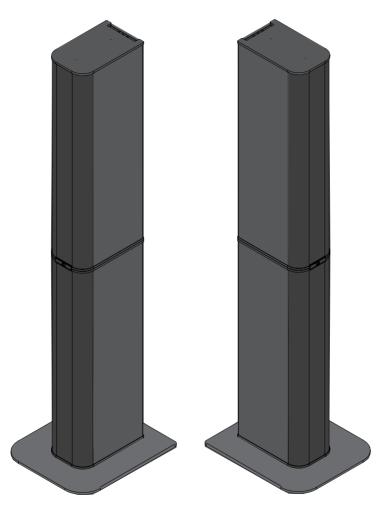
Full-range tower stereo line array system

ASSEMBLY MANUAL









#### IMPORTANT SAFETY INSTRUCTIONS



# CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



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



The lighting 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this quide.



Operator's manual; operating instructions

This symbol identifies the operator's manual that relates to the operating instructions and indicates that the operating instructions should be considered when operating the device or control close to where the symbol is placed.



For indoor use only

This electrical equipment is designed primarily for indoor use.



WFFF

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 device complies with Restriction of Hazardous Substances Directive



#### WARNING

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

#### General heed and warnings

- · Read these instructions.
- Keep these 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 plug. A polarized
  plug has two blades with one wider than the other. A grounding plug has two
  blades and a third grounding prong. The wide blade or the third prong is provided
  for your safety. If the provided plug does not fit into your outlet, consult an
  electrician for replacement of the obsolete outlet.
- Only use attachments/accessories specified by the manufacturer.
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- Clean the product only with a soft and dry fabric. Never use liquid cleaning products, as this may damage the products cosmetic surfaces.
- 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.
- Avoid placing the product in a location under direct sunlight or near any appliance that generates UV (Ultra Violet) light, as this may change the product surface finishing and cause a change in color.
- Refer all servicing to qualified service personnel. Servicing is
  required when the apparatus has been damaged in any way, such as powersupply 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.
- CAUTION: These servicing instructions are for use by qualified service personnel
  only. To reduce the risk of electric shock, do not perform any servicing other than
  that contained in the operating instructions unless you are qualified to do so.
- WARNING: Only use attachments/accessories specified or provided by the manufacturer (such as the exclusive supply adapter, battery, etc.).
- · Before turning the power on or off for all devices, set all volume levels to

This apparatus is intended for professional use.

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

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 apparatus.
- K-array cannot be held responsible for damage caused by improper use of the loudspeakers.
- K-array will not shoulder any responsibilities for products modified without prior authorization

#### **CE Statement**

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!

#### **FCC Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

#### FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Canadian Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- · this device may not cause interference, and
- this device must accept any interference, including interference that may cause undesired operation of the device.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

#### Trademark Notice

All trademarks are the property of their respective owners.



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Thank you for choosing this K-array product!

To ensure proper operation, please carefully read the owner's manuals and safety instruction before using the products.

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 <a href="mailto:support@k-array.com">support@k-array.com</a> or contact the <a href="mailto:official K-array distributor">official K-array distributor</a> in your country.

The Dolomite-KRD202P sets a new benchmark in portable audio systems. This full-range tower speaker combines 32x 2" drivers utilizing Pure Array Technology (PAT) with 4x 10" subwoofers and 4x 10" passive radiators, all split into modular 1-meter sections for easy configuration. Sold as a stereo kit, the system includes 2-meter Dolomite tower per side, a ground-stacking base, and a KA104LIVE amplifier.

With its weather-resistant build, Dolomite delivers impressive power in a compact, stylish form. Each module is crafted from stainless steel and wrapped in acoustically transparent fabric, combining durability with an elegant aesthetic. Its modular design offers versatility for both compact and large-scale configurations, adapting seamlessly to any setting. Perfect for luxury private events, hospitality venues, or premium home settings, it perfectly blends performance and sophistication.

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## System features

#### General

- High performance + high rated design
- Complete modular system
- 32x 2" woofers + 4x 10" woofers + 4x 10" passive radiators (per tower)
- V. 7° I H. 120° (array coverage per module)
- Full-range frequency response 41 Hz 18 kHz (-6dB)
- 400W (MHF) + 800W (LF) bi-amplified
- Kommander-KA104LIVE amplifier included
- · Stereo configuration
- Weather resistant IP65

#### **Applications**

- Residential
- Luxury events
- Fashion events
- · Live events / live music events

#### **Finishes**

Black

Assembly Manual

# Unpacking

Each K-array product 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 device. If you find any damage, immediately notify the shipping company.

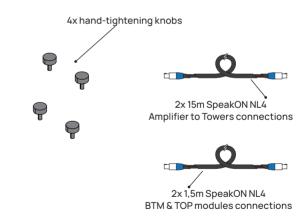
The Dolomite-KRD stereo modular system is a bundle composed of 2 full-range towers with 2 modules, each containing 16 equally spaced woofers, 4 subwoofers, and 4 passive radiators. The system is powered by a dedicated Kommander-KA104LIVE for optimal system configuration and performance.

Each tower is equipped with a robust stainless steel base that ensures structural stability during installation and use. The modular components are designed for seamless vertical stacking, featuring an interlocking system that enables rapid and secure assembly.

Check that the following parts are supplied with the bundle.

	31	
KDL102BTM	2	Bottom modules KRD system
K-SPKCABLE1	2	SpeakON NL4 1,5m
KDL102TOP	2	Top modules KRD system
K-KDL102BASE1	2	Stainless steel stand floor w/ 4x hand- tightening knobs
K-SPKCABLE15	2	SpeakON NL4 15m
KA104LIVE	1	Amplifier platform
KITSHTPWB300TRUE*	1	KIT EU CABL SHUCKO- POWERCONTRUE

K-KDL102BASE



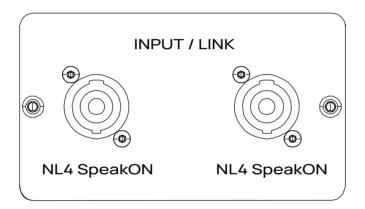
<sup>\*</sup> The kit including the cable and plug for AC mains is supplied in accordance with the regulations of the country of purchase.

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## Rear Panel

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#### KRD202P SYSTEM - KDL102 MODULE



Assembly Manual

## Wiring

#### System Overview - Dolomite-KRD202P

The Dolomite-KRD is a full-range stereo system composed of four modules, optimized for high-quality audio reproduction in a bi-amplified configuration.

Each modules is composed of mid-high range woofers and low-end woofers + passive radiators combined in a full-range system

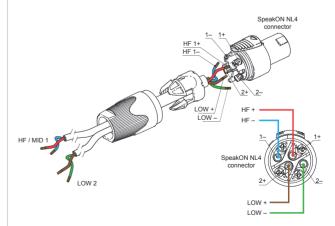
- each containing sixteen (16) 2" drivers utilizing Pure Array technology, specifically designed for accurate and detailed mid-high frequency reproduction and long trow over distance.
- two (2) 10" low-frequency woofers, each coupled with (2) passive radiators, delivering powerful and extended lowend performance.

Each tower operating as a full-range element contributing to both the mid-high frequencies—as a line array module—and the low frequencies, effectively forming a coherent left/right full-range system. It requires the use of the KA104LIVE amplifier, which provides two-way amplification for each components (bi-amp).

#### Wiring and amplification

- Each module's rear panel features two SpeakON connectors: IN (to receive the signal from the amplifier) and LINK (to pass the signal to the adjacent module) fig(a)
- The system includes factory-supplied dual SpeakON cables to connect the modules, ensuring proper signal distribution across all components.
- Pin configuration is as follows: 1+ / 1- for the mid-high signal and 2+ / 2- for the low-frequency signal. Correct polarity and channel assignment during setup are essential to maintain phase alignment and optimal stereo imaging.

TOWER 1	2x NL4 speakON	Polarity - NL4 speakON			04LIVE ed channels
HF	INI	1+	1-	+ / -	01.11
LF	- IN	2+	2-	+/-	CH1
HF	1.15.112	1+	1-	+ /-	0110
LF	LINK	2+	2-	+ /-	CH2
TOWER 2	2x NL4 speakON	Polarity			
HF	18.1	1+	1-	+ / -	01.17
LF	IN	2+	2-	+/-	CH3
HF	LINIZ	1+	1-	+/-	011/
LF	LINK	2+	2-	+ /-	CH4



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## **Amplifier Channel Matching**

The Dolomite-KRD system is powered by the KA104LIVE amplifier platform. Ensure that all amplifier channels are correctly connected and that signal polarity is properly observed. In a stereo configuration:

- Connect the bottom module of the first tower to Channel 1 - 2 of the amplifier. Use the following wiring (via the IN connector of the rear panel BTM module):
- Mid-high: pins 1+ / 1-
- · Low: pins 2+ / 2-
- Connect the top module of the same tower to Channel
   1 2, taking the signal from the LINK output of the bottom module.

For the second tower, apply the same wiring scheme using Channels 3-4 f the amplifier and connecting the two modules via the LINK output.

- Mid-high: pins 1+ / 1-
- Low: pins 2+ / 2-

Before connecting the loudspeaker cable to the amplifier:

- ensure the loudspeaker impedance matches the amplifier channel rated load impedance, especially when connecting multiple loudspeakers in parallel;
- load the dedicated loudspeaker factory preset on the amplifier DSP.



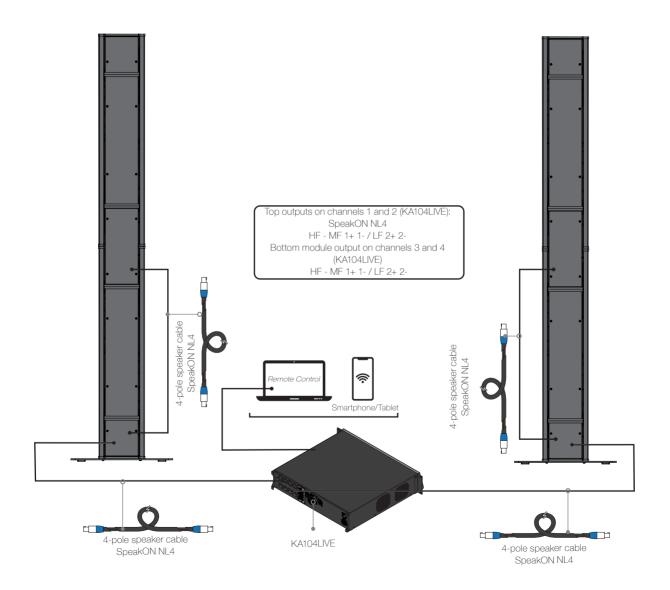
Before driving the loudspeakers ensure to load the proper loudspeaker factory preset on Kommander-KA amplifier.



Always check the loudspeaker impedance before connecting the amplifier.

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# Stereo system configuration



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## Assembling instructions

The perfect sound reinforcement system tailors both the listening expectation and the aesthetics and architectural constraints.

The Dolomite-KRD202P systems are designed to provide sound engineers and integrators with an elegant and powerful solution, combining high-end design with dedicated custom loudspeaker configurations.

Few rules shall be followed to assembly the KRD202P bundle and system. Stainless steel bases, screws, and plugs for mounting the tower modules are included.

#### 1. System Unpacking and Preparation

- 1.1. Verify that all components listed in the inventory table (see page 2) are included.
  - 1.2. Ensure the following items are present:
- · All parts and modules of the KRD202P Dolomite system
- KA104LIVE amplifier
- 2x NL4 15m speakON cables for system wiring and the 2x NL4 speakON cables for modules connections.

1.3. Before proceeding with installation, ensure to have a Torx T20 driver bit available for fastening M4 screws. This tool is necessary for securing the rear protective panels during final assembly

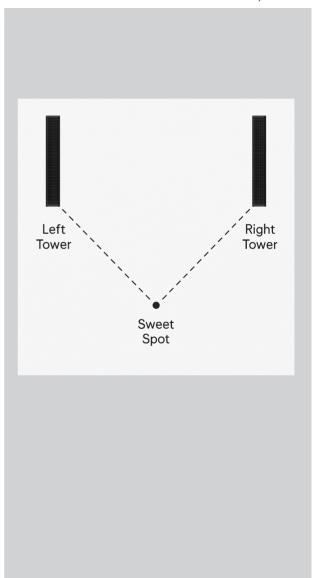
Each KRD202P module is equipped with integrated handles to facilitate easy removal from the flight case, lifting, positioning, and stacking during setup.

- For permanent installations, it is recommended to remove the handles after positioning the modules. This allows for a cleaner and more professional appearance. In such cases, use the rear cover panels to close off the back of the system and conceal all cabling, ensuring a tidy and secure installation.
- For temporary or live event setups—such as small ensembles or background music reinforcement—it is advisable to leave the cabling exposed. This provides easier access for quick troubleshooting and allows for faster disassembly after the event.

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#### 2. Optimal speaker placement and performance

- For optimal stereo imaging and frequency response, it's crucial to position the left and right towers to create a symmetrical listening area. The ideal listening position, often referred to as the "sweet spot," is equidistant from both towers. This placement ensures that sound waves from each tower reach the listener simultaneously, providing accurate localization and a balanced stereo image.
- In fixed installations, careful alignment of the towers enhances the system's performance.
- For live or temporary setups, maintaining this symmetrical arrangement aids in consistent sound coverage across the audience area.
- In indoor environments, placing the towers closer to side or rear walls can help reinforce low-frequency response through boundary coupling. However, be mindful of early reflections from nearby surfaces, which may affect the clarity of high frequencies. Angling the towers slightly inward can help minimize these effects and preserve audio definition.



Assembly Manual

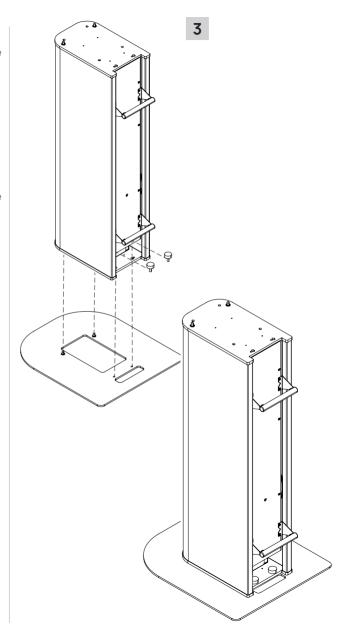
#### 3. Mounting the Bottom Module

Begin by positioning one of the bottom modules onto the standing base.

This is a straightforward operation:

- Align the module with the dedicated mounting pins located on the top of the base.
- Carefully slide the module down onto the pins until it is fully seated.
- Secure the module using 2 of the 4 dedicated hand-tightening knobs provided.

Ensure the module is firmly fixed before proceeding to stack the upper elements.



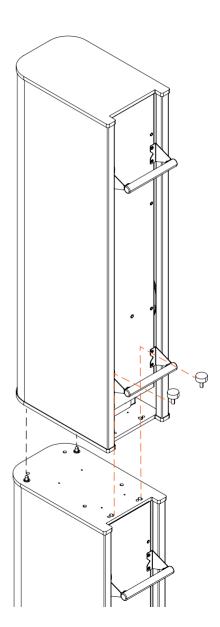
Assembly Manual

#### 4. Mounting the Top Module

Use the same procedure to mount the top module onto the bottom one: align it with the mounting pins, slide it down gently until fully seated, and secure it using the remaining 2 hand-tightening knobs.

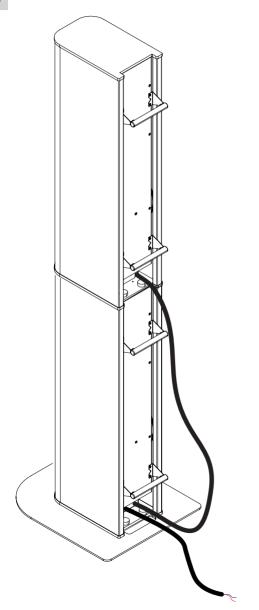
Verify that the module is properly attached and stable before proceeding with the next installation steps.





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#### 5. System Wiring

Proceed by wiring the tower according to the signal routing diagram provided in the dedicated section of this manual.

Make sure all NL4 speakON cables are securely connected and follow the configuration as illustrated, ensuring proper signal flow between amplifier and modules.

#### 6. Assembly of the Second Tower

Repeat the same mounting procedure for the second tower in order to complete the system configuration. Ensure that all modules are properly aligned, fully seated, and securely fastened as described in the previous steps.

#### 7. Final Finishing for Fixed Installations

For fixed installations in high-end environments, it is recommended to complete the system finishing by covering the rear panel and connection points with the dedicated protective panels, and by removing the handles from the modules. The protective panels must be secured using the supplied M4 screws.

Handles can be removed by unscrewing them with a T20 driver bit, ensuring a cleaner and more refined final appearance.

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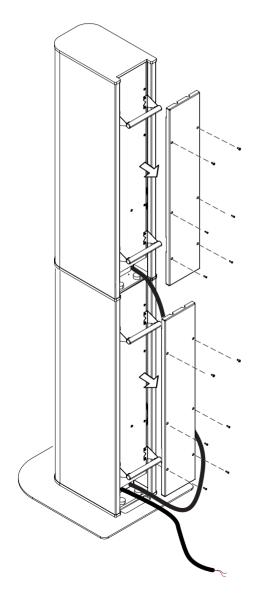
# 7.1 Final Finishing for Fixed Installations - assembly steps

Required tools: T20 driver bit

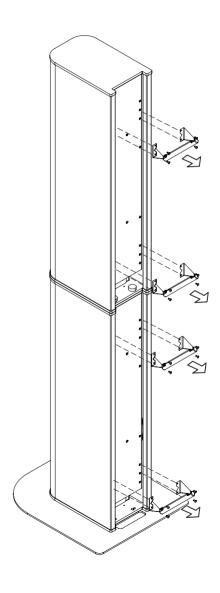
- A. Remove all panels.
- B. Remove the handles.
- C. Reinstall the panels in the following sequence:
- D. Install the upper panel first.
- E. Install the lower panel next, ensuring it covers the connectors
- F. Secure the central panel last, positioning it to cover the connectors of the upper module.
- G. Verify all panels are properly fixed and aligned.

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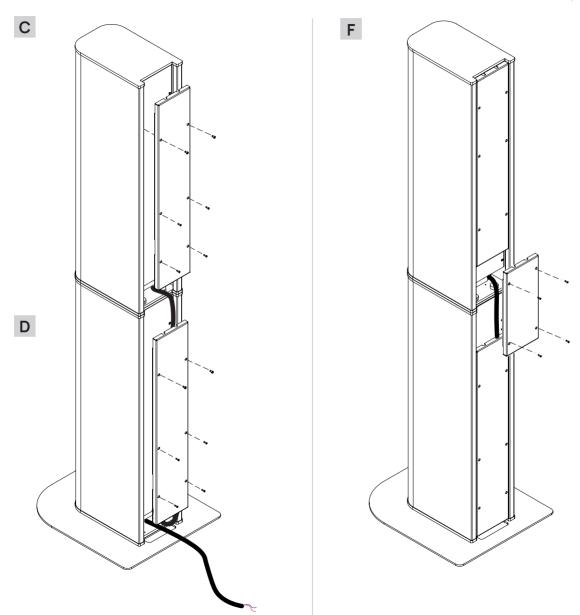






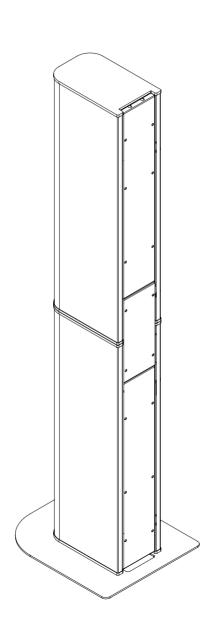


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DOLOMITE-KRD202P INSTALL

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#### 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 K-array website. Please describe the problem clearly and completely to the Customer Service.
- 3. You will be contacted back for on-line 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.

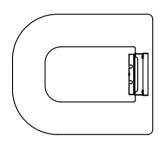
## Cleaning

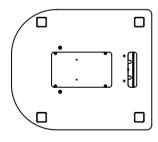
Use only a soft, dry cloth to clean the housing. Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives. Do not use any sprays near the product or allow liquids to spill into any openings.

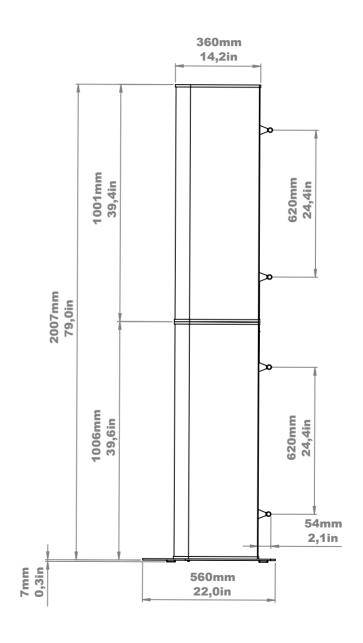


Assembly Manual

# Mechanical Drawings

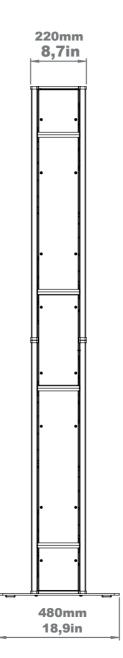






Assembly Manual

# **Mechanical Drawings**



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## **Technical Specifications**

Technical specifications			
Туре	Portable line array system		
Transducers	system: 32x2" neodymium magnet woofers 4x10" ferrite magnet subwoofers 4x10" passive radiators KDL module: 16x2" neodymium magnet woofers 2x10" ferrite magnet subwoofers 2x10" passive radiators		
Frequency Response	41 Hz -18 kHz (-6 dB)		
Max SPL <sup>2</sup>	127 dB peak (Half space)		
Rated Power	400W + 400 (MHF) + 1600W (LF) bi-amplified		
Nominal Impedance	$8\Omega + 8\Omega$ bi-amplified		
Coverage	V. 7° I H. 120° (array)		
Connectors	2x SpeakOn NL4 1+1- (MHF); 2+2- (LF) - bi-amplified		

Handling & Finishes		
Material	Stainless Steel	
Colors	Black - Black fabric	
IP Rating <sup>3</sup>	IP64 (IP65 compliant con accessorio)	
Dimensions (WxHxD)	220 x 1001 (1006) x 360mm (8.7 x 39.4 x 14.2) - without base / base dimension 560mm x 7mm x 480mm	
Weight	30 kg xmodules + 16kg base (total tower 76kg)	

<sup>1</sup> With dedicated preset.

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

In case of permament, long lasting outdoor installation, we recommend to further protect the speaker. Contact K-array directly to discuss best protection practices.



Designed and Made in Italy

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

www.k-array.com