

PAVA4600

4-Zone Compact Voice Evacuation System Host



Description

PAVA4600 is an integrated voice evacuation system host. With a built-in 600W digital amplifier, it can not only send out warning and alarm, but also support handhold microphone to make voice evacuation. It can manage emergency alarming, fire alarm announcement and background music playing for 4 zones. It is an ideal application for small shopping malls, office building and sports venues.

Features

- Digital display screen to display time, system status, and Fireman MIC status.
- One-key alarm and two kinds of editable EVAC messages; EMC microphone for on-site voice evacuation;
- With LED light for indicating system connection status and fault status.
- Support speaker line detection (light load, over load and short circuit);
- LED displays to indicate the type of audio source of the current signal.
- 2 aux input interface, 1 Fireman MIC input, support offline detection; each paging record is automatically saved to SD card.
- Support AC power supply and 24V battery power supply; support automatically and seamlessly identify and convert. AC power supply is with the priority;

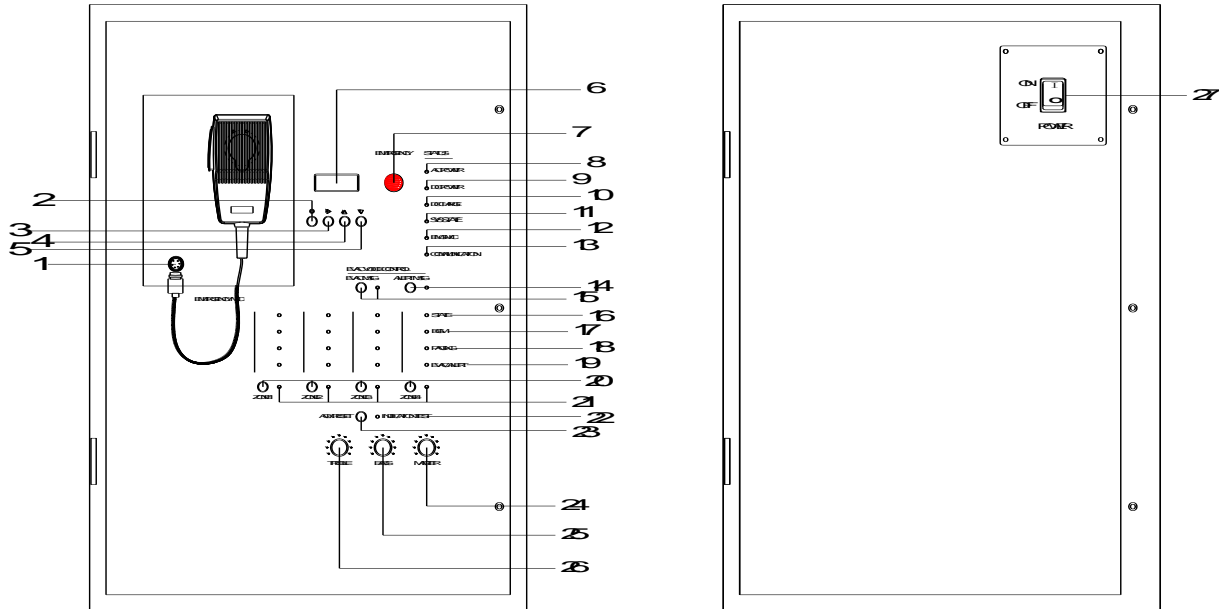
- Equipped with 24V battery charger, which can be charged automatically when the system is powered by AC
- System error information is backed up by logging in SD card;
- A/B line speaker output for four zones; independent power switch and volume control for each zone; with master volume control, treble and bass adjustment; each channel can output 600W, and the total power of 4 zones need to be within 600W.
- 4-channel link relay output interfaces (can control the short circuit of two wires to control other equipment); 2 24V output interfaces give peripheral equipment 24V (not greater than 0.5A) input signal.
- 4 input dry contacts, which can be integrated with the third-party system (such as the fire alarm system) through the input of dry nodes;
- 2-bit network cable interface, used to connect PAVA4400FM fireman microphone and PAVA4600 extender.
- It has testing function keys with LED.

Specifications

Items		Parameters
Rated output power		600W (Note: Please use the constant speakers within the power range)
Rated output voltage		100V
Sensitivity	MIC	5mv(±1mv)
	AUX IN	1VRMS(±100mv)
SNR	MIC	≥70dB
	AUX IN	≥80dB
Frequency response	MIC	100Hz~10KHz(±3dB)
	AUX IN	80Hz~15KHz(±3dB)
Ratio of source emf.		≥12dB
THD		≤1%
Tone adjustment range		±11±2 dB
Rated power consumption		850W
AC-DC power supply switching time		No interruption
12AH battery (two batteries in series into 24V) endurance		2H (normal emergency voice broadcast)
Battery	Size	(2 pcs)
	Voltage	12V; (two in series into 24V)
Working Voltage		AC220V-230V/50Hz
Package dimensions		820×470×275mm
Machine dimensions		750×400×180mm
Gross weight		20kg
Net weight		19kg(without batteries)

Front / Rear Panel

Front Panel



1. Aviation Socket

Mainly used to connect and fix the handheld microphone.

2. Confirmation Button◎

Long press this button to enter time modification.

3. Right Button →: Press to move right to next bit.

4. Up Button ↑: to add 1.

When the system is in the emergency state instead of time modification, press this button to increase the volume of alarming voice. After setting, the system will save the volume automatically.

5. Down Button ↓: to minus 1.

When the system is in the emergency state instead of time modification, press this button to decrease the volume of alarming voice. After setting, the system will save the volume automatically.

6. Digital Tube Display Screen: to display time and amplifier status.

To set system time: long press ◎ to set system time. First set the year, and as the number is flashing, press the Up or Down button to adjust the first number of the year. Press the Right button to change to the next flashing number and adjust the number. After setting the year, press the Right button to change to set the month. After setting the hour and minute, press the Confirmation button ◎ to end time modification. After setting, the time is displayed at regular intervals.

When the main amplifier fails, the screen will display E1; when the connection number of Fireman MIC changes, the screen will display bN (N refers to the Fireman MIC with address N which is disconnected).

7. System Working Mode LED Indicator

◆ Flashing Red -- the current system works in emergency mode.

◆ Off -- the current system works in normal mode.

◆ Enter emergency mode:

In normal mode, press this button, and the red indicator will flash, indicating that the emergency mode is entered.

- ◆ Exit emergency mode: In emergency mode, press this button to exit the emergency mode and stop playing EVAC voice messages and zone output.

Note: You can check the execution time and the mode in the “LOG” of PAVA4600 no matter you enter or exit the emergency mode.

8. Main Power LED Indicator

- ◆ Green -- the AC power supply of the device is normal.
- ◆ Orange -- the device is not connected to AC power supply.

9. DC 24V Battery LED Indicator

- ◆ Green -- the power supply of DC24V battery is normal.
- ◆ Orange -- the standby battery is not set.

10. Charger State LED Indicator

- ◆ Green -- the current charger is charging.
- ◆ Yellow -- the charger is not set or damaged.
- ◆ Off -- the charger is set but not charging.

11. System State LED Indicator

- ◆ Green -- the system modules are working normally.
- ◆ Flashing orange -- there is a fault in the system. (If you are sure that there is no fault in the system, please press the “ACK/RESET” button).

12. Handheld MIC State LED Indicator

- ◆ Yellow -- when the handheld microphone is lost or malfunctions, it indicates that there is a fault.
- ◆ Green -- the microphone is working.
- ◆ Off -- when the handheld microphone is normal, it indicates that it is not working.

13. Host Connection Status LED Indicator

- ◆ Green -- the current device is connected normally.
- ◆ Off -- the current host has not established a logical or physical connection with the fireman microphone.

14/15 EVAC Voice Message Status LED Indicator

- ◆ Green -- “EVAC MSG/ALERT MSG” voice message is being broadcast.
- ◆ Yellow -- “EVAC MSG/ALERT MSG” voice message is lost or the SD card is lost.
- ◆ Off -- “EVAC MSG/ALERT MSG” is normal.

Note:

1. “EVAC voice message” refers to the collective name of EVAC voice and ALERT voice.
2. If you need to play EVAC voice message manually, please enter emergency mode first, and then press the voice message button.

16. Speaker Zone State LED Indicator

- ◆ Yellow -- the impedance of the current zone A or B (speaker A or B) changes; there might be open circuit or short circuit.
- ◆ Off -- the circuit impedance variation of the current zone speaker is within the impedance range of the speaker under zone modeling.

17. Zone BGM LED Indicator

- ◆ Green -- the background music is being played.
- ◆ Off -- the background music is not being played..

Note: The host will play the background music by default when there is no other signal input.

18. Local or Fireman MIC LED Indicator

- ◆ Green -- paging.
- ◆ Off -- not paging.

Note: When paging, you can close the zones not to be paged or add new zones manually.

19. EVAC Voice Message in SD Card Broadcasting LED Indicator

- ◆ Green -- EVAC voice messages are being broadcast.
- ◆ Off -- no EVAC messages are being broadcast.

Note: You can close the zones not to be paged or add new zones manually.

20. Zone Switch Buttons

- ◆ There is a corresponding relationship between the host and the fireman microphone. Those with the same address code correspond to each other, and the zones are opened and closed correspondingly. The priority is given to the one that pressed later.

21. Zone LED Indicators

- ◆ Green -- the corresponding zone is open.
- ◆ Off -- the corresponding zone is closed.

22. System LED Indication Test

Press this button to enter the LED test mode.

23. Confirm/Reset/Model Button

If the system module is diagnosed as abnormal, the "SYS STATE" fault LED indicator will flash intermittently. After pressing this button, the "SYS STATE" will stay on and no longer flash to indicate its fault status, and the buzzer will stop. If a new module is detected as abnormal, the "SYS STATE" LED indicator will flash again, and the buzzer will start to remind the user.

Long press this button to model the impedance and the number of fireman microphones. Please conduct a modeling every time you connect the loads and connect the fireman microphones.

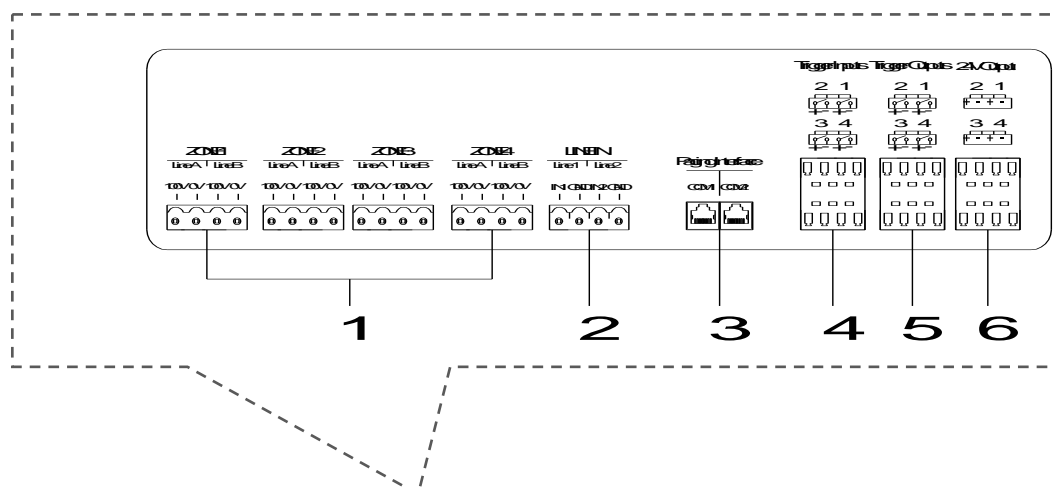
24. Master Output Volume Control

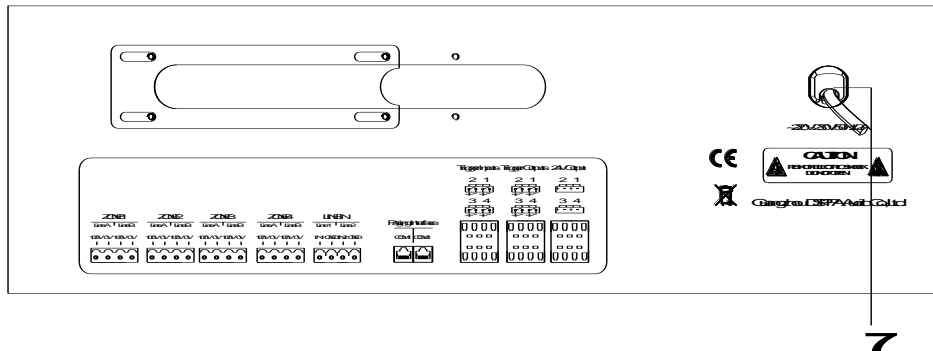
25-26. Bass and Treble Control

27. Power Switch

Located under the cover 2, press the "I" position to turn on the power of the device, and press the "O" position to turn off the power.

Rear Panel





1. Line A&B Outputs of 4-channel Speakers

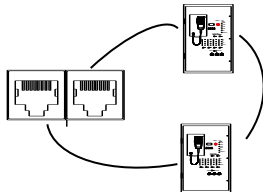
- ◆ Output voltage: 0~100V;

Note: Please conduct speaker circuit modeling at least once after connection, and long press ACK/RESET button; the zones not connected to speakers can be left empty.

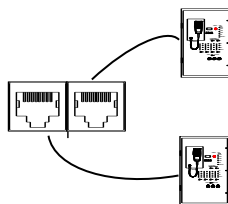
2. BGM AUX IN

3. Fireman MIC or Host Cascade Interface

- Used to connect external PAVA4400FM or PAVA4600;
- Support closed and star connection (as shown below), with auto software recognition;



Closed or loop connection



Star connection

4. 4-channel Input Dry Contacts

- ◆ In the normal state, please keep it open.

When the input dry contact 1 detects a short circuit, zone 1 will play the EVAC voice.

When the input dry contact 2 detects a short circuit, zone 2 will play the EVAC voice.

When the input dry contact 3 detects a short circuit, zone 3 will play the EVAC voice.

When the input dry contact 4 detects a short circuit, zone 4 will play the EVAC voice.

(The dry contact can also be triggered by 5V-24V high level by just moving the internal short-circuit cap in the output panel to the right. Please pay attention to the positive and negative end when triggered by a high level.)

5. 4-channel Relay Output Dry Contacts

- ◆ In the normal state, the output dry contact 1 is open. When an EVAC or ALARM alarm occurs, the output dry contact will be short-circuited.
- ◆ In the normal state, the output dry contact 2 is short-circuited. When the system fails, the dry contact will change from short circuit to open.

6. 24V Output

- ◆ In normal state, there is no output.

When using and pressing down the fireman microphone or the PTT handheld microphone of PAVA4600, the four ports output 24V signals. When the input dry contact 1 or 2 or 3 or 4 detects a short circuit, the four ports also output 24V signals. When the alarm button is pressed, the four ports also output 24V signals.

7. AC 220V-230V Power Cable

System Diagram

