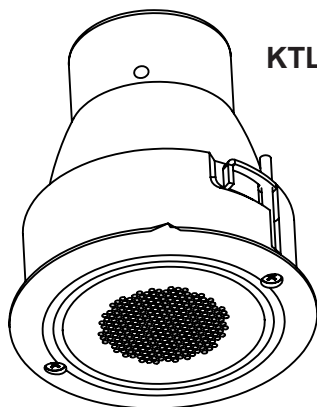




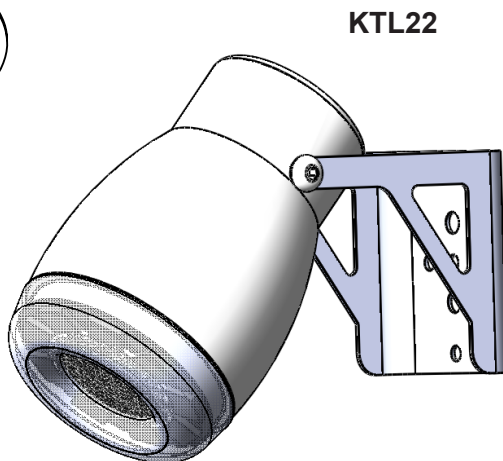
KTL22 - KTL22C

2" point source compact speaker
with integrated RGB LED spotlight

USER MANUAL - *english version*



KTL22C



KTL22



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SYMBOLS



K-array declares that this device is in compliance with the 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 centre for such equipment.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual!



Warning! Dangerous voltages: Risk of electric shock.



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



This device complies with the Restriction of Hazardous Substances Directive.

SAFETY



WARNING



- Install the speaker only in a location that can structurally support the weight of the unit. Doing otherwise may result in the unit falling down and causing personal injury and property damage.
- Professional loudspeakers are capable of producing extremely high sound levels and should be used with care. Hearing loss is cumulative and can result from levels above 90dB if people are exposed for an extended period.
- Do not operate the speaker for an extended period of time with the sound distorting. This is an indication of malfunction, which in turn can cause heat to generate and result in a fire.
- Never stand close to loudspeakers driven at high level.
- Suspending the system should only be done by qualified personnel following safe rigging practices. Secure fixings to the building structure are vital. If in any doubt, seek help from architects, structural engineers or other specialists.
- No naked flame sources such as lighted candles should be placed near the device.
- Do not attempt to disassemble the unit. The unit contains no user serviceable parts. Repairs should be performed only by factory trained service personnel.

DECLARATION OF CONFORMITY



This device complies with the essential protection requirements of Council Directive 89/336/EEC for the implementation of the Laws of the Member States relating to electromagnetic compatibility. This declaration applies to all specimens and manufacturing drawings which form part of this declaration. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards.

Please observe the respective country-specific regulations!

Safety: EN 60065:1998

EMC:

EN 55103-1 1997 Emission (1)

EN 55103-2 1997 Immunity (2)

- (1) This device may not cause harmful interference
- (2) This device must accept any interference received including interference that may cause undesired operation



WEEE

Please dispose of this product at the end of its operational lifetime by bringing it to your local collection point or recycling centre for such equipment.

The contents of this manual are furnished for informational purpose only. Hp Sound Equipment s.r.l. assumes no responsibility for any errors or inaccuracies that may appear in this manual. Hp Sound Equipment s.r.l. reserves the right to make modifications without prior notice

KTL22

KTL22C

2" point source compact speaker

1. INTRODUCTION

The K-array KTL22 is a unique product based on the simple idea of combining sound and lighting into the same housing. It is ideally suited for architectural and display light and sound installations and for background music, paging systems and program sound applications. Deploying a KKS50 or other K-array bass speaker extends the frequency response for full fidelity music reproduction.

The KTL22 has a solid aluminum chassis with an integral yoke bracket. Optionally, the K-KTIP accessory allows the fixture to be hung as a pendant, putting sound and light in the same location such as over tables in a bar or restaurant.

The speaker component is a single 30W 2" hi-efficiency neodymium element with a 32 Ohm impedance. Up to eight KTL22 can be parallel wired to a single channel of any of the KA series amplifiers.

The lighting component consists of 2 Red, 2 Green, and 2 Blue 2.5W LEDs.

Colour mix and intensity is programmable via a 4-pin Phoenix connected to the K-CTRL DMX controller.

The KTL22C is a version with integrated hardware for recessed ceiling mounting.

The elegant enclosure is small and light weight. With three mounting options it can be installed almost anywhere. It comes finished in black or polished aluminum.

2. APPLICATIONS

- High-quality distributed systems for paging and music
- Exhibit audio for museum displays
- Architectural light and sound installations
- Space-sensitive fill for theatres

3. KEY FEATURES

- Unique performance-to-size ratio
- Single 2" long excursion full range driver
- Wide-range frequency response
- High speech intelligibility and high dynamic range for music applications
- 6x2.5W high efficiency RGB LED
- Remotely controllable by K-CTRL device
- Full Aluminum ultra-strong frame
- Available in Black or Aluminum
- Integrated connection points for accessories
- Ceiling mounting version (KTL22C) available
- Only 350g of weight

4. UNPACKING

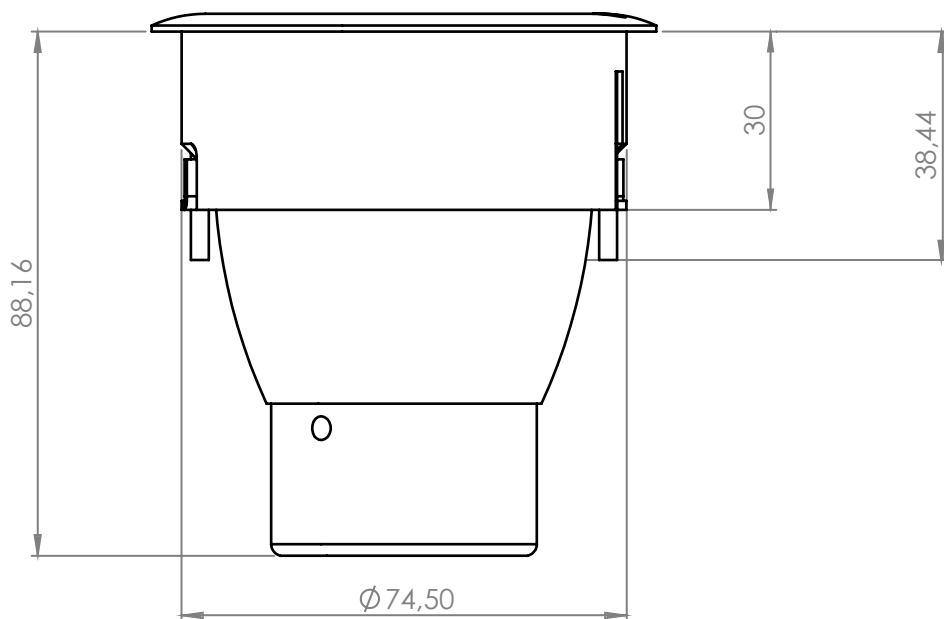
Each K-array fixture is built to the highest standard and thoroughly inspected before leaving the factory. Carefully inspect the shipping carton, then examine and test your new loudspeaker and lighting fixture. If you find any damage immediately notify the shipping company. Only the consignee may institute a claim for damages incurred in shipping. It is suggested that you retain the original packaging so that the system can be repacked at a future date if necessary. Please note that K-array and its distributors cannot accept any responsibility for damage to any returned product through the use of non-approved packaging.

5. INCLUDED ACCESSORIES

- 1 x 2-pin Phoenix connector
- 1 x 4-pin Phoenix connector
- 1 x wall bracket
- 1 x user's manual

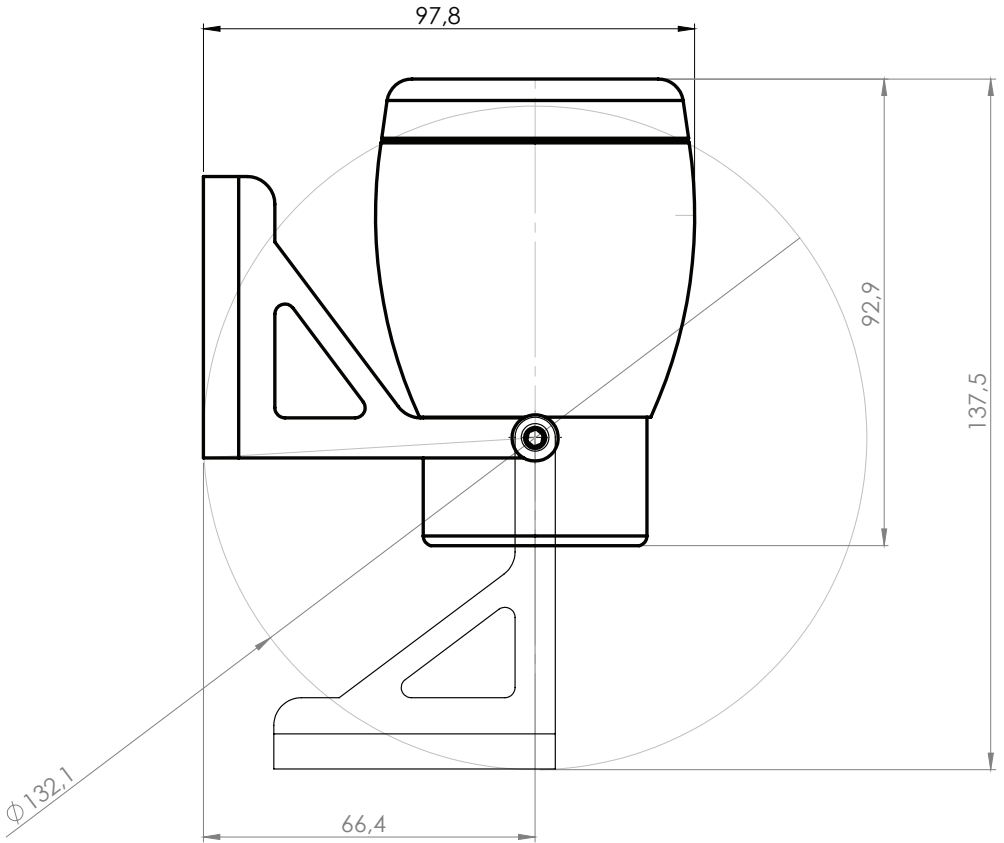
6. PHYSICAL

KTL22C



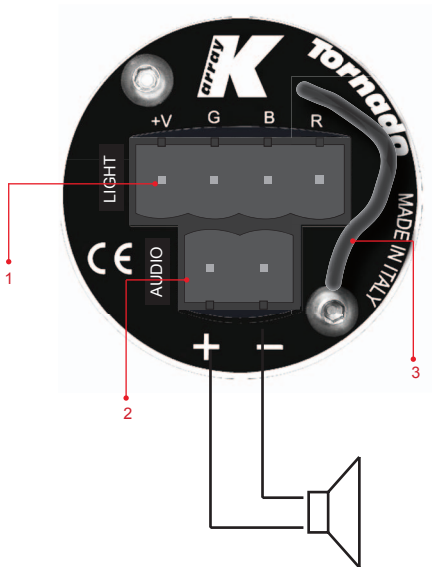
Weight 0.35 kg

KTL22



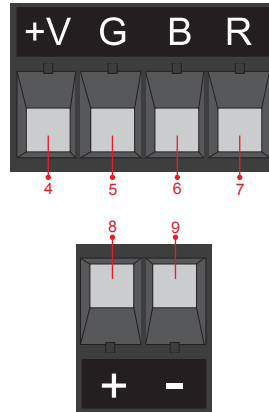
Weight 0.35 kg

7. REAR PANEL AND WIRING



1. 4-pin light controller connector.
2. 2-pin audio input connector.
3. Flexible Holder for cable connection

Included female Phoenix connectors



4. Common positive DC power (24V) for RGB LEDs .
5. Negative DC power for Green LED.
6. Negative DC power for Blue LED
7. Negative DC power for Red LED
8. Positive AUDIO INPUT
9. Negative AUDIO INPUT

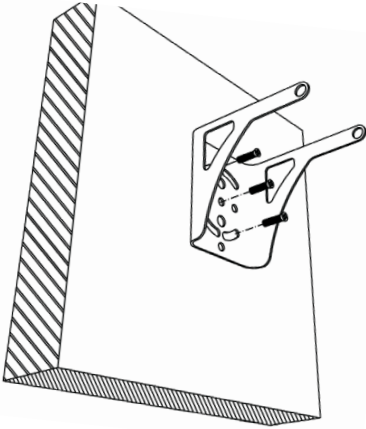


WARNING

Have care in respecting the polarity and the maximum DC voltage. An inverted polarity or a different voltage could damage the device or part of its component parts.

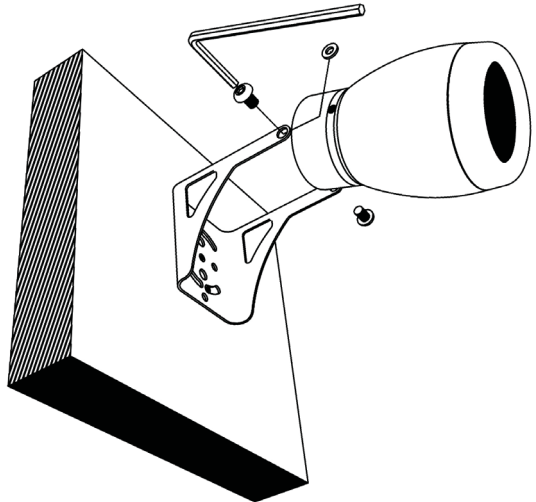
8. INSTALLATION

8.1 KTL22

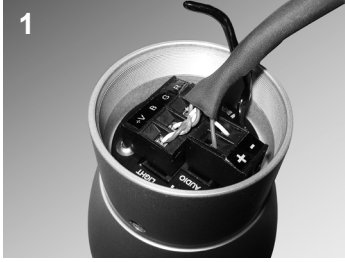


WALL MOUNTING

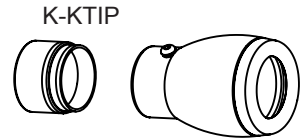
1. Disassemble the bracket from the fixture's body.
2. Fix the bracket to the mounting surface with appropriate anchors or screws.
3. Connect the cable to the fixture.
4. Re-assemble the body of the fixture to the fixed bracket.



PENDANT MOUNTING

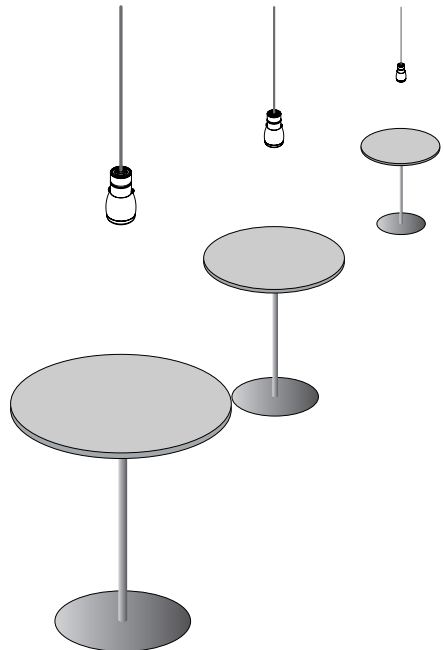


K-KTIP accessories
required

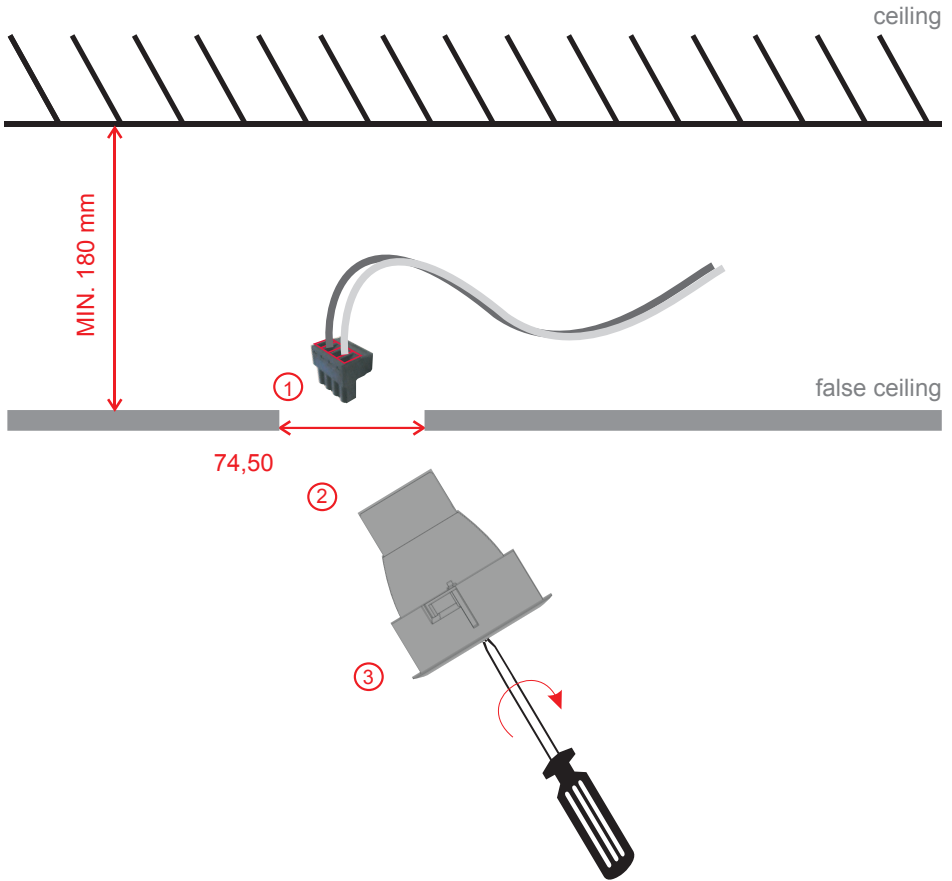


This installation procedure may need to be carried out in a different order if you are mounting the device to an already fixed cable. In that case, instruction #3 becomes the first.

1. Plug the Phoenix connectors to the device.
2. Clamp the cable with the appropriate flexible cable holder included in the back panel of the device.
3. Make a hole through the water protection of the K-KTIP ACCESSORY for inserting the cable.
4. Screw the K-KTIP accessory onto the bottom of the device.

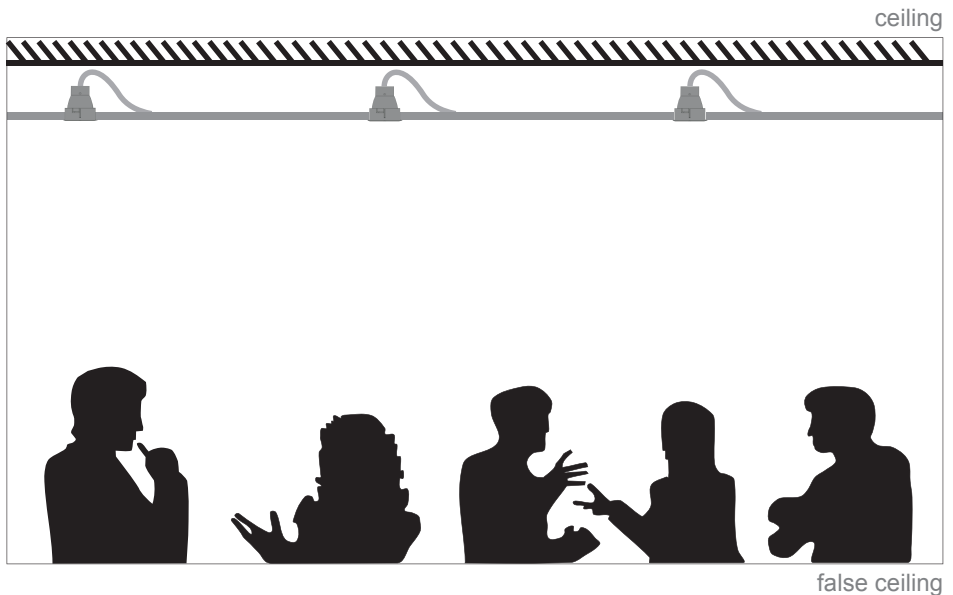
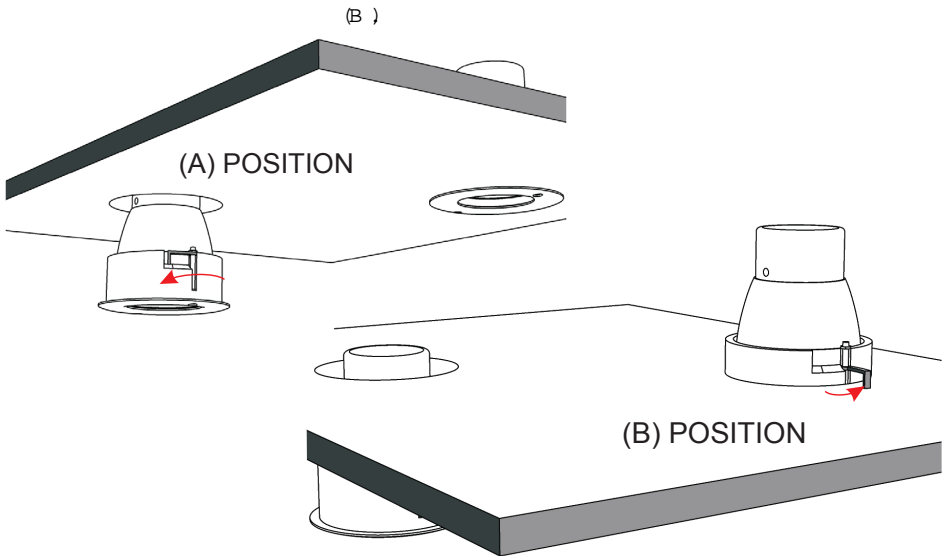


8.2 KTL22C



1. Make a 76 mm diameter mounting hole in the false ceiling. Attention: for a correct connection to the fixture at least 180mm of depth is required behind the false ceiling.
2. Connect the cables coming from the amplifier and the DMX controller to the Phoenix connectors. The cable(s) must respect the correct wiring indications.

3. Insert the fixture in the ceiling hole, taking care that the stoppers on the sides are folded in (position A). Then, using a screwdriver, tighten the two stopper mounting-screws from position (A) until they clamp the ceiling panel (position B).



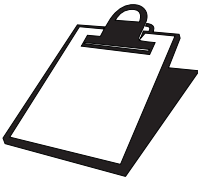
9. SERVICE

To obtain service:

- 1) Contact the official K-array distributor in your country. They will direct you to the service centre.
- 2) If you are calling for service, have the serial number(s) of the unit(s) at hand 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 must return the unit for service.
- 4) You will be given an RA (Return Authorization) number for job tracking. Refer to this number on shipping materials and in all correspondence concerning 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:

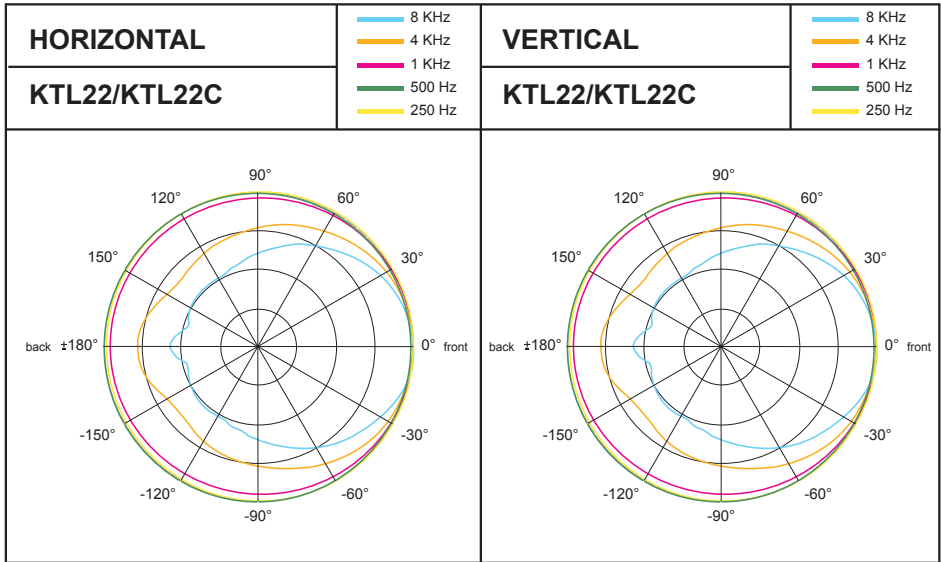


- Clean the product enclosures using a soft, dry cloth only.
- Do not use any solvents, chemicals, or cleaning solutions containing alcohol, ammonia, or abrasives.
- Do not use any sprays near the product or allow liquids to spill into any openings.

10. WARRANTY

K-array systems are warranted against manufacturing defects in materials or craftsmanship as determined by the distributor. During the warranty period K-array will, at its discretion, either repair or replace products which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorized K-array service agent or distributor. K-array cannot be held responsible for defects caused by unauthorized modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by K-array. K-array is not liable for consequential damages. This warranty is exclusive and no other warranty is expressed or implied. This warranty does not affect your statutory rights.

11. POLAR RESPONSE



12. AVAILABLE ACCESSORIES

- K-KTIP: water protection for the connectors. Useful also for pendant mounting applications
- K-CTRL: DMX light controller

KTL22 - KTL22C SPECIFICATIONS

KTL22 - KTL22C	
Acoustics	
Power handling	10 W ^(AES)
Max power	30 W
Impedance	32 Ω (KT22)
Operating frequency range	200 Hz - 18 KHz +/- 3dB (preset dependent)
Frequency range	150 HZ - 18 KHz +/- 3dB (preset dependent)
SPL 1W/1mt	87 dB (low-mid)
Maximum SPL	101 dB continuous - 107 dB peak
Amplifier Coverage	
Horizontal	90°
Vertical	90°
Crossover	
Type	External cross over required
Frequency	150Hz 24dB/oct minimum suggested
Transducers	
Full-range	2" Neodymium cone driver with 0.75" voice coil
Power Audio Input	
Connectors	2-pin Phoenix screw terminals
Recommended Amplifiers	
for KT22/KT22C	KA3-3, KA7, KA7-7, KA10, KA10-10 for up to 8 units each channel
Light	
Sources	6 x 2.5w max RGB Led
Operating voltage	22 - 28 Vdc
Max power	12w @ 24 Vdc
Connettors	4-pin Phoenix screw terminal
Light	
K-CTRL for up to 4 units	
Physical	
Dimensions KTL22	6.4 x 8.3 x 14.5 cm (2.52" x 3.27" x 5.71")
Weight KTL22	0.33 Kg (0.73 lbs)
Dimensions KTL22C	8.5 cm dia x 9.6 cm deep (3.35" dia x 3.78" deep)
Weight KTL22C	0.41 Kg (0.9 lbs)
<p>New materials and design are introduced into existing products without previous notice. Present systems may differ in some respects from those presented in this brochure.</p>	



U M C O O 9 A A O 1 E N A

k-array is a brand of
HP Sound Equipment s.r.l.

Viale Roma 7/i - 50037
San Piero a Sieve (Firenze) - Italy
tel. +39 055 8487222 - fax. +39 0558487238
e-mail: info@k-array.com
www.k-array.com

