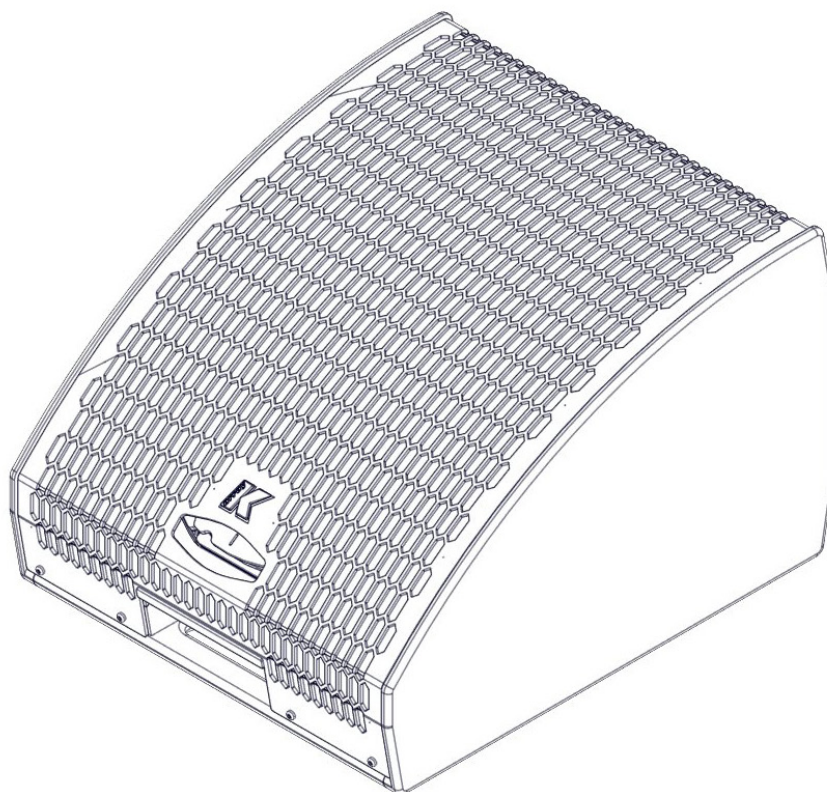




***Mastiff***  
***KM112, KM112P***

USER GUIDE  
English



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## SYMBOLS



K-array declares that this device is in compliance with applicable CE standards and regulations. Before putting the device into operation, please observe the respective country-specific regulations!

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Waste Electrical and Electronic Equipment (WEEE)  
Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling center for such equipment.

---



This symbol alerts the user to the presence of recommendations about the product's use and maintenance.

---



Warning: DANGEROUS VOLTAGE.  
Terminals marked with this symbol carry a risk of electric shock, therefore external wiring connected to these terminals requires installation by a qualified professional or the use of ready-made leads or cords.

---



This symbol alerts the user to the presence of recommendations about product's use and maintenance.

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This device complies with the Restriction of Hazardous Substances Directive.

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## 1. INTRODUCTION

The Mastiff KM112 and Mastiff KM112P are potent monitors in a small, compact form factor. Both models feature a coaxial 12" woofer and reach a maximum SPL of 133 dB (peak). The self-powered KM112 has a power output to drive the KM112P passive version, which in turn can drive a stereo mix, as well as a Thunder KMT18P subwoofer for a drum fill, making it one of the most versatile monitors on the market.

The integrated DSP features multiple analog and digital inputs and with the K-dante accessory, the system can be used in Dante network.


The monitors produce ultra-low distortion giving vocals and instruments incredible clarity and precise sound. Both models feature an asymmetrical 100° by 30° horn granting performers the possibility to select a wide or narrow sound emission in the horizontal plane. And with an incredibly strong stainless steel grill and sturdy birch wood chassis, these monitors are built to withstand any abuse that may incur from the musical acts onstage.



All Mastiff components are designed by K-array and custom made under K-array's quality control system.

## 2. KEY FEATURES

- Unique performance-to-size ratio
- Low profile
- Stainless steel grill
- Adjustable asymmetrical 30° x 100° horn
- Multiple analog and digital inputs (KM112)
- Onboard touch screen (KM112)
- Dedicated accessory for Dante connectivity (KM112)
- Speakon output to drive a passive unit (KM112)

### 3. SAFETY INFORMATION

 Warning: failure to follow these safety instructions could result in fire, shock or other injury or damage to the device or other property.

	
<p>This symbol alerts the user to the presence of recommendations about the product’s use and maintenance.</p>	<p>The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of not isolated, dangerous voltage within the product enclosure that may be of magnitude to constitute a risk of electrical shock.</p>

#### IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Keep this instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.



- When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**WARNING**

- Since the device is a CLASS I apparatus, it must be only connected to an AC three-wire grounding outlet. If your outlet isn't grounded, contact a licensed electrician to replace it with a property grounded outlet.
- To reduce the risk of electric shock, unplug the AC mains connector before installing audio cable. Reconnect the power cord only after making all signal connections. Do not use the product if the power cord is broken or frayed. Protect the power cord from being walked upon or pinched.
- To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
- **Avoiding hearing damage.** Professional loudspeakers are capable of producing extremely high sound levels and should be used carefully. Never stand close to loudspeakers driven at high volume. Set the volume to a safe level. You can adapt over time to a higher volume of sound that may sound normal but can be damaging to your hearing. Hearing loss get worse every time you're exposed to a sound level of 90 dB or over for an extended period of time. If you experience ringing in your ears or muffled speech, stop listening and have your hearing checked. The louder the volume, the less time is required before your hearing could be affected.
- **Voltage requirement.** Make sure that the supplied voltage stays within the specified range. Verify that your mains connection satisfies the power ratings of the device.
- Only connect the power supply to an appropriate power outlet
- Do not install the amplifier in wet or humid locations without using weather protection.
- **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK**, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.
- The main plug of the power supply cord shall remain readily accessible.

**CAUTION**

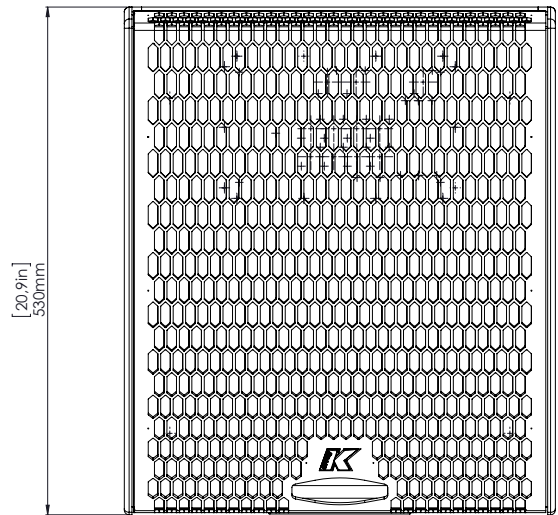
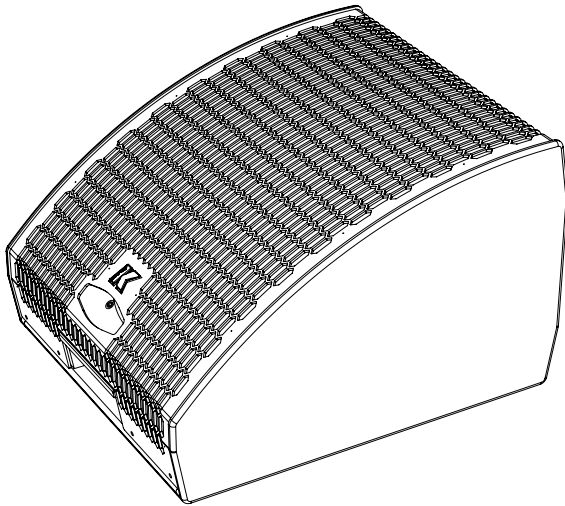
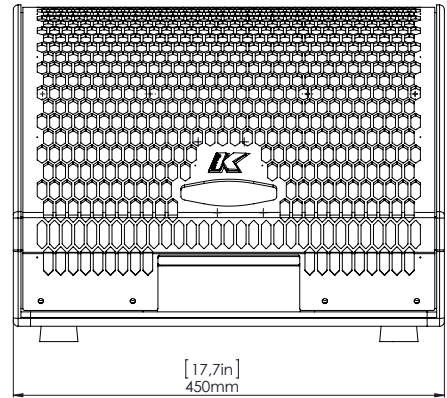
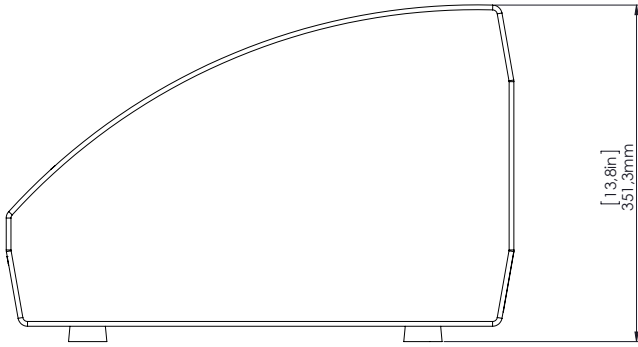
- **Choking Hazards.** This device contains small parts, which may present a choking hazard to small children. Keep the device and its accessories away from small children.
- It is important that loudspeaker systems are used in a safe manner.
- **Do not make repairs yourself.** Caution, risk of electric shock. Do not open the device, it contains potentially hazardous voltage. Never attempt to disassemble, repair or modify the system yourself. Disassembling the unit may cause damage that is not covered under the warranty. The device contains no user-serviceable parts. Repairs should only be performed by factory trained service personnel. Do not plug the power cord in if you suspect that your device needs service or repair.
- **Sound distortion.** Do not operate speakers for an extended period of time with sound distortion. This is an indication of malfunction, which in turn can generate heat and result in a fire.
- **Cooling.** During the use, it is normal for the device to get warm. The exterior of the device functions as a cooling surface that transfers heat from inside the unit to the cooler air outside. The device should be placed so that its location does not interfere with its proper cooling. For example, the device shouldn't be placed next to surfaces that can interfere with the properly cooling of the rear panel's radiators. When operating, the device should not be cover with additional protections.

- **Temperature.** Operate the device in a place where the temperature is between -20°C and 35°C (-4°F to 95° F). Avoid dramatic changes in temperature or humidity when using it, as condensation may form on or within the device.
- Take care not to spill any food or liquid through the device's grill. Do not attempt to dry the device with an external heat source, such as a hair dryer.
- **Carrying, handling and installing the device.** The device contains sensitive components. Do not drop, disassemble, open, crush, bend, deform, puncture, shred, incinerate, paint, or insert foreign objects into it. If your device has been dropped or damaged unplug the power cable immediately.
- **Set up.** Set up your device on a stable retaining horizontal surface. If combined or mechanically connected with other products, always verify the stability of the resulted system. Install the unit only in a location that can structurally support the weight of the unit, far away from people who can interfere with the stability of the system. In case of outdoor installation, protect the device from rain and moisture. Assure that the wind does not interfere with the system's stability, taking extra securities like chains, weights, ropes or any other certified anchoring systems. Doing otherwise may result in the unit falling down, causing personal injury or property damage or even death. The system should only be suspended by qualified personnel following safe rigging practices. Secure fixings to the building structure are vital. To clarify any doubt you may have, seek help from architects, structural engineers or other specialists.
- This audio system is not intended for use in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control systems, or for any other uses where the failure of the audio system could lead to death, personal injury, or sever environmental damage.

## 4. UNPACKING

Each K-array speaker is built to the highest standard and thoroughly inspected before leaving the factory. Upon arrival, carefully inspect the shipping carton, then examine and test your new amplifier. If you find any damage, immediately notify the shipping company. Only the consignee may institute a claim procedure regarding the system's electronic equipment.

### 5. PRODUCT PHYSICAL OVERVIEW



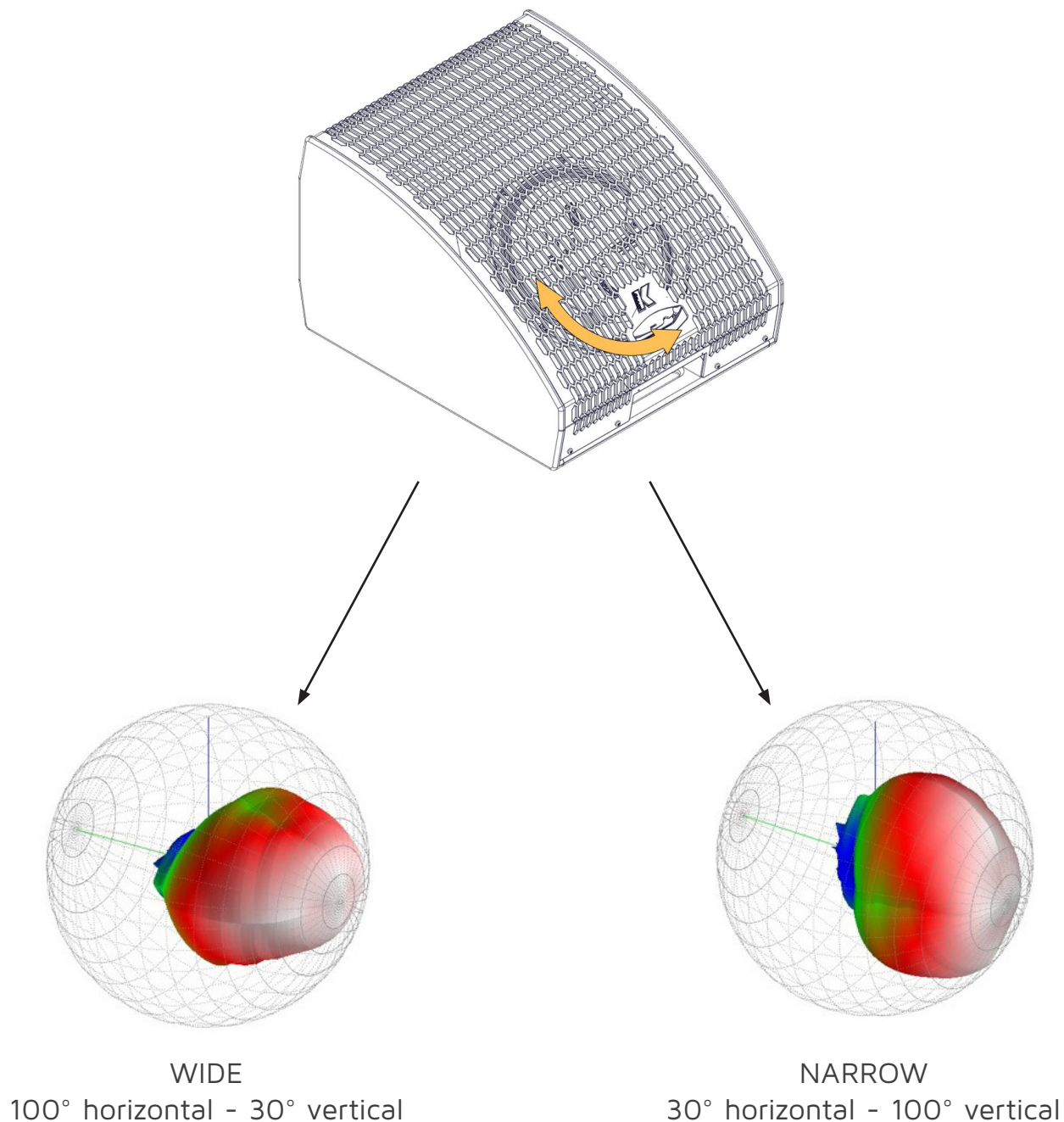
Weight  
KM112: 23.0 kg (50.7 lbs)  
KM112P: 17.0 kg (37.5 lbs)



## 6. HORN ORIENTATION

The KM112 features a 12" coaxial transducer coupled to an asymmetric horn. Because the horn is asymmetric, its sound dispersion pattern is different in respect to its axes: 100° x 30°.

The horn can be manually rotated 90° thanks to the red guide that rotates the horn from a 100° horizontal coverage (Wide) to a 30° horizontal coverage (Narrow).



## 7. KM112 AMPLIFIER PANEL

### 7.1 AC POWER

The amplifier module and any audio equipment connected to it (mixing consoles, processors, etc.) must be properly connected to the AC power distribution, preserving AC line polarity. Every grounding point must be connected to a single node or common point using the same cable gauge as the neutral and line cable. Bad grounding connections between speakers and the rest of the equipment may produce noise, hum or serious damage to the input/output stages in the system's electronic equipment.



Before applying AC to any K-array self-powered speaker, be sure that the voltage potential difference between neutral and earth ground is less than 5 VAC.



### 7.2 VOLTAGE REQUIREMENT

The amplifier's auto-range power supply feature allows the amp unit to operate safely and with no audio discontinuity when the AC voltage stays within a nominal range of 100 - 240 V (operating range 85 - 265 V) at 50 to 60 Hz.

Please verify that your AC main connections are capable of satisfying the power rating for the device.



CAUTION. Do not connect the system to AC power mains exceeding 265 V. Doing so will cause significant damage to the device and create serious risk for users!



### 7.3 CURRENT REQUIREMENT

The amplifier presents a dynamic load to the AC mains, drawing additional current as operating levels increase. Different cables and circuit breakers heat up at varying rates, so it is essential to understand current ratings and how they correspond to circuit breaker and cable specifications. Maximum continuous RMS current - measured over a period of at least ten seconds - is used to calculate the temperature increase in cables, which drives the proper size and gauge cable and rating for slow-reacting thermal breakers. Maximum burst RMS current - measured over a period of approximately one second - is used to select the rating for fast reacting magnetic breakers.

For best performance, voltage drops should not exceed 10% at 100 V or 10% at 230 V. The minimum electrical service amperage required by a K-array loudspeakers system is the sum of their maximum continuous RMS current. K-array recommends allowing an additional 30% above the minimum amperage to prevent peak voltage drops at the service entry.

## 7.4 PROTECTION CIRCUITRY

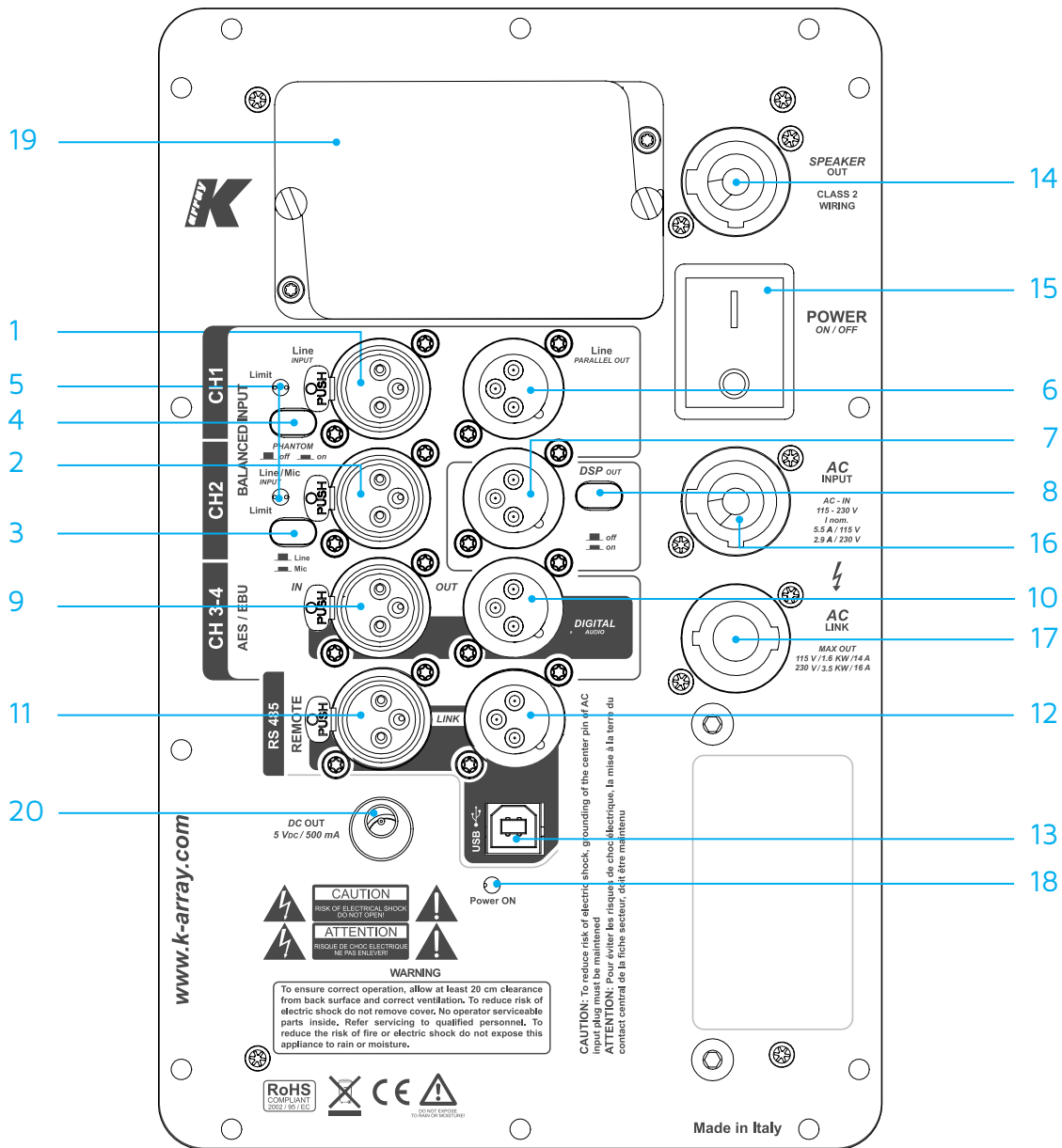
Both the Power supply and the amplifier sections are equipped with several protection circuits.

Power supply protections aim to isolate a faulty section in electrical power system from the rest of the device in order to prevent the propagation of the fault and limit device damages. They comprise overcurrent, overvoltage and thermal protections.

Amplifier protections are triggered by audio signal current and voltage – by comparing input and output – and NTC (Negative Temperature Coefficient) thermistors. A Peak Current Shut Down and a Temperature Protection Limiter protect the output stage.

High frequency stationary signals, like steady sinusoidal signals – improperly referred as continuous or permanent signals – with high amplitude tend to stress the amplifier section of the modules as well as the loudspeakers voice coils. When a high frequency stationary loud signal is feed into the amplifier a dedicated Limiter limits its mean current depending on its level and frequency.

### 7.5 AUDIO AND REMOTE CONNECTIONS

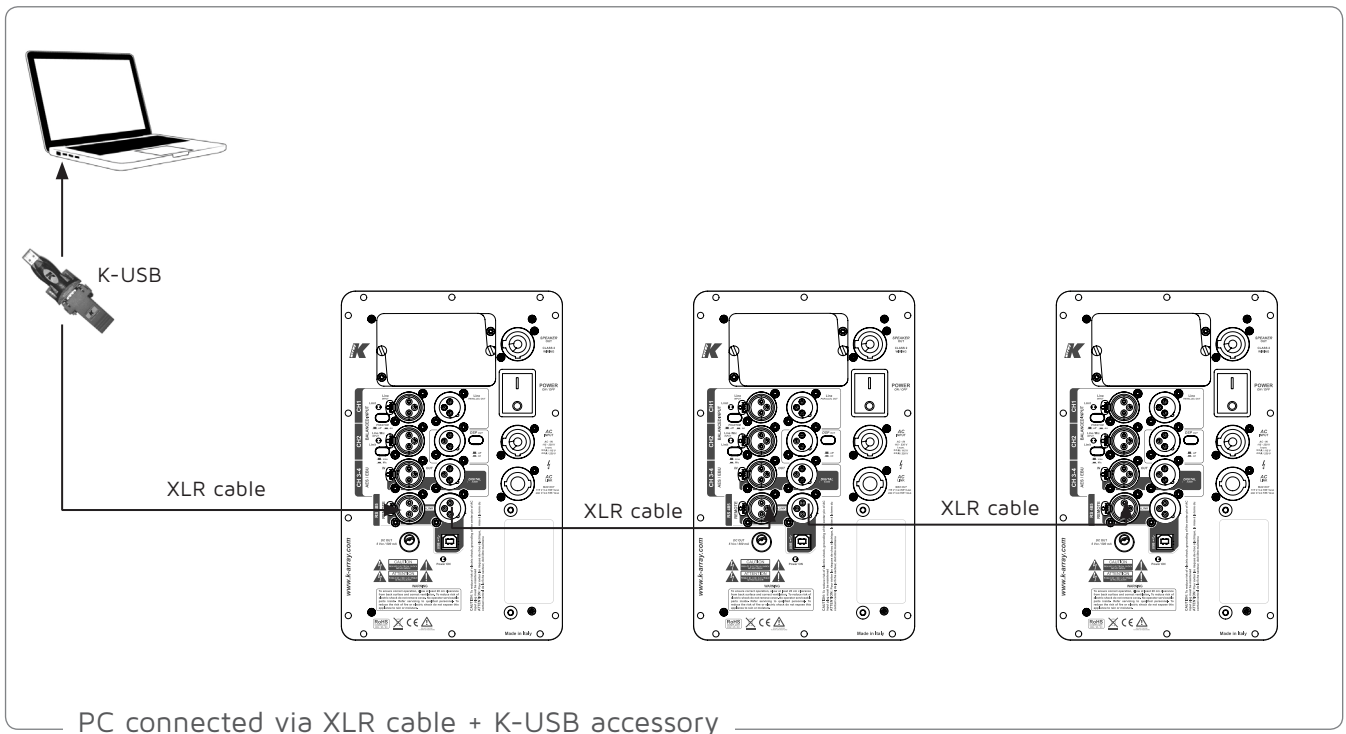
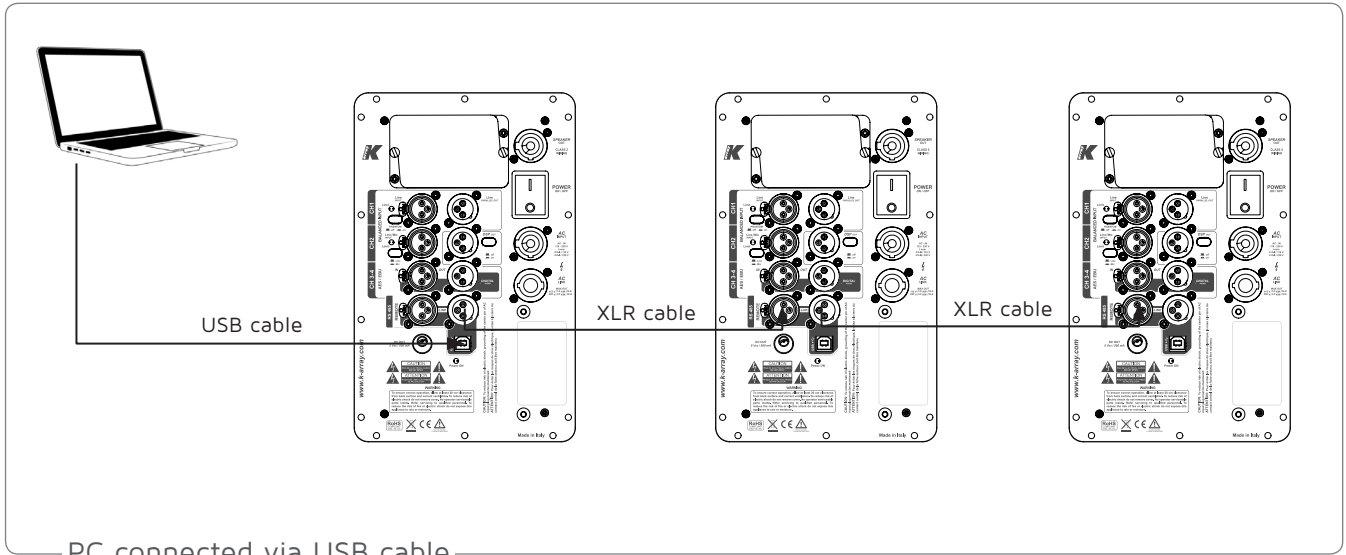


- 1) CH1 Line Input. XLR line level input with +4 dBu sensitivity.
- 2) CH2 Mic/Line Input. XLR input, with selectable sensitivity for Mic (-30 dBu) or Line (+4 dBu).
- 3) Mic/Line switch. Selects CH2 input sensitivity for Mic ( -30 dBu) or Line ( +4 dBu) level.
- 4) Phantom Power switch. Turns phantom power (48V) on/off on CH2 input.
- 5) Limiting LEDs. Independent LEDs for the CH1 and CH2 inputs, which blink when the optical limiter engages to protect the corresponding preamp circuit. Limiter threshold is +5 dBu.
- 6) CH1 Parallel Line Out. XLR parallel output providing a direct signal from the CH1 Line Input. This output cannot be processed or controlled via the K-Framework software.
- 7) DSP Out. When the DSP Out switch is not pressed (off), this connector provides a direct signal from the CH2 input. At the moment this connector doesn't output any signal if the DSP Out switch is pressed (on). This function will be useful for future applications.
- 8) DSP Out Switch. See point 7.
- 9) AES/EBU Digital Input. XLR input connector for two-channel AES/EBU digital audio, accepting sample rates up to 96 kHz.
- 10) AES/EBU Digital Output. XLR output, providing two-channel digital audio from AES/EBU Input, This output cannot be processed or controlled via the K-Framework software.
- 11) REMOTE RS485 Link Input. XLR input for connecting the KM112 from another RS485 device in a K-Framework network. RS485 Link Input can also be used to connect a computer running the K-Framework software (requires K-USB USB-to-RS485 adapter).
- 12) REMOTE RS485 Link Output. XLR output for connecting additional RS485 devices in a K-Framework network.
- 13) REMOTE USB Input. Connects a computer running the K-Framework software, for remote control of the KM112. Users can manage an entire network of RS485 devices with one PC connected via USB.
- 14) Speaker Out. Powered Speakon output, used to drive a passive monitor (KM112P) or passive subwoofer (KMT18P).
- 15) Power switch. Turns the system on and off.
- 16) AC Input. PowerCon input for AC power.
- 17) AC Link. PowerCon output for feeding AC mains power to additional K-array components with a PowerCon AC input socket.
- 18) Power On LED. Indicates the system is ON.
- 19) TOUCH SCREEN Control panel. Provides access to the main functions of the DSP on board (see dedicated section)
- 20) 5 Volt Power Connector. Provides 5VDC/500mA to power accessories.

### 7.6 RS485 NETWORK

The RS485 Link Input and The RS485 Link Output on the rear panel allow to create a network of K-array devices that users can manage with a PC running the K-Framework software. All devices can be linked with standard XLR cable.

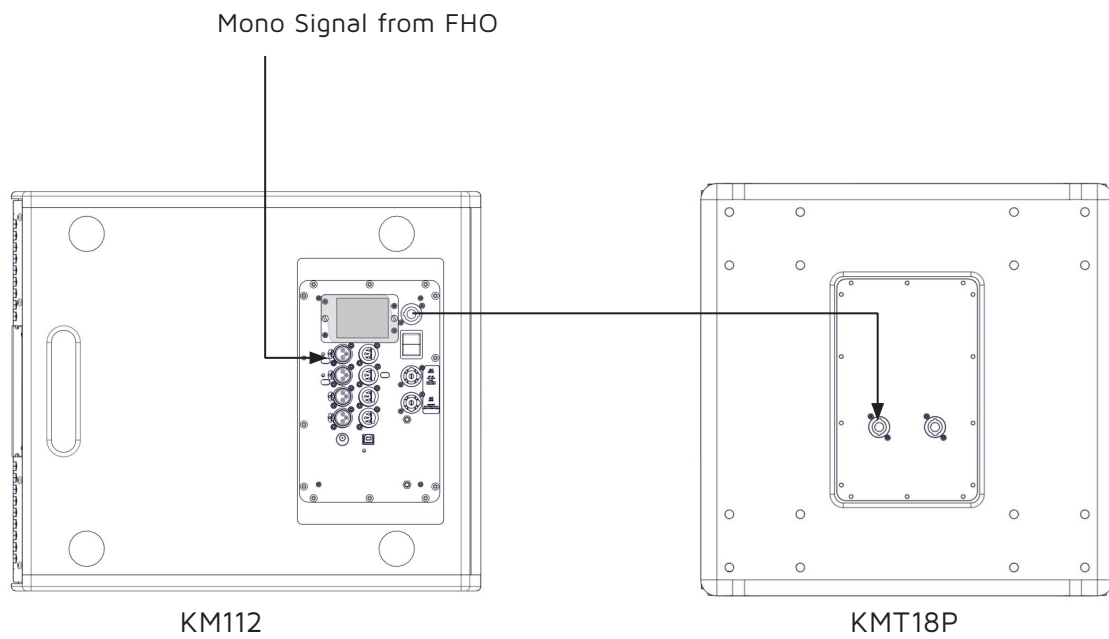
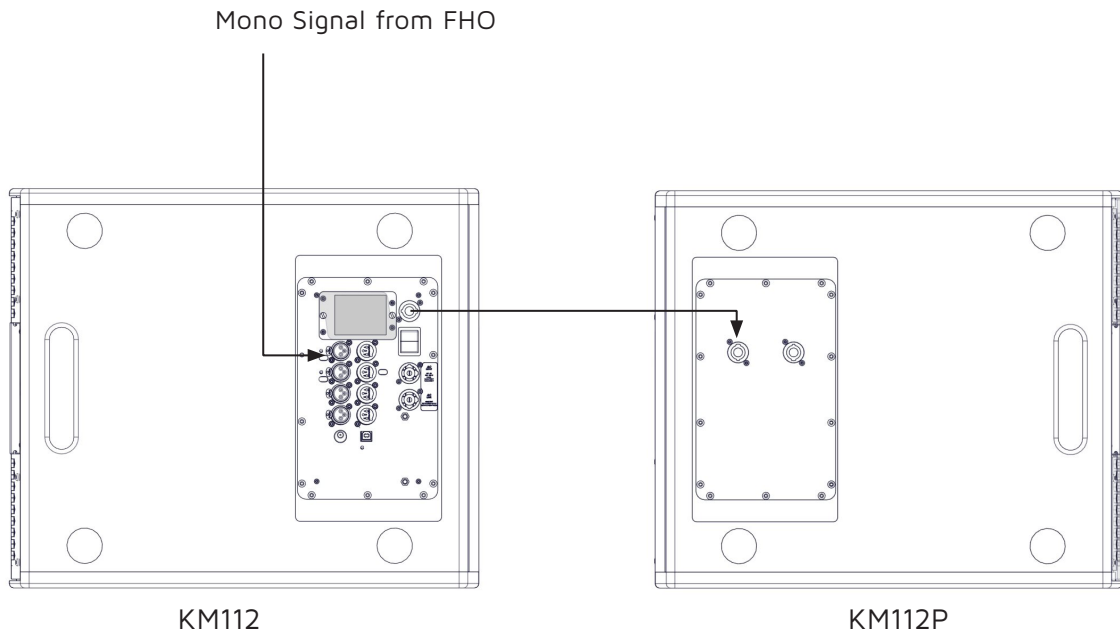
The PC can be connected to the network either with USB cable or XLR cable (requires K-USB USB-to-RS485 adapter accessory) as shown in the diagrams below.



Attention. Make sure that you have set a different ID number on each device before connecting them to a PC running the K-framework. See the INFO section in the next chapter for details.

## 8. KM112 DRIVING A PASSIVE UNIT

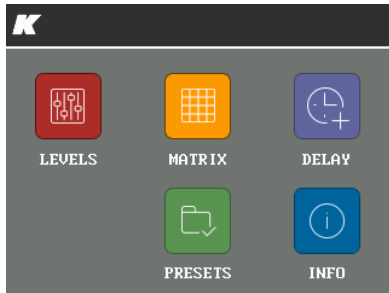
The KM112's onboard amplifier features two output channels. One channel drives the monitor while the other can be used to drive an additional passive monitor KM112P or a passive subwoofer KMT18P. Connect the passive unit to the Speakon Out connector and load the appropriate preset from the Preset page on the touchscreen.




## 9. KM112 TOUCH SCREEN FUNCTIONS

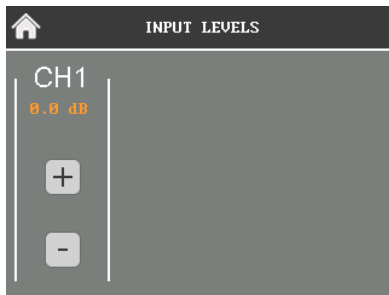
The main functions of the onboard DSP can be managed with the integrated touch screen. Functions are grouped into five sections, shown as icons on the Home page.

### HOME PAGE



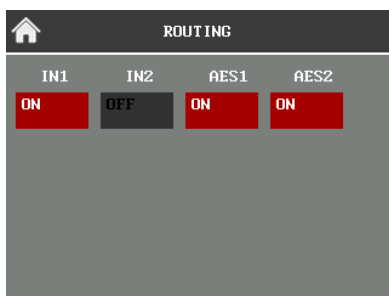
 To reach the Home page from any of the pages, touch the *Home* button.

### LEVELS



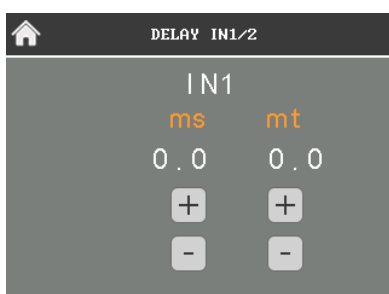
The Levels page allows users to manage the amplitude of the input signal (whether analog or digital).

### MATRIX



The Matrix page allows users to switch on/off the four inputs channels independently. *IN1* and *IN2* are the two analog inputs, *AES1* and *AES2* are the two channels of the AES/EBU digital input.

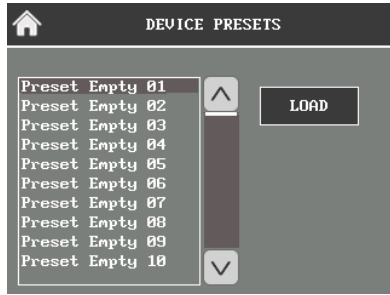
### DELAY



The Delay page allows users to delay the audio signal sent to the unit. Users can set the delay in milliseconds (ms) or meters (mt).

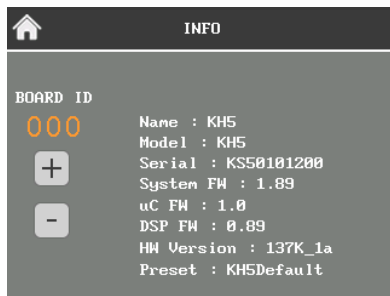


## PRESET



The Preset page allows users to load presets stored on-board.

## INFO

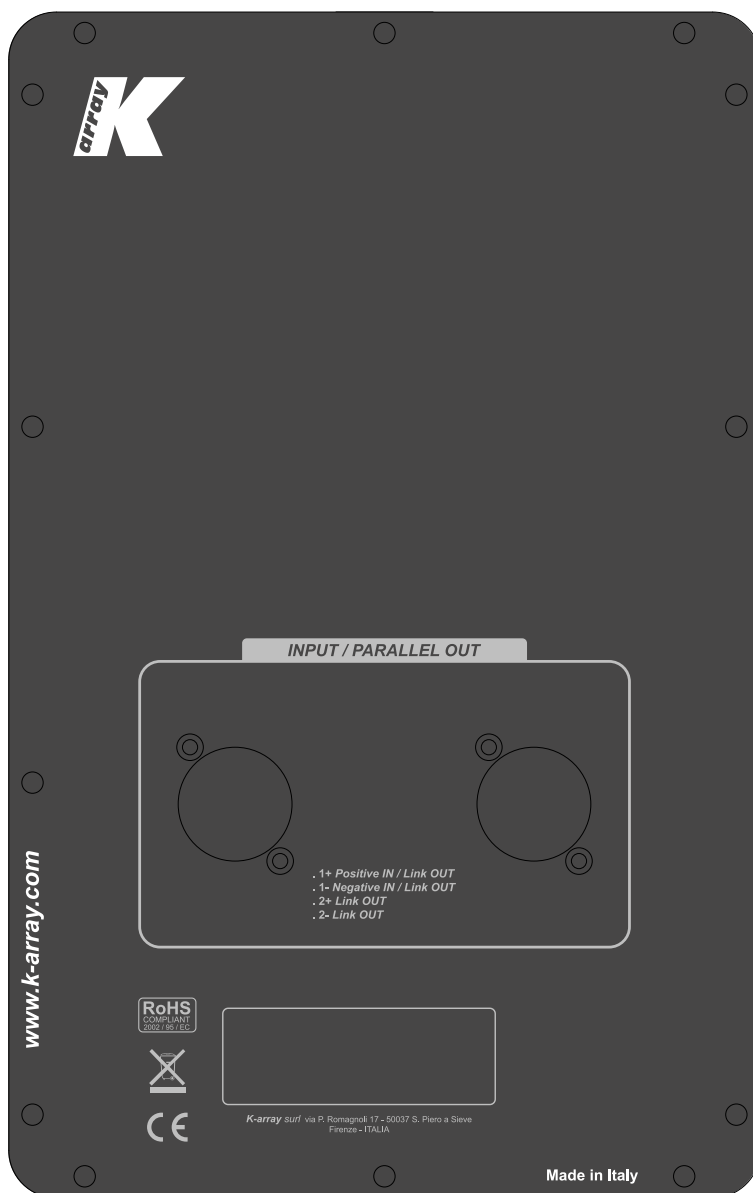


The Info page contains information about the current software and firmware, the current preset loaded and the *Board ID* of the device.

The *Board ID* is a number which identifies the device when it is connected in a K-framework network. Make sure that each device in the network has a different ID number.

## 10. KM112P CONNECTIONS

The KM112P internal wiring is designed to pick up audio power signal from pins 1+ / 1- of a NL4 connector. 2+ and 2- pins, just like 1+ and 1-, are directly wired from one socket to the other, so the signal can pass through multiple speaker modules without additional external cables.



## 11. SERVICE

To obtain service:

- 1) Contact the official K-array distributor in your country. Your local distributor will direct you to the appropriate service center.
- 2) If you are calling for service, please have the serial number(s) of the unit(s) available for reference. Ask for Customer Service and be prepared to describe the problem clearly and completely.
- 3) If the problem cannot be resolved over the phone, you may be required to send the unit in for service. In this instance, you will be provided with an RA (Return Authorization) number which should be included on all shipping documents and correspondence regarding the repair. Shipping charges are the responsibility of the purchaser.

Any attempt to modify or replace components of the device will invalidate your warranty. Service must be performed by an authorized K-array service center.



### Cleaning:

Use only a soft, dry cloth to clean the product. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

## 12. TECHNICAL SPECIFICATIONS

### 11.1 KM112 DATASHEET

<b>ACOUSTICS</b>		Digital Connectors	1 male + 1 female 3-pin XLR
Power handling	800 + 200 W	<b>POWER AUDIO OUTPUT</b>	
Max Power	1200 W <sup>(1)</sup>	Connector	Female Speakon
Impedance	8 + 8 Ohm	Wiring	Ch1+ Pin1-=Ch1- Pin2+=N.C. Pin2-=N.C
Frequency range (-10 dB)	70 Hz – 19 kHz <sup>(2)</sup>	<b>REMOTE CONTROL INPUT</b>	
SPL 1W/1mt	LF:98dB HF:105dB <sup>(3)</sup>	Connectors	1 male + 1 female XLR parallel / 1 USB B Jack serial converter
Maximum SPL	127 dB (cont.) – 133 dB (peak) <sup>(4)</sup>	<b>POWER INPUT</b>	
<b>COVERAGE</b>		Connectors	2 x PowerCon IN/OUT
Horizontal	100°-30° (depending on horn orientation)	<b>AMPLIFIERS</b>	
Vertical	30°-100° (depending on horn orientation)	Type	1 module class D – DSP controlled
<b>CROSSOVER</b>		Power	1000W @ 8 Ohm
Type	DSP controlled + passive filter	Protection	Dynamic limiter, over current, over temp, short circuits
Frequency	1300 Hz	<b>AC POWER</b>	
<b>TRANSDUCERS</b>		Nominal power requirements	100 – 240 Vac ±10% 50-60Hz
Low-mid frequency	12" Neodymium magnet woofer with 3" voice coil	Operating range	85 – 265 Vac (auto-range)
High frequency	Neodymium magnet compression driver with 2" voice coil	<b>PHYSICAL OVERVIEW</b>	
<b>AUDIO INPUT</b>		Dimensions	53.0 x 45.0 x 33.5 (20.86" x 17.71" x 13.18") <sup>(5)</sup>
Analog connectors	2 male + 2 female 3-pin balanced XLR	Weight	23Kg (50.7 lbs)
<p>Notes for data</p> <ol style="list-style-type: none"> <li>1. Maximum RMS applicable power for a musical signal. The reference signal is the one proposed by EIAJ standard</li> <li>2. With dedicated preset;</li> <li>3. Measured @4 mt then scaled @1 mt;</li> <li>4. Measured with musical signal</li> <li>5. ( W x H x D)</li> </ol> <p>New materials and design are introduced into existing products without previous notice. Present systems may differ in some respects from those presented in this catalogue.</p>			

## 12.2 KM112P DATASHEET

ACOUSTICS	
Power handling	800W+200W
Max Power	1200W
Impedance	8 Ohm
Frequency Range (-10dB)	LF: 98dB HF: 105dB
Maximum SPL	127dB (cont.) - 133dB (peak)
COVERAGE	
Horizontal	100°-30° (depending on horn orientation)
Vertical	30°-100° (depending on horn orientation)
CROSSOVER	
Type	Passive Filter
Frequency	1300 Hz
TRANSDUCERS	
Low-mid frequency	12" Neodymium magnet woofer with 3" voice coil
High frequency	Neodymium magnet compression driver with 2" voice coil
POWER AUDIO IN/OUT	
Connectors	2 x 4-pin speakon
Wiring	1+ 1- (Signal IN & LINK) 2+ 2- (Through)
PHYSICAL OVERVIEW	
Dimensions	53.0 x 45.0 x 33.5 cm (20.86"x 17.71"x 13.18") <sup>(1)</sup>
Weight	17.0 Kg (37.47 lb)
<p>1. ( W x H x D).</p> <p>New materials and design are introduced into existing products without previous notice. Present systems may differ in some respects from those presented in this catalogue.</p>	

## 13. CERTIFICATION



<b>DECLARATION OF CONFORMITY</b>
----------------------------------

**Manufacturer/Importer:** K-array s.u.r.l.

**Brand:** **K-ARRAY**  
**Address:** via Paolina Romagnoli 17 50038 Scarperia e S. Piero Firenze ITALY

**Date of Issue:** 14 / 03 / 2017

**Model Code:** **KM112 – KM112P – KM312 – KM312P**

**Declaration:** Complies with safety essential requirements of Council Directive 2004/108/EC on the approximation of the Laws of the Member States relating to electromagnetic compatibility.

2006/95/EC on the harmonisation of the laws of member state relating equipment designed for the use within certain voltage limits

This declaration applies to all specimens manufactured in accordance with the attached manufacturing drawings which form part of this declaration. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility and low voltage directive was based on the following standards:

EMC:	EN 55103-1:2009 EN 55103-2:2009 EN 61000-3-2:2006+A1+A2 EN 61000-3-3:2008
Safety:	EN 60065:2002+A1+A11+A2+A12
RoHS II:	Directive 2011/65/UE (08 june 2011)

**Marking:**



**Applying Year:** **2017**

**Applied by:** **K-array s.u.r.l.**  
 Via Paolina Romagnoli 17  
 50038 Scarperia e S. Piero  
 Firenze Italy  
 Tel. +39 055 8487222  
 Fax +39 055 8487238

**Signed by:** **Franco Spataro**  
 Technical Manager

K-array s.r.l. a socio unico società soggetta alla attività di direzione e coordinamento di HP Sound Equipment spa  
 P. IVA / VAT / CF 06206990480 - R.E.A. 609589 Cap. soc. i.v. € 100.000,00

Sede legale: via Paolina Romagnoli 17 50038 Scarperia e San Piero - Firenze - ITALY tel +39 055 8487222 fax +39 055 8487238

[k-array@pec.it](mailto:k-array@pec.it) [www.k-array.com](http://www.k-array.com)

	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Ref. Certif. No.</td> </tr> <tr> <td style="padding: 2px;">NL-49064</td> </tr> </table>	Ref. Certif. No.	NL-49064
Ref. Certif. No.			
NL-49064			

**IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME**

**CB TEST CERTIFICATE**

<p><b>Product</b></p> <p><b>Name and address of the applicant</b></p> <p><b>Name and address of the manufacturer</b></p> <p><b>Name and address of the factory</b></p> <p><small>Note: When more than one factory, please report on page 2</small></p> <p><b>Ratings and principal characteristics</b></p> <p><b>Trademark (if any)</b></p> <p><b>Customer's Testing Facility (CTF) Stage used</b></p> <p><b>Model / Type Ref.</b></p> <p><b>Additional information (if necessary may also be reported on page 2)</b></p> <p><b>A sample of the product was tested and found to be in conformity with</b></p> <p><b>As shown in the Test Report Ref. No. which forms part of this Certificate</b></p>	<p>Professional active speaker</p> <p>K-ARRAY S.u.r.l. Via P. Romagnoli, 17 50038 Scarperia e S. Piero (FI) Italy</p> <p>K-ARRAY S.u.r.l. Via P. Romagnoli, 17 50038 Scarperia e S. Piero (FI) Italy</p> <p><input type="checkbox"/> Additional information on page 2 K-ARRAY S.u.r.l. Via P. Romagnoli, 17 50038 Scarperia e S. Piero (FI) Italy</p> <p>100-240 V~; 50-60 Hz 100-120 V~; 50-60 Hz (for United States and Canada only) 300 W for models KMT12 I, KMT18 I, KM 112 600 W for model KM 312</p> <p>K-ARRAY</p> <p></p> <p>KMT12 I, KMT18 I, KM 112, KM 312</p> <p><input type="checkbox"/> Additional information on page 2</p> <p>IEC 60065:2001, IEC 60065:2001/AMD1:2005, IEC 60065:2001/AMD2:2010</p> <p><u>National differences:</u> EU Group Differences, EU Special National Conditions, EU A-Deviations, AR, AU, CA, CN, JP, KR, US</p> <p>R1502015_2_01</p>
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This CB Test Certificate is issued by the National Certification Body

DEKRA Certification B.V.  
Meander 1051, NL-6825 MJ Arnhem, Netherlands



Firmato digitalmente da  
**MASSIMILIANO TRIULZI**

Date: 2017-10-25

Signature: M.Triulzi



# Classification Record

Listing#: E113572  
 Report #: 96643  
 Original Certification: November 7, 2017  
 Revised Certification: N/A



This Certification is issued to:  
 K-ARRAY S.u.r.l.  
 Via P. Romagnoli, 17 50038  
 Scarperia e S. Piero (FI) - ITALY



For the product(s):  
 Professional Active Speaker,  
 Model KMT12 I, KMT18 I, KM 112, KM 312

Has/Have been certified to the following standard(s):  
 UL 60665: Standard for Safety Audio, Video and Similar Electronic Apparatus –  
 Safety Requirements - Seventh Edition.  
 CSA CAN/CSA-C22.2 NO. 60665:16 - Audio, video and similar electronic apparatus, Second Edition

Rick Cooper  
 Director,  
 Safety Business Line

*All changes proposed in the previously identified product that affects the above information must be submitted to MET for evaluation prior to implementation to assure continued MET Certification status.*

*The covered product(s) shall be subject to follow-up inspections to ensure that the Certified product(s) are identical to the product sample evaluated by MET Laboratories, Inc. and that all manufacturer's responsibilities are being fulfilled as specified in the Manufacturer's Responsibility section of the Certification report. The applicant named above has been authorized by MET Laboratories, Inc. to represent the product(s) listed in this record as "MET Certified" and to mark this/these product(s) according to the terms and conditions of the MET Applicant Contract, MET Listing Reports, and the applicable marking agreements. Only the product(s) bearing the MET Mark and under a follow-up service are considered to be included in the MET Certification program. This certification has been granted under a System 3 program as defined in ISO/IEC 17067.*



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**NRTL**