

## GENERAL CATALOG

PUBLIC ADDRESS AND VOICE ALARM SYSTEMS



This catalog is for reference only. While we strive to ensure its accuracy, it may include errors, omissions, or not reflect the latest updates. For detailed information, please consult our technical or sales team.

# TABLE OF CONTENTS

ABOUT LDA	04
VOICE EVACUATION SYSTEMS	
APPLICATIONS	12
ONE SYSTEM	14
NEO+ SYSTEM	24
SHARED ACCESSORIES	
SPEAKERS	48
OUR CERTIFICATIONS	54
CONTACT	56

www.lda-audiotech.com info@lda-audiotech.com



# **ABOUT LDA**

## INNOVATION AT YOUR SERVICE FOR SAFETY

A clear emergency announcement, made in a timely and controlled manner, can make all the difference in a crisis situation. That's why at LDA Audio Tech, we take **product development** seriously to create the most advanced public address and voice evacuation systems.

LDA Audio Tech is one of the leading global providers of voice alarm systems and active protection in buildings. **We design, develop, and manufacture** audio systems that easily integrate into various facilities while ensuring maximum **safety and quality** certified to the highest international standards.

Our team is made up of qualified professionals who understand the needs of integrators, installers, engineering firms, and large companies.

Through R&D and ongoing training, and by staying attuned to the latest technological innovations, LDA offers **tailored solutions for any type of installation**.



### TECHNOLOGY AND INNOVATION MANUFACTURED IN SPAIN

From the Technological Park of Andalusia in Malaga, Spain, in LDA Audio Tech we have been investing in R+D+i to open new paths for more than four decades. We export to more than 60 countries.

#### **MISSION AND VALUES**

• We provide effective sound and security systems that protect people and generate long-term value for users, customers, suppliers, workers, and shareholders in a sustainable way, complying with legal requirements and committed to continuous improvement.

• Excellence is our way to achieve outstanding results.

• Innovation is the engine of our sustainability.

- · We act with initiative and determination.
- We act ethically and responsibly.
- We care about how things are done.

#### SUSTAINABILITY

At LDA Audio Tech we understand that commitment to sustainability goes beyond technical excellence.

We adopt the ESG approach (environment, society and corporate governance) proposed by the United Nations to integrate all key aspects of corporate social responsibility into our strategy.

We manufacture our products without using materials that are hazardous to health and the environment and avoid generating unnecessary waste. We work without plastic and use recycled materials.

#### EXCELLENCE

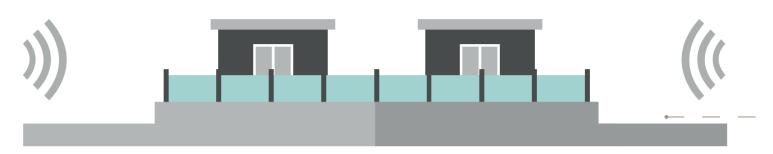
We build our company philosophy and bring it to life through a quality management system that operates transversally in all layers of our organization.

Our processes, products and services are accredited by certifications based on international standards and regulations such as EN 54, ISO 9001, CE, EAC and APF Fire Safety.

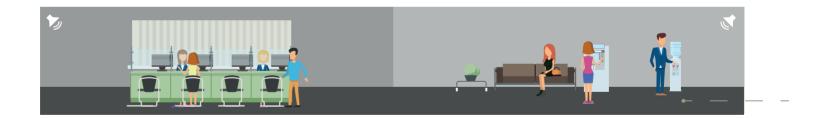
# PUBLIC ADDRESS AND VOICE EVACUATION SYS



## MAINTAINING SAFETY IN RISK SITUATIONS









10

The evacuation instructions can be customized and announced at any stage during an emergency situation.

The system informs users about how to evacuate the building in a controlled manner, **according to an established evacuation plan.** 

It uses **pre-recorded messages** with clear instructions, not strident alarms, which helps evacuate buildings effectively.

It covers all sound needs, including public address and background music systems.

### INTERNATIONAL REGULATORY FRAMEWORK

Voice alarm systems are governed by the Construction Products Regulation (CPR, EU Regulation No 305/2011), which is mandatory throughout the EU and accepted as a standard in many other countries worldwide.

Voice alarm control and indication equipment is regulated by **EN 54-16** and its components and loudspeakers by **EN 54-24**. For power supply equipment, EN 54-4 is used as a reference, and for equipment maintenance, EN 54-32 is used as a reference.

In each case, the national regulatory standards stipulate the mandatory installation of a certified EN 54 voice evacuation system.



# APPLICATIONS

B

# SOLUTIONS FOR ANY ENVIRONMENT

#### SHOPPING CENTERS

- High quality sound system.
- Announcements & advertising messages by zones.
- Integration with text-to-speech systems and PA systems by stores.
- Automatic gain control.

#### AIRPORTS

- · Directive electroacoustic solutions.
- Integration with automatic systems.
- Parameterizations according to project requirements.
- Multi-zone and multi-source (boarding gates).
- Automatic gain control.

#### **TRANSPORT NETWORKS**

- Redundant distributed system.
- Integration with TETRA, BMS and SCADA systems.
- · Acoustic intelligibility studies.
- Automatic gain control.

#### SPORTS CENTERS AND AUDITORIUMS

- Selection of local music source.
- Single PA and voice evacuation system.
- More suitable electroacoustic solutions.

#### HOSPITALS

- · Speakers for clean atmospheres.
- Multi-zone and multi-source (microphones).
- Integration with IP telephony, BMS and SCADA.

#### UNIVERSITIES

- Distributed systems by buildings (large campuses).
- Integration with local system of each classroom.
- · Phased evacuation.

#### TUNNELS

- Distributed system, high intelligibility and directivity.
- Integration with SCADA (Modbus or Ethernet).
- · SNMP supervision.



# 019

# THE MOST COMPACT AND COST-EFFECTIVE ON THE MARKET

ONE is a complete EN 54-16 certified public address and voice evacuation system with EN 54-4 battery charger integrated in a single device.

It features an innovative Wall & Rack design that allows for both wall and rack mounting. It is specifically designed for small and medium-sized projects, reducing the space required for installation by up to 50%.

ONE configures up to five times faster than other systems with its auto-setup function, without the need for additional software.





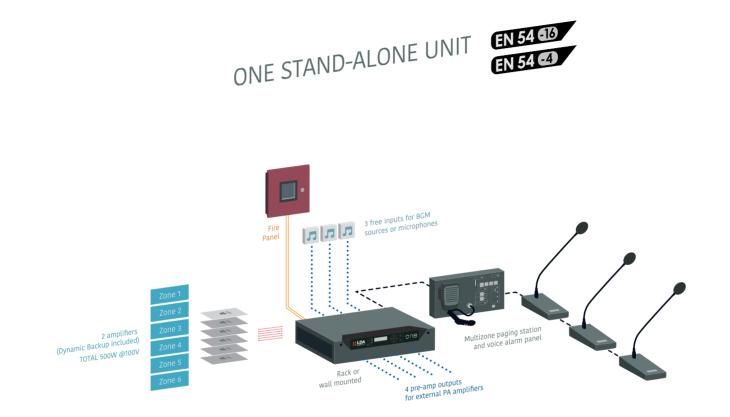
# ONE-500

#### Inside the main unit

- 6 outputs/zones. Digital 6x6 audio matrix, expandable.
  - 2 class D amplifiers with two configurations for 100/70 V lines up to 500 W. Backup amplifier included.
- 3 EN 54-4 battery charger and 12 V 17 Ah battery (30 h standby + 30' evac).
- 3 audio inputs (BGM or mic) + 1 mixer. Noise gate and contact closure for control.
- Paging station input up to 8 MPS-8Z multizone microphones or VAP-1 voice alarm panels.

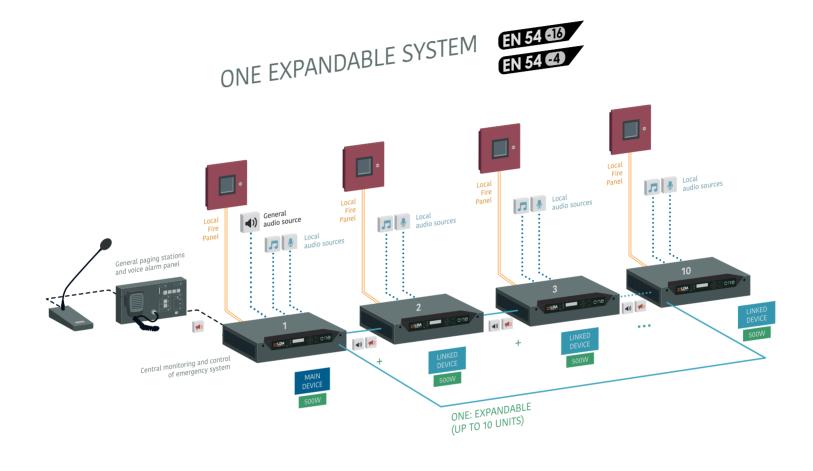
- Dual message player for pre-recorded messages EVAC + ALERT. Phased evacuation. 10 minutes storage for pre-recorded messages.
- Access control via LCD display.
  - Wall & Rack design, easy to install. Auto-setup function for EN 54 PA/VA.
- 8+2 GPIO ports (supervised for integration with Fire Alarm Control Panel).
- Attenuators control.
- 4 pre-amp outputs for external PA amplifiers connection.

- DSP: 3/7 band input/output parametric equalizer, loudness, LDA sound enhancer, independent volume controls for each input and master volume for all outputs.
- Loudspeaker lines supervision. Line terminator without return for supervision.
- Failure detection and indication of all emergency functions. USB backup/restore and emergency log.
  - PTT microphone connection port with emergency microphone function.
  - Designed and made in Spain by LDA Audio Tech.



– – – LDA ACSI® paging station bus (UTP cable)	——— Speakers line 100V	••••• Analogue audio	Fire alarm local zones and Fire alarm general / reset
--	------------------------	----------------------	---

Connection for up to 10 equipment with double communication link. Up to 60 zones and speaker lines.



LDA ACSI® paging station bus (UTP cable) UTP Cable Analogue audio Fire alarm local zones and Fire alarm general
---

Connection for up to 10 equipment with double communication link. Up to 60 zones and speaker lines. EVAC and ALERT local messages + Autonomous emergency power supply for each ONE unit.

🔹 General audio source 🌐 🎜 Local audio source (background music) 🛛 🍨 Local audio source with priority

< General paging stations and voice alarm panel

19

## ADVANCED FUNCTIONS WITH ONE ACCESSORIES

The ONE system offers any installation, no matter how small, all the power and flexibility of a high-performance centralized public address and voice evacuation system.



EN 54 Certified

### PUSH-TO-TALK MICROPHONE ONE-PTT

- Push-to-talk dynamic microphone.
- Priority input over all other sources.
- · Easy to install and use, with magnetic mount.
- Also available without certification for public address functions.



### COMMUNICATION MODULE ONE-LOOP10

- Module and license for ONE system expandable up to 10 ONE units or 60 zones.
- · Redundant loop communication.
- System monitoring and control.
- · Adds an additional communication port.
- · Easy installation.



EN 54 Certified

#### BATTERY CHARGER CARD ONE-BC1

- EN 54 certified battery charger for ONE.
- · Format: upgrade and activation card.
- Once activated, the card becomes a key for permanent operation of the charger.

#### BATTERY EQ-246113

- 12 V and 17 Ah lead-acid battery.
- For use with ONE-BC1 charger.
- More than 30 h in standby and 30' in evacuation mode.
- Can be installed in any position except with the terminals facing down.



### WALL MOUNTING KIT ONE-WMA

- Wall mounting bracket.
- Made of high-strength galvanized steel.
- Quick installation, assembly and disassembly of the ONE-500 unit.
- · Includes accessories and screws.



### RACK FIXED MOUNTING KIT ONE-RMA2

- 2U installation bracket for 19" rack.
- Solid fixing base for ONE unit.
- Color: Fe, gray RAL 7016.
- Includes screws for assembly.



### RACK MOUNTING KIT ONE-RMA

- 3U installation bracket for 19" rack.
- Allows quick installation, assembly and disassembly of the ONE-500 unit.
- · Includes accessories and screws.





# VERSATILE AND POWERFUL

ONE adapts to any installation thanks to its versatile design, which allows **both wall and rack mounting**. When wall-mounted, the unit can be rotated for easy access from the ceiling or floor, depending on cable routing.

This system brings together all essential functions in **a single ultra-compact unit**: controller, 500 W amplifier, backup amplifier, charger and batteries. To match this configuration in a traditional system, a 12U rack would be required, taking up to 14 times more volume than LDA ONE.

REDUNDANT Simultaneous use of **both amplifiers**, no backup required.



COMPACT Requires up to 50% less wallmounted space.



FAST 5 times faster setup and commissioning.



EFFICIENT With a single battery, it has a 50% smaller footprint.

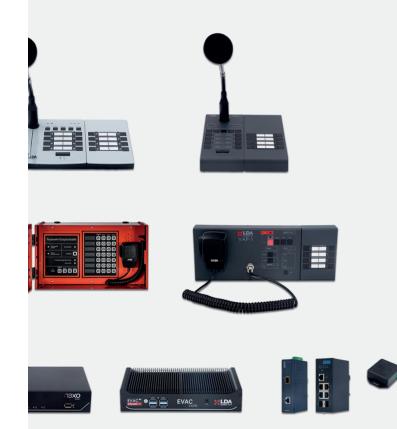








\*LDA • • • • • • • • • •



### **•** Full redundancy

Dual controllers, dual power supplies and backup amplifiers.

### Network encrypted audio

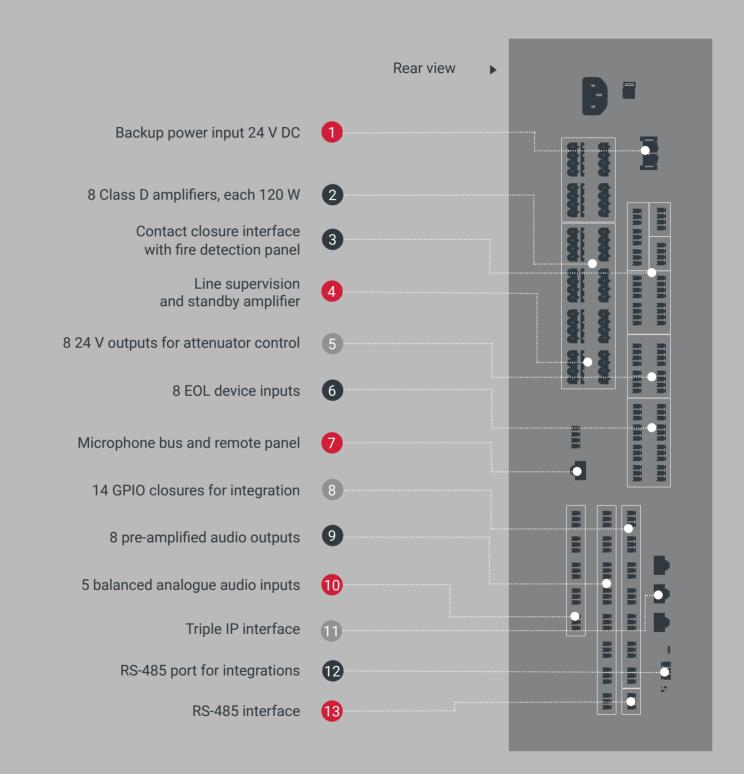
AES67/Dante® compatible for advanced integration.

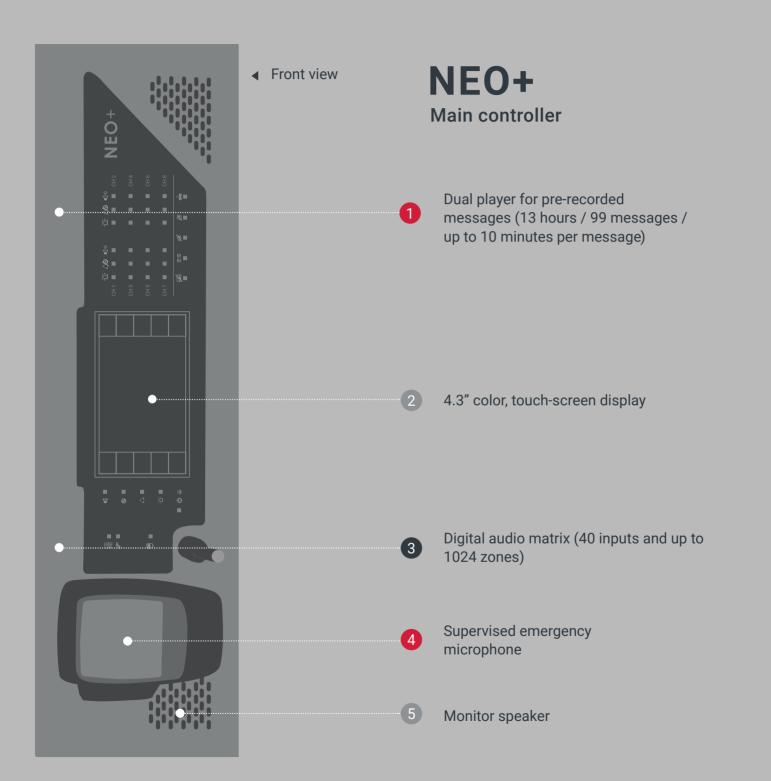
#### **Content** Efficient power usage

Up to 2000 W flexible with compact amplifiers.

Easy control Touch screen and NEO Control software.

Certified solution for critical safety.









## GO FURTHER WITH NEO+ EXTENSION

NEO+ can manage multiple alarm zones easily and intuitively. As a single controller it can handle 1024 zones, and can work without zone limitation when in multi-controller mode.

Through a IP loop connection, the NEO+ main controller transmits digital encrypted audio and control signals to each of the system's areas. NEO+ automatically recognizes all the connected NEO+ Extension units and expands the zones according to the desired configuration in each installation.



EN 54-16 certified

#### **NEO+ EXTENSION 4250E**

4 channels / 1000 W power sharing (max. 500 W per channel)

EN 54-16 certified

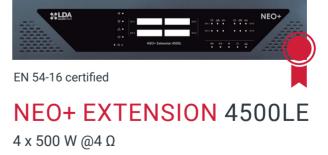
#### NEO+ EXTENSION 8250E

8 x 250 W



### **NEO+ EXTENSION 4500E**

4 channels / 2000 W power sharing (max. 1000 W per channel)



# AES67 ENET EXPAND YOUR NEO+ SYSTEM TO

# INFINITY

NEXO is an IP network audio converter that allows to expand the connectivity of the NEO+ system exponentially, thanks to its AES67 layer 3 technology.

A NEO+ system can connect up to 128 NEXO units inside or outside its network ring. Each of them allows the connection of 32 additional devices, be they microphones or evacuation panels, using the ACSI Net protocol.

A total of up to 4,096 ACSI devices to provide EN 54 certified connectivity in large distributed projects.





**ACSI**Net



### DISTRIBUTED SYSTEMS FOR LARGE PROJECTS

- High quality 48 kHz 1 ms AES67 IP audio transmission and reception.
- ACSI v2 protocol with the ability to connect up to 32 devices on the bus: MPS-8Z+, MPS-8Z, VAP-1 and VAP1-FES.
- Integrated DSP. 2x2 audio channels.
- ACSI Net audio channel encryption.
- System status LED indicators (Power, Fault, Failure and Emergency).
- Compatible with all LDA systems.

# OPTIMIZE NEO+ WITH OUR EVAC PLATFORMS

Now you can control and supervise all the devices in your NEO+ system from a desktop application.

Thanks to the innovative cloud-based technologies developed by our R&D team, you can make your public address and voice evacuation system globally accessible.

You will be able to optimize material and maintenance resources, especially in multi-site systems, where remote management facilitates all control and supervision processes.

### EVAC<sup>¢</sup> Control





EN 54-16

AES67 Al-Ready

### EVAC CONTROL

#### EN 54 LOCAL MANAGEMENT AND SUPERVISION

EVAC Control is a management and supervision platform for local EN 54 public address and voice evacuation systems NEO+ and NEO, both single and multi-site. Through an eCore device, the app controls PA and BGM functions and includes a calendar module for scheduling pre-recorded messages.

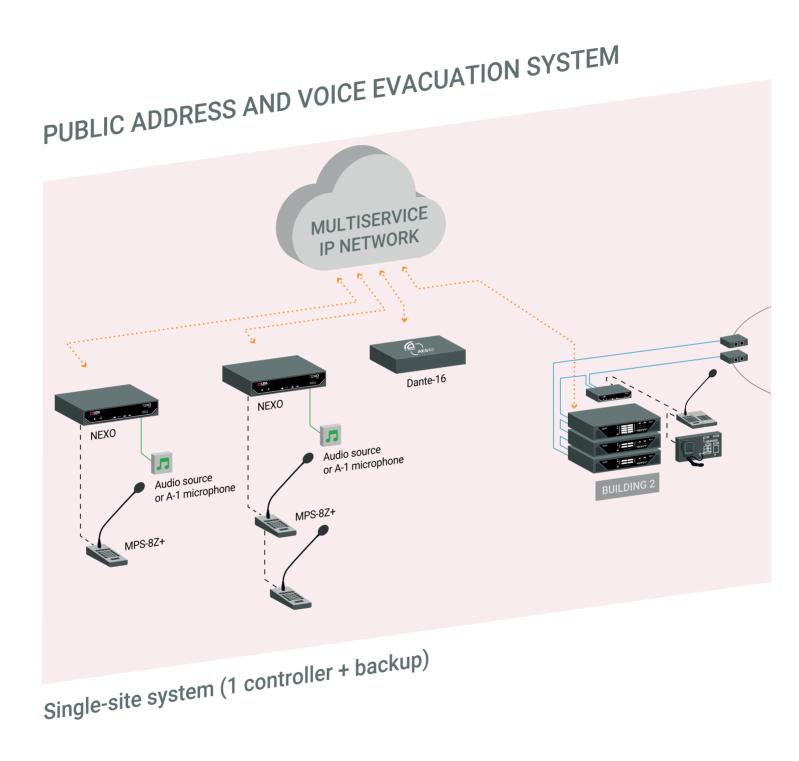
### EVAC CLOUD

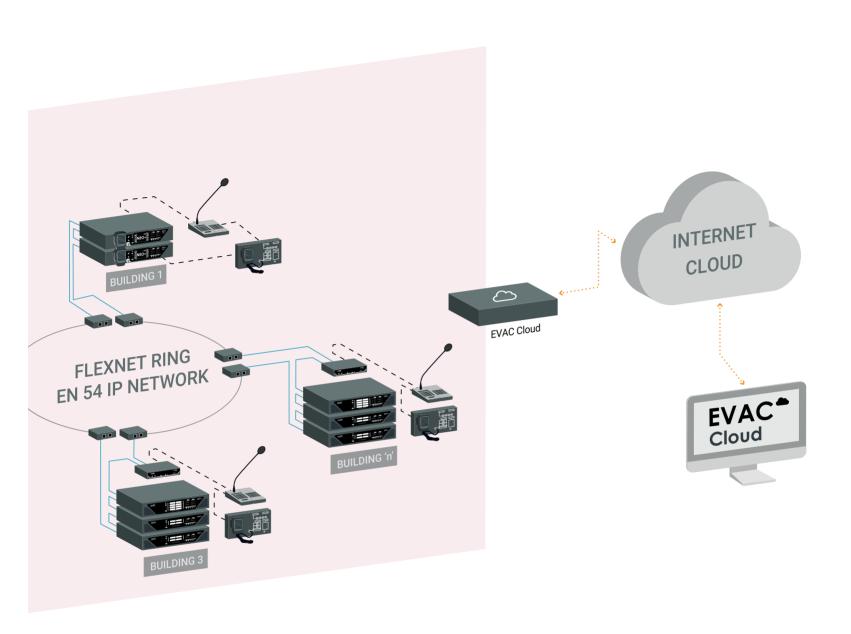
### REAL-TIME NOTIFICATION AND REMOTE TROUBLESHOOTING

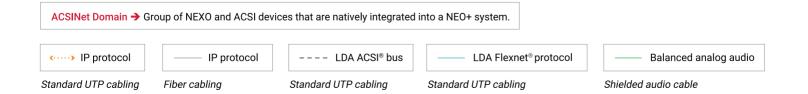
EVAC Cloud enables remote monitoring and connection EN 54 for alarm management in NEO+ and NEO systems. It offers secure remote access according to the Euralarm/ CoESS Cybersecurity Framework for advanced functions through NEO Configurator and using an EVAC Core device. The platform is AI-Ready, in future versions it will incorporate predictive algorithms based on artificial intelligence.

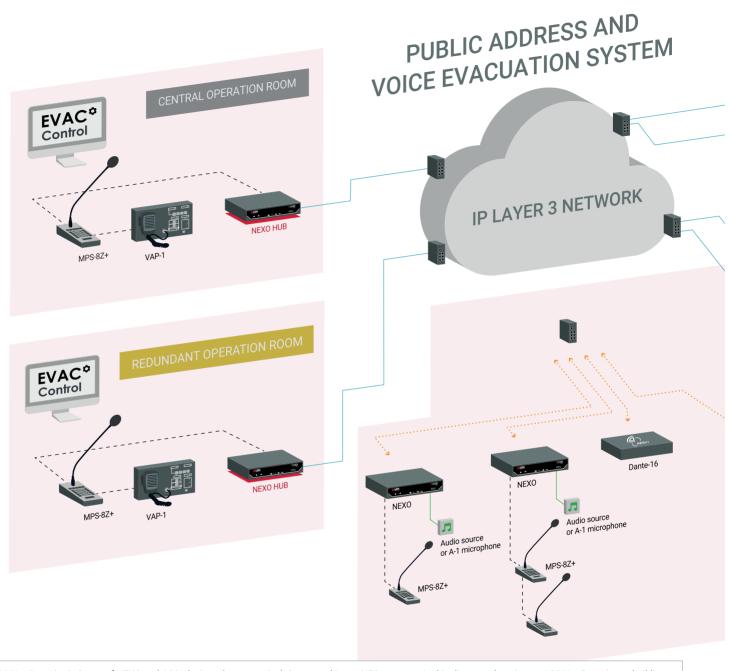
#### **Renewable subscription**

The EVAC Cloud platform provides access to remote control services through a yearly renewable subscription.

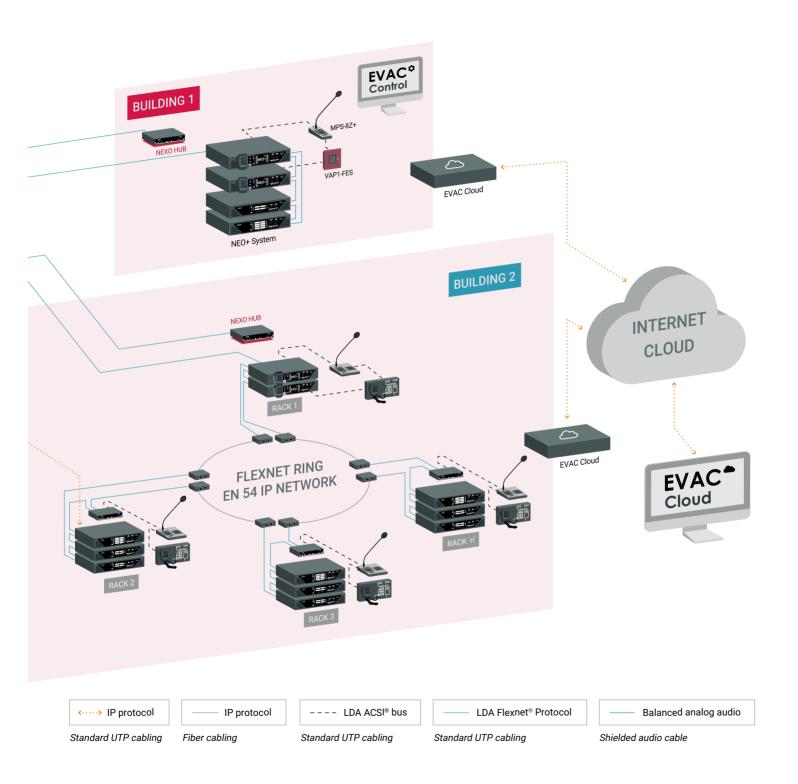








ACSINet Domain → Group of NEXO and ACSI devices that are natively integrated into a NEO+ system. In this diagram, there is one ACSINet Domain per building. ACSINet Cluster → Group of NEXO Hub and ACSI equipment forming a multisite structure. This diagram features a total of one ACSINet Cluster.



**NEO+ ACCESSORIES** FOR A RELIABLE AND CUSTOM-MADE SYSTEM



#### AES67 AND ACSI NET CONVERTER NEXO

- Network AES67 audio converter and ACSI v2 bus controller.
- Up to 32 MPS-8Z, MPS-8Z+, VAP-1 or VAP1-FES devices can be connected.



EN 54 Certified

## AES67 PROCESSOR CARD NEXO HUB

• Card for creating a link proxy in distributed multi-controller systems with NEO+.



EN 54 Certified

#### EXPANSION KEYBOARD MPS-8K+

- EN 54 expansion keyboard for the MPS-8Z+ microphone with 8 programmable buttons in ACSI v2.
- Metal chassis and buttons designed for intensive use.
- · Compact design.



EN 54 Certified

### MULTIZONE MICROPHONE MPS-8Z+

- Multizone microphone with ACSI v2 protocol to connect up to 32 devices on one bus.
- Store & Forward function to record messages and play them back by zones.



#### NETWORK SWITCH EN 54 EQ-242910

- Allows the configuration of IP communication networks between LDA Audio Tech EN 54 devices.
- Includes configuration for operation with LDA systems and mounting documentation.



EN 54 Certified

#### MEDIA CONVERTER EQ-201035

- Industrial fiber optic converter for extending Ethernet networks.
- Robust design allows a wide range of operating temperatures.





EN 54 Certified

### SFP MODULES EQ-242911 / EQ-242912

- Fiber modules for EN 54 network switch model EQ-242910.
- For distances up to 2 km (EQ-242912) and up to 20 km (EQ-242911).

EN 54 Certified

## SFP MODULE EQ-201036

• Module for EN 54 media converter model EQ-201035.



#### BATTERY CHARGER EQ-241976

- Battery charger EN 54-4.
- · Backup and auxiliary power supply.
- With 2 x 480 W outputs, maximum power 960 W.
- Supports 1 NEO+/NEO unit.



EN 54 Certified

#### BATTERY CHARGER EQ-241977

- Battery charger EN 54-4.
- Backup and auxiliary power supply.
- With 6 outputs x 960 W, maximum power 3600 W.
- Supports up to 2 NEO+/NEO Extension units.



#### BATTERY EQ-242064

- 65 Ah @12 V battery for EQ-241976 charger.
- Maintenance free.
- High durability and charge/discharge cycles.
- Plastic container with valves for overcharge protection.



#### BATTERY EQ-242065

- 150 Ah @12 V battery for EQ-241977 charger.
- Maintenance free.
- · High durability and charge/discharge cycles.
- Plastic container with valves for overcharge protection.



## FIRE BRIGADE CONTROL PANEL VAP1-FES

- Advanced voice alarm panel.
- · Includes basic unit and emergency microphone.
- With red wall cabinet RAL 3000 IP30 model EQ-242057.



EN 54 Certified

#### FIRE CONTROL PANEL AND KEYBOARD VAP1-FES 7Z

- · Advanced voice alarm panel.
- Includes basic unit, emergency microphone and 7-zone keypad.
- With red wall cabinet RAL 3000 IP30 model EQ-242057.



EN 54 Certified

#### 7 ZONES EXPANSION VAP1-FES ERW 7Z

- 7-zone extension for voice alarm panel.
- For models VAP1-FES and VAP1-FES 7Z.
- Pre-assembled article in red wall cabinet RAL 3000 IP30 model EQ-242057.



#### EN 54 Certified

### 14 ZONES EXPANSION VAP1-FES ERW 14Z

- 14-zone extension for voice alarm panel.
- For models VAP1-FES and VAP1-FES 7Z.
- Pre-assembled article in red wall cabinet RAL 3000 IP30 model EQ-242057.



#### WALL CONTROLLER VCC-64

- · Volume and channel wall controller in one zone.
- Installed locally by RS-485 bus cable.
- Up to 99 channels and volume from 0 to 9.
- 4-pole connector (terminal block).



## POWER ADAPTER VCC-64PSK

- RJ-45 communications and power adapter for VCC-64 controller.
- Connection of up to 10 devices.
- Up to 200 m distance.
- · Standard UTP cabling.



EN 54 Certified

### DANTE®-AES67 CONVERTER DANTE-16

- Dante®-AES67 digital audio converter.
- Includes industrial hardware device and Linux operating system, with LDA DANTE16 application.
- Converts up to 16 channels of Dante<sup>®</sup> digital audio to AES67 protocol.

# NEO+ 0170

# SHARED ACCESSORIES TO GO FURTHER

At LDA Audio Tech we work tirelessly to design public address and voice evacuation solutions that are both safe and efficient. Therefore, our range is completed with these accessories that can be used equally in NEO+ and ONE systems to provide them with the best functionalities.



## MULTIZONE MICROPHONE MPS-8Z

- 8 zone buttons, 1 event button and 1 memory button.
- Auto-lock and voice recording for redial.
- UTP cable connection (ACSI bus).
- Power, status, remote control and zone indicators.



EN 54 Certified

#### EXPANSION KEYBOARD MPS-8K

- 8 software programmable buttons for 8 PA zones.
- Designed for intensive use with MPS-8Z microphone.
- Each microphone supports up to 7 expansion keypads.



## **MICROPHONE A-1**

- Single-zone microphone desk with indicator lights.
- Micro-controller for different systems: on/off mode, PTT, RS-485, 2-wire TTL, pre-warning tone and TTL control levels.



EN 54 Certified

#### END OF LINE DEVICE TFL-2

- Impedance-based loudspeaker line supervision.
- Includes a filtered capacitive load, which does not overload the amplifier.



#### VOICE ALARM PANEL VAP-1

- Voice alarm panel with event button.
- EN 54 certified.
- Direct access to all evacuation functions of the NEO system.
- UTP cable connection (ACSI bus).
- Power, status, remote control and warning indicators.
- Optional local power supply.



EN 54 Certified

## EXPANSION KEYBOARD VAP-8K

- Keyboard expander for VAP-1 panel.
- EN 54 certified.
- 8 software programmable buttons for 8 public address zones.
- Each VAP-1 supports up to 7 expansion keypads.

### BLANK BLOCK VAP-1EC

- Blank block module for VAP-1 panels.
- Valid for use with VAP-1 in 4U and 6U racks.
- Suitable for use below ONE-500 unit in wall installation.



#### WALL-MOUNTED CABINET RACK-4ALT

- 19" 4U wall rack for VAP-1 voice alarm panel.
- · Includes glass door.
- · Allows up to 2 VAP-8K extension units.
- Dimensions: 600 x 150 x 288 mm.



## WALL-MOUNTED CABINET RACK-6ALT

- 19" 6U wall rack for VAP-1 voice alarm panel.
- · Includes glass door.
- · Allows up to 7 VAP-8K extension units.
- Dimensions: 600 x 150 x 360 mm.



## RED WALL-MOUNTED CABINET EQ-242057

- Wall-mounted rack to house a VAP-1 voice alarm panel and a VAP-8K keypad extension.
- Door with glass window and locking bolt.
- Made of sheet steel and finished in RAL 3000 (fire red).



### PLAYER RCD-21R

- CD player, FM/AM radio, and high speed USB.
- Independent AM/FM and CD/USB outputs.
- Supports MP3, WMA and WAV formats.
- · Independent volume control for 2 line outputs.



# SPEAKERS: A MODEL FOR EVERY NEED

Achieving adequate sound pressure levels and intelligibility for an emergency system depends on the speakers and acoustic solutions selected.

The LDA Audio Tech range is distinguished by its wide coverage, clarity and variety of formats and applications.

All our models are certified according to EN 54-24 standard for voice alarm systems in fire protection.

Our directive solutions can adapt to any complicated acoustic environment or high reverberation.



#### CH-32TN

- 3" ceiling speaker.
- Lines: 6/3/1.5/0.75 W @100 V and 3/1.5/0.75/0.375 W @70 V.
- With CH-32TNFD fire protection dome.
- With ceramic terminal and isolation fuse.
- IP44 rating.



EN 54 Certified

#### DS-60TN

- 5" surface loudspeaker.
- Lines: 6/3/1.5/0.75 W @100 V and 3/1.5/0.75/0.375 W @70 V.
- Metal enclosure for protection against fire and vandalism.
- With ceramic terminal and isolation fuse.
- IP21C rating.

HIM

EN 54 Certified

#### CH-42TN

- 6" ceiling speaker.
- Lines: 6/3/1.5/0.75 W @100 V and 3/1.5/0.75/0.375 W @70 V.
- With CH-42TNFD fire protection dome.
- With ceramic terminal and isolation fuse.
- IP44 rating.

49



#### NB-50TN

- 5" ceiling speaker.
- Lines: 6/3/1.5 W @100 V and 3/1.5/0.75 W @70 V.
- Frameless design with protection dome.
- Moisture sealed for installation in humid environments.
- IP54 rating (type B according to EN 54-24).

EN 54 Certified

#### CH-62TN

- 6.5" ceiling loudspeaker.
- Lines: 30/15/7.5/7.5/3.75 W @100 V and 15/7.5/3.75/3.75/1.8 W @70 V.
- Low distortion and high sound pressure level.
- Equipped with fire protection dome.
- With ceramic terminal and isolation fuse.
- IP44 rating (type A according to EN 54-24).



#### PCP-20TN

- 5" unidirectional projector.
- Lines: 20/10/5/2.5 W @100 V and 10/5/2.5/1.25 W @70 V.
- ABS V0 enclosure, fire-resistant.
- High sound pressure, low distortion and wide frequency response.
- With ceramic terminal and isolation fuse.
- IP65 rating.



Weatherproof

#### EN 54 Certified

#### PCM-20TN

- 5" unidirectional projector.
- Lines: 20/10/5/2.5 W @100 V and 10/5/2.5/1.25 W @70 V.
- 3 mm aluminum enclosure and steel grille.
- High sound pressure, low distortion and wide frequency response.
- · With ceramic terminal and isolation fuse.
- · IP65 rating.

EN 54 Certified

#### PCM-220TN

- · Bidirectional projector.
- + Lines: 20/10/5/2.5 W @100 V and 10/5/2.5/1.25 W @70 V.
- High sound pressure, low distortion and wide frequency response.
- High resistance. IP65 (type B according to EN 54-24) and ultraviolet protection.





#### PS-15TN

- Exponential horn.
- Lines: 15/7.5/3.75 W @100 V and 7.5/3.75/1.8 W @70 V.
- Manufactured in highly resistant ABS, with UL94-5VB fire protection.
- Adjustable U-bracket for easy installation.
- · Clear voice and superior sound quality.
- IP66 rating (type B according to EN 54-24).



EN 54 Certified

#### PS-30TN

- Exponential horn.
- Lines: 30/15/7.5 W @100 V and 15/7.5/3.75 W @70 V.
- Manufactured in highly resistant ABS, with UL94-5VB fire protection.
- Adjustable U-bracket for easy installation.
- · Clear voice and superior sound quality.
- IP66 rating (type B according to EN 54-24).

Weatherproof

Weatherproof

52



#### VTX-15TN

Weatherproof

- Directive loudspeaker.
- 2 drivers.
- 15 W nominal power.
- Lines: 15/7.5/3.75 W @100 V and 7.4/3.7/1.85 W @70 V.
- Manufactured in resistant aluminum.
- IP54 rating (type B according to EN 54-24).



Weatherproof

EN 54 Certified

## VTX-60TN

- · Directive loudspeaker.
- 8 drivers.
- 60 W nominal power.
- Lines: 60/30/15 W @100 V and 30/15/7.5 W @70 V.
- High directivity for acoustically complex enclosures.
- IP54 rating (type B according to EN 54-24).



EN 54 Certified

## VTX-90TN

- · Directive loudspeaker.
- 12 drivers.
- 90 W nominal power.
- Lines: 90/45/20 W @100 V and 45/22/10 W @70 V.
- High directivity for acoustically complex enclosures.
- IP54 rating (type B according to EN 54-24).



53

# CERTIFICATIONS

## QUALITY **ISAN** ATTITUDE

The best way to ensure our systems perform as intended is by having accredited certifications according to the strictest international standards.

All quality systems and processes at LDA Audio Tech are backed by ISO 9001 certification, and our solutions are supported by leading safety standards and certifications.



EN 54-16 Certified EN 54-4 Certified



EN 60849

EN 54-32 Compliant

Jordan Civil

Defense

EN 54 32

**APF** Certification

Saudi Arabia

Civil Defense

**A**rplus<sup>⊕</sup>

CE 1+ Marking under CPR

F

Kuwait Fire Service Directorate





**Royal Oman Police** Civil Defence



ISO 9001

Qatar

**Civil Defence** 

EAC Marking

UAE Civil

Defence UAE



**GOST Russia** 

Israel Institution

מתי

SES of Ukraine





#### **HEADQUARTERS**

Severo Ochoa, 31 29590 Málaga, Spain Tel: +34 952 028 805 info@lda-audiotech.com

#### SPAIN

San Rafael 4B, oficina 37 28108 Alcobendas, Madrid Tel: +34 910 534 750 sales@lda-audiotech.com

#### GERMANY

Gräf & Meyer GmbH Ringstraße 1 · D-66459 Kirkel Tel: +49 (6841) 93493–0 info@gplusm.de

#### ITALY

Isabel Díaz de Lope- Díaz García Tel: +39 351 9116451 idiaz@lda-audiotech.com

LATAM

Sebastián Martínez Ossa Tel: +57 310 3609357 smartinez@lda-audiotech.com

#### SAUDI ARABIA

Sufyan Habib Tel: +966 56 126 2344 sufyan@lda-audiotech.com

**QATAR** Yehya Al Roz Tel: +974 3002 9797 yehya@lda-audiotech.com

#### EGYPT

Ahmed Mostafa Tel: + 20 100 521 0144 amostafa@lda-audiotech.com

#### INDIA & SAARC

Abhishek Garg Tel: +91 81307 74349 agarg@lda-audiotech.com

www.lda-audiotech.com info@lda-audiotech.com