

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

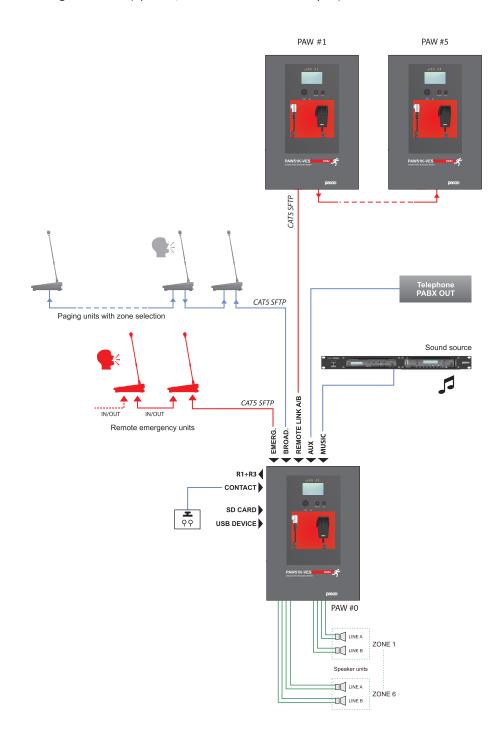
- Rated audio output: 1000 W overall, distributable freely among the zones with a maximum limit of 250 W
 per single zone.
- Backlit 4.3" display with touch screen for selecting the alert and evacuation zones and enabling navigation for adjusting volume levels, configuring the equipment and viewing failures.
- 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.

Next page...



(...) 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 *typical distortion at 25 W 0,025%	1000 W / D=2,5%*	
Rated audio output @24Vdc *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 Ω 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 Ω 60 ÷20.000 Hz 83 dB	
Emergency units (EMERG.)Sensitivity / ImpedanceFrequency responseS/N ratio	1 off Rj45 for Serie PMB132 or TSB8500-V emergency microphone units Max. signal level 1400 mV / 85 k Ω 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 Ω 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 Ω 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 for 100V lines Minimum 40 Ω	6 zones for 100V lines 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 Ω 3600 mV / 3 k Ω	
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 47/63Hz +10/-15%	100 ~ 264 Vac 47/63Hz +10/-15%
	110/ 13/0	1280 W full load
	1280 W full load (4amp active)	(4amp active / 2amp stand-by)
	100 W no load	100 W no load
Secondary power supply @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 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	