



# High technology self-powered line-array element

## Features:

- M Unique performance-to-size ratio
- K Self powered
- M Integrated DSP and remote control
- M Variable vertical coverage
- M Wide horizontal coverage
- K Very flat profile
- K Integrated flying and stacking hardware
- K Top quality components for outstanding performances
- M Ultra fast set-up and dismantling system
- K For use in stand alone arrays or in combination with other **K-array** systems

### **Applications:**

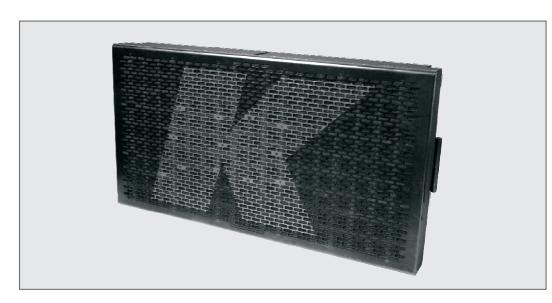
- K Large scale events
- Touring sound reinforcement
- K Stadiums, arenas, concert halls, theatres
- Installations in low-load capacity situations

The KH4 is a self-powered 2 way line array design speaker. It has an incredible reserve of power that ensures very high pressure maintaining the sound quality constant. The KH4 is ideal for longer throw applications in large venues, yet it is only 16cm flat and 47 Kg of weight, these allow for its use in more compact spaces. The KH4 is designed to easily integrate with others K-array products, for example with KS4 subwoofers.

The KH4 use twelve 8" inches cone drivers for low-mid frequencies with 2.5" voice coil, powered by six power amplifier channels. The mid-high frequencies section use five 1.75" voice  $coil\,compression\,drivers, that\,drive\,1"x4"\,constant$ directivity waveguides. The drivers form an array exactly in the centre of the speaker, a mechanical system can perform different vertical coverage, from  $7^{\circ}$  to  $37^{\circ}$  on each **KH4**.

The transducers of **KH4** are driven by an internal DSP module, a dedicated remote control software allows to control the speaker from PC.

All the KH4 components are designed by Karray R&D department and custom made under K-array control quality system.



#### **Technical Details**

Power handling Max power Impedance Operating frequency range Frequency range SPL 1W/1mt Maximum SPL	$3600 \text{ w} + 400 \text{ w}^1$ $5000 \text{ w} + 700 \text{ w}^2$ $6 \times 4 \Omega + 1 \times 8 \Omega + 1 \times 6 \Omega$ $60 \text{ Hz} - 19 \text{ KHz} + /- 3dB \text{ (preset relating)}^3$ $40 \text{ HZ} - 20 \text{ KHz} + /- 3dB \text{ (preset relating)}^4$ $105 \text{ dB (low-mid)} + 113 \text{ dB (high 1)} + 114 \text{ dB (high 2)}^5$ $139 \text{ dB continuos} - 145 \text{ dB peak}^6$
Coverage	
Horizontal Vertical	120° mechanically variable from 7° to 37°
Cross over	
Type Frequency	DSP controlled preset relating 1.2 KHz minimum (preset relating) <sup>7</sup>
Transducers Low - Mid frequency	
High frequency	12 x 8" Neodymium speakers with 2.5" voice coil 5 x 1" Neodymium planar wave drivers with 1.75" voice coil
Audio Input	
Connectors Wiring	male + female parallel 3 poles balanced XLR  Pin1 = ground / Pin2 = hot / Pin3 = cold
Remote control Input	2 x female 8 poles RJ45
-	2 x female o poles (10-10
Power Input Connectors	2 x PowerCon IN/OUT
Amplifiers	
Type Power	4 modules class D - DSP controlled 500 watts x 8 channels on 4 ohm (4000 watt total) <sup>8</sup>
Protections	Dynamic limiter, over current, over temp, short circuits
AC power	0/ 1 10/0 0/0/ 50/1 / / 1 1/
Operating range	Standard 210 - 240 Vac 50Hz (standard) Optional 100 - 120 Vac 60Hz (optional)
Max continuos and burst current	Standard 12A(>10 sec) - 24A (<1 sec) Optional 20A(>10 sec) - 40A (<1 sec)
Physical	110 v 60 v 16 om
Measures Weight	112 x 60 x 16 cm 47 Kg

#### Notes for data

- 1. Power handling is measured following AES standard conditions: transducers driven continuously for two hours with a band-limited noise signal having 6 dB of crest factor.
- 2. Max power is the maximum RMS applicable power for a musical signal, the referement signal is the one proposed by EIAJ standard.
- 3. Recommended maximum operating frequency range. Response depends on loading conditions and room acoustics. 4. Free field measured with 1/3 octave frequency resolution at 2 mt.
- 5. Measured@4 mt then scaled@1 mt 6. Measured with audio source @1 mt.
- 7. This is the frequency in which the transducers produce the same sound pressure level (measured@2 mt).
- 8. Amplifier wattage rating is based on the maximum unclipped burst sine wave RMS voltage that the amplifier will produce into the nominal load impedance.

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.