

Section	Voice Evacuation
Category	PA8500-VES System
Range	Managing/Diagnostics units
Code	CR8506-V

Certificate



EN 54-16: 2008
n. 0068-CPR-082/2013



Description

Controller

This new range of products has been designed and engineered to offer the most innovating solutions in the realization of alarms systems, **in order to manage emergency situations and to permit the guided evacuation, according to actual regulations (EN 54-16, ISO 7240-19 e EN 60849).**

The complete architecture of PA8500-VES system is based on the controller CR8506-V, the management and diagnostics unit. It is highly recommended for big as well as small installations, where high performance of security, flexibility and easiness are required. CAT-5e SF/UTP network assures an easy connection of the several units, controllers, routers, digital amplifiers and emergency and/or paging call stations. This solution performs in efficient and economic installation, allowing the usage of both local and centralized equipment.

Each CR8506-V can manage 6 control lines to which the following units can be directly connected:

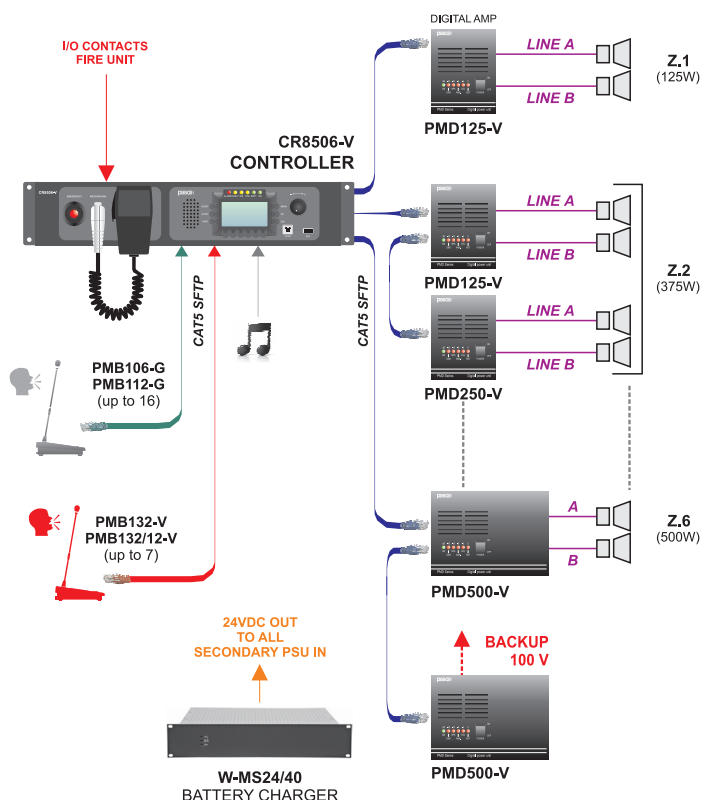
- **PMD range** of digital amplifiers, equipped with a diagnostics card (up to 16 per line);
- Router **RT8506-V** (1 per line) for up to 6 outputs zones with A & B speaker lines (100V);
- **PA8506-V** Integrated Voice Evacuation Systems with 6 zones.
- Maximum number of zones in the whole system: **216**.

It is possible to connect up to a maximum of 6 CR8506-V controllers with one another.

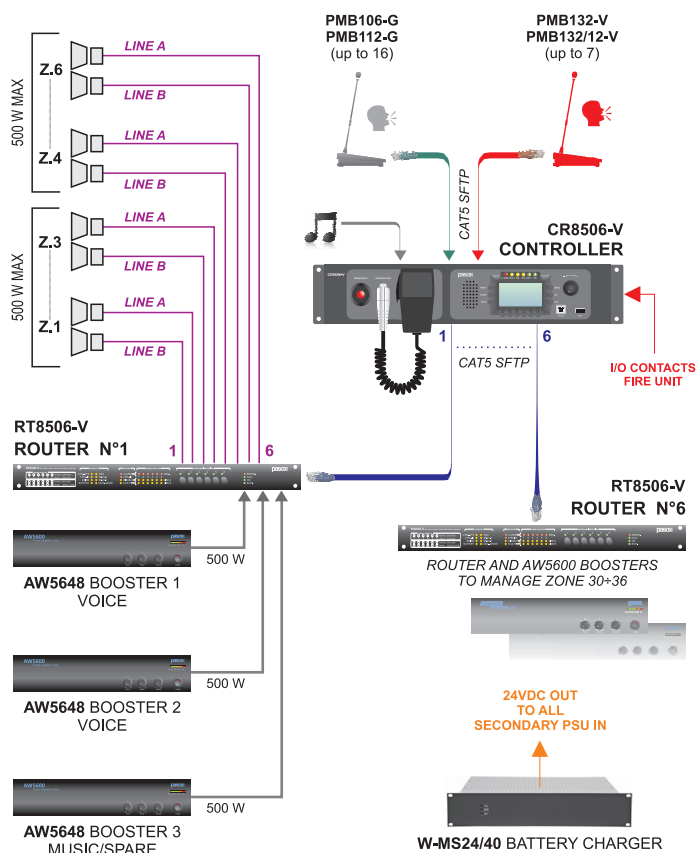
Main features

- Controlled emergency microphone.
- 2-channel broadcast system.
- Built-in message generator to broadcast prerecorded messages (EVAC and ALERT).
- USB input for background music source.
- Back-up power amplifier management.
- Secondary emergency power supply input (24 VDC).
- 7 controlled input contacts.
- 3 relay outputs.
- 6 control lines for PMD digital amplifiers and/or router RT8506-V and/or integrated voice evacuation system PA8506-V.
- 4 redundant lines to connect other CR8506-V in daisy chain (max 6).
- 2 redundant lines for emergency microphone consoles, PMB132 range (max 7).
- 2 lines for call stations PMB range (max 16 with 7 priority levels).
- Graphic display 128x64 pixel monochrome, for displaying multiple windows management.
- Complete diagnostic of system fault events.
- Standard rack mounting 19" (2 units).

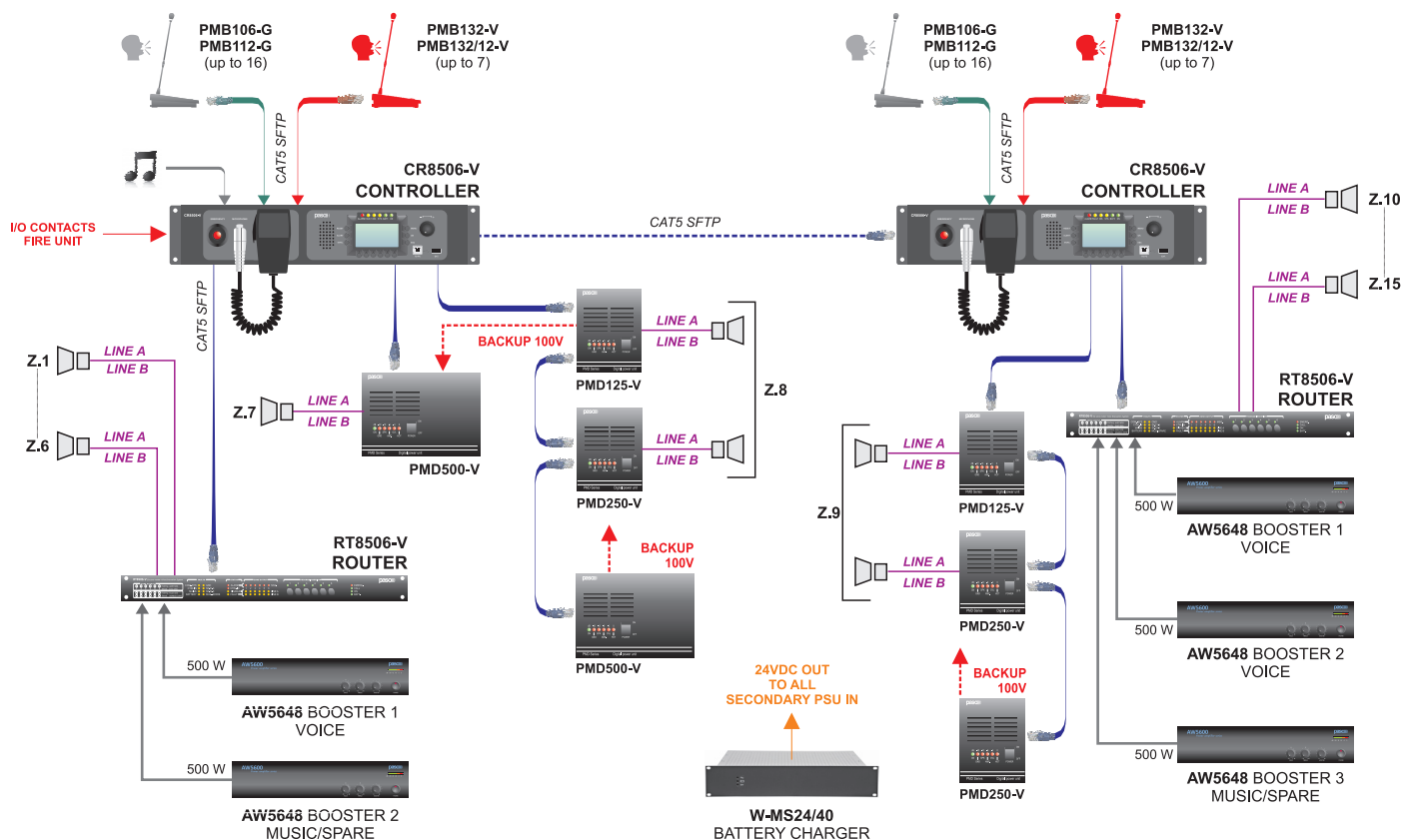
CR8506-V controllers and digital amplifiers of the PMD range



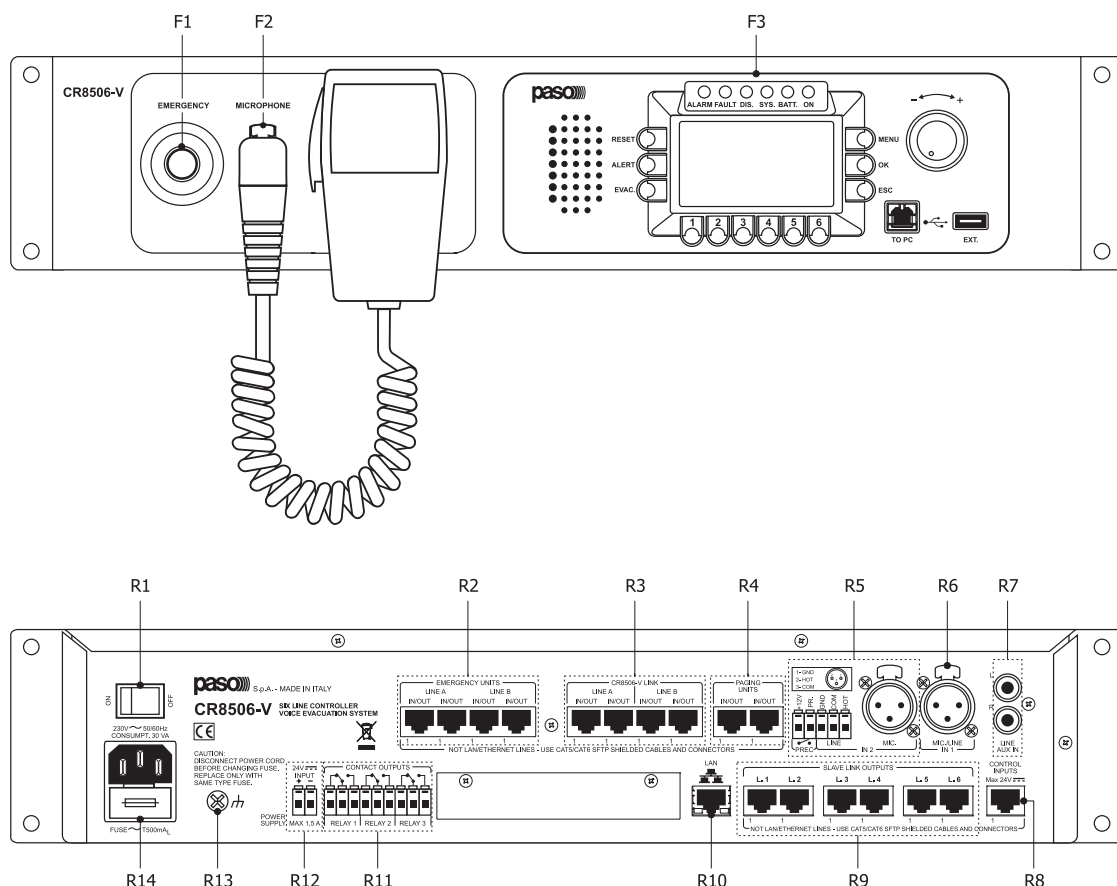
CR8506-V controller and RT8506-V router



PA8500-VES | System featuring a mixed configuration



References



Front panel

- F1. Flush-mounted push-button for activating the Manual Emergency mode (EMERGENCY).
- F2. Hand-held microphone with a Push-to-Talk (PTT) key for live emergency announcements.
- F3. Backlit black-and-white graphic display, 128 x 64 pixels.

Rear panel

- R1. ON/OFF switch.
- R2. Inputs for connecting remote emergency microphone stations (PMB132/12-V, PMB132-V).
- R3. Sockets for connections between CR8506-V controllers (up to 6 units).
- R4. Input for connecting broadcast paging units (PMB106-G, PMG112-G).
- R5. Balanced input for a microphone or outside source / Terminal block for connecting a precedence contact.
- R6. Input for external microphone.
- R7. Input for connecting an external source of music.
- R8. 7 monitored digital inputs for control via external peripheral units.
- R9. 6 output lines for connection to amplifiers of the PMD range and/or PA8506-V compact systems and/or RT8506-V routers.
- R10. Socket for connecting a Local Area Network with TCP/IP protocol for an Ethernet 10/100 network.
- R11. 3 relay outputs for signalling towards external peripheral units.
- R12. Terminals for 24 VDC external power supply.
- R13. Frame earthing connection.
- R14. Plug for 230 VAC mains power supply, with built-in fuse.

Technical data

Display	3", backlit, 128x64 dots
Inputs	
USB-EXT.	Powered USB input on the front panel - Type A socket
Emergency microphone • Sensitivity / Impedance • Frequency response / S/N ratio	Balanced XLR-F on the front panel Signal level 20 mV / 10 kΩ 60 ÷ 20.000 Hz / 72 dB
IN.1 Socket (MIC.) • Sensitivity / Impedance • Frequency response / S/N ratio	Programmable for the following modes: ON / OFF / Precedence / VOX with A.P.T. Balanced XLR-F (with possibility of activating 24 V phantom power supply) Signal level Min. 3 mV - Max 100 mV / 1,8 kΩ 240 ÷ 20.000 Hz / 63 dB
IN.2 Socket (MIC.) • Sensitivity / Impedance • Frequency response / S/N ratio Socket (LINE) • Sensitivity / Impedance • Frequency response / S/N ratio	Programmable for following modes: ON/ OFF / Precedence / VOX with A.P.T. Balanced XLR-F (with possibility of activating 24 V phantom power supply) Signal level Min. 3 mV - Max 100 mV / 1,8 kΩ 240 ÷ 20.000 Hz / 63 dB Balanced with terminals(HOT-COM-GND) Max signal level 1800 mV / 31 kΩ 60 ÷ 20.000 Hz / 84 dB
AUX • Sensitivity / Impedance • Frequency response / S/N ratio	RCA stereo socket for source of sound (BGM) – Conversion to mono Max signal level 1800 mV / 31 kΩ 60 ÷ 20.000 Hz / 84 dB
Paging units • Sensitivity / Impedance • Frequency response / S/N ratio	2 RJ45 for calling (PA) units of the PMB106-G/PMB112-G or ACIO8136 ranges. Max signal level 1400 mV / 85 kΩ 60 ÷ 20.000 Hz / 83 dB
EMERGENCY UNITS	RJ45 for connection to a dedicated emergency microphone station.
Outputs	
SLAVE LINK OUTPUT • Output level / Impedance	RJ45 for connection to an RT8506-V / PMD / PA8506-V unit Max 2000 mV / 400 Ω
CR8506-V LINK • Output level / Impedance • Sensitivity / Input impedance	RJ45 for connection to a CR8506-V unit Max 2000 mV / 400 Ω 2000 mV / 50 kΩ
Emergency controls • CONTROL INPUTS inputs • CONTROL OUTPUTS outputs	Programmable as Normally Activated or Normally De-activated. 7 inputs with diagnostics. 3 relays for signalling emergency conditions and failures, NO-NC-Changeover terminals.
Precedence IN 1 - IN 2	Precedence input with terminals with common +12 Vdc.
LAN	Presa LAN Rj45 per collegamento TCP/IP a web server.
Overall	
Mains power supply @230V _{AC} Consumption @230V _{AC}	230 Vca 50/60 Hz ±10% 10 W
External power supply @24V _{DC} Consumption @24V _{DC}	24 Vcc (min 22Vcc ÷ max 28Vcc) 0,3 A
Environmental operating conditions	Temperature: +5°C to +40°C / Relative humidity: 25% to 75% non-condensing
Mounting	Direct to rack 19" (2U).
Size of unit (L x H x D) Size of package (L x H x D)	482 x 88 x 220 mm 522 x 155 x 292 mm
Net weight Gross weight	4,5 kg 5,5 kg