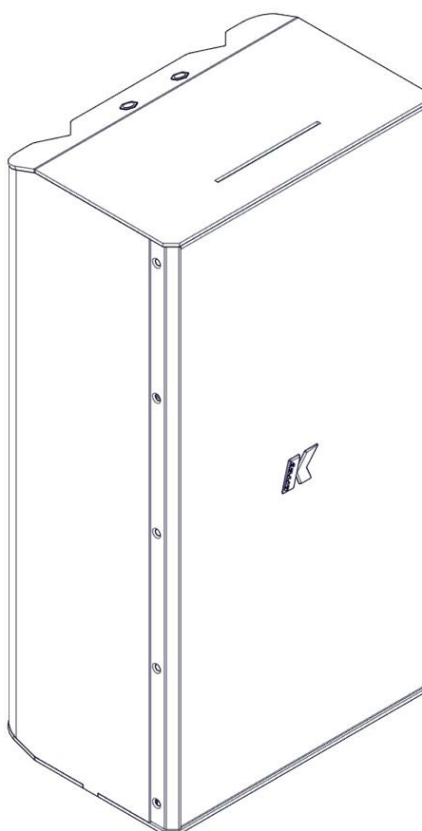




# **KF210**

## USER GUIDE English



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## SYMBOLS

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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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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.

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

---



Warning! Dangerous voltages: RISK of electric shock.

Terminals marked with this symbol are HAZARDOUS LIVE and the external wiring connected to these terminals requires installation by a qualified professional or the use of ready-made leads or cords.

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

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This device complies with Restriction of Hazardous Substances Directive.

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## 1. INTRODUCTION

The K-array KF210 is a stainless steel compact full-range speaker. With plug and play capabilities, it does not require presets and can be driven by any amplifier.

The KF210 measures less than 12 cm deep. It is comprised of a 10" and a 3" neodymium magnet woofer coaxially mounted plus one 10" passive radiator to extend the bass response. It has a selectable impedance (4/16) and 90° coverage, horizontally and vertically. With a max SPL of 117 dB, the KF210 is the ideal for installations that require high quality in a practical, compact form.

The KF210 is accompanied by several product-specific accessories that can enhance the system's setup. Wall brackets are included while other useful tools are available for purchase, like the flush mount recessing frame, K-WF210, used to further hide the speakers.

KF210 is available in a 24 K gold plated finish as well as brushed or polished stainless steel finishes in addition to the standard sleek black and elegant white rendering them suitable for any venue.

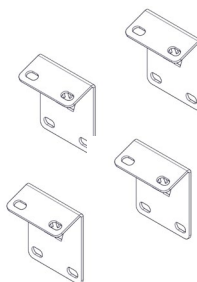
## 2. KEY FEATURES

- Unique performance-to-size ratio
- Full-range emission
- 10" + 3" neodymium magnet woofers
- 10" passive radiator
- Weatherproof
- Compatible with any amplifiers
- Dedicated accessories for flush mounting
- Self-powered capabilities with dedicated accessory

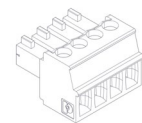
## 3. PACKAGE CONTENTS



1 x KF210 speaker



4 x wall brackets + screws



4-pin phoenix connector

## 4. SAFETY INFORMATION

Read these instructions - Keep these instructions - Heed all warnings



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 this 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.

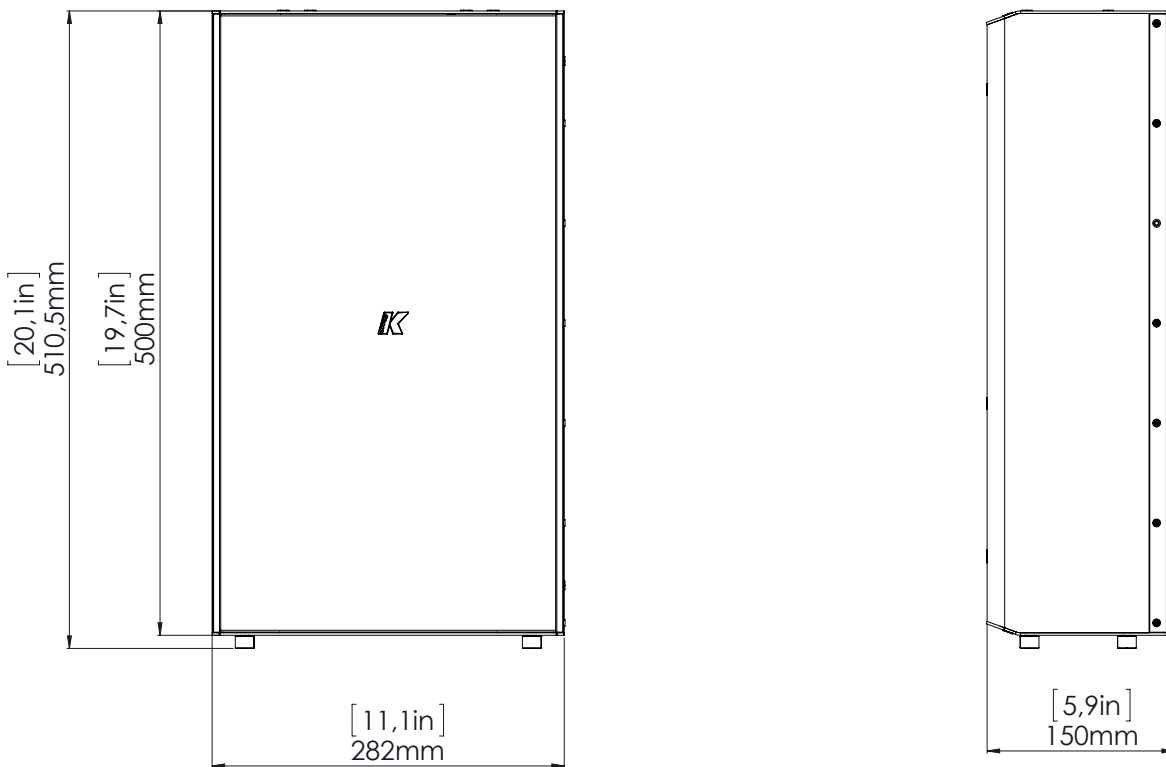


- When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- **Avoiding hearing damage.** Professional loudspeakers are capable of producing extremely high sound levels and should be used carefully. Never stand close to loudspeakers driven at high volume. 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.
- **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 under 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, paint, or 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 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. 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.

## 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. PHYSICAL OVERVIEW



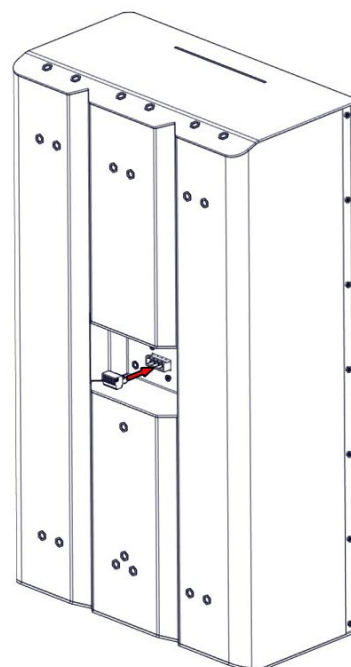
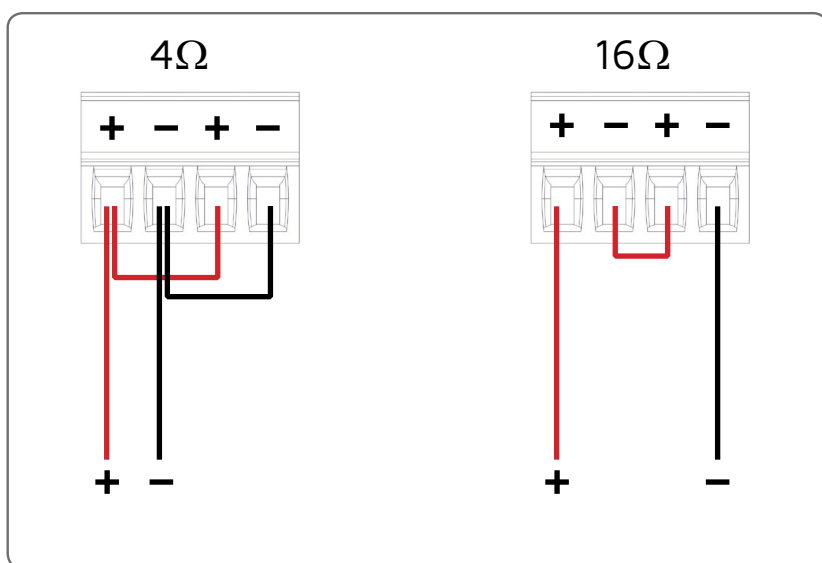
Weight  
12 kg (26.5 lbs)

## 7. WIRING

The KF210 is comprised of two neodymium transducers mounted coaxially, combined with a passive radiator. The neodymium transducers feature a double voice coil ( $8\Omega + 8\Omega$ ).

The two voice coils of each transducer can be wired in parallel (resulting in a  $4\Omega$  total impedance) or in serial (resulting in a  $16\Omega$  total impedance). To do this, a 4-pin female Phoenix connector provided is plugged into the male Phoenix connector situated at the back of the speaker.

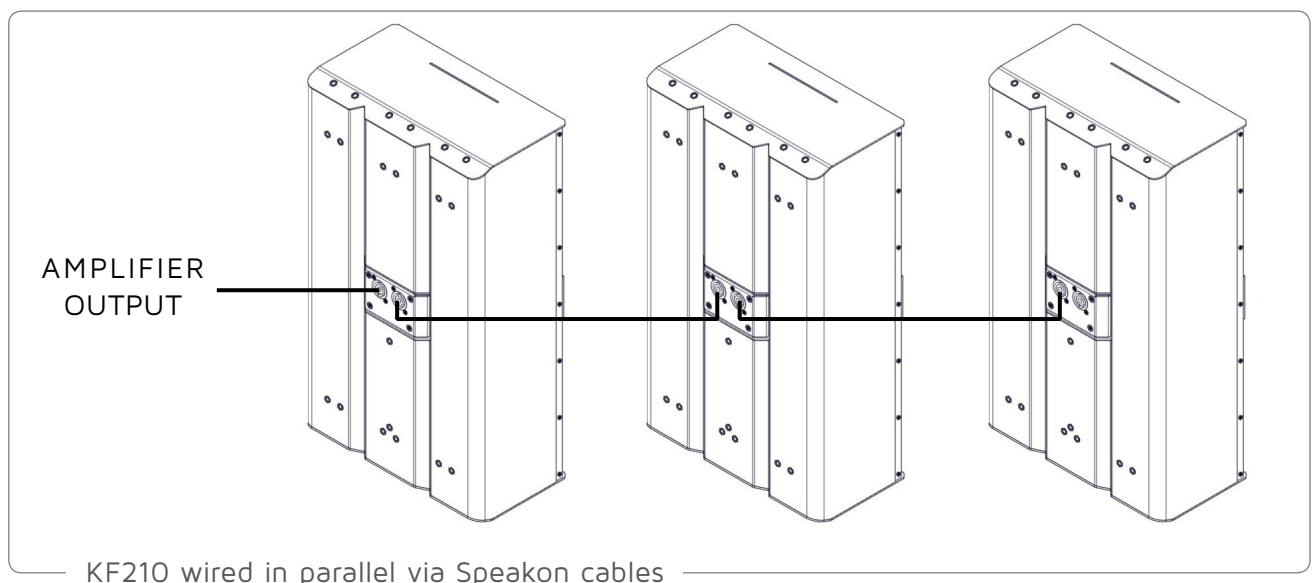
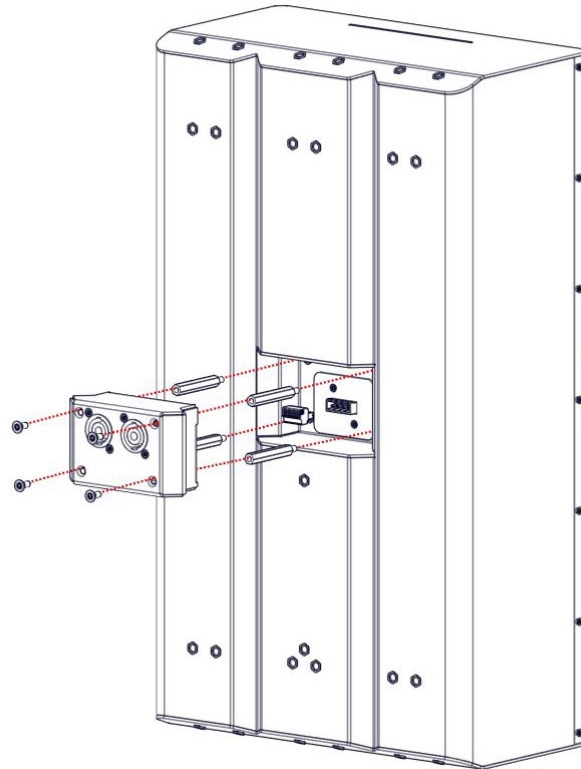
A serial cable is also provided to connect the two central pins of the phoenix connector in the  $16\Omega$  configuration.



### 7.1 K-2SPK ACCESSORY

This accessory is used to connect a Speakon cable to a KF210. It features two Speakon connectors wired in parallel providing the possibility to wire two or more units in parallel using only Speakon cables.

The two wires situated at the back of the K-2SPK carry the signal from the 1+ contact (red wire) and 1- contact (black wire) of the Speakon connector. The two wires will need to be wired the phoenix connector as shown in the previous section (by default, they are wired in serial configuration) then the four screws and four hexagonal spacers included are used to mount the K-2SPK on the KF.

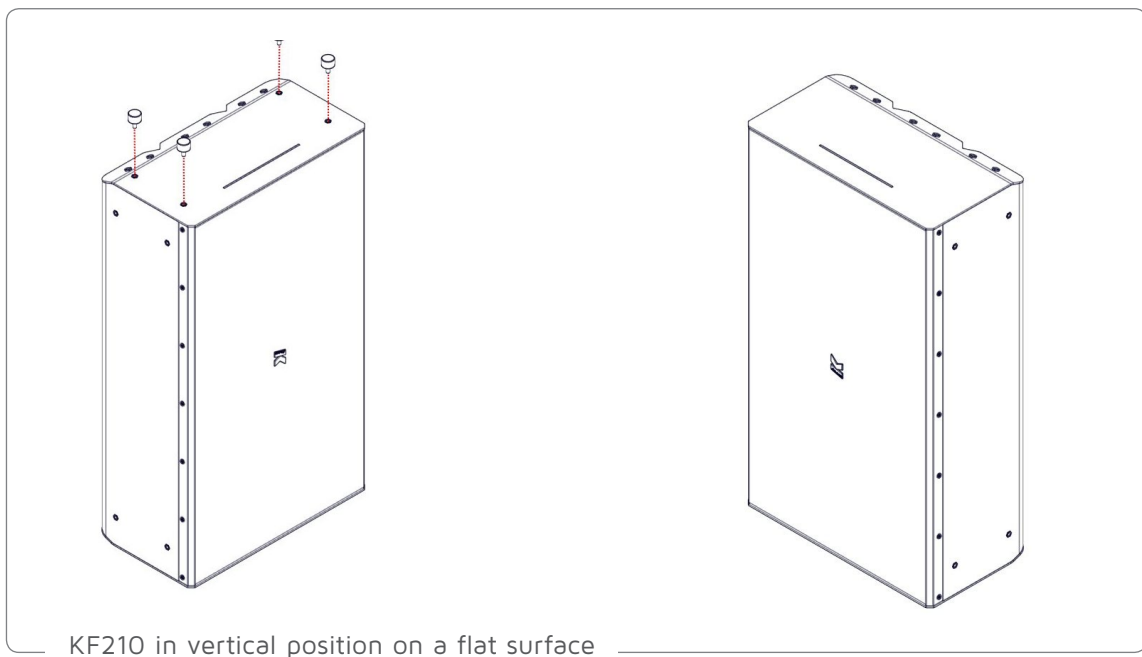
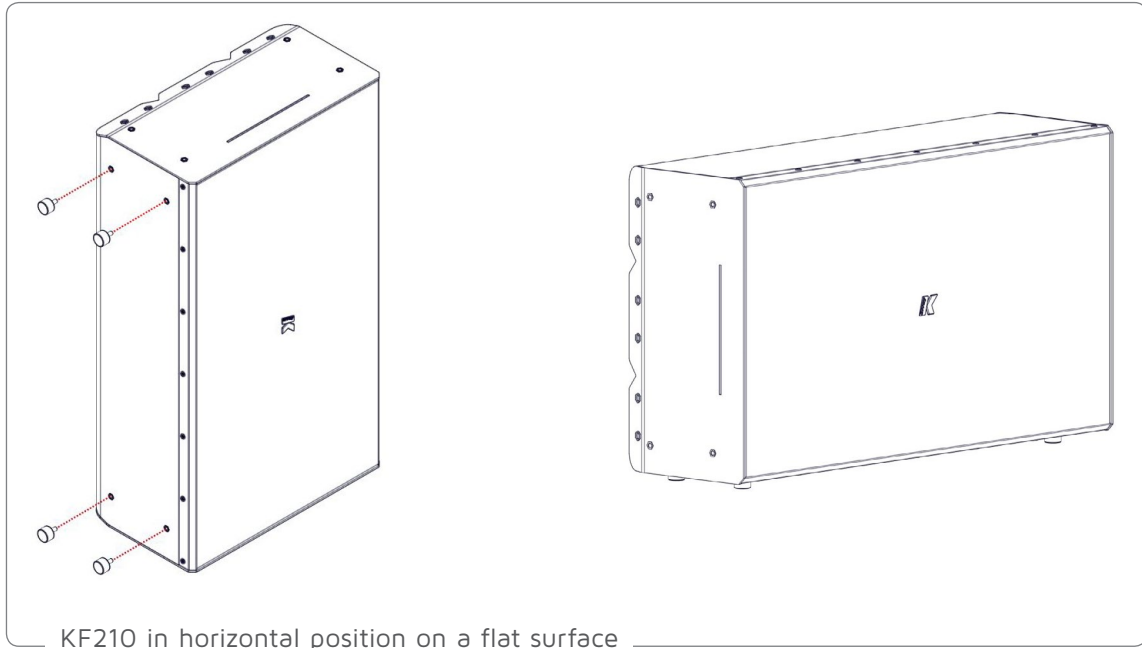




## 8. SETUP

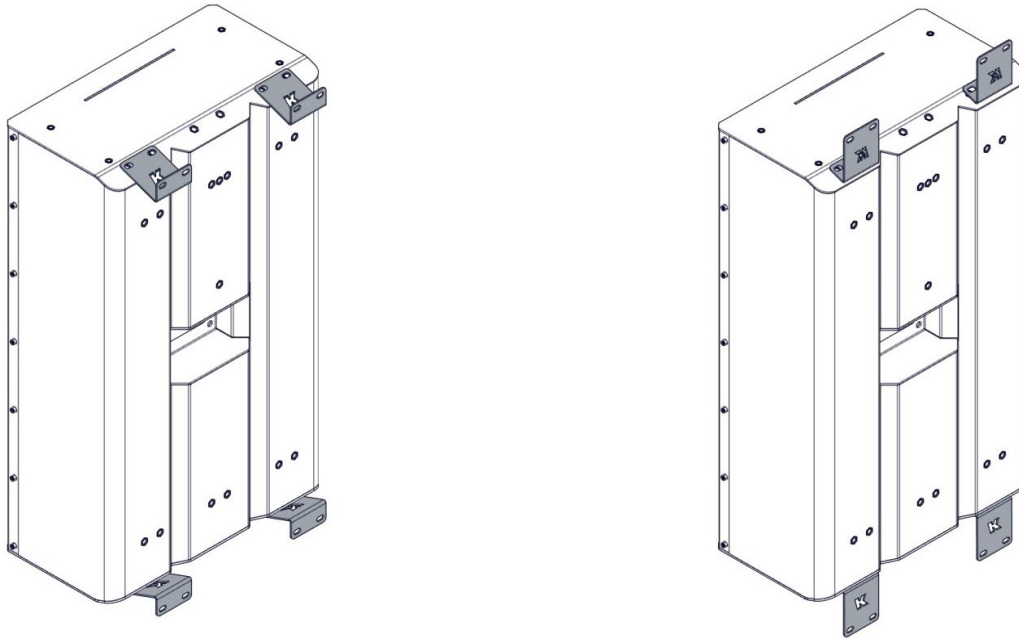
### 8.1 STACKED SETUP

KF210 units can be positioned on a flat surface both in horizontal and in vertical position thanks to the four rubber feet included.



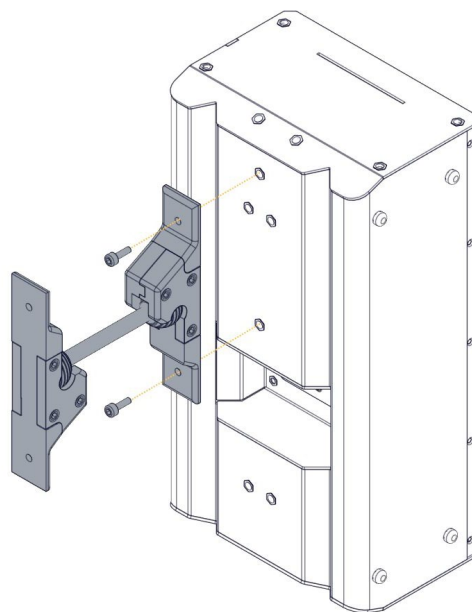
## 8.2 HANGING SETUP

The KF210 can be mounted on the wall using the four included wall brackets.



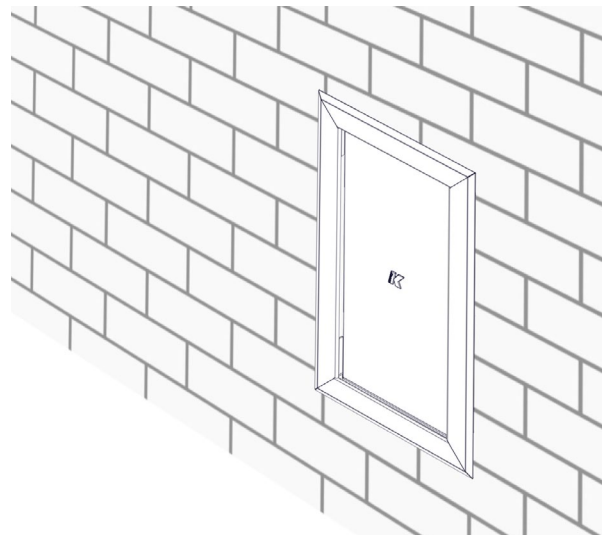
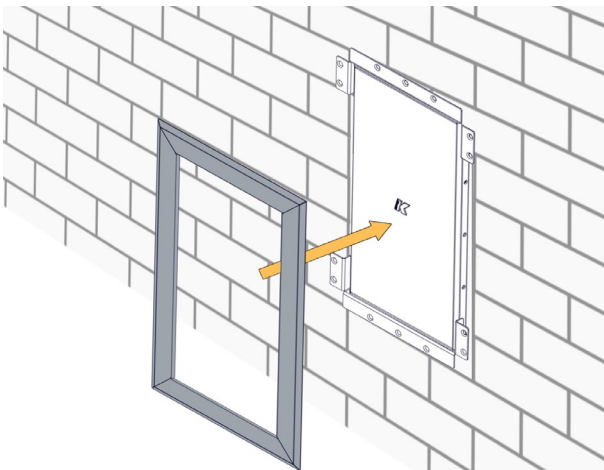
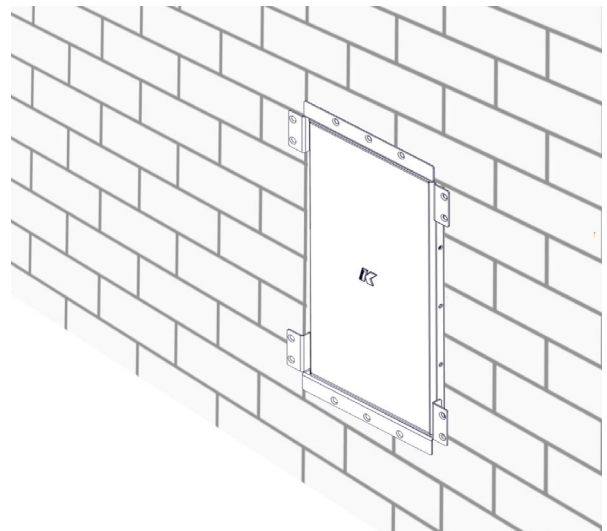
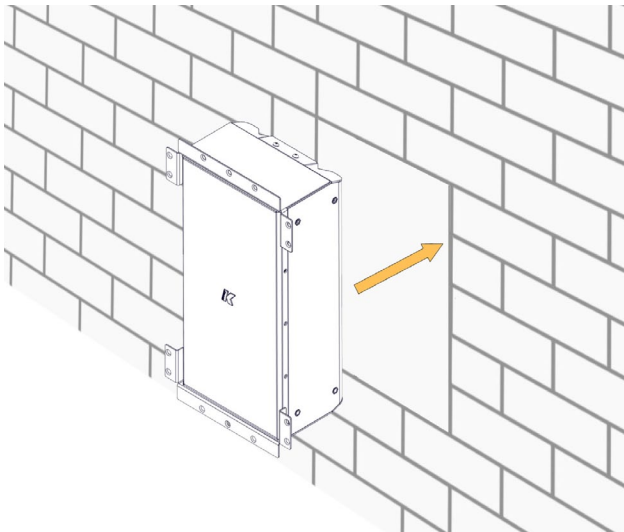
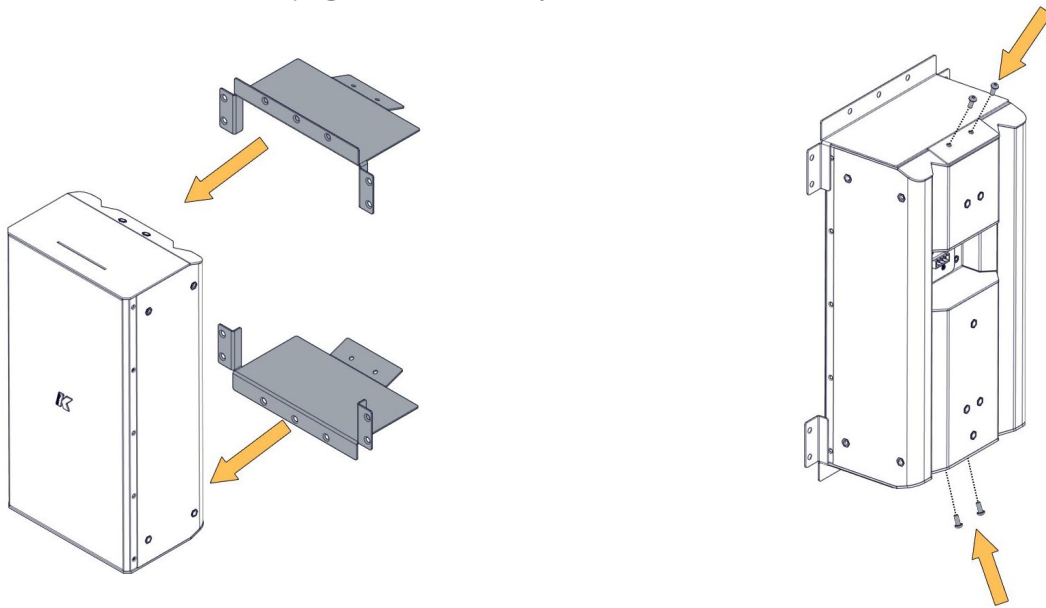
## 8.3 TILTING THE SYSTEM

When a tilting angle is necessary, the KF210 can be mounted on the wall with the K-WALL2 accessory (not included).



### 8.4 FLUSHED WALL MOUNT

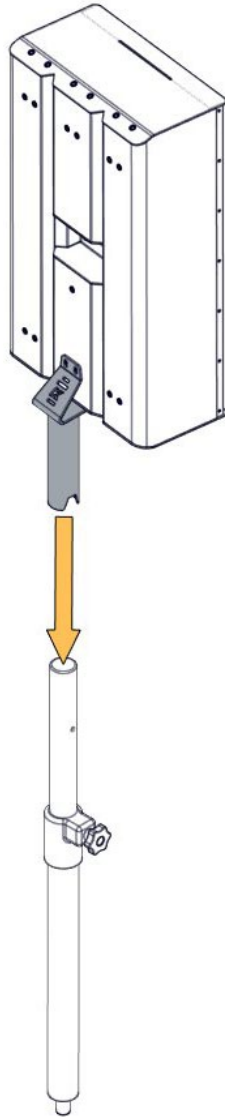
The KF210 can be easily flush mounted in wall thanks to the K-WF210 accessory (not included). The suggested dimensions for the hole to make in the wall are 295x510mm. Please check also the drilling jig available on the K-WF210 page of the K-array website.



The frame is affixed magnetically

## 8.5 POLE MOUNT

The KF210 can be mounted on a standard 35 mm diameter pole using the K-PMOUNT accessory (not included).



## 9. 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 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.

## 10. TECHNICAL SPECIFICATIONS

	<b>ACOUSTICS</b>
Max Power Handling	320 W
Impedance	4 / 16 $\Omega$ selectable
Frequency range (-10 dB)	40 Hz – 19000 Hz
SPL 1W/1mt	95 dB <sup>(1)</sup>
Maximum SPL	117 dB (cont.) – 123 dB (peak) <sup>(2)</sup>
	<b>COVERAGE</b>
Horizontal	90°
Vertical	90°
	<b>CROSSOVER</b>
Type	Internal passive crossover
Frequency	2500 Hz
	<b>TRANSDUCERS</b>
Type	1 x 10" neodymium magnet woofer with double 2" voice coil coaxially mounted to 1 x 3" neodymium magnet woofer with double 1" voice coil
Type	1 x 10" passive radiator
	<b>POWER AUDIO IN/OUT</b>
Connectors	1 x 4-pin phoenix connector
Wiring	Serial (16 $\Omega$ ) or Parallel (4 $\Omega$ )
	<b>RECOMMENDED AMPLIFIERS</b>
	KA24 - KA84
	<b>CERTIFICATION</b>
	56 (More complete water protection with K-KUIP accesspry)
	<b>PHYSICAL</b>
Dimensions (LxHxD)	28.2 cm x 50.0 cm x 15.1 cm (11.1" x 19.6" x 5.9")
Weight	12 kg (26.5 lbs)

### Notes for data

1. Measured @4 mt then scaled @1 mt;
2. Measured with musical signal

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.

## 11. 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:** KF210 – KF210W – KF212 – KF212W

**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.  
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 50038 Scarperia e S. Piero  
 Firenze Italy  
 Tel. +39 055 8487222  
 Fax +39 055 8487238

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

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 P. IVA / VAT / CF 06206990480 - R.E.A. 609589 Cap. soc. i.v. € 100.000,00  
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