Compact Voice Alarm System

MAIN FEATURES

- Audio rated power: 500W freely distributed between the zones up to a maximum of 250W within a single zone.
- 4.3" touch screen back-lit display for alert & evacuation zone selection, levels adjustment, settings, and failure visualization.
- Fireman's monitored microphone on the front panel.
- Sending of EVACUATION and ALERT pre-recorded messages.
- 7 monitored inputs, each of which is configurable for the playback or either evacuation or alert messages, programmable for each zone, or for the reset of the messages.
- 1 auxiliary input for external sound sources.
- 1 VOX input.
- 3 configurable relay outputs.
- Double output A+B per zone.
- Secure front-panel button for operating the emergency system complete with LED indicator.
- Front-panel reset button.
- Possibility to source either BGM or paging announcements from an auxiliary input or microphone.
- Possibility to connect up to 16 paging units MBT 1106, MBT 1112.
- Possibility to connect up to 4 remote emergency microphone units FMD 2012, FMD 2001 or, as an alternative, up to 2 touch screen remote emergency units TSC 6000EN.
- Possibility to connect further VAIE 6000 (up to 6 units).
- Industry-standard 19" rack-mounting format.

EN 54-16:2008 **EN 54-4:1997**

EN 54-16:2008
EN 54-4:1997 + A1:2002 + A2:2006
Cert. Nr. 0068-CPR-069/2019

Declaration of Performance (DoP) available on the website: *www.fbt.it*

DESCRIPTION

The new VAIE 6500 compact systems, equipped with an EN54-16:2008 / EN54-4 certified control unit, have been designed for ease of installation and for operating in a vast range of applications. These systems are able to manage, depending on the model, up to 6 alarm zones via local controls, remote microphone station, and controlled inputs.

Three available models:
VAIE 6502 | 2 zones - double line
VAIE 6504 | 4 zones - double line
VAIE 6506 | 6 zones - double line

LIST OF OPTIONAL FUCTIONS

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 amplifiers

LIST OF AUXILIARY FUCTIONS

DESCRIPTION
Broadcast calls
Background music

TECHNICAL SPECIFICATIONS

GENERAL	VAIE 6502	VAIE 6504	VAIE 6506
Rated audio output @230Vac * typical distortion at 25W 0,025%	500W / D=2,5%*	500W / D=2,5%*	500W / D=2,5%*
Rated audio output @24Vdc * typical distortion at 25W 0,025%	400W / D=10%*	400W / D=10%*	400W / D=10%*
Display	4.3" / backlit with touch screen 480 x 272 pixel	4.3" / backlit with touch screen 480 x 272 pixel	4.3" / backlit with touch screen 480 x 272 pixel
N. of VAIE 7500 x system	max 6 (ID 0 to 5)	max 6 (ID 0 to 5)	max 6 (ID 0 to 5)
N. of zones / amplifiers	2	4	6
INPUTS			
Emergency microphone	**Balanced XLR-F on the front door**	**Balanced XLR-F on the front door**	**Balanced XLR-F on the front door**
• Sensitivity / Impedance	Signal level 20mV / 10kOhm	Signal level 20mV / 10kOhm	Signal level 20mV / 10kOhm
• Frequency response	60 - 20kHz	60 - 20kHz	60 - 20kHz
• S/N ratio	72dB	72dB	72dB
Paging units (BROAD.)	**1 off RJ45 for paging units (PA)**	**1 off RJ45 for paging units (PA)**	**1 off RJ45 for paging units (PA)**
• Sensitivity / Impedance	Signal level max 1400mV / 85kOhm	Signal level max 1400mV / 85kOhm	Signal level max 1400mV / 85kOhm
• Frequency response	60 - 20kHz	60 - 20kHz	60 - 20kHz
• S/N ratio	83dB	83dB	83dB
Emergency units (EMG.)	**1 off RJ45 for emergency microphone stations**	**1 off RJ45 for emergency microphone stations**	**1 off RJ45 for emergency microphone stations**
• Sensitivity / Impedance	Signal level max 1400mV / 85k	Signal level max 1400mV / 85k	Signal level max 1400mV / 85k
• Frequency response	60 - 20kHz	60 - 20kHz	60 - 20kHz
• S/N ratio	83dB	83dB	83dB
AUX (LINE-VOX)	**Balanced with terminals (HOT- COM - GND) Programmable in ON/OFF/ VOX with A.P.T. Precedence input with contact closing act**	**Balanced with terminals (HOT- COM - GND) Programmable in ON/OFF/ VOX with A.P.T. Precedence input with contact closing act**	**Balanced with terminals (HOT- COM - GND) Programmable in ON/OFF/ VOX with A.P.T. Precedence input with contact closing act**
• Sensitivity / Impedance	134mV / 31kOhm	134mV / 31kOhm	134mV / 31kOhm
• Frequency response	90 ÷ 20kHz	90 ÷ 20kHz	90 ÷ 20kHz
• S/N ratio	81dB / 85dBA	81dB / 85dBA	81dB / 85dBA
MUSIC / EXT	**Balanced with terminals (HOT-COM-GND)**	**Balanced with terminals (HOT-COM-GND)**	**Balanced with terminals (HOT-COM-GND)**
• Sensitivity / Impedance	134mV / 31kOhm	134mV / 31kOhm	134mV / 31kOhm
• Frequency response	90 ÷ 20kHz	90 ÷ 20kHz	90 ÷ 20kHz
• S/N ratio	81dB / 85dBA	81dB / 85dBA	81dB / 85dBA
OUTPUTS			
Constant voltage outputs with double lines (A+B) One zone output can be configured as a standby for the others	**2 zones for 100V lines** Minimum 40Ohm	**4 zones for 100V lines** Minimum 40Ohm	**6 zones for 100V lines** Minimum 40Ohm
REMOTE LINK A/B	**2 off RJJ45 for connection with another VAIE 6500 unit**	**2 off RJJ45 for connection with another VAIE 6500 unit**	**2 off RJJ45 for connection with another VAIE 6500 unit**
• Output level / Impedance	1V / 400Ohm	1V / 400Ohm	1V / 400Ohm
• Sensitivity / Input impedance	3600mV / 3kOhm	3600mV / 3kOhm	3600mV / 3kOhm
Emergency controls	**Programmable for normally active or normally inactive state**	**Programmable for normally active or normally inactive state**	**Programmable for normally active or normally inactive state**
• Controlled inputs CONTACT	7 off inputs with diagnostic	7 off inputs with diagnostic	7 off inputs with diagnostic
• Outputs R1, R2, R3	3 relays for signaling, state of emergency and faults N.O.-N.C. - exchange state	3 relays for signaling, state of emergency and faults N.O.-N.C. - exchange state	3 relays for signaling, state of emergency and faults N.O.-N.C. - exchange state

POWER SUPPLY	VAIE 6502	VAIE 6504	VAIE 6506
Mains power supply @230Vac Consumption @230Vac	230Vac 50/60Hz +10% / -15% 646W full load (2 amps active) 36W empty	230Vac 50/60Hz +10% / -15% 653W full load (2 amps active / 2 amps standby)	230Vac 50/60Hz +10% / -15% 660W full load (2 amps active / 4 amps standby) Efficiency 75,6%
Secondary power supply @24Vdc (26,3 Vdc) Secondary power supply Consumption @24Vdc	20A full load 0,7A no load / quiescent 0,2A no load / energy saving	20A full load 0,95A no load / quiescent 0,2A no load / energy saving	20A full load 1,2A no load / quiescent 0,2A no load / energy saving
Batteries	Suggested model: W-MS 12/28 (26+28Ah) It is possible to use other batteries (18Ah - 33Ah - 40Ah)	Suggested model: W-MS 12/28 (26+28Ah) It is possible to use other batteries (18Ah - 33Ah - 40Ah)	Suggested model: W-MS 12/28 (26+28Ah) It is possible to use other batteries (18Ah - 33Ah - 40Ah)
Charger / Power supply unit	8A (Pmax. a) 12A (Pmax. b) 21V (final voltage - detached battery) 27,2V (complete load voltage)	8A (Pmax. a) 12A (Pmax. b) 21V (final voltage - detached battery) 27,2V (complete load voltage)	8A (Pmax. a) 12A (Pmax. b) 21V (final voltage - detached battery) 27,2V (complete load voltage)

MECHANICAL SPECIFICATIONS			
Code	40644	40948	40949
Environmental operating conditions	Temperature: +5°C ÷ +40°C / Relative humidity: 25% to 75% (non-condensing)	Temperature: +5°C ÷ +40°C / Relative humidity: 25% to 75% (non-condensing)	Temperature: +5°C ÷ +40°C / Relative humidity: 25% to 75% (non-condensing)
Type of mounting	Wall mounting	Wall mounting	Wall mounting
Net dimensions (WxHxD)	430 x 620 x 240mm 16.92 x 24.4 x 9.44inch	430 x 620 x 240mm 16.92 x 24.4 x 9.44inch	430 x 620 x 240mm 16.92 x 24.4 x 9.44inch
Net weight	21.70 kg 47.84 lb	22.50 kg 49.60 lb	23.10 kg 50.92 lb

TYPICAL CONFIGURATION