



KMC20V-KMC20H

USER GUIDE
English



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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.



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.



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



This device complies with Restriction of Hazardous Substances Directive.

1. INTRODUCTION

Ever since K-array launched its first slim column speaker in 2007, it has maintained its position of leader of sleek line arrays. With every subsequent product release, the company has perfected its solutions composed of closely-spaced, full-range sound sources by incorporating its Pure Array Technology.

This same line array technology is now being applied to the latest addition to the K-array portfolio in a form other than a speaker. The Capture-KMC20 is the smallest line array microphone in the market featuring PAT technology composed of 8 x 4mm cardioid capsules aligned in a line array configuration.

Given its line array characteristics, the Capture shows a minimal variation of gain with distance. As a result, the distance between the orator and the microphone is not crucial and he is able to move towards or away from the mic freely without strongly affecting the volume or audio quality.

The polar response is cardioid in the horizontal plane, and very narrow in the vertical plan, therefore, when mounted in vertical, not only does the mic not pick up sound from behind, but it's also insensitive to sounds that come from above and below, strongly reducing the amount of ambient sound captured. Being very wide in the horizontal plane, a single microphone can pick up more people and gives maximum freedom of movement to the right and left without volume fluctuations.

While when mounted in horizontal, the capture is very wide on the vertical plane and very narrow on the horizontal plane, resulting in capturing only the person in front of the microphone while standing or sitting.

The microphone's impressively slender frame is shaped from a 6x6 mm solid square brass bar using a milling cutter with bits less than 2 mm in radius. It's meticulously pieced together welding 2 mm- and 4 mm- tall capsules to a 0.6 mm-thick electronic board then two 0.3 mm-thick stainless steel grills are micro-stretched over the frame. The frame is secured in place by two plates screwed one on top of the other. Finally, all the components are sandblasted to obtain a homogeneous opaque finish and embellished with an ultra-black ruthenium galvanic bath.

And given its thickness of 6mm, these incredibly thin microphones are impressively discreet and made with durable premium materials like brass to be used for a variety of applications in conference halls, boardrooms, houses of worship and TV studios.

2. KEY FEATURES

- Ultra-thin
- 8 capsules of 4 mm
- Cylindric-cardioid polar pattern
- Pure Array Technology
- Extended frequency response
- 48V phantom powered
- Vertical and horizontal supports
- Durable, elegant brass frame

3. PACKAGE CONTENTS

The Capture microphone is available in two versions: KMC20V (that includes a base for vertical mounting) and KMC20H (that includes a base for horizontal mounting). If you need to mount the microphone in both orientations, the additional base is available to purchase as an accessory.

3.1 KMC20V



1 x microphone



1 x K-BASEMV brass base for vertical mounting with included wire and connector for preamplifier



1 x preamplifier



1 x M2 key

3.2 KMC20H



1 x microphone



1 x K-BASEMH brass base for horizontal mounting



1 x preamplifier



1 x M2 key
1 x M3 key

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

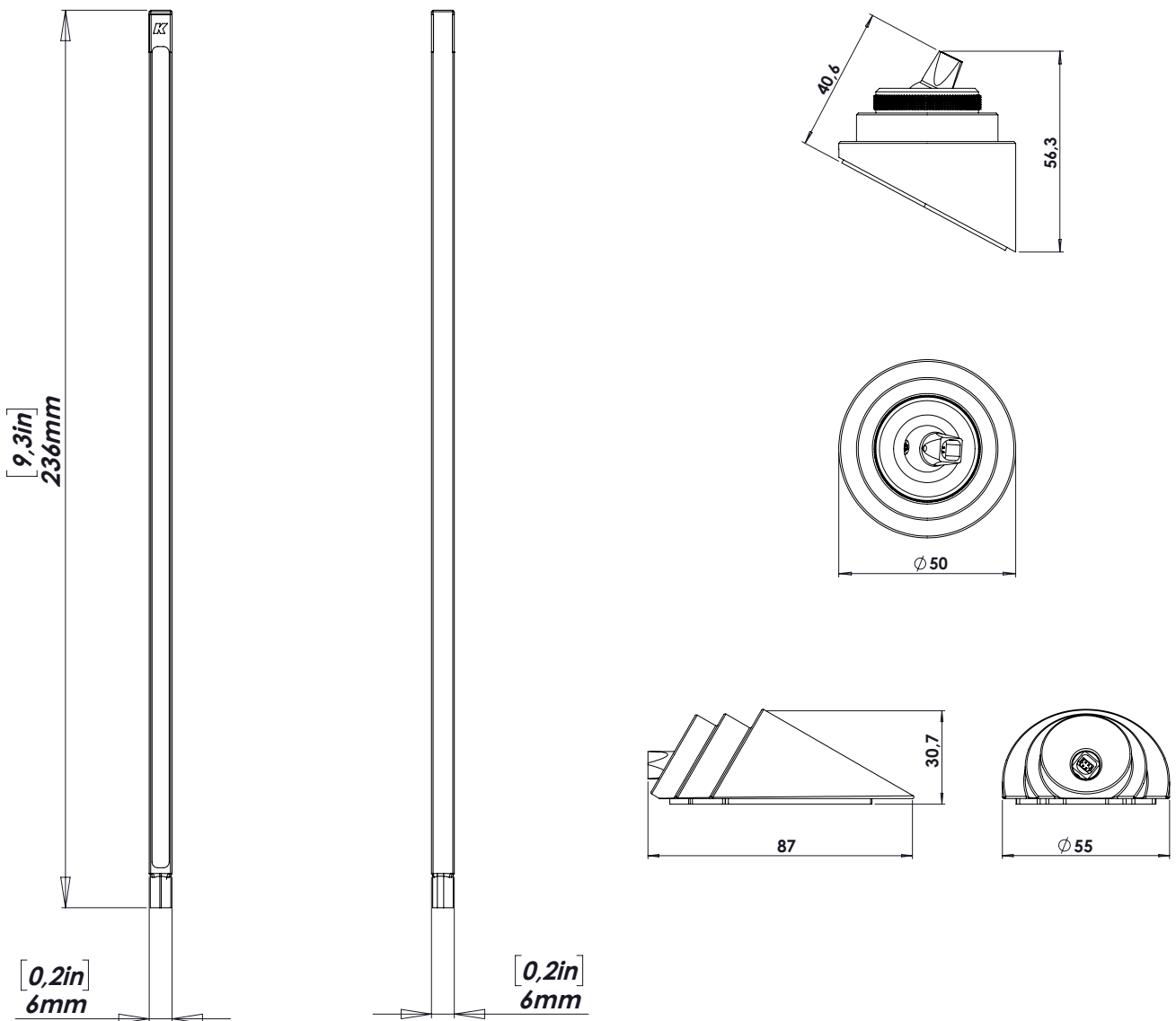
- Follow all instructions and keep all warnings.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.

- **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.
- **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.
- **Water.** Water entering the housing of the microphone can cause a short-circuit and damage the electronics. Protect the microphone from wetness. Use only a slightly damp cloth to clean the microphone.

5. UNPACKING

Each K-array microphone 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 microphone. 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
 KMC20V: 0.352 kg (0.776 lbs)
 KMC20H: 0.414 kg (0.913 lbs)

7. MOUNTING THE MICROPHONE

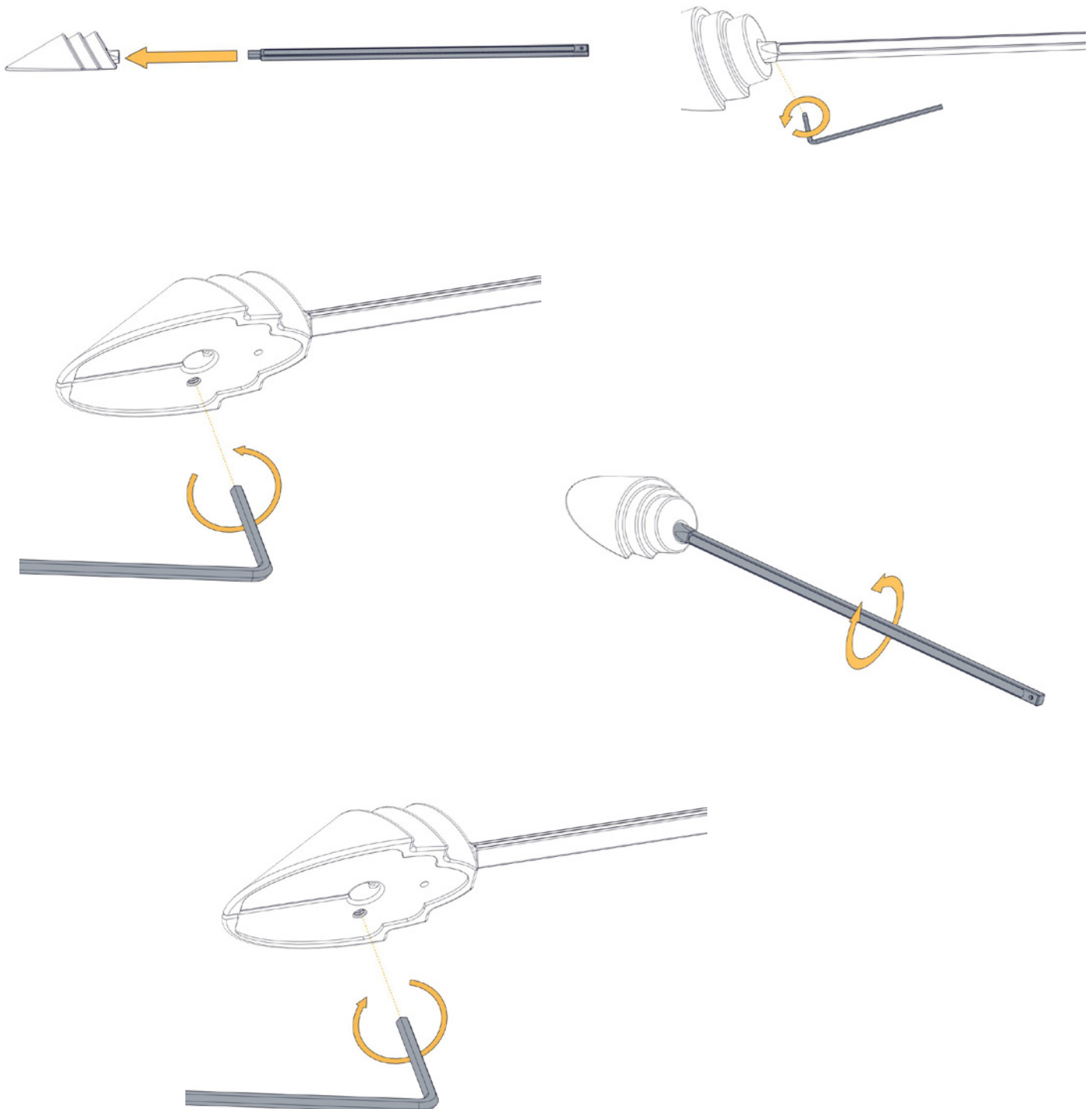
7.1 VERTICAL MOUNTING BASE

Insert the microphone into the base and screw in place using the M2 key included in the packaging. Untighten the upper rig of the base, adjust the inclination of the microphone, then tighten to lock the microphone in the desired position.



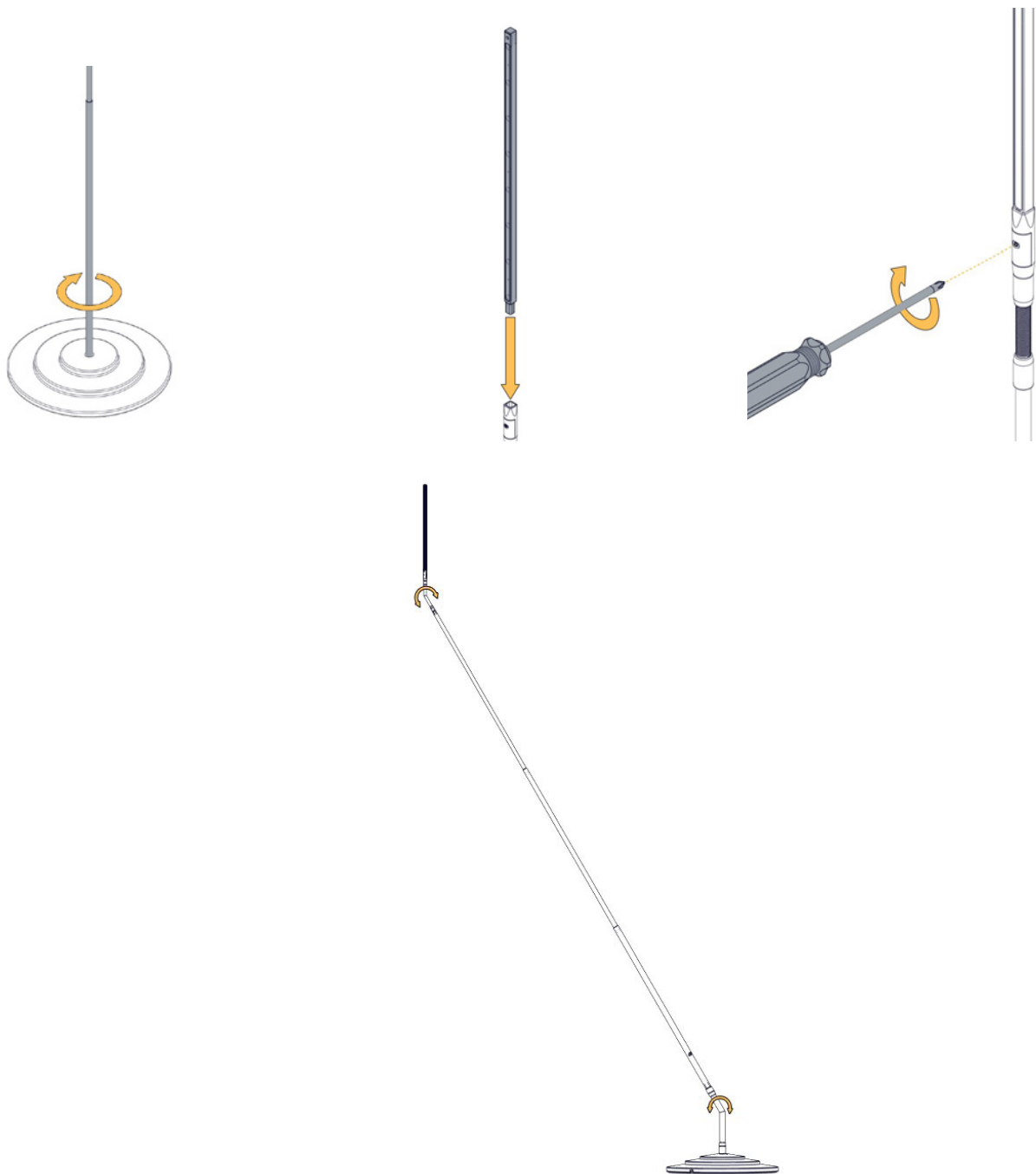
7.2 HORIZONTAL BASE

Insert the microphone into the base and screw in place by using the M2 key included in the packaging. To adjust the orientation of the microphone, untighten the screw placed in the lower part of the base using the included M3 key. Position the microphone in the desired position, then tighten the screw.



7.3 MICROPHONE STAND ACCESSORY

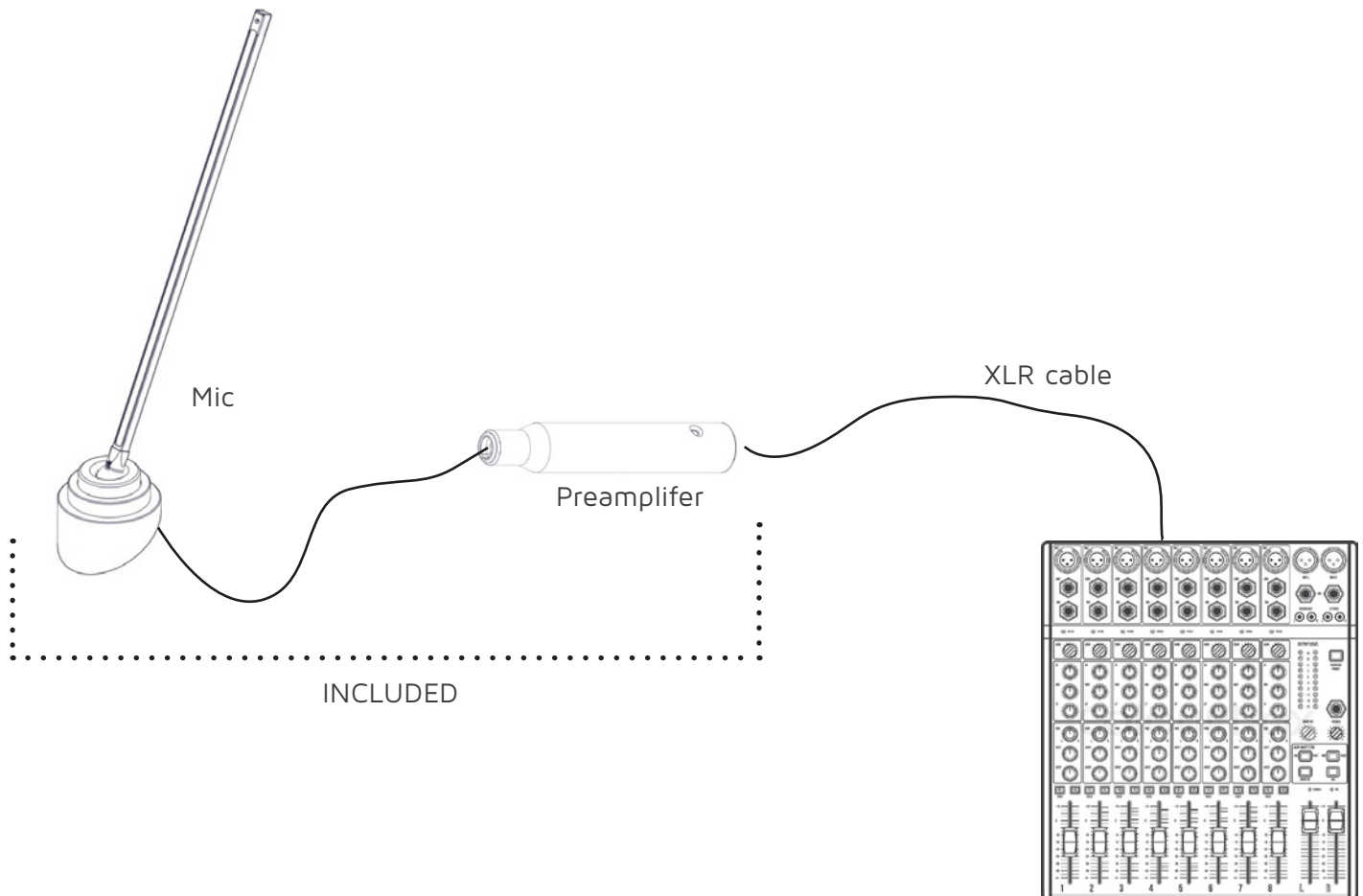
Tighten the extendable stand in the floor base. Insert the microphone in the slot on the top of the stand and screw it in place using the included screw driver. Adjust the orientation of the stand and the microphone. Connect the wire from the floor base to the preamplifier. Use an XLR microphone cable to connect the preamplifier to the mixer and feed it with the 48V phantom power.



8. CONNECTING THE MICROPHONE

Connect the wire coming out from the base to the included preamplifier. Use a three-pin XLR professional microphone cable (XLR) to connect the preamplifier to a microphone input which provides 48 V phantom powering.

Phantom supply voltage must stay between 36 to 52 Vdc, providing at least 7mA of current. Voltage must be positive on pins 2 and 3 of the XLR connector of the preamplifier.



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.



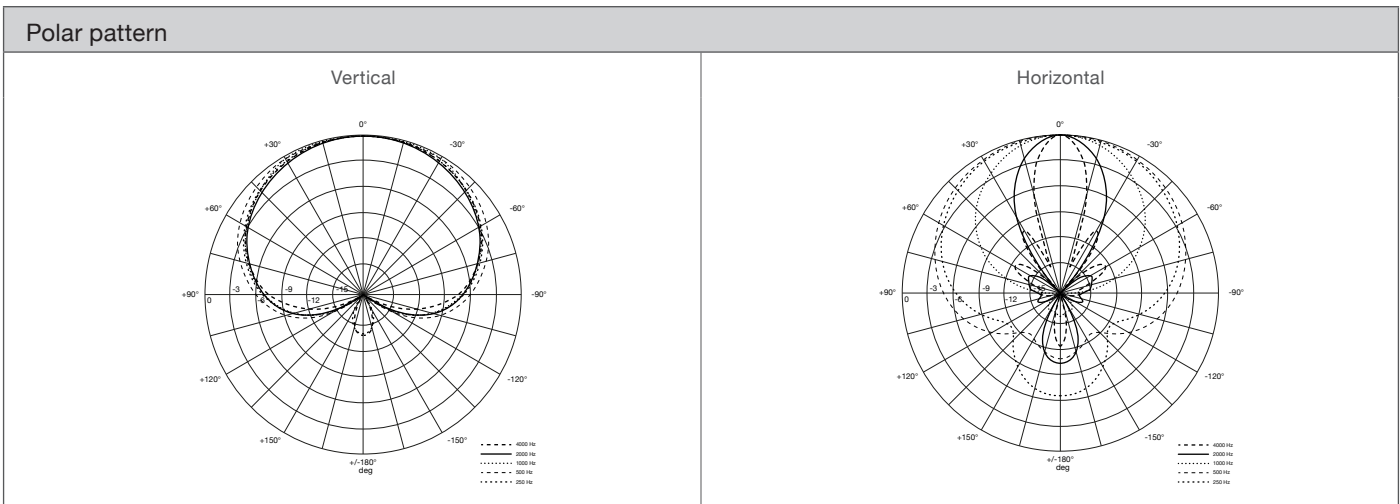
Cleaning:

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

General	
Type	Line array microphone
Capsule	8 x 4mm electret condenser
Frequency Response	65 – 15000 Hz
Sensitivity	-37 dBV (1kHz @ 94 dB SPL)
Maximum SPL	105 dB SPL (1 kHz, 10% THD)
Signal to Noise Ratio	55 dB (1 kHz, A-weighted)
Polar pattern	Cardioid line array

Handling and Finish	
IP Rating	IP54
Dimensions (WxHxD) & Weight	6 x 226 x 6 mm (0.24 x 8.90 x 0.24 in) 0.032 kg (0.070 lbs)
Finish	Ruthenium Plated Brass



The contents of this manual are furnished for informational purposes only. K-array s.u.r.l. assumes no responsibility for any errors or inaccuracies that may appear in this manual. K-array s.u.r.l. reserves the right to make modifications without prior notice.

11. CERTIFICATION