



KZ12

USER GUIDE English

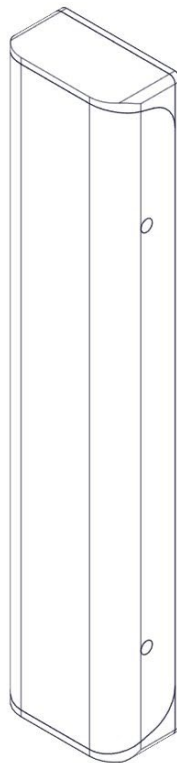


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SYMBOLS



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!



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.



This device complies with the Restriction of Hazardous Substances Directive.

1. INTRODUCTION

The KZ12 is a remarkable, ultra-micro line array designed for discreet use in a variety of situations, such as restaurants, bars, and museums.

This rugged unit contains a line array of four 0.5" excursion, full-range drivers housed in a sleek case built around a super strong chassis. The high efficiency drive units have Neodymium magnet structures and suspensions engineered for maximum linear excursion and minimum residual transducer noise.

This miniature, slim column is a mere 1.2cm deep and delivers true crystal clear audio with an amazing continuous output of 92dB which is remarkable from such a miniscule enclosure. The KZ12 weighs only 46g and measures 2.1 x 10.0 x 1.2cm (0.8"x 3.9"x 0.5").

The system delivers long throw and coherent coverage making it ideal for use in space-constrained situations. Up to four KZ12 units can be integrated with the KU36 sub bass, extending the frequency range to 35Hz.

All the components are designed inhouse at our Florence-based R&D department. They are custom manufactured to our exacting standards and quality control.

2. KEY FEATURES

- Multiple 0.5" long excursion full range drivers
- Wide range frequency response
- Integrated connector
- Ultra-strong, aluminium frame
- High dynamic range capability
- Only 46g of weight
- Suitable for outdoor installations: IP54 water proof

3. APPLICATIONS


- Background music systems in restaurants and clubs
- Exhibit audio for museum displays
- Space-sensitive fill for broadcast

4. SAFETY INFORMATION



Warning: Failure to follow these safety instructions could result in injury or damage to the device or other property.

IMPORTANT SAFETY INSTRUCTIONS

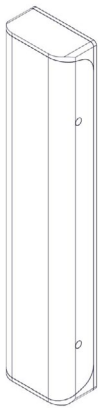
- Read these instructions.
 - Keep these instructions.
 - Heed all warnings.
 - Follow all instructions and keep all warnings.
 - Only use attachments/accessories specified by the manufacturer.
- 

 - 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 tipover.
- **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 to a higher volume of sound that over time may sound normal but can be damaging to your hearing. Hearing loss worsens after exposure 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.
 - **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.
 - **Do not make repairs yourself.** Never attempt to disassemble, repair or modify the system yourself. Disassembling the unit may cause damage that is not covered by the warranty. The device contains no user-serviceable parts. Repairs should only be performed by factory trained service personnel.
 - **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.
 - **Carrying, handling and installing the device.** The device contains sensitive components. Do not drop, disassemble, open, crush, bend, deform, puncture, shred, incinerate or paint the device nor insert foreign objects into it. If your device has been dropped or damaged, unplug the power cable immediately.
 - **Setup.** Set up your device on a stable, horizontal surface. If combined or mechanically connected with other products, always verify the stability of the resulting system. Install the unit only in a location that can structurally support the weight of the unit and far away from interference with the stability of the system. Ensure the wind does not interfere with the system's stability, using extra securities such as chains, weights, ropes or any other certified anchoring systems. Otherwise a unit could fall, causing property damage, personal injury or even death. The system should only be suspended by qualified personnel following safe rigging practices. Securing fixtures to the building structure are vital. To clarify any doubts, seek help from architects, structural engineers or other specialists.

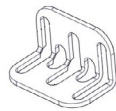
5. UNPACKING

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.

6. PACKAGING



1 x KZ12



2 x steel wall brackets



1 x double-sided
reinforcement adhesive



4 x M3 inox screws



4 x M2 nylon screws

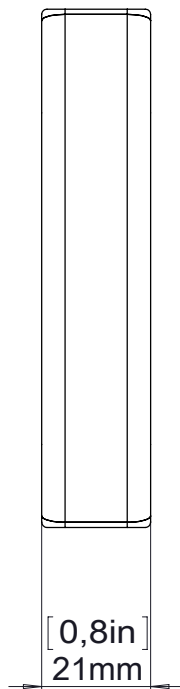
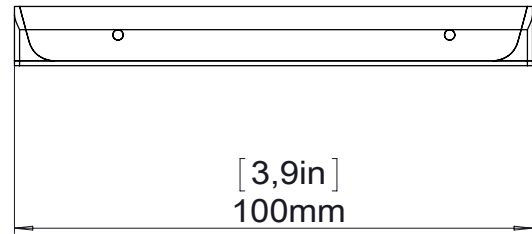
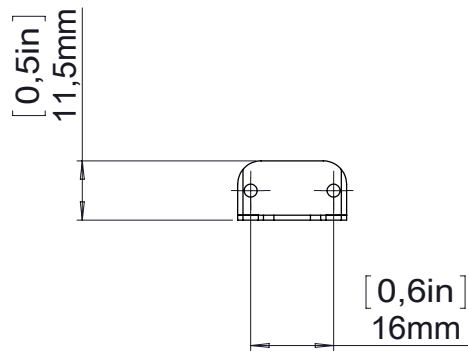


4 x M2 inox washers



2 x copper tabs

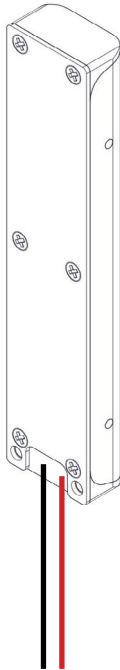
7. PHYSICAL OVERVIEW



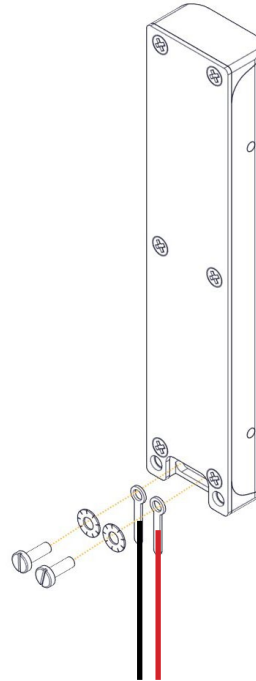
Weight
45.5 g (1.6 lbs)

8. WIRING

There are two ways to connect a KZ12 to an amplifier's output channel:



You can solder the cables directly on terminals IN+ and IN-



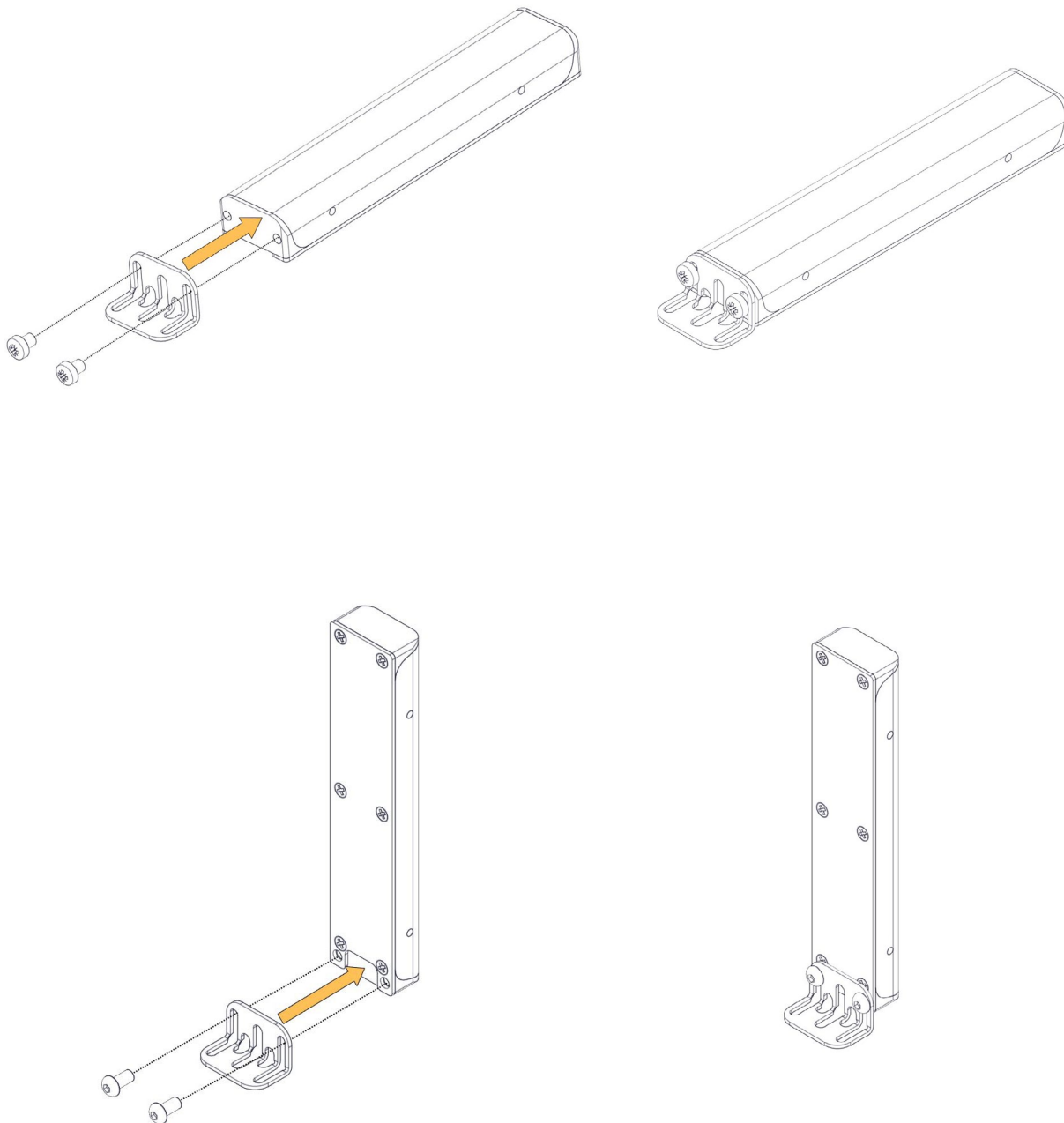
You can solder the cables on the provided copper tabs and then fix them to the speaker with the provided nylon screws.

NOTE:

The KZ12's impedance is 16Ω . An amplifier channel with an output impedance of 4Ω can drive up to 4 KZ12 wired in parallel.

9. INSTALLATION

The KZ12 can be mounted on the wall, to the ceiling or even on a table with the provided wall brackets. Depending on the installation, you can choose between two mounting options:



10. 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 device. 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.

11. TECHNICAL SPECIFICATIONS

	ACOUSTICS		TRANSDUCERS
Power handling	8 W ^(AES)	Full-range	4 x 0.5" cone driver with 0.5" voice coil
Max power	15W ⁽¹⁾		POWER AUDIO INPUT
Frequency range	250 Hz – 18 kHz +/- 3dB ⁽²⁾	Connector	IN+ IN- (to be soldered or screwed)
Impedance	16 Ω		RECOMMENDED AMPLIFIERS
SPL 1W/1mt	82 dB ⁽³⁾	Type	KA24, KMT12 (up to 4 units per channel)
Maximum SPL	92 dB (cont.) – 98dB (peak) ⁽⁴⁾		CERTIFICATION
	COVERAGE	IP	54
Horizontal	140°		PHYSICAL
Vertical	20°	Dimensions	2.1 x 10.0 x 1.2 cm (0.8"x 3.9"x 0.5")
	CROSSOVER	Weight	45.5 g (0.10 lbs)
Type	External Crossover required		
Frequency	250 Hz, 24 dB/oct suggested minimum		

Notes for data

1. Maximum RMS applicable power for a musical signal. The reference signal is the one proposed by EIAJ standard
2. With dedicated preset
3. Measured @4m then scaled @ 1m
4. Measured with musical signal

New materials and designs are introduced into existing products without prior notice. Present systems may differ in some respects from those presented in this catalogue.

12. CERTIFICATION



DECLARATION OF CONFORMITY

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: 20 / 01 / 2015
Model(s) Code: **KZ10 – KZ10W – KZ12 – KZ12W**
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

Marking:



Applying Year:

2015

Applied by:

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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

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