

**VAIE 4251**

## VOICE ALARM INTEGRATED EQUIPMENT

**References**

EN 54-24:2008, EN 50849  
EN 54-4: 1997 + A1:2002 + A2:2006  
Cert. N. 0068/CPR/163-2021

Declaration of Performance (DoP) available on the website [www.fbt.it](http://www.fbt.it)



EN 54 - 16

EN 54 - 4

**Description**

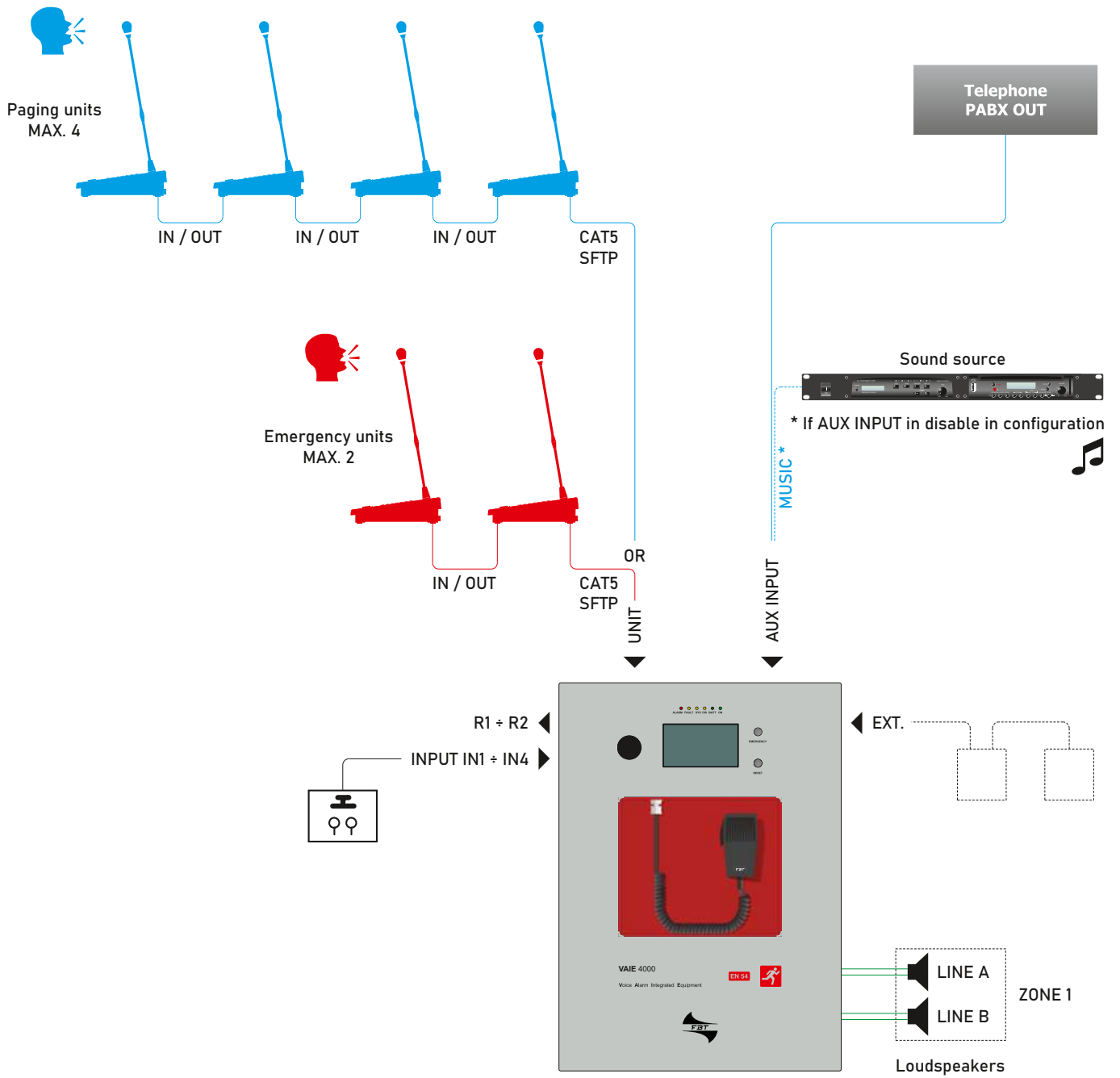
Wall mounted voice alarm integrated equipment - 250 W, 1 zone (A+B).

The VAIE 4000 series has been specifically designed for wall-mounting and equipped with control units, certified in compliance with EN 54-16:2008 / EN 54-4 standards. The VAIE 4251 model is capable of managing 1 alarm zone, with an overall power of 250 W, as well as remote microphone stations and controlled inputs to be connected to a central fire-fighting system.

**Functional features**

- Rated audio output: 250 W
- 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.
- 4 off controlled input contacts, configurable for playing the evacuation and/or alert messages to the zone, for resetting the messages or for signalling the failure of an external equipment.
- 1 off auxiliary/music input configurable as a music source, a call with precedence activation or a call with automatic activation (VOX).
- 2 off configurable relay outputs.
- Local button for placing the system in an emergency state, equipped with its own led.
- Local button for resetting the fault acoustic signal and stopping playing out of alarm messages.
- EN54-4 certified internal battery charger unit for 24Vdc secondary power supply.
- Possibility to connect up to 4 MBT 1000 series broadcasting microphone units or - as an alternative - up to 2 FMD series remote emergency units.
- An optional extension card can be used for broadcast general calls towards other connected units or as an additional music input.
- Possibility to set a standby amplifier.

Typical configuration



## Technical data

MODEL	VAIE 4251	
Rated audio output @230 Vac	250 W	
Rated audio output @24 Vdc	200 W (THD = 10%)	
Rated audio output @21,5 Vdc	158 W (THD = 10%)	
Display	4,3", backlit with touch screen, 480 x 272 pixels	
No of zones / amplifiers	1	
Inputs		
<b>Emergency microphone</b>	<b>Dynamic XLR-F w/P.T.T. (Push To Talk) on the front door</b>	
Sensitivity / Impedance	Signal level: 20 mV / 10 kOhm	
Frequency response	110 ÷ 10.000 Hz	
S/N ratio	61 dB	
<b>Paging / Emergency units (UNIT)</b>	<b>1 off RJ45 for paging units (PA) or emergency units</b>	
Sensitivity / Impedance	Signal level: max. 850 mV / 8 kOhm	
Frequency response	60 ÷ 20.000 Hz	
S/N ratio	84 dB	
<b>Aux Input (LINE VOX) / Music</b>	<b>Balanced with terminals (HOT-COM-GND)</b>	
	<b>Programmable in ON / OFF / VOX with A.P.T. models</b>	
	<b>Precedence input with contact closing activation</b>	
Sensitivity / Impedance	160 mV / 40k Ohm	
Frequency response	40 ÷ 20.000 Hz	
S/N ratio	73 dB	
Outputs		
<b>Constant voltage outputs</b>	<b>1 zone A/B for 100 V lines - Minimum 40 Ohm</b>	
<b>Emergency controls</b>	<b>Programmable for normally active or normally inactive state</b>	
Controlled inputs (IN1 ÷ IN4)	4 off inputs with diagnostic	
Outputs R1, R2	2 off relays for signalling, state of emergency and faults	
	( 24 Vdc / 1 A each )	
	N.O-N.C-Exchange state	
General information		
Mains power supply	230 Vac 50/60 Hz +10/-15%	
Consumption @230 Vac	330 W full load / 33 W quiescent	
Secondary power supply	24 Vdc (2 x 12 Vdc batteries)	
Consumption @24 Vdc	9,8 A full load / 940 mA quiescent / 0,22 A energy saving	
Batteries	12 Ah - Ri max. 250 mOhm	24 h in standby + 1/2 h full power alarm message
	18 Ah - Ri max. 167 mOhm	72 h in standby + 1/2 h full power alarm message
<b>Charger / Power supply unit</b>	9 A (I max. a) / 11 A (I max. b)	
	21 V (final voltage - detached battery) / 27,2 V (complete load voltage)	
Internal fuses	V~ 2AT / V~ 10AT	
Environmental operating conditions	Temperature: +5°C ÷ +40°C / Relative humidity: 25% to 75% (non-condensing)	
Type of mounting	Wall mounting	
Dimensions (W x H x D)	360 x 495 x 193 mm	
Net weight (without batteries)	11,5 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)

LIST OF THE AUXILIARY FUNCTIONS

DESCRIPTION
Broadcast calls
Background music