

ONE-500

EN 54-16 & EN54-4 Public Address and Voice Alarm System



The ONE500 is a compact EN 54-16 certified public address and voice alarm system that ensures a fast, safe and controlled emergency evacuation.

ONE is the most versatile and cost effective PA/VA system, thanks to its cutting-edge features, excellent audio quality and flexibility in minimum space. It has 2 class D amplifiers, 6 zones, 3 audio inputs, 6x6 audio matrix, DSP and LCD display.

The system can be configured without software or PC, thanks to the Plug&Set mode for PA/VA.

Audio inputs and automatic mixing allow high versatility for PA use in small installations. ONE has an EN 54-4 battery charger and can operate with one 12V battery. This feature and its advanced power saving control reduce maintenance costs to the maximum.

The power behind **your mission**

A Wall&Rack innovative design makes ONE suitable for wall mounting and rack integration.

General Features:

- 3 audio inputs.
- Up to 8 MPS-8Z multizone micropohones or VAP-1 panels connected with CAT5 UTP cable.
- 2 class D amplifiers with two configurations for 100V/70V lines up to 500W.
- Digital audio matrix 6x6, expandable.
- 4 pre-amp outputs for external PA amplifiers connection.
- DSP: 3/7-band input/output parametric equalizer, loudness, sound enhancer, independent volume control per each input and output master.
- Access control by LCD display.
- Control for up to 16 AT6 attenuators.

- 8+2 GPIO ports, supervised for integration with Fire Alarm Control Panel.

Voice alarm/emergency features:

- 3 audio inputs.
- Certified under EN 54-16, EN 54-4 and EN 60849 standards.
- Failure detection and indication in all emergency functions.
- Fire Alarm Control Panel integration.
- Double player for pre-recorded evacuation messages.
- Manual control of emergency states with access control.
- Emergency log.
- Loudspeaker lines supervision.
- Line terminator without return for supervision.
- Backup amplifier included.
- 10 minutes storage for pre-recorded messages.

Technical specifications

| Model | ONE-500 |
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| Reference | 590.002.001 |
| Power supply | 100 - 240V~ 50/60Hz |
| Power consumption | 350W max / 100W at 1/8 output power |
| Frequency response | 80 - 20000Hz +/-1dB |
| Signal to noise ratio | SNR~95dB, A-weighted |
| Distortion factor | <0.1% according to IEC 60268 |
| Gain adjustment per channel | -100dB +10dB, 1dB steps |
| DSP | Integrated - 48 kHz, 24 bits - 344 MIPS |
| BGM audio inputs | 1 x balanced audio 1 Vrms. 10 K Ω , 3 Pin, Euroblock type |
| Priority audio inputs | 2 x balanced audio 1 Vrms. 10 K Ω , 4 Pin, Euroblock type (GPIO) |
| General control (GPIO) | 2 x control I/O, 0-5 V, 100 Ω , in PRIO audio inputs |
| ACSI Bus | 1 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 800m / 2624.7ft |
| ACSI-Link connectivity | 2 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 800m / 2624.7ft |
| Pre-amp audio outputs | 4 x balanced audio 1 Vrms. 100 Ω , 3 Pin, Euroblock type |
| Attenuators control | 6 x override 24V DC, 6 x 30mA, 2 Pin, Euroblock type (4 pin connector) |
| Emergency control inputs | 8 x 0 - 5V DC, monitored inputs, 2 Pin, Euroblock type (4 pin connector) |
| Emergency control outputs | 2 x contact closure output, NO, max 60V DC 130mA, 2 Pin, Euroblock type (4 pin connector) |
| Virtual matrix | 15 x 24 maximum |
| Amplifier | 2 x 500W D class (250Wrms x 2) @ 70 / 100V. Min load 20 Ω |
| Backup amplifiers | 1 backup amplifier with automatic priority according to EN 54-16 |
| Speaker line outputs | 6 x 100V audio. Min. impedance: 20 Ω 500W (outputs 1 and 2), 80 Ω 120W (rest), 2 Pin, Euroblock type |
| Output power | 500 W according to EN60065. 200 Wrms according to EN 54-16 |
| Protection | Over-temperature, infrasonic, short circuit, slow start-up, overload |
| Emergency power | 181x76x167mm battery housing, up to 22Ah |
| Battery charger | Integrated, smart charging up to 3 amperes |
| Operation conditions | -5 \circ C to +45 \circ C / 23 ϕ F to 113 ϕ F 5% to 95% relative humidity (without condensation) |
| Finish | Materials: Fe y AL Colours: RAL7016 and RAL9005 |
| Weight | 7.5 Kg / 15.76 lb |
| Dimensions (W x H x D) | 453mm x 88mm x 455mm / 18.2" x 3.46" x 18" |
| Accessories | Male Euroblock connectors, installation screws, 4 x rubber foot |