
- On - indicates the power supply is normal;
- Off - indicates the power supply is abnormal;

2—Equipment “busy” indicator;

- On - the equipment is busy, please wait;

3—MIC rod socket;

- Paging is allowed when the red LED indicator is on;

Note: 

4—Paging start key;

- MIC paging controller;

Instruction:

① The zone is selected, press the key to start paging (please speak after the MIC rod indicator is on);

② When paging, press the key to end the paging;

③ When MIC is working in the PTT mode, you must press the key all the time during paging, otherwise the paging will end (PTT mode refers to the rear panel instruction);

④Paging cannot be made if zones are not selected

5—Select all key;

- When MIC is not paging:

①. If all the zones are flashing, press the key to cancel all zone selections;

②. if only part of the zones are selected, press the key to select all zones. Press the key again to deselect all zones.

- When MIC is paging:

①. When working in zone mode:

a. If all the zones are always on, press the key to cancel all zone selections;

b. if only part of the zones are selected, press the key to select all zones, up to 16 zones can be selected;

②. When working in group mode:

c. If all the groups are always on, press the key to cancel all group selections;

d. If only part of the groups are selected, press the key to select all groups, up to 16 groups can be selected;

6—Zone / Group selector;

- When MIC is not paging and the LED is off , press the corresponding key, the indicator will flash to indicate the zone is selected;
- When MIC is paging and the LED is always on, press the corresponding key, the indicator will be off to indicate the zone is closed;

7—Zone / Group selector and work status indicator;

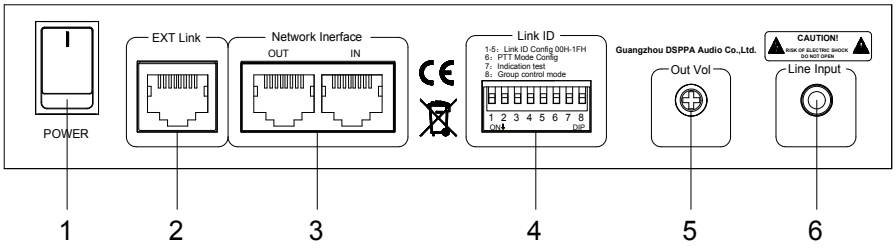
- On - indicates the zone is working;
- Flashing - indicates the zone is selected;
- Off - indicates the zone is in standby condition;

8—Zone / Group information note;

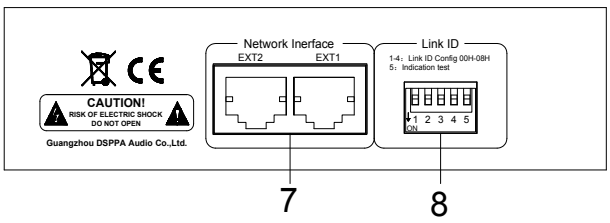
- Zone / group information can be noted, such as zone name and group number, etc.;

9—Power indicator;

3.4 Rear panel



PAVA8008 Remote paging MIC



PAVA8008E Extended keyboard

1—Paging MIC power switch；

- Used to turn on and off the MIC /extended keyboard (the host or PoE switch must be connected first);
- The extended keyboard must be connected to PAVA8008 first, which means port "7" should be connected to port "2";

2—Extended keyboard connector;

- Used to connect extended keyboard for control extended zones;

3—Equipment online interface；

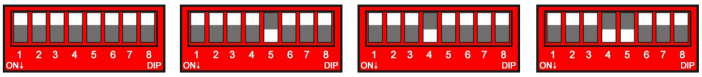
◆ Used to connect the system host or a next/previous PAVA8008 or PAVA8009;

Note: a. When connecting to the host only, the two interfaces are identical;

b. When connecting to the PoE switch, IN as input and OUT as output to the next device.

4/8—Equipment ID configuration switch;

"1~5"—indicates the equipment online ID, the following equipment ID are: (i.e. the binary value of equipment ID 1~5 is increased by 1, pull down as "1", pull up as "0"). Note: the printing "1" on the switch is the binary highest bit, "5" is the binary lowest bit. For the correspondence between the device address order and the binary value, please refer to the "Schedule: Zone Address and Dial Code Setting Comparison Table".



1 2 3 4

"6"—Pull up means the MIC is working in normal mode, pull down means the MIC is working in PTT mode, "4 - paging start key" needs to be always pressed during paging;

"7"— LED indicator test of remote paging MIC (please keep pulling up normally). When there detects pulling down, all LED indicators on the panel will turn red, green, then yellow automatically, and then return to normal display state. This is mainly used to test the LED display;

"8"—Group mode switch. When a pulling down is detected, the remote paging MIC enters the group mode. Otherwise, it is zone mode.

5—Remote paging MIC output audio sensitivity controller;

6—MIC external line input audio

Share the output channel with audio from panel "3", but audio from panel "3" has priority over line. Note: the interface is 3.5mm jack

7—Equipment network interface;

◆ Used to connect the PAVA8008 or the next or previous PAVA8008E;

Note: When connecting to the PAVA8008E, the two interfaces are identical;

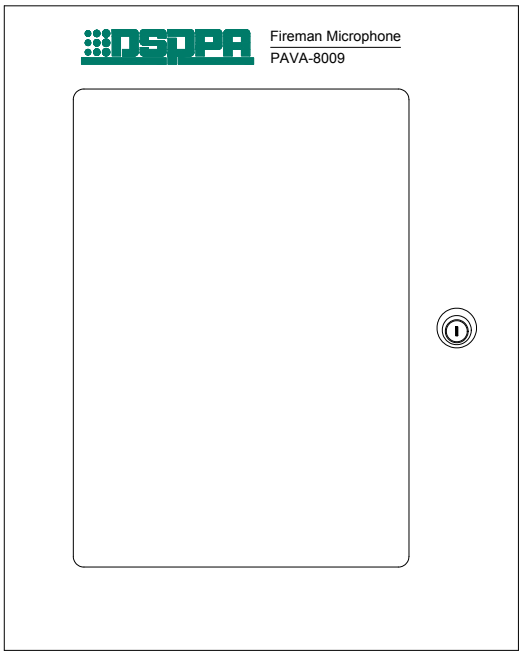
3.5 Specifications

Model	PAVA8008	PAVA8008E
MIC input sensitivity	50mV 600Ω	——
Line input sensitivity	1000mV 10kΩ	——
Freq. resp.	80Hz~15kHz （±3dB）	——
Harmonic distortion	<1%	——
Signal to noise ratio	>75dB （A weighting）	——
PoE power supply	（48±3）V/0.1A	——
Phantom power supply	——	(12~24)V/0.1A
Interface	RJ45	
Package size (L*W*H)	415×306×116mm	355×266×116mm
Machine size (L*W*H)	166×220×54mm	166×161×54mm
G.W.	1.9kg	1.5kg
N.W.	1.4kg	1kg

This specification is subject to change without notice.

4. PAVA8009 Fireman MIC

4.1 Product display

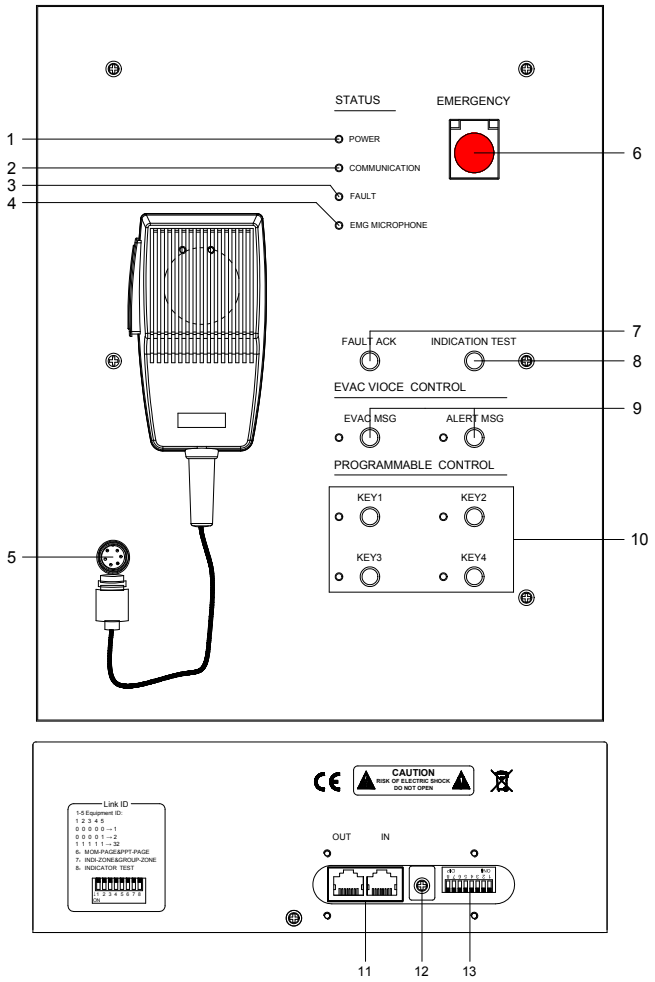


PAVA8009 Fireman MIC

4.2 Features

- Programmable key
- EVAC control
- MIC real-time control
- Configurable paging priority
- PoE power supply
- Dante network transmission technology
- Line redundancy
- Operation permission control
- IP30 Standard

4.3 Front & Rear panel



PAVA8009 Fireman MIC

1—Power indicator;

- On - indicates the power supply is normal;
- Off - indicates the power supply is abnormal;

2—System host / Fireman MIC connection status indicator;

- Green - indicates the equipment is connected properly;
- Yellow - indicates the current device hasn't established logic or physical connection with the host;

3—System fault state indicator;

- Off - indicates each module are working properly (if the general detection switch is disabled, the indicators will also be off, but it does not mean all the modules are normal);
- Yellow - indicates the system is faulty;

4—Emergency MIC status indicator;

- Green - indicates the MIC is paging;
- Off - indicates the MIC is on standby;
- Yellow - indicates the MIC is faulty;

5—Aviation socket;

Instruction: mainly used to connect and fix emergency MIC;

6—Emergency voice switch;

- Flashing red - the system is working in emergency mode;
- Off - the system is working in norm mode;

7—Multi-function key;

- Response status;

a. If the equipment is working normally but the system diagnosis is abnormal with flashing "FAULT" indicator, press the key and the system will be normal ;

b. If the equipment is faulty, press the key and the "FAULT" indicator is always on until the new fault is detected. When the timing function is in progress, press the key to stop manually.

8—System LED tester; Press to conduct LED test, and then press to cancel the test (to test whether the LED on the panel is normal);

9—EVAC voice message status indicator;

- Green – the current "EVAC MSG/ALERT MSG" is broadcasting;
- Off - the current "EVAC MSG/ALERT MSG" is not broadcasting;
- Yellow - the current "EVAC MSG/ALERT MSG" is lost or SD card is faulty;

10—Function key and status indicator;

- Set four common paging modes Key 1- Key 4 on the PC (refer to the software operation instructions for the setting method), and press the shortcut key for four paging modes. Only one shortcut can be implemented at a time;
- Green – the current shortcut is working;
- Off - the current shortcut isn't working;

11—Equipment online interface;

- Used to connect system host, extended host, remote paging MIC or the previous/ next PAVA8009;

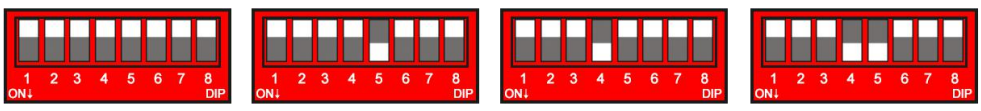
Note: a. when connecting to the host only, the two interfaces are identical;

b. When connecting to the PoE switch, IN for input and OUT for output to the next device;

12—Emergency MIC volume controller;

13—Equipment ID configuration switch;

"1~5"—indicates equipment online ID, the following equipment ID are: (i.e. the binary value of equipment ID1~5 is increased by 1, pull down as "1", pull up as "0"); For the correspondence between the device address order and the binary value, please refer to the "Schedule: Zone Address and Dial Code Setting Comparison Table".



1 2 3 4

"6" and "8" is N/A, "7" is LED test, keep pulling up normally, pull down to enter LED test mode;

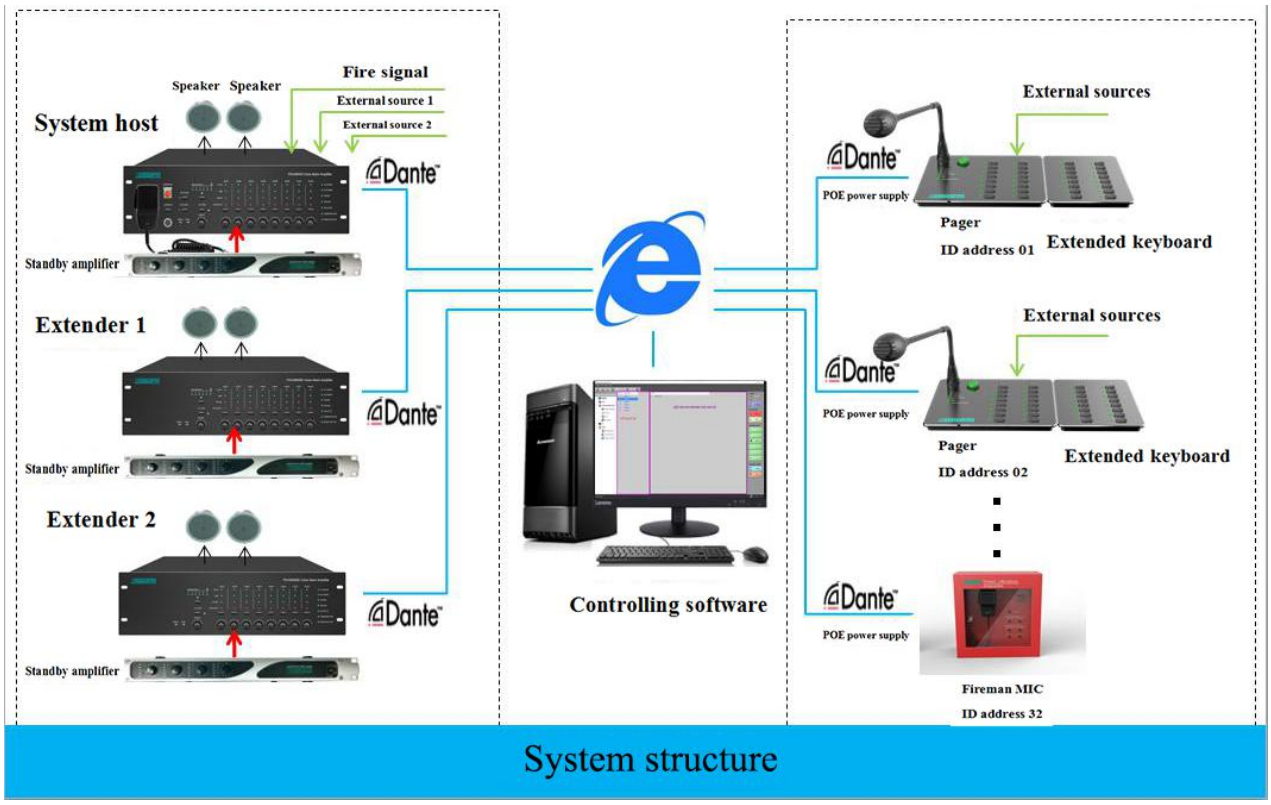
4.4 Specifications

Model	PAVA8009
MIC input sensitivity	50mV 600Ω
Freq. resp.	80Hz~15kHz （±3dB）
Harmonic distortion	<1%
Signal to noise ratio	>75dB （A weighting）
POE power supply	（48±3）V/0.1A
Interface	RJ45
Package size (L*W*H)	372×312×177mm
Machine size	302×240×101mm
G.W.	4.2KG
N.W.	3.2KG

This specification is subject to change without notice.

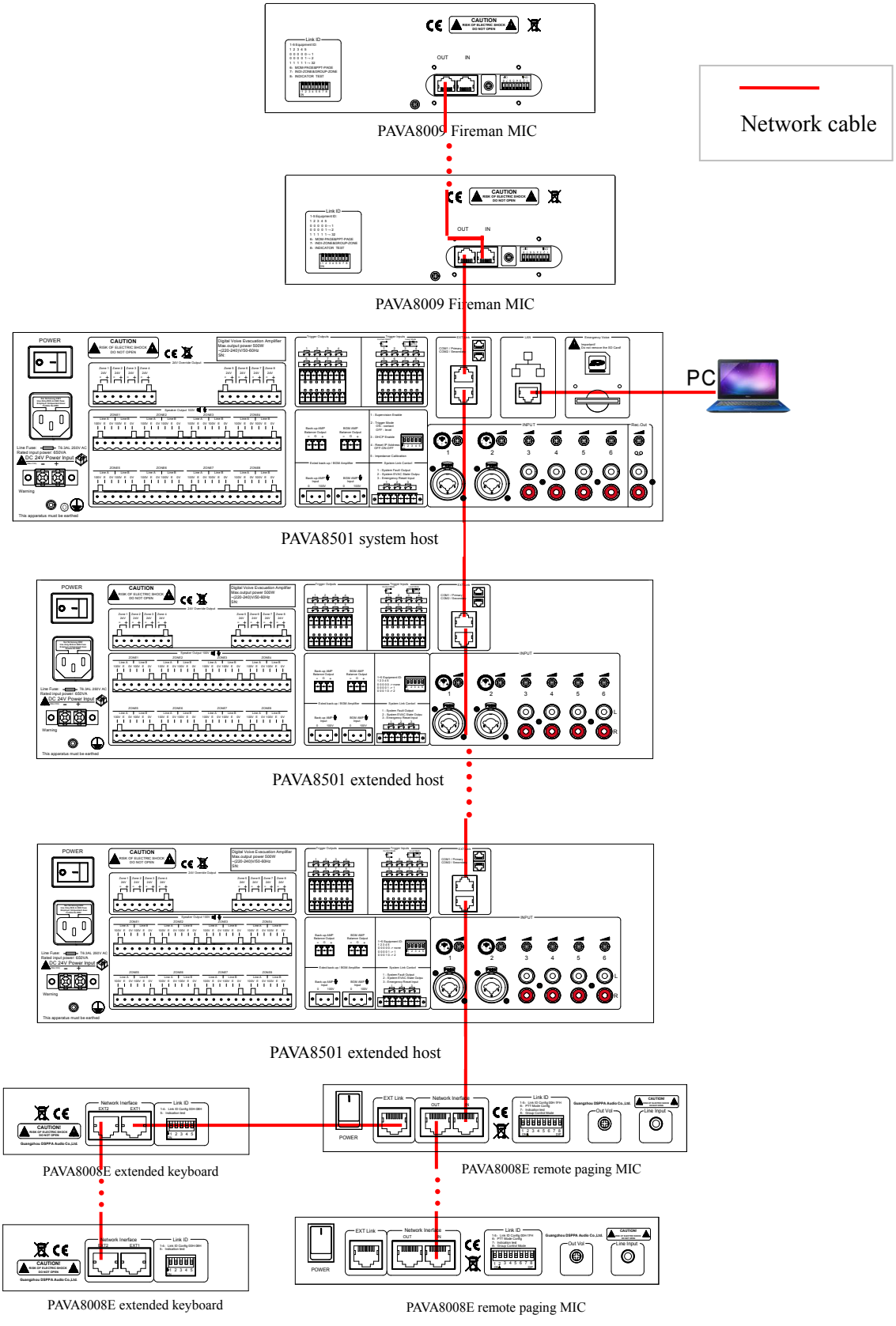
5. System structure

5.1 System structure



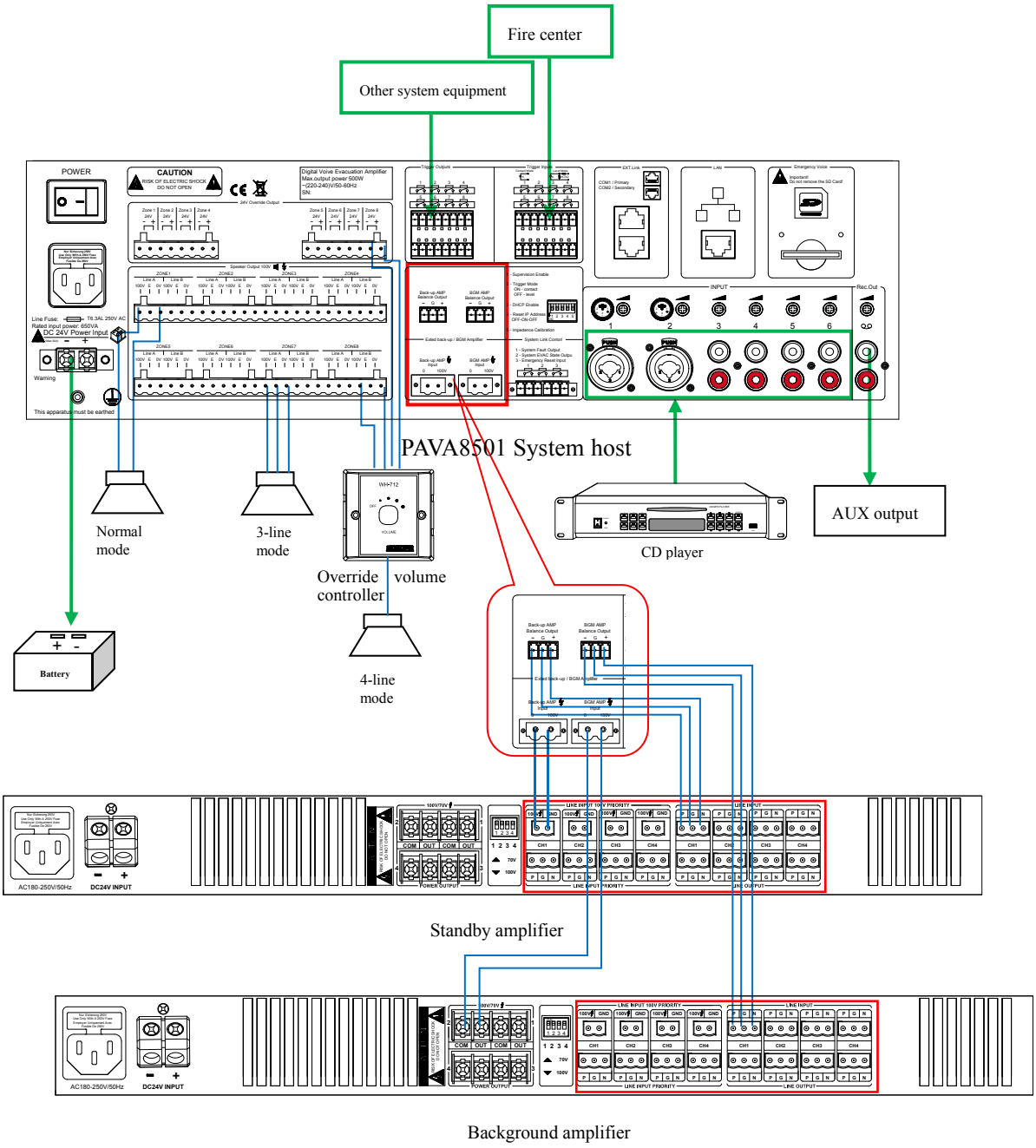
Instruction: EN54 system is composed of system host PAVA8501, extended host PAVA8500E, PC operation terminal PAVA8000, remote paging MIC PAVA8008 / PAVA8008E, MIC PAVA8009. Data control and audio transmission are over Dante network. PoE powers remote paging MIC and Fireman MIC, which is compatible with the PoE power supply of the system host and of the PoE switch.

5.2 System connection diagram



Instruction: The host PAVA8501 can connect up to 19 extended host PAVA8500E, and can 32 fireman MIC PAVA8009 and remote paging MIC PAVA8008; among them, PAVA8008E is the extended remote paging device of PAVA8008, and one PAVA8008 can connect to up to 9 PAVA8008E.

5.3 Host and extended host connection diagram



6. Operation instructions

After the EN54 system is established, the electrical connection is ensured to be correct and work normally. The MP3, line input audio, EVAC voice and hand-held paging station MIC of the host can be output simultaneously from the host and the extended host.

6.1 Manual playback host input audio

1. Select 1 line audio

Press the key below "▲" on PAVA8501 or PAVA8500E panel to switch between "MP3" and channel "1-6" input audio. When one of the indicators is on, the corresponding input audio is selected;

2. Select output zone

The key below “ZONE1-ZONE8” is used to control the corresponding zone switch; “ALL ZONES” is used to turn on or turn off all the zones; When the corresponding "BGM" indicator on PAVA 8501 or PAVA 8500E is on, it indicates the zone is playing the selected external line audio or MP3;

6.2 Manual playback EVAC voice

1. Enter “EMERGENCY” mode

Press “EMERGENCY” on PAVA8501 or PAVA8009 until the indicator is on with a rhythmic flashing;

2. Select output zone

Same as item 6.1 Manual playback of host line audio above；

3. **Select EVAC voice output mode**

Turn on the emergency voice switch, press “EVAC MSG” or “ALERT MSG” on PAVA8501 or PAVA800 until the corresponding LED indicator is on. At the same time the “EVAC/ALERT” indicator on the selected output zone is red and the voice message can be heard;

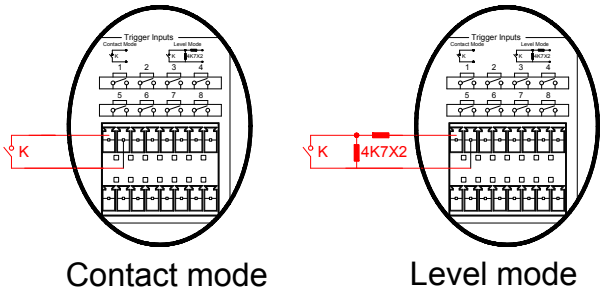
4. Exit EMERGENCY mode

Three ways with same functions:

- 1. Press “EMERGENCY” key again to reset to light off the LED indicator;
- 2. Press “EMERGENCY” key on PAVA8009 panel to light off the LED indicator;
- 3. Input no voltage relay short circuit signal greater than or equal to 0.5s through the CIE reset input contact in the back row of the host.

6.3 Automatic trigger EVAC voice

- In "Contact Mode" and "Level Mode" modes, close in the following figure of the host or extended host to trigger (exit EMERGENCY mode is the same as above):

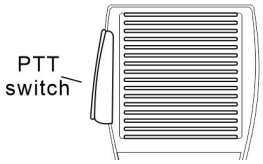


- Users can configure the contacts of host or extended host effectively by PC software;
- If not configured with PC software, the system defaults to simultaneous output both on host and extended host;

6.4 Emergency MIC paging operation

1. **Turn on hand-held MIC switch**

Press the hand-held MIC switch on PAVA8501 host or PAVA8009 at any time to make paging (if the chime is enabled, the host will play the chime automatically when the switch is pressed down, and the paging can be made after the play is completed. And there will have end chime when the paging is ended and the switch is released);



2. **Select paging zone**

Zones can be turned on and off manually during paging. All zones are on by default;

6.5 PAVA8008 paging MIC operation

1. Select output zone / group

The key below each zone / group on paging MIC is zone switch, “ALL SEL” to turn on or turn off all the zones / groups. The corresponding indicator of the selected zone flashes green while of the unselected zone is off;

2. Press the green key “CALL”

Press “CALL” until the indicator is on to make paging (if in PTT mode, please do not release the "CALL" key);

3. End paging

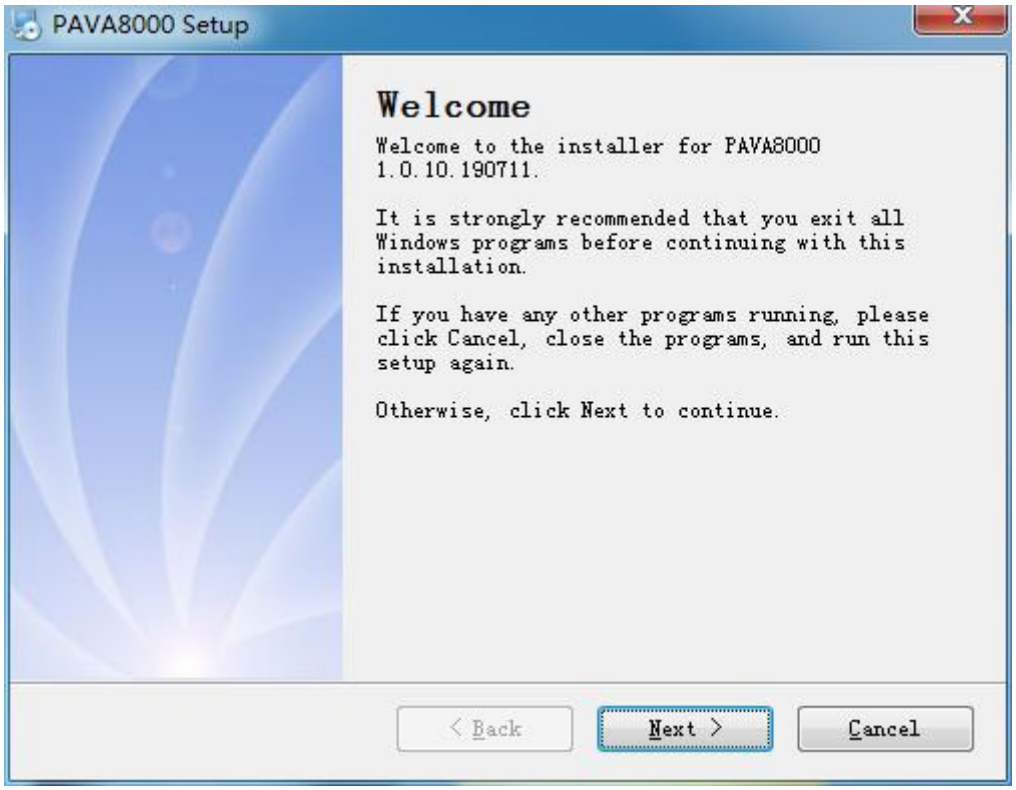
Press “CALL” again to end paging (if in PTT mode, release the “CALL” key to end);

7. Software operations

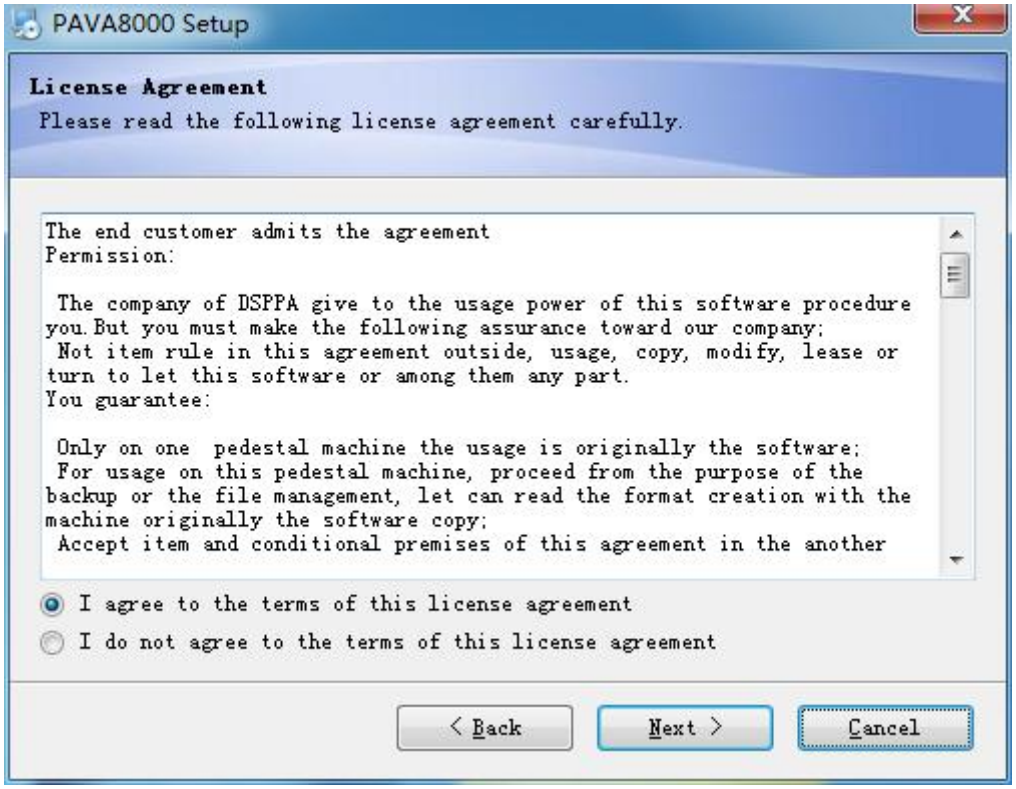
7.1 Installing Software

(1) Installation environment: Win7/win8/win10 system; double-click PAVA8000 software installation package.

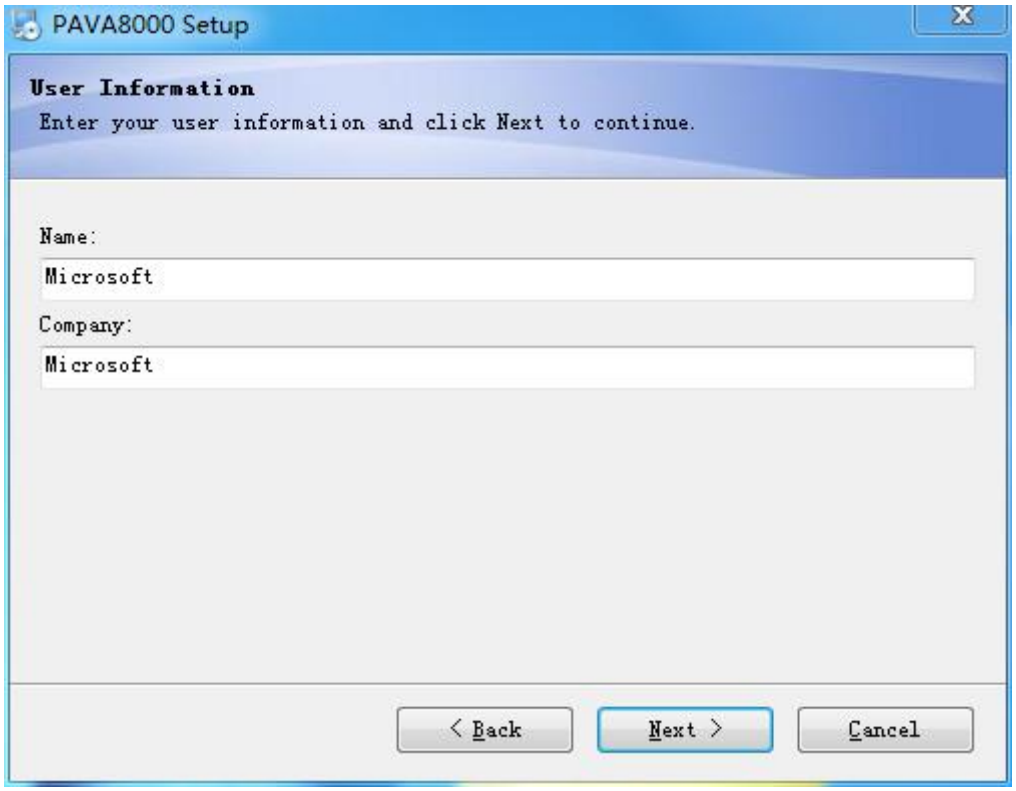
(2) Enter the installation status as shown below, and then click “Next” button.



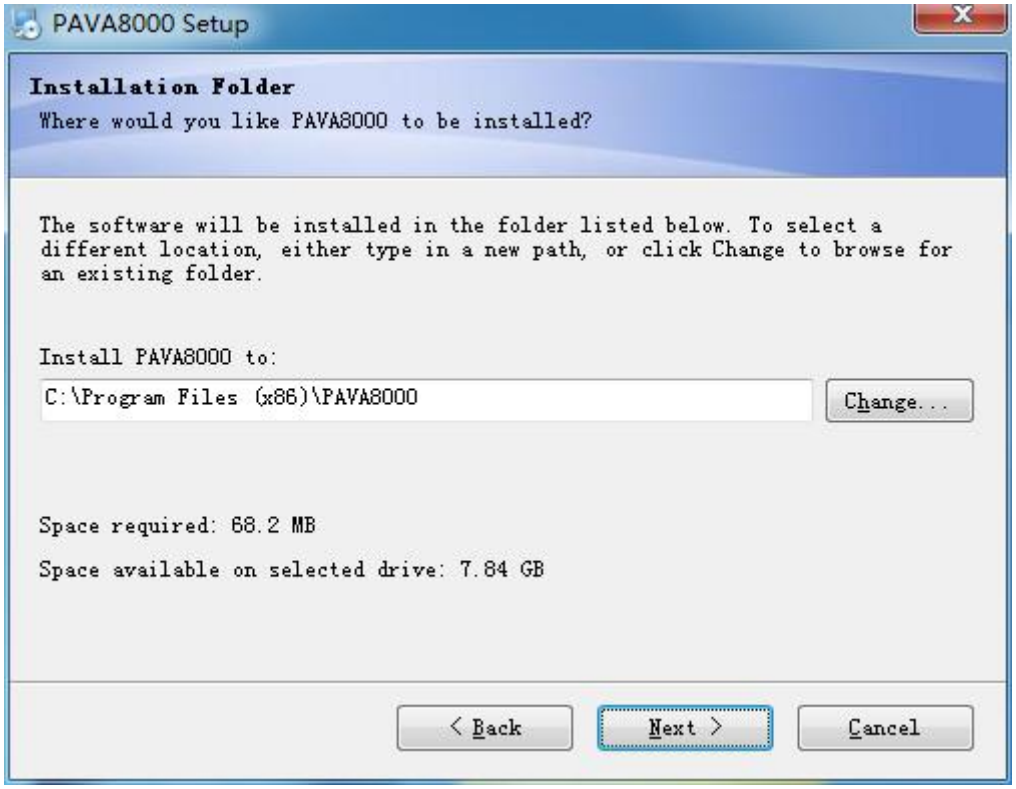
(3) After carefully reading the following license agreement, select “I agree to the terms of the license agreement” and click the “Next” button.



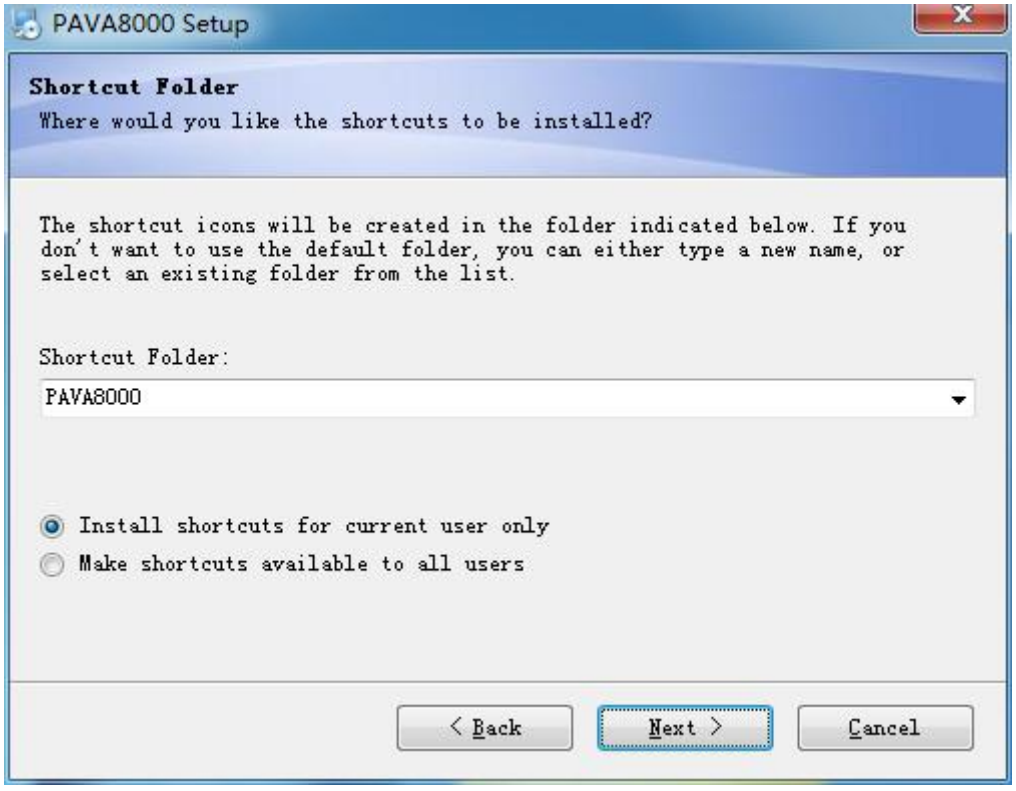
(4) Enter the following interface, the default user name is Microsoft, click “Next” to continue the installation.

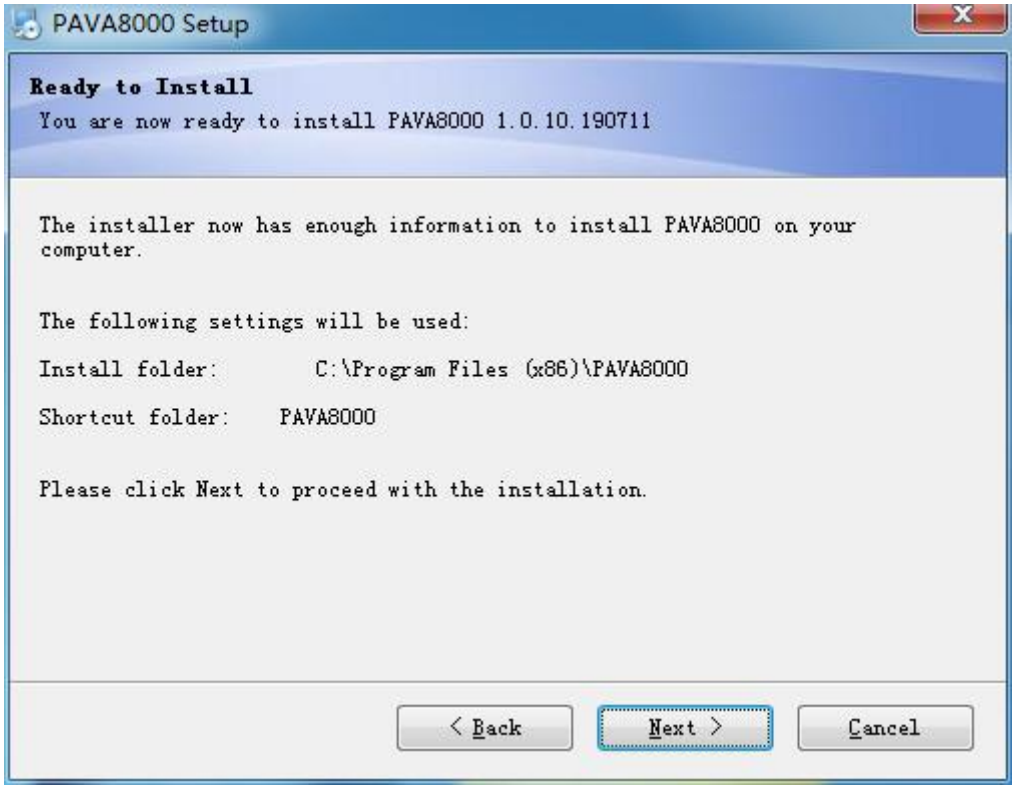


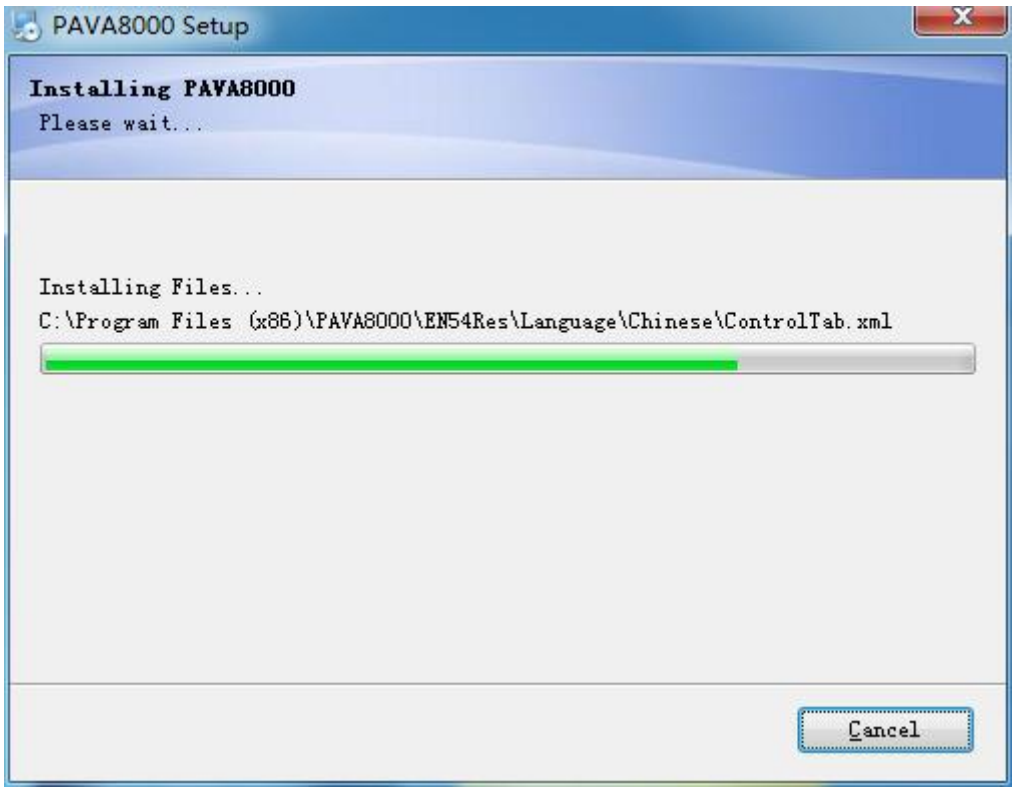
(5) Click the “Change” button on the interface below to select the software installation path. If you do not select it, you will use the default path. After selecting the installation path, click the “Next” button. (Note: Please do not install the software to the system disk. In general, the system disk is the C disk.)

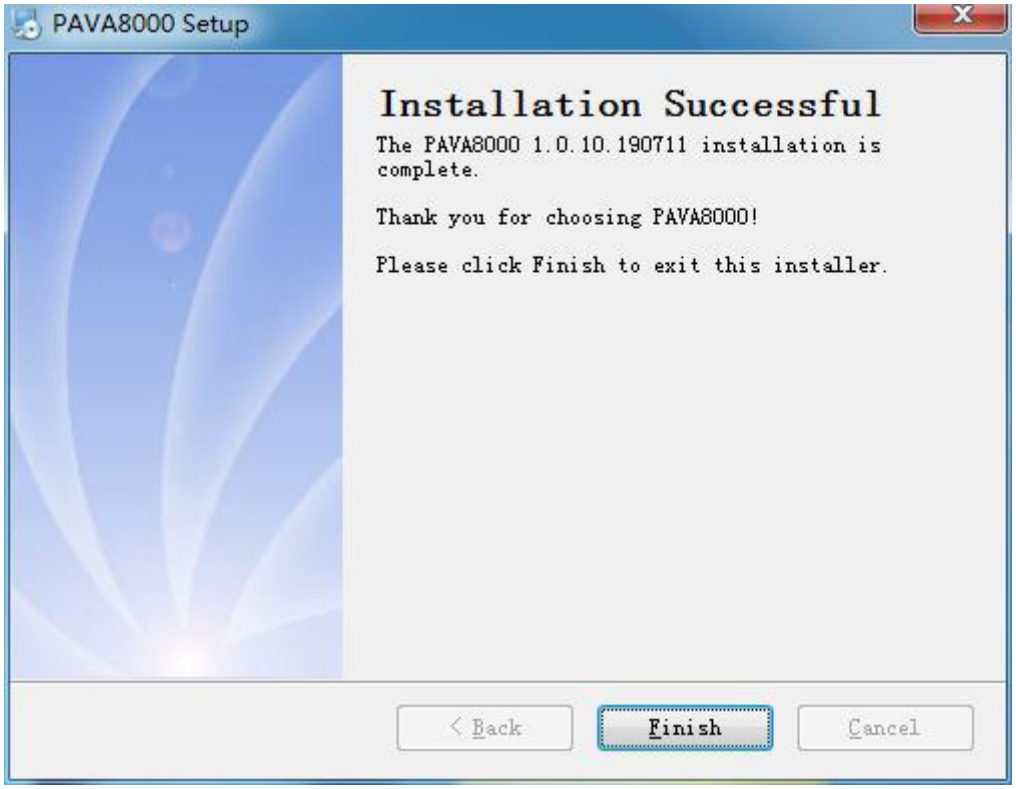


(6) As shown below, select the folder to create the shortcut, and select the user who uses this shortcut as the current user or all users, and then click “Next” to continue the installation. You need to wait a few minutes for the installation. Click “Finish” after the installation is complete.




PAVA8000 Setup
Ready to Install
You are now ready to install PAVA8000 1.0.10.190711
The installer now has enough information to install PAVA8000 on your computer.
The following settings will be used:
Install folder: C:\Program Files (x86)\PAVA8000
Shortcut folder: PAVA8000
Please click Next to proceed with the installation.
< Back
Next >
Cancel


PAVA8000 Setup
Installing PAVA8000
Please wait...
Installing Files...
C:\Program Files (x86)\PAVA8000\EN54Res\Language\Chinese\ControlTab.xml
Cancel



7.2 Running the software

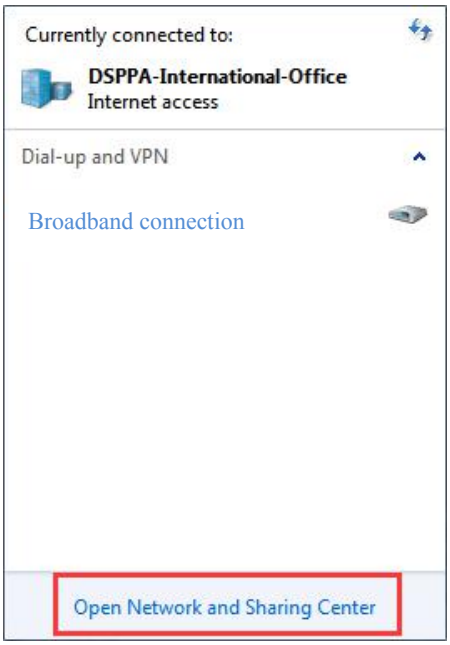
1) Modify IP address

Before logging into PAVA8000 software, it is necessary to keep the computer in the same network segment as the system host. The factory network parameters of the host are:

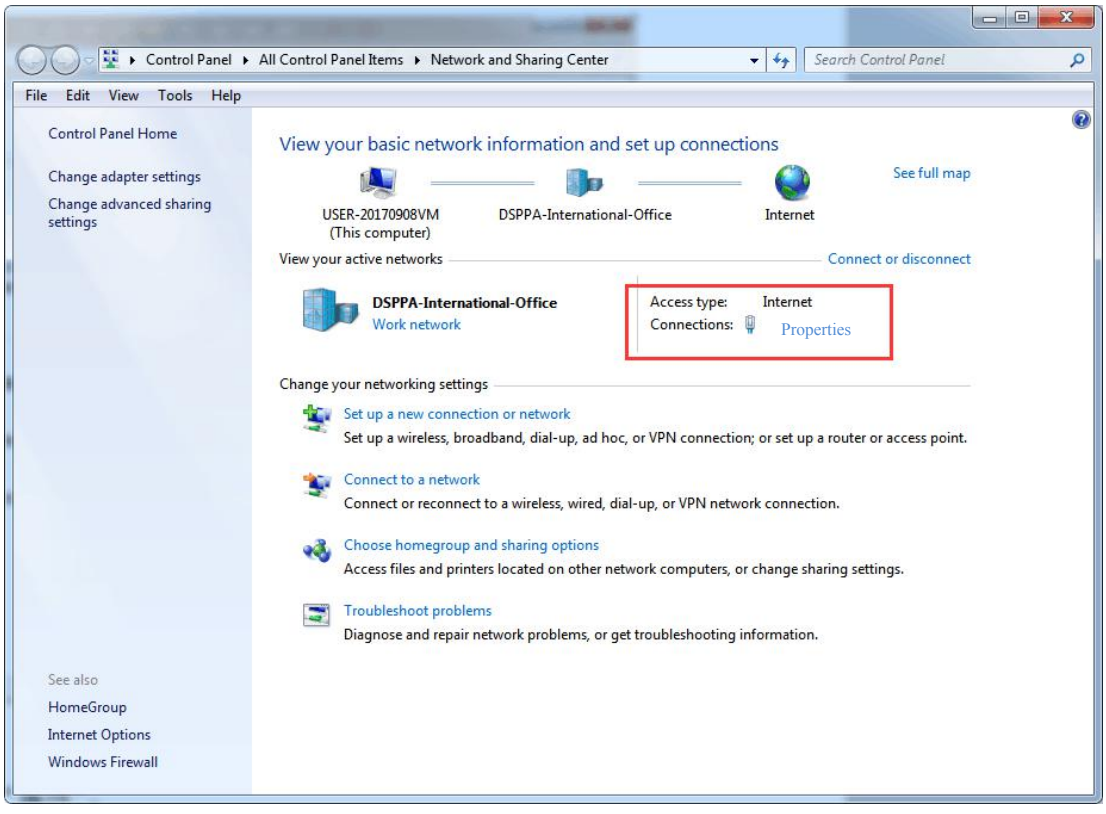
- Factory IP address 192.168.5.192,
- The gateway 192.168.5.1,
- Subnet mask 255.255.255.0.

Note: If there is not IP address network segment 192.168.5.X on the computer, it is necessary to add the IP address of the same network segment manually to operate the PC software on the computer. The steps are as follows:

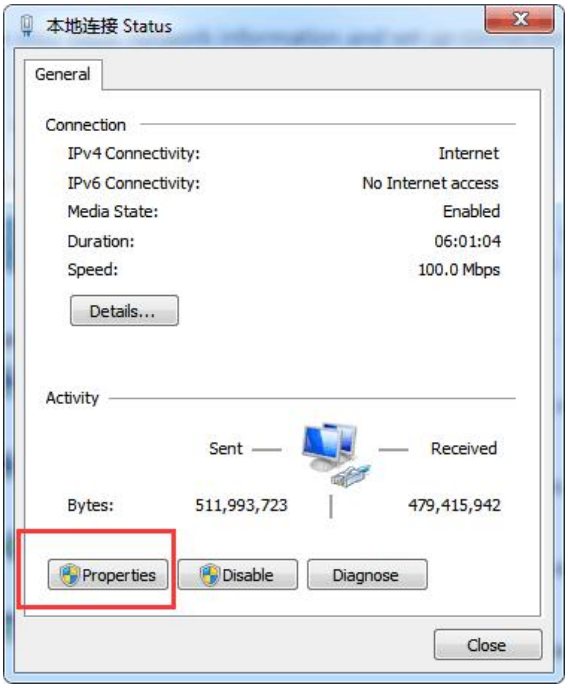
Step 1. Click the network connection icon in the lower right corner of the computer, and open the window of network and sharing center as shown in the below figure:



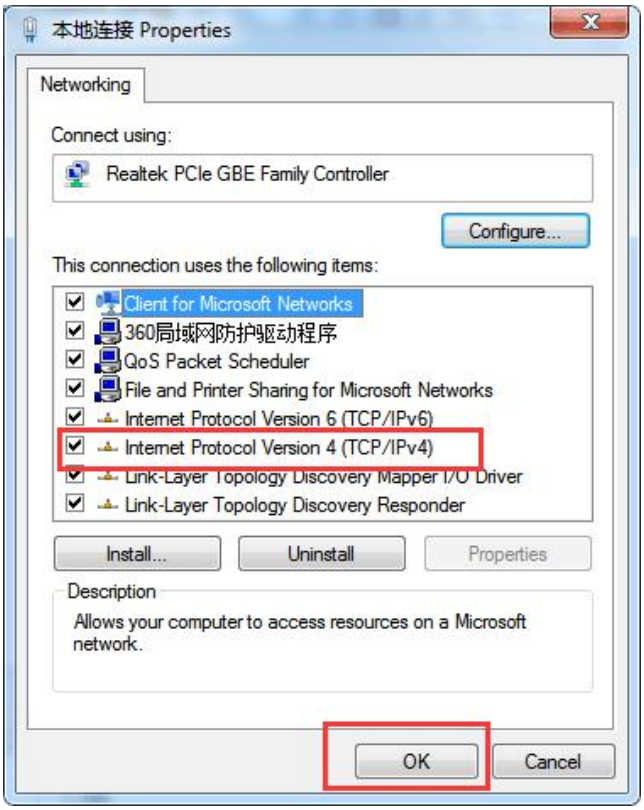
Step 2. Click and enter “Local connections” in the window as shown in the below figure,



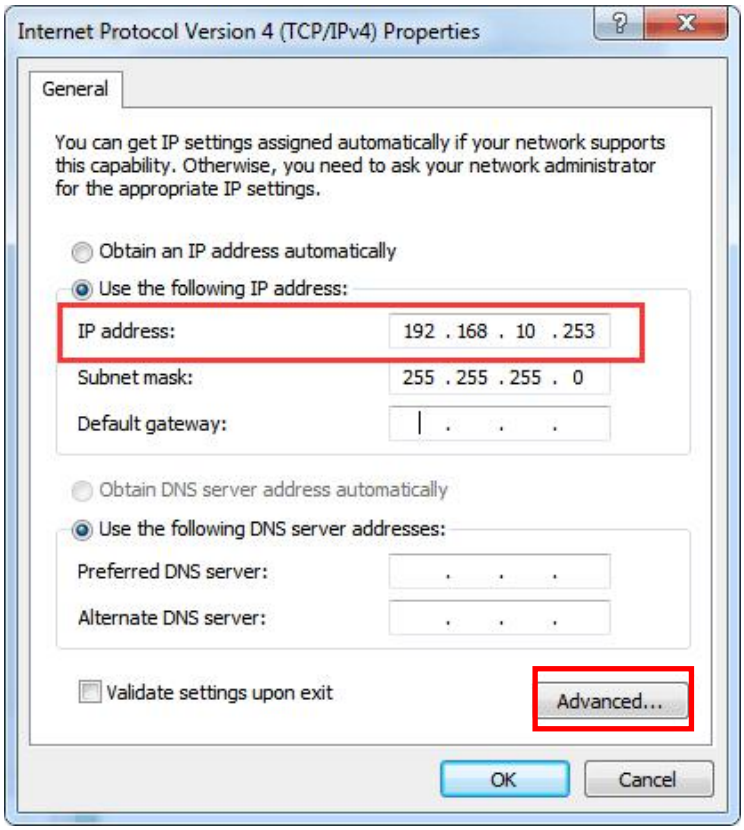
Step 3. Click “property” in the window of local connection states as below.



Step 4. In the window of local connection's property as shown in the below figure, double click "Internet protocol version 4 (TCP/IPv4)" in the red circle or click "property" to open the next window.



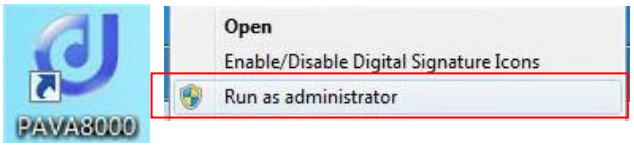
Step 5. Click "advanced" to open the advanced TCP/IP settings window.

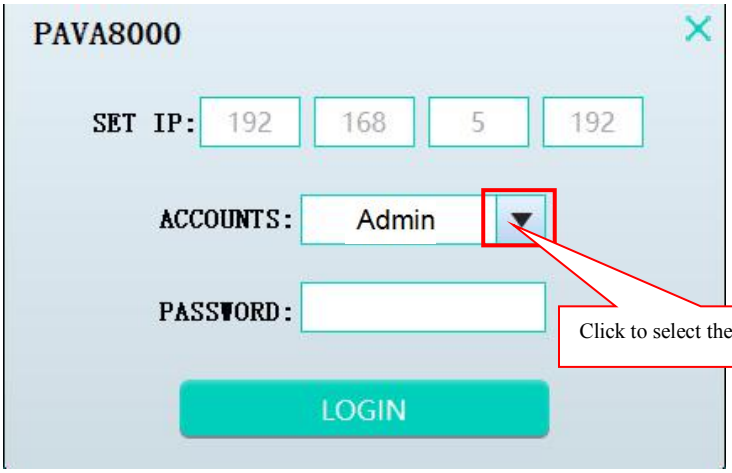


Step 6. Click "add" button and input the same IP network segment as the equipment. The selected the network segment does not affect working of the current system. The network segment type can be, for example, 192.168.5.XX.

2) Log in

After installing the software, right click the software, select "**run as an administrator**" to enter the initial login interface, set the IP address (factory IP:192.168.5.192, user name: Admin, enter factory password :Admin), and click the "login" button to enter the main interface.





Login interface

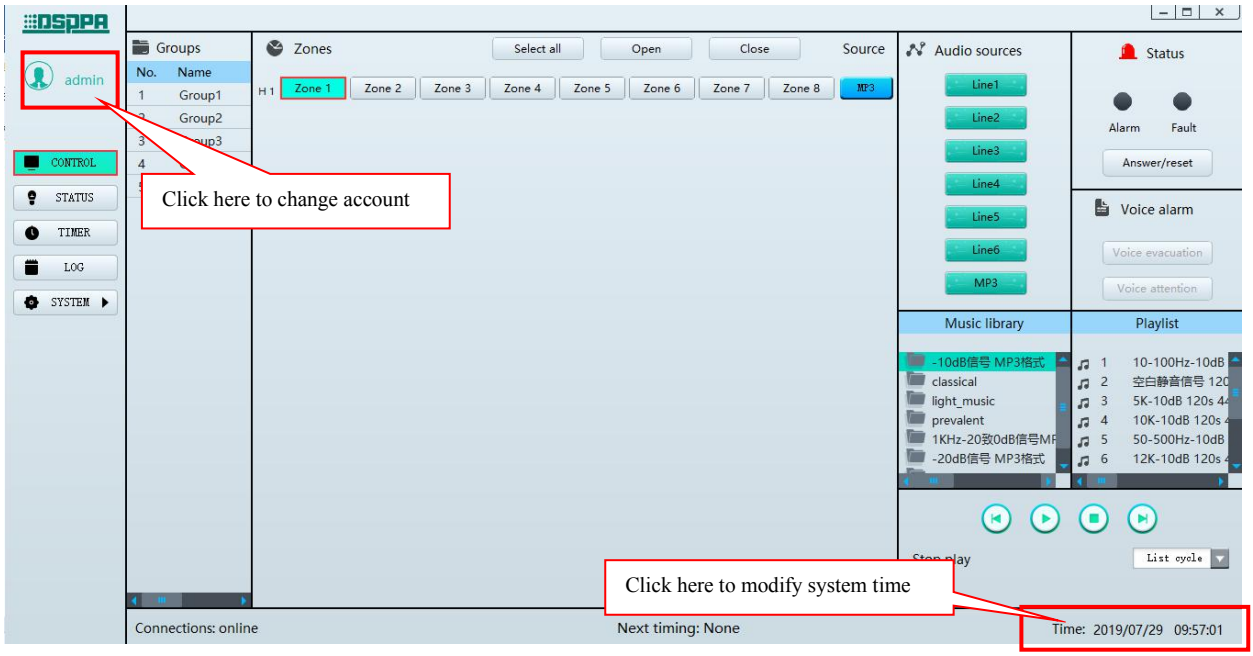
Description:

1. The login password can be modified through "User's Settings" in the "System Settings" after login;

2. The system supports up to 10 users to log in at the same time, which includes administrator users and general users.

7.3 Operating the software

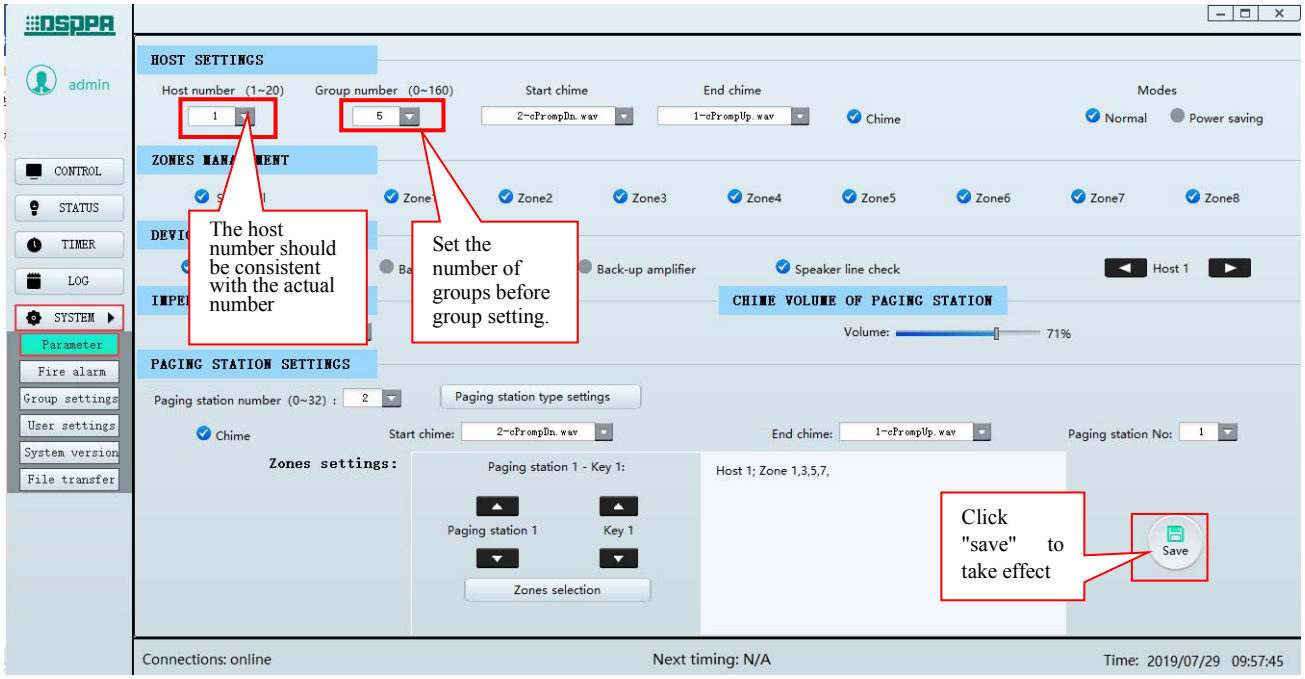
After the data synchronization is completed, enter the main interface (as shown in the figure below), and group the zones connected by the host:



Main interface

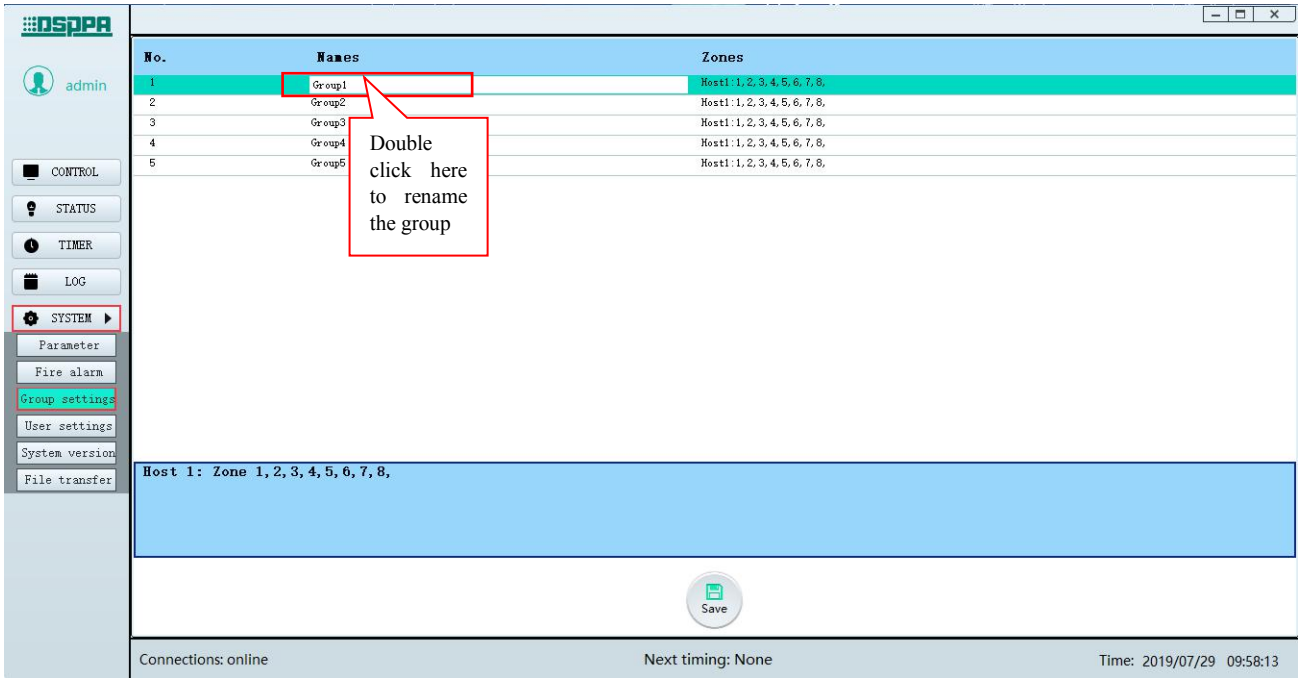
1) Grouping settings

Before grouping settings, the host number and grouping number shall be configured in the "parameter settings" interface under the "system settings" directory of the main interface. After that, click "save" to take effect.



Parameter settings interface

Click the "group settings" of System Settings to enter the following interface:



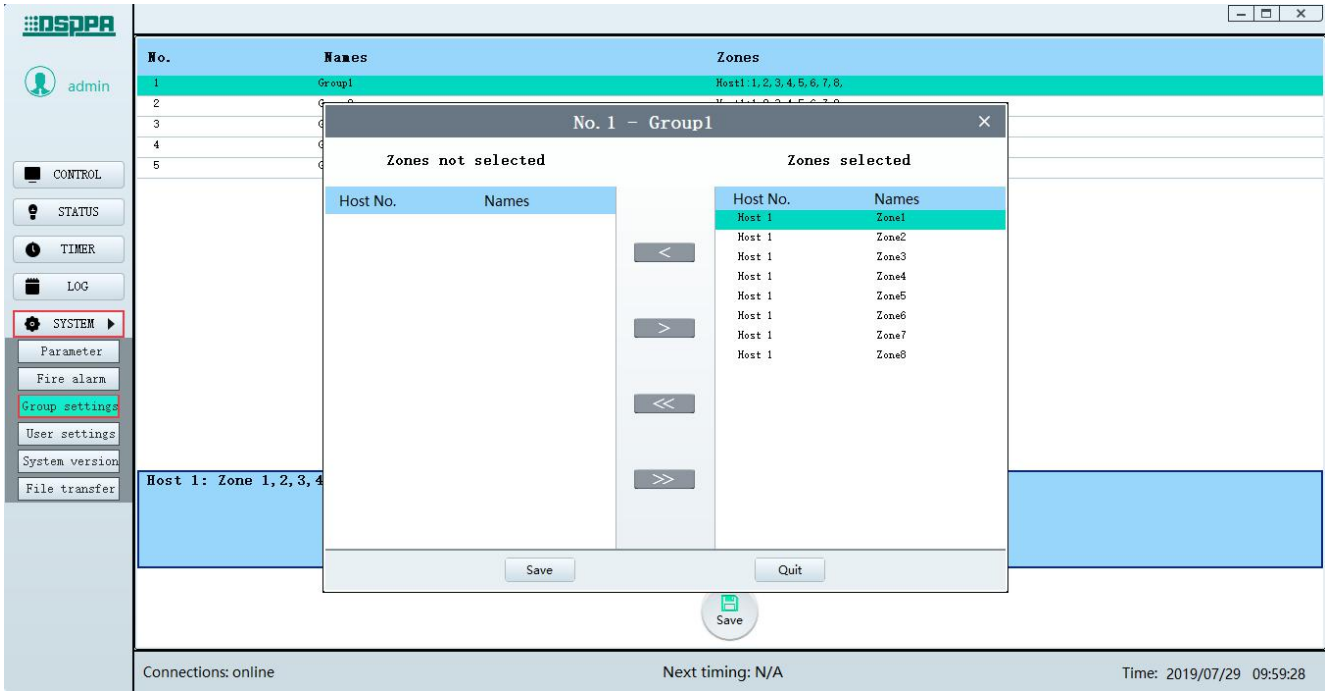
Group settings interface

The interface as shown in the above figure will show serial number, name and zones.

- **Set the group name:** double click the name to rename the group.
- **Zone settings**: double click “zones” and the following interface will pop up. "Unselected zones" means the list of all host zones that are not selected, and "selected zone" means the list of all host zones that are selected:

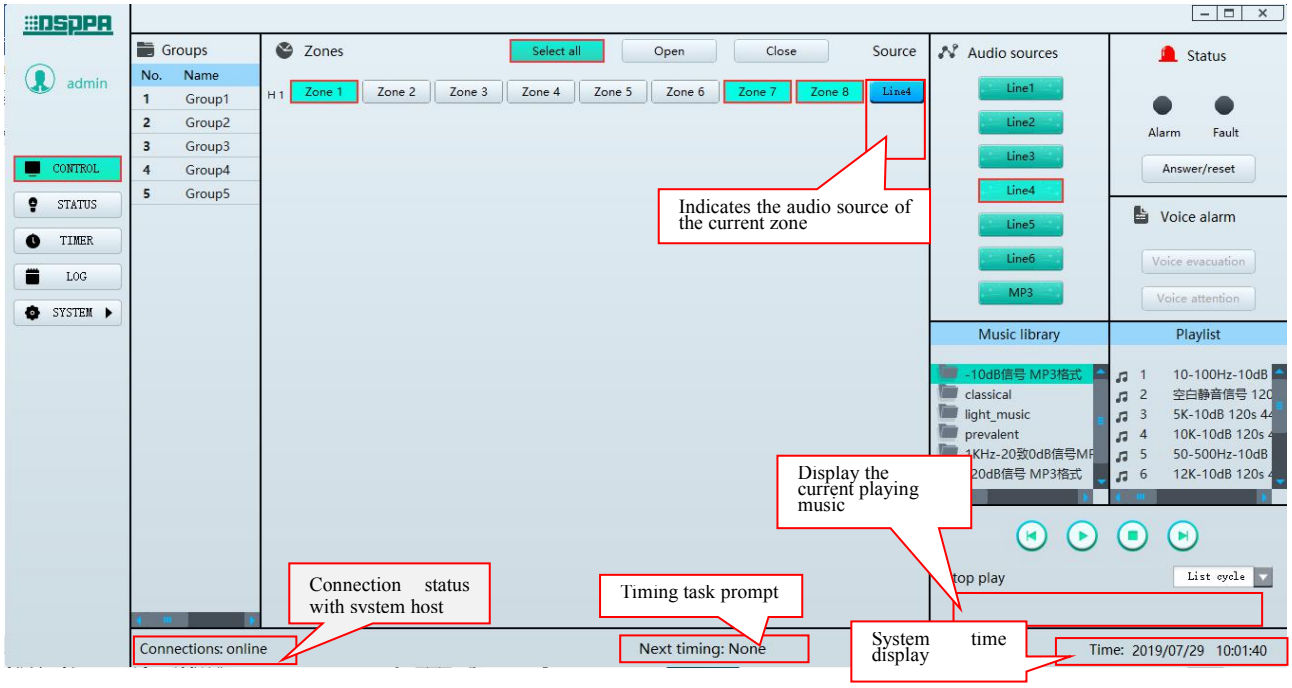
- Click the button < to move the host zone in the "selected zones" to the "unselected zones".
- Click the button > to move the host zone in the "unselected zones" to the "selected zones";
- Click the button << to move all host zones in the "selected zones" to the "unselected zones".
- Click the button >> to move all host zones in the "unselected zones" to the "selected zones".

Click the "ok" button to make a group of the selected host zones. As shown in the figure above, the 8 zones of host 1, host 2 and host 3 are made into group 1. The group set here will be displayed in the group list of the main interface. Click “save” to take effect.



Grouping interface

2) Control settings



Main interface

a. Icons on the main interface:

Groups: indicates the group list that is manually set, displays group No. and name;

Zones: indicates the host and host zones of each group;

- Select all: Click the button Select all to turn it green as the selected state, and then click Open or Close to open or close all connected host zones; Click the button Select all again to turn it grey as unselected state, and then click Open or Close to open or close selected group;
- H1 represents the system host (PAVA8501), and zone 1-8 after H1 represents the 8 zones of the system host. H2 represents the extended host PAVA8500E, and so on; click the button "Zone 8" to turn it green which indicates selected and opened, and click again to turn it gray which indicates not selected and closed (note: there is only one system host in a set of systems, and it must be H1, and the others are extended hosts);
- Line4: indicates that line 4 is selected as the input audio source in the current host zone, and no audio input can be set.
- Audio sources: corresponds to channel 1-6 and MP3 input of the host or extended host:
- Line4: represents the audio source of channel 4. Click the button and comes a red box, which means selected. Button without box means not selected.

Status: indicates the system alarm prompt and operation:

- The icon "●" above "alarm" is consistent with the indicator of emergency voice switch of the host and fire microphone. When the indicator "●" is red, it means that the emergency voice switch is turned on to play emergency voice. The icon "●" above" fault" is consistent with the STATE indicator of the host or extended host. When the indicator "●" is yellow, it means there is a fault in the system.

The icon Answer/reset is consistent with the ACK/RESET button of the host.

Voice alarm: is the voice selection of emergency broadcast in the mode of "emergency broadcasting":

- Voice evacuation is consistent with the EVAC MSG button of the host or extended host. When the emergency voice switch is turned on, click this button to show red, green and blue color transformation, which means selected. The emergency voice will be played. The grey button means not selected.
- Voice attention is consistent with the ALERT MSG button of the host or extended host. When the emergency voice switch is turned on, click this button to show red, green and blue color transformation, which means selected. The emergency voice will be played. The grey button means not selected.

b. Play music to zones or groups. The operations are as below:

① **Switch audio sources:** select the button Line4 and click the blue button "Line4" in the "zone" area. Then "Line 4" displayed on the button indicates that line 4 has been selected as the audio source in the current host zone; Click the blue button "Line4" again, and" no audio source "is displayed on the button to indicate no audio input in the host zone;

② **Songs and play mode settings:**

After turning on the zone, select the folder to play from the list of directories. Select the song to play from the list of songs. Double click play or click the button to play, click the button to pause, and click the button to stop. Click the button and to play the previous song or the next song, click the inverted triangle behind the icon List cycle to appear the drop-down box, then choose the single loop, single play, directory loop and random play modes.

- Single play: play the selected song, and will not continue to play after the song is finished.
- Directory loop: play the songs in the selected directory in order.
- Random play: play the songs in the selected directory randomly.
- Single loop: play the song in the selected directory, and then continues to play after the song is finished.

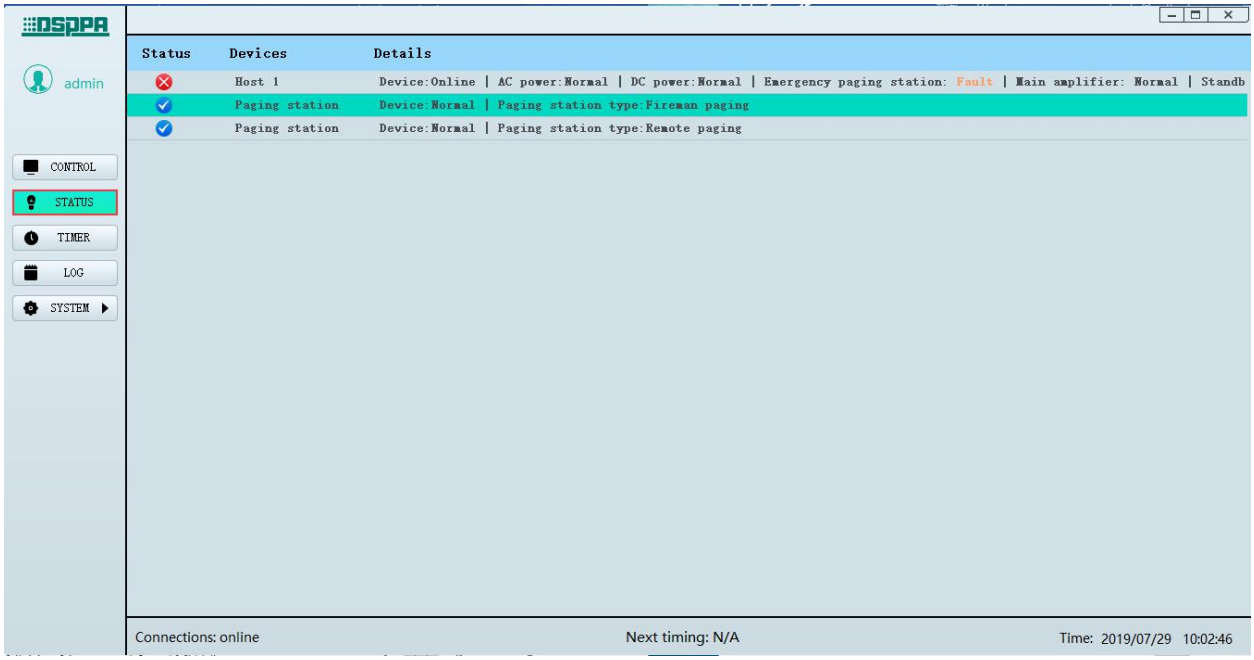
③ **Select and turn on zones:** select the host zone to play background music, and there are four ways to turn on the zones:

- Turn on a single zone: select a zone by clicking once. Then green zone button indicates the zone is turned on;
- Turn on all zones of all hosts: click "Select all" button on the main interface (green means selected), and then click "Open" to open all host zones connected;
- Turn on a single group: when the button "Select all" is grey and not selected, click a group under the group list on the main interface, and then click "Open" button to open all zones of the current group;
- Turn on all zones of a single host: click "H1" under "zones" on the main interface to open all zones of host 1, click "H2" to open all zones of host 2, and so on.

Note: ①②③ are not in particular order.

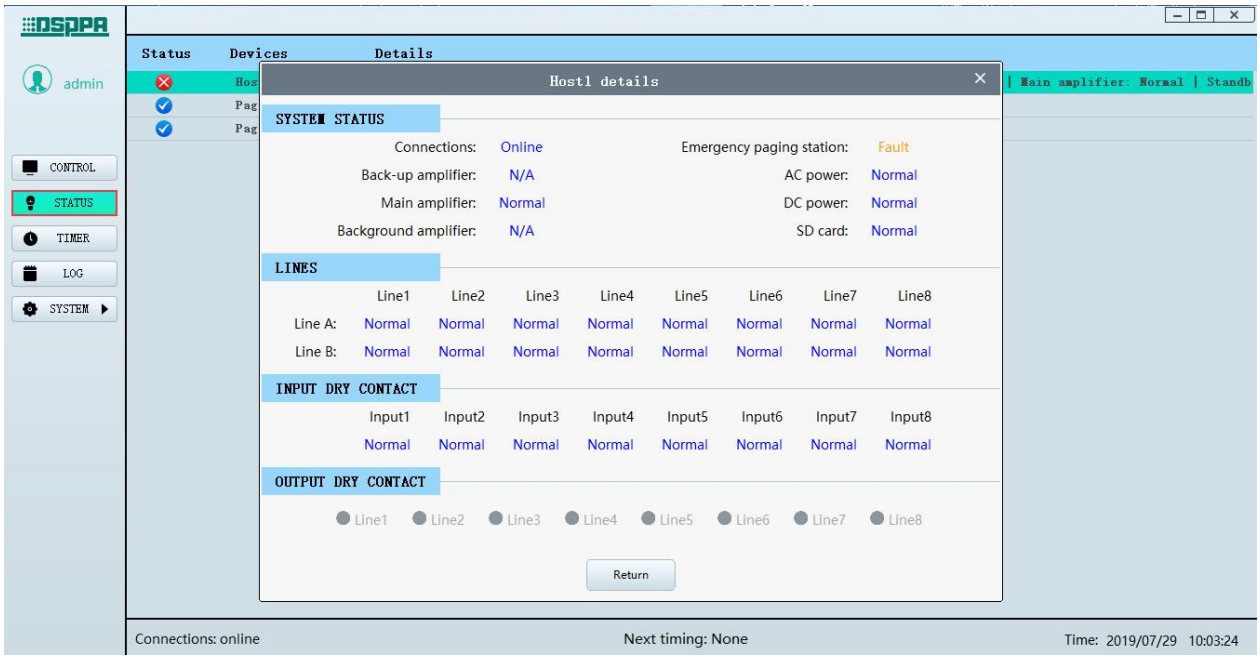
3) Running status

Click the icon "Status" to enter the interface to view the running state of the device. "" means the current device is running normally, "" means the current device is in fault;



Running status interface

- If the paging station is in fault, the user can check whether the paging station is well connected, whether the type of the paging station is configured correctly, whether the paging station is powered up or whether the number of paging station is consistent with the address and configuration;
- If the host is in fault, the user can double click the status bar to enter the host status interface as shown in the figure below:



Host status interface

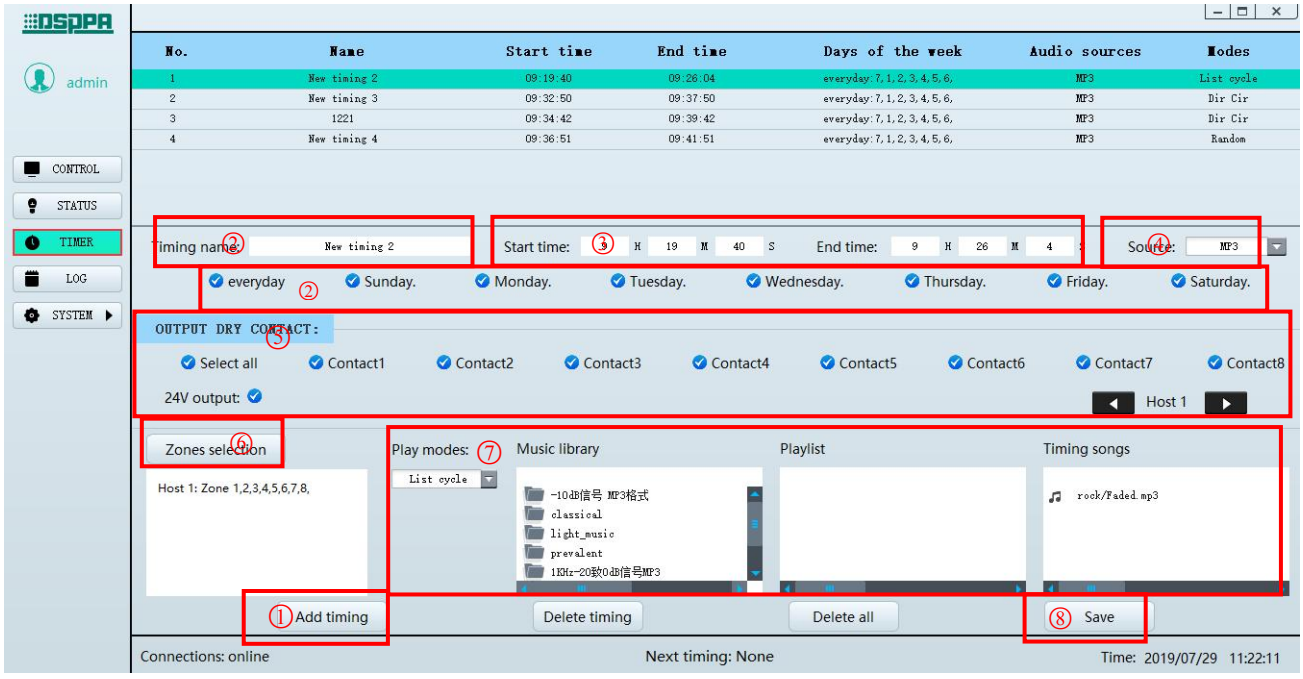
The running status of the current host or extended host can be viewed in the host status interface. The details are as follows:

❖ "Online" means successful connection between PC software and system host;

- "Offline" means the device is offline and the PC software fails to connect with the system host.
- "Normal" means the corresponding module works normally;
- "Fault" means there is a fault in the corresponding module;
- "N/A" means the device has no corresponding configuration;
- "Open circuit" means open circuit of corresponding speaker or CIE detection circuit;
- "Short circuit" means short circuit of corresponding speaker or CIE circuit;
- "Heavy load" means that the load of the corresponding speaker or CIE detection circuit is heavier;
- "Light load" means the load of the corresponding speaker or CIE detection circuit is lighter;
- If dry contact output is configured in the settings of fire alarm or timing point, when the input dry contact or timing point is triggered, the icon in front of a certain channel shows blue, indicating the certain channel output dry contact of the host has output.

4) Timing settings

Click Timer to enter the following interface:



Timing settings interface

➢ **Steps to add a timing:**

① Click the button "Add timing" first, and a default timing will appear in the list above the interface;

② Rename the timing. The user can set the timing to run in a circle of a week or some specific days of the week according to the demand.

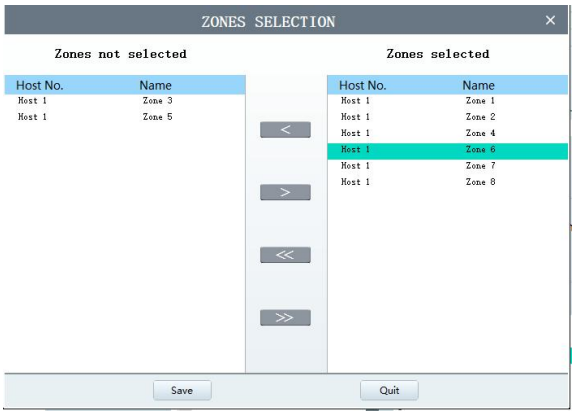
③ Set the start time and end time of the timing. If the end time is less than the start time or there occurs repeated timings, the time will turn red.

④ Click the triangle on the right of " source" box to choose audio source from MP3 or input channel 1-6, or N/A;

⑤ Click the triangle in the icon

to select a host currently connected, and then configure the output dry contact and 24V override output of the selected host. Click and light on the icon in front of the output contact and 24V override output to configure successfully;

⑥ Click "zones selection" to customize the zones need to be covered by the timing. The user can select zones according to their needs;



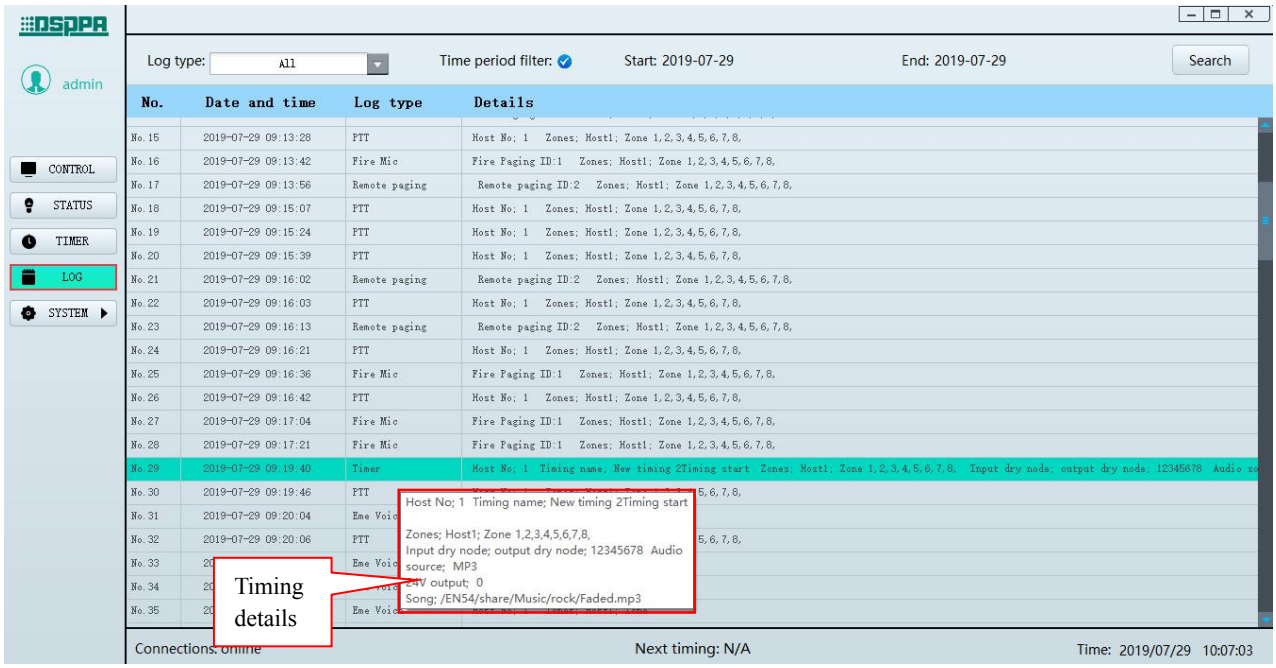
⑦ Click the triangle below "play modes" to choose the play modes from single play, single cycle, list cycle and random play. Then select the folder in the directory, choose songs in the list. Green means selected. Double click the song to add the song to the timing song list, then click "save" to complete the timing settings;

Delete timings/delete all timings: select a timing at the top of the interface, click the button "delete timing" or "delete all" to delete timings, and then click "save" to delete successfully. If not click save, no timing will be deleted.

Note: if the audio source MP3 in the timing list turns red, there are two reasons: 1. when adding timing, no timing song is selected; 2. after setting the timing, the song is deleted from the host, then the song can be uploaded in the "file transfer" interface.

5) Log settings

Click log settings to enter the following interface:



Log settings interface

Descriptions on the interface of log settings:

1) "No. ": no practical significance;

2) "Date and time": indicates date and time of the operation;

3) "Log type": indicates the log type of the operation;

4) "Details": indicates the details of the current log;

.

Search logs:

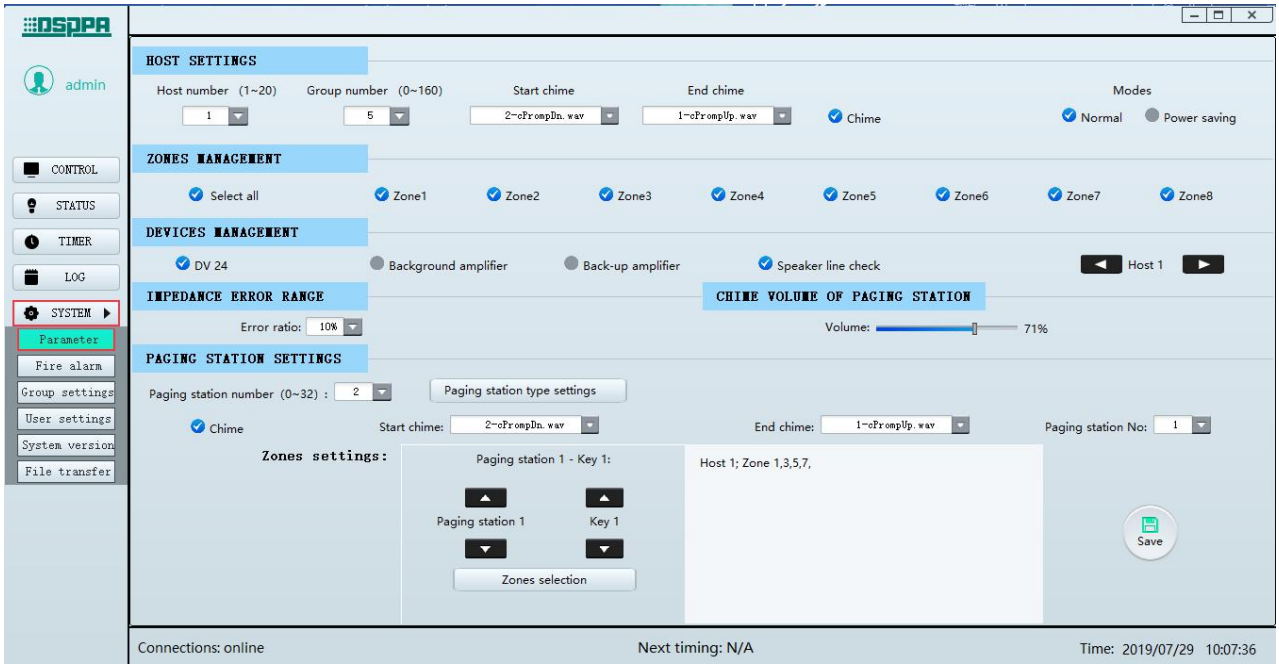
- Select a log type and click the button "search" to view the same type of logs.
- Light the icon (the light button is blue) after "time period filter", the searching will start according to the date of the set start time and end time. If the icon is unchecked, it will search the period from the default initial time of the system to the current time.

6) System settings

- Parameter settings: mainly to set the detailed parameters of hosts, zones management and paging stations.
- Fire settings: to set the fire rules and the audio priority configuration triggered by dry contacts;
- Grouping settings: customize grouping settings for each host and zone;
- User settings: to set IP address, user password and languages of the software;
- File transfer: to transfer files between the local PC and the host, and upgrade the host firmware.

Note: after modifying, please click "save", otherwise your settings will not take effect on the corresponding devices.

a. Parameter settings



Parameter settings interface

Click the parameter settings icon to enter the corresponding interface:

➢ **Host settings**

Host number/group number: to configure the number of hosts or extended hosts. When the actual number of the connected host or extended host is not consistent with the number set by the PC software, the system will prompt a fault. In the above figure, the number of hosts can be set to be consistent with the number of hosts actually used. The number of groups, which corresponds to the number of groups below the group list in the main interface, can be set according to user requirements.

Chime settings of paging station: turn on the chime switch by ticking the icon. It indicates that the chime is turned on no matter whether the paging of the handheld microphone (i.e. EMG MICROPHONE) is enabled. There are two choices for chime tone.

System working modes: normal mode and power saving mode are optional.

Note: the working mode here is that when the main power of the system is cut off or there occurs fault, the system automatically switches to the standby power.

1. Normal mode: the system works in normal mode and there is no deletion of system functions;

2. Power saving mode: the system enters power saving mode, only emergency microphone, fireman microphone, EVAC/ALERT and remote paging microphone work normally. While the background music cannot be played;

➢ **Zones management**

Users can enable and close the zone of the host or extended host according to the actual situation (the default is all zones enabled). First, tick the box before zone 1 and then click the triangle button ▲ and ▼ in ◄ Host 1 ► to select the host to be configured (as shown in the figure above).

➢ **Devices management**

Users can configure DC24V, standby power amplifier, background power amplifier and speaker circuit impedance and so on according to their requirements. Tick the boxes before the items if there needs to select them.

➢ **Speaker line detection accuracy/chime volume of paging station**

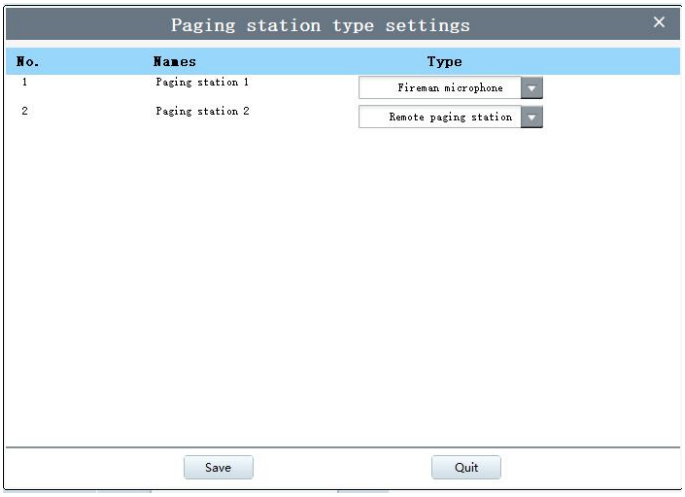
Error ratio: mainly to set the error range of impedance detection of speaker circuit, which can be set as 10%, 15%, 20%, 25% and 30%.

Chime volume of paging station: adjust the slider to set the chime volume of paging station;

➢ **Paging station settings**

Paging station number and paging station types: to configure the number and type of the remote paging stations or fire paging stations. When the actual number of connected remote paging stations or fire paging stations does not match the number configured on the PC software, the actual number of paging stations used should be set in the "paging station settings" in the figure above.

Click "Paging station type settings" to enter the corresponding interface and the paging station type can be configured as remote paging station or fire paging station; otherwise, the paging station will not be connected, and the system fault light will be on with a buzzer. As shown in the figure below, paging station 1 is set as fire paging station and paging station 2 is set as remote paging station.



Chime tone of paging station: the chime tone of each paging station can be set. For example, in the parameter setting interface, first select the paging station number, then tick the chime tone switch, and then select the audio source of the chime tone by clicking after the start chime and the end chime;

➢ **Grouping settings of paging station**

- "Paging station 1- Key 1" in the figure

1) "Paging station 1", indicates the selected remote paging station;

2) "Key 1", indicates the first group to be set by the current paging station.

As to the icons on the parameter setting interface, indicates the previous one and is the next one. The triangle buttons / are to select the currently connected remote paging station or fire paging station, while the triangle buttons / are to select the zone/group of remote paging station or the custom buttons of fire paging station.

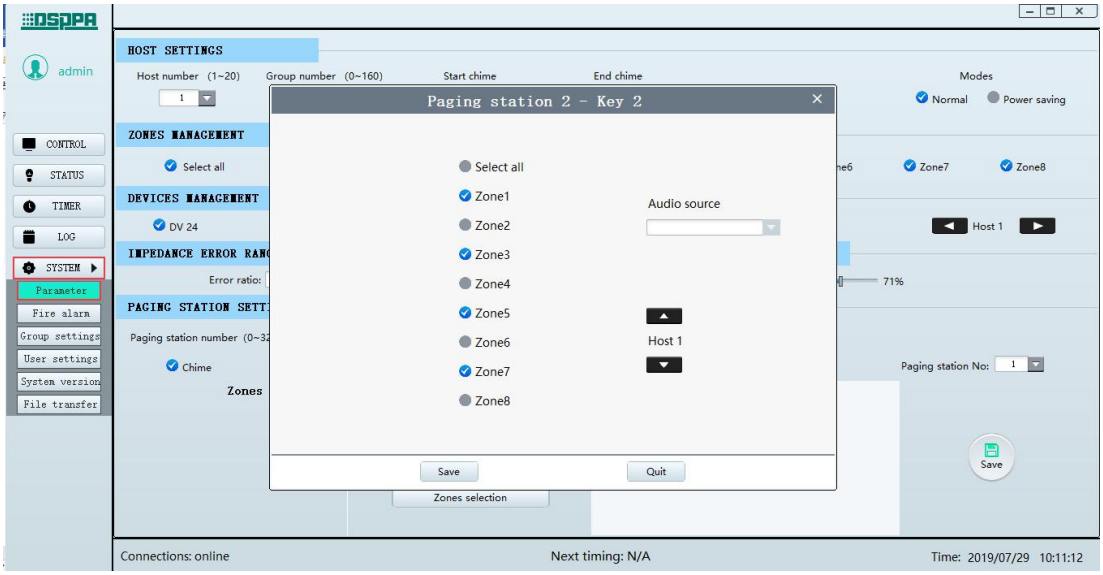
When remote paging station is selected:

- The triangle buttons / are for selecting the groups of remote paging station or fire paging station. Each remote paging station supports 16 zones or groups. And the buttons of the 16 zones or groups

correspond to the 16 keys on the remote paging station panel. Now click the button “zones selection” to pop up the below interface. The triangle button

in the interface is to select the host currently connected. Tick the box in front of the zone to select the zone of the host to configure the grouping. Finally, click "ok" and the setting is successful.

- “Host 1: Zone 1, 2, 3, 4, 5, 6, 7, 8” and “Host 2: Zone 1, 2, 3, 4, 5, 6, 7, 8” shown in the figure indicate that the operation of the key corresponds to zone 1, 2, 3, 4, 5, 6, 7, 8 of host 1 and zone 1, 2, 3, 4, 5, 6, 7, 8 of host 2. That is to say, if the user turns on the grouping mode of paging station 1 in paging station address settings, the operation of the key on the paging station is equivalent to paging to the above selected zones of the host;

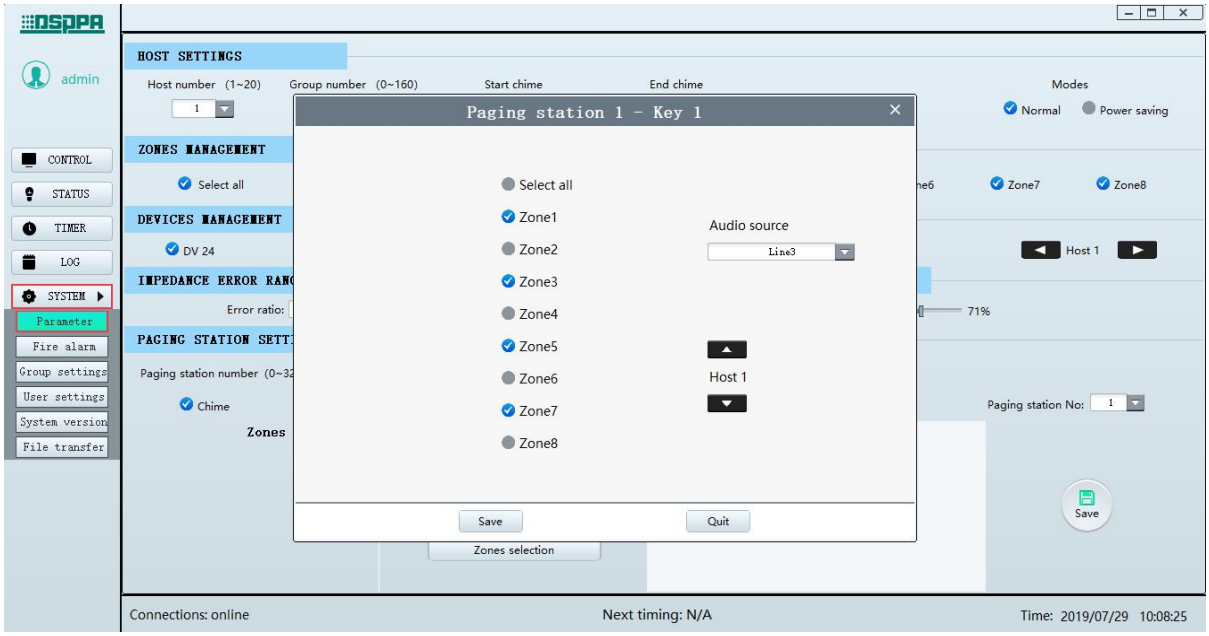


Group settings interface of paging station

When fire paging station is selected:

- The triangle buttons ▲/▼ are for selecting the shortcut keys of fire paging station. Each fire paging station supports 4 shortcut keys. And the 4 shortcut keys correspond to the 4 customize keys on the fire paging station panel. Now click the button “zones selection” to pop up the below interface. The triangle button

in the interface is to select the host currently connected. Tick the box in front of the zone to select the zones of the host for the operation of the key. Here needs to select the audio source, click the button ▼ below the audio source, then select the audio source which needs to be configured for the operation of the key. Finally, click "ok" and the setting is successful.
- “Host 1: Zone 1, 2, 3, 4, 5, 6, 7, 8” and “Host 2: Zone 1, 2, 3, 4, 5, 6, 7, 8” indicate that the operation of the shortcut key corresponds to zone 1, 2, 3, 4, 5, 6, 7, 8 of host 1 and zone 1, 2, 3, 4, 5, 6, 7, 8 of host 2. That is to say, if the user presses down the shortcut key on the panel of fire paging station, the operation of the key will turn on the selected zones of the host and play the audio source as configured;

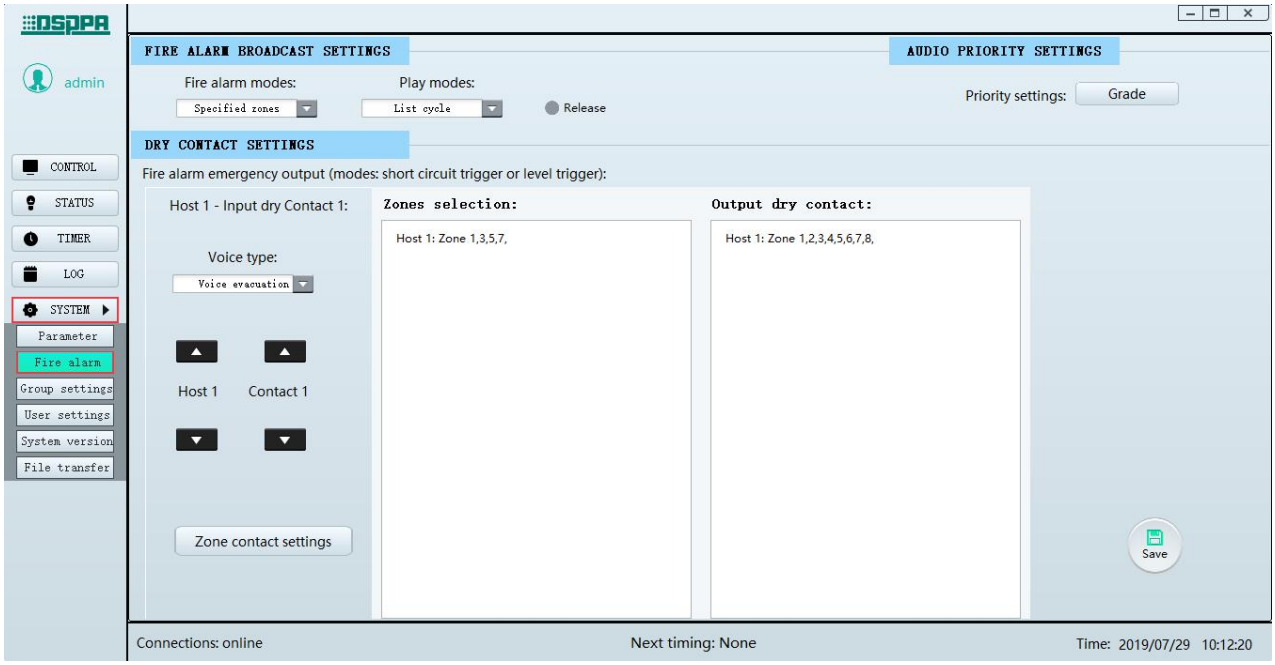


Group settings interface of paging station

After setting, click the button to take effect.

b. **Fire alarm settings**

- Set fire enforcement rules;
- Set input/output dry contact, host output zone and audio priority when dry contact is triggered;



Fire alarm settings interface

Click “Fire” to enter the fire alarm settings interface:

➢ **Fire alarm broadcast settings**

On the above figure:

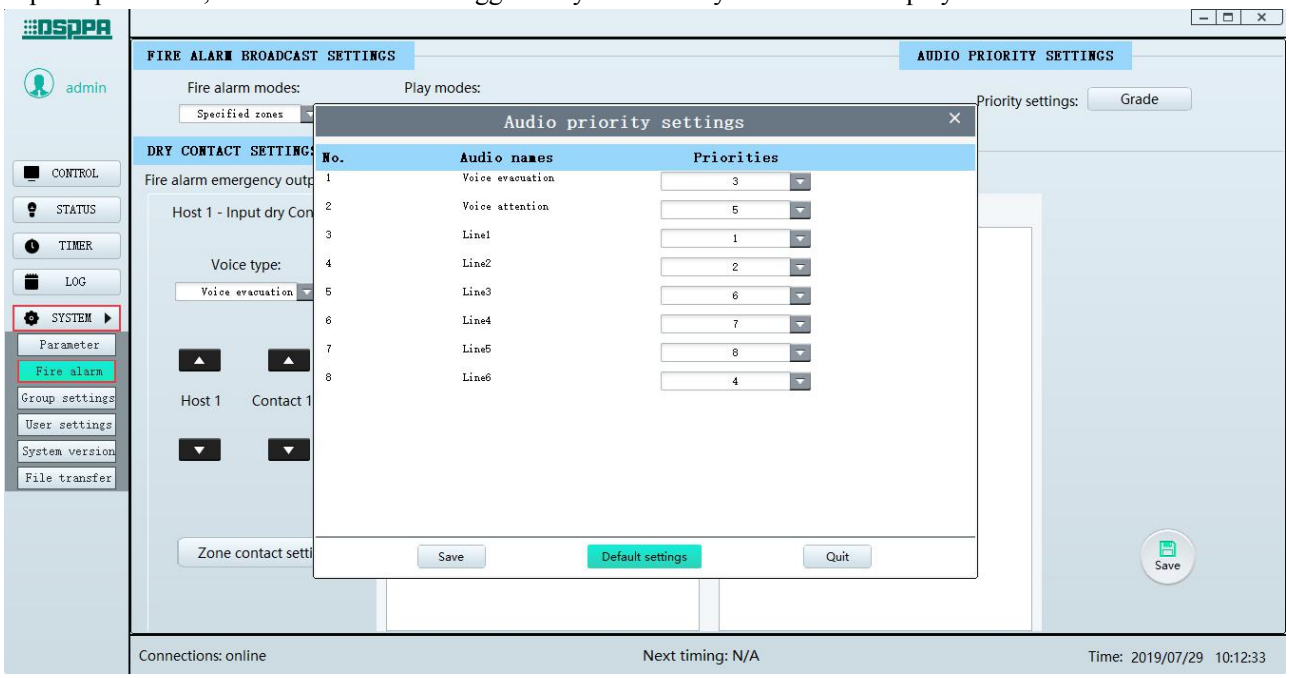
- **The user can select "specified zone" or "all zones" from the drop-down list box below the "fire alarm mode":**

1) "specified zone" means that when an input alarm signal is detected from the host or extended host, only the zones designated in the zone selection and output dry contact under the dry contact settings have output and play voice information.

2) "all zones" means that once there is an input alarm signal from the host or extended host, the system will open all zones and output dry contacts of corresponding dry contacts and play the voice information;

- **"Play mode"**: to set the play mode of list circle or single circle (mainly for built-in voice message);
- **"Release"**: when this function is enabled, the dry contact trigger will automatically end after the dry contact trigger signal ends; If this function is not enabled, the dry contact trigger continues to execute after the dry contact trigger signal ends, and it needs to be closed manually when it ends.
- **"Audio priority settings":**

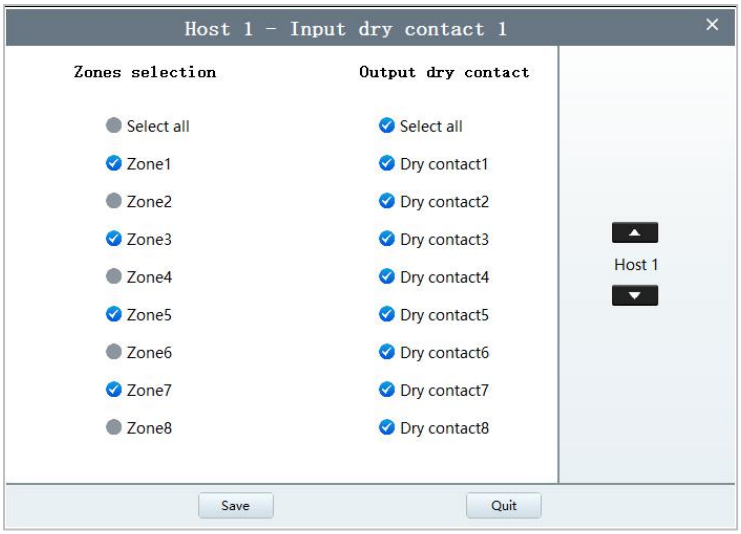
Priority configuration: click the button "grade" and a window will pop up as shown in the figure below. Click the button behind the 8 input audio sources to set priority levels 1 to 8, among which 1 is with the highest priority, and 8 is the lowest. The user can also configure the audio source priority as default order by clicking "default settings", and then click "save" to take effect. After setting the priority of input audio source, the playing order of chimes triggered by each dry contact is determined by its priority. When the next dry contact is triggered, if the priority of its input audio source is lower than that of the audio source triggered by the current dry contact, then the corresponding triggered zones of the two dry contact will be superimposed, and the audio source triggered by the current dry contact will be played. If the priority of its input audio source is higher than that of the audio source triggered by the current dry contact, the corresponding triggered zones of the two dry contact will be superimposed too, but the audio source triggered by the next dry contact will be played.



Audio priority settings interface

Dry contact settings

- **Input/output dry contact settings:** to set the zones where the dry contact triggers the alarm, the selected audio source, and the corresponding input dry contact. As to the button shown in the above figure, the left triangle button ▲/▼ is to select the current connected host, and the right triangle button ▲/▼ is to choose input dry contact of the host. Then click "zone contact settings" to enter the interface as shown in the figure below, the triangle button is to select the host. Tick in front of the zone or output dry contact, indicates to select output zone or output dry contact from the current connected host. Click "ok" to set successfully.



Contact grouping settings interface

- **"Output dry contact"**: to set the output zone and output dry contact of each dry contact of the current device in case of alarm, that is, to combine multiple operations into one shortcut operation to facilitate users to respond quickly in case of emergency. It is similar to the grouping configuration and operation in microphone, but the differences are:
  (1) Grouping requires manual operation, and contacts are mostly used for linkage through third-party system in case of uncertain conditions or emergencies;
  (2) Grouping operation does not include the output of dry contact, while the contact contains the output of dry contact, which is convenient to control the linkage of the third party system;
- "Voice type" is to select the type of EVAC voice information, which can be "EVAC voice" and "Alert voice". It can also play the audio sources of channel 1 to 6;

After setting, click the button to take effect.

c. **User settings**

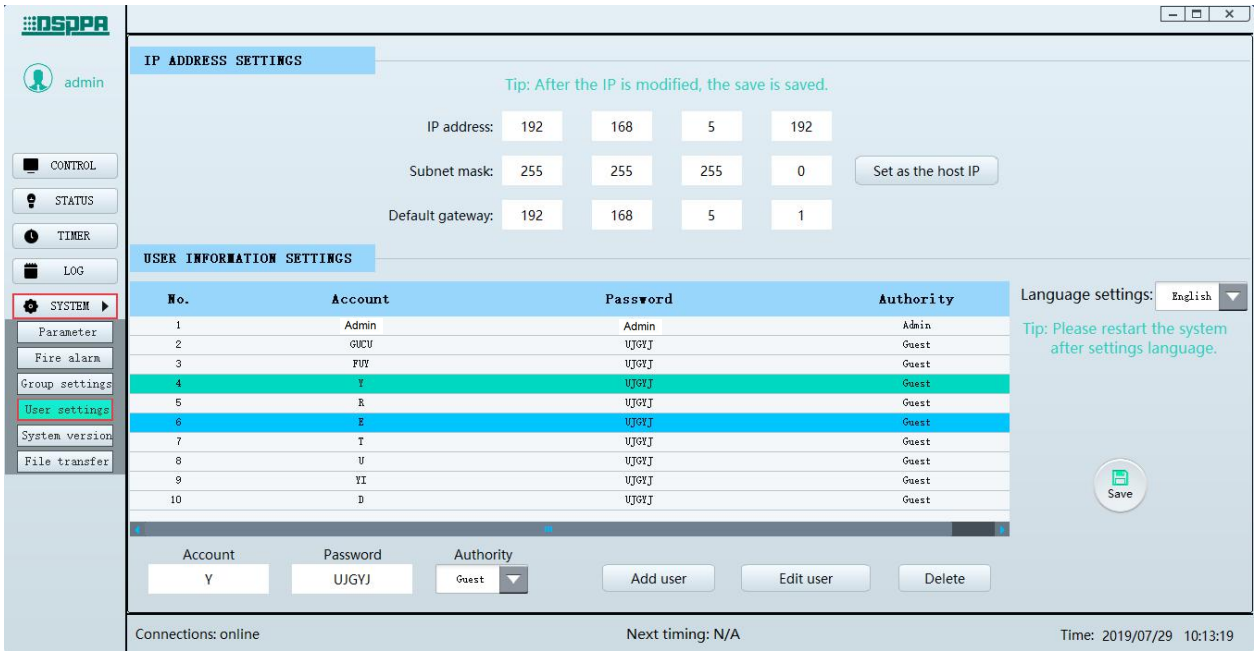
Click “user settings” to enter the user settings interface:

- **IP address settings**: to set IP address, subnet mask and local gateway parameter. After modification, click the button "set as the host IP" and click "ok" in the pop-up window. At this time, the system will be disconnected and the software must be restarted to work normally (note: new IP address need to be input in the re-login interface);
- **User information settings**: enter account name and password, select administrator or guest, and click "add user" to add new user information. The maximum number of guests is nine, and there must be one

administrator. Select one user at the list of user information and click "edit user" to modify user information, such as account, password and authority at the bottom of the interface. Click "delete" to delete the selected user information.

- **Language settings**: after selecting a language, restart the software to take effect.

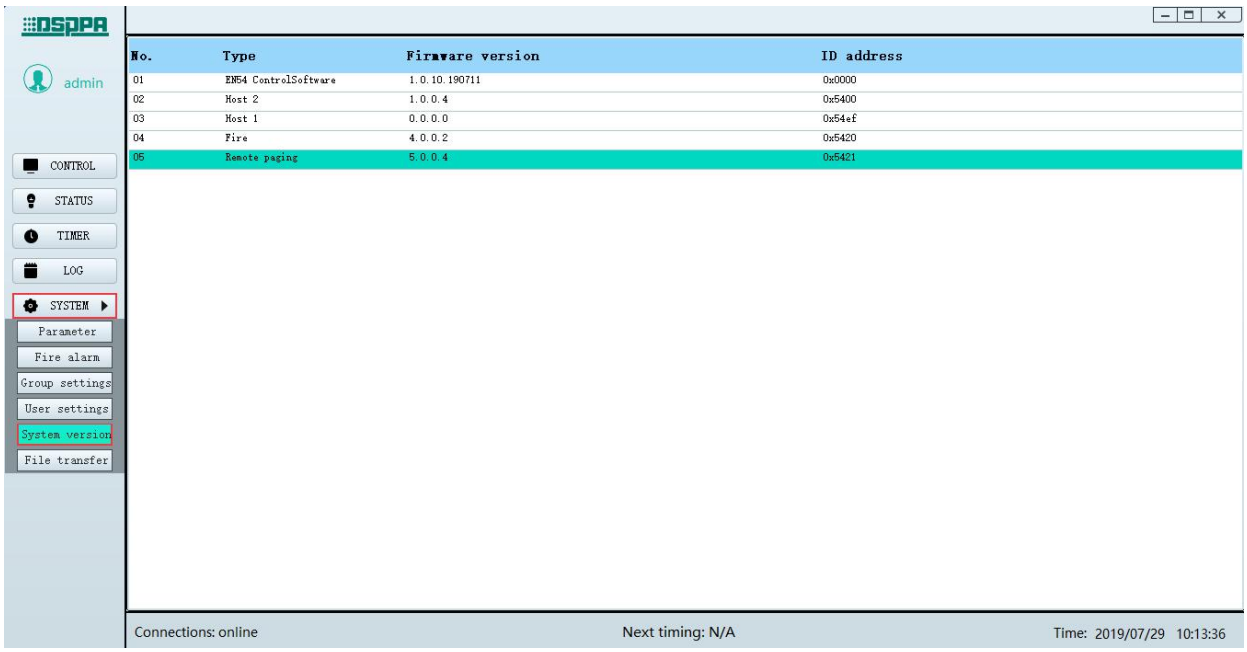
After the configuration is completed, click the button "save". Then it will pop up the window "are you sure to synchronize the user information to the host?" Click "ok" to finish the settings.



User settings interfaces

d. **System versions**

Click the system version icon and enter the system version interface to view the firmware version and ID address of the device.



System versions interface

e. **File transfer**

Click the file transfer icon to enter the corresponding interface:

Music: corresponds to the music folder on the host, the files are in the format of MP3 or wav,

Chime: corresponds to the chime folder on the host, the files are in the format of wav.

Firmware upgrades: corresponds to the firmware update folder on the host, the files are in the format of bin.

EVAC: corresponds to the EVAC voice folder on the host, the files are in the format of wav.

Recordings: corresponds to the recording folder on the host, the files are in the format of wav.

➢ **Upload files to the host:** only for music, firmware upgrade, EVAC and chime directory. The steps are as follows:

① When the server is disconnected, select one directory. The selected icon "" is green.

② Click "connect to server" to connect the server successfully

③ Select the folder under "local directory" to be uploaded.

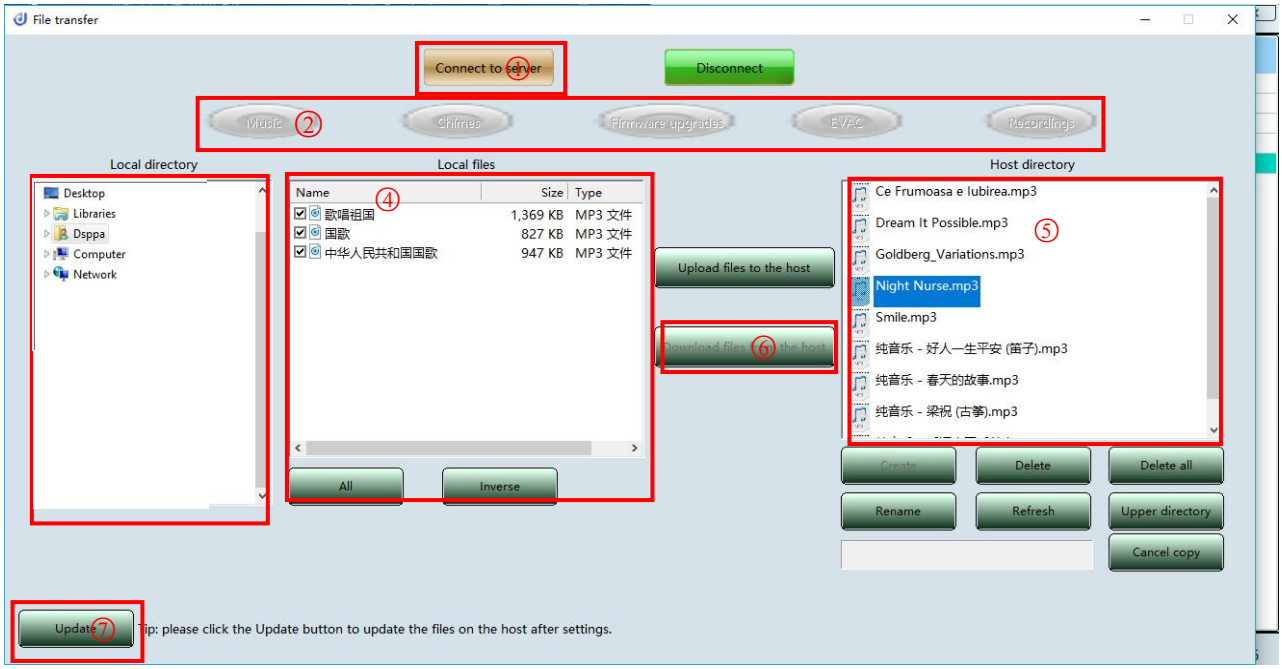
④ Then check the file to be uploaded to the host under "local files", or click "all" or "inverse".

⑤ Select and double click the target folder under the "host directory" **(The transfer only works when it is in the next directory of folders).**

- Click "rename" to rename the selected folder;
- Click "create" to create a new folder;
- Click "delete" to delete the selected folder or file;
- Click "delete all" to delete all folders or files on the current page;
- Click "upper directory" to return to the previous directory;
- Click "refresh" to refresh the page under "host directory".

⑥ Click "upload files to the host", and there will display “uploading file…” in the box before "cancel copy". Click “cancel copy” to stop the file uploading.

⑦ After the completion of file transfer, click "update” to update the files on the host.



File transfer interface

➢ **Download files from the host**: only for recording directory, the steps are as follows:

① When the server is disconnected, select the recording directory. The selected icon "" is green.

② Click "connect to server" to connect the server successfully

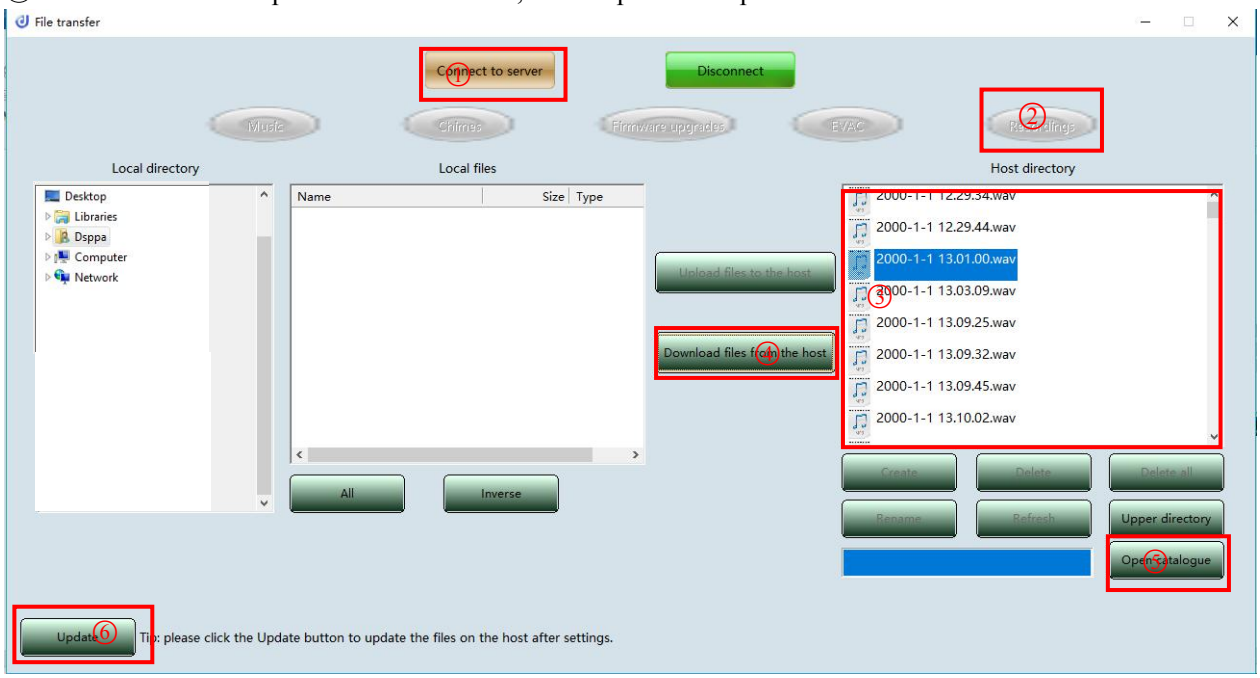
③ Select the target file under the "host directory"

- Click "rename" to rename the selected folder;
- Click "create" to create a new folder;
- Click "delete" to delete the selected folder or file;
- Click "delete all" to delete all folders or files on the current page;
- Click "upper directory" to return to the previous directory;
- Click "refresh" to refresh the page under "host directory".

④ Click "download files from the host" to download the file successfully.

⑤ Click "open catalogue" to open the folder holds the downloaded recording.

⑥ After the completion of file transfer, click "update" to update the files on the host.



File transfer interface

8. Methods for common faults

1. "STATE" on the host or extended host

- When the yellow light is always on, it indicates the zone short circuit fault is disabled;

Method: Check if the zone load is in good contact.

- When the yellow light is flashing, it indicates the zone is open;

Method: Check if the zone load is within 20Ω~2kΩ.

2. When "DC POWER" on the host or extended host is yellow:

- Check if there is DC power input;
- If there is no standby power input, disable the configuration of DC 24V on PC software.

3. When "COMMUNICATION" on the host is off, indicating the network connection with the PC is abnormal:

- Check if the network cable between the equipment and the PC is properly connected;
- Check if the IP address of the PC software and of the host are on the same network segment.

4. When "COMMUNICATION" on the extended host is off, indicating the network connection with the PC is abnormal:

- Check if the network cable between the equipment and the PC is properly connected;
- Check if the number of hosts set in the PC software matches the actual number of connections;
- Check if the DIP switch ID address exceeds the number of hosts set in the PC software.

5. When "PAGING" on the host or extended host is yellow:

- Check if the network cable between the equipment and the PC is properly connected;
- Check if the number of hosts set in the PC software matches the actual number of connections;
- Check if the DIP switch ID address exceeds the number of hosts set in the PC software.

6. "SYS STATE" on the host or extended host is yellow, indicating the system is faulty:

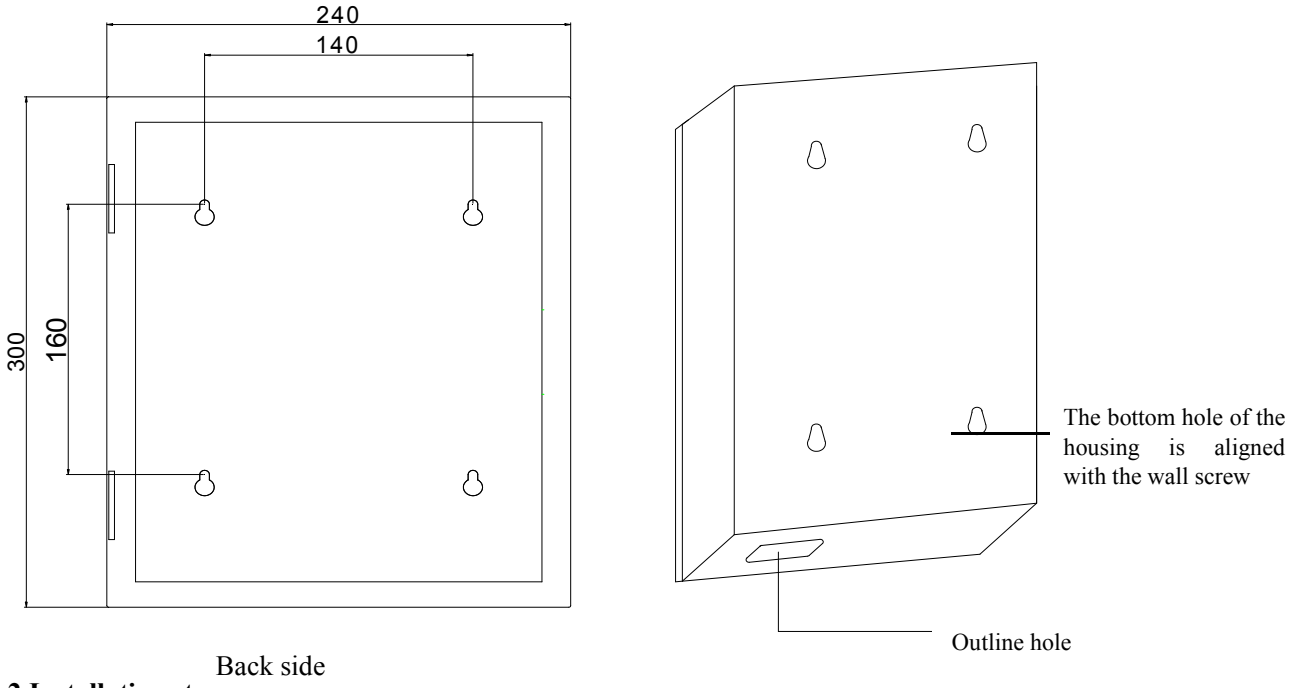
- Check if all the equipments is connected properly;
- Check if the number of hosts set in the PC software matches the actual number of connections.

7. "EMG MIC" on the host is yellow:

- Check the hand-held MIC is connected properly.

9. Installation

9.1 PAVA8009 Fireman MIC installation dimension



Back side

9.2 Installation steps

1) Open the terminal package, take out the manual and check if the equipment accessories are complete, according to the “packing list” at the end of the manual ;

2) Connect the network cables to the equipment, and fix the baffle at the bottom of the chassis on the equipment with screws;

3) Mount 4 M6 self-tapping screws on a solid object such as a wall, according to the dimension diagram of chassis back panel (mentioned above)

4) After confirming the correctness, align the 4 holes on the chassis back panel with the screws and hang them on a solid object such as a wall.

Note: During the whole installation process, make sure that the terminal and the equipment connected to the terminal are not live!

Safety Precautions

1. Precautions for Safe Operation

- Do not plug the power cord into the power grid before the system line is not connected.
- Be sure that the input voltage of the equipment is exactly the same as the voltage required for this equipment. Otherwise it may burn the equipment.
- Do not open the case without authorization in order to avoid the risk of electric shock because there is a dangerous voltage in the equipment.
- Please unplug the power cord from the socket for the sake of safety when the equipment will not be used because the equipment is not completely disconnected from the power grid when the equipment is powered off.
- Do not put the equipment in a super-cooling or superheating place.
- Be sure there is a well-ventilated operating environment to avoid the heat and excessive temperature from damaging the equipment during the operation.
- Please unplug the power plug in rainy or wet days or without operation for a long time.
- Be sure to unplug the power plug to ensure the complete disconnection from the power grid before detaching or re-install any parts of the equipment, disconnecting or re-connecting any electrical plugs of the equipment or performing any connection.
- Do not open the case to repair the equipment without authorization in case of any fault in order to avoid the accident or aggravate the damage of the equipment.
- Do not put any corrosive chemicals on or near the equipment.

2. Precautions for After-Sale Services

- The Company will provide the free warranty services of three years (including replacement of parts free of charge) for any quality problem occurred since the date of purchase if the user installed and operated the equipment as required and it is within the range of normal operation.
- For any warranty, the user must provide the warranty card, user's self-deposit stub invoice and sales invoice as the voucher.
- Any of the following circumstances is not included in the range of free warranty:
  1. Damage of product resulted from the incorrect installation, operation or handling;
  2. Damage of product resulted from any abnormal condition, for example, excessive power voltage or environment humidity, etc.
  3. Damage of product resulted from any natural disasters or other accidents;
  4. The serial number of the products on the shell is converted, altered or removed;
  5. The product was once repaired or modified by others rather than the authorized personnel of the Company;
- Please keep the Instructions and Warranty Card properly;
- For any question or attentions not covered in the Instructions, please feel free to contact our dealer or visit our website at: http://www.dsppatech.com.
- In case of any fault during the warranty period, please feel free to contact our service personnel or dealers for maintenance treatment. The Company will not bear any responsibility of free warranty for any damage resulted from the unauthorized demolition of the users themselves or the repair of others rather than the technical staff of the Company.

10. Packing list

PAVA8501/PAVA8500E packing list：

No.	Items	Quantity
1	PAVA8501/PAVA8500E host	1
2	Power cord	1
3	5×19 cross half-rounded head screw	4
4	Plastic washer	4
5	Certificate	1
6	Warranty card	1
7	User's manual (Only available for PAVA8501)	1
8	CB100 microphone (Only available for PAVA8501)	1
9	SY535 wire/ 3000MM/8 core network cable	1
10	SY546 wire/1500MM/6.3 pair of lotus heads	1
11	1.2m XLR (Female)-XLR(Male)	1
12	8P 3.5MM green plug	4
13	2P 5.08MM green plug	2
14	6P 3.81MM green plug with lock	1
15	3P 3.81MM green plug	2
16	6P 5.08MM green plug	8
17	8P 5.08MM green plug / 2EDGK	2
18	Audio line	1

PAVA8008 packing list：

No.	Items	Quantity
1	PAVA8008	1
2	D626C mic rod（L=415mm black)	1
3	D626C mic cap（black）	1
4	Certificate	1
5	Warranty card	1
6	Crystal Head	2
7	SY534 wire / 400MM / 8 core network cable	1

PAVA8008E packing list：

No.	Items	Quantity
1	PAVA8008E	1
2	Certificate	1
3	Warranty card	1
4	Cross recessed countersunk head screws White / 3×5	4
5	Connectors	2

PAVA8009 packing list：

No.	Items	Quantity
1	PAVA8009	1
2	Warranty card	1
3	Certificate	1
4	M4*30 Self tapping screw with cap	4
5	Plastic expansion pipe, diameter: 4MM	4
6	Crystal Head	2
7	CB100 microphone	1

Schedule: Zone Address and Dial Code Setting Comparison Table

Address	Dial Code	Address	Dial Code	Address	Dial Code	Address	Dial Code
0	00000	8	01000	16	10000	24	11000
1	00001	9	01001	17	10001	25	11001
2	00010	10	01010	18	10010	26	11010
3	00011	11	01011	19	10011	27	11011
4	00100	12	01100	20	10100	28	11100
5	00101	13	01101	21	10101	29	11101
6	00110	14	01110	22	10110	30	11110
7	00111	15	01111	23	10111	31	11111

Cautions

- Please unplug the power cord plug from the socket for the sake of safety when the equipment will not be used because the equipment is not completely disconnected from the power grid when the power switch of the equipment is in OFF state.
- The equipment cannot be subject to water droplets or splashes and any items like vases filled with water cannot be placed on this equipment.
- Do not open the cover of the machine to prevent the electric shock. If necessary, it shall be repaired by the professional with the professional certificate.
- The terminal marked with a symbol ϟ in the equipment indicates that it is dangerous and charged. The connecting operation of these terminals shall be performed by the trained staff.
- The equipment is connected with the power grid via the power cord plug, so, the connection between the equipment and the power grid can be cut off by unplugging the power cord plug in case of any fault or danger. Therefore, the power outlet is required to be mounted at a place where the plug of the power cords can be easily unplugged or plugged.

Guangzhou DSPPA Audio Co., Ltd