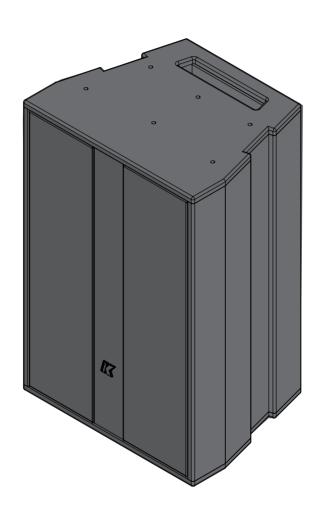
Passive 12" triaxial full-range point source speaker for high SPL applications

QUICK GUIDE



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Quick Guide

#### IMPORTANT SAFETY INSTRUCTIONS



#### CAUTION RISK OF ELECTRIC SHOCK



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 guide.



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.



#### 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 eauipment.



This device complies with Restriction of Hazardous Substances



#### 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 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.
- 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 minimum.

This apparatus is intended for professional use.

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

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- 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!



#### Trademark Notice

All trademarks are the property of their respective owners.

# **Dragon-KXT12P**Quick Guide

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$\label{eq:System2-Classic} System~2-Classic~Near-field~Stereo~System~(L/R)~with~satellites~on~pole.$	13
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Thank you for choosing this K-array products!

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.

If 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.

This document is a **Quick Start Guide**, providing the essential information about the product.

For detailed instructions and advanced configurations, please refer to the full user manual available on the K-array website.

The **Dragon-KXT** line showcases K-array's signature **tri-axial technology**, combining three acoustic axes in one enclosure for superior coherence and clarity. Iconic in design and performance, the **KXT12P**, the most compact model alongside the powerful KXT18P, forms a versatile duo ideal for live events, installations, and **high-SPL applications**.

The KXT12P is a high-output, full-range loudspeaker engineered for demanding professional use. Its advanced tri-axial design integrates a 12" high-excursion woofer with a 15" passive radiator and two coaxially mounted compression drivers (3" MF + 2" HF), ensuring excellent phase alignment and a wide, uniform dispersion.

Delivering up to 141 dB SPL (half space) and a response from 73 Hz to 20 kHz (down to 60 Hz with Full-Range preset), the KXT12P provides powerful, full-spectrum sound. Its birch plywood enclosure minimizes resonance for superior acoustic integrity, while the removable front grille reveals the distinctive coaxial horn assembly that defines the Dragon aesthetic.



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### **Key Features**

- Transducer Configuration: 1 x 12" LF woofer + 15" passive radiator, 1 x 3" MF coaxial compression driver, 1 x 2" HF coaxial compression driver.
- Frequency Response (-6dB): 73 Hz 20kHz
- · Maximum SPL (half space): 144 dB
- · Enclosure Material: Birch plywood
- Design Feature: Removable front grille to showcase the coaxial horn.

# Applications\*

- · Medium-sized live sound reinforcement systems
- · Stage monitoring and DJ setups
- · Portable PA and touring systems
- Fixed installations in clubs, theaters, or multipurpose venues
- Situations requiring high SPL performance in a compact format.
- \* The configurations and applications described require dedicated accessories, which are sold separately from the loudspeaker.

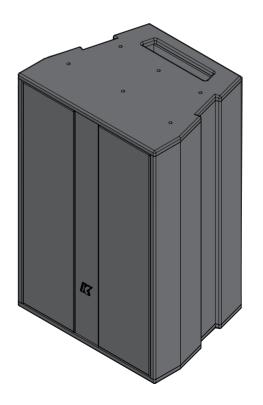
# Unpacking

#### **Package Contents**

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.

#### A. 1x Dragon-KXT12P



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## **Getting Started**

Follow these instructions to properly install and set up the loudspeaker:

- Unpack the Dragon-KXT12P and any purchased accessories required for the desired configuration.
- Verify that all components are intact and that the mounting surface or structure can safely support the loudspeaker's weight.
- Choose the appropriate installation setup for your application:
  - Standalone use: with K-array pole adapter (for 1.8 m stands).
  - Stacked on subwoofer: for DJ monitoring or compact PA setups using K-PINM20 (vertical orientation) or K-SUBSTACKKXT1218 stacking kit.
  - Vertical array or cluster configurations: with K-FLYKXT1218V and K-JOINTKXT12.
  - Horizontal array or cluster configurations: with K-FLYKXT1218H (includes bumper and joining hardware).
  - Wall-mount installation with K-UBRACKETKXT12: ensure structural safety and compliance with load capacity limits before securing the loudspeaker.
- Connect the loudspeaker to the amplifier or to an active subwoofer (e.g. Thunder-KS) using 2 × SpeakON NL4 cables wired as follows:
  - ∘ 1+ / 1-: signal input
  - ∘ 2+ / 2-: signal through

- Set the correct loudspeaker impedance with respect to the amplifier in use.
- In cluster or multi-element installations, ensure that load capacity and total impedance are within the amplifier's specifications.
- Power on the amplifier and the loudspeaker
  - from the amplifier Web App (KA or Thunder-KS), load the dedicated preset for the KXT12P to ensure proper system alignment.
- Make the necessary audio adjustments, and verify signal routing and polarity.
- Once setup is complete and the loudspeaker is securely mounted, switch on the music and enjoy!

Note: This Quick Guide provides only an overview of the available configurations and mounting options.

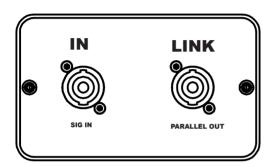
Detailed installation procedures, safety requirements, and configuration guidelines are covered in the complete User Guide.

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#### Rear Panel

Each Dragon-KXT12P is equipped with 2x SpeakON NL4 connector - **IN and PARALLEL OUT / LINK** - for signal input and signal distribution trough other speakers in parallel.

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#### KXT12P Speaker Wiring Overview

Speaker triaxial components:

- 12" Woofer (Low frequencies)
- 3" Compression driver (Mid frequencies)
- · 2" Compression driver (High frequencies)

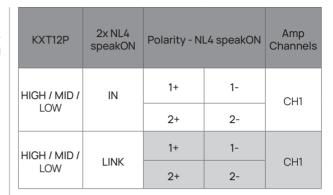
#### Input Connectors:

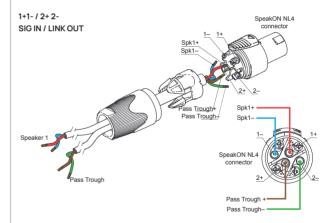
2 × SpeakON NL4, 4-pin connectors

- · Pin Assignments:
  - Pins 1+ / 1-: Full-range signal input (feeds the internal passive crossover)
  - Pins 2+ / 2-: Signal through (parallel connection to the second SpeakON connector)

#### Amplification:

 The loudspeaker operates on a single amplifier channel, as the internal crossover divides the signal between low, mid, and high frequency components.

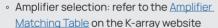




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# Impedance and Connections

- Nominal impedance KXT12P: 8 Ω
  - Internal crossover: splits the signal between woofer and drivers
  - · Standard connection: single amplifier channel required
- · Multiple speakers in parallel:
  - Total impedance decreases as more loudspeakers are added
  - Ensure the amplifier can handle the resulting load safely







Always check the loudspeaker impedance before connecting the amplifier.



Before driving the loudspeakers ensure to load the proper loudspeaker factory preset on Kommander-KA amplifier V1

#### **Amplifier Channel Matching**

The KXT12P features an internal passive crossover that distributes the audio signal to the different transducers (woofer and compression drivers).

Thanks to this circuit, the loudspeaker presents a single nominal impedance of 8  $\Omega$ , seen by the amplifier as one load.

Only one amplifier channel is required for proper operation.

When connecting multiple loudspeakers in parallel, the total system impedance decreases as more units are added.

Always ensure that the amplifier can safely drive the resulting load according to its specifications.

For proper amplifier selection based on the loudspeaker model, please refer to the Amplifier Matching Table available on the K-array website.

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.



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# Recommended System Configurations

#### Suggested System Setups

This section presents example configurations using the KXT12P loudspeaker. Each setup is tailored for a specific application and includes key components: KXT12P loudspeakers, Thunder-KS4P or KS3P subwoofers, amplification, cabling, and installation accessories.

Depending on the application, systems can be arranged as follows:

Full-passive system: All components (KXT12P and Thunder-KS4P or KS3P) are passive and powered by an external Kommander-KA amplifier.

Active subwoofer system: An active Thunder-KS4 or KS3 can power an additional passive subwoofer together with passive KXT12P loudspeakers, offering a compact and efficient solution for portable setups, live sound, or club installations.

These configurations illustrate K-array's recommended approach to combining compatible components for real-world use in various installation and live sound environments.

# System 1 – Classic Near-field Stacked Stereo System (L/R)

Description	Components
Loudspeakers / Satellites	2× KXT12P (in vertical set up and stuck on subwoofer)
Subwoofers	2× KS4P (ground stack)
Amplifier platform	1× KA204LIVE or 1x KS4 (active)
DSP and dedicated remote software control	Built in Web-App - remote accessible
Audio Cabling	Analog, SpeakOn 4-pole connectors
Power Cabling	PowerCON cables for each unit
System Configuration	Stereo L/R
Set up hardware accessories	2× K-PINM20 2× K-BASE3

User Guide

V1 Top loudspeaker Top loudspeaker KXT12P KXT12P wired 1+1- or 2+2wired 1+ 1pass through 4-pole speaker cable R3 K SpeakON NL4 4-pole speaker cable SpeakON NL4 K AA K ARRAY | man to be KS4P wired 2+2-4-pole speaker cable SpeakON NL4 ₩ X CE A X CE K-framework3 1x passive subwoofers KS4P 1x active subwoofers KS4 PC or MAC Smartphone/Tablet K-framework3 Remote Control



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System 2 – Classic Near-field Stereo System (L/R) with satellites on pole.

Description	Components
Loudspeakers / Satellites	2× KXT12P on dedicated esthetic pole
Subwoofers	2× KS3P
Amplifier platform	1× KA204LIVE or 1x KS3 (active)
DSP and dedicated remote software control	Built in Web-App - remote accessible
Audio Cabling	Analog, SpeakOn 4-pole connectors
Power Cabling	PowerCON cables for each unit
System Configuration	Stereo L/R
Set up hardware accessories	2× pole.

User Guide

V1 B3 B3 4-pole speaker cable SpeakON NL4 4-pole speaker cable SpeakON NL4 K X C € EoHS ∠ C € KA104LIVE 4-pole speaker cable 4-pole speaker cable SpeakON NL4 SpeakON NL4 K-framework3 PC or MAC Smartphone/Tablet 1x passive subwoofer 1x passive subwoofer

Remote Control

wired 2+2-

wired 2+2-



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System 3 – Horizontal cluster main system configuration + subwoofer system

Description	Components
Loudspeakers / Satellites	4× KXT12P (2x horizontal cluster)
Subwoofers	4× KS4P
Amplifier platform	1× KA208LIVE
DSP and dedicated remote software control	Built in Web-App - remote accessible
Audio Cabling	Analog, SpeakOn 4-pole connectors
Power Cabling	PowerCON cables for each unit
System Configuration	Stereo L/R
Set up hardware accessories	K-FLYKXT12H

#### System 5 - Monitoring system

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Description	Components
Loudspeakers / Satellites	4× KXT12P (2 per side stack on subwoofer)
Subwoofers	2× KS3P
Amplifier platform	1× KA204LIVE
DSP and dedicated remote software control	Built in Web-App - remote accessible
Audio Cabling	Analog, SpeakOn 4-pole connectors
Power Cabling	PowerCON cables for each unit
System Configuration	Stereo L/R
Set up hardware accessories	2× K-SUBSTACKKXT1218

#### Note:

Configurations involving the K-SUBSTACKKXT1218 and K-FLYKXT12H accessories are not included in the current diagrams. For further information, please refer to the K-array website and the next update of the full User Guide.

# **Dragon-KXT12P**Quick Guide

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#### Service

To obtain service:

- Please have the serial number(s) of the unit(s) available for reference
- 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.



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# **Technical Specifications**

Technical specifications		
Туре	Point source	
Transducers	Tri-axial *12* neodymium magnet woofer 3* compression driver (MF) + 2* compression driver (HF) + 15* passive radiator	
Frequency Response <sup>1</sup>	73 Hz - 20 kHz (-6dB)	
Frequency Response <sup>1.1</sup>	60 Hz - 20 kHz (-6dB)	
Max SPL <sup>2</sup>	141 dB (peak) half-space	
Max SPL <sup>2,1</sup> full-range	133 dB (peak) half-space	
Rated Power	1200 W	
Nominal Impedance	8Ω	
Coverage	V. 40° - H. 60° (Rotatable w/ screws)	
Connectors	2x SpeakOn NL4 1+1- (signal); 2+2- (through)	

Handling & Finishes		
Material	Birch Plywood	
Colors	Black, Custom RAL - Custom Horn	
IP Rating <sup>3</sup>	IP54	
Dimensions (WxHxD)	500 x 735 x 400mm (19,7 x 28.9 x 15,8 in)	
Weight	32 kg (70,55 lb)	

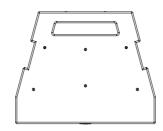
- 1 With dedicated preset.
- 11 With dedicated full-range preset
- $^2\,$  Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 8 m then scaled at 1 m.
- $^{21}\mbox{Maximum}$  SPL is calculated using a signal with crest factor 4 (12dB) measured at 8 m then scaled at 1 m.
- In case of permament, long lasting outdoor installation, we recommend to further protect the speaker. Contact K-array directly to discuss best protection practices.



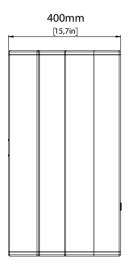
User Guide

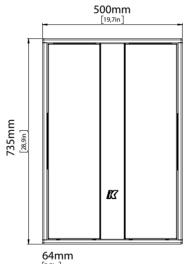
# **Mechanical Drawings**

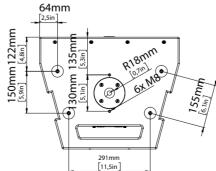
Dragon-KXT12

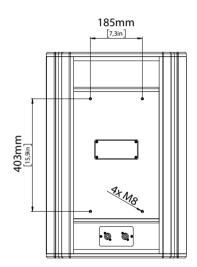


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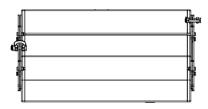


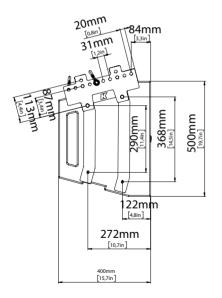
User Guide

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#### K-JOINTKXT12V

#### K-FLYKXT12V





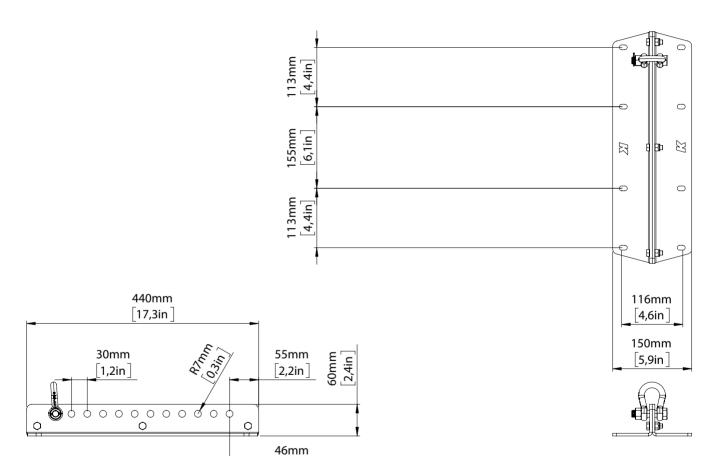






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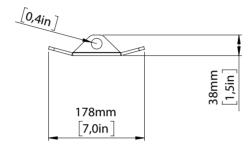
#### K-FLYKXT1218H



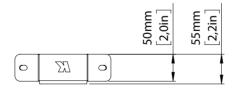


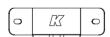
V1

## K-FLYKXT1218H - Joining kit











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