

Lyzard-KZ1I

ultra-mini point source speaker with a 0.5"
cone driver

USER GUIDE



Lyzard-KZ1RI



K-ARRAY
Unique Audio Solutions

Index

| | |
|---------------------------------------------------------------------|----|
| Unpacking (Fig.1) | 4 |
| Setup (Fig.2 -> 1-2) | 4 |
| Installation (Fig. 3 -> 1 -2 -3) | 5 |
| In-wall installation with screws (Fig. 3.1 -> 2 -3 -4) | 6 |
| Adhesive pad (Fig. 3.2 -> 1 -2 -3) | 7 |
| Permanent Recessed Installation (Fig. 4, 4.1 -> 1.1-2.2-3.3-4.4) | 8 |
| Connecting | 10 |
| Loudspeakers in Parallel | 11 |
| Service | 11 |
| Cleaning | 11 |
| Mechanical drawings | 12 |
| Technical specifications | 13 |

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions - Keep these instructions
Heed all warnings



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

Installation and commissioning may only be carried out by qualified and authorized personnel.



Switch-off the mains power supply before carrying out any connection or maintenance operations.



This fixture is intended for installation in accordance with National Electric Code and local regulation: To assure full compliance with local codes and regulations, check with your local electrical inspector before installation

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!



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.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated, dangerous voltage within the product enclosure that may be of magnitude to constitute a risk of electrical shock.



This device complies with Restriction of Hazardous Substances Directive.

General heed and warnings

- 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.
- 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.
- This loudspeaker system is intended for professional use.
- Beware of sound levels. Do not stay within close proximity of loudspeakers in operation. Loudspeaker systems are capable of producing very high sound pressure levels (SPL) which can instantaneously lead to permanent hearing damage. Hearing damage can also occur at moderate level with prolonged exposure to sound.
Check the applicable laws and regulations relating to maximum sound levels and exposure times.
- Before connecting the loudspeakers to other devices, turn off the power for all devices.
- Before turning the power on or off for all devices, set all volume levels to minimum.
- Use only speaker cables for connecting speakers to the speaker terminals.
- Be sure to observe the amplifier's rated load impedance particularly when connecting speakers in parallel. Connecting an impedance load outside the amplifier's rated range can damage the devices.
- 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.
- K-array will not shoulder any responsibilities for products modified without prior authorization.
- K-array cannot be held responsible for damage caused by improper use of the loudspeakers.



Thank you for choosing this K-array product!

To ensure proper operation, please carefully read this reference manual and safety instruction before using the product. After reading this manual, be sure to keep it for future reference.

In case you have any questions about your new device please contact K-array customer service at support@k-array.com or contact the [official K-array distributor](#) in your country.

Meet the Lyzard-KZ1 I - the ultra-mini point source speaker from K-array's smallest mid-high speaker series. Its compact and sturdy milled aluminum enclosure measures only 2.2 x 3.7 x 1.1 cm and weighs a mere 21 g. Despite its discreet size, the Lyzard-KZ1 I boasts a single 0.5" long-excursion neodymium magnet transducer that delivers uncompromising audio performance with minimal residual noise. This makes the Lyzard series the perfect solution for environments where audio technology must be hidden.

The speaker's front is protected by a magnet grill that can be effortlessly removed using the small neodymium magnet included in the package. This new feature allows for quicker access to the fixing point, making setup and maintenance times shorter for installers. Furthermore, the rear panel features a small two-pole screw euro-block connector, eliminating the need for a specialized connector.

For in-wall installations, the Lyzard KZ1R I is the latest model designed specifically for this purpose. The speaker comes with spring metallic clips, making mounting fast and easy.

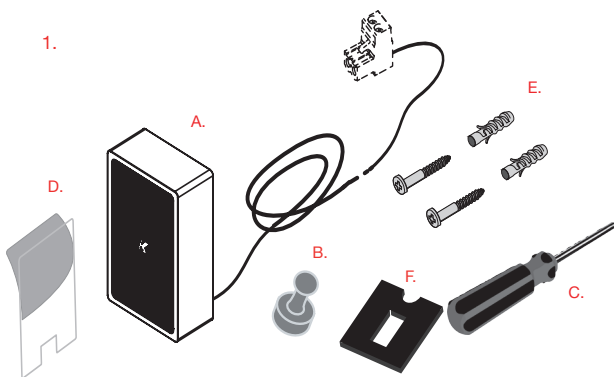
Lyzard-KZ1I

Unpacking

Each K-array product is built to the highest standards and thoroughly inspected before leaving the factory. Upon arrival, carefully inspect the shipping package. If you find any damage, immediately notify the shipping company. Check that the following parts are supplied within the package (fig.1)

- A. 1x Lyzard-KZ1I 1x Lyzard-KZ1RI loudspeaker with 5m (164 ft) cable* the cable is directly connected to the speaker through a 2mm Euroblock connector inside the speaker's rear panel.
- B. 1x little magnet included for easy grille removal.
- C. 2mm flat-blade screwdriver.
- D. 1x adhesive gel pad.
- E. 2 x screws and dowels 2mm. ca
- F. 1 x Drilling jig (part of the package design)

The accessories provided within the packaging allows an easy installation in any application, either in permanent or a temporary setup.

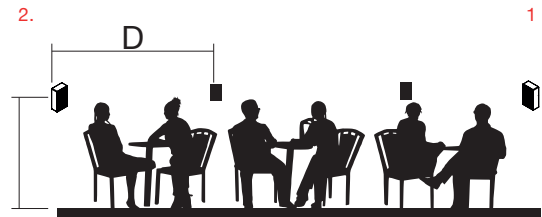


* The cable terminates with an euroblock connector only when the speaker is part of an AZIMUT system.

Setup

Lyzard-KZ1 performs best when positioned on a planar surface such as a wall. Find the proper installation height, aiming the loudspeaker at the listening position. We suggest the following configurations:

(Fig. 2, 2.1)

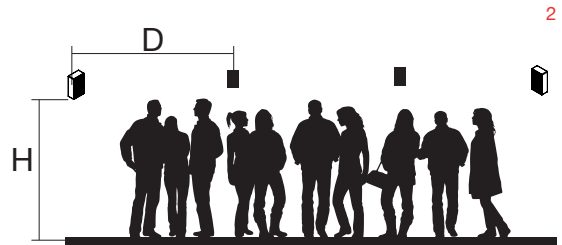


Seated listening area

H: min height 1,5 m (5 ft) / max height 2,5 m (8¼ ft)

D: min distance: 2,5 m (8¼ ft)

H



Standing listening area

H: min height 1,7 m (5' ft) / max height 2,7 m (9 ft)

D: min distance: 2,5 m (8¼ ft)

Installation

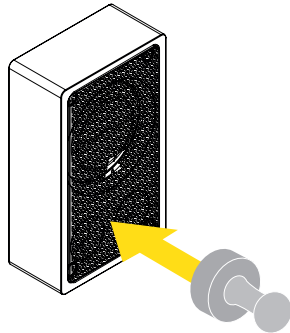
The New KZ1I and KZ1R1 are available in 2 different models here presented. The Lizard-KZ1I's compact new design comprehends a unique fully incorporated enclosure: the grille is magnetically attached to the body without using any screw, to limit noises due to transducer's excursions.

For permanent installation of the KZ1I, follow these operating instructions:

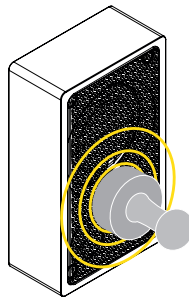
1. Take the little neodymium magnet found into the speaker's package and take off the grille. (steps 1-2-3 explain in the picture below)
2. Make 2 holes in the wall using a drill. This two holes has to be the same dimensions and match the 2 holes inside the speakers (2mm ca.)
3. With a screwdriver of 2mm, screw the speakers and gently mount it to the wall.
4. Then, take back the grille to the speaker's body. So the KZ1I is finally installed!
5. The user can also install the speaker with the dedicated adhesive pad found into the package, take the adhesive pad, attach it to the rear panel of the speaker and attach the speaker to the wall. (Fig. 3. - 1-2-3, 3.1 - 2-3-4, 3.2 - 1-2-3).

3.

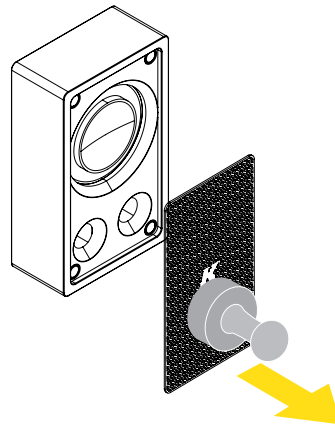
1



2

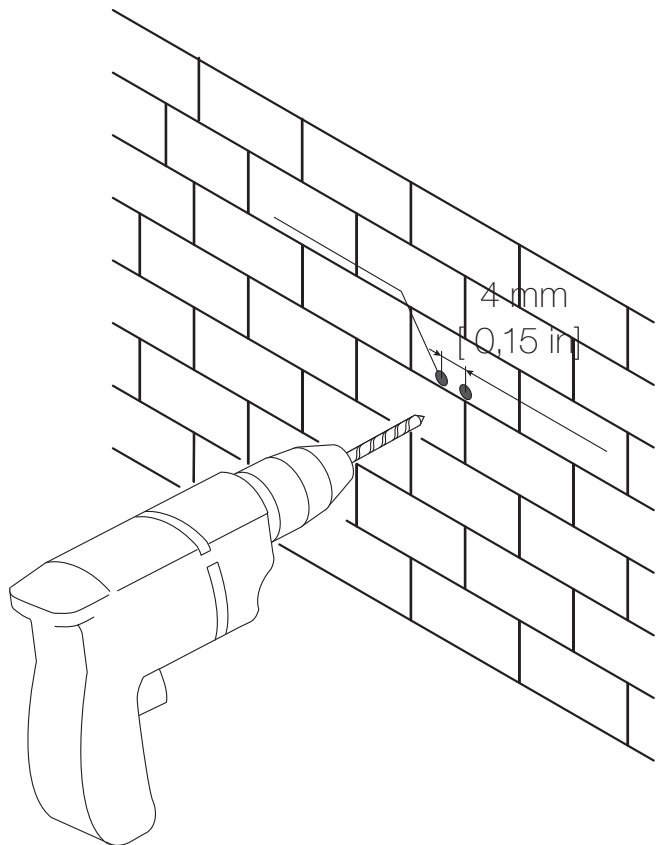


3

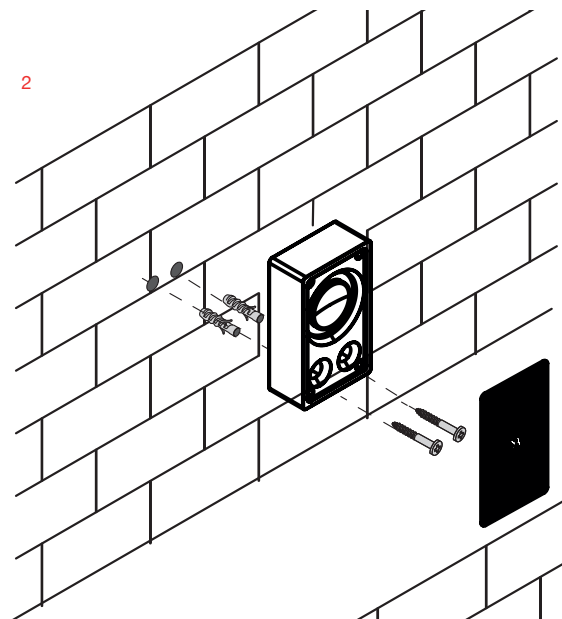


3.1

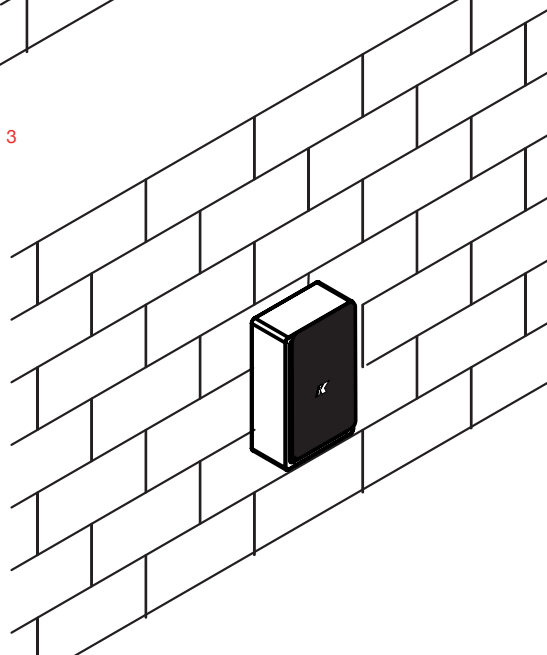
1



2

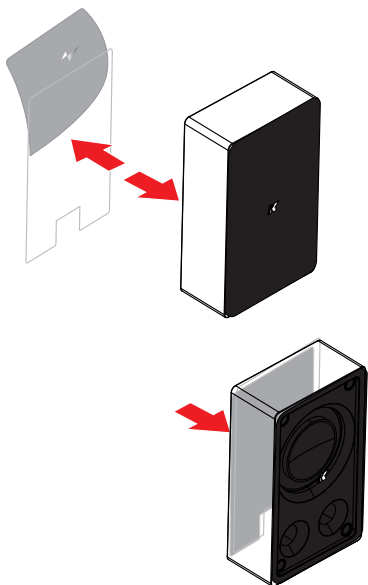


3

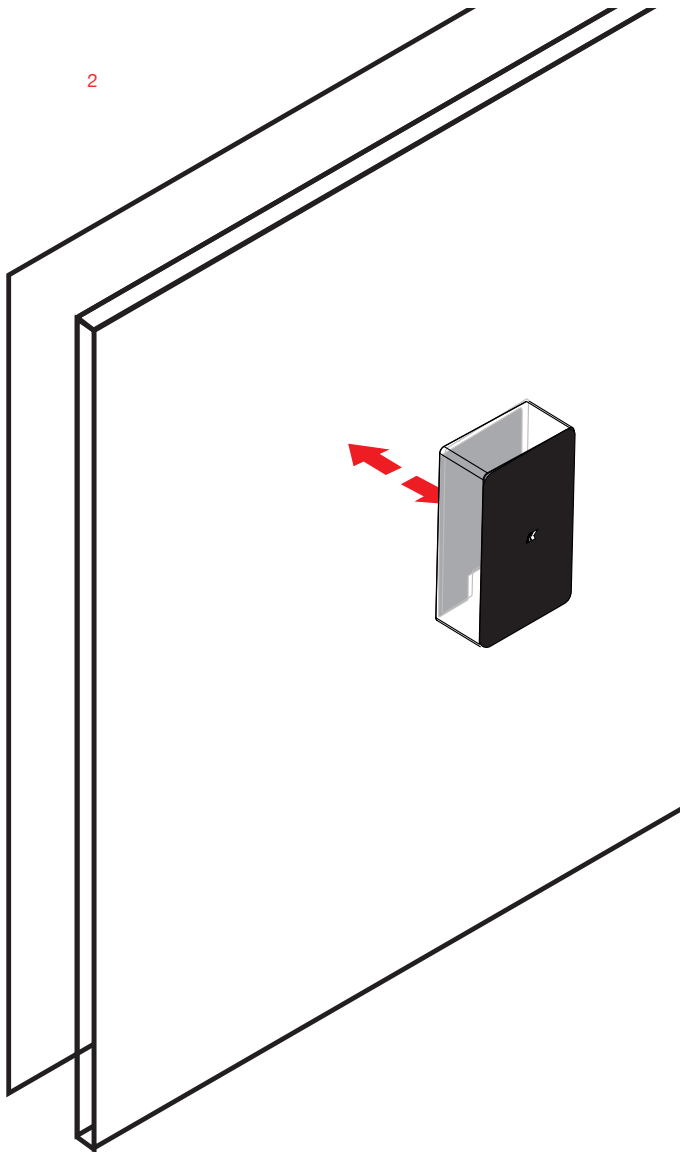


3.2

1



2



Lyzard-KZ1R1

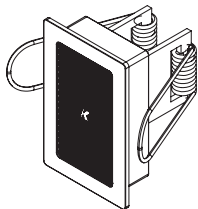
Permanent Installation Recessed

With the recessed version, the mounting and installation is thought to be easier, with the new spring metallic clips provided. So to install the recessed model permanently, following these instructions carefully. (fig.4)

For permanent installation a kit including a mounting measure template is provided, you can find it drawn inside the package, keep the box for future reference. Please check also the drilling jig available on the Lyzard-KZ1R1 product's page.(fig. 4., 1 - 2 -3 - 4, above)

Follow these operating instructions:

- 1 Find the proper wall's position and depth. (1)
- 2 Make a hole in the wall using the drilling-template provided, the deepest the recessed speaker is, (28mm with closed clips - ca 56mm with open/fold clips - see the mechanical drawings for complete details), according to the drilling-jig. To make a proper installation is better to choose a plasterboard wall to drill or saw with a drywall saw. (2)
- 3 Set the metallic clips in place and gently fold them behind to recess the speaker in the depth of the hole. (3)
- 4 Then your KZ1R1 installation is complete! (Fig. 5 - 5.1.1, 5.2.2, 5.3.3, 5.4.4) (4)



Connecting

Lyzard-KZ11 and Lyzard-KZ1R1 are already pre-wired with 5 m (16.4 ft) of ultra-thin speaker cable to be directly connected to any K-array power amplifier.

K-array's Kommander family of amplifiers featuring built-in DSP will operate the Lyzard-KZ11 and Lyzard-KZ1R1 at their optimized performance only with the proper device preset:



Set the dedicated **Lyzard-KZ11 and Lyzard-KZ1R1** DEVICE PRESET in the amplifier DSP BEFORE applying any signal to the loudspeakers

- ensure to load the KZ11 - KZ1R1 device preset before applying any signal to the loudspeaker.

Before connecting the loudspeaker cable to the amplifier:

- ensure the amplifier's minimum loading impedance is matched, especially when connecting multiple loudspeakers in parallel (see next paragraph);
- ensure that the amplifier's power is turned off

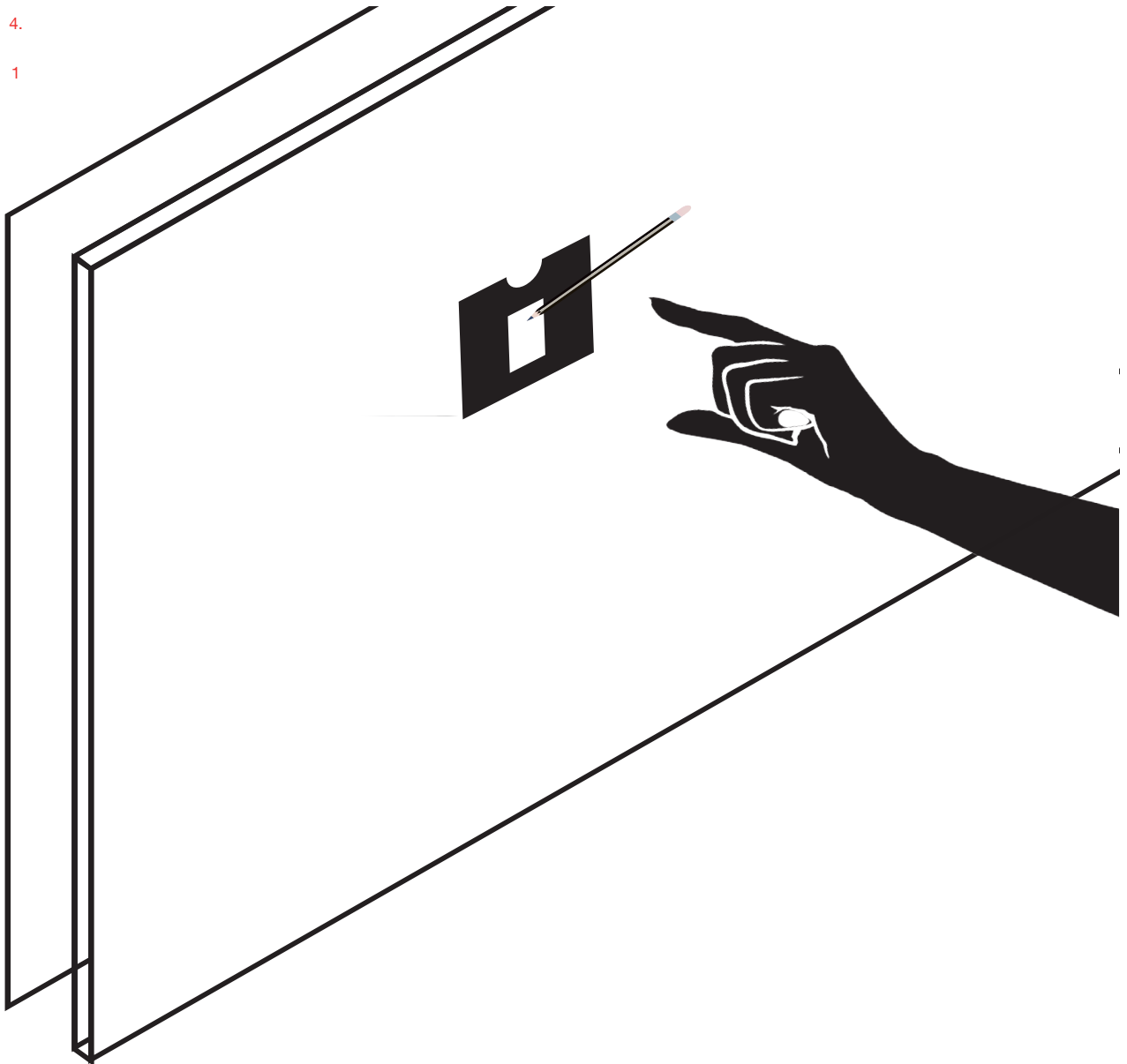
In case of cable replacement, for a cable run of up to 5 m (16.4 ft) use a wire gauge of 0,5 mm² (24 AWG) at least. For longer cable runs a wider gauge is recommended.

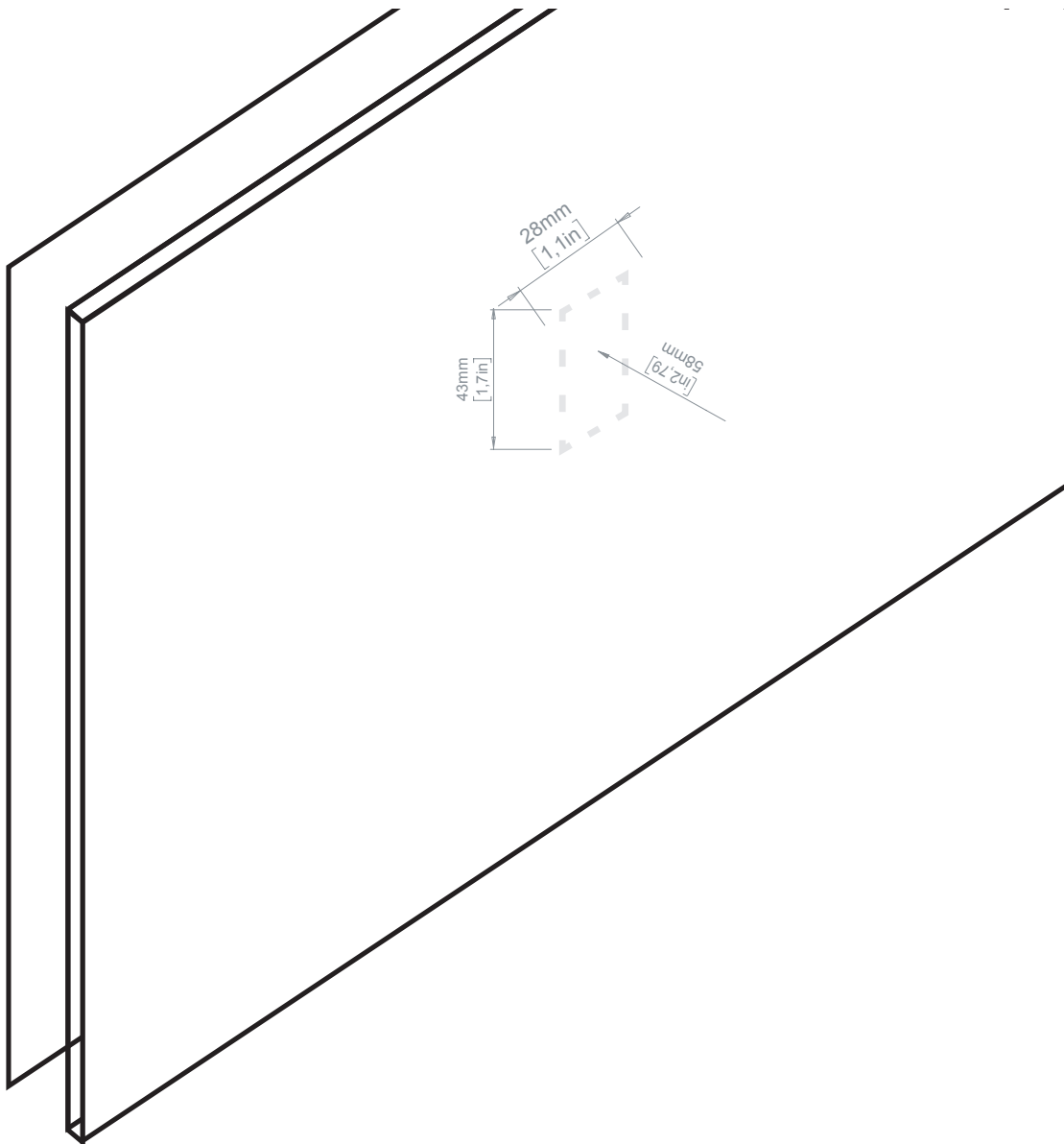


The Lyzard-KZ11 - KZ1R1 ultra-thin speaker cable should not be cut, jointed or soldered. Instead of altering the wiring, replace the cable.

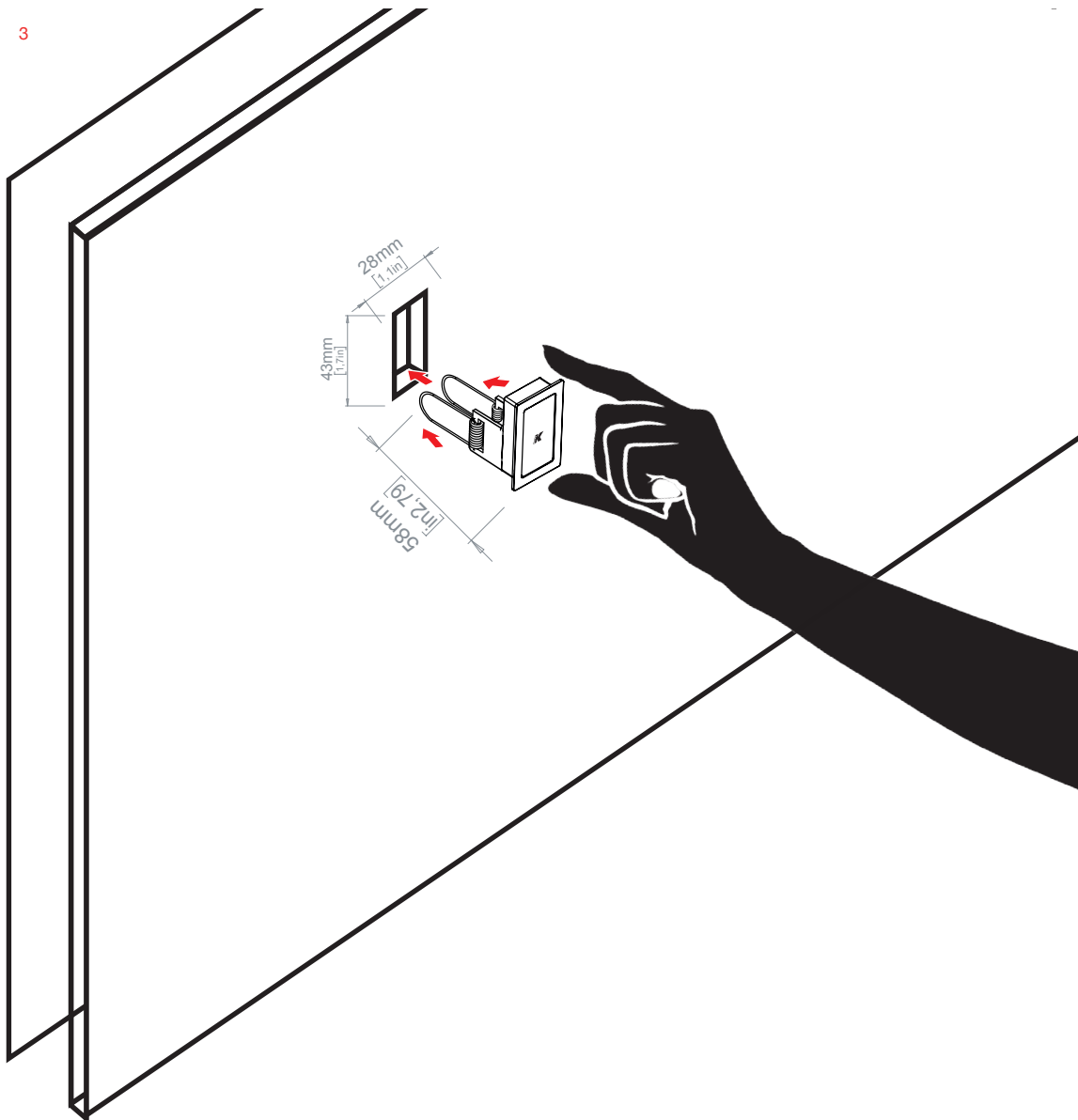
4.

1

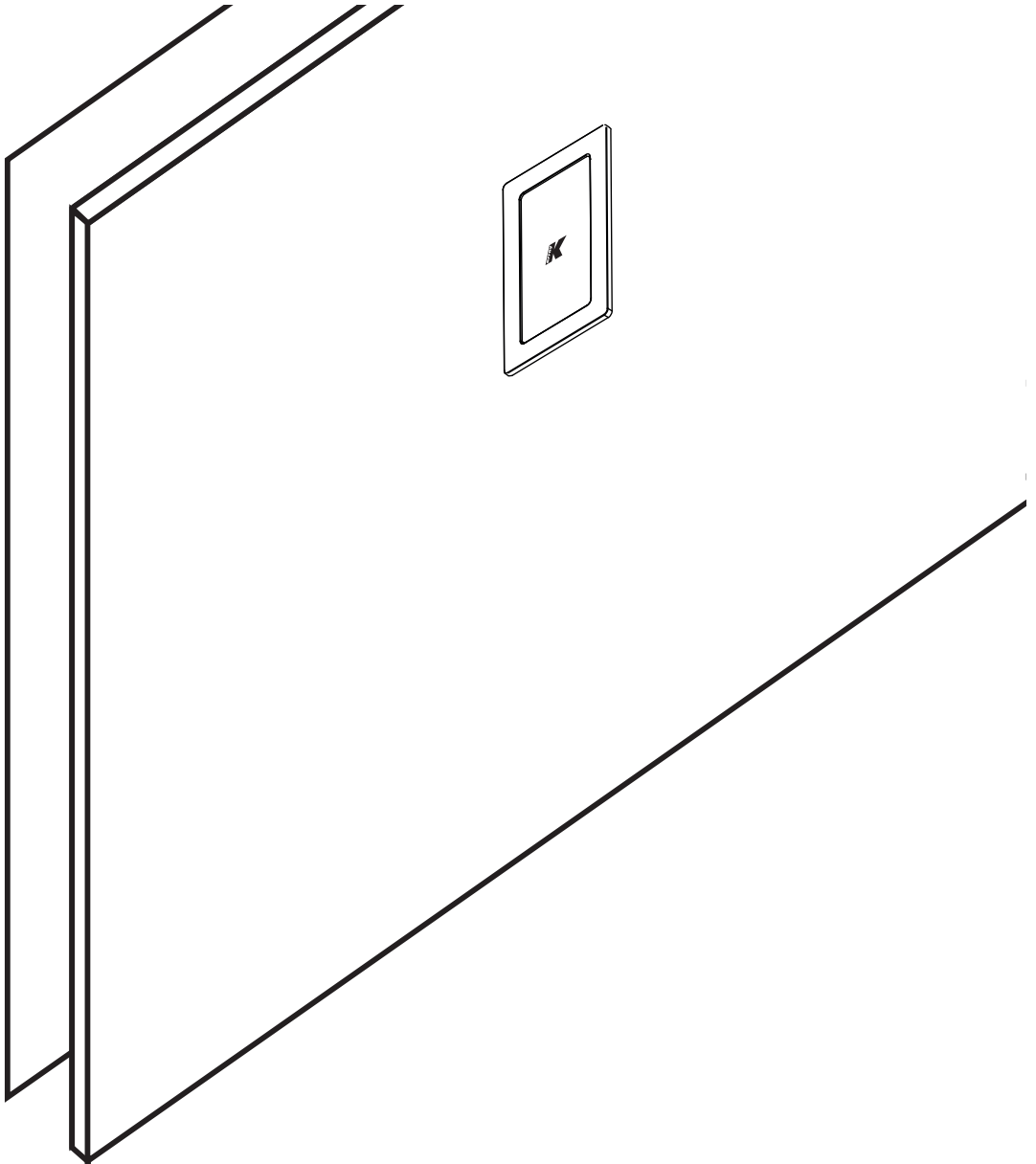




3



4



In order to screw the terminals of the, use 2-mm (5/64 in) standard (flat-blade) screwdriver.

Caution must be taken when connecting the loudspeaker cable to the amplifier’s terminal to match the signal polarity:

| | | |
|---|------|-----------------|
| + | HOT | red wire |
| - | COLD | black/blue wire |

When connecting the wires to a SpeakOn NL4 connector, screw the HOT+ wire to the terminal 1+ or 2+ and the COLD- wire to the terminal 1- or 2-.

Loudspeakers in Parallel

By connecting the loudspeakers in parallel it is possible to drive many loudspeakers with the same audio signal by means of a single amplifier output channel.

The parallel connection lowers the total load impedance. Caution must be taken to maintain the load impedance of the Lizard-KZ1I and Lizard-KZ1RI paralleled loudspeakers above the amplifier’s minimum loading impedance.

Leveraging on the impedance, up to 4 loudspeakers can be connected in parallel to the same amplifier output channel.

| N. of loudspeakers | 1 | 2 | 3 | 4 |
|--------------------|------|-----|-------|-----|
| Parallel impedance | 16 Ω | 8 Ω | 5,3 Ω | 4 Ω |

Service

To obtain service:

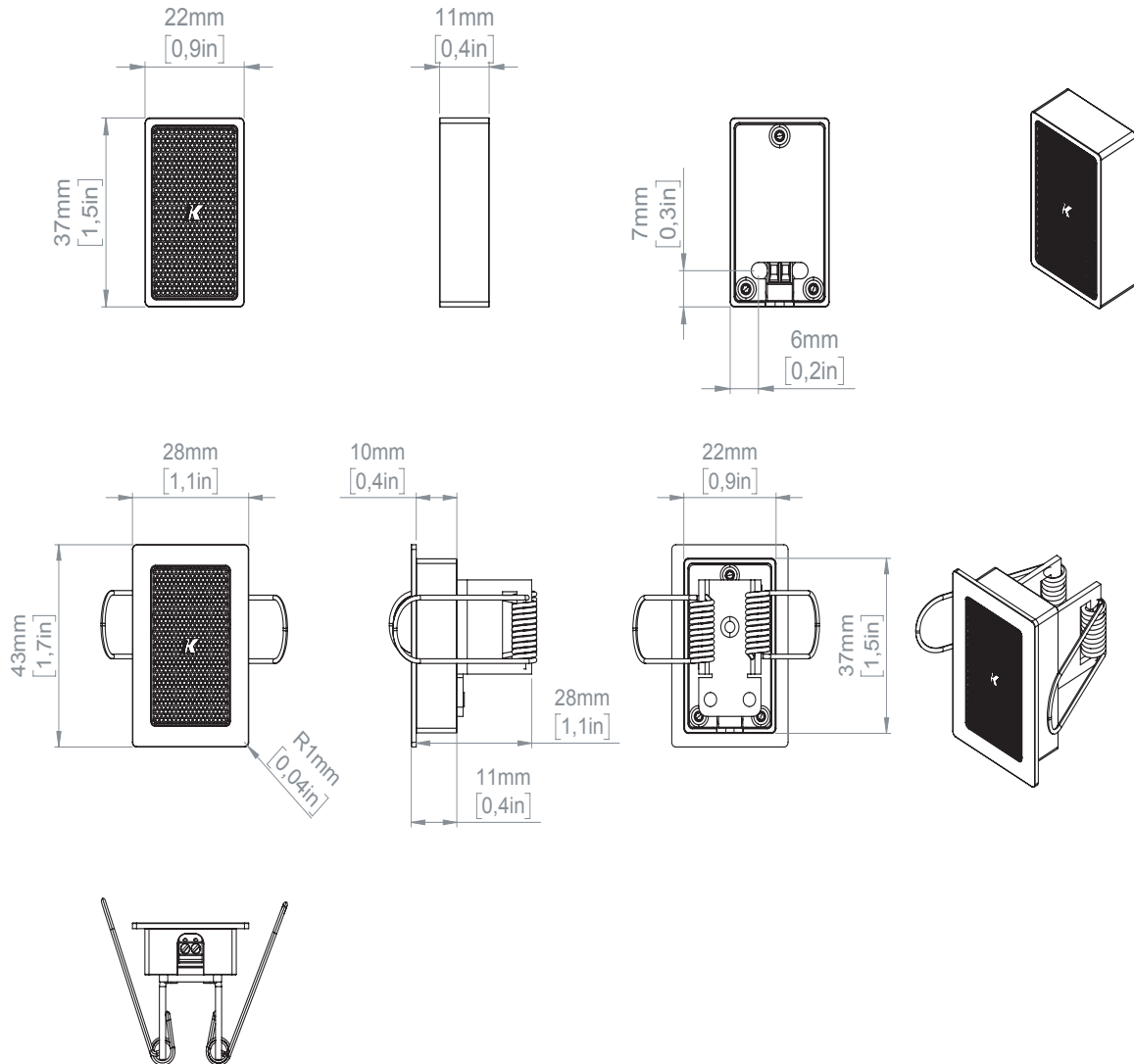
1. Please have the serial number(s) of the unit(s) available for reference.
2. Contact the official K-array distributor in your country: find the Distributors and Dealers listed on the [K-array website](#). Please describe the problem clearly and completely to the Customer Service.
3. You will be reached back for on-line servicing.
4. If the problem cannot be solved 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 costs are charged to 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 housing. 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.

Mechanical drawings



| Technical specifications | |
|---------------------------------|------------------------------|
| Type | point source |
| Transducers | 0.5" Neodymium magnet woofer |
| Frequency Response ¹ | 500 Hz – 18 kHz (-6 dB) |
| Max SPL ² | 86 dB peak |
| Coverage | V. 140° H. 140° |
| Rated Power | 3,5 W |
| Nominal Impedance | 16 Ω |
| Connectors | IN + IN- screw terminals |

| Handling & Finishes | |
|---------------------|----------------------------------------------------------------|
| Material | Aluminum |
| Colors | Black, White, Custom RAL |
| IP Rating | IP64 |
| Dimensions (WxHxD) | 22 x 37 x 11 mm (0.9 x 1.5 x 0.4 in) 28 x 43 x 11mm (Recessed) |
| Finishes | 24K Gold, Antique Gold, Rose Gold, Polished Steel |
| Weight | 0.021 kg (0.04 lb) |

¹ With dedicated preset.

² Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 8 m then scaled at 1 m.



Designed and Made in Italy

K-ARRAY surl
Via P. Romagnoli 17 | 50038 Scarperia e San Piero - Firenze - Italy
ph +39 055 84 87 222 | info@k-array.com

www.k-array.com