

# VOICE ALARM SYSTEMS



CATALOG 2024

EN 54 4 EN 54 16 EN 54 24

MAJORCOM:





# MAJORCOM:

## A story, a know-how

MAJORCOM, **founded 50 years ago** and based in Toulouse, is **the leading French company** and a major European player in the field of professional sound systems, public address and voice alarm..

MAJORCOM was the **first specialized company** in Voice Alarm systems **to be certified in France**. Through being at the forefront of the development of the most advanced technologies, MAJORCOM is committed to always providing products of the latest generation.

MAJORCOM mastery of production offers you the manufacturer's warranty on Public Address products and guarantees the compliance of its security systems with European EN 54 and International ISO standards.

## A team, an expertise

MAJORCOM places **customer service at the heart of its business model** thanks to its dedicated business team.

Our systems are custom-designed by our engineering department which is staffed with acousticians and electronic engineers, with the expert support of our R&D department, and an after-sales department with highly involved support functions.

**To our partners, we offer systems that are truly adapted to the reality of their technical needs and to the needs of the end users.**



## Values that stand the test of time

**TO LISTEN AND WORK CLOSELY WITH OUR CUSTOMERS** : we devote our full attention and expertise to **informing, securing and offering an outstanding customer experience**.

**A FOCUS ON QUALITY** : optimize your profitability rate thanks to **reliable systems supervised by our quality department** (Customer service < 0.3% ).




**A CULTURE OF INNOVATION** : our systems feature every innovation that enhances **technical, energetic and connectivity performances**.

**EXPERTISE** : our engineering relies on innovative technical resources, on the **adaptability of our teams and their unconditional dedication to your projects to fully satisfy your every need**.

# MAJORCOM:

## A wide range of products and services

MAJORCOM provides expert advice, studies, estimates, editing, commissioning, maintenance and VAS quickly and efficiently on a selection of products from:

 <p><b>PUBLIC ADDRESS &amp; IP SYSTEMS</b></p> <ul style="list-style-type: none"> <li>• Sources &amp; microphones</li> <li>• Mixers</li> <li>• Amplifiers</li> <li>• Audio over IP</li> <li>• Loudspeakers</li> <li>• PPMS, POI, PPI</li> <li>• Conference system</li> <li>• Induction loops...</li> </ul>	 <p><b>PROFESSIONAL SOUND SYSTEMS</b></p> <ul style="list-style-type: none"> <li>• Line Array</li> <li>• Loudspeakers</li> <li>• Source</li> <li>• Processors</li> <li>• Amplifiers</li> <li>• Mixers</li> <li>• Accessories...</li> </ul>	 <p><b>VOICE ALARM SYSTEMS</b></p> <ul style="list-style-type: none"> <li>• EN54-16 Systems</li> <li>• Batteries &amp; EN54-4 Chargers</li> <li>• EN54 Accessories</li> <li>• EN54-24 Speakers</li> </ul>
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## Our references

MAJORCOM has built its notoriety on the success of thousands of completed projects.

**+ 50,000**  
On-site installations

**+ 30,000**  
End customers




**+ 1,000**  
Loyal installers

**+ 100**  
Engineering consulting partners

## Information at your disposal

To accompany you in the success of your projects.

 **TECHNICAL DOCUMENTATION**: check out our data sheets, application samples, videos and catalogues on our website: [www.majorcom.fr](http://www.majorcom.fr)

 **WEBSITE**: learn more about our services and products, accessible through any device, on our website: [www.majorcom.fr](http://www.majorcom.fr)

 **NEWSLETTER**: recommendations, innovations, invitations to trade shows... To keep up with all the MAJORCOM news, subscribe to our newsletter at [www.majorcom.fr](http://www.majorcom.fr)



# EVAMATRIX

**NO NEED TO CHOOSE BETWEEN PUBLIC ADDRESS & VOICE ALARM SYSTEMS ANYMORE!**

All-in-one sound and evacuation system with complete network integration

Dante® EN 54 16

Airports · Metro Stations · Hotels  
Hospitals · Stadiums  
Shopping malls

Exhibition parks  
Educational establishments  
Buildings and industrial sites  
High-rise buildings



## EVAMATRIX - A high-performance system, stable and secure

MAJORCOM is proud to present EVAMATRIX, its brand-new EN 54-16 certified PA sound and evacuation system, with cutting-edge technology and excellent audio quality in both modes of use. EVAMATRIX is very simple to use and allows for great operation flexibility with its touchscreen on the front-panel or via an intuitive multi-platform web browser and no software constraints (smartphone, tablet, PC, MAC).

EVAMATRIX is an economically advantageous system, fully connected for easy installation and integration. It uses Dante® technology with redundancy for seamless availability in both centralized and decentralized architecture.

MAJORCOM's more than 50 years of experience in the VA and PA sound industry has made it possible to offer such a high-quality system, which is extremely simple to install and configure using its very intuitive interface.

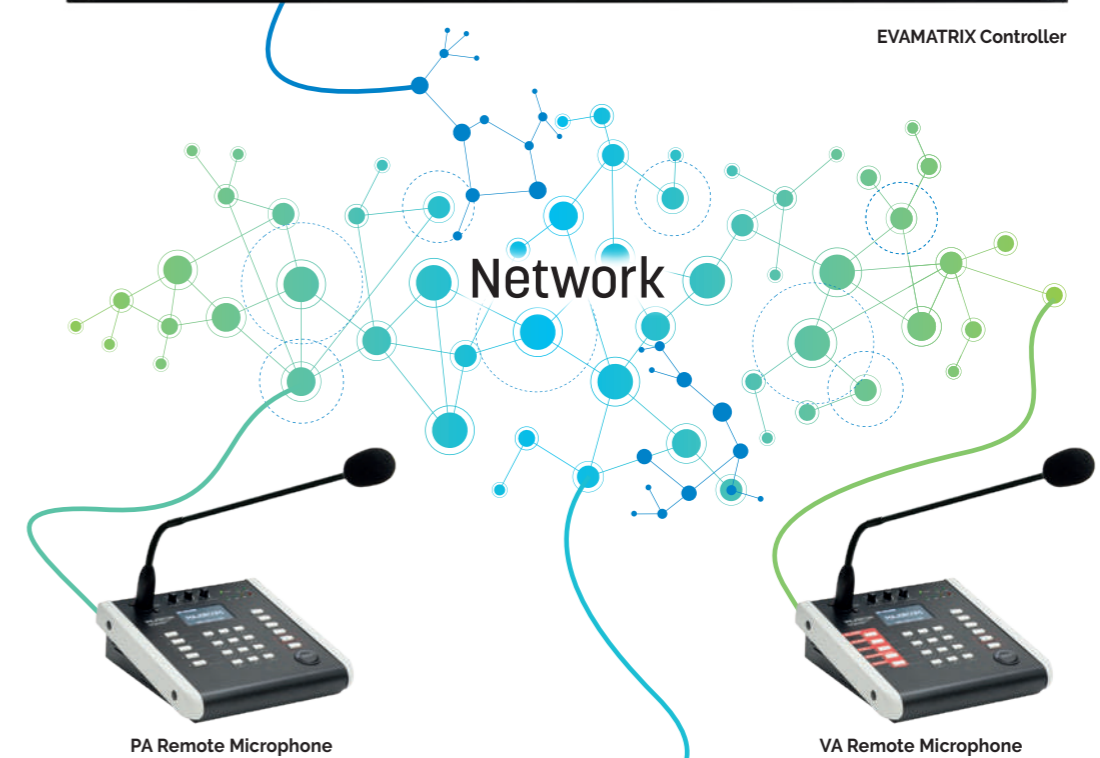
Dante®

**A fully connected architecture**

EN 54 16



EVAMATRIX Controller



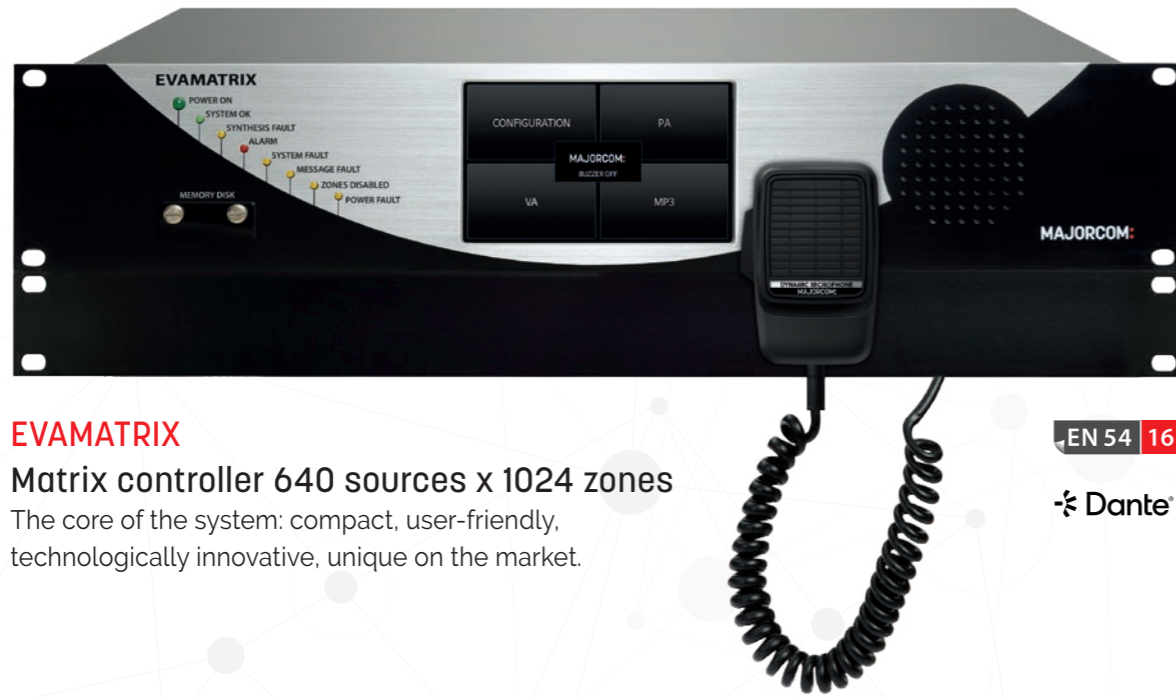
PA Remote Microphone

VA Remote Microphone

Connected digital amplifiers







**EVAMATRIX**  
 Matrix controller 640 sources x 1024 zones  
 The core of the system: compact, user-friendly,  
 technologically innovative, unique on the market.

EN 54 16



**RM-VA1000**  
 PA & VA Remote Microphone  
 A secure source for excellent speech intelligibility.

EN 54 16



**PN Series**  
 Connected digital amplifiers

Compact digital power from single to quadruple channel  
 DPN-240S: 1 x 240W • DPN-480S: 480W • DPN-240D: 2 x 240W  
 DPN-480D: 2 x 480W • DPN-240Q: 4 x 240W

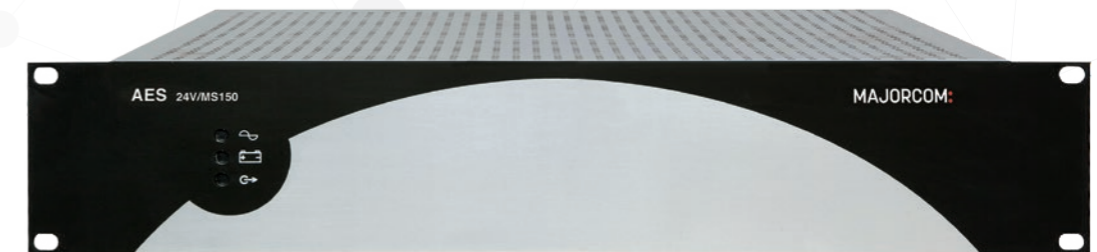
EN 54 16

**EOL**  
 End-of-line element

The reliable solution for controlling the integrity of  
 the 70V and 100V speaker line.



EN 54 16



**AES Series**

**EN 54-4 certified power supply units**  
 AES 24V/MS40: Maximum current for all outputs = 40A  
 AES 24V/MS150: Maximum current for all outputs = 150A

EN 54 4



## EVAMATRIX - A SAFE AND ECONOMICALLY ADVANTAGEOUS SYSTEM



256-bit  
security and encryption



Wiring and installation  
simplified through IP



Save time  
and money



Perfectly meets  
market demands  
and needs



Reduced installation  
costs and  
commissioning



Interfacing and multiple  
compatibilities  
including SNMP V2c

- An intuitive graphical interface for user comfort, with integrated security functions.
- A system with reduced operational and maintenance costs.
- Modern design with reduced power consumption, minimal heat loss and reduced rack congestion.

## EVAMATRIX - A COMPLETE SYSTEM FOR ALL KINDS OF APPLICATIONS

EN 54-16  
Certified

DANTE®  
& IP

1024  
Zones  
2048 speaker  
lines A+B

Control  
&  
Supervision

Progressive  
evacuation

Centralized  
management

Real-time  
supervision

Touchscreen  
GUI

Security &  
Encryption  
Https/SSL/  
TLS1.2/  
AES256

Web  
interface

Annual  
Scheduler

TTS :  
Text-to-  
Speech

Powerful  
event  
engine

Brid's Eye  
View  
SNMP  
and more

Connectivity  
Flexibility

## EVAMATRIX - A COMPLETE SYSTEM FOR ALL KINDS OF APPLICATIONS

### EN 54-16 certification

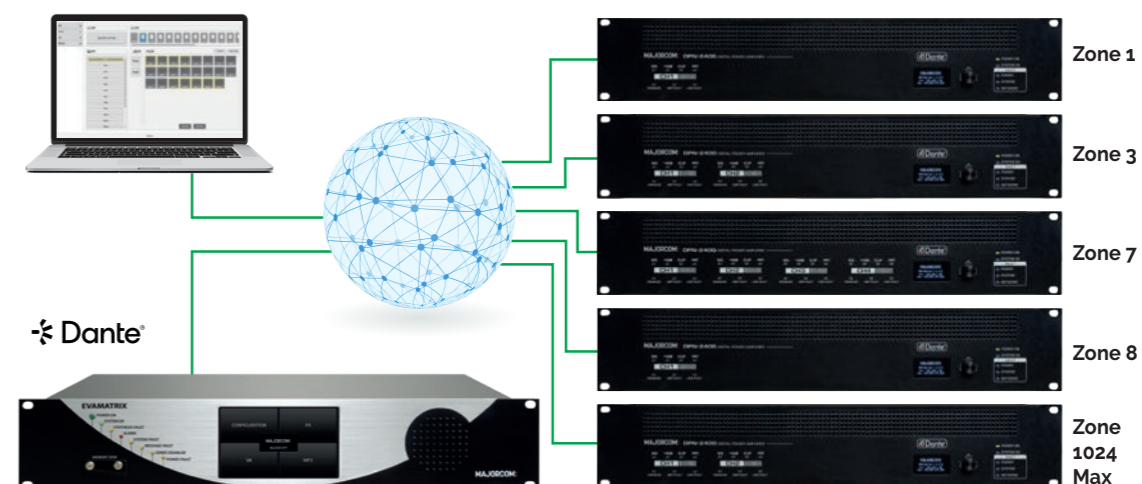
The EVAMATRIX system is EN 54-16 certified and can be installed in any rack in accordance with regulatory recommendations.

### Dante® & IP

The EVAMATRIX system runs entirely over IP networks, providing full flexibility and optimal scalability, integrating the latest and most recognized technologies such as Dante®. The system can be easily deployed with both centralized and decentralized configuration. All components of the system offer redundant Gigabit Ethernet network connectivity that combines security and reliability.

### 1024 Zones / 2048 speaker lines A+B 512 alarm zones

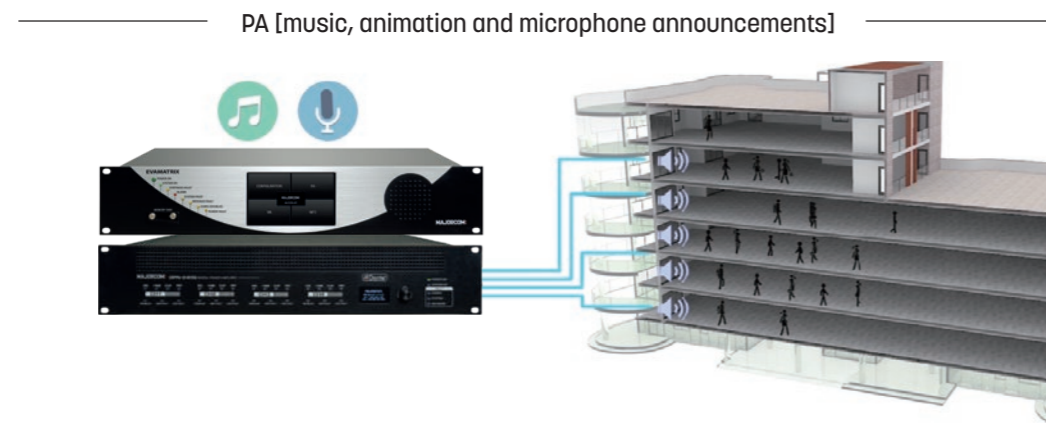
The EVAMATRIX system is designed to handle 1024 PA zones and 2048 A+B speaker lines. It can also handle up to 512 alarm zones.





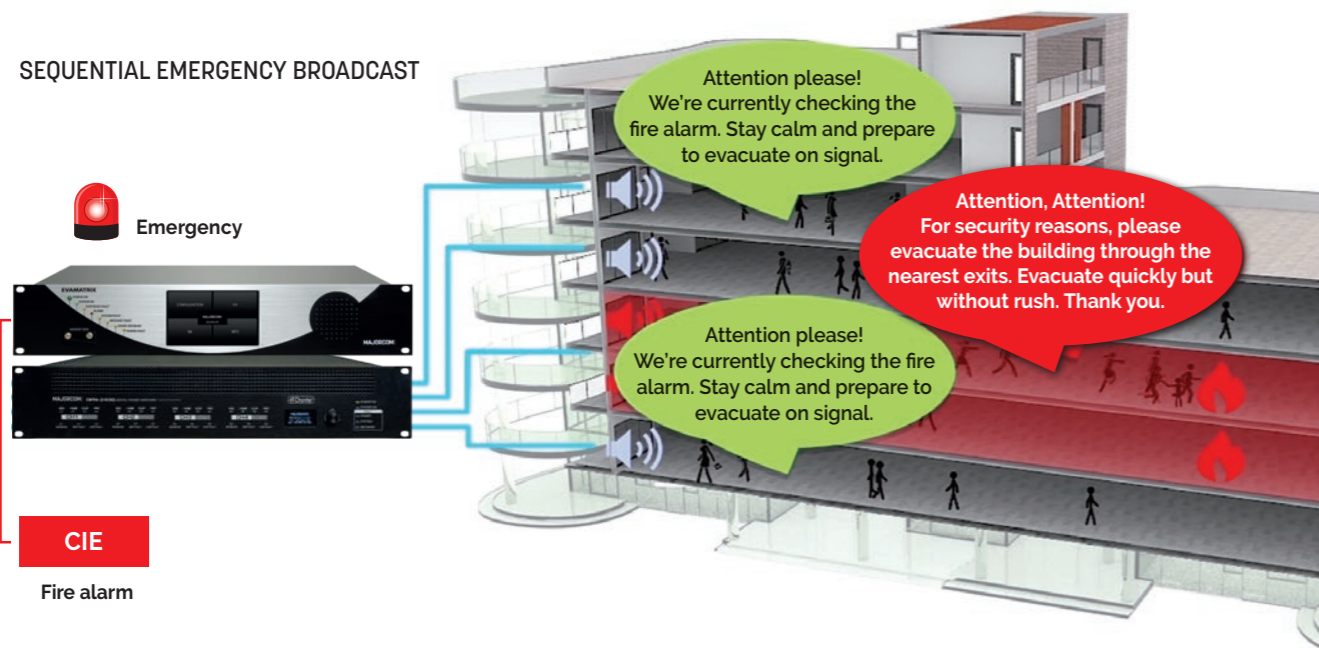
## System control and supervision

EVAMATRIX is a system designed to deliver the best sound of PA and VA in one product. All system components are controlled in real time with indication and deferral of defects, for reliable and seamless supervision.



## Progressive evacuation

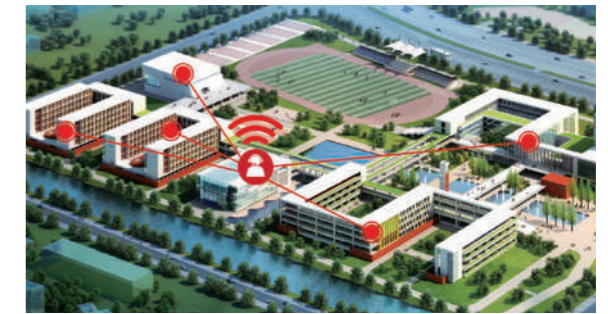
EVAMATRIX is equipped with two security message readers that can be used to simultaneously broadcast the alarm message to one alarm zone group and a warning message to another alarm zone group. This allows an easier and gradual evacuation through CIE.



## Centralized and remote management

With the EVAMATRIX system, it's never been easier to configure, set up, use and manage a comfort and evacuation sound system, whether your facility is located in a single site or decentralized.

EVAMATRIX doesn't require any heavy software or additional hardware, only a simple web browser from any PC, MAC or tablet.



Control and Supervision Center

- The DPN amplifier series directly integrates speaker line control technology.
- Integrated DSP for sound processing.
- Additional connectivity: audio input, dry input/output, UGA

## DPN Digital amplifiers

The DPN amplifier series offers a wide range of capacities and channels:

240 W, 2 x 240 W, 4 x 240 W, 480 W, 2 x 480 W.

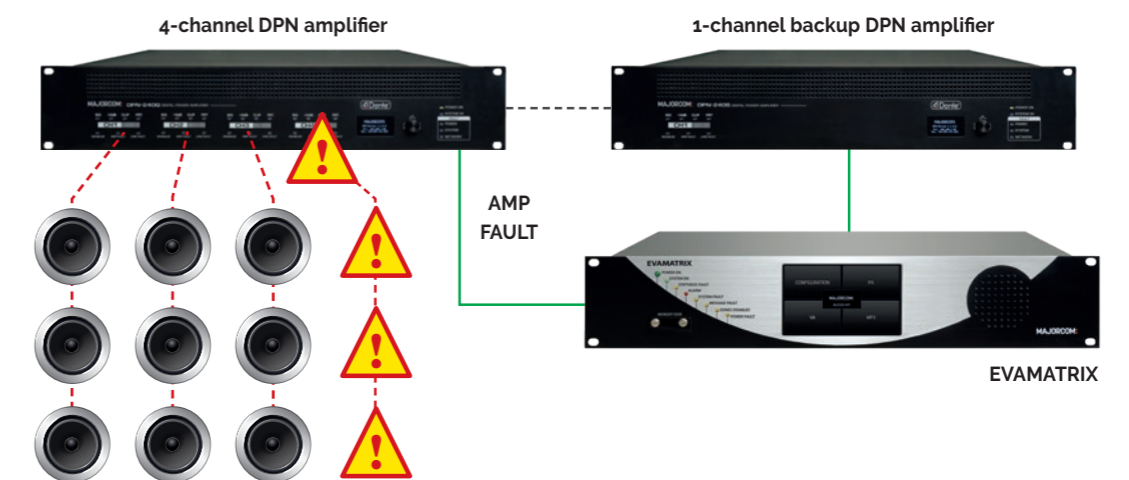
Emergency amplifier management has been simplified. It is also possible to assign any amplifier channel as backup for one or more amplification units, and one or more channels can be dedicated as backup for the entire rack. This design saves energy and batteries, reduces heat emission and congestion in the bay.

Each amplifier channel has two independently monitored, controlled and protected speaker line outputs.

All DPN amplifiers offer a multitude of connections: alternate audio input, event inputs/outputs, UGA inputs and Gigabit Ethernet redundancy...

A DSP is embedded to allow all audio signal processing necessary for your facility.

### Amplifier defect detection

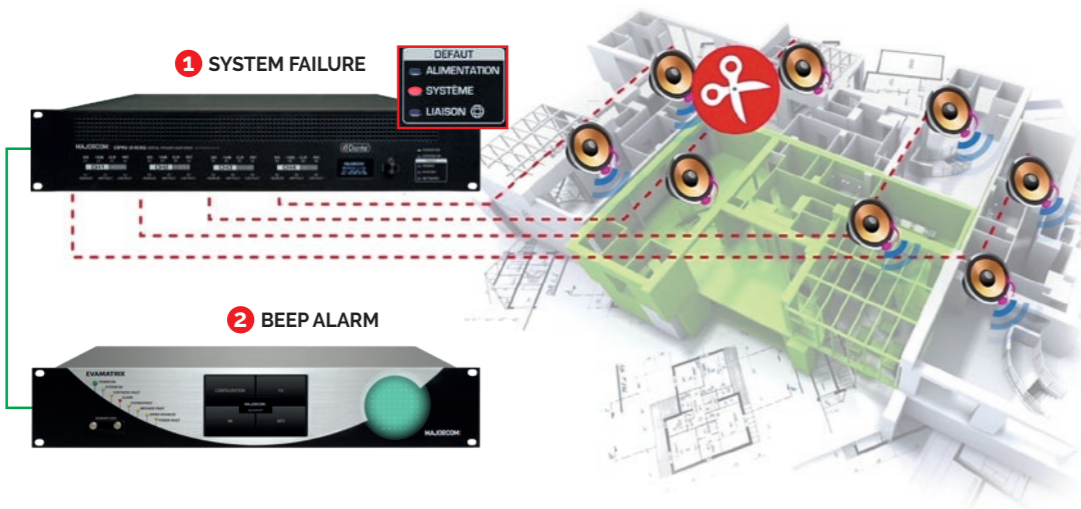




## Real-time supervision

EVAMATRIX continuously controls and monitors all units and connections in the system, signals and audio streams, emergency functions, network redundancy, power supplies and speaker lines. Abnormalities and defects are detected in less than 100 seconds in accordance with relayed EN 54-16 standard. The detected defects are reported to the EVAMATRIX controller, recorded in the log files and relayed to the CIE fire alarm interface:

- Short circuit fault, line opening, impedance variation, earth fault below 50kΩ.
  - Power failure: emergency 54-4, 230VAC power supplies, AC/DC fuses.
  - Failure and monitoring of contact connections and UGA link interface to the CIE.
  - Amplifier Fault and backup amplifier auto-switching.
  - Evacuation memory disk fault and emergency function.
  - Failure of network connections with redundancy management.
  - Emergency PTT microphone and remote microphone fault.
- Etc...



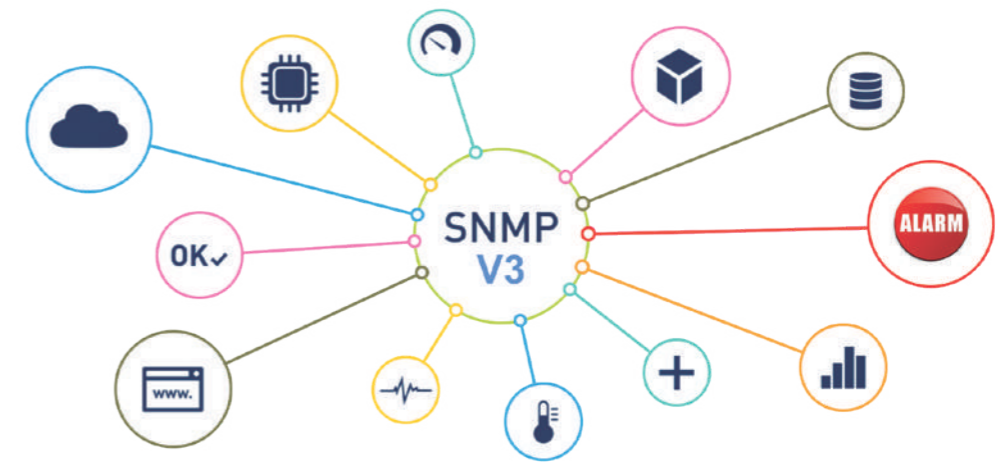
## Monitor your VA System via SNMP

Thanks to the integration of the SNMP V3 (Simple Network Management Protocol) in the EVAMATRIX system, the status of sound equipment and all sorts of defects can be instantly detected and reported through a network monitoring and management software.

The functions supported by the SNMP protocol are:

- requesting and retrieving data,
- setting or writing data,
- SNMP alerts that signal the occurrence of events (speaker line fault, amplifier fault, CPU, alarm, etc.).

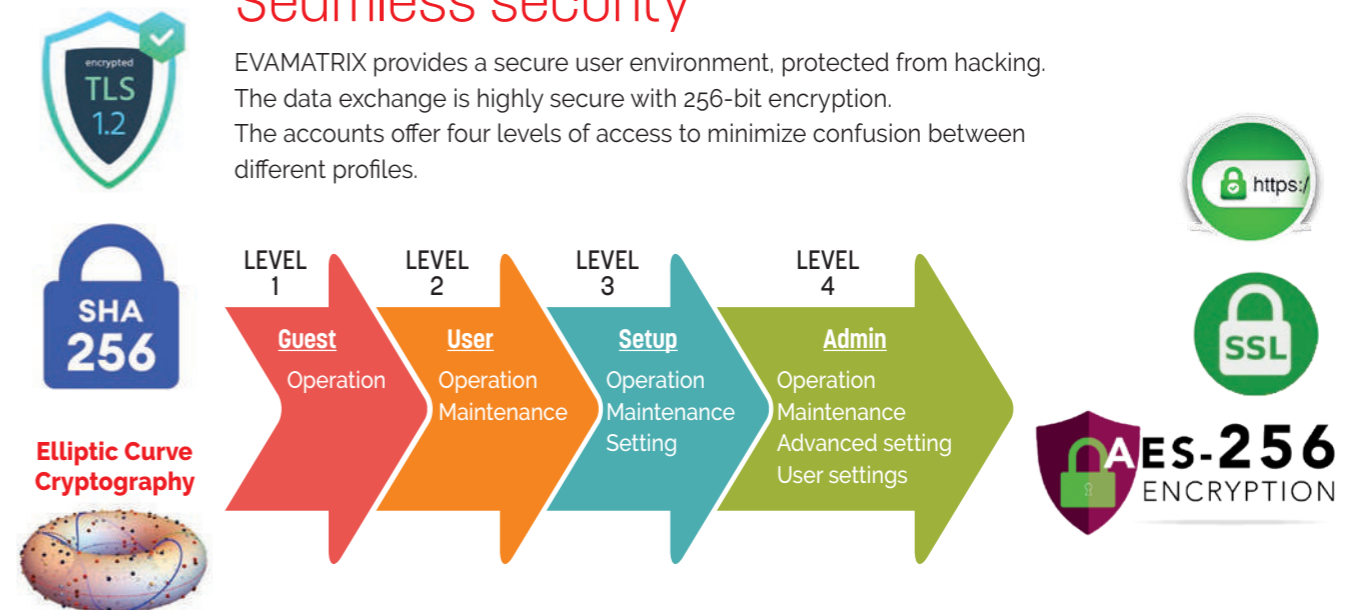
The SNMP protocol allows a management application (such as Centreon, PRTG for example) to request information from a managed unit (EVAMATRIX, DPN, RM) which is equipped with a software that sends and receives SNMP information called an SNMP agent.



- EVAMATRIX components offer integrated network redundancy for complete security to compensate for any failure.

## Seamless security

EVAMATRIX provides a secure user environment, protected from hacking. The data exchange is highly secure with 256-bit encryption. The accounts offer four levels of access to minimize confusion between different profiles.

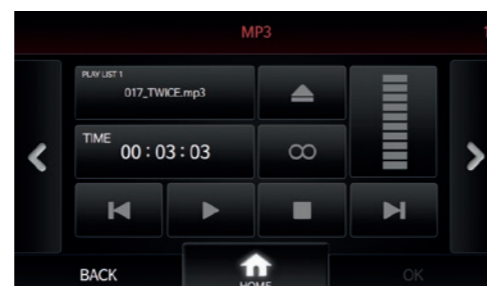
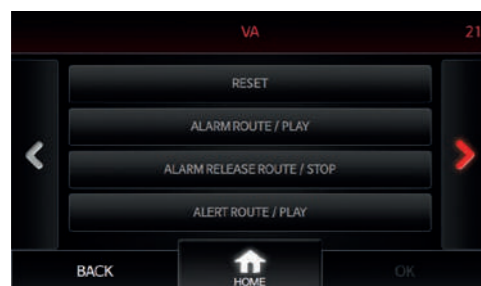
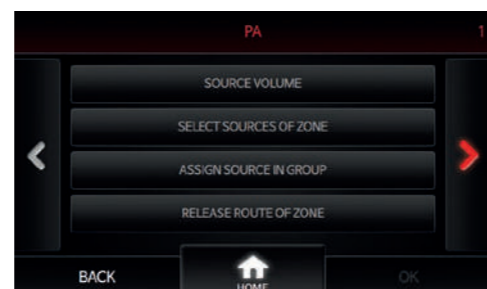
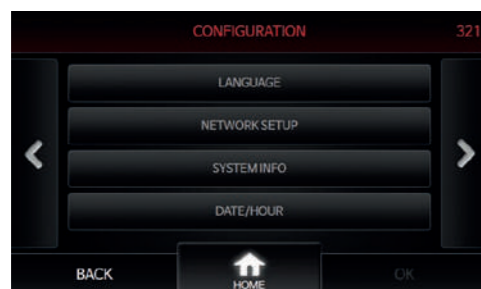
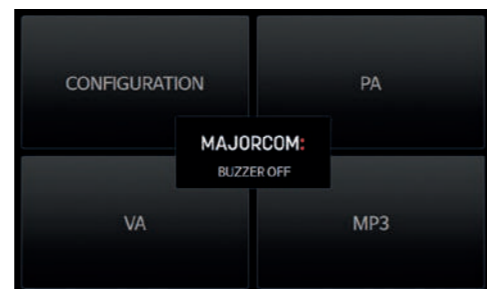




## Touch interface GUI

The EVAMATRIX system can be easily managed and configured using the 5" color LCD touch-screen and its very intuitive navigation. All the selected functions and operator choices are highlighted and the status information is instantaneously displayed on-screen. Some functions are accessible according to access levels and permissions.

- Main screen: configuration, comfort, security, MP3.
- Configuration: language, network, system information, date & time.
- PA: source volume, area volume, preset, assignment and source routing.
- VA: reset, acquit, launch and stop alarm/alert, microphone and emergency call, faults, journal, test...
- MP3: PA MP3 player.



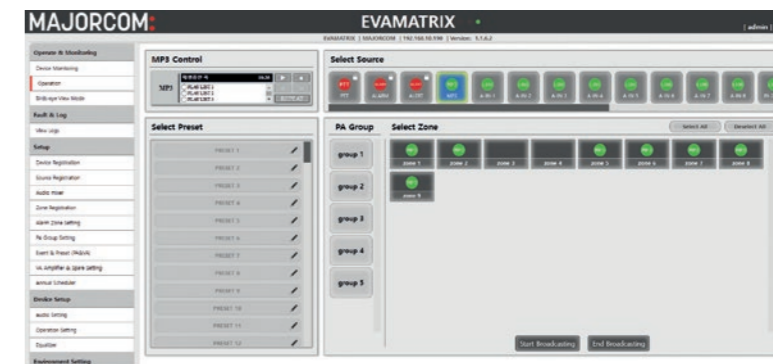
## User-friendly, ergonomic and intuitive web interface

EVAMATRIX is the one and only system on the market that offers you in its standard version:

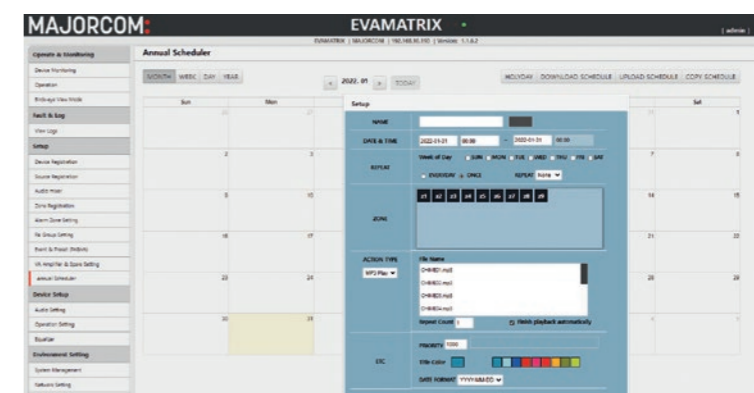
- a powerful annual event planner,
- a multilingual TTS engine,
- the "Bird's-Eye View" plan function.

Thus, EVAMATRIX can adapt to any type of installation without additional licensing and module costs.

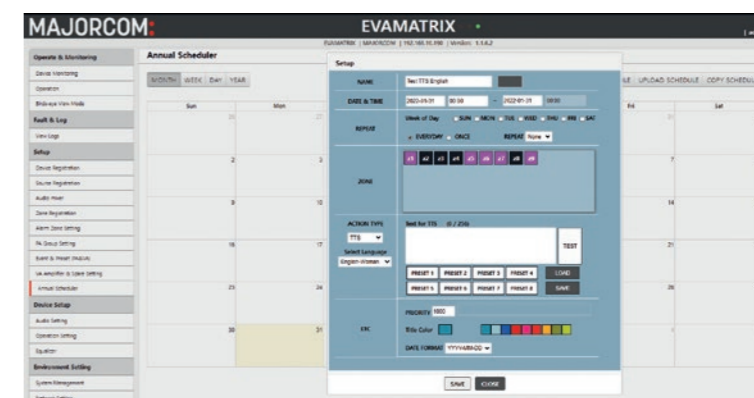
Plain Interface for great simplicity of use



Annual Scheduler



Vocal synthesis



Plan mode



with multi-plan management

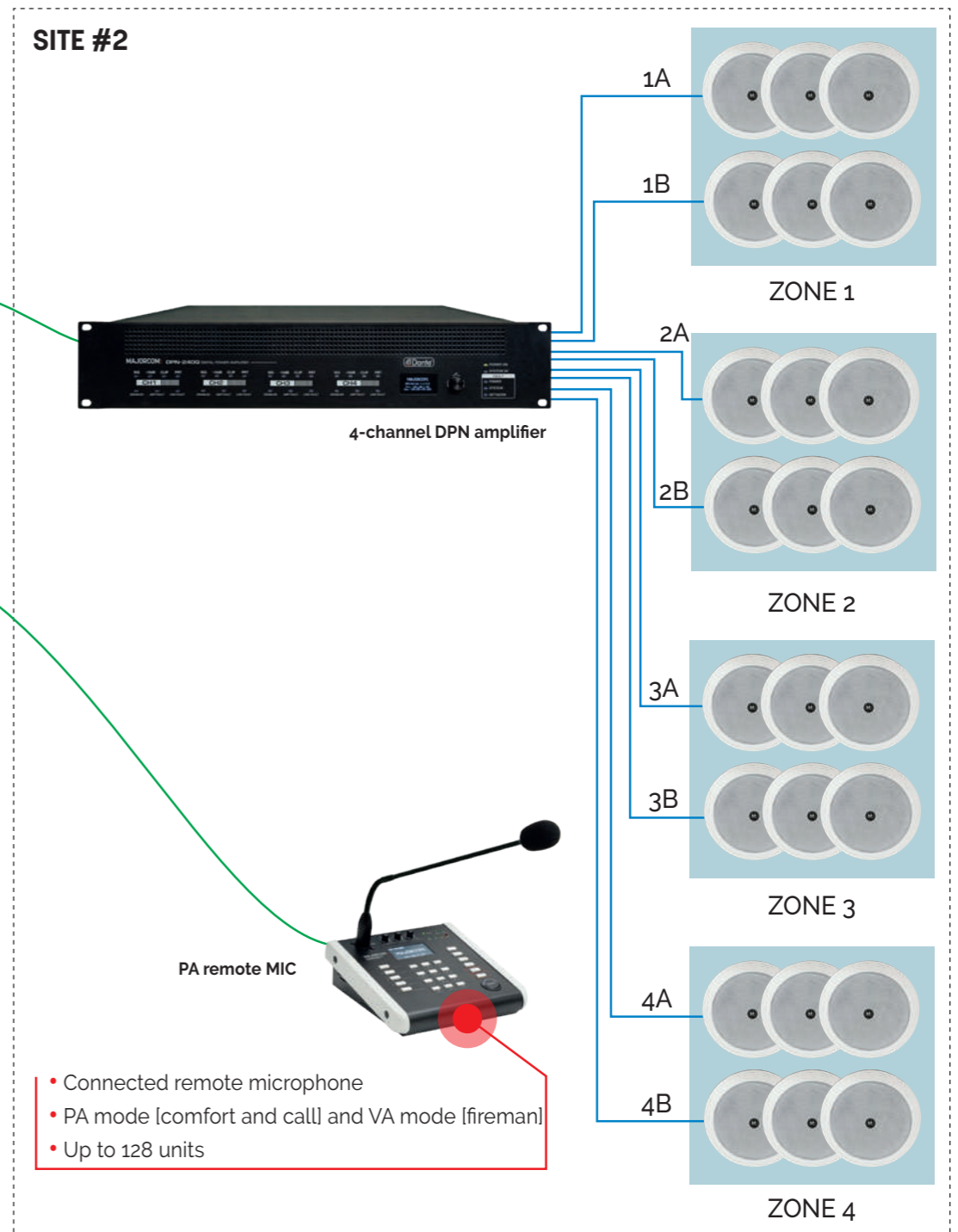
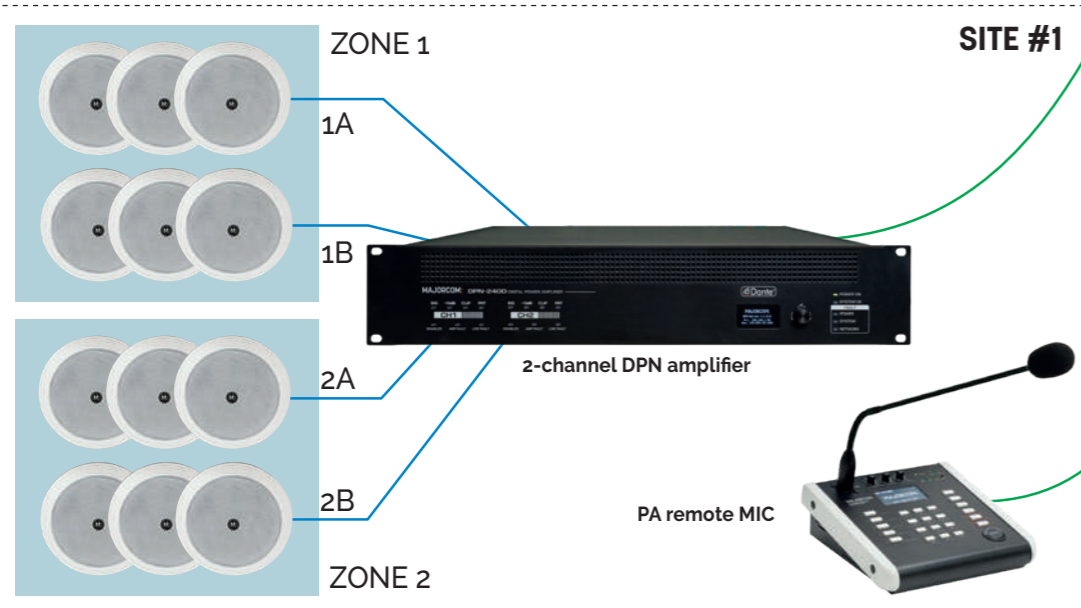
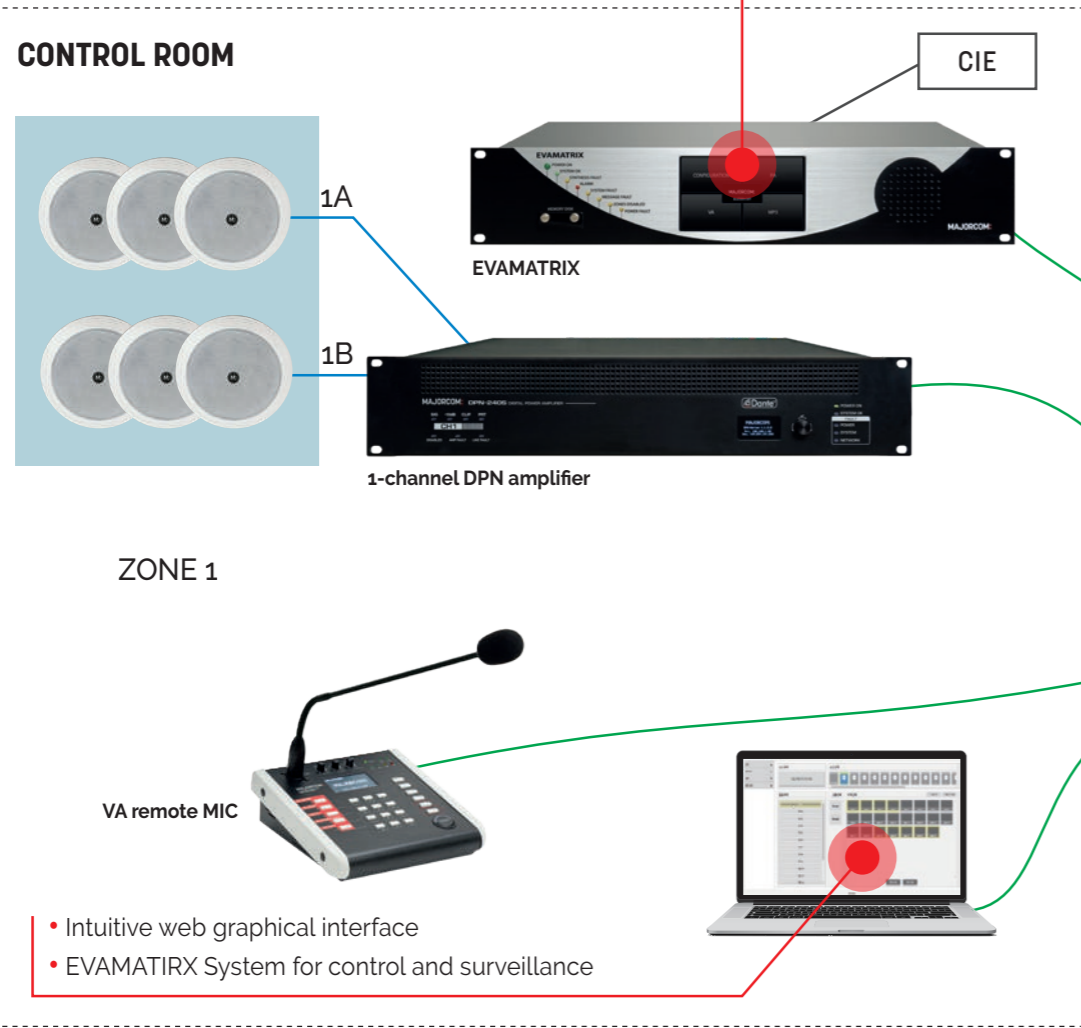




# EVAMATRIX - MULTI-SITE APPLICATION

- EVAMATRIX 640 x 1024
- Dante® Network Audio Transmission
- Emergency system capable of detecting errors in the main signal and the line of communication in advance

— Audio [100V]  
— Network





## EN 54 16 : Optional functions with requirements

The EVAMATRIX system includes the following optional functions as well as their requirements in accordance with the EN 54-16 standard

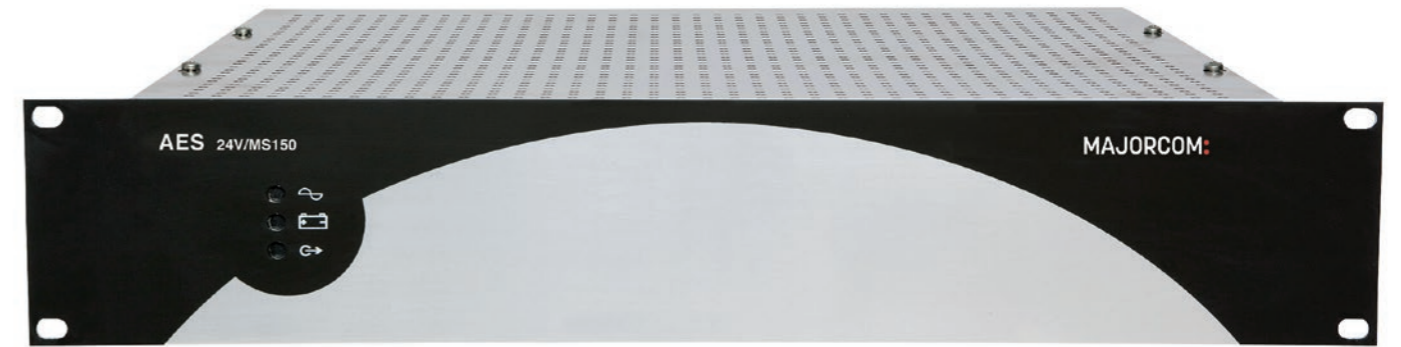
OPTION	EN 54-16 SECTION/SUBSECTION	YES/NO	
Audible warning	7.3	Yes	✓
Delay(s) to entering the voice alarm condition	7.4	Yes	✓
Phased evacuation	7.5	Yes	✓
Manual silencing of the voice alarm condition	7.6.2	Yes	✓
Manual reset of the voice alarm condition	7.7.2	Yes	✓
Voice alarm conditions output	7.9	Yes	✓
Indication of faults related to voice alarm zones	8.4	Yes	✓
Disabled condition	9	Yes	✓
Voice alarm manual control	10	Yes	✓
Emergency microphone(s)	12	Yes	✓
Redundant power amplifiers	13.14	Yes	✓
Interface to external control device(s)	11	Yes	✓

## EVAMATRIX Special Functions

- Redundant powerful amplifier
- PTT microphone and table
- Sound and visual indication
- Progressive evacuation
- Voice alarm delay and timing
- Stop the alarm while remaining in emergency mode
- Manual alarm reset
- Monitored and controlled fire alarm system output
- Voice alarm exit mode
- Manual voice alarm control
- Defect indication of the CIE communication protocol
- Indication of a malfunction related to the voice alarm zones
- External control device interface
- Annual scheduler
- TTS [Voice Synthesis]
- View with "Bird's-Eye View" plan
- Etc.

## Backup power supply AES: a certified range

EN 54 4



AES 24V/MS150

The EN 54-16 standard, which now governs Sound Security Systems (SSS), refers to the EN 54-4 standard according to which the different Power Supplies of our EVAMATRIX System are certified.

Our two BPS models comply with several EC directives: CPD (in compliance with EN 54-4/A2), LVD, EMC, WEEE and RoHS.

**AES 24V/MS40:** maximum current for all outputs is 40A.

**AES 24V/MS150:** maximum current for all outputs is 150A.



### QUICK AND EASY TO SET UP

- **Simple:** all you need is "1 pair of pliers and 1 screwdriver".
- **Quick:** plug-in connectors on the rear panel. Ready-to-use connection kit.
- **Safe:** a totally sealed box prevents any risk of damaging the internal electronics due to falling conductive parts.
- **Light:** the weight of the 2U rack is 3.1kg for the AES 24V/MS40 and 5.4kg for the AES 24V/M150.

### OPTIMAL PERFORMANCE

- **In normal operation mode:** the BPS power supply controls and recharges the batteries and keeps them charged from the power supply. It can provide the sound security system with standby current.
- **In security operation mode:** the total operating current (including the current of the amplifiers of the sound security system) is supplied by the batteries.

### BACKUP BATTERIES

Stationary Batteries Sealed Lead Acid gas valve controlled by maintenance :

- 12V - 17Ah : **BAT12V17AH**
- 12V - 25Ah : **BAT12V25AH**
- 12V - 38Ah : **BAT12V38AH**
- 12V - 65Ah : **BAT12V65AH**
- 12V - 78Ah : **BAT12V78AH**
- 12V - 100Ah : **BAT12V100AH**
- 12V - 150Ah : **BAT12V150AH**
- 12V - 210Ah : **BAT12V210AH**





## RACK 19" 12U EX / 22U EX / 32U EX / 37U EX / 42U EX : mounted

## RACK 19" 12U EX CB / 22U EX CB / 32U EX CB / 37U EX CB / 42U EX CB : mounted, tested and wired

- 22U / 32U / 37U racks : removable side panels with key lock, front glass door & rear door with key lock.
- 12U / 42U racks : removable rear & side panels, front glass door with key lock.
- Supplied with fans, electrifications, wheels and brackets.



Model	RACK 19" 12U	RACK 19" 22U	RACK 19" 32U	RACK 19" 37U	RACK 19" 42U
Number of units	12	22	32	37	42
Dimensions (D x W x H with wheels)	600 x 600 x 722 mm	800 x 600 x 1169 mm	800 x 600 x 1613 mm	800 x 600 x 1835 mm	800 x 600 x 2074 mm
Number of fans	0	2	2	2	2
Color	RAL 9005				RAL 9004

## COFFRET RM-VA : 4U Wall mounted rack for RM-VA 1000



- This 19" wall-mount cabinet allows the RM-VA 1000 voice alarm mic to be deported while maintaining access levels required by EN 54-16 standard.
- It can hold one RM-VA 1000 microphone.
- Front glass door with lock provided with 2 keys.
- Removable top and bottom panels, making it easier for cable entry.
- The RM-VA 1000 is sold separately.

## 19" solid blank panel

- Fills unused space in the rack.
- Improves cooling efficiency and optimizes airflow circulation.

Models	Height (U)	Dimensions (mm) W x D x H	Color	Material
PB 9100	1U	483 x 10 x 42	Black RAL9005	Cold rolled steel (SPCC)
PB 9200	2U	483 x 10 x 88		
PB 9300	3U	483 x 10 x 132		
PB 9400	4U	483 x 10 x 175		



PB 9100



PB 9400

## 19" fixed shelf

- Ideal for non-rackmount equipment.

Models	Rack depth	Dimensions (mm) W x D x H	Height (U)	Color	Material	Load capacity
PLATEAU RACK 600	600 mm	483 x 350 x 88	2U	Black RAL9005	Cold rolled steel (SPCC)	20 kg
PLATEAU RACK 800	800 mm	470 x 550 x 48	2U			90 kg



PLATEAU RACK 600

## 19" reinforced fixed shelf

- Fixed shelf with reinforcement for heavy loads, ideal for batteries

Models	Rack depth	Dimensions (mm) W x D x H	Height (U)	Color	Material	Load capacity
PLAT RENF BAT 600	600 mm	470 x 350 x 48	2U	Black RAL9005	Cold rolled steel (SPCC)	90 kg
PLATEAU RENF BAT	800 mm	483 x 550 x 43	1U			120 kg



PLAT RENF BAT 600

## 19" sliding shelf

- Ideal for non-rackmount equipment.

Models	Rack depth	Height (U)	Depth (mm)	Color	Material	Load capacity
PLAT GLISSIERE 2U	600 mm	2U	400	Black RAL9005	Cold rolled steel (SPCC)	20 kg
PLAT GLISSIERE 800	800 mm	1U	550			35 kg



PLAT GLISSIERE 800

## 19" lockable drawer with handle

- Ideal for storing and protecting documentation or sensitive material in the bay.
- Equipped with key lock and handle.
- Supplied with 2 keys.

Models	Rack depth	Dimensions (mm) W x D x H	Height (U)	Color	Material
TIROIR RGMT 2U	600 mm	483 x 350 x 89	2U	Black RAL9005	Cold rolled steel (SPCC)
TIROIR 2U RACK 800	800 mm	483 x 550 x 89			



TIROIR 2U RACK 800





## 640 Sources x 1024 Zones Matrix Controller

EN 54 16



EVAMATRIX is the first networked public address system co-developed by MAJORCOM and INTER-M that can be used in both centralized and decentralized locations.

EVAMATRIX is a powerful and scalable EN 54-16 VA (Voice Alarm) and PA (Public Address) PA system for versatile PA configurations.

## FEATURES

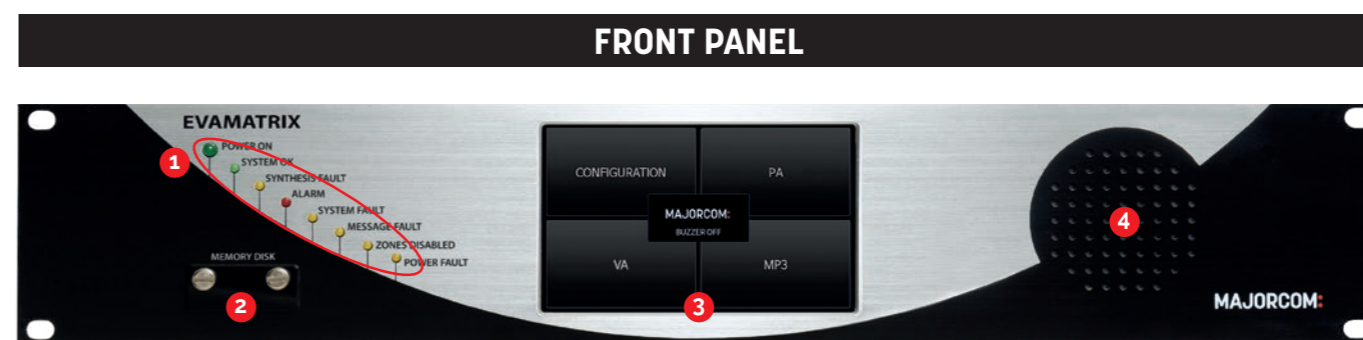
- Complete control of the EVAMATRIX system components and audio routing 640 Sources / 1024 Zones / 2048 speaker lines in A&B.
- A wide range of Class-D digital amplifiers, DPN range available in single or multi-channel and on network.
- Emergency PTT microphone monitored on the central, included.
- Supervised and integrated storage of ALARM & ALERT security message files on 2 drives.
- Support for Dante® and ana- logical audio input streams on EVAMATRIX, DPN and RM-VA 1000.
- A maximum of 128 networked microphone consoles RM-VA1000 (security and comfort).
- Redundant IP connections (Primary and Secondary) for audio and controls.
- Control and supervision of all system functions and faults. All data is centralized, reported and archived.
- Powerful DSP on the EVAMATRIX control unit and DPN amplifiers.
- MP3 player to play your audio contents on the SD card in the front panel of the EVAMATRIX.
- Automated announcements programmable by schedule (daily, weekly, yearly, vacations).
- Powerful multi-language and multi-channel TTS engine programmable by calendar.
- Bird's-eye view feature to import your shots in PNG or JPG to make your user experience more personalized.
- A wide choice of connections and interfaces with the CIE\* (UGA inputs and monitored dry contact in inputs and outputs).
- Ergonomic and user-friendly interface with a 5" LCD capacitive touch screen.
- Multi-platform setup, management and control via web page (thin client) depending on the access level.
- Additional network security implemented using AES-256-bit encryption, with real-time authentication and audio over IP encryption against malicious attacks.
- Internal real-time clock for event scheduler; support for Network Time Protocol (NTP) with automatic daylight saving time (DST).
- Internal fault and event log.
- Integrated web server for configuration, parameterization and client use depending on the access level.
- The EVAMATRIX system integrates the SNMP V3 protocol (Simple Network Management Protocol) which allows a management and monitoring software to report any type of defect and status of the sound equipment.
- The EVAMATRIX system integrates seamless security (HTTPS, TLS1.2, SHA256, SSL, AES256 encryption and elliptic curve cryptography)

\*Control and Indicating Equipment



## 640 Sources x 1024 Zones Matrix Controller

EN 54 16



- 1 Status and fault LEDs
- 2 SD card slot (PA)
- 3 5" capacitive touch screen
- 4 Monitor speaker

## REAR PANEL



- 1 220VAC power outlet
- 2 Fuse 220VAC (T 0.5 A/250VAC)
- 3 24VDC power supply input (EAE backup)
- 4 PA audio outputs (1 ~ 8 & MONITOR)
- 5 PA audio inputs (1 ~ 8)
- 6 PTT microphone input on the front panel
- 7 UGA inputs (1 ~ 5) monitored Dry
- 8 Contact inputs (1 ~ 8) monitored
- 9 Trigger REMOTE MESSAGE (1 ~ 8) Fault
- 10 Synthesis outputs (1 ~ 5)
- 11 Dry contact outputs (1 ~ 16)
- 12 Monitored memory cards (security)
- 13 RJ-45 network ports - Dante® (Primary & Secondary)
- 14 RJ45 network ports RM-VA1000VA/PA Microphone Console (Dante® Primary)

## EMERGENCY MICROPHONE PTT (PUSH TO TALK)

EN 54 16



- Push To Talk emergency microphone with microphone capsule monitoring
- Omnidirectional directionality

- 1 Microphone capsule 600Ω
- 2 Push button
- 3 Cable with 6-pin DIN connector

MODEL	MICRO PTT
Microphone	Dynamic capsule
Impedance	Omnidirectional
Sensitivity	-74dB @ 1kHz
Frequency response	300 to 5,000Hz
Dimensions (WxHxD)	50 x 90 x 45mm
Connector	DIN 6-pole lockable
Weight	210g
Sustainability	100.000 cycles
Standard	EN 54-16





## 640 Sources x 1024 Zones Matrix Controller

EN 54 16

## TECHNICAL CHARACTERISTICS

MODEL	EVAMATRIX	
Power supply	220 - 240VAC, 50/60Hz, 24VDC	
Consumption	Less than 38W	
Frequency response	20Hz - 20kHz (relative level @ 1kHz ±3dB)	
Signal to Noise Ratio	> 70dB	
Harmonic distortion rate (THD)	< 0.02%	
Gain adjustment per channel	-75dB ~ -0dB, about 0.4dB per 1 step	
DSP audio processing	48kHz, 32-bit CAN/CNA converters - DSP (294 MIPS)	
Virtual MATRIX	640 x 1024	
Audio inputs	MIC / PHANTOM MIC / LINE (1 ~ 8, Euroblock 3pins) Switchable 0dBV 10kΩ (LINE) / -60dBV 600Ω balanced (MIC) (with 24VDC Phantom power supply)	
Audio outputs	AUDIO OUT (1 ~ 8) 0dBV (balanced) Monitor 0dBV (balanced)	
Ethernet (LAN)	RJ45, TCP/IP protocol 10/100/1000 Base-T	
Extension (LAN)	Output to EVAMATRIX on RJ45 (Dante®) - Input from EVAMATRIX on RJ45 (Dante®) CAT5 cable Maximum distance: 100m	
PTT microphone	Supervised, 6-pin DIN connector	
UGA inputs	Inputs UGA 1 ~ 5: Triggering on a voltage Min/Max trigger voltage ALARM/ALERT: 21VDC to 60VDC UGA supervision: -3VDC + 3VDC	
Dry contact inputs	Inputs 1 ~ 8 10kΩ : in triggering 20 kΩ : in supervision Open or short-circuited: connection fault	REMOTE MESSAGE: 1 ~ 8 short-circuit triggerable
Dry contact outputs	Outputs 1 ~ 16 : relay outputs	
Synthesis output	Dry contact outputs 1 ~ 5 : relay output	
Protections	Current protection, temperature protection, voltage protection...	
MTTF availability	Average failure time greater than 100,000 hours	
MTTR availability	Average repair time less than 20 minutes	
DC input power supply	24VDC	
Touch screen	5"LCD	
Operating temperature	-10°C ~ +40°C - Humidity: 5 ~ 95%	
Weight	4.5kg	
Dimensions (WxHxD)	482 x 88 x 280mm (2U 19")	
Accessories	2x Micro SD / 1x SD Card / Euroblock Connectors / AC Power Cord / Micro PTT Cable / Screws / User Manual	
Protocol and security encryption	TCP/IP, Http, Https, SNMP V2c, IPv4, TLS1.2, SHA256, SSL, AES-256, Elliptic curve cryptography	



## Digital Network Amplifiers

EN 54 16

DPN-240S · DPN-240D · DPN-240Q · DPN-480S · DPN-480D

## FEATURES

- The DPN series offers a wide choice of single or multi-channel power ratings, in line 70V/100V with galvanic isolation.
- The amplifiers are EN 54-16 certified and designed to work with the EVAMATRIX security PA system.
- All system components are fully IP networked (audio & control) using Dante® technology.
- Dual primary and secondary network connection for total redundancy.
- Low power consumption, low heat dissipation for energy savings and gains in battery capacity and backup power.
- Complete supervision of the operation of the amplifiers and all connections. Faults are reported locally on the EVAMATRIX and archived.
- Control and supervision of the loudspeaker lines WITHOUT audio interruption with the EOL-20 end of line element
- Control and supervision of the network link with audible and visual indication on the amplifier unit and EVAMATRIX.
- Integrated backup amplifier channel dynamically assignable from the EVAMATRIX web interface with automatic switchover
- 2 A/B outputs on each amp channel. The 2 outputs are supervised and individually disabled in case of failure.
- Audio over IP, Dante® and AES67 compatible; audio sample rate is of 48kHz with a sample size of 24 bits.
- High signal to noise ratio, wide audio bandwidth, very low distortion and crosstalk.
- DSP, digital signal processing on all amp channels from the EVAMATRIX control unit web server, including equalization, levels to optimize and customize the sound in each speaker zone.



DPN-240S / 480S



DPN-240D / 480D



DPN-240Q

## SEVERAL POWERS FROM SINGLE TO QUADRUPLE CHANNEL

1 x 240 W: DPN-240S    2 x 240 W: DPN-240D    4 x 240 W: DPN-240Q  
1 x 480 W: DPN-480S    2 x 480 W: DPN-480D

- Local UGA and dry contact inputs monitored for triggering of alarm conditions, alarm... Ideal for decentralized systems.
- Dry contact inputs for local feedback of third party faults (CIE\*, EAE, GTC...) in case of decentralized use.
- Local fault outputs customizable as desired and by alarm zone.
- An additional local analog audio input on each DPN amplifier that will be converted and made available to the entire EVAMATRIX system.
- The system integrates the SNMP V2c protocol (Simple Network Management Protocol) which allows a management and monitoring software to report any type of fault and status of the sound equipment.
- The system incorporates seamless security (HTTPS, TLS1.2, SHA256, SSL, AES256 encryption and elliptic curve cryptography).

\*Control and Indicating Equipment





## Digital Network Amplifiers

EN 54 16

DPN-240S · DPN-240D · DPN-240Q · DPN-480S · DPN-480D

### FRONT PANEL



- 1 Status LEDs: system, power, network LEDs
- 2 Audio signal level and protection
- 3 Status LEDs: amplifier fault, speaker line fault, zone out of order
- 4 OLED information display and control wheel

### REAR PANEL



- 1 220VAC power outlet
- 2 24VDC power supply input (EAE backup)
- 3 AMP OUTPUT: A&B speaker line output terminal
- 4 100V input emergency amplifier
- 5 Fault IN : monitored and programmable drycontact inputs (e.g. EAE fault)
- 6 DRY CONTACT IN: monitored dry contact inputs and Programmable (e.g.: Alarm/Alerts...)
- 7 DRY CONTACT OUT: programmable dry contact outputs (e.g.: defect carry-over...)
- 8 UGA IN: monitored UGA inputs for alarm/alert triggering
- 9 Dante® Primary & Secondary Ethernet Ports
- 10 AUDIO IN: line level audio input
- 11 Air exhaust vent



## Digital Network Amplifiers

EN 54 16

DPN-240S · DPN-240D · DPN-240Q · DPN-480S · DPN-480D

### TECHNICAL CHARACTERISTICS

MODEL	DPN-240S	DPN-240D	DPN-240Q	DPN-480S	DPN-480D
Power supply	220 - 240VAC, 50/60Hz, 24VDC				
Power	1 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	2 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	4 x 240W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	1 x 480W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF	2 x 480W RMS @ 70V/100V Class D Load Min 41.6Ω, Capacity Min 0.01uF
Consumption	Max	313W	595W	1 254W	583W
	1/8 power	135W	140W	280W	135W
	Standby	58W	75W	89W	59W
Frequency response	20Hz - 20kHz to (±3dB @ 1W)				
Signal / Noise	> 91dB (20kHz LPF, A-WTD)				
T.H.D	< 0.45% at 1kHz Power rating				
Audio input	Type: Balanced Euro terminal / Input sensitivity: 5dBV (1.78 Vrms)				
Ethernet (LAN)	RJ45, TCP/IP protocol 100/1000 Base-T				
Extension	Output to EVAMATRIX on RJ45 (Dante®) - Input from EVAMATRIX on RJ45 (Dante®) CAT5 cable Maximum distance: 100m				
UGA inputs	UGA inputs 1 - 4 : triggerable on a voltage (22V ~ 60V)				
Dry contact inputs	Dry contact inputs from (1 - 4) : triggerable on dry contact NO/NF				
Dry contact outputs	Dry contact outputs from (1 - 4) : Relay output				
Speaker line outputs	4-pin connector, (1ch) for channels A+B				
Backup amplifier input	1 input per channel, for amplifier with equal power				
Protection	Current protection, temperature protection, DC voltage output protection, overload				
MTTF availability	Average failure time greater than 100,000 hours				
MTRR availability	Average repair time less than 20 minutes				
AES/EAE emergency power input	24VDC				
FAULT-IN input	Supervised fault input for remote fault reporting (e.g. AES/EAE)				
Screen	1.3" OLED screen				
Operating temperature	-10°C ~ +40°C / Humidity: 5 - 95%				
Weight	8,59kg	9,1kg	10,1kg	8,56kg	9,7kg
Dimensions (WxHxD)	482 x 88 x 450mm				
Accessories	AC power cord, Euroblock connectors, Rack mount screws, User manual				
Protocol and encryption	TCP/IP, Http, Https, SNMP V2c, IPv4, TLS1.2, SHA256, SSL, AES-256, Elliptic curve cryptography				





EN 54 16

## Microphone Call Station for VA &amp; PA

RM-VA 1000  
VARM-VA 1000  
PA

The RM-VA1000 call station is intended for use with EVAMATRIX VA or PA sound systems.

It can be configured in security mode (VA) via the supplied kit (sticker and rear cable protection cover) or in public address mode (PA).

It is easy to install and simple to use with its LCD screen that provides clear feedback on the configuration of a call.

The RM-VA 1000 only requires a connection to an IP network with a power supply via Ethernet 24VDC from EAE for use in or a simple 230VAC/24VDC adapter supplied for use in comfort mode.

In VA mode, the call station is fully supervised and allows you to launch an emergency call, ALARM, ALERT. The LCD screen gives the operator optimal control and constant feedback.

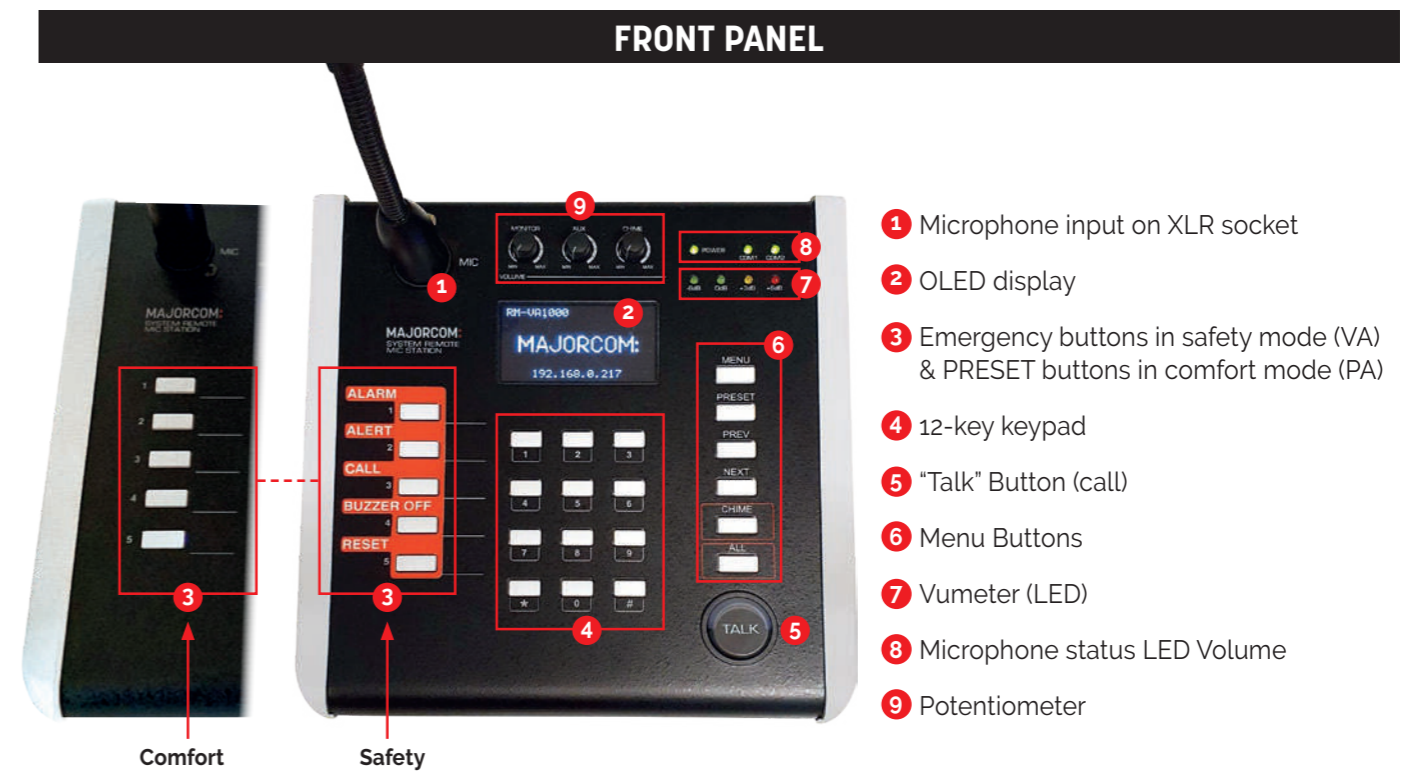
## FEATURES

- The RM-VA1000 call station can be configured for VA or PA.
- Connection to the IP network via a shielded Cat5e cable
- The 2.3" LCD display (with function menu navigation key) provides instructions and comments during the emergency call process, pre-recorded messages (ALARM/ALERT).
- Built-in monitor speaker with volume control.
- Local audio line input (mono) for connecting an external audio source in comfort mode only. The audio channel is available on the network and can be assigned to any speaker zone.
- Up to 128 microphone consoles can be connected to the EVAMATRIX system, of which up to 4 are VA consoles.
- The call station is fully compliant with EN 54-16 standards for evacuation applications.
- All critical alarm functions are accessible according to access levels. The 2.3" display provides information on the system status.
- Control of all critical functions; signal and audio assignment is controlled, as well as communication with the network.
- The EVAMATRIX system integrates the SNMP V3 protocol (Simple Network Management Protocol) which allows a management and monitoring software to report any type of fault and status of the sound equipment.
- The EVAMATRIX system integrates seamless security (HTTPS, TLS1.2, SHA256, SSL, AES256 encryption and elliptic curve cryptography).



EN 54 16

## Microphone Call Station for VA &amp; PA



- 1 Microphone input on XLR socket
- 2 OLED display
- 3 Emergency buttons in safety mode (VA) & PRESET buttons in comfort mode (PA)
- 4 12-key keypad
- 5 "Talk" Button (call)
- 6 Menu Buttons
- 7 Vumeter (LED)
- 8 Microphone status LED Volume
- 9 Potentiometer

## REAR PANEL



- 1 24VDC power connectors
- 2 Reset switch
- 3 RJ-45 network port
- 4 AUX audio input jack (only in comfort mode)
- 5 Mic input volume potentiometer

Safety mode cover (VA)





## Microphone Call Station for VA & PA

EN 54 16

### TECHNICAL CHARACTERISTICS

MODEL	RM-VA 1000
Power supply	24VDC (VCC)
Consumption	Max. 10W
Frequency response	100Hz - 18kHz to -3dB @ 1kHz
Signal to Noise Ratio	> 65dB
Harmonic distortion rate (THD)	< 0,1%
<b>MIC</b>	
AUX input sensitivity	-50dBV
Output sensitivity	0dBV
Signal-to-noise ratio (< 20kHz LPF, A-WT.)	70dB or more
T.H.D (< 22kHz LPF)	0,1% or less
Frequency response 100Hz ~ 18kHz Input: -50dBV, 1kHz based	0dB ± 3dB
<b>AUX</b>	
AUX input sensitivity	-10dBV
Output sensitivity	0dBV
Signal-to-noise ratio (< 20kHz LPF, A-WT.)	80dB or more
T.H.D (< 22kHz LPF)	0,1% or less
Frequency response 100Hz ~ 18kHz Input: -50dBV, 1kHz based	0dB ± 3dB
<b>General</b>	
Ethernet (LAN)	RJ45, TCP/IP protocol 100/1000 Base-T
LAN Extension	Output to EVAMATRIX on RJ45 (Dante®) - Input from EVAMATRIX on RJ45 (Dante®) CAT5 cable Maximum distance: 100m
MTTF availability	Average failure time greater than 100,000 hours
MTTR availability	Average repair time less than 20 minutes
AES/EAE emergency power input	24VDC
OLED screen	2,42"
Operating temperature	-10°C ~ +40°C - Humidity: 5 ~ 95%
Weight	1,29kg
Dimensions (WxHxD)	200 x 73 x 206mm
Accessories	AC power cord, Adapter, Gooseneck microphone, Euroblock termina
Protocol and encryption	TCP/IP, Http, Https, SNMP V2c, IPv4, TLS1.2, SHA256, SSL, AES-256, Elliptic curve cryptography

## End of line element

### EOL-20

EN 54 16



This module is a reliable solution for checking the integrity of the loudspeaker line, which is mandatory for VA sound systems.

The EOL-20 is connected at the end of the line after the last speaker.

It communicates with the DPN amplifier channel that drives the speaker line to confirm the integrity of the speaker line.

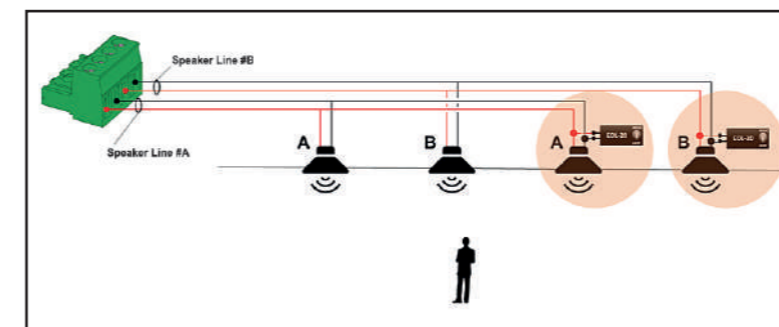
Where impedance measurements may not detect a disconnected loudspeaker (depending on the number of loudspeakers and the type of cable), the EOL-20 provides a highly reliable solution to always report the correct status of the loudspeaker lines.

The EOL-20 housing is IP30 and fits most cable junction boxes.

### FEATURES

- The operation is based on the detection of the amplifier's pilot signal with feedback to the amplifier via the same speaker line.
- No additional wiring is required for fault or status reporting.
- The end of line element must be connected at the end of the line and on each speaker line.
- The two wires have no polarity and can be connected in either direction.
- The A/B outputs of a DPN amplifier channel are individually supervised with separate end-of-line units.
- The switch allows a more accurate measurement of the loudspeaker line depending on its load:
  - HIGH: speaker line load greater than 150 W
  - LOW: speaker line load less than 150 W
- To reduce power consumption, the DPN amplifier channels use pilot signal modulation.
- The audibility of the pilot signal is practically zero due to the low amplitude of the pilot signal (20kHz frequency) which is far beyond the range of human-hearing, even in young children.

### WIRING OF THE EOL-20 ON A SPEAKER LINE



The EOL-20 must be connected at the end of the line and on each speaker line. The two wires have no polarity and can therefore be connected in either direction.

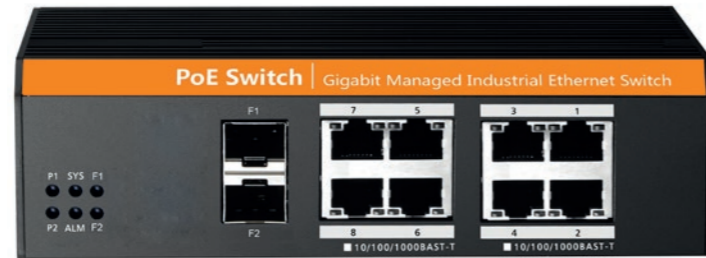
### TECHNICAL CHARACTERISTICS

Model	EOL 20
Operating temperatures	-10°C ~ +40°C Humidity : 5 ~ 95%
LOW position	Speaker line load less than or equal to 150W
HIGH position	Loudspeaker line load greater than 150W
Weight	150g
Dimensions (WxHxD)	100 x 35 x 30mm
Accessories	no



**SWCH EVA 8P+SFP M :****8-Port Gigabit Managed Industrial Ethernet Switch with 2 SFP ports****NEW**

**SWCH EVA 8P+SFP M** is a 10-port gigabit managed industrial Ethernet switch with 8 gigabit PoE RJ45 ports and 2 gigabit optical SFP ports. Each POE port can provide up to 30W and can be used for IEEE802.3af/at compatible Powered Devices (PDs). Supports dual DC power source backup.

**ALIM 24-48VDC 120W (NOT INCLUDED)****ISOLATED DC-DC POWER SUPPLY**

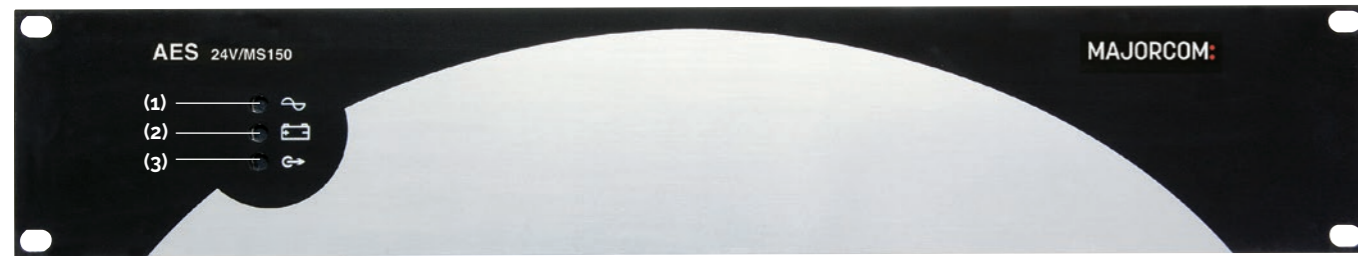
- Supplies power to the SWCH EVA 8P+SFP M by converting the 24V DC current supplied by the AES (AES24V MS40 or AES24V MS150) into 48V DC
- Easy DIN rail installation

**TECHNICAL CHARACTERISTICS**

General	SWCH EVA 8P+SFP M	
<b>Network Interface</b>	<ul style="list-style-type: none"> <li>10/100/1000Mbps RJ45 ports x8</li> <li>10/100/1000Mbps SFP ports x2</li> </ul>	<ul style="list-style-type: none"> <li>Console ports x1</li> </ul>
<b>Network Protocol</b>	IEEE802.3, IEEE802.3il, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3ad, IEEE802.3x, IEEE802.3af/at, IEEE802.1pl, IEEE802.1ql, IEEE802.1w, IEEE802.1d, IEEE802.1s	
<b>Performance</b>	<ul style="list-style-type: none"> <li>Bandwidth : 20Gbps (Non-Block)</li> <li>Throughput : 14.9Mpps</li> <li>MAC table : 8K</li> </ul>	<ul style="list-style-type: none"> <li>Port cache : 4.1Mb</li> <li>Forwarding model : Store and forward</li> </ul>
<b>LED Indicator</b>	<ul style="list-style-type: none"> <li>Power Indicator : P1,P2</li> <li>System Indicator : SYS</li> <li>Alarm Indicator : ALM</li> </ul>	<ul style="list-style-type: none"> <li>SFP Port Indicator : Link&amp;Act F1-F2</li> <li>RJ45 Port Indicator : POE&amp;Link&amp;Act 1-8</li> </ul>
<b>POE Pin</b>	1/2 (+), 3/6 (-)	
<b>Casing</b>	Corrugated high-strength metal housing, IP40	
<b>Installation</b>	DIN-Rail	
<b>Dimensions (LxWxH)</b>	163mm×110mm×46.5mm	
<b>Operating Temperature</b>	-40~75°C	
<b>Storage Temperature</b>	-40~85°C	
<b>Operating Humidity</b>	5%-95% RH (non-condensing)	
<b>Storage Humidity</b>	0%-95% RH (non-condensing)	
<b>Certification</b>	CE/ROHS/FCC	
<b>Compliance</b>	<ul style="list-style-type: none"> <li>EMS : <ul style="list-style-type: none"> <li>IEC61000-4-2 (ESD) : ±8kV (contact), ±15kV (air)</li> <li>IEC61000-4-3 (RS) : 10V/m (80MHz-2GHz)</li> <li>IEC61000-4-4 (EFT) : Power Port: ±4kV; Data Port: ±2kV</li> <li>IEC61000-4-5 (Surge) : Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±6kV</li> <li>IEC61000-4-6 (CS) : 3V (10kHz-150kHz); 10V (150kHz-80MHz)</li> <li>IEC60068-2-6 (Vibration)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>IEC60068-2-27 (Shock)</li> <li>IEC60068-2-32 (Free Fall)</li> <li>EMC : <ul style="list-style-type: none"> <li>EN IEC 61000-6-4:2019</li> <li>EN IEC 61000-6-2:2019</li> </ul> </li> <li>EMI : <ul style="list-style-type: none"> <li>FCC CFR47 Part 15</li> <li>EN55022/CISPR22</li> <li>Class A</li> </ul> </li> </ul>

Power supply	
<b>Input voltage</b>	48-56V DC (power supply not included, see ALIM 24-48VDC 120W)
<b>Input port</b>	Pluggable 5 pin terminals block, 5.08mm pitch (supports dual DC power source backup, built-in overcurrent protection, supports anti-reverse connection)
<b>No-load power</b>	6W@52V DC
<b>Full load power</b>	246W@52V DC (POE full load output)
<b>Max. power for single port</b>	30W
Software	
<b>Protocol</b>	<ul style="list-style-type: none"> <li>IEEE 802.3 : Ethernet Media Access Control (MAC)</li> <li>IEEE 802.3i : 10BASE-T Ethernet</li> <li>IEEE 802.3u : 100BASE-TX fast Ethernet</li> <li>IEEE 802.3ab : 1000BASE-T gigabit Ethernet</li> <li>IEEE 802.3z : 1000BASE-X gigabit Ethernet(fiber)</li> <li>IEEE 802.3ad : Comply link aggregation standard</li> <li>IEEE 802.3x : Flow control</li> <li>IEEE 802.1p : About the traffic priority of the second layer of Qos / Cos protocol (multicast filtering)</li> <li>IEEE 802.1q : VLAN Bridge operation</li> <li>IEEE 802.1d : STP spanning tree</li> <li>IEEE 802.1s : MSTP spanning tree</li> <li>IEEE 802.1w : RSTP spanning tree</li> <li>IEEE 802.3af</li> <li>IEEE 802.3at</li> </ul>
<b>AI Button</b>	<ul style="list-style-type: none"> <li>AI Loop Protect</li> <li>AI PoE</li> <li>AI VLAN</li> <li>AI Extend</li> </ul>
<b>DHCP</b>	DHCP Snooping
<b>VLAN</b>	<ul style="list-style-type: none"> <li>4K VLAN</li> <li>802.1Q VLANMAC VLAN ,IP VLAN</li> <li>Voice VLAN</li> </ul>
<b>MAC Table</b>	<ul style="list-style-type: none"> <li>IEEE 802.1d</li> <li>Supports MAC address automatic learning and aging</li> <li>Support static, dynamic, filtering address table</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>Password protection</li> <li>Decline user access by port number, IP address and MAC address</li> <li>HTTPS, SSL V3, TLS V1, SSH V1/V2</li> <li>ARP Protection, IP source Protection, DoS Protection</li> <li>Supports DHCP Snooping and DHCP attack protection</li> <li>Supports 802.1X authentication, AAA</li> <li>Supports port security, port isolation</li> <li>Supports CPU protection</li> <li>Supports IP-MAC-PORT ternary binding</li> </ul>
<b>PoE Management</b>	<ul style="list-style-type: none"> <li>Supports PoE total power limit</li> <li>Supports PoE chip status view</li> <li>Supports PoE port priority setting</li> <li>Supports PoE power time period setting</li> </ul>
<b>ACL</b>	<ul style="list-style-type: none"> <li>Supports L2 (Layer 2) ~ L4 (Layer 4) packet filtering function</li> <li>Supports port mirroring, port redirection, flow rate limit, QoS remarking</li> </ul>
<b>QoS</b>	<ul style="list-style-type: none"> <li>Supports 8 port queues</li> <li>Supports port priority, 802.1P priority, DSCP priority</li> <li>Supports SP, RR, WRR, priority scheduling algorithm</li> </ul>
<b>Spanning Tree</b>	<ul style="list-style-type: none"> <li>Supports STP (IEEE 802.1d) RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s)</li> <li>Supports loop protection, root bridge protection, TC protection, BPDU protection, BPDU filtering</li> </ul>
<b>Multicast</b>	<ul style="list-style-type: none"> <li>Supports IGMP v1/v2 Snooping</li> <li>Supports multicast VLAN</li> <li>Supports multicast filtering, packet statistics, and unknown multicast discards</li> </ul>
<b>Storm Suppression</b>	<ul style="list-style-type: none"> <li>Multicast suppression</li> <li>Broadcast suppression</li> <li>Unknown unicast suppression</li> </ul>
<b>Link Aggregation</b>	<ul style="list-style-type: none"> <li>Static aggregation</li> <li>Dynamic aggregation</li> <li>Supports IP, MAC, and hybrid load balancing modes</li> <li>Up to 32 aggregation groups</li> </ul>
<b>IPv6</b>	Pv6 Ping, IPv6 Tracert, IPv6 Telnet, IPv6 SSH, IPv6 SSL
<b>Management and Maintenance</b>	<ul style="list-style-type: none"> <li>WEB managementHTTPHTTPTSSSL V3</li> <li>CLITelnet, SSH V1/V2, Local serial port</li> <li>SNMP V1/V2/V3</li> <li>LLDP, RMON</li> <li>CPU monitoring, memory monitoring</li> <li>System log, grading warning</li> <li>Supports Ping, Tracert detection, cable detection</li> <li>ARP protection, IP source protection, DoS protection</li> </ul>



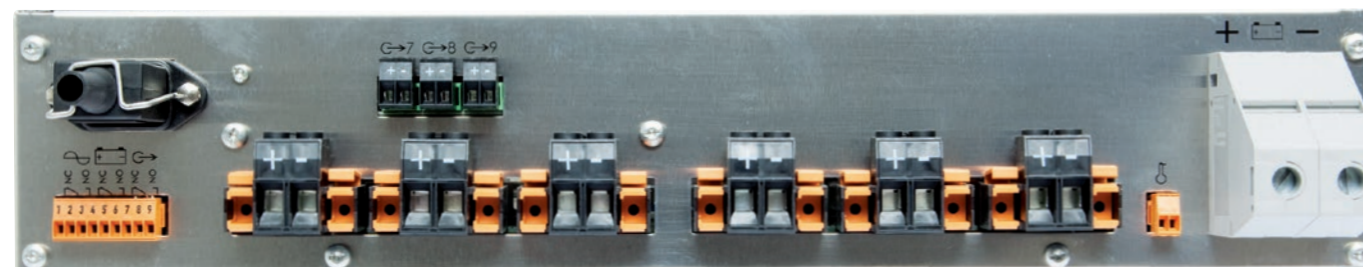


(1): LED Power Default      (2): LED Battery Default      (3): LED Output Voltage Default

Model	AES 24V/MS 40	AES 24V/MS 150
Power voltage	195 - 264VAC, 50-60Hz	
Primary Current	1A @ 195VAC	2A @ 195VAC
	Breaker Circuit (D curve) need to be provided Upstream	
Outputs	Nominal Voltage 24VDC Floating Voltage Set at half-load and at 25°C: 27.2V +/- 0.5%	
	2 "Amplifiers" Outputs with a current of 20A maximum per Output on connectors 16mm <sup>2</sup> 2 "Controllers" Outputs with a current of 5A maximum per Output on connectors 2.5mm <sup>2</sup> The maximum current for all outputs is 40A	6 "Amplifiers" Outputs with a current of 40A maximum per Output on connectors 16mm <sup>2</sup> 3 "Controllers" Outputs with a current of 5A maximum per Output on connectors 2.5mm <sup>2</sup> The maximum current for all outputs is 150A
Outputs Relays	Output Relay without any voltage Battery Default Output Relay without any voltage Main Power Default Output Relay without any voltage 24V Output Default	
Battery Capacity	Between 24 and 110Ah	Between 38 and 225Ah
Operating Temperature	-10 to +45°C at 100% of load -10 to +55°C at 75% of load	
Relative Humidity	20 to 95%	
Dimensions (W x D x H)	483 x 395 x 89mm	
Weight	3.1kg	5.4kg



AES 24V/MS40 rear panel



AES 24V/MS 150 rear panel



# VULCA VOICE - All-in-one Voice Alarm system

COMPACT • ALL-IN-ONE

EN 54 16

## VULCA VOICE range COMPACT ALL-IN-ONE VOICE ALARM SYSTEM

EN 54 4



- Compact all-in-one Voice Alarm System certified EN 54-16 and EN 54-4
- 1 Alarm Zone
- Integrated amplifiers : up to 400W
- Amplifier and loudspeaker line monitoring
- Up to 4 broadcasting zones
- Integrated emergency microphone
- Integrated power supply (PSE)
- Ready for installation
- Easy to use
- Digital player
- Messages scheduler
- Specifically designed for small and medium installations



EN 54 16

## VULCA VOICE range CSC1-310-NF • CSC1-420-NF • CSC1-430-NF • CSC1-440-NF

EN 54 4

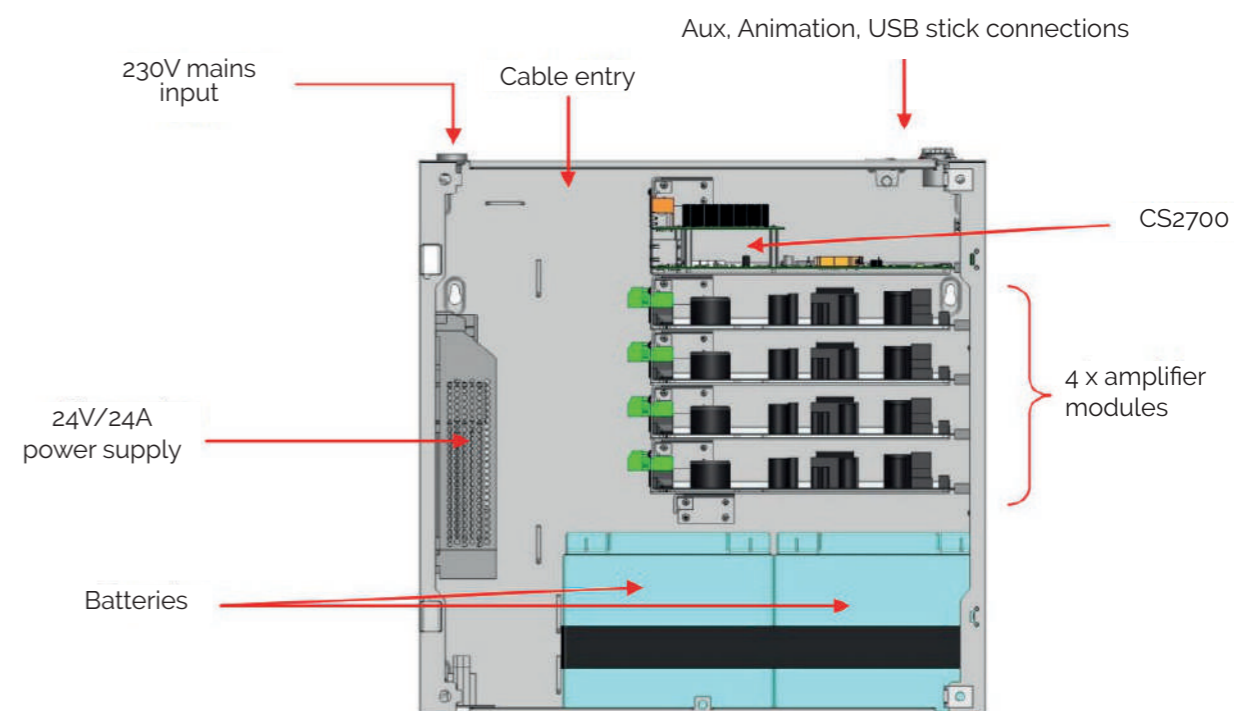
### FEATURES

- The Vulca Voice range includes several different versions differentiated by the number of loudspeaker lines, the maximum power available per loudspeaker line and the total power available.
- Connected to a CIE (Control and Indicating Equipment), this system constitutes a single alarm zone. This alarm zone is divided into 1 to 4 loudspeaker lines.
- Memory support on SD card (or USB key) combined with the digital player makes it easy to personalize your messages and create different schedules.
- Set-up is simple, thanks to a small footprint (24 cm), full integration (amplifiers, power supply and back-up batteries) and suitable interfaces.
- Fireman Palm handheld microphone included.
- Digital matrix with priority management.
- Bells playlist included.
- Customizable playlist.
- 4 GPIs (logic inputs) - 4 GPOs (logic outputs).
- Integrated power supply (PSE) and batteries (batteries not included).
- gU wall enclosure.
- It's possible to use EN 54-24 compliant 100V loudspeakers subject to the addition of a capacitor (**ADAPTATEUR-VA**).
- Very easy to use, operation is carried out on the front panel HMI consisting of the LCD display, the 4 navigation keys as well as buttons and LEDs.

### INSIDE

CSC1-310-NF		CSC1-420-NF		CSC1-430-NF		CSC1-440-NF	
<b>300W</b>	<b>1</b>	<b>400W</b>	<b>2</b>	<b>400W</b>	<b>3</b>	<b>400W</b>	<b>4</b>
Total power	Nb. of speaker lines	Total power	Nb. of speaker lines	Total power	Nb. of speaker lines	Total power	Nb. of speaker lines

- Vulca Voice is a range of compact, all-in-one Voice Alarm systems certified to European standards EN 54-16 and EN 54-4, meeting the requirements of the NF-SSI mark for France.
- They include an amplifier module, batteries (not included) and a battery charger in the same unit.
- These compact all-in-one systems are capable of managing 1 Alarm Zone, consisting of one to four speaker lines, depending on the model.
- Vulca Voice features a wall-mounted design. It is specially designed for small and medium-sized installations, with an alarm zone divided into 1 to 4 loudspeaker lines.
- Under voice alarm conditions, its role is to broadcast a pre-recorded evacuation message, or a spoken message in order to prompt the rapid and disciplined alert of the occupants of the emergency zone.





EN 54 16

## VULCA VOICE range

EN 54 4

CSC1-310-NF · CSC1-420-NF · CSC1-430-NF · CSC1-440-NF

## TECHNICAL CHARACTERISTICS

Model	CSC1-310-NF	CSC1-420-NF	CSC1-430-NF	CSC1-440-NF
Total power	300 W	400 W	400 W	400 W
Outputs / Nb. of speaker lines	1	2	3	4
Public Address console interface	Power supply : 24V DC – 550mA max @25°C			
Safety Console Interface	Power supply : 24V DC – 550mA max @25°C			
Interfaces	Ethernet IP / USB			
GPIs (General Purpose Inputs)	Number	4 (logic inputs)		
	Opto-isolated type	input current max. 10mA		
	Pulse duration	100ms minimum (in pulse mode)		
GPOs (General Purpose Outputs)	Number	4 (logic outputs)		
	Voltage/Current	24VDC/0.1A per GPO @25°C		
Frequency range	50 - 20 000 Hz			
Distortion	< 1%			
S/N ratio	> 70 dB			
Public Address inputs	4 (AUX, Animation, Telephone, Public Address Console input) + USB + SD card			
Aux Input	RCA connector x 2, stereo, sensitivity 0dbu, asymmetric signal			
Animation input	XLR-6.35 mm jack combo connector, mono, sensitivity 0dbu/-30dbu			
Telephone input	2-pin plug-in connector, mono, level 0dbu			
USB input	Yes			
Sensitivity	-30 dBm / 0 dBm			
Connectors	RCA x 2 / XLR - Jack combined connector / 2 pt terminal block / RJ 45 (Public Address Console Bus)			
PSE (Power Supply Equipment)	Fault information : dry contact, max. input current 10mA			
CIE (Control and Indicating Equipment)	Voltage triggering : from +15V to +58 V DC			
Emergency microphone	Type	dynamic, one direction (noise cancelling)		
	Sensitivity	-68dB/μbar (-48dB/Pascal)		
	Impedance	600 Ω		
Primary power source	Mains voltage	from 195V to 264V		
	Mains frequency	from 47 to 63Hz		
	Primary current	4A @ 195V		
Secondary power source	2 accumulator batteries , sealed, lead acid, 12V, with capacity between 17Ah and 42Ah			
Dimensions (H x L x P)	520 x 530 x 240 mm			
Material	Metal			
Operating temperature	-5°C to +40 °C			
Enclosure IP rating	IP 30			
Color	Industrial grey – RAL 7035			
Weight	Without batteries : 20,5 kg With batteries : 38,5 kg (batteries are not included)			
Evacuation message	Duration	22s		
	Content	NFS32001 siren + message "Votre attention s'il vous plait, nous vous demandons de quitter les lieux par les sorties les plus proches. Votre attention s'il vous plait, nous vous demandons de quitter les lieux par les sorties les plus proches. Le signal d'évacuation va retentir. Attention, attention, because of a technical hitch in our building, we ask you to evacuate the premises. Please go to the emergency exit"		



## IMC 300T/VA

### 2-way Omnidirectional speaker - 30W

#### Patented omnidirectionality

Created by MAJORCOM and protected by an international patent, this powerful omnidirectional speaker is specifically adapted to the sound systems of large and very large volumes with loud noise levels: shopping centres, sports halls, ice rinks, swimming pools, airports, etc. Equipped with a heavy-duty, 16cm 2-way speaker and 30W a high-performance 100V line transformer, the IMC 300T/VA has a near Hi-Fi quality.

#### AUDIO QUALITY

It broadcasts quality sound without any frills.

#### SOUND COVERAGE

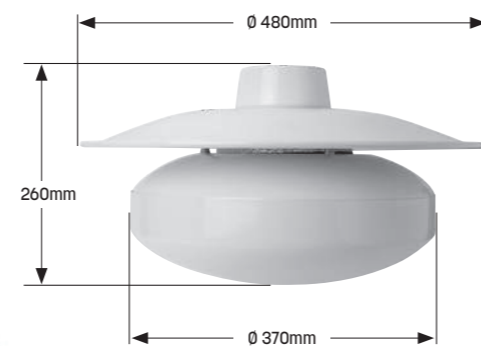
The patented reflector has earned the reputation of being the most efficient solution for achieving a large and homogeneous coverage zone (3 to 5 times larger than traditional enclosures, sound projectors, etc.).

#### OPTIMAL INTELLIGIBILITY

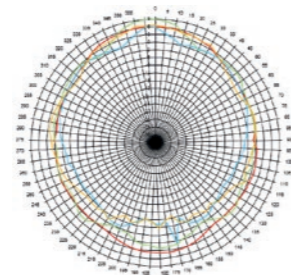
RASTI measurements have shown that our products respond in all cases to the intelligibility requirements of safety standard EN-5424 (Type A).

- 3 steel mounting slings (80cm) make it possible to suspend it securely.
- Optional specific RAL painting available : **PEINT OMNI** (minimum 6 pcs).

Model	IMC 300T/VA
Body & grill	Metal
Nominal power	30W
Nominal Impedance	330Ω
Power 100V Line	30/20/10W
Impedance	330 / 500 / 1.000Ω
Bandwidth	60Hz - 20kHz
Sensitivity (1W/1m)	84dB
SPL MAX 1m	98.8dB
Directivity (H-V) @ 500Hz	360° - 360°
Directivity (H-V) @ 1kHz	360° - 360°
Directivity (H-V) @ 2kHz	200° - 200°
Directivity (H-V) @ 4kHz	275° - 275°
Speaker	6.5" - 2 ways
Cone	Protected paper
Dimensions [mm]	Ø480/Ø370 x (H)260
Weight	4.5kg
Operating temperature	-15 to +55°C
Protection Index	IP54
Color	White

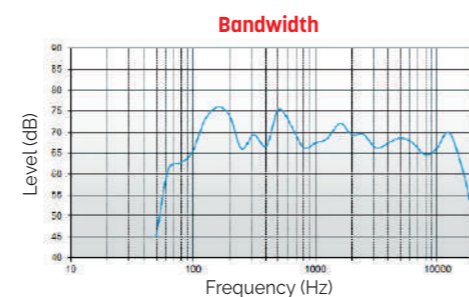
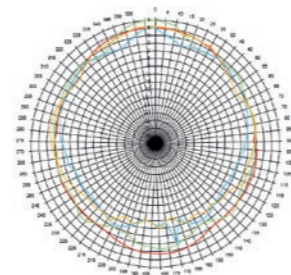


Horizontal directivity



500Hz  
1kHz  
2kHz  
4kHz

Vertical directivity



 n° 1134 20 Certificate n°: 1134-CPR-234 <b>MAJORCOM</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings <b>IMC 300T/VA</b> Type A
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## B 420TW VA - B 420TB VA

### 20W Design Pendant Speakers

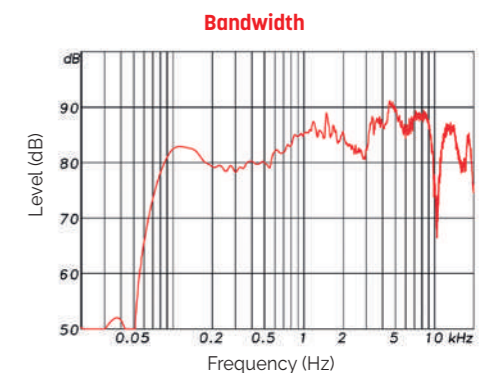
- The 20W pendant speaker is equipped with a 100mm 2-way bass reflex system and offers powerful sound with a wide and homogeneous dispersion.
- The B 420T VA has a 100V transformer with 4 power adjustments, these can be easily adjusted by a rotary switch on the top of the sphere. Low impedance operation is also possible.
- The impact-resistant, UV-resistant ABS plastic housing guarantees lasting stability.
- Additional operational safety is provided by the 2x2-pole ceramic terminal block, a thermal fuse, a PG screw connection integrated into the canopy and the moisture impregnation of the loudspeaker.
- The loudspeaker is protected against the risks of environmental influences with protection class IP65.

Model	B 420TW VA - B 420TB VA
Body & grill	ABS, Aluminium
Nominal power	20W
Nominal Impedance	500Ω
Power 100V Line	20 / 10 / 5 / 2.5W
Impedance	500 / 1.000 / 2.000 / 4.000Ω
Bandwidth	70 - 22.000Hz
Sensitivity (1W/1m)	83.9dB
SPL MAX 1m	96.9dB
Directivity (H-V) @ 500Hz	360°
Directivity (H-V) @ 1kHz	160°
Directivity (H-V) @ 2kHz	102°
Directivity (H-V) @ 4kHz	86°
Speaker	4"
Cone	PP polypropylene
Dimensions	Ø 189,4 x H 231mm
Weight	2.02kg
Operating temperature	-10 to +55°C
Protection Index	IP65
Color	B 420TW VA : White / B 420TB VA : Black

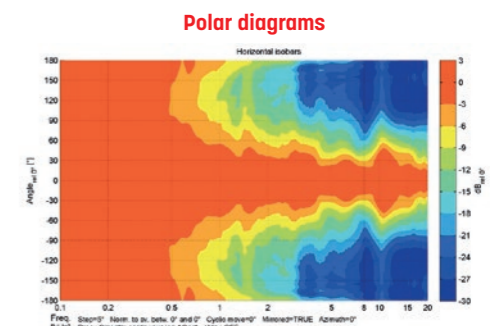


B 420TW VA (White)

B 420TB VA (Black)



Bandwidth



Polar diagrams

 n° 1438 22 Certificate n°: 1438-CPR-0872 <b>MAJORCOM</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings <b>B 420TW VA</b> <b>B 420TB VA</b> Type A
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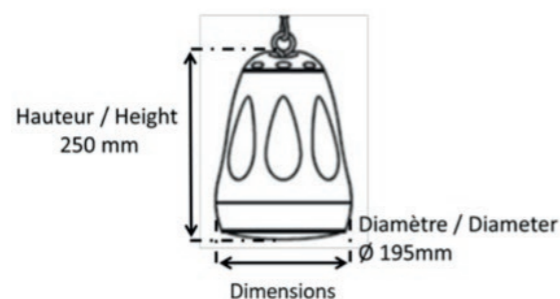


## PEND-3025B-EN 30W Pendant speaker

- Very good sound coverage : broadcast angle > 150°
- Dynamic sound : 5" full range driver
- Discrete and smooth design : aerodynamic shape, black matt
- Easy and quick installation : cable with carabiners, Euroblock terminal & potentiometer.
- This black pendant loudspeaker is composed of a 5" full range driver which guarantees a very good intelligibility of both your safety messages and your background music.
- It is ideal for spaces with high ceiling.
- Its installation remains easy with its Euroblock connector and its strong cable supplied with carabiners.



 n°1438 21 Certificat n° : 1438-CPR-0772 BOUYER 1270, avenue de Toulouse 82000 MONTAUBAN FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>PEND-3025B-EN</b>  <b>Type A</b>

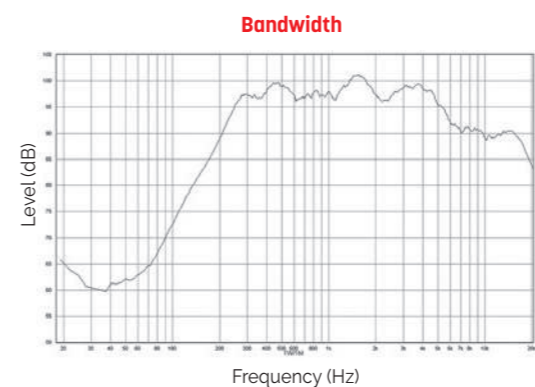


Model	PEND-3025B-EN
Nominal power	30 W
Impedance	30 W : 333 Ω / 15 W : 666 Ω / 7,5 W : 1333 Ω / 3,8 w : 2630 Ω
Power 100V Line	30 / 15 / 7,5 / 3,8 W + 8 Ω (adjustable with potentiometer)
Bandwidth	110 Hz - 20 kHz
Sensitivity (1W/1m)	85 dB
SPL MAX 1m	98 dB
Speaker	5" full range driver
Directivity (H-V) @ 500 Hz	360°
Directivity (H-V) @ 1 kHz	146,5°
Directivity (H-V) @ 2 kHz	82,5°
Directivity (H-V) @ 4 kHz	76,5°
Dimensions	Ø 195 x H 250 mm
Weight	2,2 kg
Operating temperature	-10°C à +55°C
Material	ABS
Protection Index	IP21 (resistant to humidity)
Color	Black
Accessories	Fixation cable + carabiners

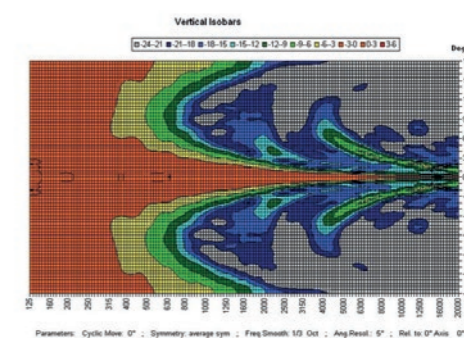
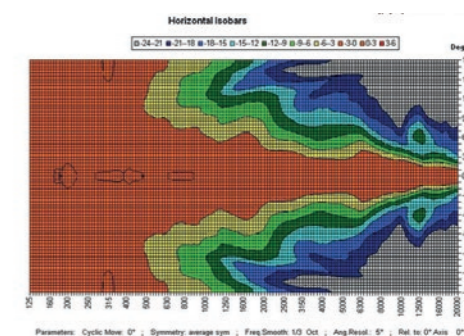
## CU 320T VA 20W Sound Column

- The 20W powered speaker is equipped with four 77mm full-range loudspeaker chassis and a 100V transformer with 4 power adjustments.
- The powder coated and shock-resistant aluminium housing in RAL 9006 guarantees long-term stability.
- For additional reliability, a 2 pin-ceramic block, a thermal fuse is provided and the speaker chassis is impregnated against wetness.
- Furthermore sturdy cable glands 2 x PG9 are also provided.
- The speaker is also secured with the high protection class IP66 against the security risks of environmental influences.
- Optional specific RAL painting available : **PEINT CU** (minimum 25 pcs).

Model	CU 320T VA
Body & grill	Aluminium
Nominal power	20W
Nominal Impedance	500Ω
Power 100V Line	20 / 15 / 10 / 5W
Impedance	500 / 667 / 1,000 / 2,000Ω
Bandwidth	147 - 23,500Hz
Sensitivity (1W/1m)	92,5dB
SPL MAX 1m	100,3dB
Directivity (H-V) @ 500Hz	360° - 124°
Directivity (H-V) @ 1kHz	188° - 65°
Directivity (H-V) @ 2kHz	149° - 38°
Directivity (H-V) @ 4kHz	86° - 14°
Speaker	4 x 3"
Dimensions (WxHxD)	510 x 100 x 92 mm
Weight	2,9kg
Operating temperature	-25°C - +70°C
Protection Index	IP66 - IK08
Color	RAL 9006



Polar diagrams



 n°1438 22 Certificat n° : 1438-CPR-0867 MAJORCOM: 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CU 320T VA</b>  <b>Type B</b>



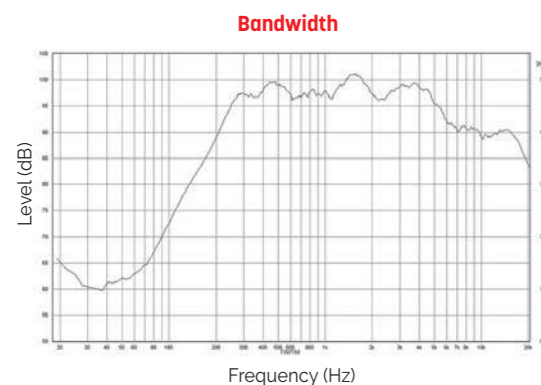
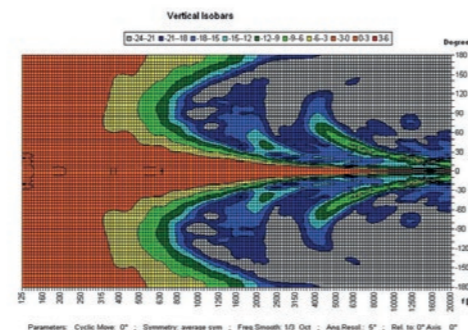
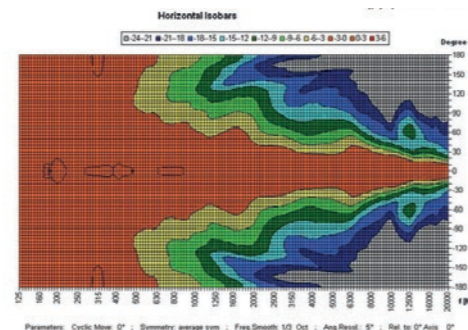
## CU 350T VA 50W Sound Column

- The 50W powered speaker is equipped with four 77mm full-range loudspeaker chassis and a 100V transformer with 4 power adjustments.
- The powder coated and shock-resistant aluminium housing in RAL 9006 guarantees long-term stability.
- For additional reliability, a 2 pin-ceramic block, a thermal fuse is provided and the speaker chassis is impregnated against wetness.
- Furthermore sturdy cable glands 2 x PG9 are also provided.
- The speaker is also secured with the high protection class IP66 against the security risks of environmental influences.
- Optional specific RAL painting available : **PEINT CU** (minimum 25 pcs).



Model	CU 350T VA
Body & grill	Aluminium
Nominal power	50W
Nominal Impedance	200Ω
Power 100V Line	50 / 30 / 15 / 7.5W
Impedance	200 / 333 / 667 / 1,333Ω
Bandwidth	110 - 18,000Hz
Sensitivity (1W/1m)	94,7dB
SPL MAX 1m	111,7dB
Directivity (H-V) @ 500Hz	360° - 73°
Directivity (H-V) @ 1kHz	186° - 33°
Directivity (H-V) @ 2kHz	173° - 17°
Directivity (H-V) @ 4kHz	98° - 6°
Speaker	8 x 3"
Dimensions (WxHxD)	100 x 971 x 92mm
Weight	5,2kg
Operating temperature	-25°C ~+70°C
Protection Index	IP66 - IK08
Color	RAL 9006

Polar diagrams



Bandwidth

 n°1438 22 Certificate n°: 1438-CPR-0867	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CU 350T VA</b> Type B
<b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	

## MS 530TB VA - MS 530TW VA 2-Way Wall Speakers - 30W

- The MS Serie compact wall speakers impress by a sophisticated design and by its powerful sound.
- Perfectly suitable for installations where high sound quality is needed..
- The 30W powered speaker is equipped with a high quality 2-way system and a 100V transformer with 3 power adjustments.
- The impact-resistant, UV-resistant ABS plastic housing assures enduring stability.
- For additional reliability, a thermal fuse and a wetness impregnation of the speaker is provided.
- The speaker is also secured with protection class IP65 against the risks of environmental influences.



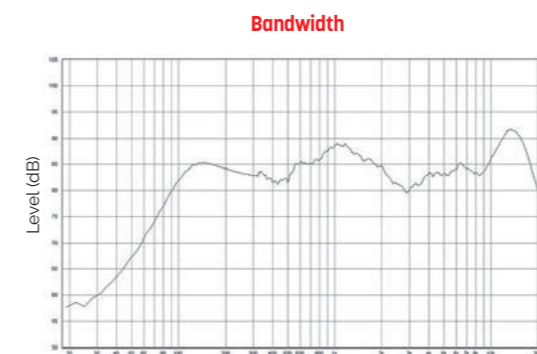
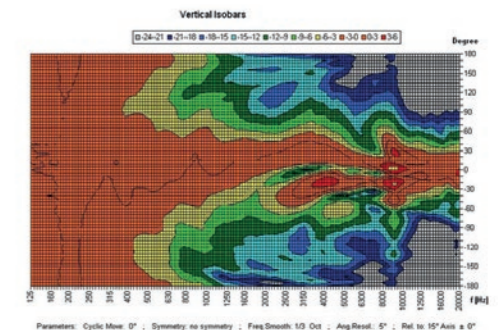
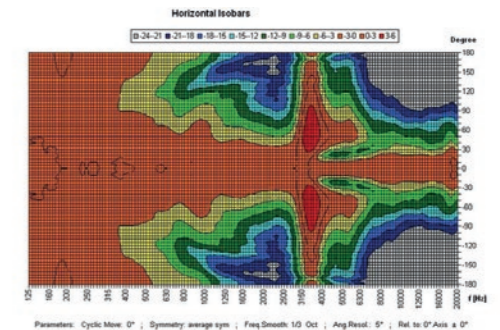
MS 530TB VA (Black)



MS 530TW VA (White)

Model	MS 530TB VA - MS 530TW VA
Body & grill	ABS
Nominal power	30W
Nominal Impedance	333Ω
Power 100V Line	30 / 15 / 7,5 / 3,75W
Impedance	333 / 667 / 1,333 / 4,000Ω
Bandwidth	50 - 23,500Hz
Sensitivity (1W/1m)	85dB
SPL MAX 1m	105,6dB
Directivity (H-V) @ 500Hz	360° - 360°
Directivity (H-V) @ 1kHz	200° - 160°
Directivity (H-V) @ 2kHz	130° - 100°
Directivity (H-V) @ 4kHz	120° - 40°
Speaker	5"
Dimensions (WxHxD)	160 x 262 x 153 mm
Weight	2,5kg
Operating temperature	-25°C ~+70°C
Protection Index	IP65 - IK09
Color	MS 530TB VA: Black / MS 530TW VA: White

Polar diagrams



Bandwidth

 n°1438 22 Certificate n°: 1438-CPR-0870	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>MS 530TB VA MS 530TW VA</b> Type B
<b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	



## MS 650TB VA - MS 650TW VA 2-Way Wall Speakers - 50W

- The MS Serie compact wall speakers impress by a sophisticated design and by its powerful sound.
- Perfectly suitable for installations where high sound quality is needed..
- The 30W powered speaker is equipped with a high quality 2-way system and a 100V transformer with 3 power adjustments.
- The impact-resistant, UV-resistant ABS plastic housing assures enduring stability.
- For additional reliability, a thermal fuse and a wetness impregnation of the speaker is provided.
- The speaker is also secured with protection class IP65 against the risks of environmental influences.

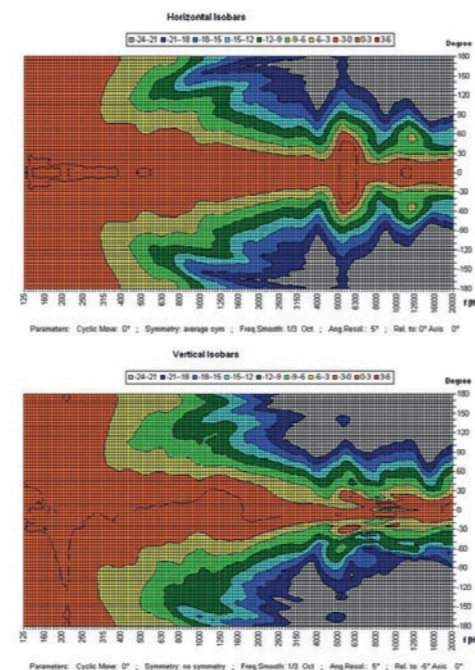


MS 650TB VA (Black)

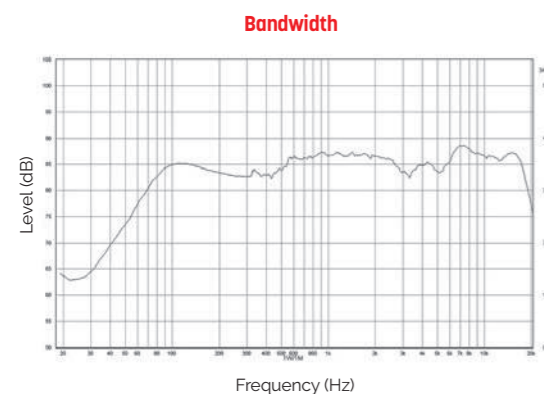
MS 650TW VA (White)

Model	MS 650TB VA - MS 650TW VA
Body & grill	ABS
Nominal power	50W
Nominal Impedance	200Ω
Power 100V Line	50 / 25 / 12,5 / 6,25W
Impedance	200 / 400 / 800 / 1,600Ω
Bandwidth	52 - 25,000Hz
Sensitivity (1W/1m)	88,8dB
SPL MAX 1m	105,1dB
Directivity (H-V) @ 500Hz	360° x 360°
Directivity (H-V) @ 1kHz	200° x 155°
Directivity (H-V) @ 2kHz	110° x 120°
Directivity (H-V) @ 4kHz	80° x 25°
Speaker	6"
Dimensions (WxHxD)	205 x 330 x 192 mm
Weight	3,65kg
Operating temperature	-25°C ~+70°C
Protection Index	IP65 - IK09
Color	MS 650TB VA: Black / MS 650TW VA: White

### Polar diagrams



 n°1438 22 Certificat n°: 1438-CPR-0870 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>MS 650TB VA</b> <b>MS 650TW VA</b>  Type B

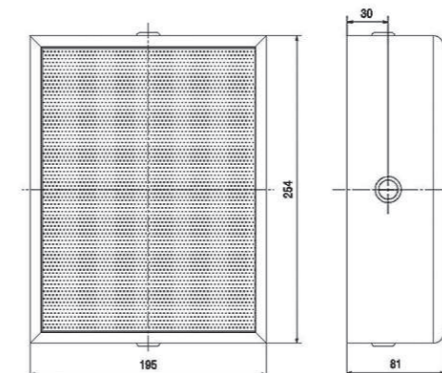


## CB 56T VA 6W Wall mounted Speaker

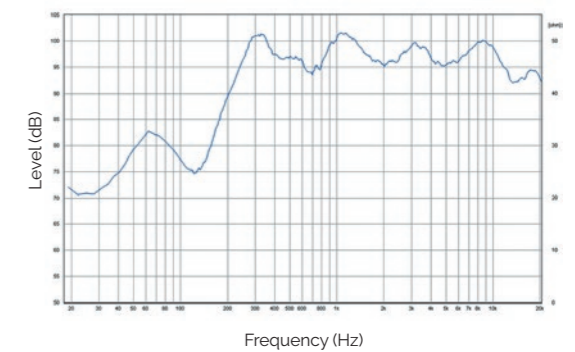
- The 6W powered speaker is equipped with a 165mm full-range loudspeaker and a 100V transformer with 3 power adjustments 6/3/1.5W.
- The high-density, shock-resistant MDF wood housing in white provides a low resonance sound. A sturdy front grille made of steel guarantees enduring stability.
- For additional reliability, a 2 pin-ceramic block, a thermal fuse is provided and the speaker chassis is impregnated against wetness.
- The speaker is also secured with the high protection class IP54 against the security risks of environmental influences.
- The proven spring clamp on the rear plate ensures a quick mounting on walls.



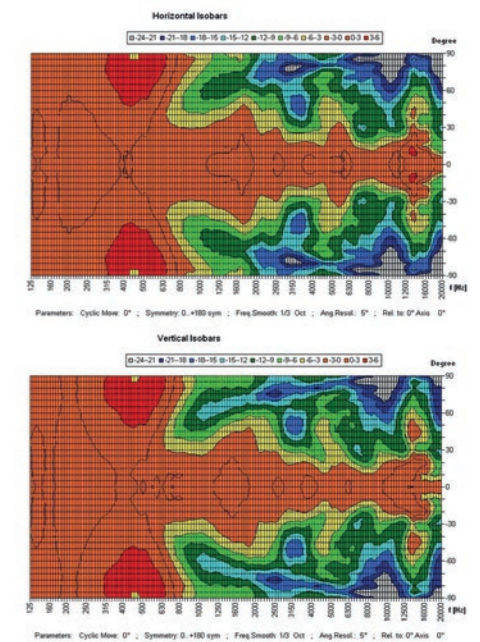
Model	CB 56T VA
Body & grill	MDF, Steel
Nominal power	6W
Nominal Impedance	1667Ω
Power 100V Line	6 / 3 / 1,5W
Impedance	1667 / 3,333 / 6,667Ω
Bandwidth	197 - 21,900Hz
Sensitivity (1W/1m)	93dB
SPL MAX 1m	100,8dB
Directivity (H-V) @ 500Hz	180°
Directivity (H-V) @ 1kHz	160°
Directivity (H-V) @ 2kHz	125°
Directivity (H-V) @ 4kHz	89°
Speaker	5"
Cone	Paper
Dimensions (WxHxD)	254 x 195 x 81mm
Weight	1,95kg
Operating temperature	-10 to +55°C
Protection Index	IP54
Color	White



### Bandwidth



### Polar diagrams



 n°1438 22 Certificate n°: 1438-CPR-0868 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CB 56T VA</b>  Type A

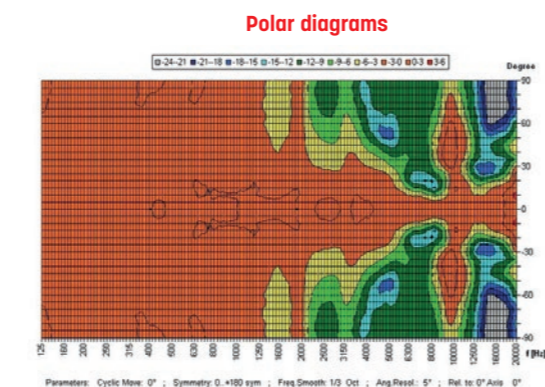
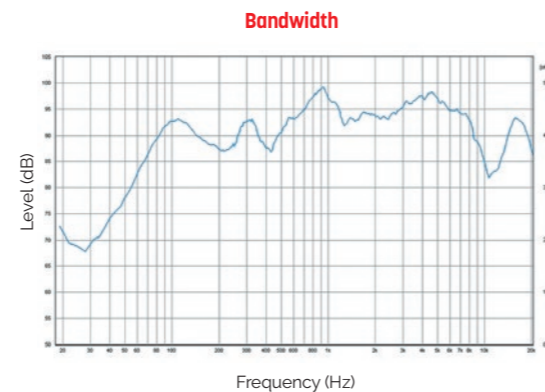


## CSE 56T VA 6W Ceiling Speaker

- The 6W powered speaker is equipped with a 130mm full-range loudspeaker and a 100V transformer with 3 power adjustments 6W, 3W and 1.5W.
- Thanks to an innovative air flow system, the CSE 56T VA provides sound characteristics which are attributed to a conventional bass speaker.
- An extremely flat construction method allows a low mounting depth of only 70mm, with less than 1kg product weight.
- For additional reliability the speaker is impregnated against wetness.
- Quick and easy mounting with spring clamps and short tension distance. Perfectly suitable for installations where the installation depth is very limited. This speaker is suitable for a ceiling strength of about 3 - 45mm.
- Optional specific RAL painting available : **PEINT PLAFONNIER** (minimum 25 pcs).
- Optional metallic fire dome available: **FD CSE 56T VA**



Model	CSE 56T VA
Body & grill	Metal, plastic PET contact protection
Nominal power	6W
Nominal Impedance	666Ω
Power 100V Line	6 / 3 / 1.5W
Impedance	1.667 / 3.333 / 6.667Ω
Bandwidth	104 - 17 200Hz
Sensitivity (1W/1m)	86,8dB
SPL MAX 1m	98,3dB
Directivity (H-V) @ 500Hz	180°
Directivity (H-V) @ 1kHz	180°
Directivity (H-V) @ 2kHz	140°
Directivity (H-V) @ 4kHz	85°
Speaker	5"
Cone	Coated paper
Dimensions	Ø 181,5 x D 65mm (181,5 x 91,5mm fire dome)
Ceiling Cut-out	Ø 156mm
Weight	0,51kg (0,71kg with fire dome)
Operating temperature	-10°C / +55°C
Protection Index	IP21C
Color	RAL 9016



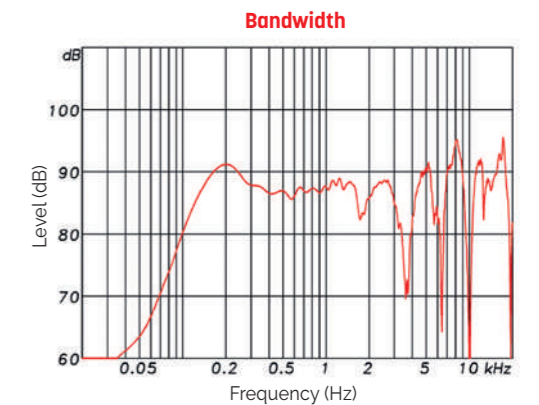
FD CSE 56T VA

 n°1438 22 Certificate n°: 1438-CPR-0866 <b>MAJORCOM:</b> 56 chemin de la Flamrière 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CSE 56T VA</b>  <b>Type A</b>

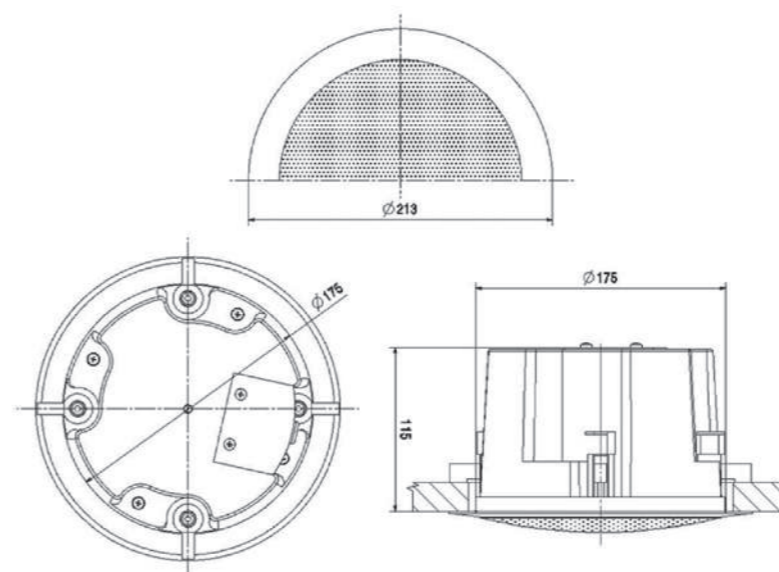
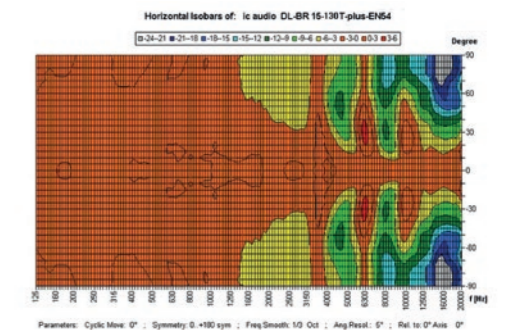
## P 515T VA 2-Way Ceiling Speaker - 15W

- P 515T VA is a 2 way bass reflex ceiling speaker suitable for high quality installation.
- Fitted with a 5" speaker, a neodymium tweeter and a 100V transformer with 4 power taps, it offers a very high sound quality.
- Easy installation via screw mounting system.
- Optional specific RAL painting available : **PEINT PLAFONNIER** (minimum 25 pcs).

Model	P 515T VA
Body & grill	ABS
Nominal power	15W
Nominal Impedance	667Ω
Power 100V Line	15 / 7.5 / 3.75 / 1.9W
Impedance	667 / 1.333 / 2.667 / 5.263Ω
Bandwidth	100 - 22.800Hz
Sensitivity (1W/1m)	86,2dB
SPL MAX 1m	98dB
Directivity (H-V) @ 500Hz	180°
Directivity (H-V) @ 1kHz	180°
Directivity (H-V) @ 2kHz	145°
Directivity (H-V) @ 4kHz	95°
Speaker	5"
Dimensions (mm)	Ø 213 x P 152
Ceiling Cut-out	Ø 178mm
Weight	1,73kg
Operating temperature	-10°C ~ +55°C
Protection Index	IP21C
Color	RAL 9016



Polar diagrams



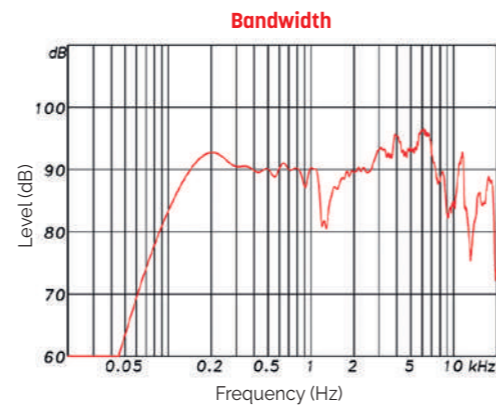
 n°1438 22 Certificate n°: 1438-CPR-0856 <b>MAJORCOM:</b> 56 chemin de la Flamrière 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>P 515T VA</b>  <b>Type A</b>



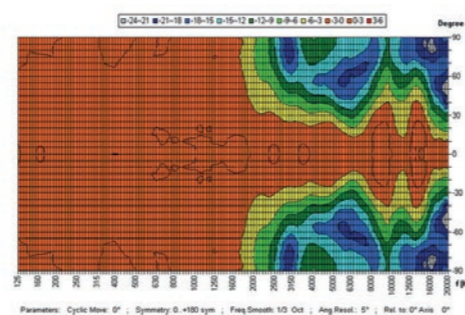
## P 630T VA 2-Way Ceiling Speaker - 30W

- P 630T VA is a 2 way bass reflex ceiling speaker suitable for high quality installation.
- Fitted with a 6.5" speaker, a neodymium tweeter and a 100V transformer with 4 power taps, it offer a very high sound quality.
- Easy installation via screw mounting system.
- Optional specific RAL painting available : **PEINT PLAFONNIER** (minimum 14 pcs).

Model	P 630T VA
Body & grill	ABS
Nominal power	30W
Nominal Impedance	333Ω
Power 100V Line	30 / 15 / 7,5 / 3,75W
Impedance	333 / 667 / 1,333 / 2,667Ω
Bandwidth	87 - 19 300Hz
Sensitivity (1W/1m)	89,8dB
SPL MAX 1m	110,2dB
Directivity (H-V) @ 500Hz	180°
Directivity (H-V) @ 1kHz	180°
Directivity (H-V) @ 2kHz	115°
Directivity (H-V) @ 4kHz	62°
Speaker	6.5"
Dimensions (mm)	∅ 239,5 x D 176,5
Ceiling Cut-out	∅ 210mm
Weight	2,27kg
Operating temperature	-10°C ~+55°C
Protection Index	IP21C
Color	RAL 9016



**Polar diagrams**

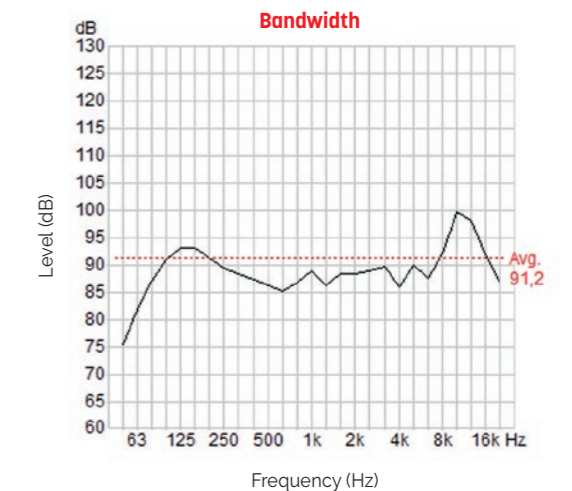


 n°1438 22 Certificate n°: 1438-CPR-0856 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>P 630T VA</b>  Type A

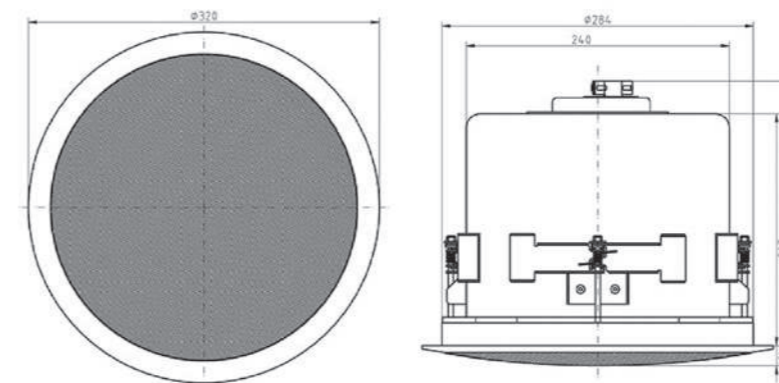
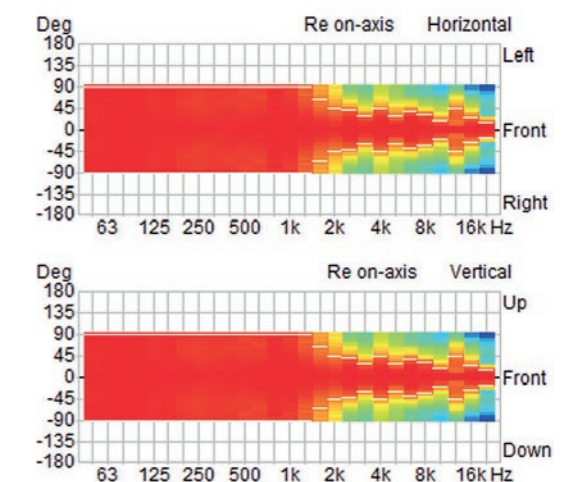
## P 860T VA 2-Way Ceiling Speaker - 60W

- P 860T VA is a 2 way bass reflex ceiling speaker suitable for high quality installation.
- Fitted with a 8" speaker, a neodymium tweeter and a 100V transformer with 4 power taps, it offers a very high sound quality.
- Easy installation via screw mounting system.
- Optional specific RAL painting available : **PEINT PLAFONNIER** (minimum 14 pcs).

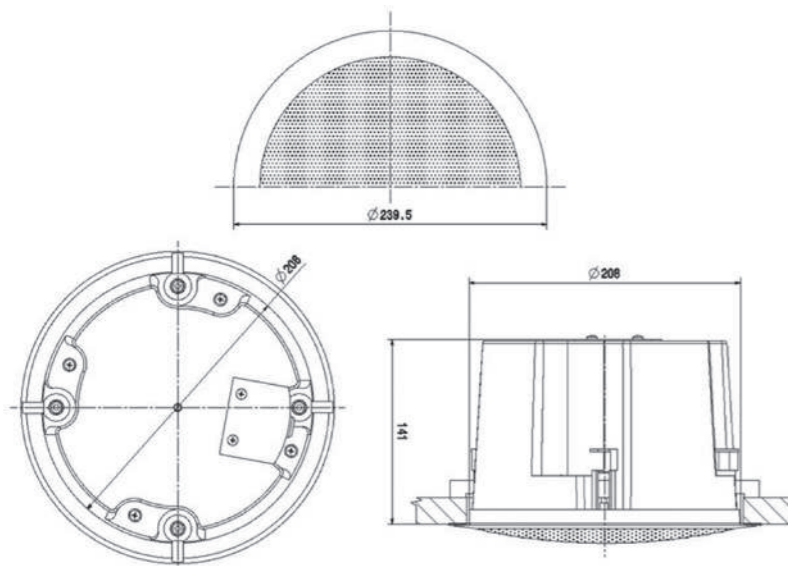
Model	P 860T VA
Body & grill	Metal
Nominal power	60W
Nominal Impedance	167Ω
Power 100V Line	60 / 30 / 15 / 7,5W
Impedance	167 / 333 / 667 / 1,333Ω
Bandwidth	50 - 24,000Hz
Sensitivity (1W/1m)	91,2dB
SPL MAX 1m	110,7dB
Directivity (H-V) @ 500Hz	180°
Directivity (H-V) @ 1kHz	165°
Directivity (H-V) @ 2kHz	130°
Directivity (H-V) @ 4kHz	80°
Speaker	8"
Dimensions (mm)	∅ 319 x D 254
Ceiling Cut-out	∅ 302mm
Weight	4,7kg
Operating temperature	-10°C ~+55°C
Protection Index	IP21C
Color	RAL 9016



**Polar diagrams**



 n°1438 22 Certificate n°: 1438-CPR-0854 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>P 860T VA</b>  Type A





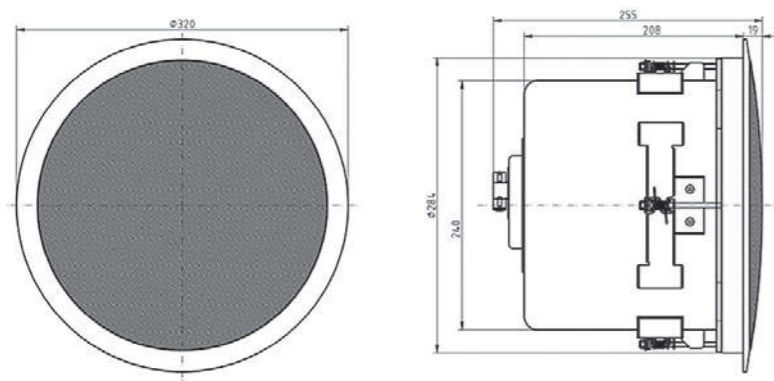
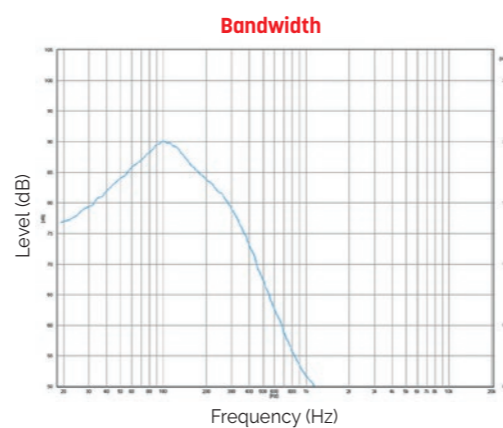
## PSUB 120T

### 120W Ceiling subwoofer

- This 120W powered subwoofer is equipped with a 200mm high-performance system featuring 4 power adjustments 120/60/30/15W.
- PSUB 120T offers an amazing deep bass response which gives your voice alarm installation a rich sound quality.
- Power tapings are easily set at the front of the speaker, a low impedance operation at 4ohm is also possible. The crossover frequency is set to 135Hz. You can change the phase 180° by a switch at the front. To make things perfect the metal housing in RAL 9016 guarantees long-term durability.
- Protection class IP21C secures the speaker against the risks of environmental influences. The speaker chassis is impregnated against wetness. Easy installation via screw mounting system.
- Perfectly suitable for installations where high sound quality is demanded.
- Optional specific RAL painting available : **PEINT PLAFONNIER** (minimum 14 pcs).



Model	PSUB 120T
Body & grill	ABS / Metal
Nominal power	120W
Nominal Impedance	83Ω
Power 100V Line	120 / 60 / 30 / 15W
Impedance	83 / 167 / 333 / 667Ω - 4Ω
Bandwidth	32 - 280Hz
Sensitivity (1W/1m)	87dB
SPL MAX 1m	107,8dB
Dimensions (mm)	Ø 319 x P 250
Ceiling Cut-out	Ø 302mm
Weight	6,4kg
Operating temperature	-10°C ~+55°C
Protection Index	IP21C
Color	RAL 9016



## IMPI 330T VA

### Indoor/outdoor sound projector - 10W

Compliant with the international standards relative to public address and evacuation installations (EN 54-24 Type B and ISO 7240-24), this sound projector is recommended for the equipment of all types of public places such as train stations, pedestrian streets, car parks etc.

### QUALITY SPEECH AND MUSIC REPRODUCTION

Equipped with a 12cm diameter loudspeaker, its frequency response makes it possible to broadcast high-quality music and information messages.

### EASY TO INSTALL

A solid aluminium bracket is provided to facilitate the installation and orientation of the projector in almost all positions. It is possible to mount the bracket first and then the sound projector.

### WITHSTANDS ALL KINDS OF WEATHER

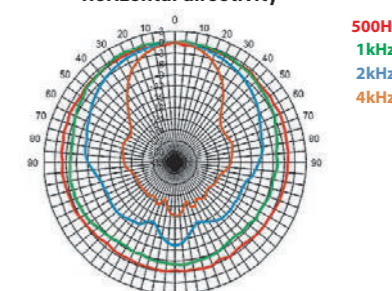
Made of extruded aluminium, it can be installed indoors or outdoors (IP55) and blends in with most surroundings.

- Optional specific RAL painting available : **PEINT PROJECTEUR** (minimum 15 pcs).

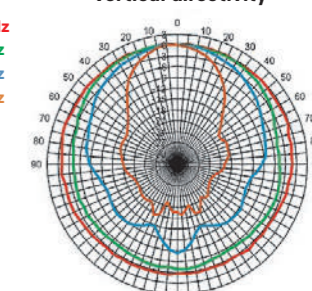
Model	IMPI 330T VA
Body & grill	Aluminium
Nominal power	10W
Nominal Impedance	1kΩ
Power 100V Line	10 / 5 / 2,5W
Impedance	1 / 2 / 4kΩ
Bandwidth	120Hz - 20kHz
Sensitivity (1W/1m)	95dB
SPL MAX 1m	103dB
Directivity (H-V) @ 500Hz	360° - 360°
Directivity (H-V) @ 1kHz	240° - 260°
Directivity (H-V) @ 2kHz	115° - 115°
Directivity (H-V) @ 4kHz	54° - 54°
Speaker	5"
Cone	Plastic
Dimensions [mm]	Ø138 x (D)225
Weight	2,5kg
Operating temperature	-25 to +70°C
Protection Index	IP55
Color	White



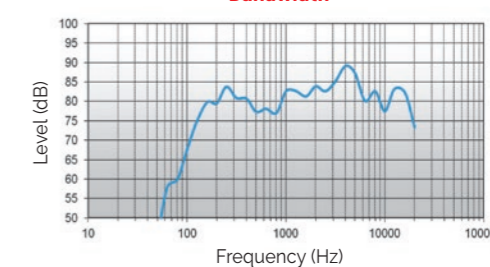
Horizontal directivity



Vertical directivity



Bandwidth



 n° ANPI 12 Certificate n° : 1134-CPR-116 <b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>IMPI 330T VA</b>  <b>Type B</b>

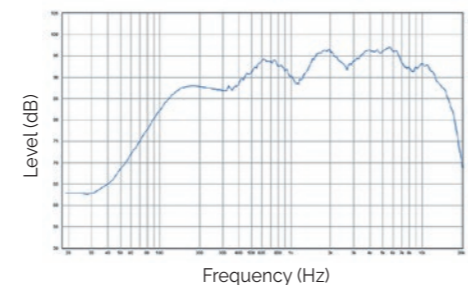
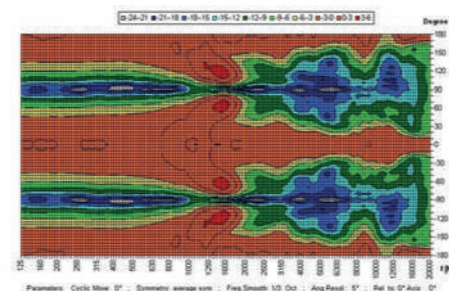


**IMPI 2510T VA****Bi-directional Sound Projector - 10W**

- The 10W powered speaker is equipped with two 130mm full-range loudspeakers and a 100V line transformer with 4 power adjustments.
- A robust powder coated aluminum housing in RAL 9010, and a vandal-resistant feet ensure a permanent installation of this speaker.
- For additional reliability, a 2x2 pin-ceramic block and a thermal fuse is provided and the speaker chassis is impregnated against wetness.
- Optional specific RAL painting available : **PEINT DUAL** (minimum 25 pcs).

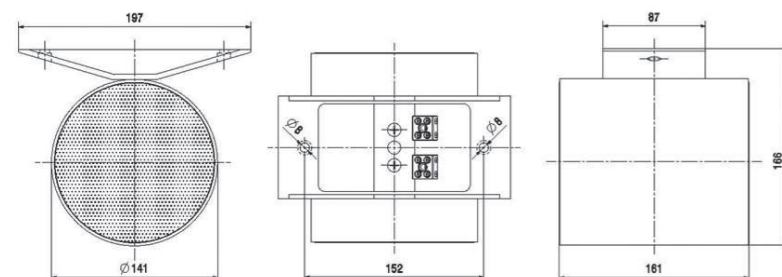


Model	IMPI 2510T VA
Body & grill	Aluminium
Nominal power	10W
Nominal Impedance	1000Ω
Power 100V Line	10 / 6 / 3 / 1,5W
Impedance	1,000 / 1,667 / 3,333 / 6,667Ω
Bandwidth	237 - 12 400Hz
Sensitivity (1W/1m)	89,6dB
SPL MAX 1m	95,3dB
Directivity (H-V) @ 500Hz	2 x 130°
Directivity (H-V) @ 1kHz	2 x 150°
Directivity (H-V) @ 2kHz	2 x 145°
Directivity (H-V) @ 4kHz	2 x 75°
Speaker	2 x 5"
Cone	Coated paper
Dimensions (WxDxH)	197 x 161 x 166mm
Weight	2,35kg
Operating temperature	-25 to +70°C
Protection Index	IP65
Color	RAL 9010

**Bandwidth****Polar diagrams**

Parameters: Cyclic Move: 0°; Symmetry: average sym; Freq: Smooth: 1/3 Oct; Avg: Peak; 0°; Ref: to 0° Axis; 0°

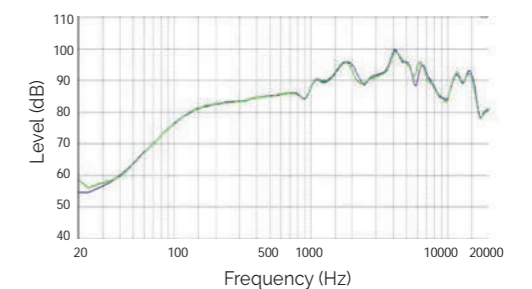
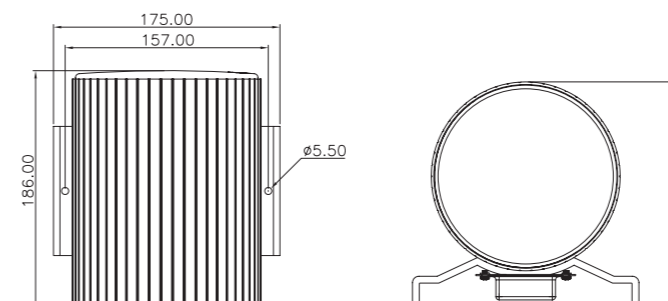
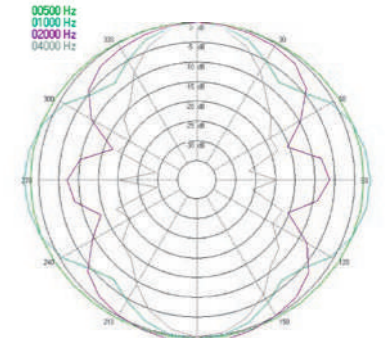
 n° 1438 22 Certificate n°: 1438-CPR-0873 <b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>IMPI 2510T VA</b>  <b>Type B</b>

**SPJ-52WHBS****2-way bi-directional sound projector - 20W**

- Excellent reproduction of voice and music
- Built-in connector and connection cables
- For installation on the ceiling or on the wall
- Protection from water and dust, IP66
- The SPJ-52WHBS is a powerful, 20-W bidirectional sound projector designed for the high-quality reproduction of voice and music.
- It can be used inside or outside. The two opposing speakers are perfect for applications such as metro stations, train stations, parking garages, and make it possible to cut the number of speakers in half.
- The SPJ-52WHBS is equipped with a ceramic terminal block, a thermal fuse and wires that can withstand high temperatures.



Model	SPJ-52WHBS
Body & grill	Aluminium
Nominal power	20W
Nominal Impedance	500Ω
Power 100V Line	20 / 10 / 5W
Impedance	500 / 1,000 / 2,000Ω
Bandwidth	120Hz - 20,000Hz
Sensitivity (1W/1m)	88dB
SPL MAX 1m	100dB
Directivity (H-V) @ 500Hz	360°
Directivity (H-V) @ 1kHz	320°
Directivity (H-V) @ 2kHz	200°
Directivity (H-V) @ 4kHz	80°
Speaker	2 x 5"
Cone	Paper composite
Dimensions	Ø 146 x 186mm
Weight	3,2kg
Operating temperature	-20 to +70°C
Protection Index	IP66

**Bandwidth****Directivity**

 n° ITC Certificate n°: 1488-CPD-0302/W <b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>SPJ-52WHBS</b>  <b>Type B</b>

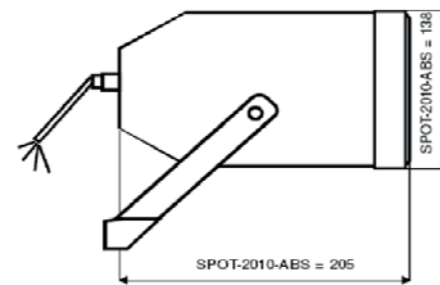
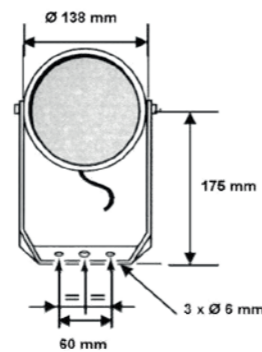


## SPOT2010-EN5424 20W Sound Projector

- High intelligibility
- Protection index IP 55
- Inconspicuous & multipurpose
- Easy and quick installation
- The SPOT2010-EN5424 is a 20W sound projector fitted with a dual cone loudspeaker.
- Its fixing device facilitates its orientation and ensures an easy and quick installation : wall- or ceiling mounting.
- Made out of ABS, it is weatherproof, shock and corrosion resistant. Therefore, it can be installed in any type of environment



 n°1293 17 Certificate n° : 1293-CPR-0568 BOUYER 1270, avenue de Toulouse 82000 MONTAUBAN FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>SPOT2010-EN5424</b> Type B



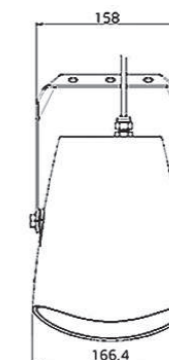
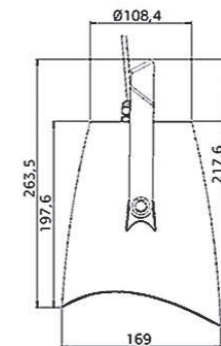
Model	SPOT2010-EN5424
Nominal power	20 W
Power 100V Line	20 / 10 / 5 W
Frequency range	110 - 17 000 Hz
Impedance	20 W : 0,5 kΩ / 10 W : 1 kΩ / 5 W : 1,8 kΩ
Sensitivity (1W/1m)	100 dB
SPL Max 1m	112 dB / 20W
Directivity (-6dB)	500 Hz : 180° 4 KHz : 75°
Speaker	Ø 12,5 cm dual cone
Dimensions	Ø 138 x 205 mm
Fixed centre distance	2 x 60 mm
Weight	1,6 kg
Material	ABS + Alu grid
Protection rating	IP55
Color	White
Connexion	Block terminals

## IMPI 520T VA 20W Design Sound Projector

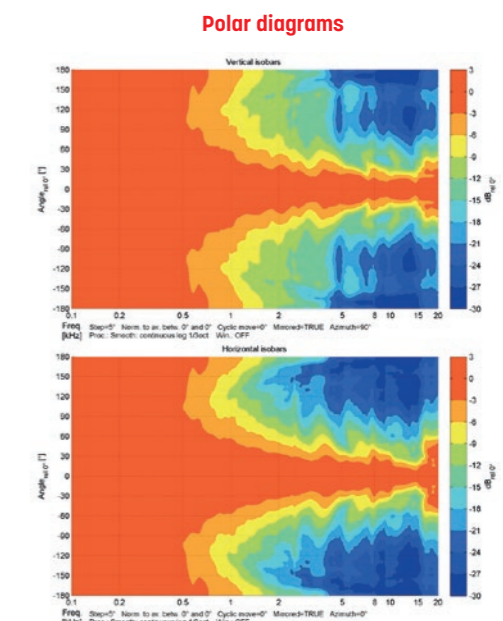
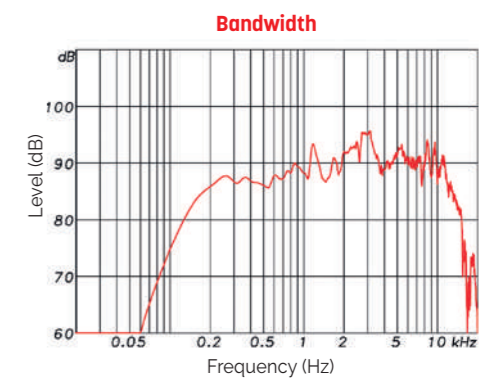
- The 20W design speaker with an amazing concave shape is equipped with a 130mm full-range speaker and a 100V transformer with 3 power adjustments 20/10/5W.
- Acoustically the design loudspeaker convinces at all levels. Thanks to a smart phase-shifting and a high-quality midrange resonator, the speaker offers a sound characteristic that is matching a 2-way system.
- In addition, the very wide dispersion ensures a comprehensive sound.
- A robust, ABS plastic housing in RAL9016 and a stable aluminium mounting bracket guarantee a durable installation.
- The cable is fed via a cable gland (PG11). The integrated 2x2-pole ceramic block and thermal fuse as well as the moisture impregnation of the loudspeaker ensure additional safety.



Model	IMPI 520T VA
Body & grill	ABS, Aluminium
Nominal power	20W
Nominal Impedance	500Ω
Power 100V Line	20 / 10 / 5W
Impedance	500 / 1,000 / 2,000Ω
Bandwidth	142 - 14,300Hz
Sensitivity (1W/1m)	88,4dB
SPL MAX 1m	100dB
Directivity (H-V) @ 500Hz	360°
Directivity (H-V) @ 1kHz	155° - 220°
Directivity (H-V) @ 2kHz	95° - 85°
Directivity (H-V) @ 4kHz	80° - 85°
Speaker	5"
Cone	PP polypropylene
Dimensions (WxDxH)	166,4 x 283,5 x 169mm
Weight	1,76kg
Operating temperature	-25 to +70°C
Protection Index	IP65
Color	RAL 9016



 n°1438 22 Certificate n° : 1438-CPR-0869 MAJORCOM 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>IMPI 520T VA</b> Type B





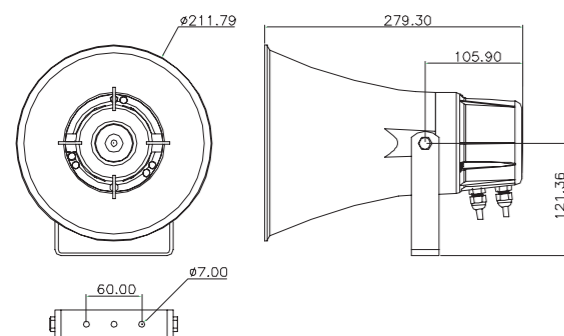
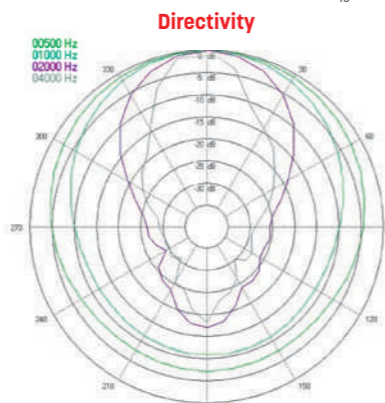
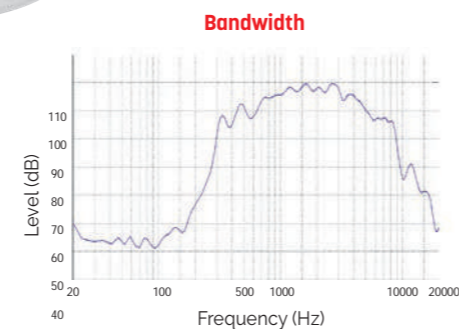
## PHS-81T30BS

### 30W Horn Speaker

- High performance enclosure
- High-quality vocal reproduction
- Protection from water and dust, IP66
- The high-performance horn speaker faithfully reproduces speech with excellent sound distribution and can be used in a wide range of outdoor applications. The perfect solution for sports fields, parks, factories and outdoor pools
- The speaker is equipped with a ceramic terminal block, a thermal fuse and wires that can withstand high temperatures.
- Included is a U-shaped, stainless steel universal mount and screws (both AISI 316) for flexible installation.



Model	PHS-81T30BS
Body & grill	ABS fireproof
Nominal power	30W
Nominal Impedance	333Ω
Power 100V Line	30 / 15 / 7.5 / 3.75W
Impedance	333 / 666 / 1,333 / 2,667Ω
Bandwidth	340Hz - 9kHz
Sensitivity (1W/1m)	108dB
SPL MAX 1m	123dB
Directivity (H-V) @ 500Hz	200°
Directivity (H-V) @ 1kHz	120°
Directivity (H-V) @ 2kHz	60°
Directivity (H-V) @ 4kHz	30°
Dimensions [mm]	∅212 x 280
Weight	2,05kg
Operating temperature	-25 to +70°C
Protection Index	IP66
Color	White



 Certificate n° : 1488-CPD-0314/W <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>PHS-81T30BS</b>
	<b>Type B</b>

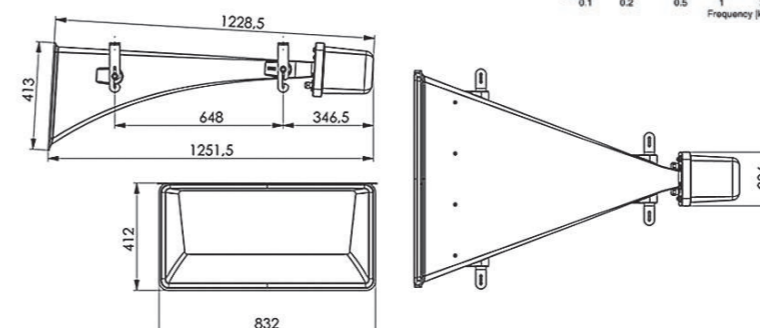
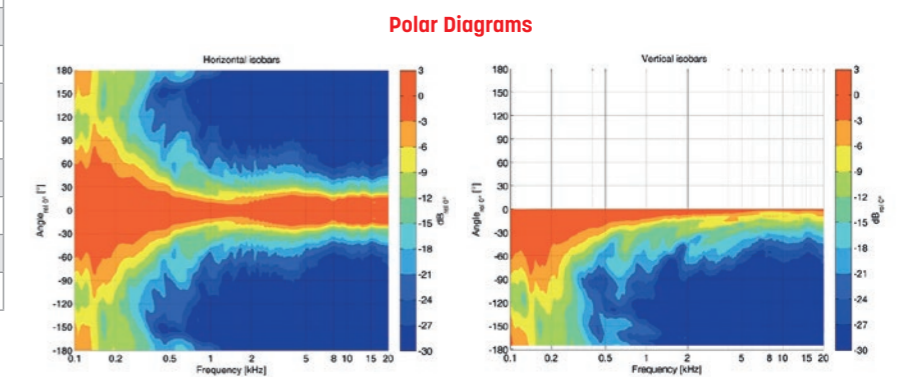
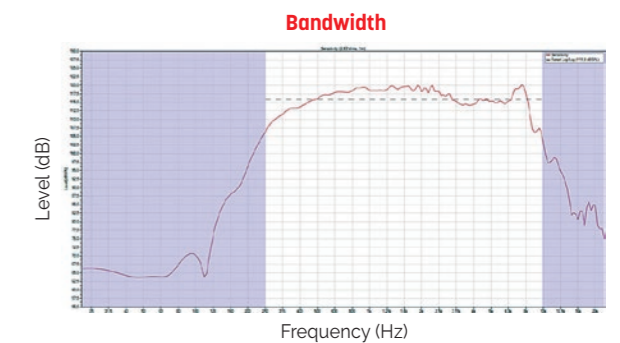
## TU 100T VA

### 100W Horn speaker

- The boundary horn speaker TU 100T VA has been developed for areas with extreme high ambient noise and is suitable for indoor and outdoor application, such as tunnels.
- It is built to withstand corrosive atmospheric contaminants, high moisture levels and temperature extremes. The horn provides an enormous sound pressure level, a very balanced frequency response and also a very low distortion.
- The TU 100T VA with a flame retardant plastic housing (UL 94V-0) in black and IP65 protection is also equipped with a ceramic terminal and thermal fuse. The high quality 100W horn driver offers a high performance CCAR voice coil. Furthermore sturdy cable glands 2 x PG13,5 are also provided.
- Sturdy installation by rust-free V4A (A4) stainless steel brackets and screws.
- This horn speaker provides intelligible voice notifications over great distance, resulting in a lower number of loudspeakers which are required. The product is a certified voice alarm speaker according EN 54-24 and there is no additional equalizer needed to meet the frequency response requirements according EN 54-24.



Model	TU 100T VA
Body & grill	ABS
Nominal power	100W
Nominal Impedance	100Ω
Power 100V Line	100 / 50 / 25W
Impedance	100 / 200 / 400Ω
Bandwidth	280 to 9,000Hz
Sensitivity (1W/1m)	113,9dB
SPL MAX 1m	131,9dB
Directivity (H-V) @ 500Hz	58° - 35°
Directivity (H-V) @ 1kHz	35° - 25°
Directivity (H-V) @ 2kHz	40° - 20°
Directivity (H-V) @ 4kHz	54° - 15°
Dimensions (WxDxH)	315 x 305 x 350mm
Weight	16kg
Operating temperature	-25 to +70°C
Protection Index	IP65
Color	Black



 Certificate n° : 1438-CPR-0908 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>TU 100T VA</b>
	<b>Type B</b>

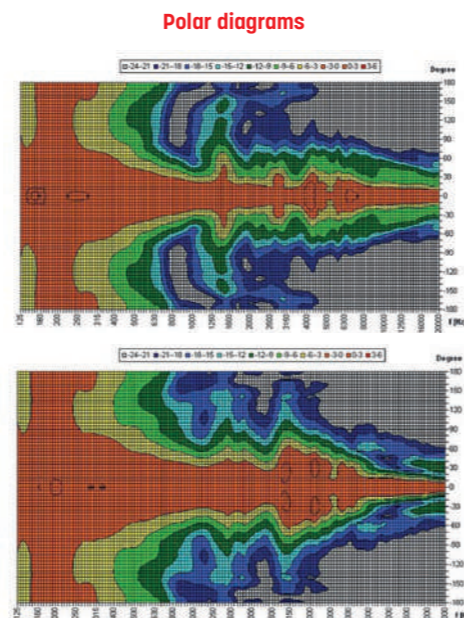
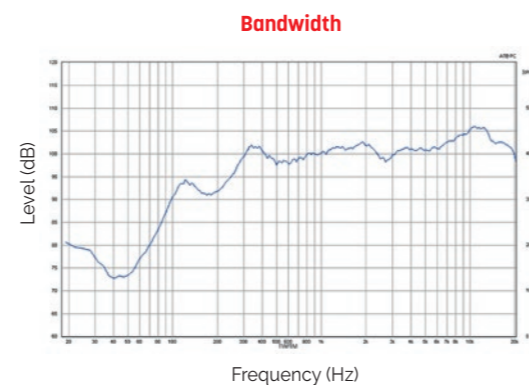
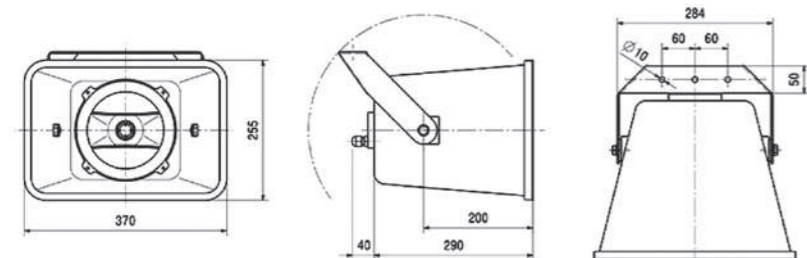


## CS 532T VA 2-Way Horn Speaker - 30W

- The 30W powered 2-way speaker is equipped with a 100V line transformer with 4 power adjustments 30/15/7.5/3.75W.
- The impact-resistant ABS housing in RAL 7035 guarantees long-term stability.
- For additional reliability, a ceramic block and a thermal fuse is provided.
- The speaker is also secured with the high protection class IP66 against the security risks of environmental influences. Mounting by stainless aluminum universal mount.



Model	CS 532T VA
Body & grill	ABS
Nominal power	100W
Nominal Impedance	100Ω
Power 100V Line	100 / 50 / 25W
Impedance	100 / 200 / 400Ω
Bandwidth	280 to 9,000Hz
Sensitivity (1W/1m)	98.1dB
SPL MAX 1m	112dB
Directivity (H-V) @ 500Hz	58° - 35°
Directivity (H-V) @ 1kHz	35° - 25°
Directivity (H-V) @ 2kHz	40° - 20°
Directivity (H-V) @ 4kHz	54° - 15°
Speaker	5" + Driver
Dimensions (WxDxH)	315 x 305 x 350mm
Weight	16kg
Operating temperature	-25 to +70°C
Protection Index	IP66
Color	White



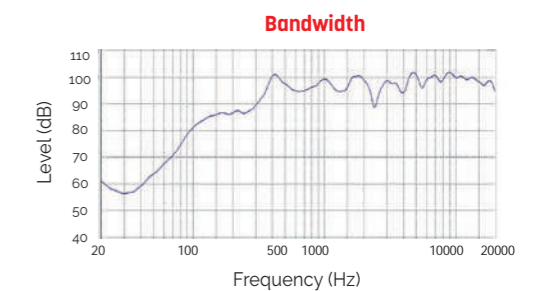
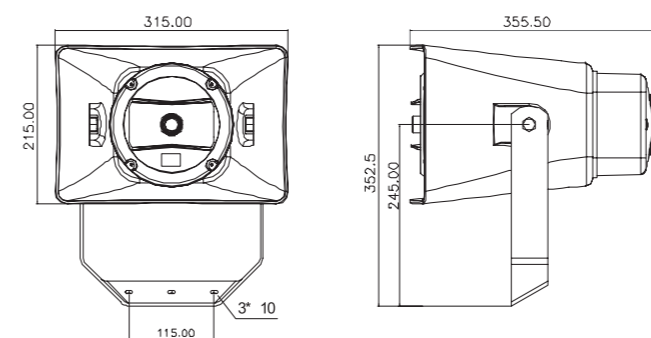
 n°1438 22 Certificate n°: 1438-CPR-0865 <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CS 532T VA</b>  Type B

## CS-5HTBS 2-Way Horn Speaker - 30W

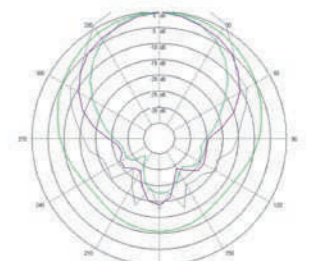
- The CS-5HTBS long-range enclosure is equipped with a 2-way system, thereby providing a wide frequency range and high sensitivity, making it ideal for the high-quality reproduction of voice and music..
- With its controlled-directivity acoustical horn and two transducers, one for low frequencies and the other for high, this unique rectangular enclosure produces amazingly pure sound..
- The horn is waterproof and can be used in high-humidity environments. It is therefore suitable for outdoor use such as sports fields, stadiums, theme parks, exhibition halls and air terminals, as well as for applications used in P.A and evacuation systems.



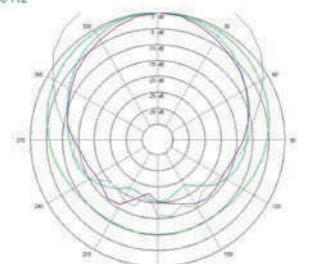
Model	CS-5HTBS
Body & grill	ABS fireproof
Nominal power	30W
Nominal Impedance	333Ω
Power 100V Line	30 / 15 / 7.5 / 3.75W
Impedance	333 / 666 / 1,333 / 2,667Ω
Bandwidth	120Hz - 20,000Hz
Sensitivity (1W/1m)	96dB
SPL MAX 1m	111dB
Directivity (H-V) @ 500Hz	140° - 180°
Directivity (H-V) @ 1kHz	60° - 100°
Directivity (H-V) @ 2kHz	90° - 90°
Directivity (H-V) @ 4kHz	90° - 140°
Speaker	6" + 2.5" driver
Dimensions (WxDxH)	315 x 355 x 215mm
Weight	4.65kg
Operating temperature	-25 to +70°C
Protection Index	IP66
Color	White



**Horizontal directivity**



**Vertical directivity**

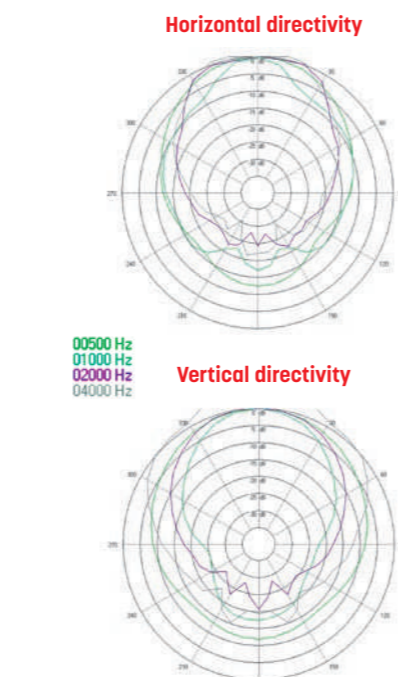
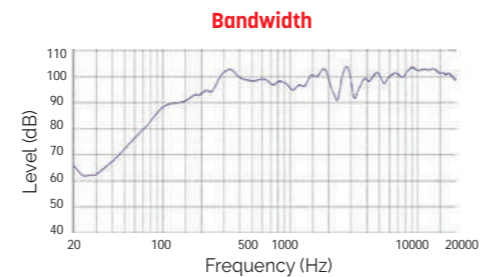


 n°11C Certificate n°: 1488-CPD-0315/W <b>MAJORCOM:</b> 56 chemin de la Flambrère 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CS-5HTBS</b>  Type B

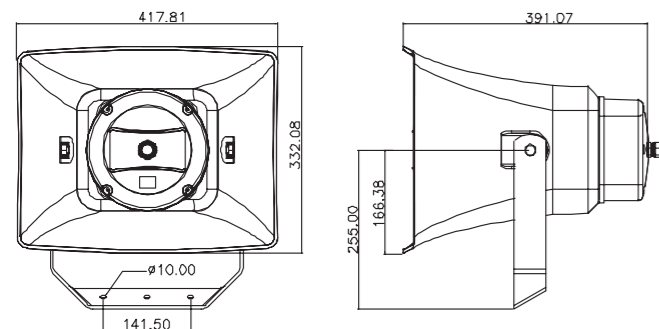


**CS-6HT60BS****2-way Horn Speaker - 60W**

- The CS-6HT60BS is equipped with a 2-way system, thereby providing a wide frequency range and high sensitivity, making it ideal for the high-quality reproduction of voice and music.
- With its controlled-directivity acoustical horn and two transducers, one for low frequencies and the other for high, this unique rectangular enclosure produces amazingly pure sound.
- The horn is waterproof and can be used in high-humidity environments. It is therefore suitable for outdoor use such as sports fields, stadiums, theme parks, exhibition halls and air terminals, as well as for applications used in P.A and evacuation systems.



 n° ITC <b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>CS-6HT60BS</b> Type B



Model	CS-6HT60BS
<b>Body &amp; grill</b>	ABS fireproof
<b>Nominal power</b>	60W
<b>Nominal Impedance</b>	167Ω
<b>Power 100V Line</b>	60 / 30 / 15 / 7,5W
<b>Impedance</b>	167 / 333 / 666 / 1.333Ω
<b>Bandwidth</b>	100Hz - 20kHz
<b>Sensitivity (1W/1m)</b>	98dB
<b>SPL MAX 1m</b>	113dB
<b>Directivity (H-V) @ 500Hz</b>	100° - 140°
<b>Directivity (H-V) @ 1kHz</b>	40° - 70°
<b>Directivity (H-V) @ 2kHz</b>	80° - 90°
<b>Directivity (H-V) @ 4kHz</b>	80° - 150°
<b>Speaker</b>	6,5" + tweeter 2,5"
<b>Dimensions [mm]</b>	(L)332 x (P)391 x (H)418
<b>Weight</b>	7.05kg
<b>Operating temperature</b>	-25 to +70°C
<b>Protection Index</b>	IP66
<b>Color</b>	White

**PS 8150T/W VA - PS 8150T/B VA**  
**2-Way Horn Speakers - 150W**

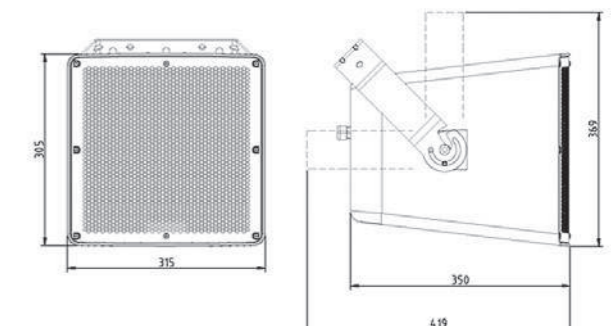
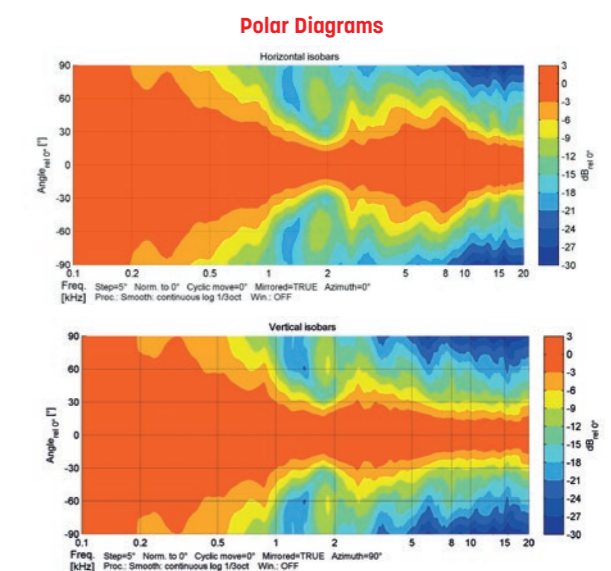
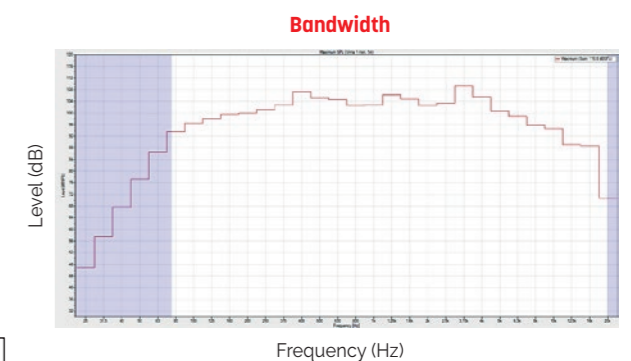
- This 2-way coaxial horn speaker is designed for booth outdoor and outdoor applications !
- EN 54-24 certified, it delivers a superb foreground music.
- The PS 8150T VA delivers a smooth and powerful beam type sound for a large range of venues, such as airports, mega-stores, stadiums and many more.
- The 150W powered professional speaker is equipped with an impressive 2-way bassreflex system, consisting of an 8" woofer and a high performance HF-driver with crossover at 2.5kHz.
- The speaker offers 3 different 100V power tapings 150/75/38W, low impedance operation is also possible.
- The sturdy high-impact ABS housing in white with metal hexagon-shaped aluminium grill offers IP66 enclosure protection.
- Connection is easily done by a screw-terminal at the rear of the speaker, protected by a cover plate with 2 x PG11 cable glands.
- The metal mounting bracket with adjustable inclination enables simple and safe installation. A safety rope is included in the delivery.



PS 8150T/W VA (White)



PS 8150T/B VA (Black)




 n° 1438 22 <b>MAJORCOM:</b> 56 chemin de la Flamèche 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings <b>PS 8150T/W VA</b> <b>PS 8150T/B VA</b> Type B
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Model	PS 8150T/W VA - PS 8150T/B VA
<b>Body &amp; grill</b>	ABS, Aluminium
<b>Nominal power</b>	150W
<b>Nominal Impedance</b>	67Ω
<b>Power 100V Line</b>	150 / 75 / 38W
<b>Impedance</b>	67 / 133 / 263Ω
<b>Bandwidth</b>	75 - 20,000Hz
<b>Sensitivity (1W/1m)</b>	96,7dB
<b>SPL MAX 1m</b>	116.8dB
<b>Directivity (H-V) @ 500Hz</b>	170° - 180°
<b>Directivity (H-V) @ 1kHz</b>	79° - 80°
<b>Directivity (H-V) @ 2kHz</b>	50° - 62°
<b>Directivity (H-V) @ 4kHz</b>	85° - 70°
<b>Speaker</b>	8" + Driver
<b>Cone</b>	PP polypropylene
<b>Dimensions (WxHxD)</b>	315 x 305 x 350mm
<b>Weight</b>	11.85kg
<b>Operating temperature</b>	-25 to +70°C
<b>Protection Index</b>	IP66
<b>Color</b>	White

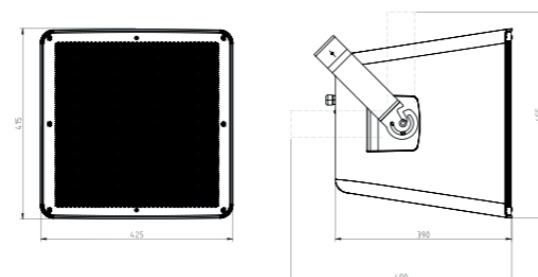
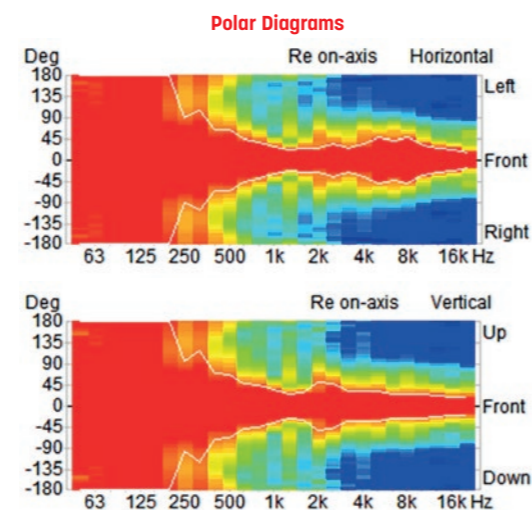
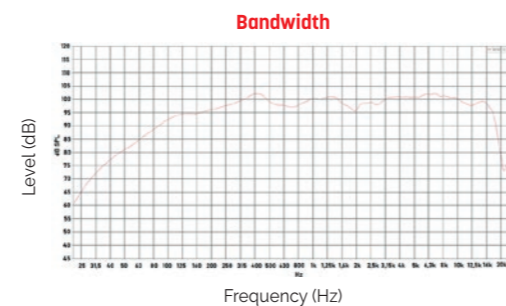


## PS 8250T/W VA - PS 8250T/B VA 2-Way Horn Speakers - 250W

- This 2-way coaxial horn speaker is designed for booth outdoor and outdoor applications !
- EN 54-24 certified, it delivers a superb foreground music.
- The PS 8250T VA delivers a smooth and powerful beam type sound for a large range of venues, such as airports, mega-stores, stadiums and many more.
- The 250W powered professional speaker is equipped with an impressive 2-way bassreflex system, consisting of a 12" woofer and a high performance HF-driver with crossover at 2.5kHz.
- The speaker offers 3 different 100V power tapings 250/125/63W, low impedance operation is also possible.
- The sturdy high-impact ABS housing with metal hexagon-shaped aluminium grille offers IP66 enclosure protection.
- Connection is easily done by a screw-terminal at the rear of the speaker, protected by a cover plate with 2 x PG11 cable glands.
- The metal mounting bracket with adjustable inclination enables simple and safe installation. A safety rope is included in the delivery.

 n°1438 22 Certificate n° : 1438-CPR-0855 <b>MAJORCOM:</b> 56 chemin de la Flamrière 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>PS 8250T/W VA</b> <b>PS 8250T/B VA</b> <b>Type B</b>

Model	PS 8250T/W VA - PS 8250T/B VA
Body & grill	ABS, Aluminium
Nominal power	250 W
Nominal Impedance	40 Ω
Power 100V Line	250 / 125 / 63 W (80 Ω)
Impedance	40 / 80 / 158 Ω
Bandwidth	75 - 20,000Hz
Sensitivity (1W/1m)	98,5 dB
SPL MAX 1m	122,5 dB
Directivity (H-V) @ 500Hz	138° - 152°
Directivity (H-V) @ 1kHz	60° - 70°
Directivity (H-V) @ 2kHz	90° - 110°
Directivity (H-V) @ 4kHz	80° - 70°
Speaker	12" + Driver
Cone	PP polypropylene
Dimensions (WxHxD)	390 x 425 x 418 mm
Weight	18,9 kg
Operating temperature	-25 to +70°C
Protection Index	IP 66
Color	White / Black



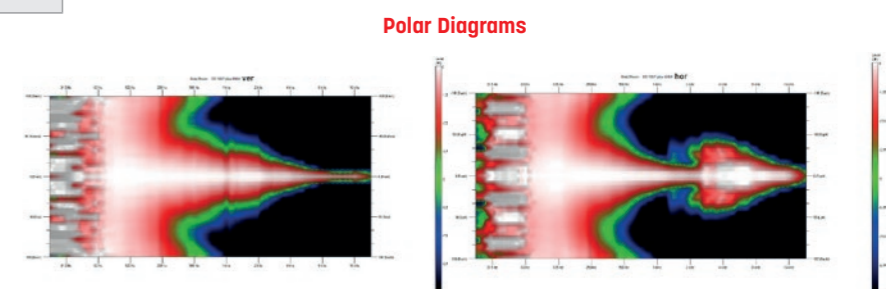
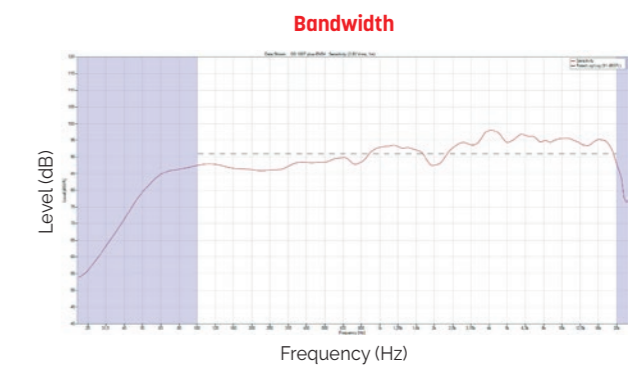
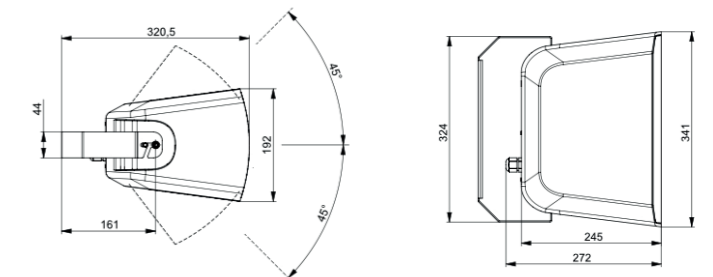
## XS 100T VA Compact Power Speaker 25/50/100 W


- The XS 100T VA is a compact power speaker, with waveguide technology. Whether sports venues, exhibition halls or stages, the XS 100T VA offers an exceptional sound experience with excellent speech intelligibility, certified according to EN 54-24.
- Built in an impact-resistant ABS housing with an aluminium grille, the XS 100T VA is available in white. The 100W speaker is equipped with two 4" performance mid-bass woofers, a 2-way bass reflex system and a high-performance tweeter including a waveguide.
- A tweeter switch provides a 4dB boost for possible sound correction in near-wall and near-ceiling installations. The loudspeaker offers 4 different 100V power adjustments. Low-impedance operation is also possible.
- The loudspeaker is weatherproof with IP66 protection rating. A sturdy aluminium bracket ensures flexible mounting, indoors as well as outdoors.

- **This loudspeaker is also available as a professional line array (XS 100T VA ARRAY).**



Model	XS 100T VA
Power	25/50/100 W
Impedance (100V)	100/200/400 or 1x4 Ω
Bandwidth	49-22.000 Hz
SPL, Pmax/4m	95,1 dB
Sensitivity (1W/1m)	86,3 dB
Directivity (H-V) -6dB, 500Hz	160° - 230°
Directivity (H-V) -6dB, 1KHz	65° - 140°
Directivity (H-V) -6dB, 2KHz	120° - 100°
Directivity (H-V) -6dB, 4KHz	145° - 68°
Dimensions	341 x 245 x 192 mm
IP Rating	IP66
Weight	6,5 kg
Temperature range	-25 / +70 °C
Mounting	Mounting bracket (included)
Connector	Screw terminal
Terminal diameter	2,3 mm
Maximum cable passage	4 mm <sup>2</sup>
Colour	White



 n°1438 22 Certificate n° : 1438-CPR-1023 <b>MAJORCOM:</b> 56 chemin de la Flamrière 31300 TOULOUSE FRANCE	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>XS 100T VA</b> <b>Type B</b>



## XS 100T VA ARRAY

### Compact Line Array 4x100 W



- The XS 100T VA ARRAY combines the strengths of the XS 100T VA into a loudspeaker system that is able to cover even larger areas with excellent speech intelligibility, certified according to EN 54-24. This compact line array consists of 4 modules in a steel bracket. Each module can be adjusted in 3 vertical steps : 0, 5, 10 and 15°. This makes it adaptable to all acoustic challenges, indoors and outdoors. The loudspeaker is weatherproof with an IP66 protection rating. A safety rope is included.

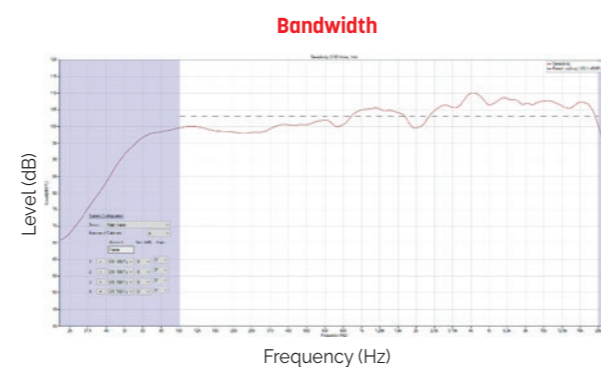
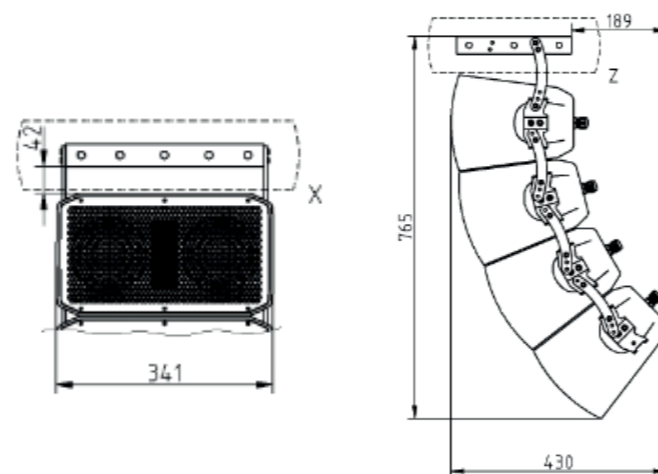
- Built in an impact-resistant ABS housing with an aluminium grille, the XS 100T VA ARRAY is available in white. Each of the 100W speakers is equipped with two 4" performance mid-bass woofers, a 2-way bass reflex system and a high-performance tweeter including a waveguide.

- A tweeter switch provides a 4dB boost for possible sound correction in near-wall and near-ceiling installations. Each loudspeaker offers 4 different 100V power adjustments. Low-impedance operation is also possible.

- These loudspeakers are also available individually (XS 100T VA).



Model	XS 100T VA ARRAY
Power	4 x 100/50/25 W
Impedance (100V)	4 x 100/200/400 or 1x4 Ω
Bandwidth	50-22.000 Hz (Tweeter odB)
Sensitivity (1W/1m)	92 dB
Directivity (H-V) -6dB, 500Hz	182° - 62°
Directivity (H-V) -6dB, 1KHz	78° - 30°
Directivity (H-V) -6dB, 2KHz	82° - 11°
Directivity (H-V) -6dB, 4KHz	175° - 10°
Dimensions	0° : 341 x 852 x 274 mm 45° : 341 x 765 x 430 mm
IP Rating	IP66
Weight	30 kg
Mounting	Mounting bracket (included)
Connector	Screw terminal
Terminal diameter	2,3 mm
Maximum cable passage	4 mm <sup>2</sup>
Colour	White



 n°1438 22 Certificate n° : 1438-CPR-1023	<b>EN 54-24</b> Speaker for voice alarm systems for systems for fire detection systems and fire alarm systems in buildings
	<b>XS 100T VA ARRAY</b>  <b>Type B</b>
<b>MAJORCOM:</b> 56 chemin de la Flambe 31300 TOULOUSE FRANCE	



Our systems strictly comply with the requirements of European EN 54 and international ISO standards. These certifications, genuine proof of quality and reliability, give you total peace of mind while ultimately guaranteeing the safety of the public concerned.



The EC marking of our products guarantees compliance with the European regulation in terms of safety, health and environmental protection while ensuring their free circulation within the European Union.



Stands for "Restriction of the use of certain Hazardous Substances in electrical and electronic equipment". Our products respect the RoHS European directive (2002/95/EC), the purpose of which is to limit the use of certain heavy metals and other harmful materials.



Our **EN-54** products comply with European safety requirements in terms of fire detection and alarm systems.



**EN 54-16** concerns the voice alarm control and indicating equipment.



**EN 54-24** concerns the components of voice alarm systems (Loudspeakers).

**EN 54-4** concerns the power supply equipment.



Our **ISO 7240** products comply with International safety requirements in terms of fire detection and alarm systems.

**ISO 7240-24** concerns the components of voice alarm systems (Loudspeakers).



DANTE is the newest networking standard for audio developed by Audinate. It respects the standard Ethernet standard and is compatible with the future standard AVB. Advantage: high number of channels and multi-format, low latency, native redundancy, automatic network configuration, use of standard Ethernet hardware.



Establishments receiving services from the public shall be such as to enable persons with disabilities to access, circulate and receive information disseminated therein in the areas open to the public. In this context, the installation of a magnetic induction loop amplifier for the hearing impaired Check-out counters, meeting rooms, conference rooms, shows..., is imperative. This does not apply only to E.R.P. but also to the liberal professions and traders.

**MAJORCOM is ISO 9001 certified**

The ISO 9001:2015 certification of the quality management system demonstrates MAJORCOM's commitment to delivering a quality service and satisfying its customers while constantly improving its quality management systems. The award of an ISO 9001:2015 certificate by a prestigious company like BUREAU VERITAS is proof of high quality and also demonstrates that MAJORCOM complies with the quality management principles recognised at the highest international level.





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Custom-designed sound systems by a  
**highly involved Design Office, R&D,  
Customer Service and Support Functions.**

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