



INSTALLATION AND OPERATION MANUAL

Digital Voice Alarm & Evacuation System



EVAC-500/EVAC-240

EVAC-500RT/EVAC-240RT

EVAC-500FM

EVAC-500TM

EVAC-500RM

EVAC-12KD

EVAC-500SFT

CONTENTS

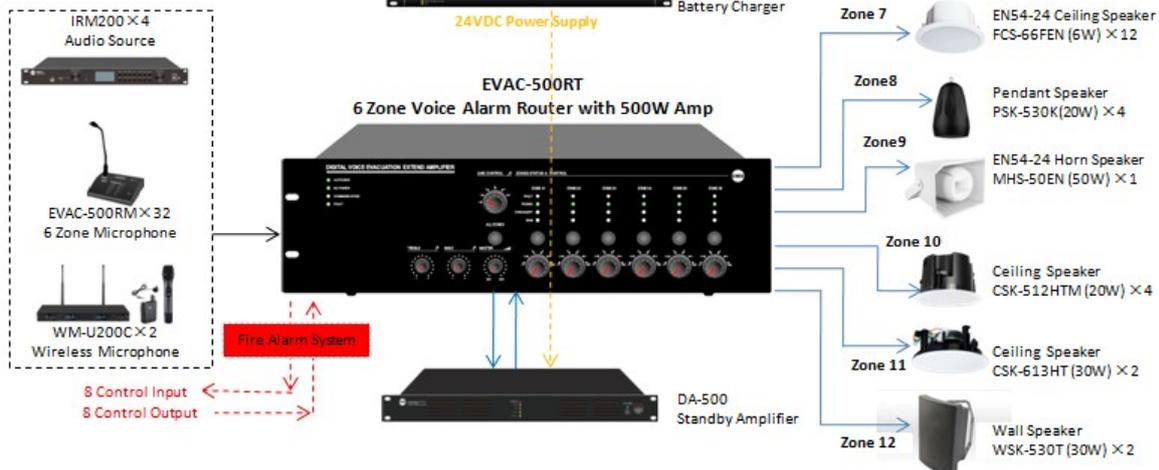
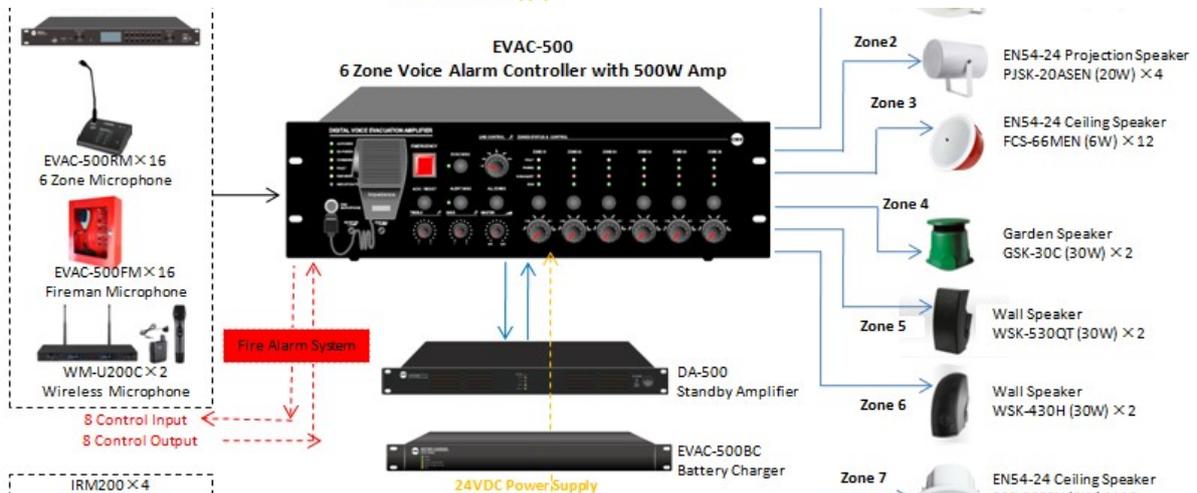
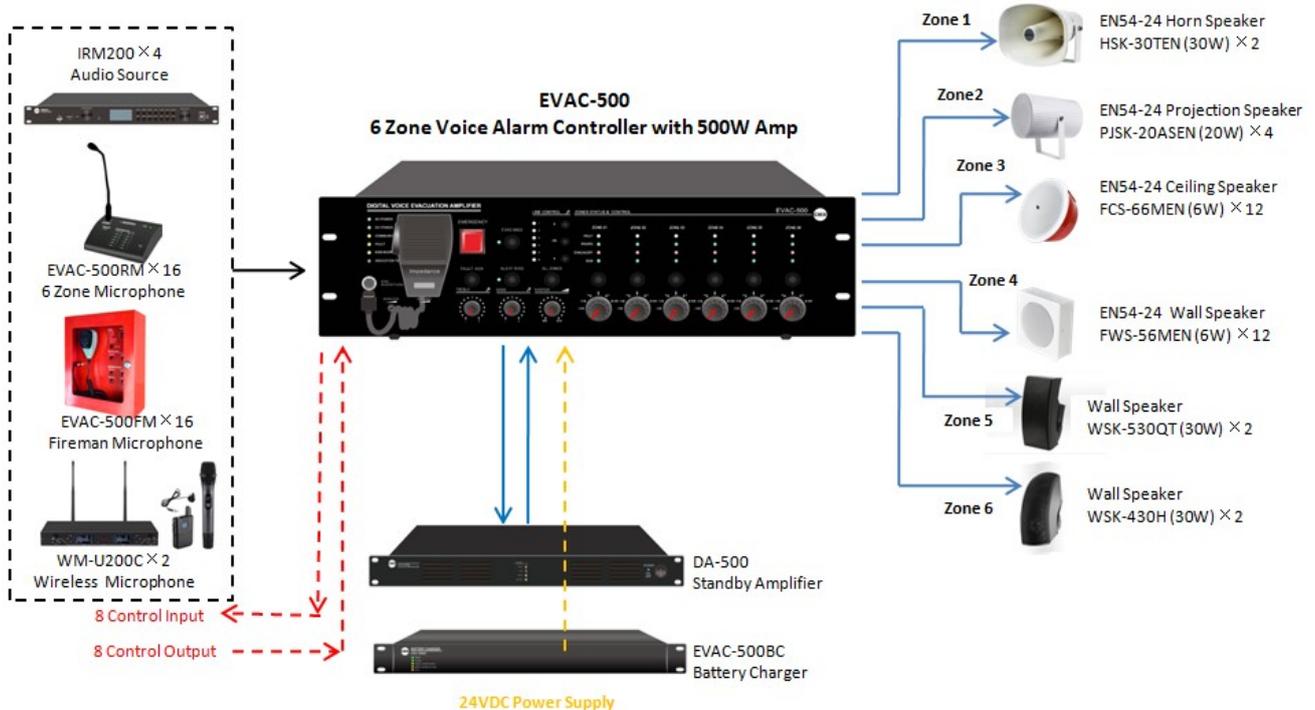
About the Manual	2
System Overview& Features & System Capacity	3
1. Host and Extension Host EVAC-500/EVAC-500RT	4-11
1.1. Front Panel	4-7
1.2. Rear Panel.....	7-9
1.3. Dipswitch Setting of Host and Extension Host.....	10
1.4. Technical Specifications.....	11
2. Fireman’s Microphone EVAC-500FM	12-15
2.1. Front Panel and Rear Panel	12-15
2.2 Technical Specifications.....	15
3. Touch Screen Remote Microphone EVAC-500TM	16-19
3.1. Front Panel and Rear Panel	17-18
3.2 Technical Specifications.....	18
3.3. System Connection Diagram Example.....	19
4. Remote Paging Microphone EVAC-500RM & Keypad EVAC-12KD	19-23
4.1. Front Panel and Rear Panel	20-22
4.2 Technical Specifications.....	22
4.3. System Connection Diagram Example.....	23
5. Overall System Operation Guidance	23-27
5.1. Background Music System Broadcast.....	23
5.2. Manual Emergency Broadcast	23
5.3. Auto Emergency Broadcast.....	24
5.4. Emergency Microphone Announcement	24
5.5. General Announcement From Remote Microphone.....	24
5.6. BGM Broadcast & Microphone Announcement from Software.....	24-28
5.6.1. Via Software BGM Broadcast.....	26
5.6.2. Via Software Microphone Broadcast	28
6. System Software EVAC-500SFT	29-41
6.1. Icon Introduction.....	29
6.2. Computer Configuration	30
6.3. Software Operation.....	31-41
6.3.1. Log In & Password.	31
6.3.2. Introcution of Menu Bar & Tool Instruction	32
6.3.3. Control Menu.	33
6.3.4. Zone Control Configuration.	33-36
6.3.5. Fire Alarm Rules Configuration	36-38
6.3.6. Zone Group Configuraiton	38-39
6.3.7. Priority Configuration.....	39
6.3.8. Log In Event Query	39
6.3.9. Others.....	40-41
6.3.9.1. Change Password.	40
6.3.9.2. Proof Host Time.....	41
6.3.9.3. Speaker Impedance Error Adjustment.	41
7. System Maintenance Notice	42
8. After Sales Service	42
9. Warranty	42

About the Manual

1. Purpose: Provide installation, configuration and operation EVAC-500 voice alarm & evacuation system.
2. Target reader: Professional technician after training of voice alarm & evacuation system.
3. Terminology

Host-EVAC-500 or EVAC-240, Extension host- EVAC-500RT or EVAC-240RT, Remote Microphone-EVAC-500RM, Touch screen remote Controller- EVAC-500TM, Fireman’s Microphone- EVAC-500FM, Keypad—— EVAC-12KD

The software of this system will be continuously upgraded, but backward compatibility. Please note the company's website real-time information.



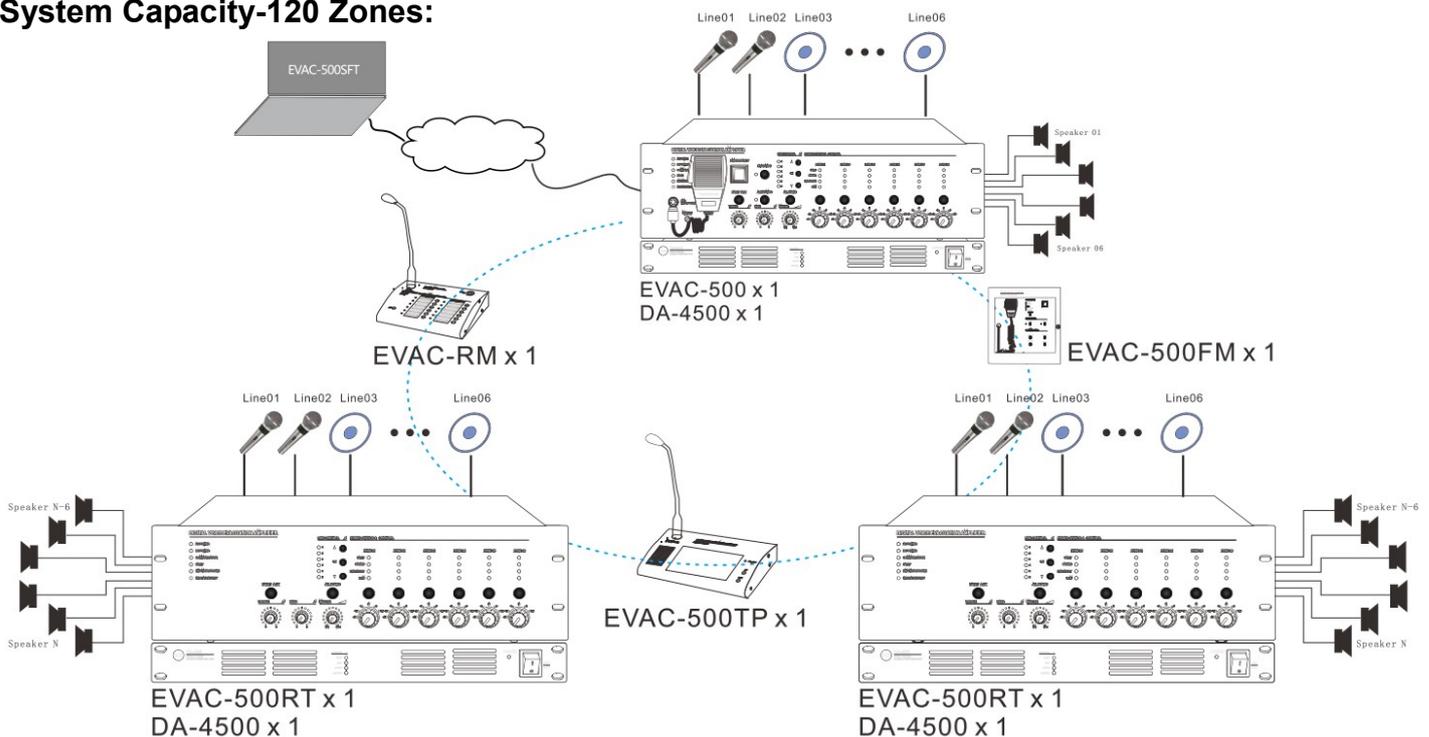
System Overview

The EVAC-500 voice evacuation system is EN54-16 certified public address & voice evacuation system. The all in one voice alarm & evacuation controller built-in remote PC software, zone paging controller, all main signal line monitoring, amplifier changeover, speaker line supervision, power supply monitoring and power amplifier, voice recorder, SD card, emergency microphone and fire alarm interface. The voice evacuation controller is innovated with DSP (digital signal processor) to ensure its hi-fi audio performance and superior signal processing in case of commercial announcement and emergency evacuation. Each controller built-in 6 zone speaker outputs, rated power output at 500W or 240W. The voice evacuation controller shall be pre-set through the supplied software over microphone number, zone number, zone loading, speaker monitoring, fire alarm mode, alert/EVAC message zone output, AC/DC etc, then synchronized the setting to master controller and router. The voice evacuation system is strictly follow the Construction products Regulation (EU) No 305/2011: EN54-16:2008 Voice Alarm Control and Indicating Equipment.

Feature:

- EN54-16 certification No. I/ISEETC. 000620190305.
- Digital voice evacuation system all in one solution.
- Integration of voice evacuation controller, remote PC software, zone paging controller, all main signal line monitoring, amplifier changeover, speaker line supervision, power supply monitoring and power amplifier, voice recorder, SD card, emergency microphone and fire alarm interface.
- Auto broadcasting EVAC and alert 256 voice messages to pre-set zones.
- Customized alert, evacuation & business message stored at SD card.
- AB speaker line surveillance to avoid any speaker line failure.
- Back-up power amplifier management.
- Up to 120 zones by cascaded more router EVAC-500RT.
- Support 32 units of remote paging microphone EVAC-500RM & EVAC-500TM.
- Support external connection of fireman microphone EVAC-500FM.
- Redundant network cabling backup through CAT6 cable loop connection.
- 8 supervised control inputs & 8 control outputs, 1 fault, 1 reset & 1 EVAC relay outs.
- Logs and fault events auto recording.

System Capacity-120 Zones:

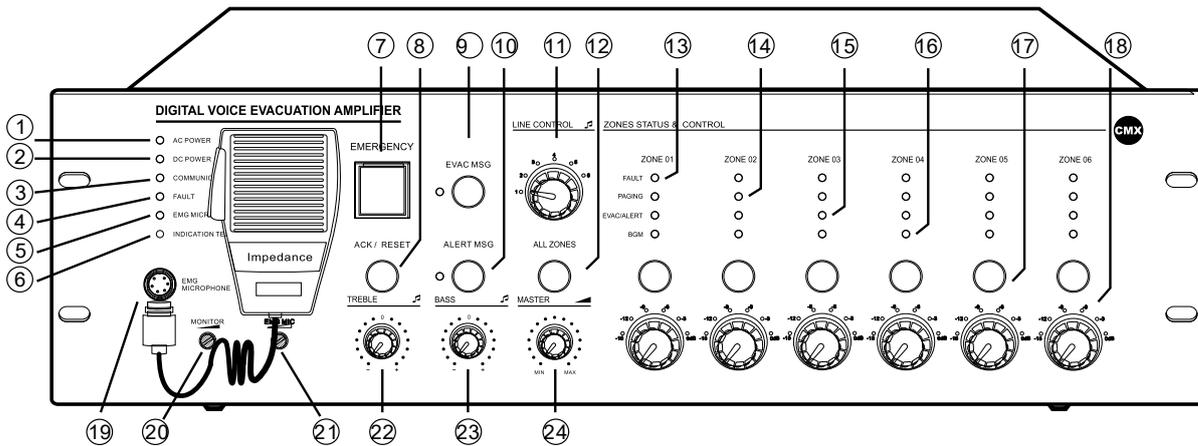


1. Host & Extension Host EVAC-500/EVAC-240 & EVAC-500/EVAC-240RT

EVAC-500 & EVAC-240 is the core of voice alarm system, built with 500W/240W digital amplifier, enable to manual or auto broadcast the emergency message, also fireman's microphone evacuation is also possible under emergency, system capacity up to 120 zones with paging and background music functions, monitoring includes amplifier failure, speaker line failure, emergency message and emergency microphone supervision.

- Emergency message format of *.wav.
- EVAC message number shall be less than 255 in the file root of "evac_message/" & "alert_message/" & "prompt/".
- Make sure the software standby amplifier configuration is same as real amplifier wiring, otherwise, the host EVAC-500 will not auto standby to backup amplifier without software correct configuration.
- 6 zone speaker outputs, each zone max power output is 500W, total 6 zone power output max is 500W.
- With 6 external microphone or line inputs for analog microphone use or external audio sources input.
- With control input and control output to inter-work with third party system.
- With 3000 events history record includes power module, fireman mic, EVAC message, amplifier & speaker line.
- System capacity of 32 units remote paging microphone up to 600 meters through CAT6 straight cable.
- System support redundancy wiring among remote paging microphone, host and extension host within 600 meters.

1.1. EVAC-500 & EVAC-500RT Front Panel



1-AC Power Indicator.

Green----means currently host AC supply normal;

Yellow----means currently host AC supply failed.

2-24V DC Indicator.

green – means current host 24V DC standby power supply is normal;

extinguish----means Current host has no 24V DC backup power supply;

Yellow----means current host 24V DC backup power failure.

3-Communication Indicator between Host and Extension Host.

Yellow----means no logical or physical connection between host and extension host;

extinguish----means no logical or physical connection between EVAC-500SFT with host;

Green----means currently device connection is normal.

4-Fault Indicator.

Off means system working well unless the dipswitch PIN of all supervision function is disable on rear panel; yellow means system fault, otherwise press “ACK/RESET” to restore the system.

5-Emergency Microphone Indicator.

Yellow----means emergency microphone lost or faulty; Green----means working well; extinguish----means microphone is normal but it is not working.

6-Indication Test Button.

Press the button to light on the LED indicators of all equipments include host, extension and paging microphone to test the indication working well.

7-Emergency Button.

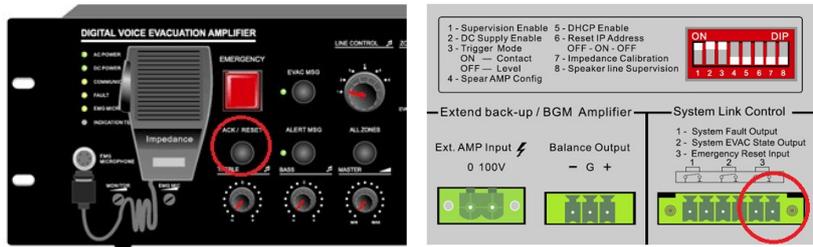
Red flash—emergency mode; extinguish--normal mode.

Making Emergency Broadcast:

- a) Emergency broadcast will be activated by manual press the button and red light flashing.
- b) Auto emergency broadcast will be activated by the trigger inputs on the rear panel of host and extension unit and red light flashing.

Reset the Emergency Mode:

- a) Press the “ACK/Reset” button on the front panel to exist the emergency mode to terminate the emergency broadcast and terminate the zone output.
- b) Input a reset signal to the emergency control input terminal on the rear panel of the EVAC-500 which has been assigned a reset function. These events history could be recorded and inquired in the software history record.



8-ACK/RESET Button

- a). If the system various modules work normal or abnormal system module diagnosis but press the button when the indicator "FAULT" light is not flashing, equipment do not do any processing,
- b). If the system module in the diagnosis of abnormal, "FAULT" of FAULT indicator light flashing, press some button, "FAULT" stopped lighting from blinking, blinking indicating its disabled state ,Buzzer to stop till To the new module detects abnormal after heavy shine again "FAULT" LED lamp and start the buzzer hint user,
- c). When the current partition has output, press the build close the current audio output, quick exit and quit play.

9 & 10-EVAC MSG & ALERT MSG

Green——“EVAC MSG/ALERT MSG” Voice is in broadcast information; Yellow——“EVAC MSG/ALERT MSG” Lose voice information or loss SD card; Extinguish—— “EVAC MSG/ALERT MSG” Normal.

Note: 1."EVAC voice information" refers to the EVAC voice ALERT and voice; 2. If you need to manually play EVAC voice messages, Need to enter the emergency mode, Then press the voice messages button; 3. System default “EVAC” Voice priority is higher than "ALERT". Can change the priority through the EVAC - 500 SFT configuration..If not special application requirements, please do not change it.

11-Line Input Selector

Mainly used to select the external line input to this host or extension.

Only the host audio tracks can be output to the extension of the host while line extension of the host audio won't scale

output to other host;

The host line audio can be controlled by EVAC - 500 SFT or EVAC - RM/RME and EVAC-500FM/EVAC-500TP.

Note: The choice of the current user can be seen through the EVAC - 500 SFT interface. To change the different audio output, only through use to choose from the panel.

12-All Zones

To select all six zone outputs open or close at the same time.

13-Zone Fault Indicator.

Yellow-The current partition A and B or A or B speaker impedance change, may be open or short circuit. Extinguish-The current speaker zone loop impedance changes within the impedance of the speaker when it was pre-set.

Note: When the host or extension host access system according to the project wiring work needs a resistance to proofread before obtaining the loop impedance value of the current speaker, please follow below steps:

Unplug the host back row ID switch. 7, Until hear buzzer ring alternately or see panel lights flashing after "FAULT" then, Put the 7th ID switch it on. When the speaker circuit impedance change more than the current host or extend the host for the impedance value plus or minus 10% ~ 10% Will record the current changes and inform the user in the form of light. Zone detection sensitivity is more than 20W

14-Paging Indicator.

When paging, can manually close the zones where no need paging or add new zones.

15-EVAC/ALERT Indicator.

When EVAC and alert emergency broadcast is working, the indicator will be light on.

16-BGM Indicator.

When background music broadcast is working, the indicator will be light on

Note: Manual broadcast voice messages need choose audio first, then, choose output zone, For example, if you want output line 3 in 3rd zone, you can choose line 3 audio then choose 3rd zone. You also can choose 3rd zone, then, choose line 3. Two ways are the same, normally, we choose zone firstly, then choose audio. In this way, each zone will output audio at the same time, We also can control different zones from the EVAC - 500 SFT operation.

17-Zone Selector.

To select individual six zone output open or close.

18-Zone Output Attenuator.

Increase or decrease the individual zone speaker output loudness at 6 levels and max control of -15dB.

19-Emergency Microphone Input.

Input for the emergency microphone or fireman microphone of priority.

20-Monitor Speaker Attenuator.

Increase or decrease the built-in monitor speaker loudness.

21-Emergency Microphone Gain Control.

It is used to adjust the emergency microphone input sensitivity.

22-Treble Control.

Increase or decrease the overall treble output.

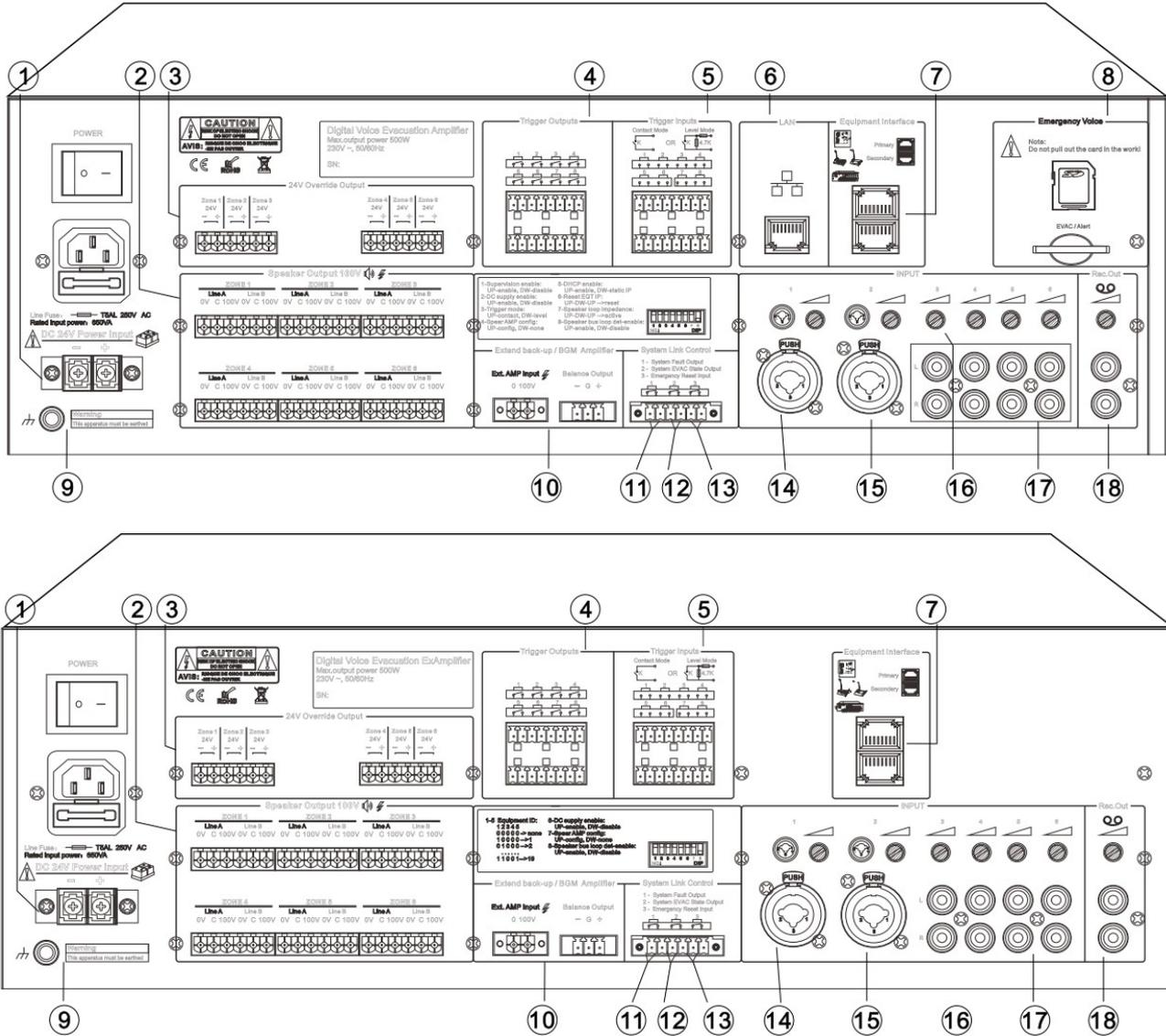
23-Bass Control.

Increase or decrease the overall bass output.

24-Master Volume Control.

Increase or decrease the overall master volume output.

1.2. EVAC-500 & EVAC-500RT Rear Panel



1-24V DC Power Input.

24V DC input for sealed lead-acid battery, UPS or equivalent product;

Note:

1. Use EN54-4 certificated power supply when EN standard required.
2. Do make sure the 24V DC could meet the minimum working current of the host. For example, full loading of EVAC-500 at 500W, the lead-acid battery shall supply the current higher than 27A, battery capacity higher than 27Ah and working time shall be full loading*27Ah*1.2 hours.

2-Six A&B Speaker Zone Output

- ◆ external constant voltage transformer loudspeaker and 3 wired volume control;
- ◆ output voltage is: 0 ~ 100 v;

Note: Note: please connection at least one zone of speaker circuit after completing the wiring. It will be OK when not all speaker zones output are connected with speakers. Please also ensure the total speaker loading is less than 80% of the host built-in amplifier loading.

3- Six 24V Relay Output

- ◆ external four wire system programmable;
- ◆ rated output current for each road: 0.2 A;

Note: output shall not be greater than the total power 28 w;

4-8 Program Control Outputs.

These outputs usually shall be keep open, which could be programmed in the software to activate it or terminate it auto or manually.

5-8 Program Control Inputs.

These inputs usually shall be keep open, which could be programmed in the software to activate it or terminate it auto or manually.

6-LAN Input for PC Software.

It is mainly used to connect to EVAC-500SF for setting, program and manual operation.

Note:

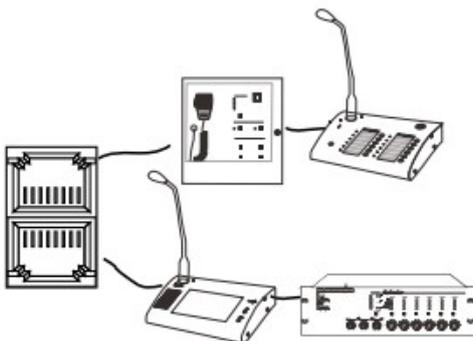
- 1) Default IP address: 192.168.1.168, Communication port number: 16888.
- 2) Reset the IP address to default by enable & disable once time the dipswitch 6th PIN on the rear panel of host.
- 3) If you dislike the default IP address, please up the 5th dipswitch to open DHCP function. Make sure your network router opened up the DHCP function. This function is mainly used to upgrade new features to use in the future, the current system before unplug ";
- 4) Support PC software directly connection to EVAC-500, automatic identify cross and straight cable. All communication cable shall be meet TIE/EIA-568B standards including connection to extension and remote paging microphone.

7- Two RJ45 Communication Ports.

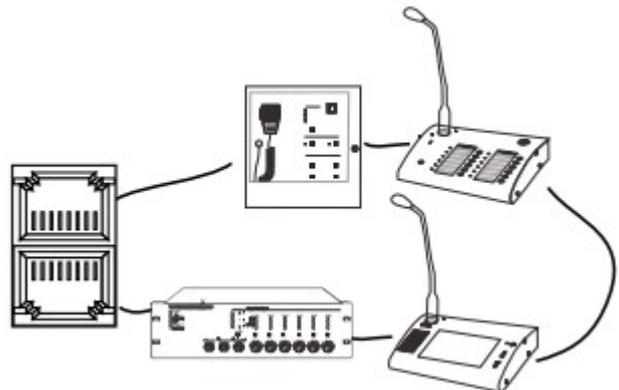
Use straight CAT6 cable to connect the extension controller EVAC-500RT to the host, system capacity of 19 units extension and communication distance is up to 600 meters. Support microphone loop connection or star connection as above remote paging microphone pictures, the system software will auto distinguish different kinds of cable connection.

- ◆ Also connection ports for extend EVAC-500RM/EVAC-500FM/EVAC-500TM/EVAC-500RT
- ◆ support loop connection or start connection(as shown in the figure below), automatic identification of software - to maintain the operation of the system is reliable & stable recommend to use the loop connection.

Closed or loop connection mode

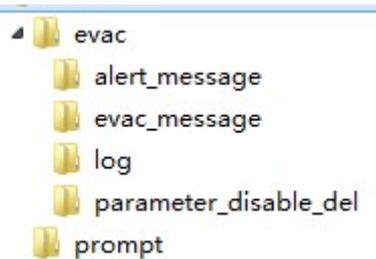


Star connection



8- Evacuation Message SD Card.

The emergency message memory card is real time monitored, tested memory capacity of 32G, never plug out this card during work, otherwise the event record and program will be lost. The root of emergency message as below picture, there is each one Alert and EVAC default messages, edit, add or delete or replace these messages are possible done by professional technician, these messages will be real time supervised. "Log" file is log in event record, which could be inquired or download in software EVAC-500SF. "Prompt" means chime before announcement, so customized chime could be replaced the default one in EVAC-500RM, this chime message is not real time monitored, only will be reviewed once after power on, so no chime or file lost will be not warned as fault. Max message number is 255.



9-Ground Earth Line

Please connect this earth line to the ground for safety use.

10-Backup power amplifier interface

- ◆ power signal inputs of 100V or 70V,
- ◆ "audio signal output shall be balanced

11-System Fault Output

- ◆ In case of any fault for the system, this output will closed circuit to trigger output and normally default is open circuit.

12-System EVAC State Output

- ◆ In case of EVAC, the output will closed circuit to trigger output and normally default is open circuit.

13-Emergency Reset Input (Longer than or equal to 0.5S relay closed-circuit input, used to connect CIE device and realize the on-line control)

- ◆ In case of emergency, use one closed circuit input to reset it to back to normal status
- ◆ When it is operated in a normal mode, it is not processed and ignored.

14 & 15-MIC/LINE Input

- ◆ Balanced MIC/LINE 1-2 Inputs by COMBO type

16-MIC/LINE Input Gain Control

Please change the gain to match with microphone or line input, since their sensitivity is different, so as to avoid any noise.

17- Line Input 3-6

Stereo line input from audio sources player for background music system use, **each input with gain control.**

18-REC Out

- ◆ Output to recorder and External amplifier, with gain control. Please make sure the output audio volume big enough and non-distorted.

1.3. Dipswitch Setting of Host & Extension Host

1.3.1. Host Configuration Dipswitch (UP means “ENABLE” and DOWN means “DISABLED”)

- ◆ 1 - “Supervision Enable” means to on/off the system all supervision or monitoring functions, we suggest to disable or off it during test or before full system wiring, please on this dipswitch after full wiring and software program.
- ◆ 2 - “DC Supply Enable” means the host or extended host whether has been 24V DC power supply, if yes, please program it in the software and on this dipswitch, otherwise, please off this dipswitch. The system host will be fault if software program is not consistent with 24V DC power supply conditions.
- ◆ 3 - “Trigger Mode” here is used to select the two way control inputs whether by closed control input or level control input. “ENABLE”, means by the relay closed control input, “DISABLED” means the by way of level control input.
- ◆ 4 “Spare Amp Config” means the host or extended host whether has been configured with standby power amplifier, if yes, please also program it in the software, thus when the host amplifier failure, the standby amplifier will automatically backup the main amplifier failure, since the host built-in auto amplifier failure changeover.
- ◆ 5 - “DHCP Enable” refers to selection mode of host IP address. “ENABLE” means the IP address of host will use the IP address automatically allocated by the router, and “DISABLED” means that the host will use the static IP address;
- ◆ Consult the above “6 – Ethernet Port”;
- ◆ 6 - “Reset IP Address” means to reset the host IP address from its default IP address 192.168.1.168, and port number is 16888. Only ensure the software PC’s IP address is same gateway with the host IP address, thus the communication and program could be well done.
- ◆ 7 - “Impedance Calibration” means to calibrate the zone speaker loading impedance, after the software program of speaker impedance value and fluctuation percentage, then the system host will activate the speaker zone impedance surveillance, once there is zone speaker impedance change because of short circuit or open circuit, the host and software both will be failure warning. Please ensure that the current speaker zones are all closed while calibrating the modeling;
- ◆ 8 - “Speaker Line Supervision” to on/off the zone speaker supervision or monitoring.

1.3.2. Extended Host Configuration Dipswitch (UP means “ENABLE” and DOWN means “DISABLED”)

- ◆ 1 - “1-5 Equipment ID” these 5 pin of dipswitch is used to set up the different ID of extended host. (00000 means non-configured, 00001 means 01 extended host, 00010 means 02 extended host).
- ◆ 6 - “DC Supply Enable” means the host or extended host whether has been 24V DC power supply, if yes, please program it in the software and on this dipswitch, otherwise, please off this dipswitch. The system host will be fault if software program is not consistent with 24V DC power supply conditions.
- ◆ 7 - “Spare Amp Config” means the host or extended host whether has been configured with standby power amplifier, if yes, please also program it in the software, thus when the host amplifier failure, the standby amplifier will auto backup the main amplifier failure, since the host built-in auto amplifier failure changeover.
- ◆ 8 - “Speaker Line Supervision” to on/off the zone speaker supervision or monitoring.

1.4. Technical Specifications

Model		EVAC-500/EVAC-240	EVAC-500RT/EVAC-240RT
Description		Host	Extension Host
AC Electrical Part	Power Supply	AC220V-250V, 50/60Hz	
	Power Consumption	650W	
	Max Current	<3A	
	Fuse	250V/5A, low speed type	
DC Electrical Part	Power Supply	24V DC, 20V-27.5V	
	Max Current	<27A	
Emergency Microphone	Sensitivity	5mV	
	Impedance	600Ω	
Line Input 1-6	THD	<1%, at rated power output, 1kHz	
	Sensitivity	775mV	
	Impedance	10kΩ	
	S/N Ratio	>70dB	
Control Input & Output	Fault Output	Closed circuit, no voltage	
	EVAC State Output	Closed circuit, no voltage	
	EVAC Reset Input	Closed circuit, no voltage, T>0.5s	
	8 Program Control Output	Closed circuit, no voltage	
	8 Program Control Input	Way-1: Closed circuit, no voltage Way-2: Level input and max 3.3V	
Emergency Message	Format	WAV	
	Memory Card	SD memory card	
	Capacity	32G	
	Message No.	255 Max	
	Period	10 years	
	SD card	FAT/FAT32	
Log Event	Format	HEX	
	Storage Way	Nand Flash	
	Event No.	1000	
	Period	10 years	
Working Environment	Operation Temp	+5℃ ~ +40℃	
	Storage Temp	-20℃ ~ +70℃	
	Relative Humidity	< 95%	
Mechanical Spec	Dimension	484x132x405mm	
	Net Weight	11.2kg	
	Rack Mount	19" rack mount type	
	Finish	Aluminum plate and metal case in black	

2. Fireman's Microphone——EVAC-500FM

Feature:

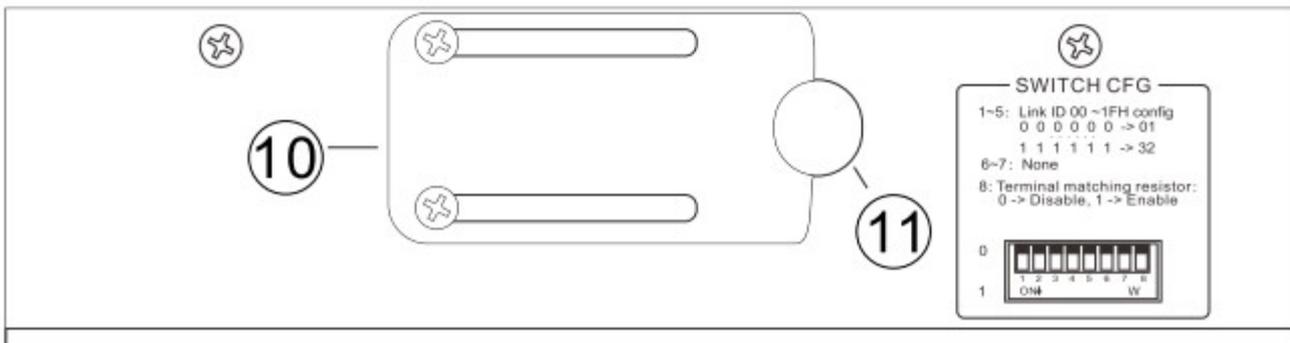
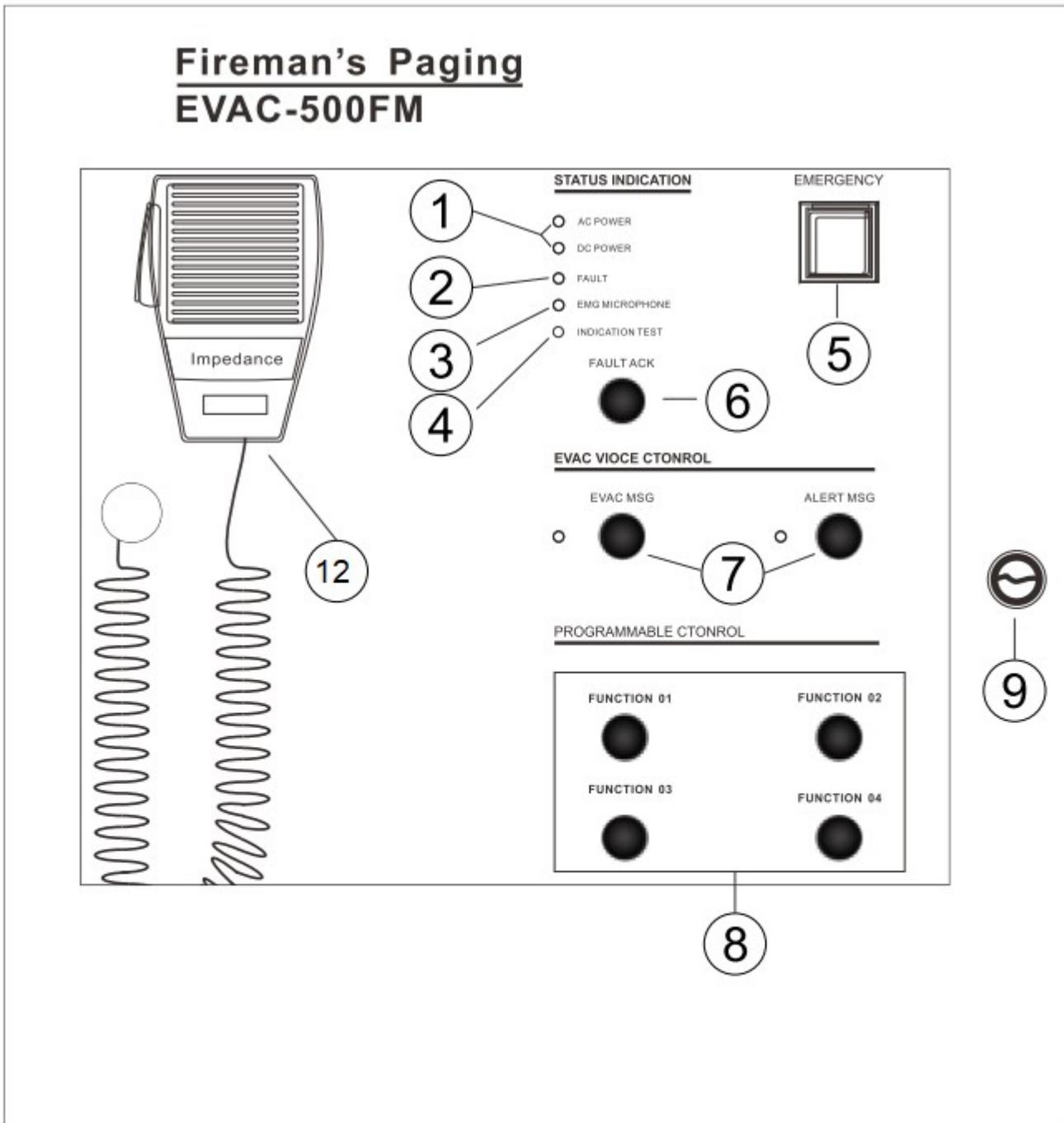
- Fireman's microphone as remote control of voice evacuation system EVAC-500.
- EN54-16 Certified fireman's microphone.
- Emergency (EMG) microphone with priority.
- EMG state and fault visual indicators.
- The fireman's microphone unit is fully real time monitored.
- Four programmable buttons and EVAC/Alert.
- Remote pre-recorded message broadcast in case of emergency.
- Support DC 24V phantom power supply from the controller.
- With AC, DC, fault, MIC and indication test four indicators.
- With emergency activation button for all zone EVAC operation.
- Communication distance up to 600 meters.
- Communication with controller through CAT6 cable loop redundancy connection.
- Each voice evacuation system supports 32 units of fireman microphone maximum.
- With lock and key to ensure access permission.



Description:

The EVAC-500FM fireman's microphone is EN54-16 certified and designed exclusively for EVAC-500 public address & voice evacuation system. The fireman's microphone is a surface mounted cabinet containing a first help and echo cancelling microphone, state indicator, pre-recorded message announcement and live announcement. The fireman's microphone is typically used in case of emergency to help the fireman to enter or acknowledge the emergency state, and acknowledge and reset the fault state. Emergency or alert pre-recorded messages can be broadcasted to pre-assigned zone or all zone, and fireman live calls can be made with priority. The fireman's microphone is a remote control that has dedicated buttons and indicators for fireman's operation only. The remote control has no zone selection but with programmable buttons. Four LED indicators show the EVAC status and calls that are active in the system. The fault indicators show detailed information of a fault in the system. Connection to the Voice Evacuation System is via standard, shielded CAT-6 cable and RJ45 connectors in a redundancy loop up to 600 meters. The wall mount type fireman's microphone is suitable for indoor & outdoor both applications. The voice evacuation system is strictly follow the Construction products Regulation (EU) No 305/2011: EN54-16:2008 Voice Alarm Control and Indicating Equipment.

2.1. Front Panel and Rear Panel:



1—Power Indicators

1). AC POWER:

- Yellow —— The system has equipment, but AC power failure;
- Green —— The system has equipment and AC power is normal;

2). DC POWER:

- Yellow —— The system has equipment, but DC power failure;
- Green —— The system has equipment and DC power is normal;

2— Fault indicator

Yellow (NO SPARKLING)——Indicates that the current equipment or system has equipment module failure, The user has identified the fault, Pls click “FAULT ACK”.

Yellow (SPARKLING)—— Indicates that a new fault exists in the device, To inform the user, At this point the user is not confirmed.

Distinguished indicators—— All modules of the system work normally.

3— Emergency Microphone indicator

- Yellow —— Means fault;
- Green —— Means working;
- Distinguished indicator —— Means communication is normal;

4— Indication Test

- ◆ In any state, Press the test indication button on the host, the light on the LED will be lighted up. It is used to confirm whether the LED is working properly;

5—Emergency Button

Red flash—emergency mode; extinguish--normal mode.

Making Emergency Broadcast: a) Emergency broadcast will be activated by manual press the button and red light flashing. b) Auto emergency broadcast will be activated by the trigger inputs on the rear panel of host and extension unit and red light flashing.

Reset the Emergency Mode: a) Press the “ACK/Reset” button on the front panel to exist the emergency mode to terminate the emergency broadcast and terminate the zone output. b) Input a reset signal to the emergency control input terminal on the rear panel of the EVAC-500 which has been assigned a reset function. These events history could be recorded and inquired in the software history record.

6— FAULT ACK

- a). If the system various modules work normal or abnormal system module diagnosis but press the button when the indicator "FAULT" light is not flashing, equipment do not do any processing;
- b). If the system module in the diagnosis of abnormal, "FAULT" of FAULT indicator light flashing, press some button, "FAULT" stopped lighting from blinking, blinking indicating its disabled state, Buzzer to stop till To the new module detects abnormal after heavy shine again "FAULT" LED lamp and start the buzzer hint user;
- c). When the current partition has output, press the build close the current audio output, quick exit and quit play;

7—EVAC MSG & Alert MSG

Green——“EVAC MSG/ALERT MSG” Voice is in broadcast information; Yellow——“EVAC MSG/ALERT MSG” Lose voice information or loss SD card; Extinguish—— “EVAC MSG/ALERT MSG” Normal.

Note: 1."EVAC voice information" refers to the EVAC voice ALERT and voice; 2. If you need to manually play EVAC voice messages, Need to enter the emergency mode, Then press the voice messages button; 3. System default “EVAC” Voice priority is higher than "ALERT". Can change the priority through the EVAC - 500 SFT configuration. If not special application requirements, please do not change it.

8—Four Function Button & Indicators

Light on means working. Flash means zone has been selected. Extinguish means no working.

9— Lock with Key

10 & 11— Cable Outlet

12—ID Configuration Dipswitch.

Upward means enable and downward means disable. 1st to 5th PIN means ID of binary system. 6th PIN upward means normal paging mode and downward means PPT paging mode. 7th PIN upward means individual zone and downward means group, group could be defined with multiple zones. 8th PIN is indication test, downward means start the LED indication test, all LED indicator will be from red-green-yellow then to normal state. Below is example of remote paging mic ID from No 1 to No 4.



2.2. Technical Specifications

✧ Electric Part

Phantom Power

Voltage	20V ~ 27.5V
Maximum Current	Less than 0.2A (24V power supplier, all the LED on the front panel will be lighted up, it is paging state)
Power Consumption	Less than 3W

Performance Index

MIC

SPL	30mV
-----	------

Mechanical Specifications 300* 300 * 107 mm

N.W.	3.9KGS
Installation	Wall Mount Type
Color	Red

✧ Environmental Requirement

Operating Temperature	+5°C ~ +40°C
Storage Temperature	-20°C ~ +70°C
Relative temperature	<95% (without condensation)

3. Touch Screen Remote Microphone——EVAC-500TM

Feature:

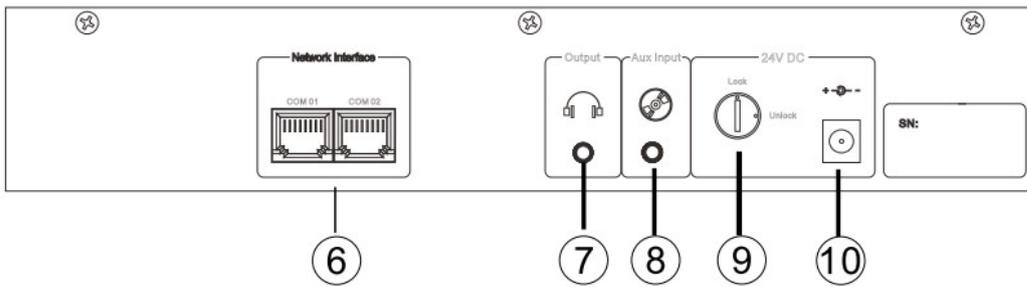
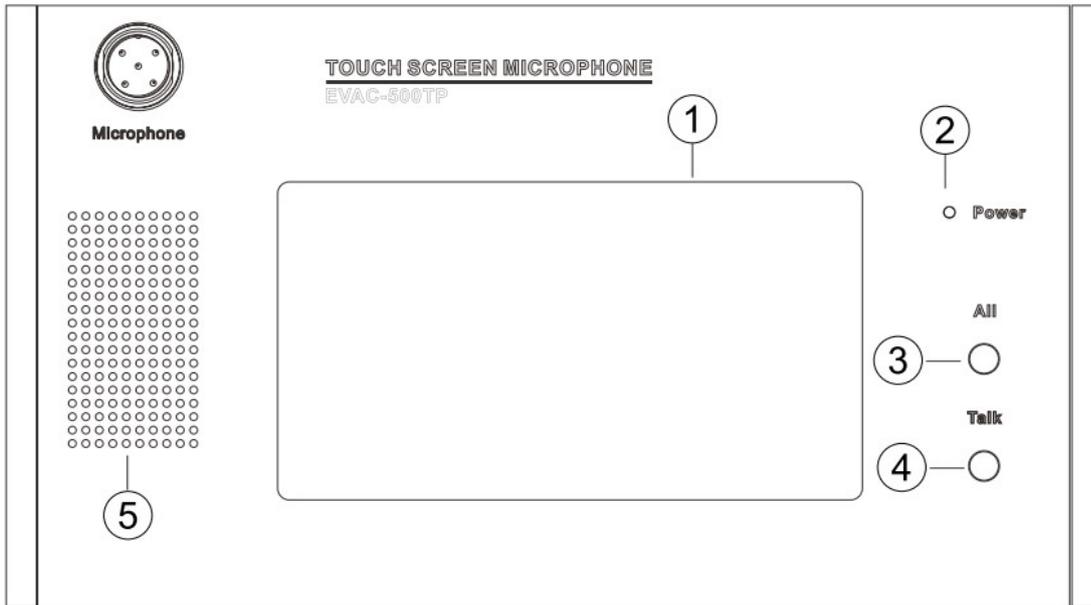
- Touch screen remote microphone or call station
- EN54-16 Certified remote microphone
- Business & commercial zone live announcement use
- Multiple zones, single zone & all zone paging
- Each microphone of 120 zone capacity
- Support 32 remote microphones of loop redundancy connection
- The remote microphone unit is fully real time monitored
- Support PPT and lock type two modes
- Shielded CAT-6 cable up to 600 meters
- Power supply from EVAC-500 controller



Description:

The EVAC-500TM touch screen remote microphone is EN54-16 certified and designed exclusively for EVAC-500 public address & voice evacuation system. The remote microphone is used for business and commercial live announcement to selected zones or all zones. The remote microphone is designed of 120 zone with busy & working indicators. Up to 32 units of remote microphone could be connected to the voice evacuation system via shielded CAT6 cable and RJ45 connectors in a redundancy loop up to 600 meters. The talk button maybe a PTT or lock type pre-set by the dipswitch on the rear of the microphone. Green LED indicates the microphone and zone active status. The remote microphone is 24VDC powered by the EVAC-500 controller. The voice evacuation system is strictly follow the Construction products Regulation (EU) No 305/2011: EN54-16:2008 Voice Alarm Control and Indicating Equipment.

3.1. Front and Rear Panels



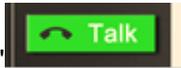
1—HD display

2— Power indicator

3— All Zone

- ◆ Select all zone for paging methods:
 1. Users can choose all zone button on the LCD display
 2. The user can select the all zone button

4—Talk button

- ◆ When the user confirms the selection of the zone, press this talk button on LCD screen " " or press talk button to make announcement;
 Note: When the gooseneck is ready for talk, there is round ring indicator will be illuminated.

5— Monitor speakers

- ◆ :



Used to monitor the user's current paging sound, this output can be closed and open through the interface and the volume is adjustable, as shown below:

6— Two RJ45 Communication Port with Host

There are two RJ45 communication ports, one for host and the other port is for next remote microphone hand-in-hand connection or loop connection back to the host for redundancy connection. For these two RJ45 ports, there is no distinction between the primary and the secondary port.

7— Monitor output

- ◆ This monitor output has priority over the built-in monitor

8— Line input

- ◆ This is used to input external audio source player instead of MIC output audio, while the presence of line input priority;

9— Main power switch on/off

10—External 24V DC Power Supply Input

Note: When the device and the host communication distance is longer than 100m, please use external power supply, specifications: 24VDC / 1A.

3.2. Technical Specifications

◇ **Electrical Specifications**

Phantom power

voltage	20V ~ 27.5V
maximum current	less then 0.5A (24VDC, front panel LED lighting, Paging state)
Power consumption	less than 7W
performance index	
line input	
sensitivity	775mV
impedance	10kΩ
SNR(Signal to Noise Ratio)	>70dB

MIC

sensitivity	50mV
-------------	------

◇ **Mechanical Specifications**

◇

Dimension	282* 153 * 52 mm
N.W.	about 1.3kg
Install	Tabletop
Color	Black

◇ **environmental requirement**

Operating temperature	+5°C ~ +40°C
Storage temperature	-20°C ~ +70°C
Relative temperature	<95% (without condensation)

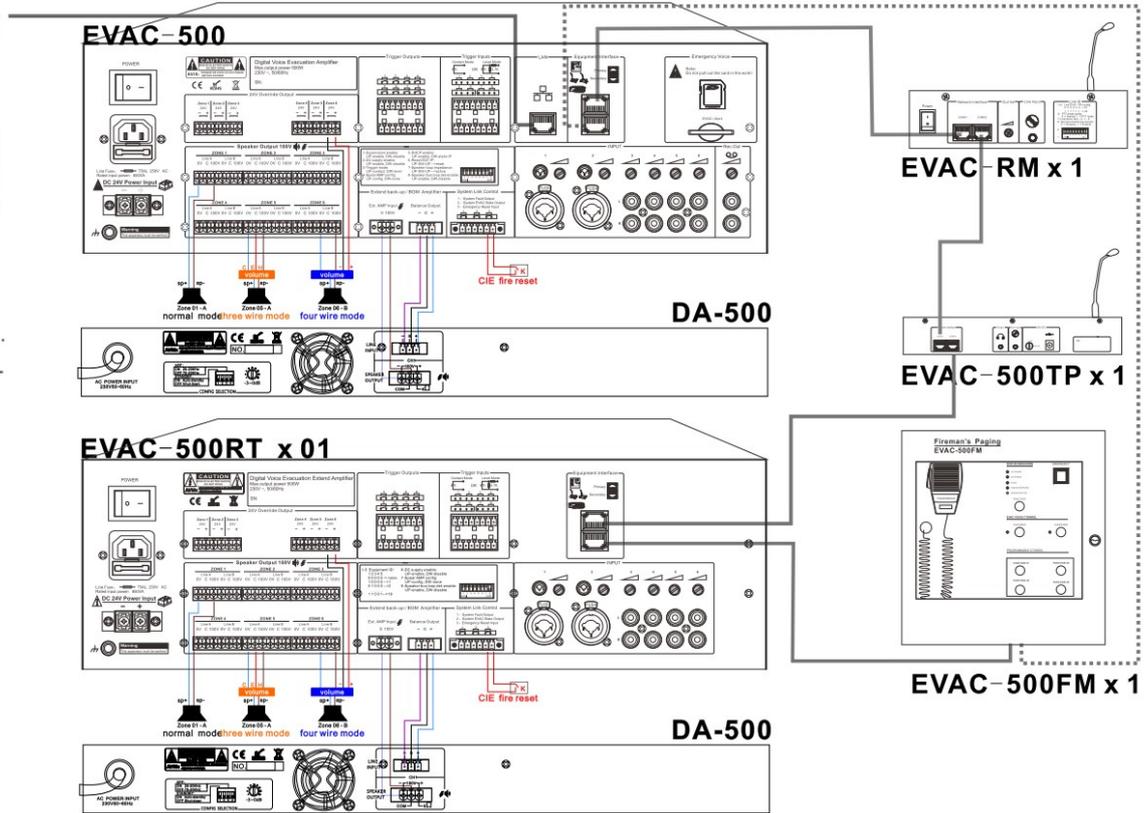
3.3. System Connection Diagram Example:



EVAC-500SFT

- NOTE:
1. Redundant cable
 2. CAT-5 STP/UTP cable
 3. Trigger inputs mode table:

Level Mode	FA	CABLE	EVAC-500RT	
	4K7	K2	K3	MCU detection
	K1	4.7K		
logic status	K1	K2	K3	Status confirmation
	0	1	0	NORMAL
	x	1	1	SHORT
	x	0	0	OPEN
	1	1	0	TRIGGER



4. Remote Microphone and Keypad—EVAC-500RM & EVAC-12KD

Feature:

- Remote microphone or call station of voice evacuation system EVAC-500.
- EN54-16 Certified fireman’s microphone.
- Business & commercial zone live announcement use.
- Multiple zones, single zone & all zone paging.
- Each microphone of 12 zone capacity.
- Up to 120 zones by cascaded the zone keypad EVAC-12KD.
- Support 32 remote microphones of loop redundancy connection.
- The remote microphone unit is fully real time monitored.
- Support PPT and lock type two modes.
- Shielded CAT-6 cable up to 600 meters.
- Power supply from EVAC-500 controller.

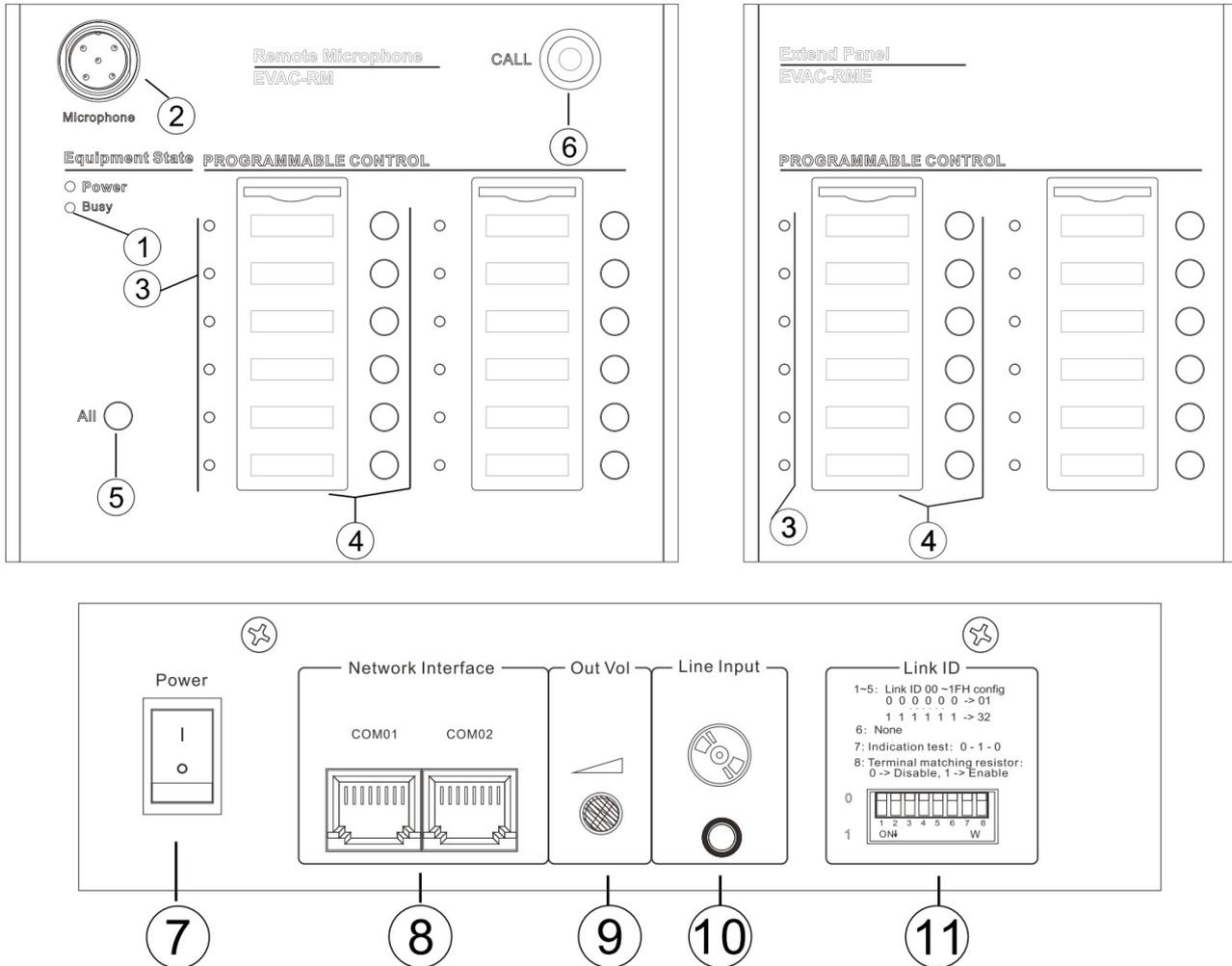


Description:

The EVAC-500RM remote microphone or call station is EN54-16 certified and designed exclusively for EVAC-500 public address & voice evacuation system. The remote microphone is used for business and commercial live announcement to selected zones or all zones. The remote microphone is designed of 12 zone buttons with busy & working indicators. One or multiple external 12 zone expansion keypad EVAC-12KD could be cascaded together for up to 120 zone operation. Up to 32 units of remote microphone could be connected to the voice evacuation system via standard, shielded CAT-6 cable and RJ45 connectors in a redundancy loop up to 600 meters. The talk button maybe a PTT or lock type pre-set by the dipswitch on the rear of the microphone. Green LED indicates the microphone and zone

active status. The remote microphone is 24VDC powered by the EVAC-500 controller. The voice evacuation system is strictly follow the Construction products Regulation (EU) No 305/2011: EN54-16:2008 Voice Alarm Control and Indicating Equipment.

4.1. Front Panel and Rear Panel



1—Busy indicator

- ◆ Green - the equipment is busy, please wait;
- ◆ Off - normal state, can be used to call or control the specified partition;

2—Microphone XLR Socket

- ◆ Connection with the supplied gooseneck microphone.

3—Zone Status Indicator

- ◆ On - indicates that its current partition is in working condition;
- ◆ Flashing - indicates that the user is currently selecting this partition;
- ◆ Off - indicates that the partition is currently not working, handle the standby state;

4— Zone Name Card Insert

- ◆ Here the user can print and insert the paper name card to indicate each zone.

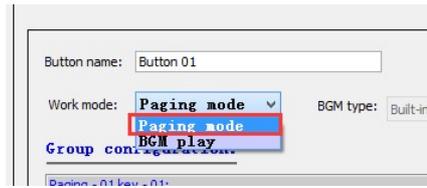
5— All Zone

- ◆ Used to select all current zones;

Description:

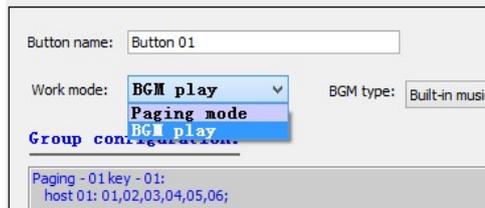
1. Paging mode”

Select all keys that are configured as Paging mode, as shown in the following figure:



2. “BGM play” ——:

If the corresponding key is configured as "BGM play" - this key is disabled: as shown below:



6—Talk On/Off Button

- ◆ On/off the microphone to start paging or finish paging or announcement.

Notes:

1. When it is paging, the current paging will be ended by pressing this key;
2. When there is no paging but the zone is selected, it will begin the paging by pressing this key (it will wait for the ON of the microphone light);

Attentions:

When the MIC is operated in the PTT mode, this key shall be always pressed for a paging operation; otherwise once button is released, the paging will end (PTT mode refers to the description in the later “11”).

7— Main Power switch to on/off the power supply for this microphone

8— Two RJ45Network Interface

- ◆ There are two RJ45 communication ports, one for host and the other port is for next remote microphone hand-in-hand connection or loop connection back to the host for redundancy connection. For these two RJ45 ports, there is no distinction between the primary and the secondary port.

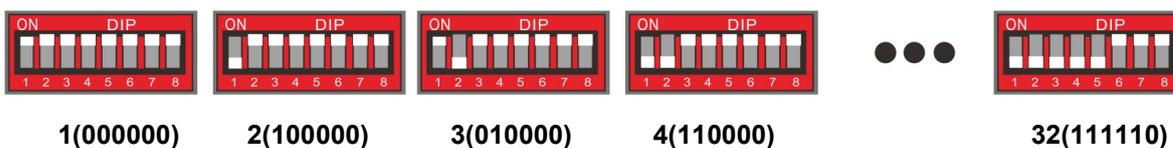
9— MIC Output Volume, to increase or decrease the microphone loudness.

10—Line input

- ◆ This is used to input external audio source player instead of MIC output audio.

11—ID Configuration Dipswitch

- ◆ "1 ~ 5" – the first 5 dipswitch is used to configure the ID address of the microphone as following rules (the device ID1 ~ 5 binary value)



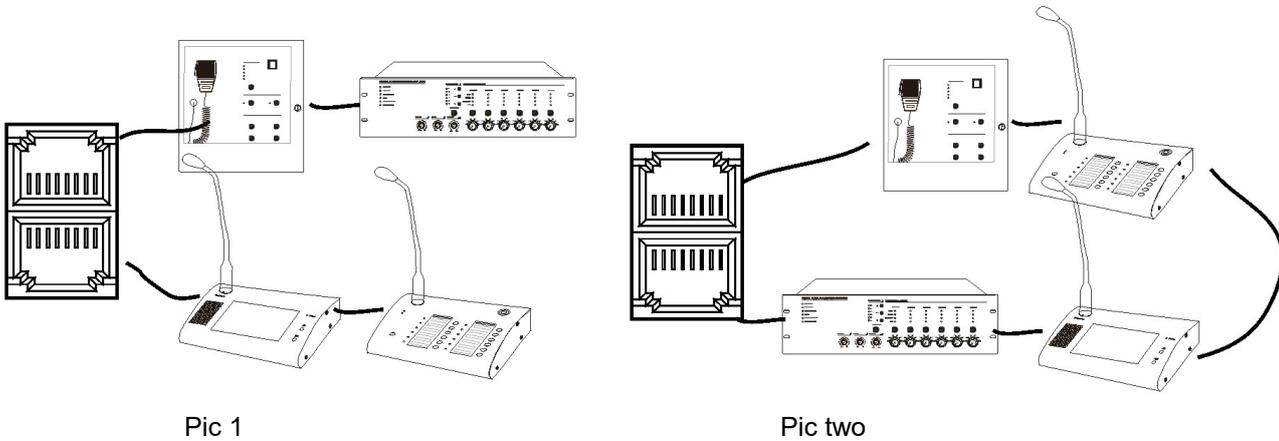
“6” Reserved PIN, non-functional, so no need to change or program.

“7”: Indicator test dipswitch is used to test all “LED” on the microphone panel (please keep it PULL-UP if it is normal).

When the 7th dipswitch is PULL-down, all LED lights on the panel will automatically restore to their normal display states after lighting in an order of Red → Green → Yellow. It is used mainly to test whether the display of LED lights is normal or not.

“8” — Device terminating resistance control, used to ensure the microphone line always monitored.

◆ Please refer to the following connection:



- Note:**
1. If the EVAC-500FM, EVAC-500RM, EVAC-500TM or EVAC-500RT can not communicate with the host (EVAC-500) normally, enable the EVAC-500RM terminating resistor, That is, unplug the "8" bit, prohibit the working of EVAC-500FM or through the touch interface to open the EVAC-500TP terminal matching resistor, by this way the system connection can be non-loop;
 2. Similar to the "Pic Two" of the loop connection, it is need to prohibit all external devices terminal resistance, so the system loop connection is recommended for more stable performance.

4.2. Technical Specification

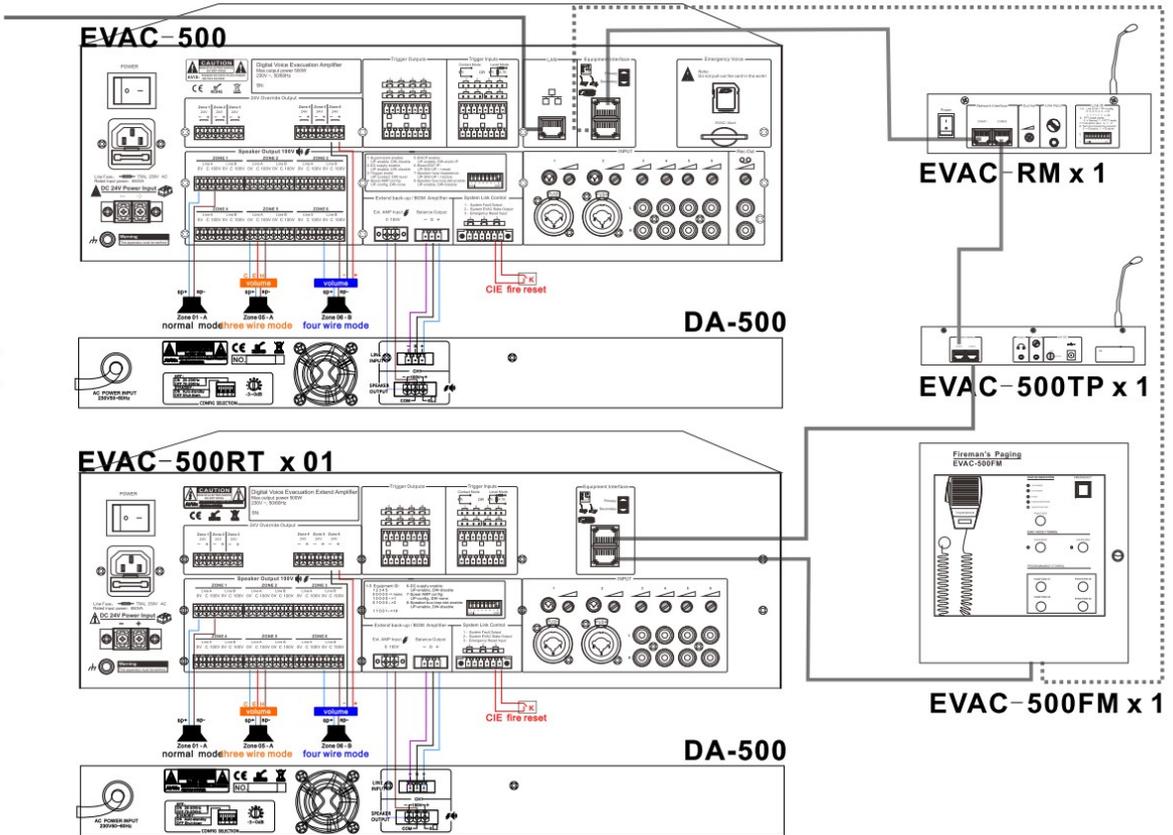
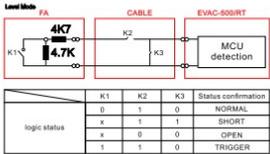
Model	EVAC-500RM	
Description	Remote Paging Microphone	
System Capacity	32 units	
Communication Distance	600 meters	
System Connection	Star connection or loop redundancy connection	
Zone Number	12 zones or 12 groups	
Paging Mode	PPT & normal paging modes	
Electrical Part	Phantom Power Voltage	20V-27.5V
	Max Current	<0.1A
	Power Consumption	<2.4W
Line Input	Sensitivity	775mV
	Impedance	10kΩ
	S/N Ratio	>70dB
Microphone Input	Sensitivity	5mV
	Impedance	600Ω
Working Environment	Operation Temp	+5℃ ~ +40℃
	Storage Temp	-20℃ ~ +70℃
	Relative Humidity	< 95%
Mechanical Part	Dimension	153*52*175
	Weight	0.8kg
	Finish	Aluminum case in black

4.3. System Connection Example:



EVAC-500SFT

- NOTE:
1. Redundant cable (dotted line)
 2. CAT-5 STP/UTP cable _____ (solid line)
 3. Trigger inputs mode table:



5. Overall System Operation Guidance

Bill of Equipments:

- ✧ EVAC-500;
- ✧ EVAC-500RT;
- ✧ EVAC-500FM;
- ✧ EVAC-500TM;
- ✧ EVAC-500RM/EVAC-12KD;
- ✧ EVAC-500SFT

In order to describe the convenience of the following description contains all the equipment, the actual use of the user, the user may only configure the necessary equipment, but this does not affect your understanding of the entire system;

- ✧ The electrical connection between the system equipment is correct and working properly.

5.1. Background Music Broadcast.

Input the audio sources or microphone to the line input1-6 on rear panel, select the line input through the source selector on the front panel of host or extension unit, open the zone output with corresponding BGM indicator means background music broadcast.

Note: The emergency message and emergency microphone will be shared between host and extension unit, while the line inputs 1-6 are only for itself use.

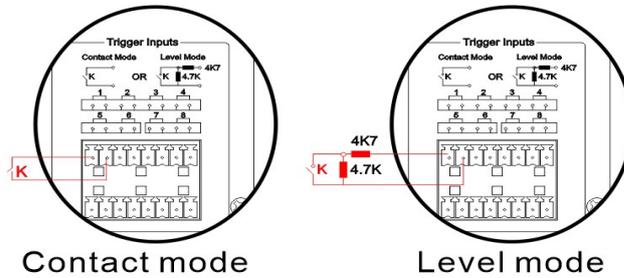
5.2. Manual Emergency Broadcast.

Press the emergency button and illuminate in red, then select the zone and press the “EVAC MSG” or “Alert MSG”

to make the manual emergency broadcast in the condition of message indicator light on and zone EVAC indicator light on. Press again the emergency button or remote reset input to terminate the emergency broadcast.

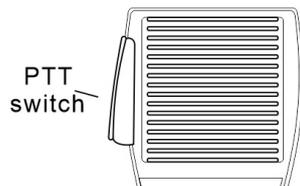
5.3. Auto Emergency Broadcast.

From normal status, connect a timer or other external control equipment to the 8 program control input terminals of the host or extension unit. The control input terminals receive a control input from the timer or allows an automatic general announcement or emergency message to be broadcast. At the same time, a control output will be send out to third party control system for inter-action. There are two kinds of control inputs by short circuit contact or by level mode. Press again the emergency button or remote reset input to terminate the emergency broadcast.



5.4. Emergency Microphone Announcement.

Press the clip of emergency microphone to make emergency announcement to all zone any time, the pre-announcement chime will be broadcast first and the EMG microphone indicator will light on means ready for emergency announcement, hang off the microphone to terminate the broadcast. This emergency microphone circuit will be real time supervised.

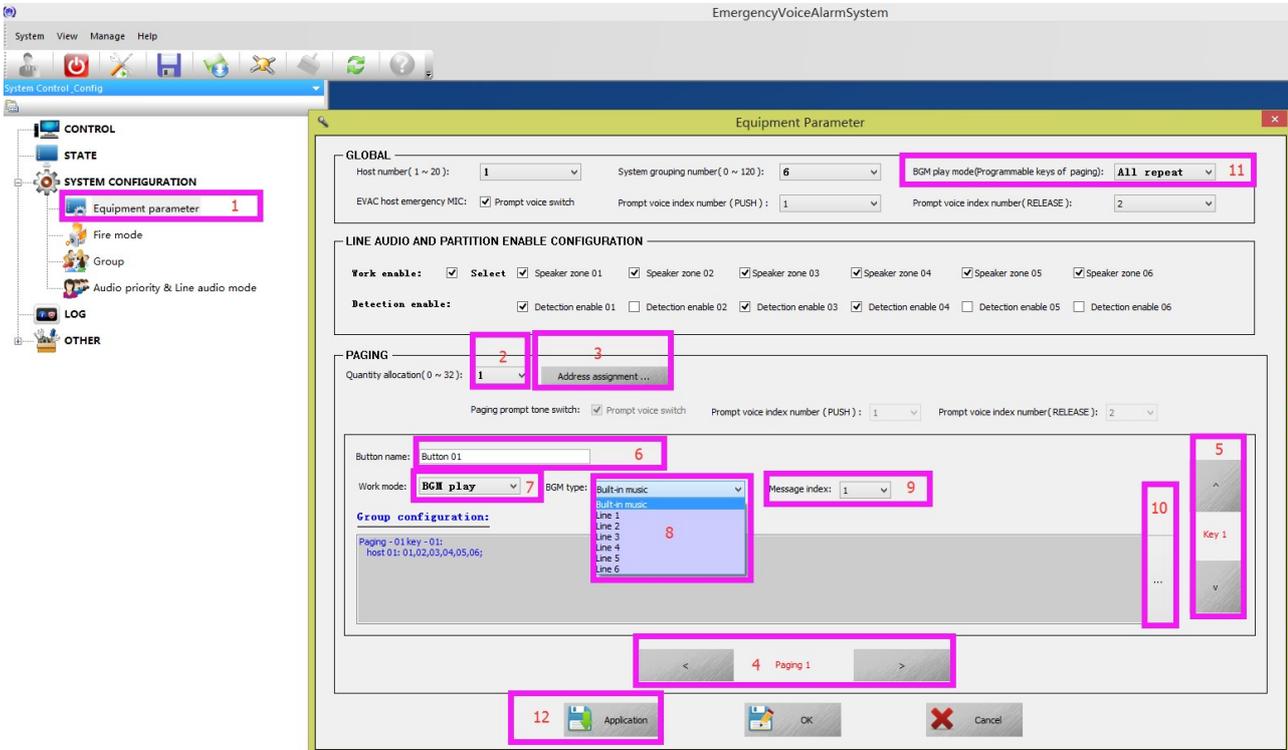
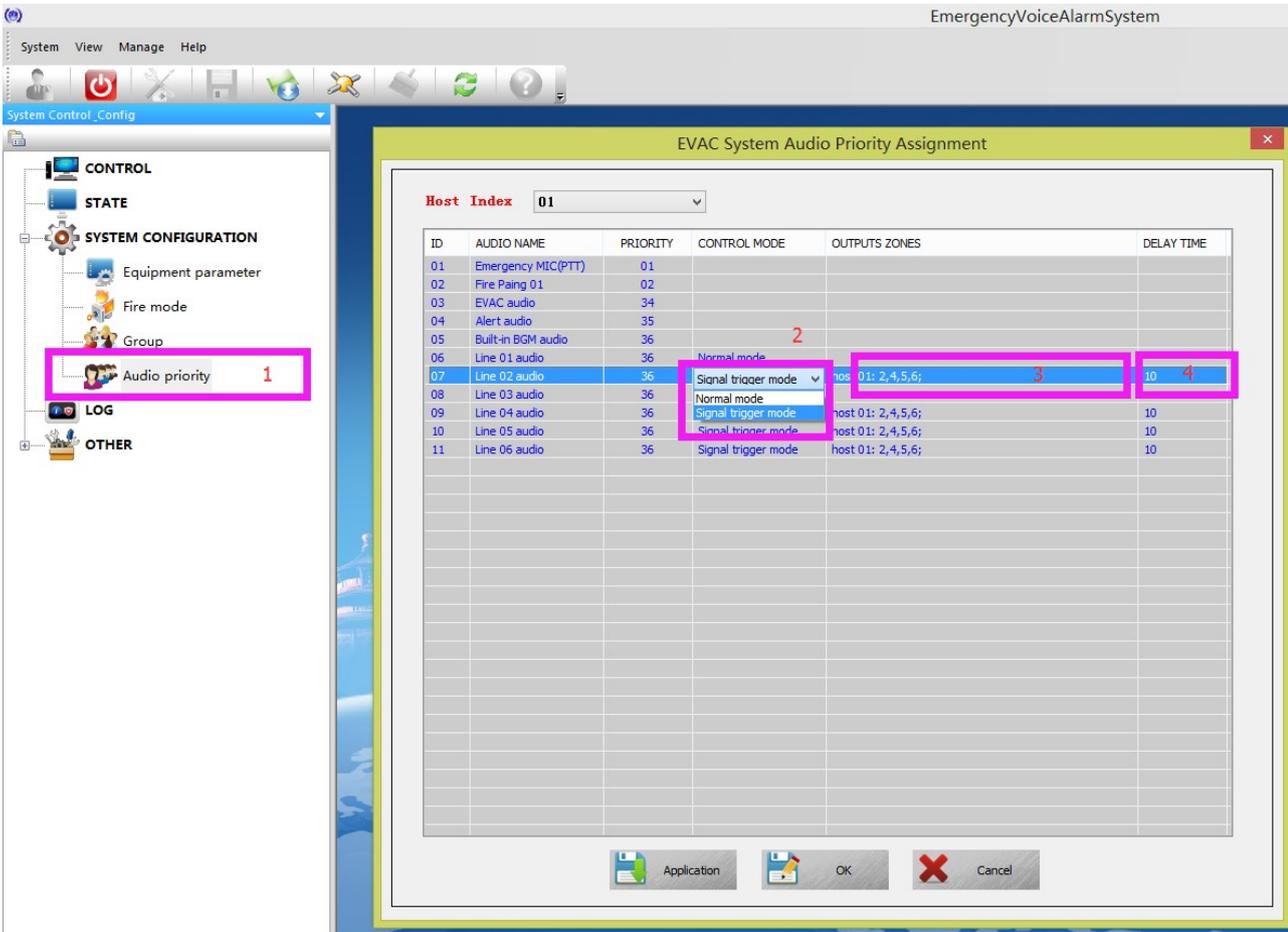


5.5. General Announcement from Remote Microphone.

Select the zone from EVAC-500RM or EVAC-500TM and illuminate the zone indicator, press the call button to make the general announcement with chime. Under PPT mode, the call button need to be kept pressing to make the general announcement.

5.6. Background Music Broadcast & Microphone Announcement from Software

- A) Select the zone or group and choose the effective line input to make the general broadcast. The zone or group displayed only after configuration, the software will auto distinguish the effective line input. B) Move mouse to zone1 icon, and click the left to click the inverse button to control the zone output status. Green means output and extinguish means terminate output.



"1" -> "2" (configure the system to allow the number of remote MIC: the value of EVAC-500TP, EVAC-RM and EVAC-500FM sum).

-> "3" (configure the type of MIC, EVAC-500TP and EVAC-RM "TYPE" select "Business paging").

-> "4" (select the "Paging" index number for the current working parameter configuration).

-> "5" (used to select the corresponding paging key number, the picture shows the first button).

-> "6" (for the current button to take an alias for easy memory recognition, up to 12 valid characters, can be automatically displayed in the EVAC-500TP interface, EVAC-RM need to use their own printed note mark).

-> "7" (used to set the working mode, when the "Paging mode" for the constituency, press only said that the selected group, do not perform other functions, the figure set to "BGM play" that control the host built-in background Music and lines into the specified partition, including the expansion of the main partition, press to open, press again to close)

-> "8" (for selecting whether to output built-in background music or external input line audio).

> "9" (when "8" select "Built-in music" to further specify the play of the track).

-> "10" (for selecting the output partition, including the extended host).

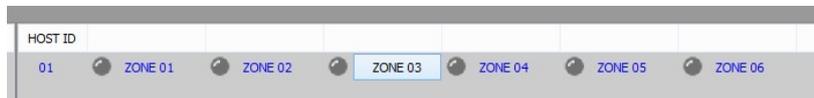
-> "11" (for the device built-in background music playback mode, currently only supports single loop and all files in this folder loop).

According to the diagram above "1 ~ 11" after configuration is complete, please click on the "12", in the Address for the EVAC 01-500 FM the need to "Address the assignment)." -> "TYPE" -> "Fire the paging" ", the EVAC - RM "by default Business the paging "" or EVAC - 500 tp to press the button" 01 "can be the host of the built-in SD card in the BGM song play 1 to" host 01 line 02 with the input signal is detected, the automatic line audio 02 output to the above, the output of the "3" configuration partition, namely host 1 ~ 6 partition again press, closed the current output.

5.6.1. Via Software EVAC-500SFT BGM Broadcast

(1) . Manual BGM Broadcast:

- i. Click on the corresponding zone name, when a rectangle button appears, click to open or close the zone of the corresponding host as shown below:



Note: This operation only opens the zone of the corresponding host, not audio processing. If there is audio output at present, the audio can be exported without the audio output, namely, open and no audio output.

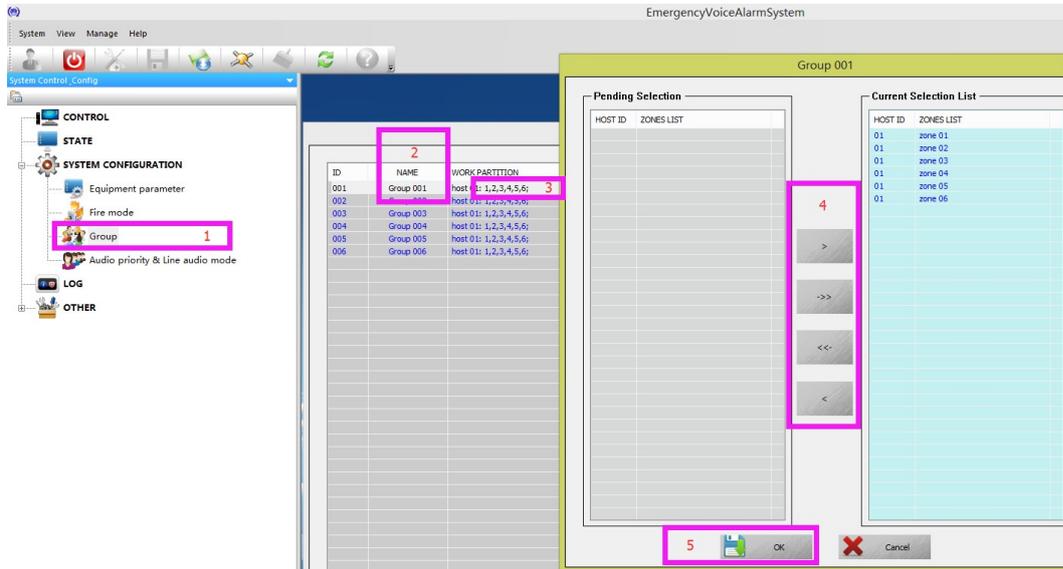
- ii. Click on the audio on the right, and the current LED is lit, which means open, as shown below:



Note: This operation only opens the host audio, does not automatically open the output partition, and operates on the corresponding host panel.

(2) . Specify grouping and audio output:

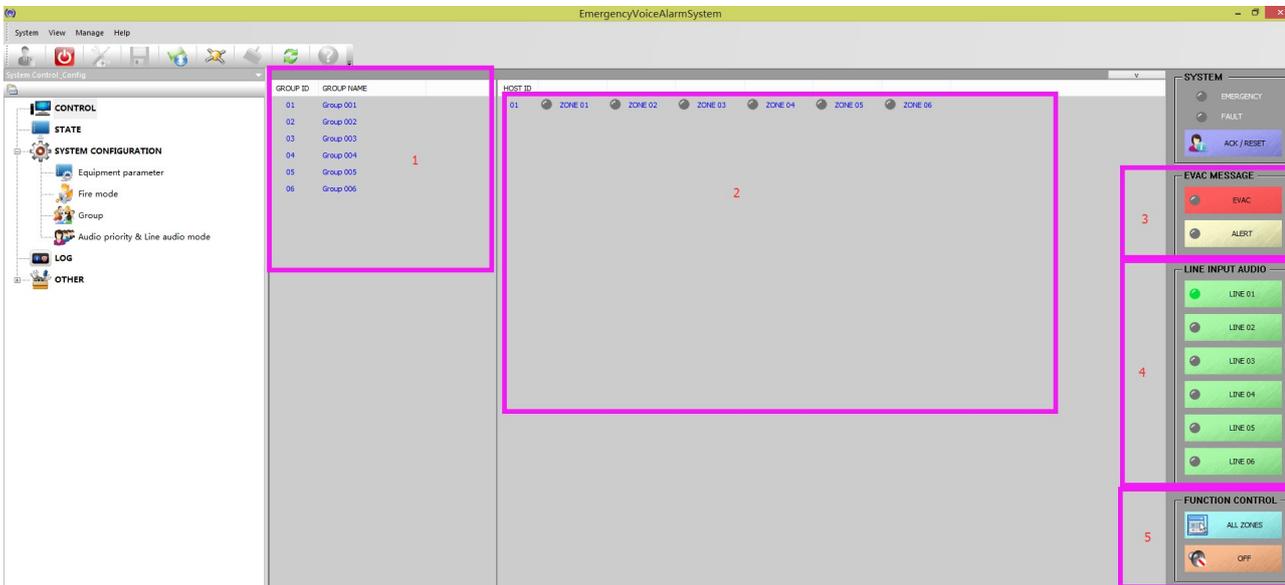
- i. You should configure the grouping by the following figure:



In this picture:

- "1"——select the hierarchical configuration,
- "2"——Give the grouping an alias, "double click the corresponding group name, and you can enter -- up to 12 characters."
- "3"——set the partition that is currently included in the grouping, double-click will pop up the window on the right, that is, select grouping by the function key in "4", and the grouping of the same device can exist in different partitions simultaneously.
- "5"——determine the current setting, please note that any new Settings for the user need to be effectively required to synchronize the system host, that is, click "Application"

ii. When you complete the configuration above, you can control it by following the image below:



The diagram above shows and operates:

- "1"——To configure all groups by "I", click on the corresponding grouping name, and the "2" on the right shows the partitions contained in the current grouping;
- "2"——The partitions currently included in the "1" section show all the partitions of the system if there is no corresponding grouping;
- "3"——For the host EVAC voice information state and control, the corresponding indicator color is indicated:
 extinguish --- normal;
 green --- working;
 Yellow --- If the user changes their own SD, please use the FAT32 file system format SD card, and in order to

prevent the accident, please do not place in the SD card and EVAC has nothing to do with the file

“4”——When the selected group is selected (including through "5"), click the corresponding line audio to output the audio of the host to the corresponding partition.

“5”——function keys:

“ALL ZONES”——Represents the selection of all groups, if you have chosen to cancel the group selection,

“OFF”——This operation will close the audio of the current output of the partition, for example, the partition output is the built-in BGM audio, and the BGM playback will be stopped while the partition is closed.

5.6.2. Via Software EVAC-500SFT Microphone Announcement

Emergency microphone on the front panel of the host is monitored, it is mainly used for all zone emergency announcement, select the zone all keys, then there is chime for reminding, after that push the clip of the emergency microphone to initiate the announcement and push the clip again with one chime to terminate the announcement.

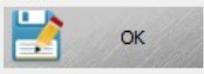
Operation on EVAC-500RM is as follows

- ✧ Select the currently required zone (the selected zone corresponds to the LED green indicators) - either in single zone or all zones;
- ✧ Press the green "CALL" button and wait for the gooseneck round indicator to light up. (if you work in PTT mode, shall always keeping on the "CALL" button.);
- ✧ Terminate the announcement, press the "CALL" button again (for PTT mode only release the call button).

Note: group call is different from the zone call on the panel.

6. EVAC-500SFT System Software

6.1. Icon Introduction:

	Save and synchronize to the EVAC-500 host, each revision should click on this OK button.
	Save but not synchronized to the EVAC-500 host.
	Give up the action.
	Current zone is prohibited for operation.
	Current Zone is working
	Zone impedance vibration (open circuit or short circuit)
	The current zone is normal, no broadcast.
	The current zone is under emergency broadcast.
	The current system modules normal
	The current system module faulty
	The current host normal
	The current host system is faulty
	Refresh
	Upload
	Save
Host	Host 01 means EVAC-500 Host 02 means extension host 001

6.2. Computer Configuration:

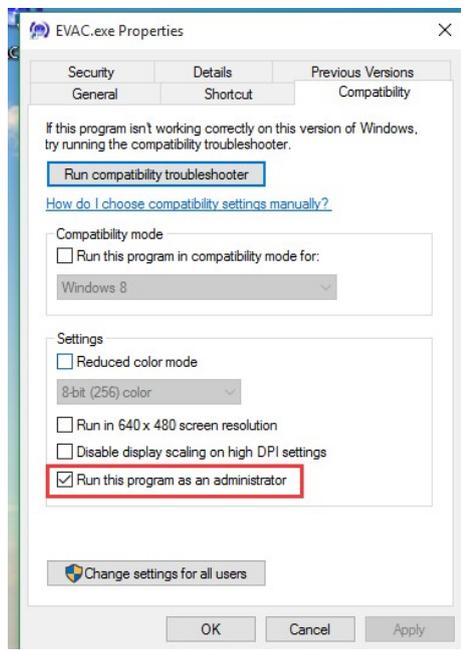
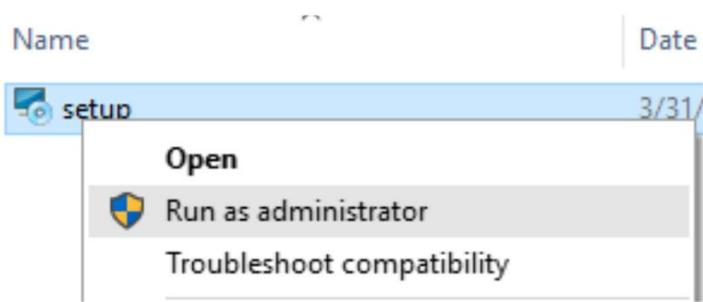
AMD/Inter CPU 2.0G, Window XP SP3/Window 7/8/8.1/10.

Run the management software as Administrator ONLY!

Find the correct version of management software from www.cmxaudio.com or ask it directly from your sales manager, double-click or select “Run as administrator” by right mouse button, and then continue to click “YES” and “Next”.

Note: Since the operating system of WIN7 or above has comprehensively enhanced its security performance, please ensure to log in the operating system only with an identity of administrator; otherwise it may lead to the error during the software installation and during the running after installation. Please check whether the administrator authority is obtained before running by below method:

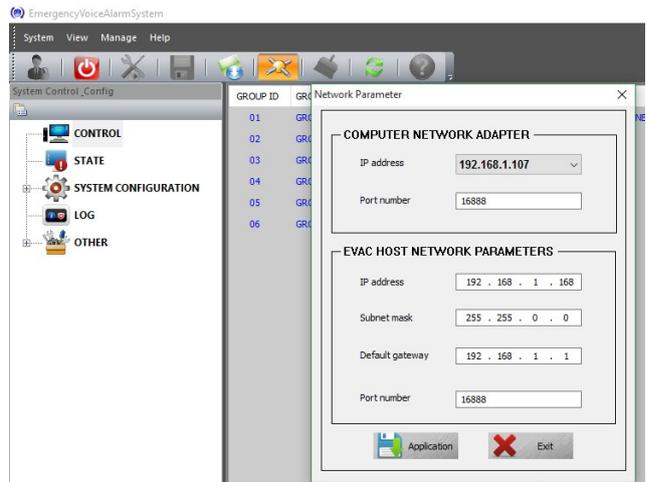
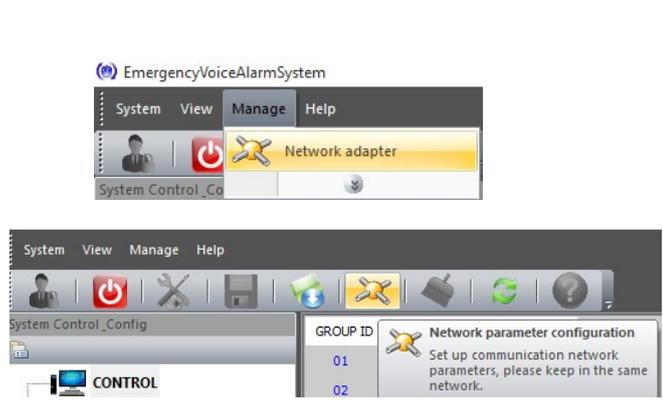
Click on the icon “EVAC.exe”  by right mouse to select the properties to run as administrator.



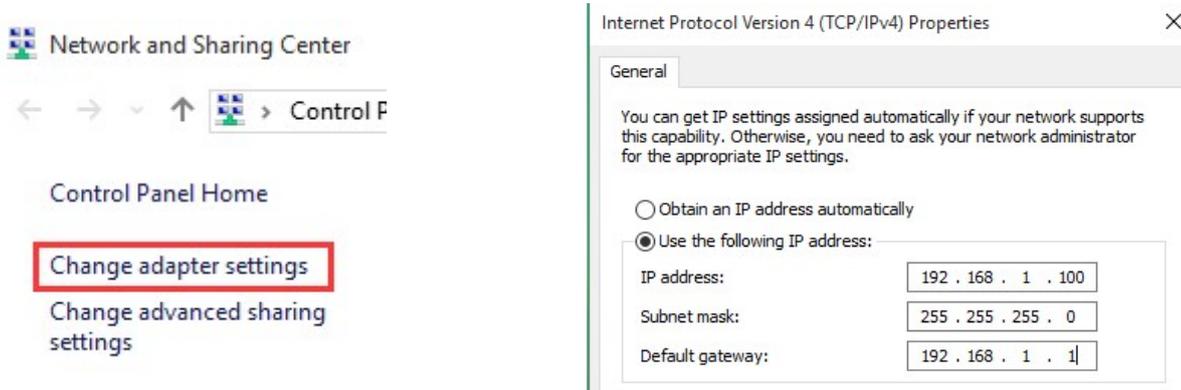
Keep the PC and Host EVAC-500 in the same network Gateway. Only after change the PC’s IP address same gateway as the voice alarm controller default IP address, then the software can communicate with the controller.

(Host default IP address: 192.168.1.168, Sub Mask: 255.255.0.0, gateway: 192.168.1.1).

- Up the 5th PIN of configuration dipswitch on the rear panel of host to have dynamic IP address allocation or DHCP. Please refer to below pictures to help the DHCP once IP allocation is rather slow.



Find the icon  in the right down corner of your computer (the icon may be different for various operating systems, so please refer to the actual icon), click the right mouse button to select “Open Network and Sharing Center”, and then select " Change adapter settings " in the pop-up window, as shown in the below figure:



6.3. Software Operation

6.3.1. Log In & Password.

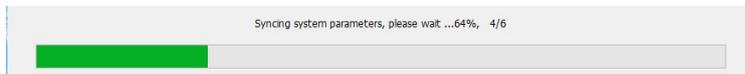


Double click” EVAC.exe” icon on desktop to log in the main operation page of the software. Click on  to enter user name & password for identity verification. The software will be auto exist once 3 times wrong password input. (Default user name is: Admin and password is blank or no need password), directly click OK to log in

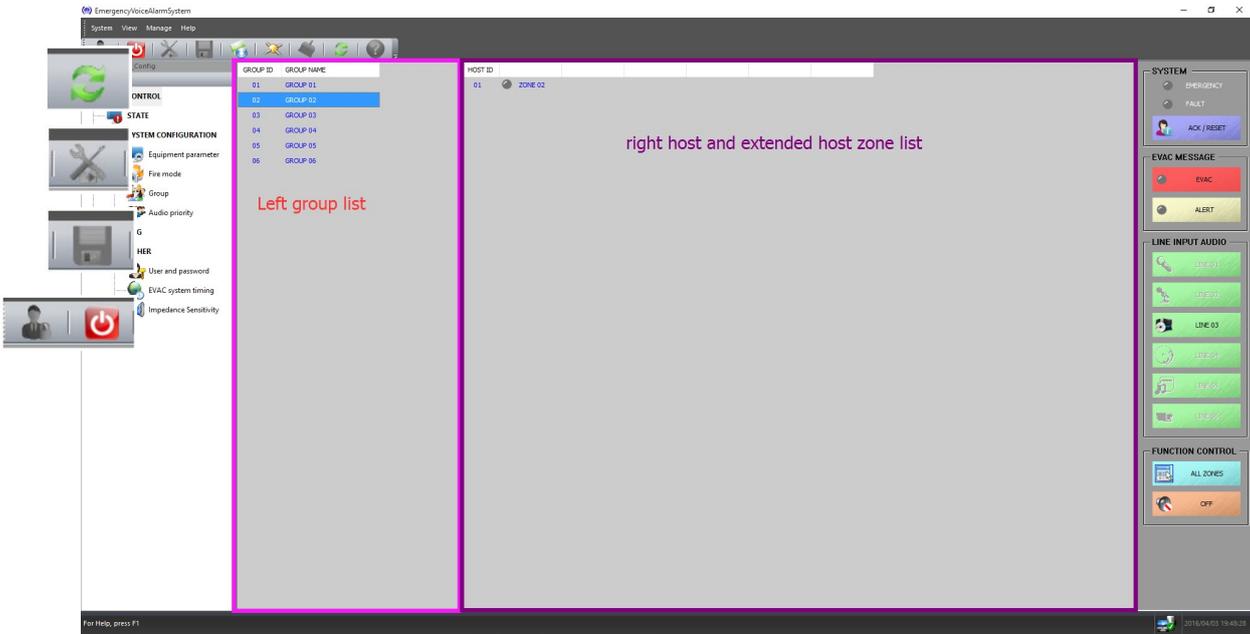
1. This password can be modified through the “OTHER—user and password” at left side after the login;
2. Wrong log in more than 3 times, the system will auto exit from the login interface.

- **Synchronize.**

The first connection of EVAC-500SF and EVAC-500 synchronization will be as below, after that will display the main page.



Picture1 for the following

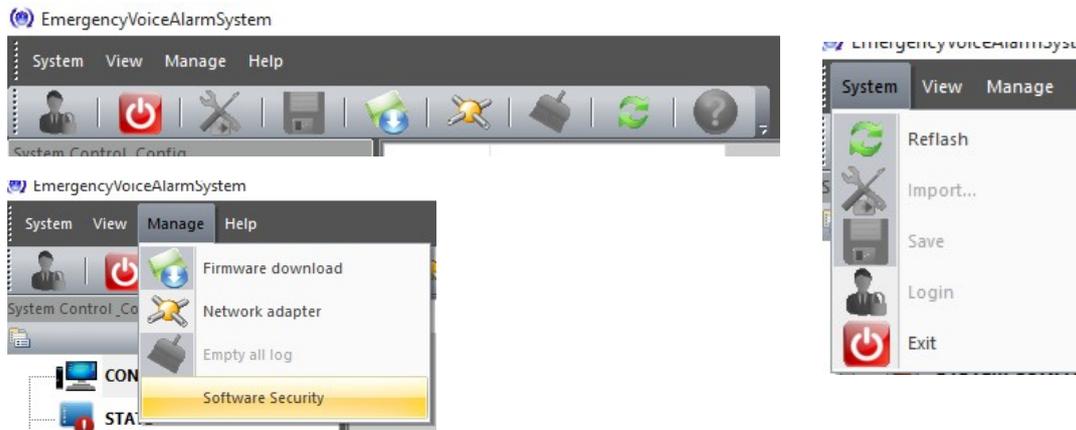


● **Main Page of Software as the picture above:**

The top is system menu and toolbar. Left is program item, middle is system status and right part is emergency status, emergency message & line inputs. Bottom is system status and time.

6.3.2. Introduction of Menu Bar and Tool.

System-View-Manage-Help. System includes refresh, import, save, login and exit. View is used to customize different visual display of the system diagram. Manage include firmware download (No change), network adapter (Edit the IP address), empty all log (clear the log in event) and software security (Password is need to exist). Help is used to check the software version.



1)“System” Menu

 “Reflash” refreshes the up-to-date status of the interface in which current user is located.

 “Import” is used to import from voice alarm controller to the management software .

 “Save” is used to save the LOG message of system modules or user’s configuration.

 “Login” and “Exit” means the login or exit from the management software.

2) “View” Menu is is used to customize the software display, now it is reserved for operation.

3) “Manage” menu

- “Firmware download” is used to replace the firmware of voice alarm controller. Please take care in this operation (please refer to the upgrading part of voice alarm controller firmware); “Network adapter” is used to modify the reference of host network, which shall be kept consistent with the current network of the user;
- “Empty all log” is used to delete all status records or logs of host system modules (please take care in operations, and please refer to the following chapters LOG);
- “Software Security” is used to enhance the operation security, namely, the security authentication as the user
- exits. If it is “checked”, it is necessary to enter the password as the user exits the software.

4) “HELP” menu is used mainly to view the software version.

6.3.3. Control Menu:

General: “CONTROL” with the right voice control button is to control output status of system zone, these included group configuration, appoint EVAC-500 host or EVAC-500 extension host 's single zone output control.

1. “STATE” is for checking the working status of system’s device module.
2. “SYSTEM CONFIGURATION” for check or modify the working device data in current system
3. “LOG” is for checking data record of system device and module.
4. “OTHER” is for modify the user’s login password, correct the time of EVAC-500 host and modify the speaker impedance error of EVAC-500 system, the percentage more larger means accuracy is more lower.

6.3.4. Zone Control Configuration

Login software or click the left “CONTROL” as (picture 1) above, it shows message as below:

- In the left shows that they are six group in EVAC-500SF
- On the right shows that they are six zone in current system.
- The red LED on the top of right indicate current system worked at emergency model
- The yellow LED shows that is fault with the current system module.
- The red and yellow of EVAC voice button LED off means that EVAC voice message is OK in the current SD card

Description:

- On the left hand is EVAC-500 or EVAC-500RT panel line output control knob, EVAC-500SF’s just shows current effective line output
- EVAC-500SFT’s system group can be set from 0~120, via “system configuration”-“Equipment parameter” to confirm the group number(default is six),each zone in the group can set via “Group”
- Put the mouse to the empty place of grouping list and double click or press “” to show all zone status
- Please click group items in group list to check zones include the group, such as click group six
- Show as below:

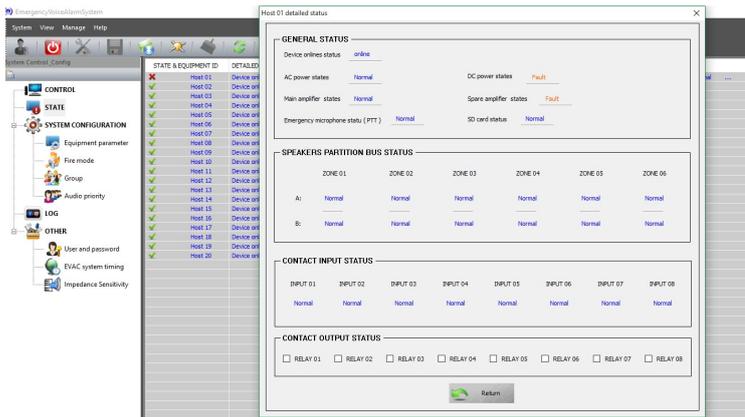


In above picture, the blue background in left hand means is chosen, in the right hand shows that there are six zone in this group. You can add or delete more zone of host or extension host. After modify please make sure to click “Application” after modify)

① The red LED on the top right can only reset via the red EMERGENCY button on the front panel of EVAC-500 or “3-Emergency Reset Input” in rear panel, user can use EVAC 500SF to control the active of EVAC

message can not be off (zone can be open or off) under the emergency mode.

- ② You can check Yellow LED by click "State" then double click the item you need to check

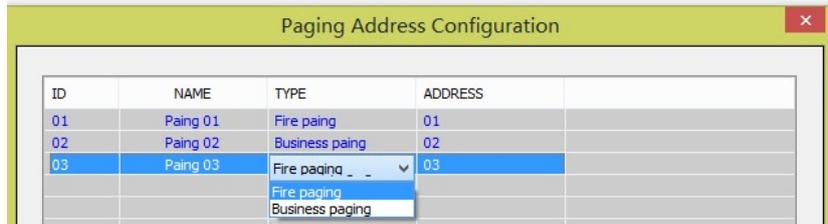


Operation and control

- ① The operation of assigned zone host and assigned zone are as below (to output the assigned audio or turn off the zones)
 - There will be come out one button when move the mouse to the middle of 'HOST ID', then click "zone 0X" then click it again to control the zone (the button will be disappear automatically if click the mouse at anywhere except the button)
- ② The single zone control of assigned host
 - For example, if want to control zone 2 of the host, only need to find 'ZONE 02' from the right of '01', which under 'HOST ID', then click.
- ③ Group control (output the assigned audio)
 - Choose the target zone: use the mouse to choose the corresponding group from the left middle (the list box from the right middle will indicated the zones of the current group)
 - To choose the output audio: use the mouse to click 'EVAC MESSAGE' (it need on emergency status) or 'LINEINPUT AUDIO' audio on the right side.
 - All system zones control (for sure it will be the same result if you put all the system zones to one group or multi groups) Choose the target zone: Click "all zones" then choose output audio (Click 'EVAC MESSAGE' (it need to be a emergency status) or 'LINEINPUT AUDIO' audio from the right side).
- ④ Turn off the group
 - 1. Choose the target zone
 - 2. To choose the output audio: use the mouse to click 'EVAC MESSAGE' (it need to be a emergency status) or 'LINEINPUT AUDIO' audio from the right side.
 - The user can set the number of business microphones or fire microphones that need to be connected to the host by "Quantity allocation (0 ~ 32)", and click "Address assignment ..." to set the working parameters of the microphone:

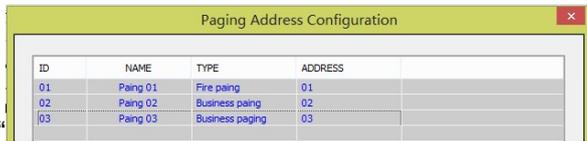
The user can enable or disable a single partition of the host or extended host according to the actual situation. If the check box of the partition of the PARTITION ENABLE CONFIGURATION is enabled, Indicates that the

prohibition of <no operation or prohibited loop detection, default all enabled>;



- (1). "ID" Item lists the number of current host access microphones - please configure them with actual devices;
- (2). "NAME" The virtual name that corresponds to the microphone is not practical and is automatically allocated by the system;
- (3). "TYPE" For the type of microphone, users can click on this to choose between "Fire paging" and "Business paging";
- (4). "ADDRESS" For the address of the corresponding microphone, please ensure that the current system is connected by the "Link ID" of the first 1 ~ 5 digits, otherwise the microphone may not work properly;

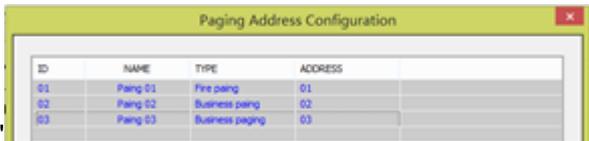
Note: please double-click in the blank area after the modification is completed, and there is no list box



" Click "OK" when the drop-down list box appears in the figure,

otherwise the change is invalid.

Note: After the modification is complete, double-click in the blank area, make sure that no drop-down list box in the



" box appears in the list box, click "OK", otherwise the change is

invalid.

① Similarly the user can through the Paging prompt tone switch "setting for each of the microphone switch and specify a different prompt (bell) method with the host on the panel of receiver, here is not in the description (multiple can set by clicking on the microphone "  " To switch;

② the same user can "Paging prompt tone switch" were set each microphone switch and specify a different tone (bell) method and the host panel above the microphone, not described here (multiple microphones can be set through the Click "  " to switch);

③ Users can also set up different control partitions for the 12 groups of the first microphone based on actual

requirements, by clicking "  " Add and delete, pass "  " Switch different groups, The group list box displays the following:



(1) "Paging -01 group -01:

- 1) "Paging-01" Indicates that the currently listed group information is a microphone at address 01.
- 2) "group-01" It's group 01, but it can also be 02 or 03. The range is: 01 ~ 12.

(2) "host 01: 01, 02, 04, 05, 06; host 02: 01, 02, 03, 05, 06": Indicates that some partitions contain the host (the system defaults to - host 01, and the user cannot change).

Except the partition 3 all partitions and extension of the host 01 all partitions except the partition 4 (extended host number from 02, the user can not change), that is, the user in the address of 01 if you use a microphone on grouping mode, the elected group 01 paging is equivalent to choose the host and at the same time extend the host 01 each five partitions paging.

Note:

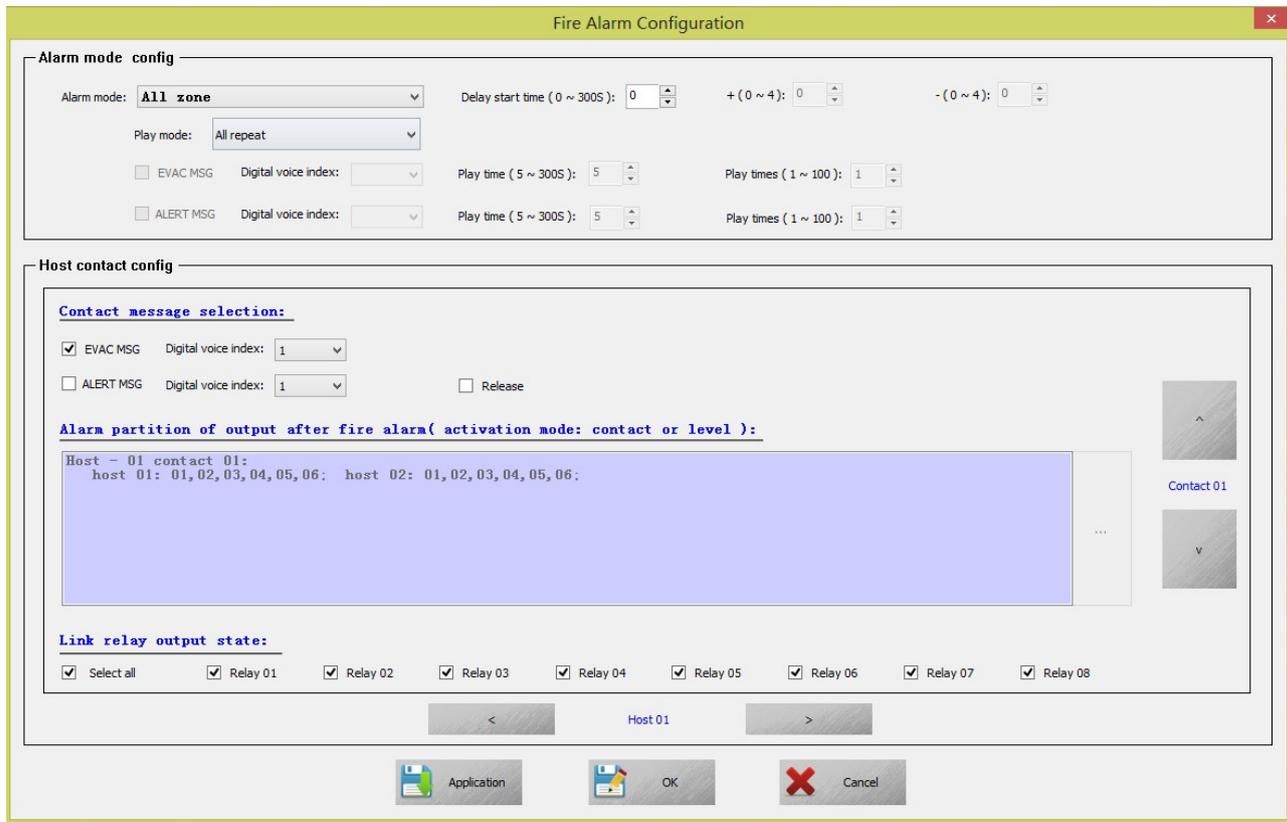
- ① After the modification is completed, please click "Application", otherwise your Settings will not be able to complete your expected function on the corresponding device;
- ② Please refer to the above described above "when configured with the evac-500sft configuration as shown below".

6.3.5. Fire Alarm Rules Configuration

1. Set fire alarm rules;

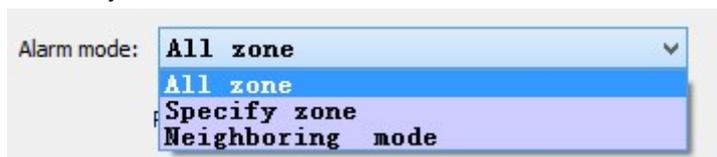
Set contact output partition and connect relay status;

"Fire mode":



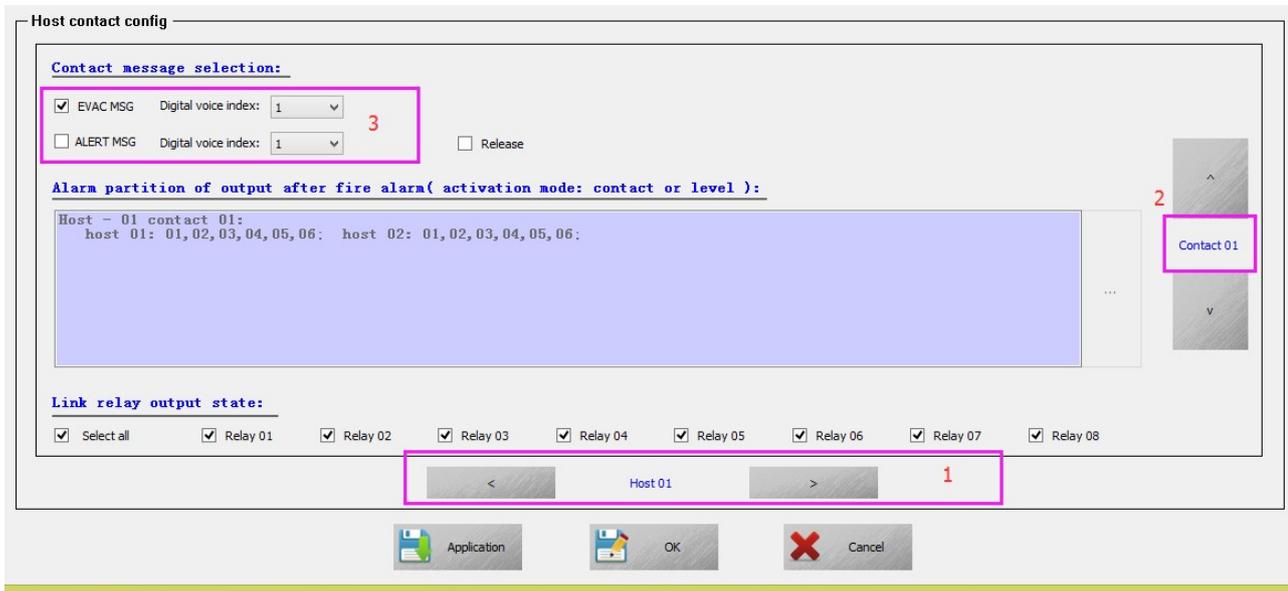
Above pic.:

- ① users can choose from a way:



"All zone" means that once the fire alarm is input from the "Trigger Inputs" of the host or the extended host, wait for

" Delay start time (0 ~ 300S): 0 " to set the delay time, output the EVAC voice information to all the partitions of the system, and output the EVAC information parameters The configuration of the corresponding contact is determined by the following figure:



Contact set interface

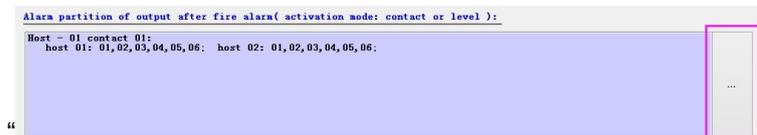
"1" -> select the host ID number;

"2" -> set the host corresponding to the contacts;

"3" -> set the host corresponding to the contact type of voice playback and tracks:

(2) "Specify zone" Represents once from the host or extended host "Trigger Inputs" After entering the fire alarm, wait

" Delay start time (0 ~ 300S): 0 " After setting the delay time, output the EVAC voice information



" The section listed in the list "users can click the button in the pink box on the right to set the output partition", and the EVAC information parameters of the output are determined by the "contact setting interface" above.

(3) "Neighboring mode" Once the "Trigger Inputs" from the host or extended host enter the fire alarm signal, wait

" Delay start time (0 ~ 300S): 0 " After setting the delay time, output the EVAC voice information to the corresponding partition of the current contact, and Play the Play mode in the right image: play time "Specify the time to play" repeat

time "Specifies the number of times to play" and " + (0 ~ 4): 1 - (0 ~ 4): 2 "up "1" down "2" play ALERT message, repeat and repeat till fire alarm message.

(3) "Specify zone" means to wait for " Delay start time (0 ~ 300S): 0 " to set the delay time after the fire signal is input from the "Trigger Inputs" of the host or extension host, the EVAC voice message is output to the "listed" You can click on the right side of the pink box button to set the output partition ", the output of the EVAC information parameters from the figure" contact settings interface "decision.

(4) "Neighboring mode" means that once the fire alarm is input from the "Trigger Inputs" of the host or extension host,

wait for "Delay start time (0 ~ 3005): 0" to set the delay time and output the EVAC voice message to the corresponding area of the current contact and press the right Play mode Select the playback mode "Specify the time to play" and the number of times to play the "the number of times to play" and "1" under "2" to play ALERT information, cycle, until reset Fire.

Note:

- (1). Different contacts choose different types of EVAC, such as the contact 01 of the host 01 1 selected EVAC, contact 2 selected ALERT, after the trigger, the final high-priority voice type will play, low priority voice will stop
- (2). Different contacts select the same type of voice information, after the trigger, after the trigger of the voice information will not play, but after the trigger fire will be superimposed on the output of EVAC voice information;
- (3) When "Alarm mode" is selected as: "Neighboring mode", EVAC and ALERT information must be selected, the user can not modify, has triggered the partition system automatically superimposed on the current output of the fire zone;

6.3.6. Zone Group Configuration

Click "SYSTEM CONFIGURATION" then "Group" as below:

ID	NAME	WORK PARTITION
001	Office area	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;
002	Waiting Room	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;
003	Ticket Check	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;
004	ENTRANCE	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;
005	EXIT	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;
006	Rest Room	host 01: 1,2,3,4,5,6; host 02: 1,2,3,4,5,6;

Description:

- 1. "ID" is a zone name number;
- 2. "NAME" this is name user, usually use an easy remember name so you can remember it easily. Such as below (system default is "GROUP 01..."), Click the item then enter modify mode (max 12 character), press "Enter" to set next group;
- 3. "WORK PARTITION" show zone list in current group, double click can add or delete sub item;

The screenshot shows the 'EVAC System Grouping Configuration' dialog box with the 'GROUP 01-- 001' configuration screen. It features a table on the left with columns ID, NAME, and WORK PARTITION. To the right, there are two panels: 'Pending Selection' and 'Current Selection List'. The 'Current Selection List' panel shows a table with columns HOST ID and ZONES LIST, containing entries like '01 zone 01', '01 zone 02', etc. Navigation buttons (>, >>, <<, <) are located between the two panels.

① Left top of dialog box show current zone number;

② Left part is current zone list, choose and add to the right means add the zone in current group, you can double click corresponding zone or though “Shift” and “Ctrl” button to continuous choose or discontinuous choose, also can add or delete though the middle operating button;

③ ">" and "<" as a single zone operation, ">" indicates that add the system zone to the current group, "<" is a opposite operation, delete selected zone from the current group;

④ "<<" and ">>" means deleting all zone and add all zone to the current group

Note: Please click “Application” after modify, or your setting will not be successful.

6.3.7. Priority Configuration

Click “SYSTEM CONFIGURATION” then click “Audio priority” as below:

ID	AUDIO NAME	PRIORITY
01	Emergency MIC(PTT)	01
02	Business Paing 01	02
03	EVAC audio	34
04	Alert audio	35
05	Network audio	36
06	Line 01 audio	36
07	Line 02 audio	36
08	Line 03 audio	36
09	Line 04 audio	36
10	Line 05 audio	36
11	Line 06 audio	36

See Pic above:

① "ID" number is automatically added by system;

② "AUDIO NAME" is the audio in the host;

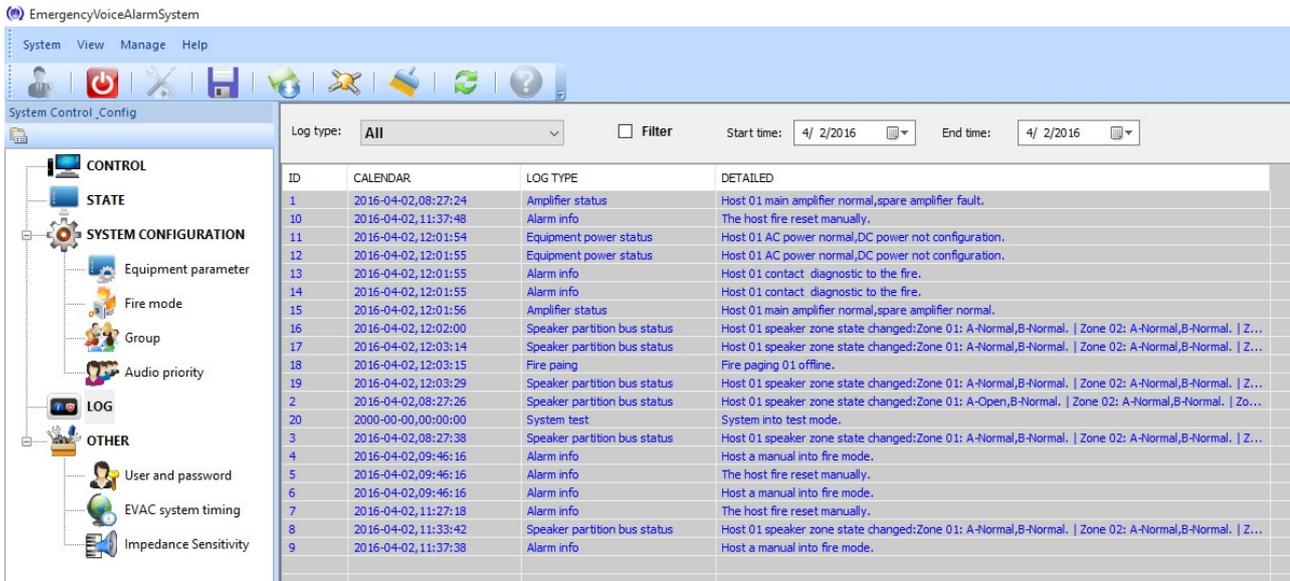
③ PRIORITY "means audio's priority, but it also directly affect of the output permission of current audio, please be careful when modifying, the above figure is default settings of this system;

Note: User can on line or off line to set the system parameter and save it though  as back up.

User can load the back up system parameter though  —— need manually synchronize after loading;

6.3.8. Log In Event Query

Click “LOG” as below:



Description:

- ① “ID” no sense;
- ② “CALENDAR” Means data of the module;
- ③ “LOG TYPE” means LOG type (use for search when there are many record, can have quick checking);
- ④ “DETAILED” Means details of current log;

Description:

User can check designated time recording though “Log type” and “Filter” Start time: 4/ 2/2016 End time: 4/ 2/2016 and click “Save” on tooling bar to save the log as excel sheet.

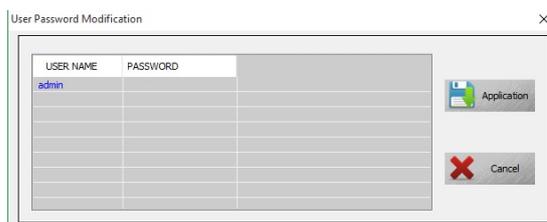
6.3.9. OTHER

- 1. Change password;
- 2. Correct system time;
- 3. Adjust speaker zone impedance;

6.3.9.1. Change user password:



- ① Click “User and password”: , user input password (If wrong, system will quit automatically);
- ② Password correct will show as below:



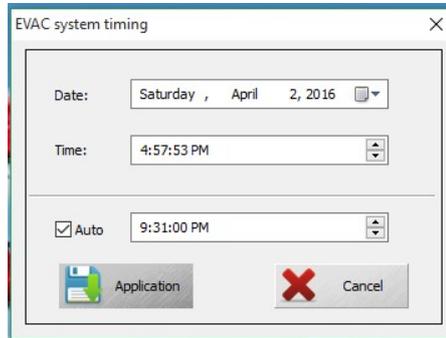
Description

- ① “USER NAME”—— Means name of the current login user. Double click to enter edit state.

- ② "PASSWORD"—Means password of the current login user. Double click to enter edit state.
- ③ After edition, please click Application, otherwise your settings can not be completed.

6.3.9.2. Proof Host Time

Click "EVAC system timing" as below:



Description:

- ① "Data" and "Time" means date and time, display time is the current computer time;
- ② "Auto" for EVAC – 500SF automatic proofreading the host of time;

Note: After edition, please click Application, otherwise your settings can not be completed.

6.3.9.3. Speaker Impedance Error Adjustment:

Click "EVAC system timing" Select allowed error range of current speaker circuit from the drop-down list box of the pop-up window (if it is wrong report, can rise the percentage properly).

7. System Maintenance Notice:

- 1) Don't put the system device installed in direct sunlight or near the heating element, because the device may fade deformation, or stop working by the high temperature into protection state.
- 2) Don't install or stored the system equipment in a dusty or wet place, otherwise it may disturb working stability or cause intermittent fault.
- 3) Keep the system equipment be away from strong magnetic field equipment as far as possible in case of high electromagnetic interference effects the normal operation of the system equipment.
- 4) When the system set with several pieces of EVAC – 500RT in the same cabinet, in order to keep a good heat dissipation, please leave corresponding space between each equipment.
- 5) Remote Microphone EVAC-500RM with 24V phantom power supply. When it is indicating power led become dimming or indicating not working correctly, please shorten the wire.(actual measurement Cat5 can normal working in 600M.Pay attention to the whole length of ring, not single equipment 600M)
- 6) Have a backup for main device lines, please set configuration accordingly to your requirements. If major fault cause system not working, please contact our After Sales Service for Repair processing. Built-in accessories, Do not dismantle machine without permission in order to avoid the equipment or module's permanent damage and electric shock hazard.
- 7) In order to ensure reliable work, please ensure a good ground connection.

8. After Sales Service

Ensure the problem is not related to operator error, or system devices that are external to this unit. Information provided in the troubleshooting portion of this manual may help with this process. Once it is certain that the problem is related to the product contact your warranty provider as described in the warranty section of this manual.

9. Warranty

Warranty terms of global three years. While the term and warranty may vary by country and may not be the same for all products. Terms and conditions of warranty for a given product may be determined first by locating the appropriate country which the product was purchased in, then by locating the product type.

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Specifications may change without pre-notice.