

Section

**EN54 Voice Evacuation Systems** 

Category

PAW Series - ALL-IN-ONE Systems for wall mounting EN54-16

Range

PAW51K-VES

Code

PAW51K4-V, PAW51K6-V

Certificate

EN 54-16:2008 / EN54-4:1997 + A1:2002 + A2:2006 Certificate No. 0068/CPR/063-2019



Description

### 1000 W Compact wall-mount EVAC systems

The new PAW51K-VES range incudes two integrated voice evacuation systems for emergency facilities, designed specifically for wall-mounting and equipped with control units, certified in compliance with EN 54-16:2008 / EN 54-4 standards. Depending on the model, these systems are capable of managing from 4 to 6 alarm zones, each driven by a single amplifier, as well as remote microphone stations and controlled inputs to be connected to a central fire-fighting system. It is possible to connect up to a maximum of 6 of these systems to one other (for managing an overall maximum of 36 zones).

This range includes:

- PAW51K4-V 1000 W / 4 zones | double output line (A+B)
- PAW51K6-V 1000 W / 6 zones | double output line (A+B)

#### **Functional features**

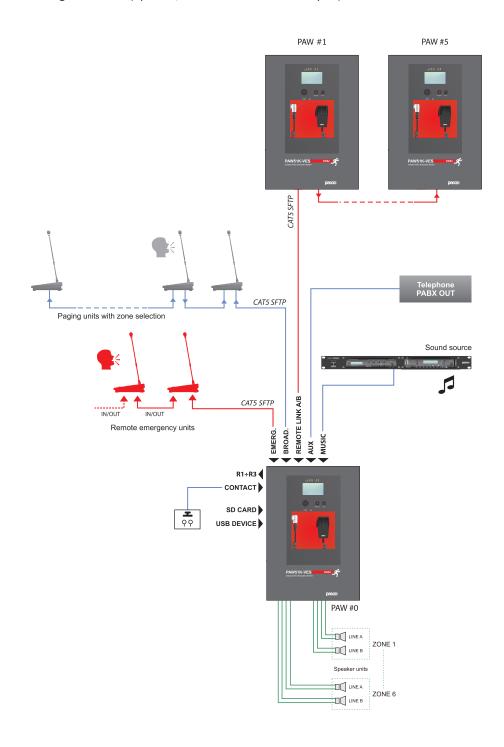
- Rated audio output: 1000 W overall, distributable freely among the zones with a maximum limit of 250 W
  per single zone.
- Backlit 4.3" display with touch screen for selecting the alert and evacuation zones and enabling navigation for adjusting volume levels, configuring the equipment and viewing failures.
- Handheld fireman's paging microphone.
- Sending out of pre-recorded EVACUATION and ALERT messages.
- Sending out of pre-recorded BROADCAST messages (i.e. spots, announcements, sound bells).
- Playing back of pre-recorded messages via monitor loudspeaker.
- 7 off controlled input contacts, configurable for playing the evacuation and/or alert messages to the programmed zones or for resetting the messages.
- 1 off music input for sound sources.
- 1 off auxiliary input configurable as a music source, a call with precedence activation or a call with automatic activation (VOX).
- 3 off configurable relay outputs.
- Double A+B output for each zone.
- Event log (list of failures and/or alarms that have occured in the system).
- Double LINK line for connecting other PAW51K-VES and/or PAW5500-VES (up to a total of 6 units).
- Multilanguages management.
- Protected local button for placing the system in an emergency state, equipped with its own LED.
- Local reset button.
- 3-band equalisation for each zone output.
- 3-band equalisation for each music input.
- Optional internal expansion card ACPAW-2IN for two additional music inputs (EXT 1 and EXT 2).
- Optional internal expansion card ACPAW-6IN with DSP for six additional music inputs.
- Built-in SD/USB input for background music MP3 player.

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### (...) Functional features

- Independent selection on each zone of the various audio sources (MUSIC IN, AUX IN, MP3 player and EXT).
- Up to 8 pre-recorded messages can be retrieved from outside through input contacts (of which 2 fixed emergency messages plus 6 that can be classed as emergency / evacuation / broadcast messages).
- Possibility of setting up to 16 timers for the programmed playing out of the broadcast messages with the possible activation of signalling relays.
- Up to 16 PMB106-G and/or PMB112-G broadcasting microphone stations can be connected.
- Up to 4 of the above mentioned stations can be set for local calls only (zones of the card-cage to which they are connected).
- Up to 4 PMB132-V and PMB132/12-V remote emergency units can be connected (or, as an alternative, up to 2 touch screen units TSB8500-V).
- EN54-4 certified battery charge unit for 24VDC secondary power supply (batteries not included).
- Mounting on 19" rack (optional, with ACPAW-RCK accessory kit).





# TECHNICAL DATA

| MODEL   | PAW51K4-V   | PAW51K6-V                                 |
|---|---|---|
| Rated audio output @230Vac<br>*typical distortion at 25 W 0,025%  | 1000 W / D=2,5%*  |   |
| Rated audio output @24Vdc<br>*typical distortion at 25 W 0,025%   | 800 W / D=10%*  |   |
| Display   | 4.3" backlit with touch screen 480x272 pixels   |   |
| N° of PAW51K-VES/x per system   | Max. 6  | (ID 0÷5)                                  |
| N° of zones/amplifiers  | 4   | 6   |
| Inputs  |   |   |
| Emergency microphone • Sensitivity / Impedance • Frequency response • S/N ratio   | Balanced XLR-F on the front door Signal level 20 mV / 10 k $\Omega$ 60 ÷20.000 Hz 72 dB   |   |
| Paging units (BROAD.)  • Sensitivity / Impedance  • Frequency response  • S/N ratio                                     | 1 off Rj45 for PMB106/112 paging units (PA) Max. signal level 1400 mV / 85 k $\Omega$ 60 ÷20.000 Hz 83 dB   |   |
| <ul><li>Emergency units (EMERG.)</li><li>Sensitivity / Impedance</li><li>Frequency response</li><li>S/N ratio</li></ul> | 1 off Rj45 for Serie PMB132 or TSB8500-V emergency microphone units Max. signal level 1400 mV / 85 k $\Omega$ 60 $\div$ 20.000 Hz 83 dB   |   |
| AUX (LINE-VOX)  • Sensitivity / Impedance  • Frequency response  • S/N ratio  | Balanced with terminals (HOT-COM-GND) Programmable in ON / OFF / VOX with A.P.T. modes Precedence input with contact closing activation 134 mV / 31 k $\Omega$ 90 $\div$ 20.000 Hz 81 dB / 85 dBA |   |
| MUSIC / EXT  • Sensitivity / Impedance  • Frequency response  • S/N ratio   | Balanced with terminals (HOT-COM-GND) 134 mV / 31 k $\Omega$ 90 ÷ 20.000 Hz 81 dB / 85 dBA  |   |
| Equalisation  |   |   |
| Independent equalisation for each output zone Independent equalisation for each music input                             | 3-band equaliser Bass tones (100 Hz): ± 10 dB Mid-range (1 kHz): ± 10 dB Treble tones (10 kHz): ± 10 dB   |   |
| Outputs   | , ,   |   |
| Constant voltage outputs with double lines (A/B) One zone output can be configured as a standby for the others.         | 4 zones<br>for 100V lines<br>Minimum 40 Ω   | 6 zones<br>for 100V lines<br>Minimum 40 Ω |
| REMOTE LINK A/B  • Output level / Impedance  • Sensitivity / Input impedance  | $n^{\circ}2+2$ Rj45 for connection with another PAW51K-VES / PAW5500-VES unit 1 V / 400 $\Omega$ 3600 mV / 3 k $\Omega$   |   |
| Emergency controls • Controlled inputs CONTACT • Outputs R1, R2, R3   | Programmable for normally active or normally inactive state 7 off inputs with diagnostic 3 relays for signalling, state of emergency and faults (24 Vdc / 1 A each) N.O-N.C-Exchange state        |   |



TECHNICAL DATA

| MODEL  | PAW51K4-V  | PAW51K6-V                         |
|--|--|-----------------------------------|
| General information                          |  |                                   |
| Mains power supply                           | 100 ~ 264 Vac<br>47/63Hz<br>+10/-15%   | 100 ~ 264 Vac 47/63Hz<br>+10/-15% |
|  | 110/ 13/0  | 1280 W full load                  |
|  | 1280 W full load<br>(4amp active)  | (4amp active / 2amp stand-by)     |
|  | 100 W no load  | 100 W no load                     |
| Secondary power supply<br>@24 Vdc (26,3 Vdc) | 40 A full load   | 40 A full load                    |
| Secondary power supply                       | 2 A no load / quiescent  | 2 A no load / quiescent           |
| Consumption @24 Vdc                          | 0,3 A no load / energy saving  | 0,3 A no load / energy saving     |
| Batteries                                    | Only use 40 Ah batteries.  |                                   |
| Charger / Power supply unit                  | 16 A (I max. a) 20 A (I max. b) 21 V (final voltage – detached battery) 27,2 V (complete load voltage) |                                   |
| Environmental operating conditions           | Temperature: +5°C ÷ +40°C<br>Relative humidity: 25% to 75% (non-condensing)                            |                                   |
| Type of mounting                             | Wall / To 19" rack with ACPAW-RCK optional accessory   |                                   |
| Dimensions (W x H x D)                       | 430 x 620 x 240 mm   |                                   |
| Net weight (without batteries)               | 22 kg  |                                   |

## **LIST OF OPTIONAL FUNCTIONS**

| CLAUSE | DESCRIPTION  |
|--------|--|
| 7.6.2  | Manual muting of voice alarm condition               |
| 7.7.2  | Manual resetting of voice alarm condition            |
| 7.9    | Output for signalling a voice alarm condition        |
| 8.3    | Indication of fault affecting the transmission paths |
| 8.4    | Indication of fault affecting the alarm zones        |
| 10     | Manual control of voice alarms                       |
| 11     | Interface for external control device(s)             |
| 12     | Emergency microphone(s)                              |
| 13.14  | Redundant power amplifier                            |

## **LIST OF THE AUXILIARY FUNCTIONS**

| DESCRIPTION      |  |
|------------------|--|
| Broadcast calls  |  |
| Background music |  |