

PUBLIC ADDRESS AND VOICE ALARM SYSTEM EN 54-16 & EN 54-4

ONE

Ref: LDAONE500S01

The *ONE* 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.

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



General features:

- 3 audio inputs.
- Emergency microphone input.
- Up to 8 MPS-8Z multizone microphones 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, LDA sound enhancer, independent volume control per each input and output master.
- Access control by LCD display.
- Control for up to 16 LDA AT6 attenuators.
- 8+2 GPIO ports, supervised for integration with Fire Alarm Control Panel.
- Interface MODBUS RTU. RS-485 Half Duplex

Voice alarm/emergency features:

- 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.

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Technical specifications:

Model	ONE-500
Reference	LDAONE500S01
Power supply	100 - 240V~ 50/60Hz
Power consumption	320W max / 100W at 1/8 output power
Frequency response	80 – 20000Hz +/-1dB
Signal to noise ratio	SNR~90dB, A-weighted
Distorsion factor	<1% according to IEC 60268 -15dB. <0,01% pre-out outputs
Gain adjustment per channel	-100dB +10dB, 1dB steps
DSP	Integrated - 48 kHz, 24 bits - 344 MIPS
BGM audio inputs	Up to 3 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
LDA ACSI Bus	1 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 1000m
ACSI-Link connectivity	2 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 800m
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 (Pink Noise 1/8). 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
Display	Backlit LCD 2 rows x 16 characters
Operation conditions	-5 $^{\circ}$ C to +45 $^{\circ}$ C / 23 $^{\circ}$ F to 113 $^{\circ}$ 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