

MAGA

ENGINEERING

PRODUCT CATALOGUE



 **MADE AND
DESIGNED
IN SPAIN**

Graphic design and layout

Central Media 
Agencia de Comunicación
www.centralmedia.com.es

**© Maga Engineering®
Product Catalogue
Revision October 2022**

INDEX

INTRODUCTION	Pág. 04
ABOUT US	Pág. 06
VERTICAL SERIES	Pág. 08
SUB SERIES	Pág. 16
WEDGE SERIES	Pág. 30
HORIZON SERIES	Pág. 34
SPOT SERIES	Pág. 36
BROADCAST SERIES	Pág. 42
SLIM SERIES	Pág. 44
AMPLIFICATION	Pág. 48





INTRODUCTION

Welcome to the Maga Engineering® product catalogue. Below you will find the features and technical specifications of our current product range classified according to the following series:

VERTICAL Series

With the data and technical characteristics of our **ME10V**, **ME10V wide**, **ME20V** and **ME24V** Line Array loudspeakers (which are included in the **EASE Focus® version 3** prediction and rigging program).

SUB Series

Dedicated to our **ME115SND** MKII, **ME115SND**, **ME115SNDX**, **ME218SNDX**, **ME218LEX**, **ME218FHA** and **ME218FH** subwoofers. The **ME218LEX** subwoofer is included in the **EASE Focus® version 3** prediction and rigging program.

WEDGE Series

With the high-performance multipurpose stage monitors **ME12WAX** and **M15WAX**.

HORIZON Series

With the data and technical characteristics of the high-performance **ME12Z** loudspeaker for Horizontal Array.

SPOT Series

Dedicated to the **ME6.5S**, **ME8S** and **ME8SA MKII** point source loudspeakers.

BROADCAST Series

With the **ME10BA** high SPL monitor, designed to become the new standard within the audiovisual mixing and post-production studios.

SLIM Series

With the ultra-compact **ME63SL** and **ME123SL** columns for permanent installation.

Our range of products completely covers the needs of the most demanding companies and professionals in the sector. Whatever your project, whatever your concerns, do not hesitate to consult our specialised staff, as you are sure to find a satisfactory solution to your needs in Maga Engineering® sound systems.

All our Line Array loudspeakers (**ME10V**, **ME10V wide**, **ME20V** and **ME24V**) as well as our **ME218LEX** subwoofer are included in **EASE Focus® version 3** prediction and rigging program. Therefore, in order to guarantee the total compatibility of our systems with those third party products that define a standard of excellence and are “de facto” standard for first level Touring, we are currently working to include our acoustic enclosures in the loudspeaker libraries of the **PLM Series™** amplifiers by **Lab.gruppen®** and **X Series™** amplifiers by **Powersoft®**.

Another proof of our commitment to quality and a job well done is the availability of a laser inclinometer (optional) on the rigging frame of our Line Array systems, not to mention aspects such as the **5-year limited warranty on all passive Maga Engineering® products**.

Finally, before entering the products section, you will find a text called “About us”, where you can see our company origins and philosophy. Although, really, everything could be summarized in a few words: Quality, Performance, Reliability and Confidence. All at the service of our greatest passions, which are Sound and Music.

We hope you enjoy reading.

MAGA ENGINEERING



ABOUT US

Maga Engineering is a company that designs and manufactures extremely high quality acoustic enclosures and PA systems in Spain. At the foundation of the company, there was a clearly defined mission: to manufacture the best possible sound reinforcement systems.

All Maga Engineering® acoustic enclosures are designed, from the initial sketch, to deliver the best results that today's technology allows. Only the best drivers and components on the market are used to manufacture them. Performance, sound pressure, quality and timbre are studied thoroughly, with thousands of laboratory tests. Electronics, enclosures and transducers, everything is taken into account to offer the best overall performance, as if it were a perfect gear. Behind the Maga Engineering® systems we find what could be called a "superior DNA".

Maga Engineering® systems offer fidelity levels typical of the High-End world, while being extremely versatile. Two of our hallmarks. All our custom passive filters are manufactured with high-end components.

Our Line Array enclosures of the VERTICAL series (**ME10V**, **ME10V wide**, **ME20V** and **ME24V**) allow multiple Line Array configurations.

The **ME10V** Line Array enclosure can be staked or flown with extreme ease and offers rental companies a high degree of amortization, as its great flexibility in the assembly allows multiple events of small/medium size with a single model of Line Array loudspeaker. It includes a 10" LF driver and two 0.8" HF drivers. With an extraordinarily reduced size and weight (24Kg), it offers a high performance that reaches a sound pressure level of 137dB peak to 1 meter. This reduction in weight and space has great advantages in terms of transport and greatly simplifies the rigging and assembly process. It is available in two versions, **ME10V** with 90° horizontal dispersion and **ME10V wide** with 120° horizontal dispersion.

The **ME20V** Line Array enclosure has been specially designed to cover medium/large events. It includes two 10" LF drivers and a 3.5" + 1.75" coaxial HF driver that ensures perfect alignment and phase coherence. With a very tight weight (33Kg) and size, it achieves an impressive sound pressure level of 140dB peak to 1 meter and maintains the seal of quality and timbre that characterizes us, as well as the manageability and versatility of its "little brother".

Finally, the last Line Array model of the VERTICAL series is the **ME24V**, a 3-way "beast" designed for Big Touring events. It includes two 12" LF drivers and a 3.5" + 1.75" coaxial HF driver that ensures perfect alignment and phase coherence. The overwhelming sound pressure level it reaches is 143dB peak to 1 meter.

All our Line Array enclosures are included in the EASE Focus® version 3 prediction and rigging program.

Combining the VERTICAL series enclosures with the **ME218LEX** (2 x 18") SUB series subwoofer, which reach 140dB peak at 1 meter, any Line Array system required can be configured, from the smallest to the largest Big Touring system. We recommend reading the document "**Line Array Configurations**".

The ME218LEX subwoofer is included in the EASE Focus® version 3 prediction and rigging program.

Maga Engineering® offers within the WEDGE series two high performance multipurpose floor monitors (**ME12WAX** and **ME15WAX**), as well as speakers for point source PA and monitoring applications within the SPOT series (**ME6.5S**, **ME8S** and **ME8SA MKII**) and a high performance acoustic enclosure for Horizontal Array or point source belonging to the HORIZON series (**ME12Z**). Special mention should be made of the **ME12Z/ME218FH** (passive) and **ME12Z/ME218FHA** (self-powered) high performance sets, ideal for **DJ/DISCO** applications due to its impressive sound pressure levels (134dB peak in the **ME12Z** and 139dB peak in

both **ME218FH** and **ME218FHA** subwoofers). Likewise, the SPOT **ME6.5S**, **ME8S** and **ME8SA MKII** series enclosures offer absolutely exceptional performance and quality for their size; combined with the SUB **ME115SND**, **ME115SNDX** and **ME115SND MKII** series subwoofers, they form very interesting mini PA systems due to their enormous performance, sound quality and small size, offering the highest quality solution in many situations where a traditional Line Array system is not required. All this without losing the sound quality and the High-End timbre that characterizes us. We recommend reading the document "**Maga Mini Configurations**".

Finally, the BROADCAST series, with the **ME10BA** monitor designed specifically for mixing and post-production studios, and the SLIM series, with the **ME63SL** and **ME123SL** ultra-compact column speakers designed for permanent installations.

Behind Maga Engineering® is a group of electronic and acoustic engineers who have mastered all the technologies that have historically been employed in the manufacture of acoustic enclosures and PA systems. It is also a group of musicians and music lovers who have always disagreed with the fact that large format audio systems have to sound "hard" or "rough". Convinced that a PA system can offer fidelity levels similar to those of the High-End without sacrificing the highest performance, Maga Engineering® engineers have developed the acoustic enclosures presented in this catalogue, which are the result of countless hours of study, experience and laboratory tests to offer, in each case, the highest quality product. And all this, without ever losing sight of the practical characteristics of handling and operation that facilitate the work of the rental and event production companies that are, in short, the users of our systems.

VERTICAL SERIES • ME10V

Compact Line Array System

- Custom components.
- L and R models for symmetrical systems mounting.
- 2-way enclosure (1 x 10" LF and 2 x 0.8" HF drivers). Custom passive filter made of High-End components which optimises performance and SPL (137dB peak).
- HEPC® (High-End Phase Coherence) filter technology.
- Designed to handle low curvature flat waves.
- Enclosure with asymmetrical 90° horizontal dispersion pattern.
- Angulation of the enclosure adjustable in nine steps, from 0° to 9°.
- Digital laser inclinometer kit for rigging frame installation (optional).
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program, which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

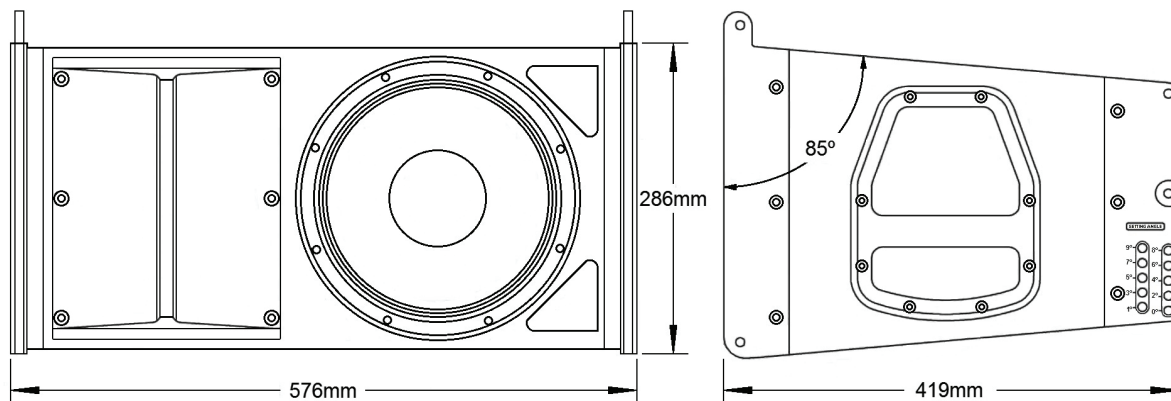
Frequency Response:	50Hz - 20KHz
Sensitivity (1W@1m):	102dB
Power Handling (continuous):	AES 500W
Recommended Amplification:	600W
Nominal Impedance:	16Ω
Maximum SPL Power:	137dB peak (1m)
Angle of Coverage (-6 dB):	Horizontal: 90° / Vertical: Defined by Array (min. 20°)
Bass Components:	1 x 10" Neodymium, AES 450W
Treble Components:	2 x 0.8" Neodymium, AES 40W each

Enclosure

Front:	576 x 286mm
Depth:	419mm
Net Weight:	24Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



DIMENSIONS



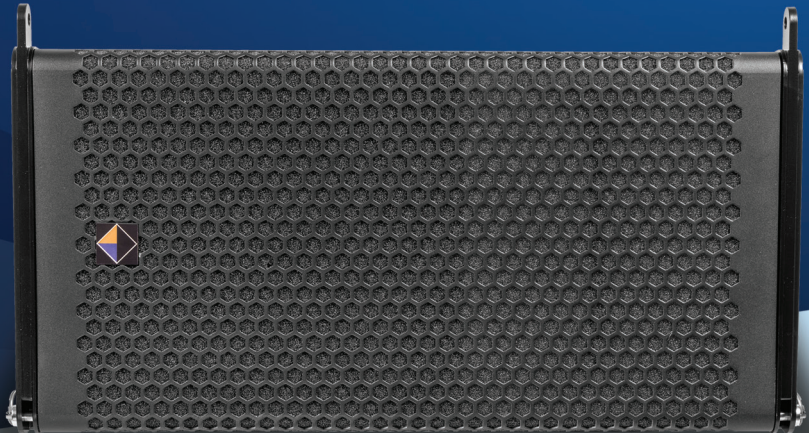
VERTICAL SERIES • ME10V *wide*

Compact Line Array System 120° Horizontal Dispersion

- Custom components.
- Designed for wide horizontal dispersion configurations, as well as “down-fill” element for configurations formed by ME10V standard elements.
- L and R models for symmetrical systems mounting.
- 2-way enclosure (1 x 10” LF and 2 x 0.8” HF drivers). Custom passive filter made of High-End components which optimises performance and SPL (137dB peak).
- HEPC® (High-End Phase Coherence) filter technology.
- Designed to handle low curvature flat waves.
- Enclosure with asymmetrical 120° horizontal dispersion pattern.
- Angulation of the enclosure adjustable in nine steps, from 0° to 9°.
- Digital laser inclinometer kit for rigging frame installation (optional).
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program, which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



The white colour of the 120° horn distinguishes this version from the standard ME10V.





TECHNICAL SPECIFICATIONS

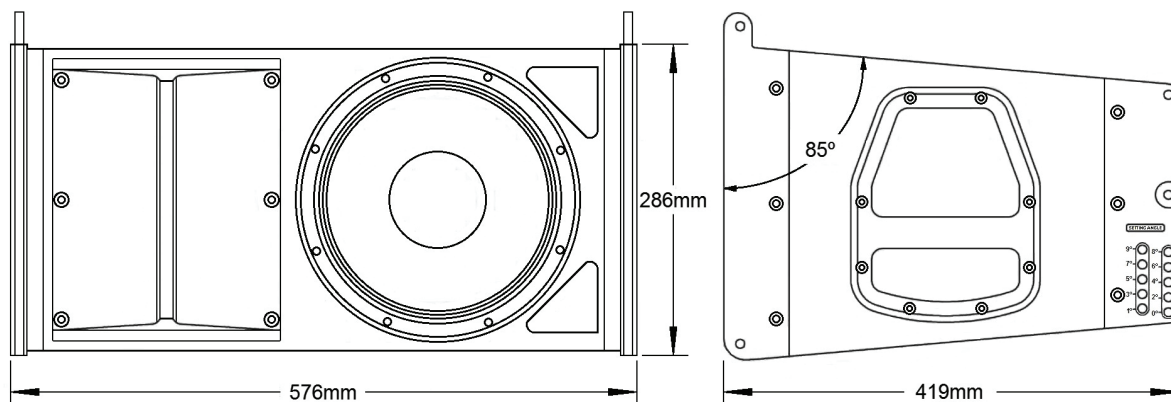
Frequency Response:	50Hz - 20KHz
Sensitivity (1W@1m):	102dB
Power Handling (continuous):	AES 500W
Recommended Amplification:	600W
Nominal Impedance:	16Ω
Maximum SPL Power:	137dB peak (1m)
Angle of Coverage (-6 dB):	Horizontal: 120° / Vertical: Defined by Array (min. 20°)
Bass Components:	1 x 10" Neodymium, AES 450W
Treble Components:	2 x 0.8" Neodymium, AES 40W each

Enclosure

Front:	576 x 286mm
Depth:	419mm
Net Weight:	24Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



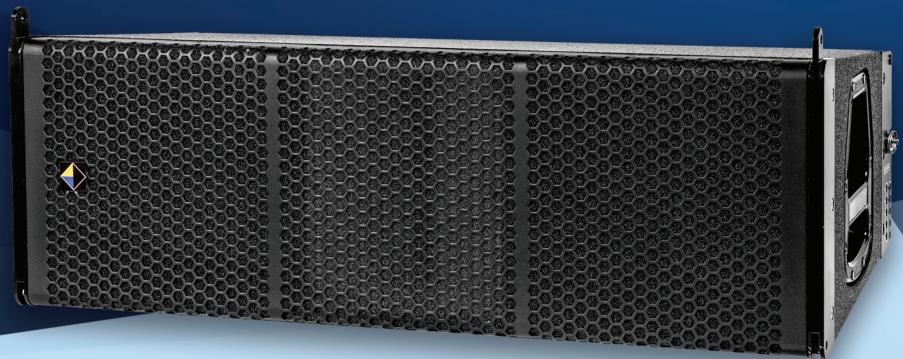
DIMENSIONS



VERTICAL SERIES • ME20V

High Performance Line Array System

- Custom components.
- High SPL output (141dB peak).
- Biamp enclosure (2 active ways, 3 real ways), with 2 x 10" LF drivers and 3.5" + 1.75" coaxial HF driver. Custom passive filter made of High-End components.
- HEPC® (High-End Phase Coherence) filter technology.
- Designed to handle low curvature flat waves.
- Enclosure with 100° horizontal dispersion pattern.
- Angulation of the enclosure adjustable in nine steps, from 0° to 9°.
- Digital laser inclinometer kit for rigging frame installation (optional).
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program, which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

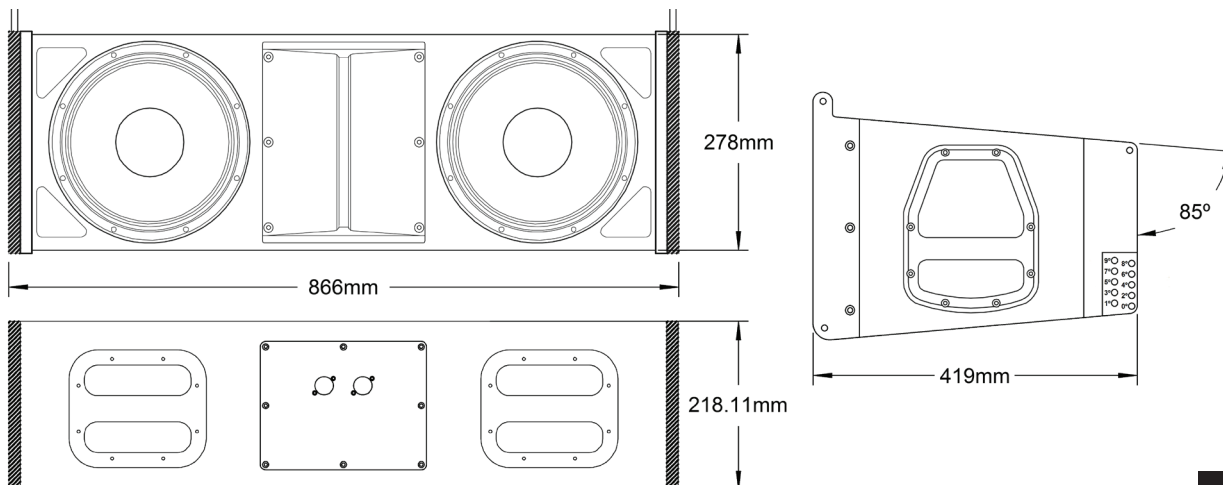
Frequency Response:	50Hz - 20KHz
Bass-Treble Sensitivity (1W@1m):	100dB - 112dB
Bass-way Power Handling (continuous):	AES 1.400W, 16Ω
Mid/Treble-way Power Handling (continuous):	AES 230W, 16Ω
Recommended Amplification:	1.600W
Nominal Impedance:	16Ω
Maximum SPL Power:	141dB peak (1m)
Angle of Coverage (-6 dB):	Horizontal: 100° / Vertical: Defined by Array (min. 20°)
Bass Components:	2 x 10" Neodymium, AES 700W each
Treble Components:	1 x 3.5" + 1 x 1.75" Neodymium, AES 150W + 80W

Enclosure

Front:	866 x 278mm
Depth:	419mm
Net Weight:	33 Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 Bass / +2-2 Mid-Treble connection



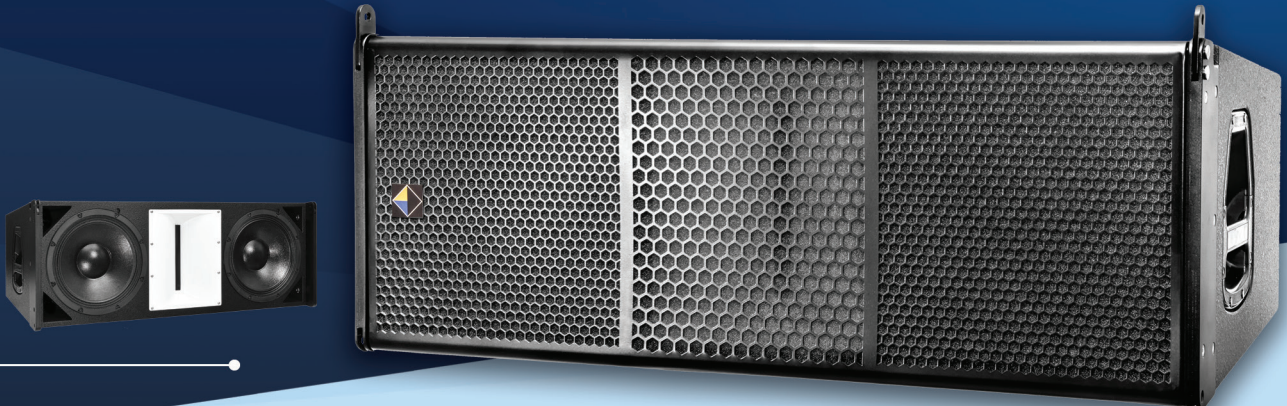
DIMENSIONS



VERTICAL SERIES • ME24V

Big Touring Line Array System

- Custom components.
- High SPL output (143dB peak).
- Biamp enclosure (2 active ways, 3 real ways), with 2 x 12" LF drivers and 3.5" + 1.75" coaxial HF driver. Custom passive filter made of High-End components.
- HEPC® (High-End Phase Coherence) filter technology.
- Designed to handle low curvature flat waves.
- Enclosure with 100° horizontal dispersion pattern.
- Angulation of the enclosure adjustable in nine steps, from 0° to 9°.
- Digital laser inclinometer kit for rigging frame installation (optional).
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program, which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

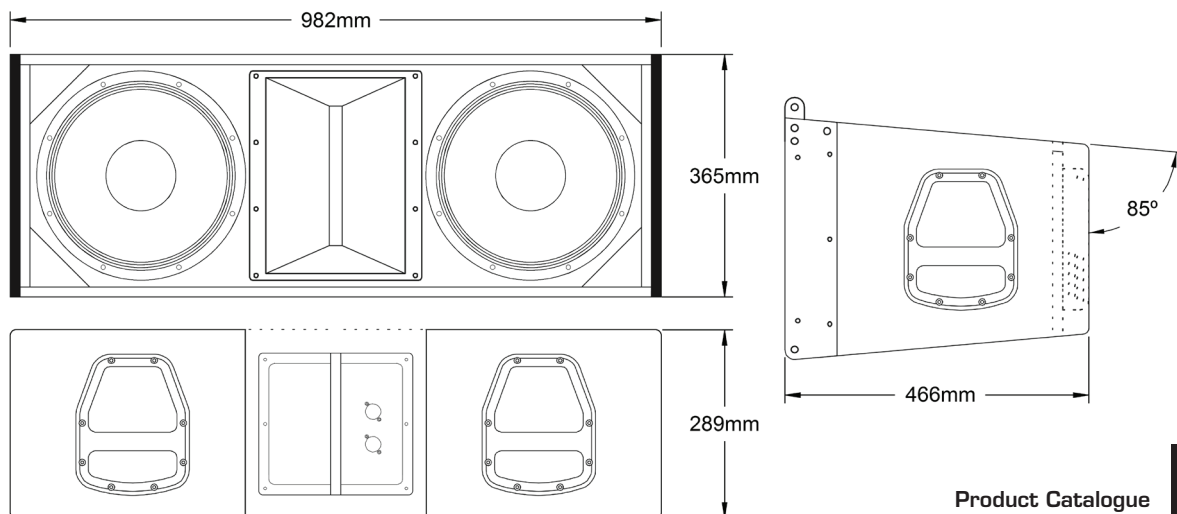
Frequency Response:	50Hz - 22KHz
Bass Sensitivity (1W@1m):	103dB
Treble Sensitivity (1W@1m):	112dB
Bass-way Power Handling (continuous):	AES 1.400W, 16Ω
Mid/Treble-way Power Handling (continuous):	AES 230W, 16Ω
Recommended Amplification:	1.800W
Nominal Impedance:	16Ω
Maximum SPL Power:	143dB peak (1m)
Angle of Coverage (-6 dB):	Horizontal: 100° / Vertical: Defined by Array (min. 20°)
Bass Components:	2 x 12" Neodymium, AES 700W each
Treble Components:	1 x 3.5" + 1 x 1.75" Neodymium, AES 150W + 80W

Enclosure

Front:	982 x 365mm
Depth:	466mm
Net Weight:	43Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 Bass / +2-2 Mid-Treble connection



DIMENSIONS



SUB SERIES • ME115SNDA MKII

Multipurpose 15" Active Subwoofer

- Custom components.
- High SPL output (129dB peak).
- Single ferrite compact size 15" loudspeaker.
- Multipurpose use. Ideal for portable PA systems in combination with Spot and Wedge series loudspeakers and for permanent installations.
- Include internal 1.200W Class D amplifier with complete digital processing (includes 4 user selectable presets). Ethernet connection for updates and programming/control with ArmoníaPlus® System Manager.
- Power source with automatic regulation (90 - 250 V).
- Special rubber feet to avoid vibrations and displacements.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Mounting for extension bar on top side.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.

ArmoníaPlus
System Manager



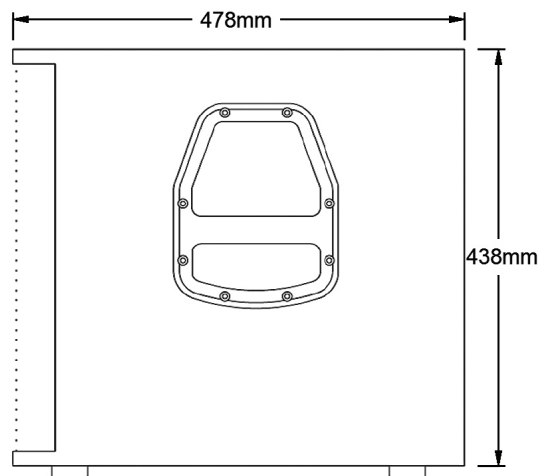
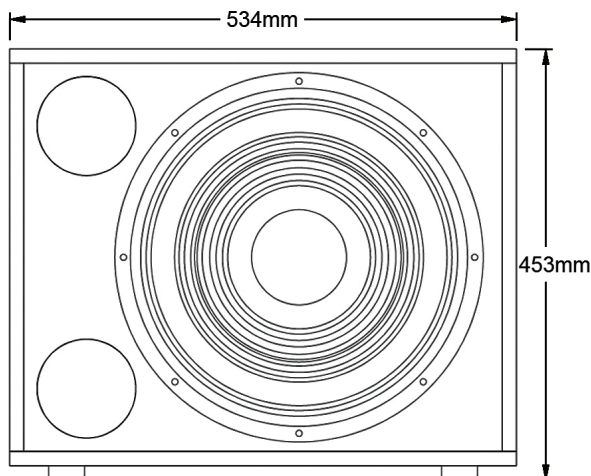


TECHNICAL SPECIFICATIONS

Frequency Response:	35Hz - 100Hz (+/- 3dB)
Includes four single button user-definable presets:	Preset 1: Set to 80Hz Preset 2: Set to 100Hz Preset 3: Set to 80Hz with polarity reversal Preset 4: Set to 100Hz with polarity reversal
Maximum SPL Power:	129dB peak (1m)
Amplification:	1.200W @ 8Ω class D amplifier with complete digital processing and Ethernet connection for updates and programming/control with ArmoníaPlus® System Manager
Components:	1 x 15" Ferrite, AES 700W, 8Ω
Enclosure (feet included)	
Front:	534 x 453mm
Depth:	478mm
Net Weight:	28Kg
Connectors:	2 x Neutrik powerCON TRUE male and female; 2 x XLR male and female; Ethernet



DIMENSIONS



SUB SERIES • ME115SND

Multipurpose 15" Passive Subwoofer

- Custom components.
- High SPL output (128dB peak).
- Single ferrite compact size 15" loudspeaker.
- Multipurpose use. Ideal for portable PA systems in combination with Spot and Wedge series loudspeakers and for permanent installations.
- Supports a continuous AES 700W.
- Special rubber feet to avoid vibrations and displacements.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Mounting for extension bar on top side.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

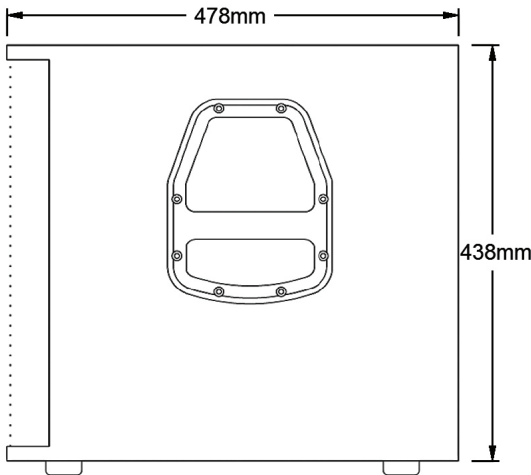
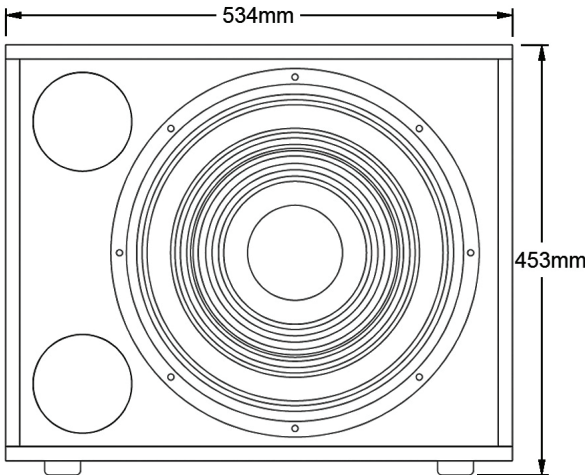
Frequency Response:	35Hz - 200Hz (+/- 3dB)
Sensitivity (1W@1m):	98dB
Power Handling (continuous):	AES 700W
Recommended Amplification:	400W to 800W
Nominal Impedance:	8Ω
Maximum SPL Power:	128dB peak (1m)
Components:	1 x 15" Ferrite, AES 700W, 8Ω

Enclosure (feet included)

Front:	534 x 453mm
Depth:	478mm
Net Weight:	25Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



DIMENSIONS



SUB SERIES • ME115SNDX

High Performance 15" Passive Subwoofer

- Custom components.
- High SPL output (129dB peak).
- Single ferrite compact size 15" loudspeaker.
- Multipurpose use. Ideal for portable PA systems in combination with Spot and Wedge series loudspeakers and for permanent installations.
- Supports a continuous AES 1.000W.
- Special rubber feet to avoid vibrations and displacements.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Mounting for extension bar on top side.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

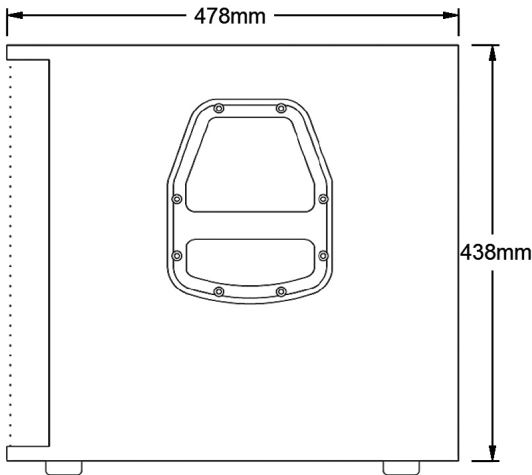
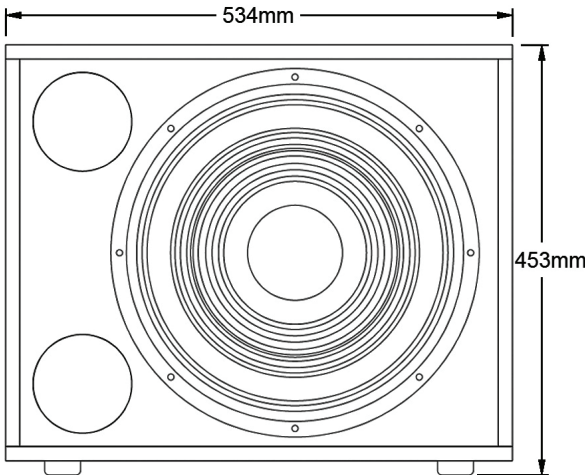
Frequency Response:	35Hz - 200Hz (+/- 3dB)
Sensitivity (1W@1m):	98dB
Power Handling (continuous):	AES 1.000W
Recommended Amplification:	600W to 1.200W
Nominal Impedance:	8Ω
Maximum SPL Power:	129dB peak (1m)
Components:	1 x 15" Ferrite, AES 1.000W, 8Ω

Enclosure (feet included)

Front:	534 x 453mm
Depth:	478mm
Net Weight:	25Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



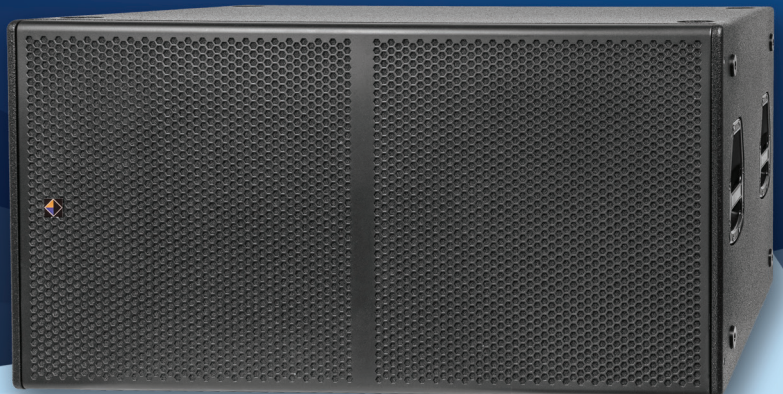
DIMENSIONS



SUB SERIES • ME218SNDX

Dual 18" Passive Subwoofer

- Custom components.
- High SPL output (138dB peak).
- Latest generation 18" Neodymium loudspeakers, with advanced cooling (MALTCROSS® technology) and lower power compression losses that allow the SPL to be maintained at more constant values within a working period.
- Supports a continuous AES 2.000W.
- Special rubber feet to avoid vibrations and displacements.
- Prepared for horizontal and vertical placement.
- Pre-installation of nuts for four 100mm GUITEL® wheels.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

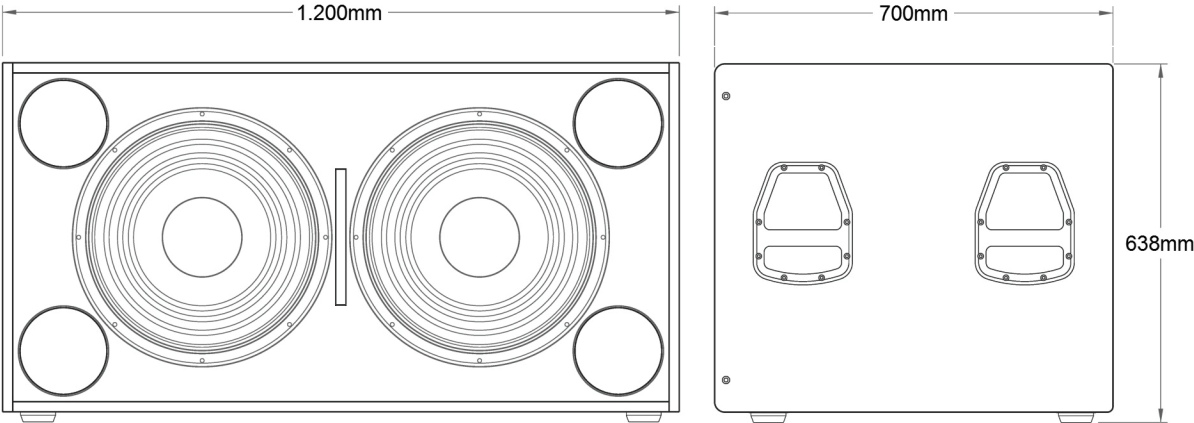
Frequency Response:	40 - 200Hz (+/- 3 dB)
Sensitivity (1W@1m):	101dB
Power Handling (continuous):	AES 2.000W
Recommended Amplification:	1.400W to 2.800W
Nominal Impedance:	4Ω
Maximum SPL Power:	138dB peak (1m)
Components:	2 x 18" Neodymium, AES 1.000W each

Enclosure (feet included)

Front:	1.200 x 638 mm
Depth:	700mm
Net Weight:	89Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



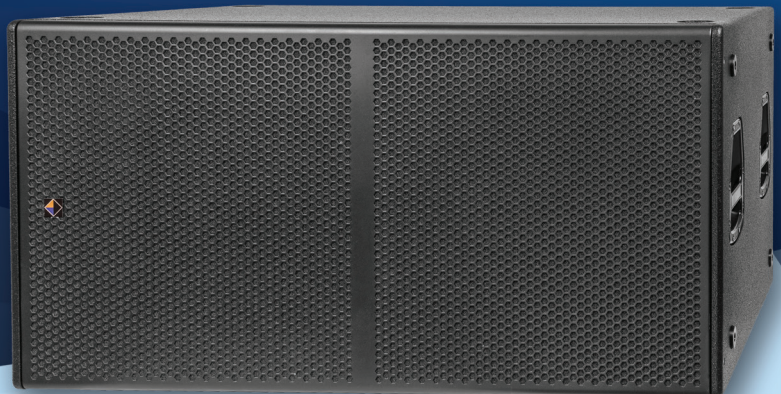
DIMENSIONS



SUB SERIES • ME218LEX

High Performance Dual 18" Passive Subwoofer

- Custom components.
- High SPL output (140dB peak).
- Latest generation 18" Neodymium loudspeakers, with advanced cooling (MALTCROSS® technology) and lower power compression losses that allow the SPL to be maintained at more constant values within a working period.
- Supports a continuous AES 3.200W.
- Special rubber feet to avoid vibrations and displacements.
- Prepared for horizontal and vertical placement.
- Pre-installation of nuts for four 100mm GUITEL® wheels.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

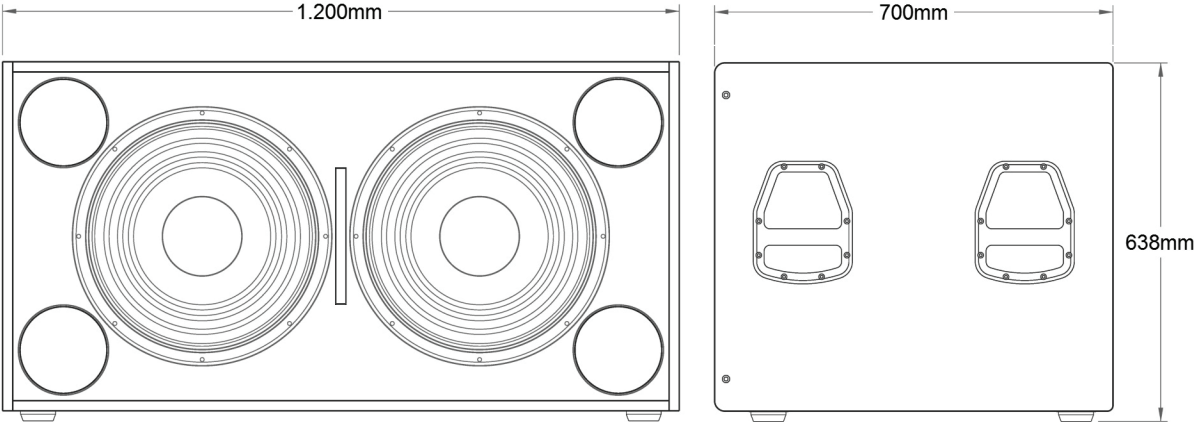
Frequency Response:	40 - 200Hz (+/- 3 dB)
Sensitivity (1W@1m):	100dB
Power Handling (continuous):	AES 3.200W
Recommended Amplification:	2.000W to 4.000W
Nominal Impedance:	4Ω
Maximum SPL Power:	140dB peak (1m)
Components:	2 x 18" Neodymium, AES 1.600W each

Enclosure (feet included)

Front:	1.200 x 638 mm
Depth:	700mm
Net Weight:	93Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



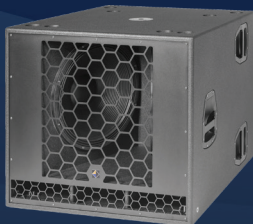
DIMENSIONS



SUB SERIES • ME218FHA

High Performance Dual 18" Active Subwoofer

- Custom components.
- High SPL output (139dB peak).
- Latest generation 18" Neodymium loudspeakers .
- Ideal for portable PA systems and DJ systems in combination with HORIZON (ME12Z) and VERTICAL (ME10V) series enclosures.
- Internal 3.000W + 3.000W Class D amplifier with integrated DSP.
- Universal power supply (operating voltage 85V - 265V).
- Special rubber feet to avoid vibrations and displacements.
- Four 100 mm GUITEL® wheels installed on the rear side for easy transport.
- Mounting for extension bar on top side.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



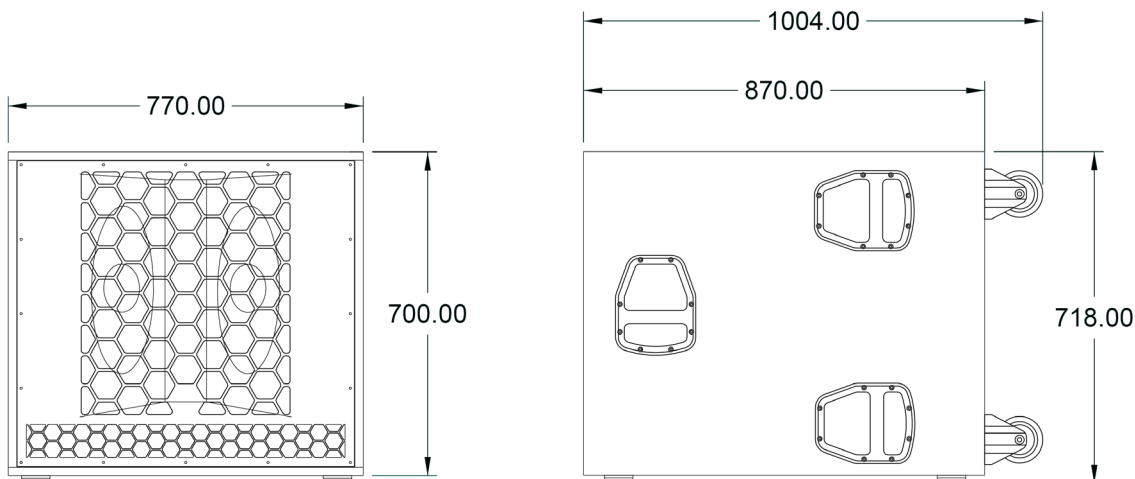


TECHNICAL SPECIFICATIONS

Frequency Response:	35Hz - 200Hz (+/- 3dB)
Includes four single button user-definable presets:	Preset 1: Connection of 1 ME12Z unit Preset 2: Connection of 1 ME46V unit Preset 3: Connection of a cluster of 2 ME10V units Preset 4: For operation as external subwoofer
Maximum SPL Power:	139dB peak (1m)
Amplification:	2 class D amplifiers with 3.000W @ 4Ω each, with complete digital processing
Components:	2 x 18" Neodymium, AES 1.000W each
Enclosure (feet included)	
Front:	770 x 718mm
Depth:	870mm (1.004mm, wheels included)
Net Weight:	90Kg
Connectors:	XLR Input, XLR Link, powerCON TRUE 1 in-out, USB, 2x RJ45



DIMENSIONS



SUB SERIES • ME218FH

High Performance Dual 18" Passive Subwoofer

- Custom components.
- High SPL output (139dB peak).
- Latest generation 18" Neodymium loudspeakers.
- Ideal for portable PA systems and DJ systems in combination with HORIZON (ME12Z) and VERTICAL (ME10V) series enclosures.
- Supports a continuous AES 2.000W.
- Special rubber feet to avoid vibrations and displacements.
- Four 100 mm GUITEL® wheels installed on the rear side for easy transport.
- Mounting for extension bar on top side.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

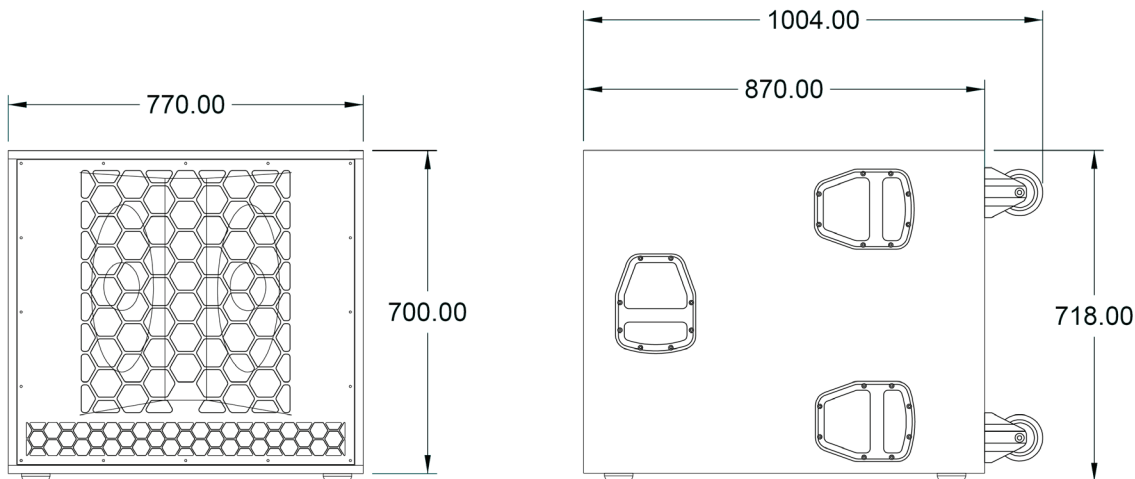
Frequency Response:	35 - 200Hz (+/- 3 dB)
Sensitivity (1W@1m):	100dB
Power Handling (continuous):	AES 2.000W
Recommended Amplification:	1.500W to 2.500W
Nominal Impedance:	4Ω
Maximum SPL Power:	139dB peak (1m)
Components:	2 x 18" Neodymium, AES 1.000W each

Enclosure (feet included)

Front:	770 x 718 mm
Depth:	870mm (1.004mm, wheels included)
Net Weight:	88Kg
Connectors:	2 x Neutrik Speakon 4 Cont.; +1-1 connection



DIMENSIONS



WEDGE SERIES • ME12WAX

Coaxial 12" Active Multipurpose Stage Monitor

- Custom components.
- Self-powered enclosure with 1 x 12" LF and 1 x 2.84" HF coaxial driver.
- Floor monitor/PA position.
- Low feedback level.
- Excellent performance as a floor monitor.
- Includes internal 800W + 200W Class D amplifier.
- Light weight (19.5Kg).
- Complete internal digital process (includes 4 user-selectable presets) and Ethernet connection for updates and programming/control with ArmoníaPlus® System Manager
- Plate for standard tripod with two holes for 0° and 5° inclination.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



ArmoníaPlus
System Manager



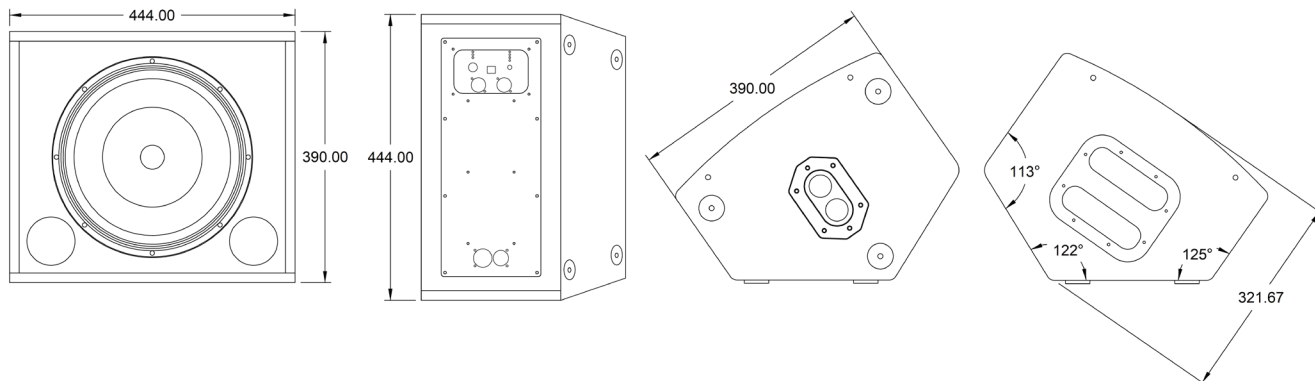


TECHNICAL SPECIFICATIONS

Frequency Response:	52Hz - 20KHz (+/- 2dB in preset 4)
Maximum SPL Power:	128dB peak (1m)
Includes four single button user-definable presets:	Preset 1: Full range Preset 2: Floor monitor Preset 3: Set to 100Hz for use with subwoofer Preset 4: Flat response
Horn:	60°, conical
Amplification:	800W @ 4Ω (12" LF driver) + 200W @ 16Ω (2.84" HF driver); amplifier with complete digital process and Ethernet control with the ArmoníaPlus® System Manager program
Bass Components:	1 x 12" Neodymium, AES 500W, 8Ω
Treble Components:	1 x 2.84" Neodymium, AES 90W, 16Ω
Enclosure (feet included)	
Front:	444 x 390 mm
Depth:	321.67 mm
Net Weight:	19.5Kg
Connectors:	2 x Neutrik powerCON TRUE male and female; 2 x XLR male and female; Ethernet



DIMENSIONS

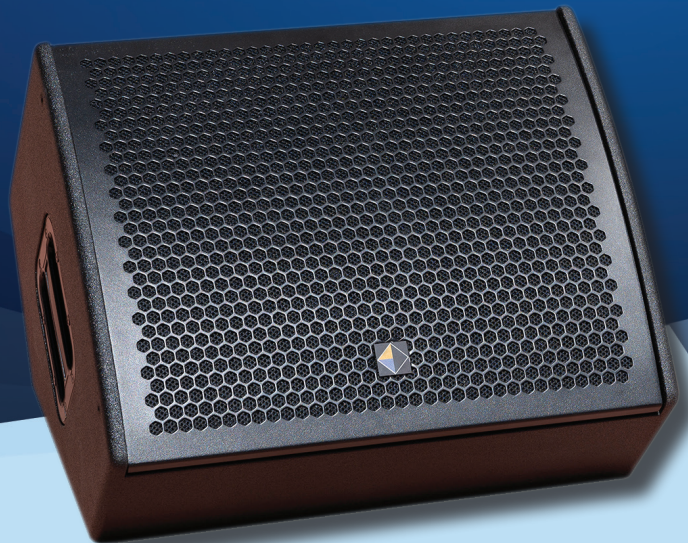


WEDGE SERIES • ME15WAX

High Performance Coaxial 15" Active Stage Monitor

- Custom components.
- Self-powered enclosure with 1 x 15" LF and 1 x 2.84" HF coaxial driver.
- Floor monitor/PA position.
- Low feedback level.
- Excellent performance as a floor monitor.
- Includes 800W + 200W Class D amplifier.
- Light weight (23Kg).
- Complete internal digital process (includes 4 user-selectable presets) and Ethernet connection for updates and programming/control with ArmoníaPlus® System Manager
- Plate for standard tripod with two holes for 0° and 5° inclination.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.

ArmoníaPlus
System Manager



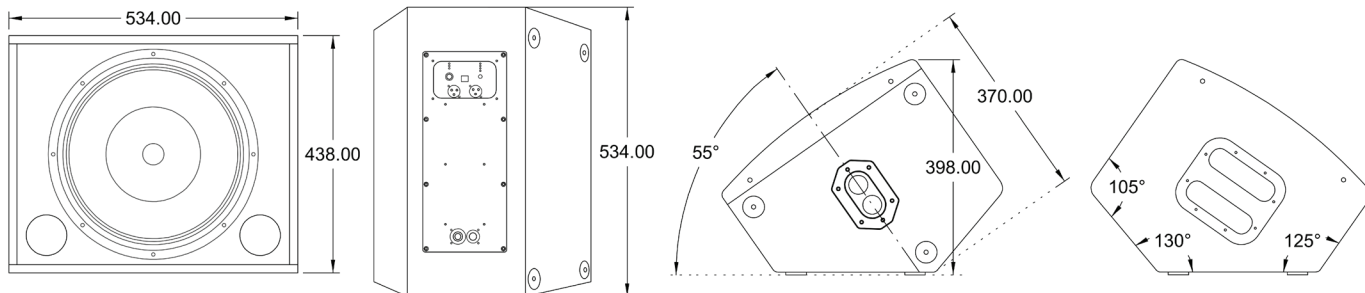


TECHNICAL SPECIFICATIONS

Frequency Response:	42Hz - 20KHz (+/- 2dB in preset 4)
Maximum SPL Power:	132dB peak (1m)
Includes four single button user-definable presets:	Preset 1: Full range Preset 2: Floor monitor Preset 3: Set to 100Hz for use with subwoofer Preset 4: Flat response
Horn:	60°, conical
Amplification:	800W @ 4Ω (15" LF driver) + 200W @ 16Ω (2.84" HF driver); amplifier with complete digital process and Ethernet control with the ArmoníaPlus® System Manager program
Bass Components:	1 x 15" Neodymium, AES 500W, 8Ω
Treble Components:	1 x 2.84" Neodymium, AES 90W, 16Ω
Enclosure (feet included)	
Front:	534 x 438 mm
Depth:	370 mm
Net Weight:	23Kg
Connectors:	2 x Neutrik powerCON TRUE male and female; 2 x XLR male and female; Ethernet



DIMENSIONS



HORIZON SERIES • ME12Z

High Performance 12" Passive Trapezoidal Enclosure for Point Source and Horizontal Array

- Custom components.
- High SPL output (134dB peak).
- High performance PA enclosure. Excellent Array performance with up to 3 horizontal stacking enclosures.
- 90° x 60° rotatable horn (optional 60° x 40° for horizontal array).
- Custom passive filter with multiple protections, made of High-End components
- HEPC® (High-End Phase Coherence) filter technology.
- 12 aerial fixing points for M10 nut. Plate for standard tripod.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.





TECHNICAL SPECIFICATIONS

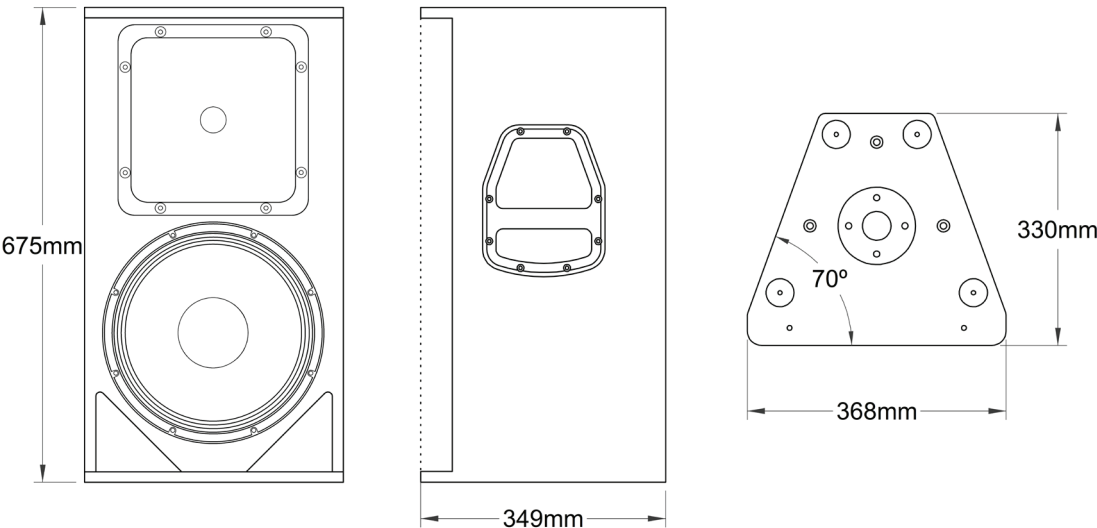
Frequency Response:	60Hz - 19KHz
Sensitivity (1W@1m):	101dB
Power Handling (continuous):	AES 900W
Recommended Amplification:	1.200W
Nominal Impedance:	8Ω
Maximum SPL Power:	134dB peak (1m)
Horn:	90° x 60° (optional 60° x 40°), rotatable
Bass Components:	1 x 12" Neodymium, AES 700W, 8Ω
Treble Components:	1 x 1.4" Neodymium, AES 80W, 8Ω

Enclosure (vertical position)

Front:	368 x 675mm
Depth:	330mm
Net Weight:	22Kg
Connectors:	2 x Neutrik Speakon



DIMENSIONS



SPOT SERIES • ME6.5S

Ultra High Performance 6.5" Passive Compact Trapezoidal Enclosure

- Custom components.
- Unbeatable power/weight ratio (120dB peak/8Kg).
- Passive enclosure with 1 x 6.5" LF and 1 x 1" HF drivers. Available in 8Ω and 16Ω versions.
- Custom passive filter made of High-End components.
- HEPC® (High-End Phase Coherence) filter technology.
- Ideal for portable PA systems in combination with SUB series subwoofers and for permanent installations.
- 80° conical horn.
- Available in black and white finishes as standard; wide range of RAL colours on request*.
- 12 aerial fixing points for M6 nut; accept K&M® mount model 24180.
- Includes plate with M20 thread on the lower side for standard tripod adapter.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



(*) More information on page 66





TECHNICAL SPECIFICATIONS

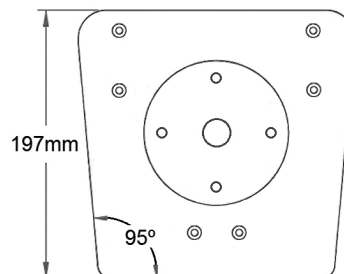
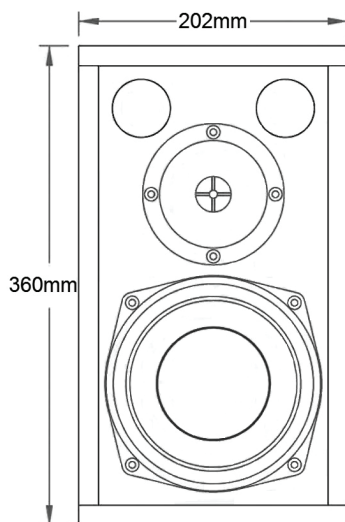
Frequency Response:	60Hz - 20KHz (+/- 6dB)
Sensitivity (1W@1m):	94dB
Power Handling (continuous):	AES 300W
Recommended Amplification:	200W to 600W
Nominal Impedance:	8Ω (available in 16Ω version)
Maximum SPL Power:	120dB peak (1m)
Horn:	80°, conical
Bass Components:	1 x 6.5" Ferrite, AES 200W, 8Ω
Treble Components:	1 x 1" Neodymium, AES 20W, 8Ω

Enclosure (vertical position)

Front:	360 x 202mm
Depth:	197mm
Net Weight:	8Kg
Connectors:	2 x Neutrik Speakon



DIMENSIONS



SPOT SERIES • ME8SA MKII

Ultra High Performance 8" Active Compact Trapezoidal Enclosure

- Custom components.
- Unbeatable power/weight ratio (127dB peak/10.2Kg).
- Self-powered enclosure with 1 x 8" LF and 1 x 1" HF drivers. 90° x 60° rotatable horn. Available in 8Ω and 16Ω versions.
- Ideal for portable PA systems in combination with SUB series subwoofers and for permanent installations.
- Includes 2 Class D amplifiers of 400W each.
- Complete internal digital processing (includes 4 user-definable presets and Ethernet connector for programming, control and upgrades).
- Available in black and white finishes as standard; wide range of RAL colours on request*.
- Horizontal rigging by using an adjustable lyre. Vertical gravity rigging to one point by using a microbumper (adjustable inclination between 0° and 6°).
- Plate for standard tripod with two holes for 0° and 5° inclination.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



Armonía-Plus
System Manager

(*) More information on page 66





TECHNICAL SPECIFICATIONS

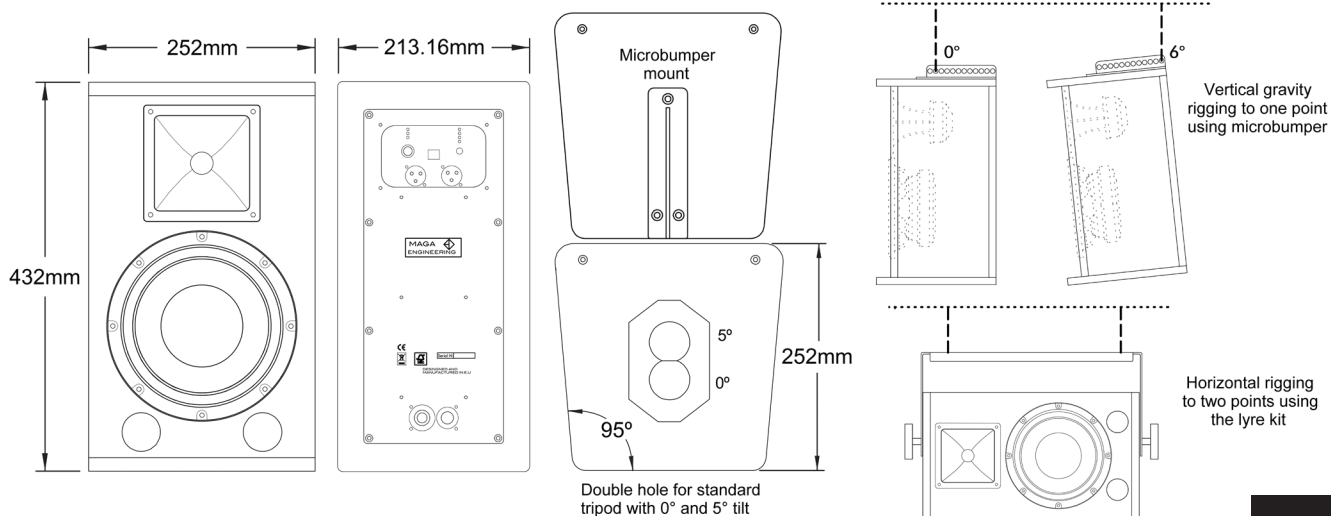
Frequency Response:	60Hz - 19KHz (+/- 3dB)
Maximum SPL Power:	127dB peak (1m)
Includes four single button user-definable presets:	Preset 1: Full Range Preset 2: Floor monitor Preset 3: Set to 100Hz for use with subwoofer Preset 4: Response for voice use
Horn:	90° x 60°, rotatable
Amplification:	2 class D amplifiers with 400W @ 8Ω each, with complete digital processing
Bass Components:	1 x 8" Neodymium, AES 350W, 8Ω
Treble Components:	1 x 1" Neodymium, AES 40W, 16Ω

Enclosure (vertical position)

Front:	252 x 432mm
Depth:	252mm
Net Weight:	10.2Kg
Connectors:	2 x Neutrik powerCON TRUE; 2 x XLR male and female; Ethernet



DIMENSIONS



SPOT SERIES • ME8S

Ultra High Performance 8" Passive Compact Trapezoidal Enclosure

- Custom components.
- Unbeatable power/weight ratio (127dB peak/11.2Kg).
- Passive enclosure with 1 x 8" LF and 1 x 1" HF drivers. 90° x 60° rotatable horn. Available in 8Ω and 16Ω versions.
- Custom passive filter made of High-End components.
- HEPC® (High-End Phase Coherence) filter technology.
- Ideal for portable PA systems in combination with SUB series subwoofers and for permanent installations.
- Available in black and white finishes as standard; wide range of RAL colours on request*.
- Horizontal rigging by using an adjustable lyre. Vertical gravity rigging to one point by using a microbumper (adjustable inclination between 0° and 6°).
- Plate for standard tripod with two holes for 0° and 5° inclination.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- Hexagonal punched front screen and high-strength epoxy finish, with special acoustic coating to protect the loudspeakers against dust and dirt.
- MAGA ENGINEERING® 5-year limited warranty.



(*) More information on page 66





TECHNICAL SPECIFICATIONS

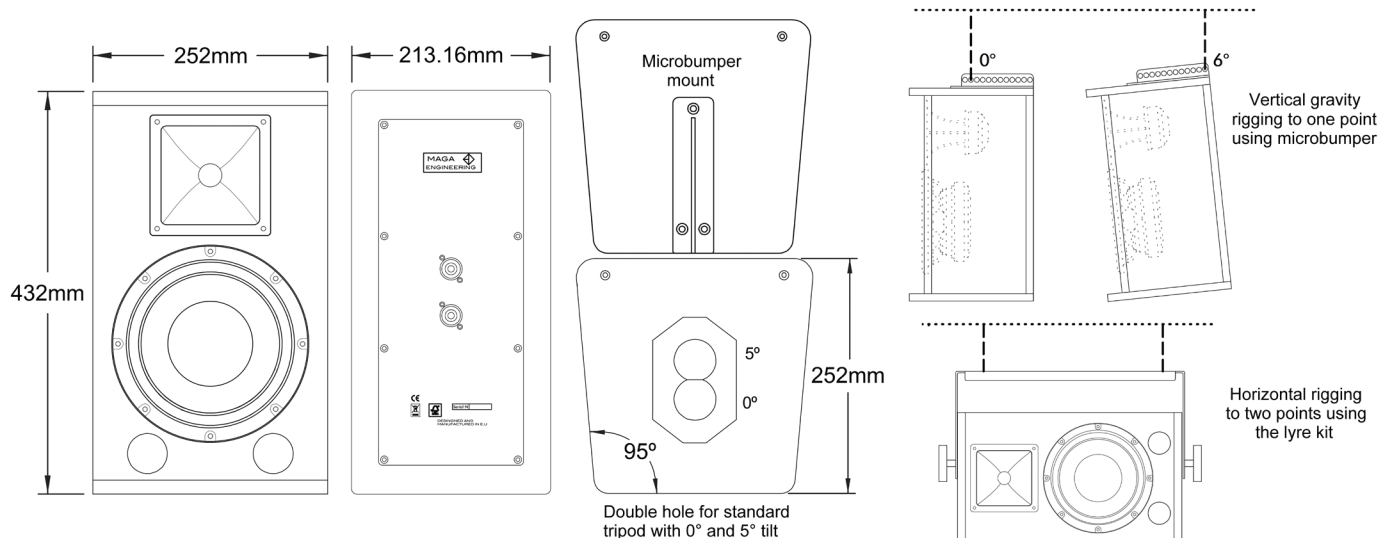
Frequency Response:	60Hz - 19KHz (+/- 3dB)
Sensitivity (1W@1m):	94dB
Power Handling (continuous):	AES 400W
Recommended Amplification:	200W to 800W
Nominal Impedance:	8Ω (available in versión 16Ω)
Maximum SPL Power:	127dB peak (1m)
Horn:	90° x 60°, rotatable
Bass Components:	1 x 8" Ferrite, AES 350W, 8Ω
Treble Components:	1 x 1" Ferrite, AES 40W, 16Ω

Enclosure (vertical position)

Front:	252 x 432mm
Depth:	252mm
Net Weight:	11.2Kg
Connectors:	2 x Neutrik Speakon



DIMENSIONS



BROADCAST SERIES • ME10BA

High SPL Active Monitor for Mixing and Audiovisual Post-production Studios

- Custom components.
- Self-powered enclosure with 1 x 10" LF and 1 x 1" HF drivers.
- High SPL output (125dB peak).
- Specifically designed for mixing and audiovisual post-production studios.
- Includes 2 class D 250W amplifiers, with analog (2 x XLR male/female, RCA) and digital (AES, S/PDIF and optical) connections; USB 2.0 configuration interface.
- Optional DANTE® connection.
- Full internal digital processing (includes 3 user selectable presets).
- 16 aerial fixing points for M8 nut, which allow any vertical or horizontal rigging position.
- Manufactured from 18 layers of Finnish birch.
- Woods used complies with the FSC® program which guarantees the control of production and reforestation.
- Finished with special Polyurea paint, waterproof and resistant to erosion and degradation.
- Rugged construction of panels, assembled with tongue and groove technique and subsequent gluing and pressing.
- MAGA ENGINEERING® 5-year limited warranty.



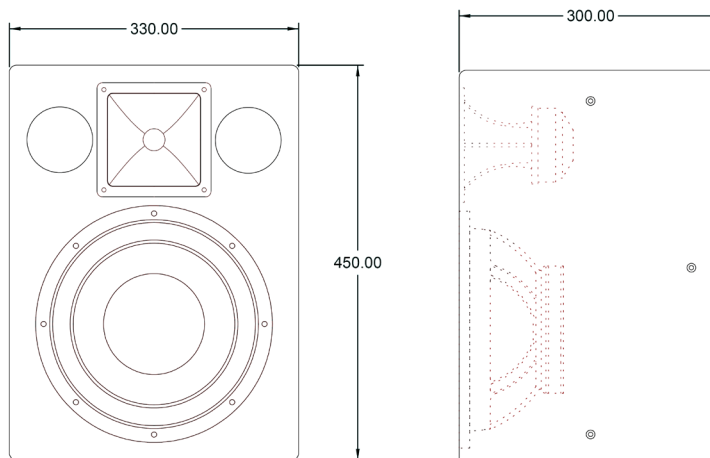


TECHNICAL SPECIFICATIONS

Frequency Response:	45Hz - 22KHz (+/- 1dB)
Input Nominal Sensitivity:	+4dBu
Maximum SPL Power:	125dB peak (1m)
Includes three single button user-definable presets:	Preset 1: Flat Preset 2: Treble way with -2dB Preset 3: X-curve
Horn:	90° x 60°, rotatable
Amplification:	2 x 250W @ 4Ω class D amplifiers with complete digital processing
Bass Components:	1 x 10" Ferrite, AES 250W, 4Ω
Treble Components:	1 x 1" de Neodymium, AES 30W, 8Ω
Enclosure (vertical position)	
Front:	330 x 450mm
Depth:	300mm
Net Weight:	18Kg
Connectors:	Analog (2 x XLR male/female, RCA); Digital (AES, S/PDIF and Optical); USB 2.0 configuration interface; optional DANTE® connection



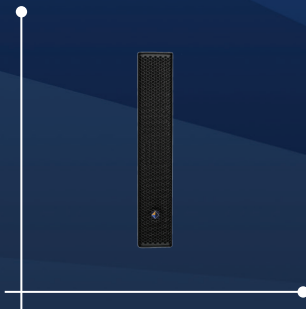
DIMENSIONS



SLIM SERIES • ME63SL

Ultra-compact Passive Column Speaker

- Custom components.
- Ultra-compact passive column speaker with 6 x 3" (0.75" voice coil) neodymium transducers .
- High SPL output (125dB peak).
- Ideal for portable PA systems in combination with SUB series subwoofers and for permanent installations.
- Made of stainless steel.
- Welded and perfectly sealed structure with polymer coating to form an airtight housing.
- Includes plates integrated in the structure for the connection of several accessories such as wall brackets and adaptor for 35mm bar with inclination system.
- Finished with special high resistance epoxy paint.
- Robust, heavy-duty front grille with special acoustic coating to protect the loudspeakers from dust and dirt.
- Wide range of RAL colours on request*.
- MAGA ENGINEERING® 5-year limited warranty.



(*) More information on page 66





TECHNICAL SPECIFICATIONS

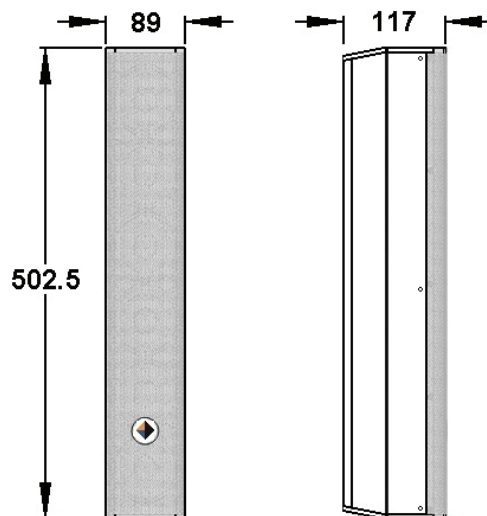
Frequency Response:	180Hz - 20kHz (+/- 3dB)
Sensitivity (1W@1m):	97dB
Power Handling (continuous):	AES 150W
Recommended Amplification:	150W to 300W
Nominal Impedance:	32Ω
Maximum SPL Power:	125dB peak (1m)
Angle of Coverage:	Horizontal: 100° / Vertical: 15°
Components:	6 x 3" (0.75" voice coil) Neodymium

Enclosure (vertical position)

Front:	502.5 x 89mm
Depth:	117mm
Net Weight:	4.4Kg
Connectors:	2 x Neutrik Speakon



DIMENSIONS



SLIM SERIES • ME123SL

Ultra-compact Passive Column Speaker

- Custom components.
- Ultra-compact passive column speaker with 6 x 3" (0.75" voice coil) neodymium transducers .
- High SPL output (125dB peak).
- Ideal for portable PA systems in combination with SUB series subwoofers and for permanent installations.
- Made of stainless steel.
- Welded and perfectly sealed structure with polymer coating to form an airtight housing.
- Includes plates integrated in the structure for the connection of several accessories such as wall brackets and adaptor for 35mm bar with inclination system.
- Finished with special high resistance epoxy paint.
- Robust, heavy-duty front grille with special acoustic coating to protect the loudspeakers from dust and dirt.
- Wide range of RAL colours on request*.
- MAGA ENGINEERING® 5-year limited warranty.



(*) More information on page 66





TECHNICAL SPECIFICATIONS

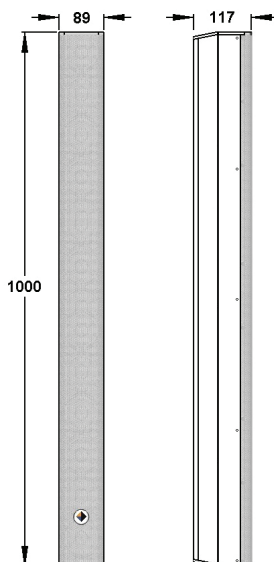
Frequency Response:	180Hz - 20kHz (+/- 3dB)
Sensitivity (1W@1m):	96dB
Power Handling (continuous):	AES 300W
Recommended Amplification:	200W to 800W
Nominal Impedance:	8Ω
Maximum SPL Power:	127dB peak (1m)
Angle of Coverage:	Horizontal: 100° / Vertical: 15°
Components:	12 x 3" (0.75" voice coil) Neodymium

Enclosure (vertical position)

Front:	1.000 x 89mm
Depth:	117mm
Net Weight:	13Kg
Connectors:	2 x Neutrik Speakon



DIMENSIONS





AMPLIFICATION

To amplify our Line Array and Maga Mini systems, we use amplification from the manufacturers **Lab.gruppen®** and **Powersoft®**.

In both cases, this is the latest generation amplification which is industry standard, well proven in terms of quality, reliability and performance and which, in addition, integrates DSP with a complete management system and Ethernet, AES/EBU and Dante® connections.

In order to minimise the risk of error when connecting the system and to make it easier for the user to assemble and operate it, all the amplifiers leave the factory in their rack, conveniently machined, labeled and protected by a custom flight case.

Likewise, all DSP processors integrated in the amplifiers leave the factory programmed with specific presets to the configuration of the chosen system.

LINE ARRAY Systems

Our Line Array systems leave the factory as a turnkey project. To get the highest performance of our systems, we use the following amplifiers and models:

- **Lab.gruppen® PLM Series™**. **PLM™ 12K44** and **PLM™ 20K44** models.
- **Powersoft® X Series™**. **X™8**, **X™4L** and **X™4** models.

All the amplifiers mentioned above are 4-channel models (except the Powersoft® X™8 model, which is an 8-channel amplifier).

MAGA MINI Systems

Our Maga Mini systems can be self-powered or passive. In the case of self-powered Maga Mini systems, the enclosures include **Powersoft®** and **RAM Audio® amplifier modules**.

In the case of passive systems, we use **Powersoft® T Series™** amplification. These amplifiers are 4-channel models.

Below, you can find the technical specifications of each of the models mentioned above.



AMPLIFICATION FOR LINE ARRAY SYSTEMS

MAGA ENGINEERING® ME Pi4-10K

- 10.000W amplifier with 4 output channels.
- 4 x 2.500W ($2\Omega / 4\Omega$), 4 x 1.600W (8Ω), 4 x 2.500W (Hi-Z 70V / Hi-Z 100V).
- Maximum output voltage 176V peak.
- Maximum output current 50A peak.
- Amplifier designed with a non-symmetrical class H topology which allows working with very high voltages given incredible headroom and a great punch.
- Powerful dual-precision 64-bit DSP (4 inputs/4 outputs) at 96 kHz, and high-performance AD/DA converters at 96 kHz/24 bits. Minimum process latency time of 0.85 ms. Custom FIR processes up to 1000 taps.
- Dante™ Networking (compatible with AES67 and DDM) optional and AES3 digital inputs.
- Two-port Ethernet switch for daisy chain connection.
- USB port for firmware update and DSP control.
- Extra-large 4.3" IPS display, capacitive touch panel user interface.
- QuantaPulse™ SMPS.
- Similar power per channel in any impedance.
- Advanced PMS™ (Power Management System) that incorporates a set of protection systems both in the power supply and in the audio modules (Soft-start protections, Turn-on Turn-off transients, Muting at turn-on, Over-heating, DC, RF, Short-circuit, Open or mismatched loads, Overloaded power supply, ICL™, PMS™ and SSP™) that works in real time continuously, keeping all amplifier variables within safe working thresholds always with the best reliability.
- Exceptional power sharing in asymmetrical loads.
- Powerful and fast response cooling system.
- Industry standard Neutrik® XLR and Speakon® connectors.
- 2-Year Warranty Program.
- Designed and engineered in Spain.





ESPECIFICACIONES TÉCNICAS

General

Number of amplifier channels: 4

Total burst power all channels: 10.000W

Max. output power

Maximum output power per channel @ 8Ω: 1.600W

Maximum output power per channel @ 4Ω / 2Ω: 2.500W

Maximum output power @ 8Ω Bridged: 5.000W

Maximum output power @ 4Ω Bridged: 5.000W

Hi-Z 70 V / Hi-Z 100 V: 2.500W

Amplifier output modules

Maximum output voltage: 176V

Maximum output current: 50A

Audio

Voltage Gain: 26dB - 44dB (1dB
step)

Total Harmonic Distortion: < 0.05 %

Intermodulation Distortion (SMPTE): < 0.05 %

Signal-to-Noise Ratio (SNR): 107,5dB

Channel separation (Crosstalk) at 1 kHz: > 70dB

Front Panel Interface

Firmware Update and DSP Control: 1 x USB type B

Rear Panel Interface

Analog, 2-channel I/O (input + link): 4 x Neutrik 3-pin XLR,
electronically balanced

AES / EBU / I/O (input + link): 2 x Neutrik 3-pin XLR

Output connectors: 4 x Neutrik speakON

Ethernet Control Ports (daisy chain): 2 x RJ45

Dante™ Networking* Digital Inputs

(compatible with AES67 and DDM): 2 x RJ45 Neutrik etherCON

Required AC Mains

Operating Voltage (50Hz-60Hz): 170V-265V AC / 90V-140V AC

1/8 Rated Power (@230V, 4 ohms): 16A

Dimensions and Weight

Width: 483 mm

Height: 89 mm

Depth: 320 mm


Weight: 8,5 kg

*: Dante® connection is optional.

**More information on models and specifications can
be found at www.magaengineering.com**

AMPLIFICATION FOR LINE ARRAY SYSTEMS

LAB.GRUPPEN® PLM™ 12K44 SP

- 12.000W amplifier with 4 flexible output channels and up to 5.900W channel output for touring applications.
- 4 x 3.000W (2Ω / 2.67Ω / 4Ω), 4 x 1.900W (8Ω), 4 x 950W (16Ω), 4 x 3.000W (Hi-Z 70V / Hi-Z 100V).
- Proven and reliable Class-TD output stage with proprietary Intercooler® high-efficiency cooling system.
- LAKE™ digital signal processing for unparalleled loudspeaker management and system control.
- Integrated 8x channels of dual redundant Dante digital audio networking with AES67 support.
- Rational Power Management (RPM) provides total flexibility to allocate available power across all 4 output channels.
- Best-in-class Power Factor Correction (PFC) with Current Draw Modelling reduces running costs and minimizes environmental impact.
- Under-Voltage Limiting (UVL) for continued operation during severe mains supply voltage drops.
- Universal power supply (70-265V AC).
- Redundant audio inputs and on-board system surveillance for full system security.
- Backlit, white-on-black front panel display and menu navigation buttons.
- 3 front-to-rear airflow fans with temperature control for optimal speed and reduced noise. Removable dust filter grilles for increased air circulation.
- 4 “LAKE Class” analog input channels with Iso-Float ground isolation.
- 4 input channels of AES/EBU (AES3) digital audio supporting all standard sample rates up to 192 kHz with 24-bit resolution.
- 2 Neutrik etherCON RJ-45 ports provide dual redundant Dante™ interfaces and remote configuration via LAKE™ Controller and Dante™ Controller software.
- Balanced analog and AES/EBU audio inputs on Neutrik XLR connectors.
- 1 NLT8 and 2 NLT4 Neutrik speakON output connectors.
- 10-Year Warranty Program.
- Designed and engineered in Sweden. 



LAB.GRUPPEN

 Dante®

 lake



TECHNICAL SPECIFICATIONS

General

Processing / Network: Lake/Dante

Number of amplifier channels: 4

Total burst power all channels (share among channels with RPM): 12.000W

Max. output power (all channels driven)

2Ω / 2,67Ω / 4Ω: 3.000W

8Ω: 1.900W

16Ω: 950W

Hi-Z 70 V / Hi-Z 100 V: 3.000W

Amplifier output modules (all channels)

Peak output voltage: 194V

Max. output current: 67A

Audio Performance (Amplifier platform with digital input)

THD + N 20 Hz - 20 kHz for 1 W: < 0.05 %

THD + N at 1 kHz and 1 dB below clipping: < 0.04 %

Dynamic range: > 114dB

Channel separation (Crosstalk) at 1 kHz: > 70dB

Frequency response (1 W into 8Ω, 20 Hz - 20 kHz): +/- 0.05dB

Internal Sample Rate / Data path: 48 / 96 kHz / 32 bit floating point

Product propagation delay AES 96 kHz / analog

input: 1.61 / 1.68ms

AES Inputs

Inputs: 4 AES inputs

Supported sample rates / resolution: 44.1, 48, 88.2, 96, 176.4, 192 kHz / up to 24 bits

Sample rate conversion THD+N 20 Hz - 20 kHz

unweighted: 0.0000003

Analog Inputs

Inputs: 4

Maximum input / digital reference: +26 dBu / +21 dBu

Sampling rate / Resolution: 96kHz / 24 bit

Input impedance balanced /

unbalanced: 20 / 10 kΩ

THD+N (typical at 1 kHz

unweighted): 0.0000022

THD+N (typical at 20 Hz and 20 kHz

unweighted): 0.0000033

Back panel Interface

Analog, 2-channel I/O (input + link): 4 x 3-pin XLR, electronically balanced

AES / EBU / I/O (input + link): 2 x 3-pin XLR

Output connectors: Neutrik speakON (1 x NLT8, 2 x NLT4) or 4 Binding Posts (pairs)

Auto 10/100, Auto Uplink: 2 x RJ45 etherCON

Control and monitoring interface: Via Ethernet for Lake Controller software, or DLM (the 3rd party protocol)

Mains Power

Nominal voltage: 100 - 240V AC, 45 - 66Hz

Operating voltage: 70 - 265V AC

Dimensions and Weight

Front: 483 x 88 mm

Depth: 424 mm

Weight: 16.5 kg

More information on models and specifications can be found at www.labgruppen.com

AMPLIFICATION FOR LINE ARRAY SYSTEMS

LAB.GRUPPEN® PLM™ 20K44 SP

- 20.000W amplifier with 4 flexible output channels and up to 5.900W channel output for touring applications.
- 4 x 4.400W ($2\Omega / 4\Omega$), 4 x 5.000W (2.67Ω), 4 x 2.300W (8Ω), 4 x 1.150W (16Ω), 4 x 3.300W (Hi-Z 70V), 4 x 4.700W (Hi-Z 100V).
- Proven and reliable Class-TD output stage with proprietary Intercooler® high-efficiency cooling system.
- LAKE™ digital signal processing for unparalleled loudspeaker management and system control.
- Integrated 8x8 channels of dual redundant Dante digital audio networking with AES67 support.
- Rational Power Management (RPM) provides total flexibility to allocate available power across all 4 output channels.
- Best-in-class Power Factor Correction (PFC) with Current Draw Modelling reduces running costs and minimizes environmental impact.
- Under-Voltage Limiting (UVL) for continued operation during severe mains supply voltage drops.
- Universal power supply (70-265V AC).
- Redundant audio inputs and on-board system surveillance for full system security.
- Backlit, white-on-black front panel display and menu navigation buttons.
- 3 front-to-rear airflow fans with temperature control for optimal speed and reduced noise. Removable dust filter grilles for increased air circulation.
- 4 "LAKE Class" analog input channels with Iso-Float ground isolation.
- 4 input channels of AES/EBU (AES3) digital audio supporting all standard sample rates up to 192 kHz with 24-bit resolution.
- 2 Neutrik etherCON RJ-45 ports provide dual redundant Dante™ interfaces and remote configuration via LAKE™ Controller and Dante™ Controller software.
- Balanced analog and AES/EBU audio inputs on Neutrik XLR connectors.
- 1 NLT8 and 2 NLT4 Neutrik speakON output connectors.
- 10-Year Warranty Program.
- Designed and engineered in Sweden.



LAB.GRUPPEN

Dante®

lake



TECHNICAL SPECIFICATIONS

General

Processing / Network: Lake/Dante

Number of amplifier channels: 4

Total burst power all channels (share among channels with RPM): 20.000 W

Max. output power (all channels driven)

2Ω / 4Ω: 4.400 W

2,67Ω: 5.000 W

8Ω: 2.300 W

16Ω: 1.1500 W

Hi-Z 70V / Hi-Z 100V: 3.300W / 4.700W

Amplifier output modules (all channels)

Peak output voltage: 194V

Max. output current: 67A

Audio Performance (Amplifier platform with digital input)

THD + N 20 Hz - 20 kHz for 1 W: < 0.05 %

THD + N at 1 kHz and 1 dB below clipping: < 0.04 %

Dynamic range: > 114dB

Channel separation (Crosstalk) at 1 kHz: > 70dB

Frequency response (1 W into 8Ω, 20 Hz - 20 kHz): +/- 0.05dB

Internal Sample Rate / Data path: 48 / 96kHz / 32 bit floating point

Product propagation delay AES 96 kHz / analog

input: 1.61 / 1.68 ms

AES Inputs

Inputs: 4 AES inputs

Supported sample rates / resolution: 44.1, 48, 88.2, 96, 176.4, 192kHz / up to 24 bits

Sample rate conversion THD+N 20 Hz - 20 kHz

unweighted: 0.0000003

Analog Inputs

Inputs: 4

Maximum input / digital reference: +26 dBu / +21 dBu

Sampling rate / Resolution: 96kHz / 24 bit

Input impedance balanced /

unbalanced: 20 / 10kΩ

THD+N (typical at 1 kHz

unweighted): 0.0000022

THD+N (typical at 20 Hz and 20 kHz

unweighted): 0.0000033

Back panel Interface

Analog, 2-channel I/O (input + link): 4 x 3-pin XLR, electronically balanced

AES / EBU / I/O (input + link): 2 x 3-pin XLR

Output connectors: Neutrik speakON (1 x NLT8, 2 x NLT4) or 4 Binding Posts (pairs)

Auto 10/100, Auto Uplink: 2 x RJ45 etherCON

Control and monitoring interface: Via Ethernet for Lake Controller software, or DLM (the 3rd party protocol)

Mains Power

Nominal voltage: 100 - 240V AC, 45 - 66Hz

Operating voltage: 70 - 265V AC

Dimensions and Weight

Front: 483 x 88 mm

Depth: 424 mm

Weight: 17 kg

More information on models and specifications can be found at www.labgruppen.com

AMPLIFICATION FOR LINE ARRAY SYSTEMS

POWERSOFT® X™4

- 12.000W amplifier with 4 flexible output channels.
- 4 x 5.200W (2Ω), 4 x 4.000W (2.7Ω), 4 x 3.000W (4Ω), 4 x 1.600W (8Ω).
- Maximum output voltage of 175V peak.
- Maximum output current of 130A peak.
- Top-grade DSP with ArmoníaPlus System Manager™, high dynamic range and extensive feature set, multi-stage signal processing (innovative solutions for modeling speakers behaviour and power handling), input and output equalizers IIR, FIR, IIR+FIR and raised-cosine filters, complete sets of limiters (peak, RMS voltage, RMS current, and TruePower™) and compensation of the speaker cable losses with Active DampingControl™.
- Power supply suitable for Single-Phase, Bi-Phase or Three-Phase operation, from 85 VAC up to 460 VAC, provides maximum flexibility and versatility in any power distribution design.
- Power Load Balancing with Power Factor Correction enhances efficiency in power distribution.
- Powersoft Green Audio Power® technologies improves efficiency and minimizes the 'carbon footprint' and the operational costs.
- Flexible routing/mixing provided by the internal 4x4 input/output matrix, allows the user to mix and route analog and digital I/O.
- Easy plug-and-play Dante® (optional) networking allows easy routing of the signal from any node within the network to Powersoft X4.
- 4 input channels with physical analog and digital AES3 connectors and 2 redundant Dante® (optional) connection provide maximum flexibility.
- Improved reliability thanks to the customizable input backup policy that allows to automatically switch input source in case of signal failure.
- Complete user interface integrated into Armonía Pro Audio Suite™.
- WiFi remote monitoring through smartphone and tablet.
- 4-Year Warranty Program.
- Designed and engineered in Italy.



ArmoníaPlus
System Manager





TECHNICAL SPECIFICATIONS

Channel Handling

Number of output channels: 4 mono, bridgeable
per ch. pair

Number of input channels (analog): 4 (4 x XLR)

Number of input channels (AES3): 4 (2 x XLR)

Number of input channels (Dante™ *): 16 (2 x RJ45)

Output Stage

Maximum output power per channel @ 8Ω: 1.600W

Maximum output power per channel @ 4Ω: 3.000W

Maximum output power per channel @ 2.7Ω: 4.000W

Maximum output power per channel @ 2Ω: 5.200W

Maximum output power @ 8Ω Bridged: 6.000W

Maximum output power @ 4Ω Bridged: 10.400W

Peak total output, all channels driven: 20.000W

Maximum unclipped output voltage: 175V peak

Maximum output current: 130A peak

Audio

Gain: 17dB - 47dB (0.1 dB
increments)

Default Gain: 32dB

Output Noise A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: -70.0dBV

Dynamic Range A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: 114.3dB

Damping Factor @ 8Ω, 20Hz - 500Hz: > 5.000

Slew Rate (input filter bypassed): > 50V/μs

Frequency Response (-3 dB, 1W @ 8Ω): 5Hz - 30kHz

Crosstalk (1 kHz): -70dB

THD+N (from 0.1W to Full Power): < 0.5% (typical <
0.01%)

DIM (from 0.1W to Full Power): < 0.5% (typical <
0.01%)

Input Impedance: 20kΩ Balanced

Input Acceptance: +27dBu

AC Mains Power

Single Phase

Nominal Voltage: 100 - 240V @ 50/60Hz

Operating Range: 90 - 264V from DC to 200Hz

Power Factor (1/8 Maximum Output

Power @ 4Ω): > 0.9

Current Draw (1/8 Maximum Output

Power @ 4Ω): 18A rms @ 100V / 9A rms @ 240V

Suggested circuit breaker: C16

Three Phase

Nominal Voltage: 173Y/100 - 416Y/240 V

3~, 3W+N+PE / 3W+PE

Power Factor (1/8 Maximum Output

Power @ 4Ω): > 0.9

Current Draw from Each Single Phase

(1/8 Maximum Output Power @ 4Ω): 6A rms @ 173Y / 3A rms @ 416Y

Suggested circuit breaker (per phase): C10

Idle Consumption (all AC MAINS

cases): < 100 W

Max. consumption (all AC MAINS

cases): < 3.000 W

Thermal

Operating temperature: 0° - 35°C / 32° - 95°F

Cooling: Fan, continuously variable

speed, temperature controlled

Dimensions and Weight

Front: 483 x 44.5 mm

Depth: 495 mm

Weight: 15kg

*: Dante® connection is optional.

**More information on models and specifications can
be found at www.powersoft.com**

AMPLIFICATION FOR LINE ARRAY SYSTEMS

POWERSOFT® X™8

- 24.000W amplifier with 8 flexible output channels.
- 8 x 5.200W (2Ω), 8 x 4.000W (2.7Ω), 8 x 3.000W (4Ω), 8 x 1.600W (8Ω).
- Maximum output voltage of 175V peak.
- Maximum output current of 130A peak.
- Top-grade DSP with ArmoníaPlus System Manager™, high dynamic range and extensive feature set, multi-stage signal processing (innovative solutions for modeling speakers behaviour and power handling), input and output equalizers IIR, FIR, IIR+FIR and raised-cosine filters, complete sets of limiters (peak, RMS voltage, RMS current, and TruePower™) and compensation of the speaker cable losses with Active DampingControl™.
- Power supply suitable for Single-Phase, Bi-Phase or Three-Phase operation, from 85 VAC up to 460 VAC, provides maximum flexibility and versatility in any power distribution design.
- Power Load Balancing with Power Factor Correction enhances efficiency in power distribution.
- Powersoft Green Audio Power® technologies improves efficiency and minimizes the 'carbon footprint' and the operational costs.
- Flexible routing/mixing provided by the internal 8x8 input/output matrix, allows the user to mix and route analog and digital I/O.
- Easy plug-and-play Dante® (optional) networking allows easy routing of the signal from any node within the network to Powersoft X8.
- 8 input channels with physical analog and digital AES3 connectors and 2 redundant Dante® (optional) connection provide maximum flexibility.
- Improved reliability thanks to the customizable input backup policy that allows to automatically switch input source in case of signal failure.
- Complete user interface integrated into Armonía Pro Audio Suite™.
- WiFi remote monitoring through smartphone and tablet.
- 4-Year Warranty Program.
- Designed and engineered in Italy.



Armonía-Plus
System Manager





TECHNICAL SPECIFICATIONS

Channel Handling

Number of output channels: 8 mono, bridgeable
per ch. pair

Number of input channels (analog): 8 (8 x XLR)

Number of input channels (AES3): 8 (4 x XLR)

Number of input channels (Dante™ *): 16 (2 x RJ45)

Output Stage

Maximum output power per channel @ 8Ω: 1.600W

Maximum output power per channel @ 4Ω: 3.000W

Maximum output power per channel @ 2.7Ω: 4.000W

Maximum output power per channel @ 2Ω: 5.200W

Maximum output power @ 8Ω Bridged: 6.000W

Maximum output power @ 4Ω Bridged: 10.400W

Peak total output, all channels driven: 40.000W

Maximum unclipped output voltage: 175V peak

Maximum output current: 130A peak

Audio

Gain: 17dB - 47dB (0.1 dB
increments)

Default Gain: 32dB

Output Noise A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: -70.0dBV

Dynamic Range A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: 114.3dB

Damping Factor @ 8Ω, 20Hz - 500Hz: > 5.000

Slew Rate (input filter bypassed): > 50V/μs

Frequency Response (-3 dB, 1W @ 8Ω): 5Hz - 30kHz

Crosstalk (1 kHz): -70dB

THD+N (from 0.1W to Full Power): < 0.5% (typical <
0.01%)

DIM (from 0.1W to Full Power): < 0.5% (typical <
0.01%)

Input Impedance: 20kΩ Balanced

Input Acceptance: +27dBu

AC Mains Power

Single Phase

Nominal Voltage: 100 - 240V @ 50/60Hz

Operating Range: 90 - 264V from DC to 200Hz

Power Factor (1/8 Maximum Output

Power @ 4Ω): > 0.9

Current Draw (1/8 Maximum Output

Power @ 4Ω): 32A rms @ 100V / 18A rms @ 240V

Suggested circuit breaker: C32

Three Phase

Nominal Voltage: 173Y/100 - 416Y/240 V

3~, 3W+N+PE / 3W+PE

Power Factor (1/8 Maximum Output

Power @ 4Ω): > 0.9

Current Drawn from Each Single

Phase (1/8 Max. Output Power @ 4Ω): 12A rms @ 173Y / 6A rms @ 416Y

Suggested circuit breaker (per phase): C16

Idle Consumption (all AC MAINS

cases): < 200 W

Max. consumption (all AC MAINS

cases): < 5.000 W

Thermal

Operating temperature: 0° - 35°C / 32° - 95°F

Cooling: Fan, continuously variable speed,
temperature controlled

Dimensions and Weight

Front: 483 x 89 mm

Depth: 495 mm

Weight: 24kg

*: Dante® connection is optional.

**More information on models and specifications can
be found at www.powersoft.com**

AMPLIFICATION FOR LINE ARRAY SYSTEMS

POWERSOFT® X™4L

- 27.000W amplifier with 4 flexible output channels.
- 4 x 8.200W (2Ω), 4 x 7.700W (2.7Ω), 4 x 6.800W (4Ω), 4 x 4.800W (8Ω).
- Maximum output voltage of 300V peak.
- Maximum output current of 140A peak.
- Top-grade DSP with ArmoníaPlus System Manager™, high dynamic range and extensive feature set, multi-stage signal processing (innovative solutions for modeling speakers behaviour and power handling), input and output equalizers IIR, FIR, IIR+FIR and raised-cosine filters, complete sets of limiters (peak, RMS voltage, RMS current, and TruePower™) and compensation of the speaker cable losses with Active DampingControl™.
- Power supply suitable for Single-Phase, Bi-Phase or Three-Phase operation, from 85 VAC up to 460 VAC, provides maximum flexibility and versatility in any power distribution design.
- Power Load Balancing with Power Factor Correction enhances efficiency in power distribution.
- Powersoft Green Audio Power® technologies improves efficiency and minimizes the 'carbon footprint' and the operational costs.
- Flexible routing/mixing provided by the internal 4x4 input/output matrix, allows the user to mix and route analog and digital I/O.
- Easy plug-and-play Dante® (optional) networking allows easy routing of the signal from any node within the network to Powersoft X4.
- 4 input channels with physical analog and digital AES3 connectors and 2 redundant Dante® (optional) connection provide maximum flexibility.
- Improved reliability thanks to the customizable input backup policy that allows to automatically switch input source in case of signal failure.
- Complete user interface integrated into Armonía Pro Audio Suite™.
- WiFi remote monitoring through smartphone and tablet.
- 4-Year Warranty Program.
- Designed and engineered in Italy.



ArmoníaPlus
System Manager





TECHNICAL SPECIFICATIONS

Channel Handling

Number of output channels: 4 mono

Number of input channels (analog): 4 (4 x XLR)

Number of input channels (AES3): 4 (2 x XLR)

Number of input channels (Dante™ *): 16 (2 x RJ45)

Output Stage (Symmetrical / Asymmetrical)

Maximum output power per channel @ 8Ω: 4.800W / 5.000W

Maximum output power per channel @ 4Ω: 6.800W / 8.400W

Maximum output power per channel @ 2.7Ω: 7.700W / 9.600W

Maximum output power per channel @ 2Ω: 8.200W / 10.000W

Peak total output, all channels driven: 32.800W / 25.000W

Maximum unclipped output voltage: 300V peak

Maximum output current: 140A peak

(Symmetrical: Measured by driving and loading symmetrically all the channels / Asymmetrical: Measured by driving all channels, but with every second channel at -6dB)

Audio

Gain: 17dB - 47dB (0.1 dB increments)

Default Gain: 32dB

Output Noise A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: <-67dBV / <-67.5dBV

Dynamic Range A-Weighted @ 8Ω - Analog to

Analog / Digital to Analog: 113.5dB / 114dB

Damping Factor @ 8Ω, 20Hz - 500Hz: > 5.000

Slew Rate (input filter bypassed): > 50V/μs

Frequency Response (-3 dB, 1W @ 8Ω): 5Hz - 22.5kHz

Crosstalk (1 kHz): -70dB

THD+N (from 0.1W to Full Power): < 0.5% (typical < 0.01%)

DIM (from 0.1W to Full Power): < 0.5% (typical < 0.01%)

Input Impedance: 20kΩ Balanced

Input Acceptance: +27dBu

AC Mains Power

Single Phase

Nominal Voltage: 100 - 240V @ 50/60Hz

Operating Range: 90 - 264V from DC to 200Hz

Current Draw (1/8 Maximum Output

Power @ 4Ω): 26A rms @ 115V / 13A rms @ 230V

Suggested circuit breaker: C32 - C32/C16

Three Phase

Nominal Voltage: 173Y/100 - 416Y/240 V

3~, 3W+N+PE / 3W+PE

Current Draw from Each Single Phase

(1/8 Maximum Output Power @ 4Ω): 9A rms @ 199V Y three phase
115V / 5A rms @ 400V Y three
phase 230V

Suggested circuit breaker (per phase): C16

Idle Consumption (all AC MAINS

cases): < 230W

Max. consumption (all AC MAINS

cases): < 5.000W

Thermal

Operating temperature: 0° - 35°C / 32° - 95°F

Cooling: Fan, continuously variable

speed, temperature controlled

Dimensions and Weight

Front: 483 x 88mm

Depth: 495 mm

Weight: 24kg

*: Dante® connection is optional.

More information on models and specifications can be found at www.powersoft.com

AMPLIFICATION FOR MAGA MINI SYSTEMS

POWERSOFT® T™304

- 3.000W amplifier with 4 flexible output channels.
- 4 x 750W (2Ω / 4Ω / 8Ω).
- Maximum output voltage of 145V peak.
- Maximum output current of 50A peak.
- Top-grade DSP with ArmoníaPlus System Manager™, high dynamic range and extensive feature set, multi-stage signal processing (innovative solutions for modeling speakers behaviour and power handling), input and output equalizers IIR, FIR, IIR+FIR and raised-cosine filters, complete sets of limiters (peak, RMS voltage, RMS current, and TruePower™) and compensation of the speaker cable losses with Active DampingControl™.
- Universal power supply, from 90 VAC up to 264 VAC
- Easy plug-and-play Dante® networking allows easy routing of the signal from any node within the network to Powersoft T304.
- 4 analog input channels with physical XLR connectors.
- 1 digital AES3 input channel and 1 Dante® input provide maximum flexibility.
- Complete user interface integrated into Armonía Pro Audio Suite™.
- WiFi remote monitoring through smartphone and tablet.
- 4-Year Warranty Program.
- Designed and engineered in Italy.



Armonía-Plus
System Manager





TECHNICAL SPECIFICATIONS

Channel Handling

Number of output channels: 4 mono, bridgeable
per ch. pair

Number of input channels (analog): 4 (4 x XLR)

Number of input channels (AES3): 1 (1 x XLR)

Number of input channels (Dante™): 1 (1 x XLR)

Output Stage (Symmetrical / Asymmetrical)

Maximum output power per channel @ 8Ω: 750W / 1.200W

Maximum output power per channel @ 4Ω: 750W / 1.200W

Maximum output power per channel @ 2Ω: 750W / 1.200W

Maximum unclipped output voltage: 145V peak

Maximum output current: 50A peak

(Symmetrical: Measured by driving and loading symmetrically all the
channels / Asymmetrical: Measured by driving all channels, but with
every second channel at -6dB)

Audio

Gain: 32dB

Input sensitivity @ 8Ω: 2.57V rms

S/N (20 Hz - 20 kHz @ 8Ω): >110dB

Max input level: 24dBu

Frequency Response: 20Hz - 20kHz +/-
0.5dB

Crosstalk (1 kHz): <-70dB

Input impedance: 20kΩ Balanced

CMRR: >65dB

THD+N (from 0.1 W to Half Power): < 0.1% (typical <
0.05%)

SMPTE IMD (from 0.1 W to Half Power): < 0.1% (typical <
0.05%)

Output impedance at 100 Hz: 26mΩ

AC Mains Power

Nominal Voltage (+/- 10%): 100 - 240V @ 50/60Hz

Operating Range: 90 - 264V @ 50/60Hz

@ 120V

Standby Power: 15W

Idle Power: 32W

Power (1/8 of maximum output power

@ 4Ω): 532W

Current Draw (1/8 of maximum output

power @ 4Ω): 4.7A rms

Thermal Loss (1/8 of maximum output

power @ 4Ω): 537BTU/h

@ 230V

Standby Power: 16W

Idle Power: 32W

Power (1/8 of maximum output power

@ 4Ω): 525W

Current Draw (1/8 of maximum output

power @ 4Ω): 2.7A rms

Thermal Loss (1/8 of maximum output

power @ 4Ω): 512BTU/h

Dimensions and Weight

Front: 484 x 44.5 mm

Depth: 405 mm

Weight: 7.1kg

**More information on models and specifications can
be found at www.powersoft.com**

AMPLIFICATION FOR MAGA MINI SYSTEMS

POWERSOFT® T™604

- 6.000W amplifier with 4 flexible output channels.
- 4 x 1.500W (2Ω / 4Ω), 4 x 1.250W (8Ω).
- Maximum output voltage of 145V peak.
- Maximum output current of 50A peak.
- Top-grade DSP with ArmoníaPlus System Manager™, high dynamic range and extensive feature set, multi-stage signal processing (innovative solutions for modeling speakers behaviour and power handling), input and output equalizers IIR, FIR, IIR+FIR and raised-cosine filters, complete sets of limiters (peak, RMS voltage, RMS current, and TruePower™) and compensation of the speaker cable losses with Active DampingControl™.
- Universal power supply, from 90 VAC up to 264 VAC
- Easy plug-and-play Dante® networking allows easy routing of the signal from any node within the network to Powersoft T604.
- 4 analog input channels with physical XLR connectors.
- 1 digital AES3 input channel and 1 Dante® input provide maximum flexibility.
- Complete user interface integrated into Armonía Pro Audio Suite™.
- WiFi remote monitoring through smartphone and tablet.
- 4-Year Warranty Program.
- Designed and engineered in Italy.



Armonía-Plus
System Manager





TECHNICAL SPECIFICATIONS

Channel Handling

Number of output channels: 4 mono, bridgeable
per ch. pair

Number of input channels (analog): 4 (4 x XLR)

Number of input channels (AES3): 1 (1 x XLR)

Number of input channels (Dante™): 1 (1 x XLR)

Output Stage (Symmetrical / Asymmetrical)

Maximum output power per channel @ 8Ω: 1.250W / 1.250W

Maximum output power per channel @ 4Ω: 1.500W / 2.100W

Maximum output power per channel @ 2Ω: 1.500W / 1.600W

Maximum unclipped output voltage: 145V peak

Maximum output current: 50A peak

(Symmetrical: Measured by driving and loading symmetrically all the channels / Asymmetrical: Measured by driving all channels, but with every second channel at -6dB)

Audio

Gain:: 32dB

Input sensitivity @ 8Ω: 2.57V rms

S/N (20 Hz - 20 kHz @ 8Ω): >110dB

Max input level: 24dBu

Frequency Response: 20Hz - 20kHz +/-
0.5dB

Crosstalk (1 kHz): <-70dB

Input impedance: 20kΩ Balanced

CMRR: >65dB

THD+N (from 0.1 W to Half Power): < 0.1% (typical <
0.05%)

SMPTE IMD (from 0.1 W to Half Power): < 0.1% (typical <
0.05%)

Output impedance at 100 Hz: 26mΩ

AC Mains Power

Nominal Voltage (+/- 10%): 100 - 240V @ 50/60Hz

Operating Range: 90 - 264V @ 50/60Hz

@ 120V

Standby Power: 15W

Idle Power: 32W

Power (1/8 of maximum output power

@ 4Ω): 1.054W

Current Draw (1/8 of maximum output

power @ 4Ω): 9.5A rms

Thermal Loss (1/8 of maximum output

power @ 4Ω): 1.039BTU/h

@ 230V

Standby Power: 16W

Idle Power: 32W

Power (1/8 of maximum output power

@ 4Ω): 1.027W

Current Draw (1/8 of maximum output

power @ 4Ω): 5.2A rms

Thermal Loss (1/8 of maximum output

power @ 4Ω): 944BTU/h

Dimensions and Weight

Front: 484 x 44.5 mm

Depth: 405 mm

Weight: 7.5kg

More information on models and specifications can be found at www.powersoft.com

NOTES



The ME10V, ME10V *wide*, ME20V, ME24V, ME12W, ME15WX, ME12Z, ME6.5S and ME8S systems are equipped with HEPC® (High-End Phase Coherence) filtering technology, which guarantees a perfect sum and powerful, clear and highly intelligible coverage. In the case of the ME10V Line Array system, a perfect sum and a powerful, clear and highly intelligible coverage is guaranteed at distances of up to 70 meters (*). This is a real milestone for a compact, lightweight line array system (24 kilograms per element).

(*) For Line Arrays of eight (8) or more elements. This feature is truly unique, taking into account the extremely reduced dimensions and weight of each Maga Engineering® ME10V Line Array element. In general, each configuration must be dimensioned for the needs of the event, as well as the characteristics of the site and the audience. Maga Engineering® is not responsible for pressure and/or intelligibility losses caused by cross-wind or other external factors.



“The ME6.5S and ME8S enclosures (in their two active and passive versions) of the SPOT series and the ME63SL and ME123SL enclosures of the SLIM series can be supplied, on request, in a wide range of RAL colours. This special finish results in a slight surcharge, which varies according to the number of units ordered”

Lab.gruppen® is a registered trademark of Lab.gruppen AB. PLM™ (Powered Loudspeaker Management) is a trademark of Lab.gruppen AB.

Powersoft® is a registered trademark of Powersoft S.p.A.

NOTES

State of the Art Sound Systems

 **MADE AND
DESIGNED
IN SPAIN**

MAGA ENGINEERING
Carretera de Pedro Muñoz, 28
16630 Mota del Cuervo, Cuenca - ESPAÑA
CIF B-16249757

 +34 609 045 722
 +34 967 180 668
 sales@magaengineering.com
 <https://magaengineering.com>
 www.facebook.com/MagaEngineering
 www.instagram.com/maga.engineering