

Lyzard-KZ1

Pioneering, powerful and exclusive
mini point source with a 0.5" cone driver

USER GUIDE



K-ARRAY
Unique Audio Solutions

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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.

Should 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.

The unique design of the Lyzard-KZ1 sets the loudspeaker in a class of its own.

The Lyzard-KZ1 measures 2 x 3,7 x 1 cm and weighs only 21 grams; it is composed of a single 0.5" long excursion transducer contained in an ultra-resistant aluminum chassis, capable of high-profile audio performance.

An innovative sound experience, the high-efficiency driver, which covers an impressively wide frequency range, has a neodymium magnet and suspensions engineered for maximum linear excursion and minimum residual transducer noise.

The Lyzard-KZ1 is designed for discreet use in a variety of intimate environments where high-quality background music is needed in a compact form, such as museums and small retail stores and comes in a variety of premium finishes.

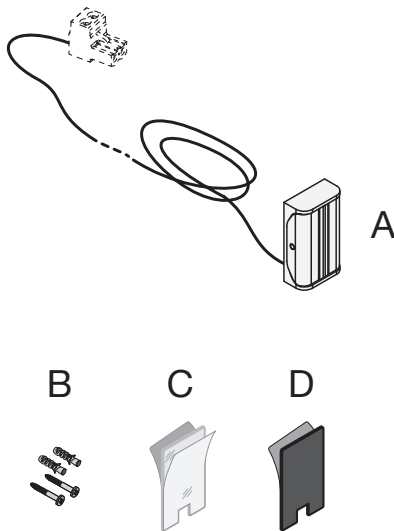
Lyizard-KZ1

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Unpacking

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

- A. 1x Lyizard-KZ1 loudspeaker with cable*
- B. 2x screw and plug mounting kits
- C. 4x double-sided removable adhesive pads
- D. 1x adhesive magnetic pad



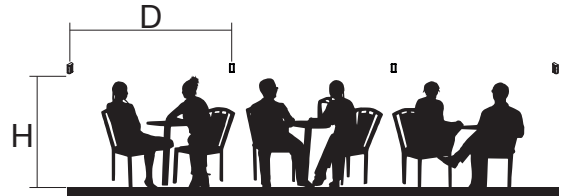
The accessories provided within the packaging allows an easy installation in any application, either in permanent or a temporary setup.

* In the Lyizard-KZ1 AZ kit the cable is terminated with an euroblock connector.

Setup

Lyizard-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.

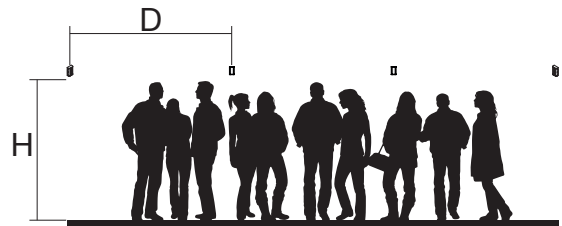
We suggest the following configurations:



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)



Standing listening area

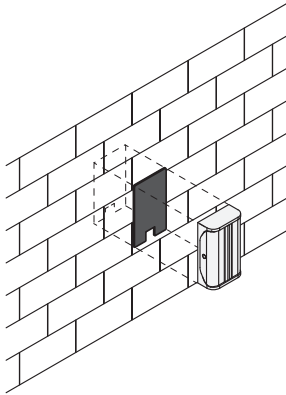
H: min height 1,7 m (5½ ft) / max height 2,7 m (9 ft)

D: min distance: 2,5 m (8¼ ft)

Installation

Adhesive Pads

The adhesive pads are intended for quick and clean installation on flat surfaces. Two types of pad are provided: the double-sided removable adhesive pad and the magnetic pad are ready to use for either fixed and temporary installations.

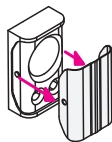


Permanent Installation Using Wall Plug

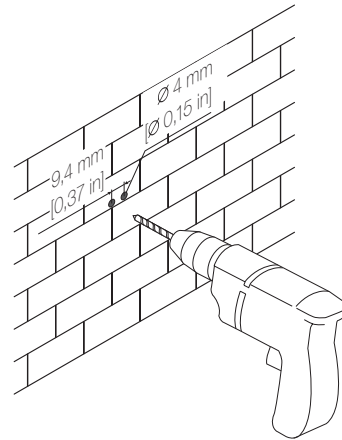
For permanent installation a kit including a proper screw and plug is provided.

Follow these operating instructions:

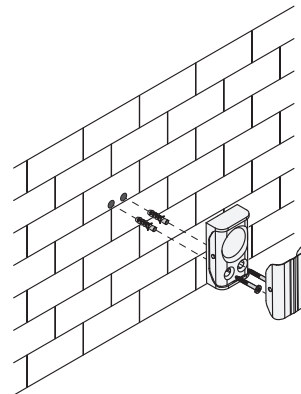
1. Before permanently affixing the loudspeaker to the surface, gently remove the outer grill;



2. Drill two 4 mm (0.15 in) diameter holes in the surface at a distance of 9,4 mm (0,37 in) between each other and at least 20 mm (0.80 in) deep;



3. Set the wall plug in place and gently screw the loudspeaker to the surface;



4. Reposition the outer grill on the loudspeaker.

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Connecting

Lyzard-KZ1 is 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 line of amplifiers featuring built-in DSP will operate the Lyzard-KZ1 at its optimized performance only with the proper device preset: ensure to load the Lyzard-KZ1 device preset before applying any signal to the loudspeaker. Before connecting the loudspeaker cable to the amplifier:



Set the dedicated Lyzard-KZ1
DEVICE PRESET on the amplifier DSP
BEFORE applying any signal to the loudspeaker

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



The Lyzard-KZ1 ultra-thin speaker cable
should not be cut, jointed or soldered.
Instead of altering the wiring, replace the cable.

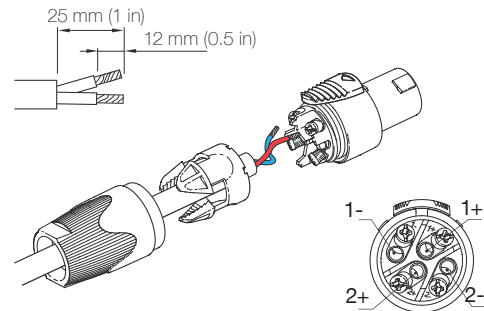
In case of cable replacement, for a cable run of up to 5 m (16.4 ft) use a wire gauge of 0,5 mm² (24 AWG) at least. For longer cable runs a wider gauge is recommended.

In order to screw the terminals of the Lyzard-KZ1, 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 paralleled loudspeakers above the amplifier's minimum loading impedance.

Leveraging on the Lyzard-KZ1 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:

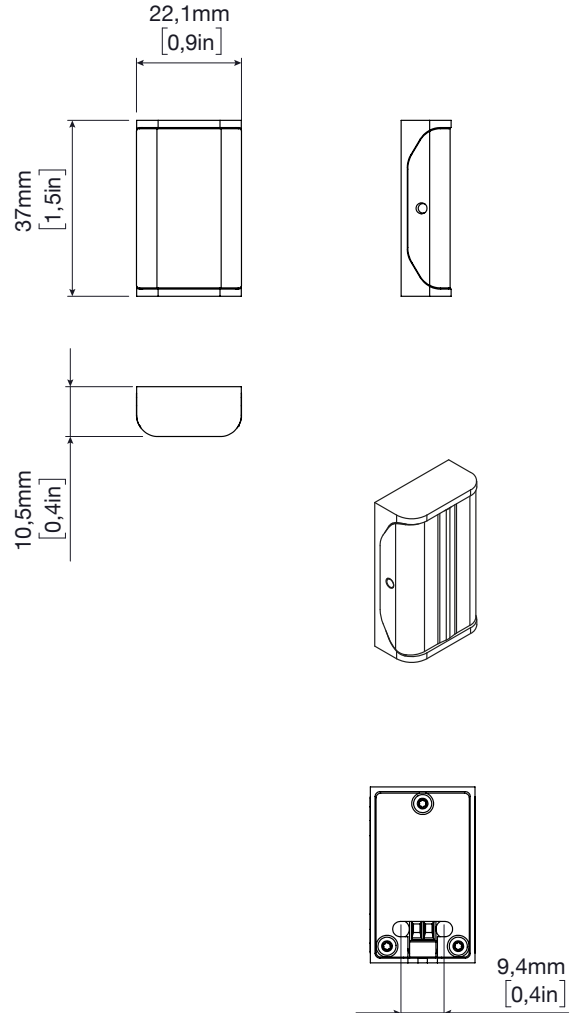
1. Please have the serial number(s) of the unit(s) available for reference.
2. Contact the official K-array distributor in your country: find the Distributors and Dealers list on the [K-array website](#). Please describe the problem clearly and completely to the Customer Service.
3. You will be contacted back for online servicing.
4. 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 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



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Technical specifications

General	
Type	Point source
Drivers	0.5" neodymium magnet woofer with 0.5" voice coil
Frequency Response	500 Hz – 18 kHz (-6dB)
Rated Power	3.5 W
Maximum SPL	86 dB peak ¹
Nominal Impedance	16 Ω
Crossover	External crossover required
Coverage	140°

Handling & Finishes	
IP Rating	IP54
Dimensions (WxHxD)	22 x 37 x 11 mm (0.84 x 1.46 x 0.41 in)
Weight	0,021 kg (0.046 lb)
Colors & Finishes	black, white, custom RAL, brushed and polished stainless steel, 24K gold finishes

Accessories	
Recommended Amplifier	Kommander-KA02

¹ Maximum SPL is calculated using crest factor 4 (12dB) @ 1 m and power handling specifications, exclusive of power compression.



Designed and Made in Italy

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