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).
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).
R5. Balanced input for a microphone or outside source / Terminal block for connecting a precedence contact.
R6. Input for external microphone.
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
- **Balanced XLR-F on the front panel**
  - Signal level 20 mV / 10 kΩ
  - Frequency response 60 ÷ 20,000 Hz / 72 dB

#### IN.1 Socket (MIC.)
- **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
  - Frequency response 240 ÷ 20,000 Hz / 63 dB

#### IN.2 Socket (MIC.)
- **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
  - Frequency response 240 ÷ 20,000 Hz / 63 dB

#### IN.2 Socket (LINE)
- Balanced with terminals (HOT-COM-GND)
- Signal level 1800 mV / 31 kΩ
- Frequency response 60 ÷ 20,000 Hz / 84 dB

#### AUX
- RCA stereo socket for source of sound (BGM) – Conversion to mono
- Signal level 1800 mV / 31 kΩ
- Frequency response 60 ÷ 20,000 Hz / 84 dB

#### Paging units
- 2 RJ45 for calling (PA) units of the PMB106-G/PMB112-G or ACIO8136 ranges.
  - Signal level Min. 3 mV - Max 100 mV / 1,8 kΩ
  - Frequency response 240 ÷ 20,000 Hz / 63 dB

#### EMERGENCY UNITS
- RJ45 for connection to a dedicated emergency microphone station.

### Outputs

#### SLAVE LINK OUTPUT
- RJ45 for connection to an RT8506-V / PMD / PA8506-V unit
- Signal level 2000 mV / 400 Ω
- Frequency response 60 ÷ 20,000 Hz / 84 dB

#### CR8506-V LINK
- RJ45 for connection to a CR8506-V unit
- Signal level 2000 mV / 400 Ω
- Frequency response 2000 mV / 50 kΩ

#### Emergency controls
- 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 Vcc.

### LAN
- Presa LAN RJ45 per collegamento TCP/IP a web server.

### Overall

#### Mains power supply @230Vac
- Consumption @230Vac 230 Vca 50/60 Hz ±10%
- Power 10 W

#### External power supply @24Vcc
- Consumption @24Vcc 24 Vcc (min 22Vcc ÷ max 28Vcc)
- Power 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)
- 482 x 88 x 220 mm

#### Size of package (L x H x D)
- 522 x 155 x 292 mm

#### Net weight
- 4,5 kg

#### Gross weight
- 5,5 kg

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PASO S.p.A. reserves the right to make changes to drawings and specifications at any time and without notice.