



# **AE300**

Integrated Voice Alarm System

**VAE**  
VOICE ALARM  
EQUIPMENT



# AE300

## Integrated Voice Alarm System

The AE300 is the all-in-one solution for demanding emergency sound applications and voice evacuation systems that require operational simplicity, ease of installation, budgetary price and fulfilment to the EN54 European Standard.



- Off-the-shelf integrated voice alarm system
- Installation ready out of the box
- High-quality full digital DSP-based architecture
- High output power (300W)
- Redundant loudspeaker lines (A+B)
- Embedded EN54-4 power supply and batteries
- 8 x general purpose triggerable messages
- 2 x voice alarm messages; monitored input triggers
- Background music input
- Ethernet ready



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### PROVEN PERFORMANCE

The AE300 is an off-the-shelf integrated emergency sound system, leading in performance, ease of installation and reliability.

### THE IDEAL SOLUTION

The AE300 has been designed for all buildings and facilities where fire alarm systems and evacuation needs are limited to a single zone, but thanks to its networking features (*to be released*), several units can live together in a master-slave operation on more complex installations where additional zones are needed.

The AE300 is the ideal solution for schools, halls, supermarkets, motels, railway stations, hospitals and, in general, all small buildings opened to the public.

The unit integrates an **EN54-16 automatic voice evacuation system** and an **EN54-4 backup power supply** in a wall-mount steel enclosure. Nothing else is needed: no complex configuration and installation, no endless commissioning, no engineering skills. Just take it out of the box, hang it to the wall, make few connections and the unit is fully operational!

The unit can trigger recorded evacuation messages from the fire alarm equipment, or live messages can be spoken through the integrated PTT style microphone. Access to the security and fire alarm features system is protected by a key-lock. The AE300 is not just a fire alarm device: it features a background music input, an external microphone input for general announcements, an external emergency call-station input, a set of contacts to trigger general purpose recorded messages. Its powerful software features also allow to schedule user selectable recorded announcements.

Its powerful **DSP architecture** and its **300W Class-D integrated amplifier** will clearly bring your emergency message in the widest hall, building or facility.

### INTEGRITY AND CLARITY: ALWAYS!

The AE300 voice evacuation system is fully supervised according to EN54-16 and EN54-4 standards, to ensure spoken or recorded messages integrity by constantly monitoring the audio, power and control path, from the microphone capsule, to the loudspeaker line. In addition, the AE300 automatically switches to its embedded spare power amplifier in case of a failure to the main unit.

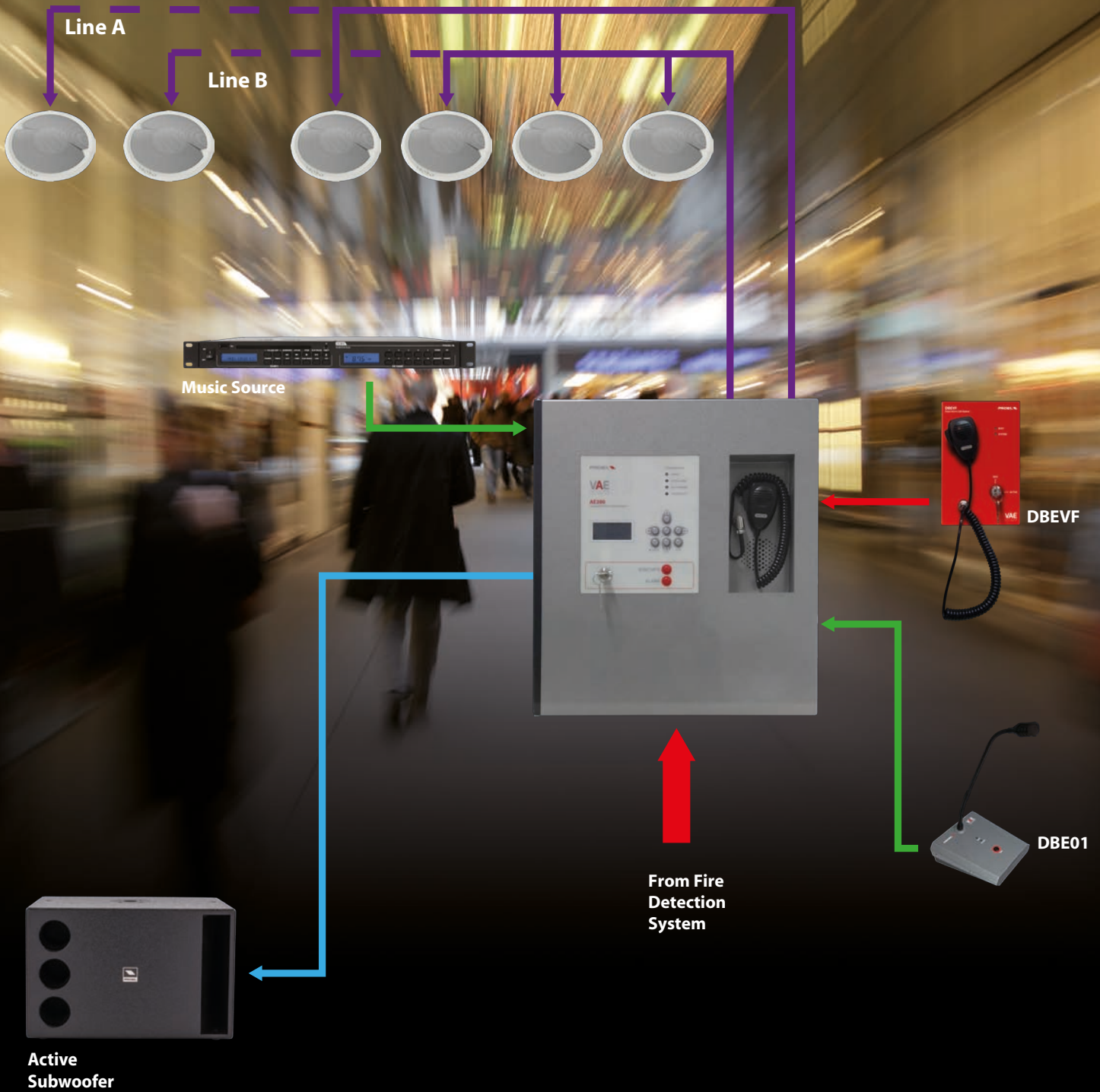
The AE300 has been designed with a Hi-Fi mindset, because the quality and intelligibility of your recorded or live alarm message and background music is a key feature you can't renounce.

### IN-HOUSE DESIGN, NO COMPROMISE MANUFACTURING

The AE300 is totally designed and manufactured by Proel engineering and product development team. We are proud of the know-how we have gained but we constantly outlook to increase our knowledge. Our products are manufactured in Italy under the strictest factory process control as prescribed by the EN54-4 and EN54-16 certification.

## TECHNICAL SPECIFICATIONS and FEATURES

	<b>AE300</b>
Main power source	AC mains 220V - 50/60Hz
Backup power source	48V – built-in batteries (4x 12V 7,2A/h sealed lead acid)
Backup power unit life	36h stand-by + 0.5h full power
Maximum power consumption	350W
Rated Output power	Single zone 300W rms @ 1% THD on 100V loudspeaker line
Frequency response	100Hz – 18Khz @ -3dB
Signal to noise ratio	>90dB
Redundant power amplifier	Yes
Redundant loudspeaker line	Yes (Line A, Line B)
Loudspeaker line monitoring	Line A and Line B independent 18 KhZ FFT impedance measurement +/-5% range. Detection of line cut, line short, line grounding
User interface	Status leds + dot-matrix display, menu navigation keyboard, direct access status keys (alarm, warning, silencing)
Audio processing	DSP based, 16bit-48Khz; 3-band equalizer, Compressor/expander on microphone inputs; Pre-gain and master volume controls; Chime
Audio inputs/outputs	Background music; microphone input with phantom supply and enable contact input. Subwoofer line output
Front panel loudspeaker monitor	Yes
Emergency Firemen microphone	Frontpanel PPT microphone with monitored capsule RJ14 input for WG-MTU01 desktop emergency call station
General input controls	8x dry contact inputs triggers for general announcement messages
General message scheduler	Yes
Input controls from fire alarm devices	2x monitored input contacts against cable-cut and cable short. Alarm, warning
Output status reporting	2x 1A 230V relay contacts (alarm, fault)
Communication	RS485, RS232 diagnostic port, RJ45 10 BASE-T/100
Battery monitoring	Internal resistance DC measurement
Certifications and compliancy	EN54-16, EN54-4, BS-EN5839-8, 60849
Access restriction	Key-locked front door, password protected access to system menu
Chassiss, dimensions and weight	Steel, powder coated – 12Kg batteries included. Width 440mm, Height 11 Rack units (490mm) – Depth 150mm







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