



ENG • ESP

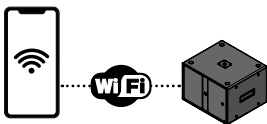


Description

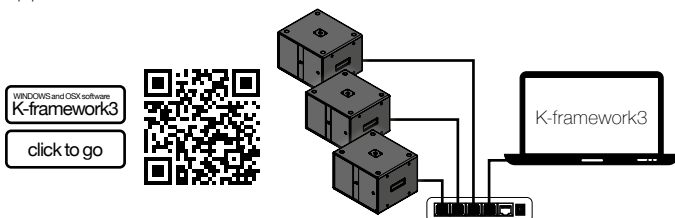
The Thunder-KS1 I is a compact active subwoofer featuring a 12" cone driver and a powerful 4x 1500W @ 4Ω audio amplifier module with built-in DSP.

The audio power output connectors allow the Thunder subwoofers to drive a wide range of K-array passive loudspeakers. Compatible with midrange loudspeaker and other passive subwoofers, the self powered Thunder subwoofers with DSP are designed to be the core devices in K-array sound reinforcement systems.

The dedicated K-array Connect mobile app provides a user friendly interface for remote control of the DSP main parameters and easy configuration of the signal routing.



K-framework3 is the managing and control software dedicated to professionals and operators looking for a powerful tool for designing and managing a large number of units over a wired LAN in demanding applications.

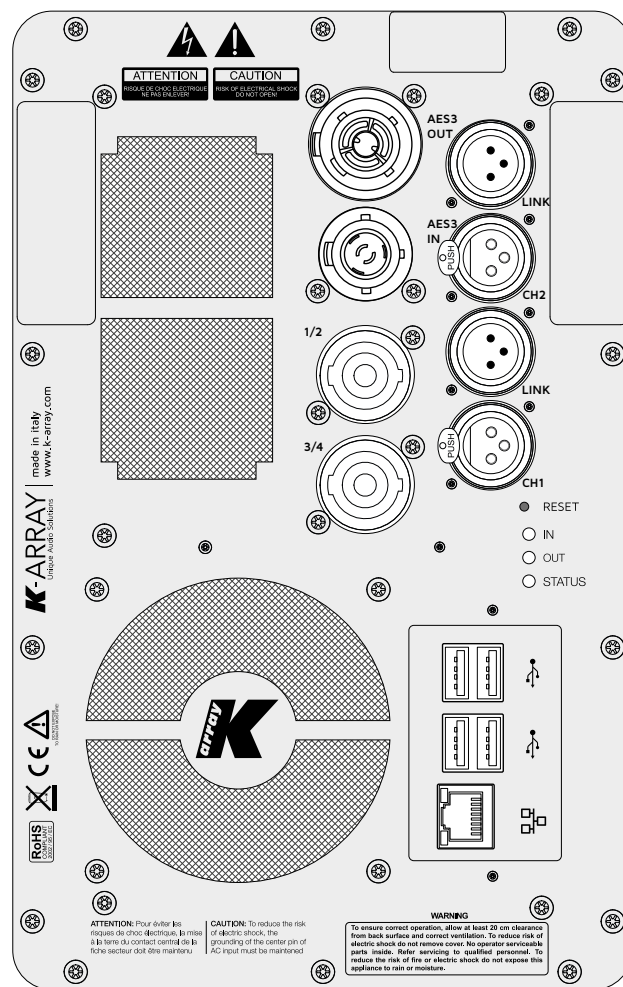


- 12" neodymium magnet woofer.
- Built in Class D audio amplifier module 4x 1500W @ 4Ω.
- 4x 1500W @ 4Ω audio power outputs for driving external loudspeakers.
- K-array Connect mobile app for easy wireless access to the DSP features.
- K-framework designer and remote control software for advanced loudspeakers system management.
- DSP onboard with:
 - Channel Grouping: group controls over multiple channels;
 - Input EQ: 3 bands fully parametric equalizer;
 - Output EQ: 8 bands fully parametric selectable filters: Peaking, High-Shelf, Low-Shelf, High-Pass, Low-Pass, HP-Butterworth, LP-Butterworth;
 - Dynamic limiters;
 - Signal routing: freely assignable input-to-output signal path with level adjustment;
 - Channel delay up to 230ms.
- osKar embedded: custom operating system running on quad core 1.5 GHz internal processor.
- Bass reflex acoustic load with symmetric ports.
- High density Finnish birch plywood cabinet for increased resistance and robustness.
- Rugged Polyurea coating for improved environmental resistance.
- Available in black or white or customizable paint over the entire RAL palette.

Technical Specifications

General	
Type	Active subwoofer
Transducers	12" neodymium magnet woofer
Frequency Response ¹	35 Hz – 150/450 Hz (-6 dB) crossover dependant
Crossover	DSP-controlled, Low Pass @ 150 Hz up to 450 Hz, preset dependant
Max SPL ²	134 dB peak
Coverage	Omni
Connectors	Line Input 2x XLR-F analog balanced / AES3 input Line Output 2x XLR-M Link analog balanced / AES3 output Speaker Output 2x SpeakON NL4 (Ch1 1+/1- // Ch2 2+/2-) Mains powerCON TRUE1 TOP, 16 A true mains Networking and Data 1x RJ45 4x USB-A
DSP	Input gain, routing matrix, delay, full parametric IIR filters (Peaking, Shelving, Hi/ Lo pass, Hi/Lo Butterworth), Onboard preset, Remote monitoring
Remote control	Wi-Fi dedicated APP K-framework3 via wired Ethernet connection
Amplifier module	4-channel switching mode, Class D
Output power ³	4x 1500 W @ 4 Ω
MAINS Operating Range	100-240V AC, 50-60 Hz with PFC
Power Consumption	600 W @ 8 Ω load, Pink noise, 1/4 rated power
Protections	Over Temp. (Power Limiting – Thermal Shutdown), Short Circuit/Overload Output Protection, Power Limiting, Clip Limiter/ Permanent Signal Limiter, High Frequency Protection
Handling & Finishes	
IP Rating	IP53
Dimensions (WxHxD)	500 x 350 x 440 mm (19.7 x 13.8 x 17.3 in)
Weight	21,6 kg (47.62 lb)
Color	Black, White, Custom RAL (on demand)

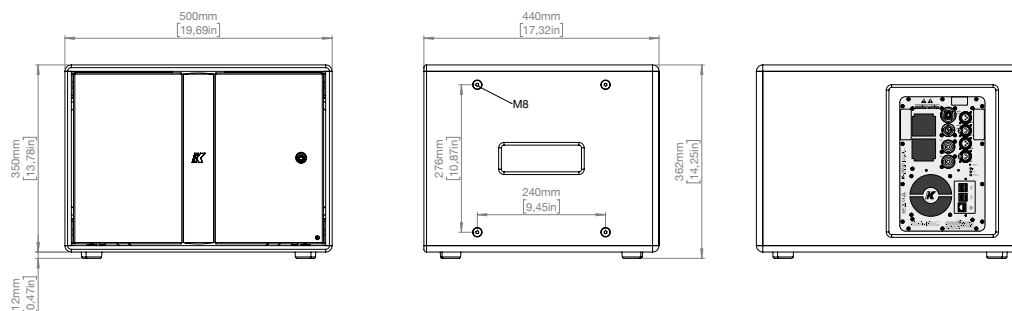
Accessories	
K-FOOT3	Adapter for standing top and midrange loudspeaker on top



¹ Extensible with dedicated preset according to the midrange crossover point.

² Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 1 m.

³ CTA-2006 (CEA-2006) Amplifier Power Standards.



Notes:

Passive loudspeakers require dedicated presets loaded onboard K-array amplifiers.
New materials and designs are introduced into existing products without previous notice.
Present systems may differ in some respects from those presented in this document.



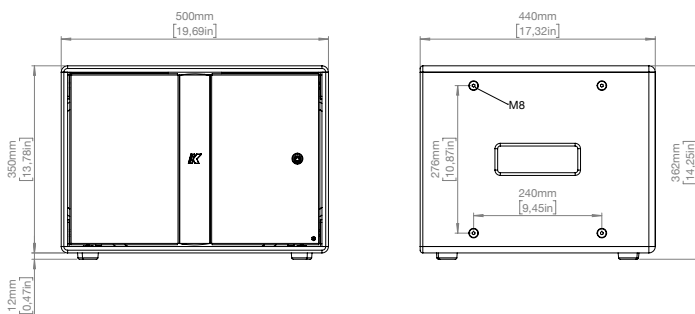
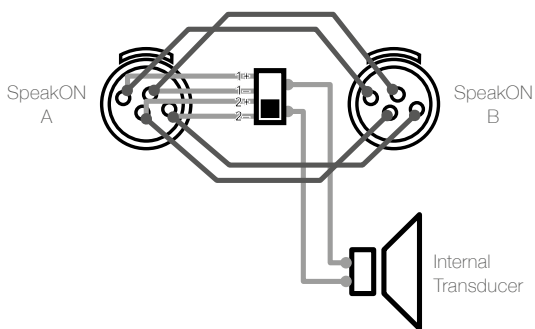


Description

The Thunder-KS1P I is a compact passive subwoofer featuring a long excursion 12" cone driver with 3" voice coil.

The Thunder-KS1P I features 2x SpeakON NL4 connectors that allow to input the signals from external active systems or amplifiers, with either a 2-wire or a 4-wire cable, as well as route the signal to other loudspeakers.

Input terminals selection and link wiring.



Technical Specifications

Type	Passive subwoofer
Transducers	12" neodymium magnet woofer
Frequency Response ¹	35 Hz – 150/450 Hz (-6 dB) crossover dependant
Crossover	External DSP-controlled, Low Pass @ 150 Hz up to 450 Hz, preset dependant
Max SPL ²	134 dB peak
Nominal Impedance	8Ω
Power handling	1200 W peak
Coverage	Omni
Connectors	Speaker input/parallel output 2x SpeakON NL4 Input terminals selectable: IN+Link 1+/1- (parallel), Link 2+/2- Link 1+/1- , IN+Link 2+/2- (DEFAULT)

Handling & Finishes

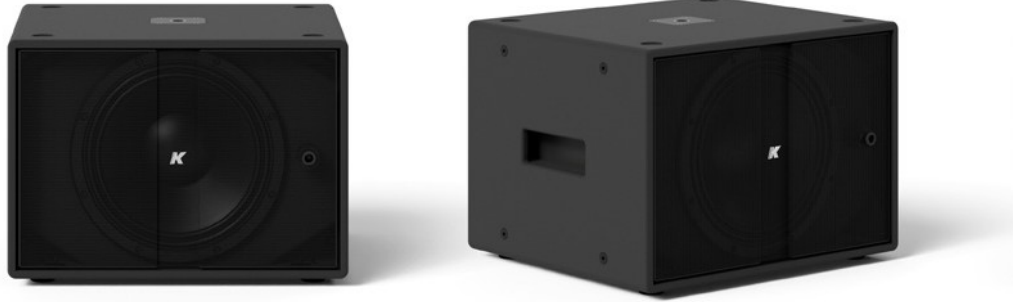
IP Rating	IP54
Dimensions (WxHxD)	500 x 350 x 440 mm (19.7 x 13.8 x 17.3 in)
Weight	18 kg (39.7 lb)

¹ Extensible with dedicated preset according to the midrange crossover point.

² Maximum SPL is calculated using a signal with crest factor 4 (12dB) measured at 1 m.

Notes:

Passive loudspeakers require dedicated presets loaded onboard K-array amplifiers. New materials and designs are introduced into existing products without previous notice. Present systems may differ in some respects from those presented in this document.

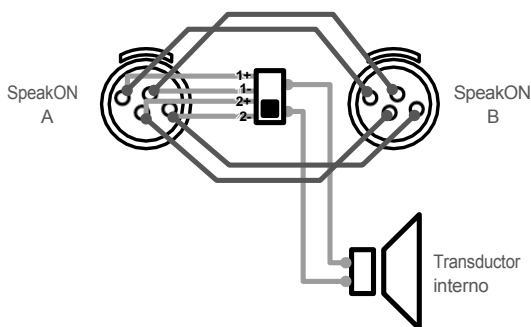


Descripción

El Thunder-KS1P I es un subwoofer pasivo compacto que incorpora un transductor de cono de 12" de larga excursión con bobina móvil de 3".

El Thunder-KS1P I incorpora 2 conectores SpeakON NL4 que permiten introducir las señales de sistemas activos o amplificadores externos, con un cable de 2 o 4 hilos, así como dirigir la señal a otros altavoces.

Selección de terminales de entrada y cableado de enlace.



Especificaciones técnicas

Tipo	Subwoofer pasivo
Transductores	Woofer de 12" con imán de neodimio
Respuesta en frecuencia ¹	35 Hz - 150/450 Hz (-6 dB) en función del crossover
Cruce	Controlado por DSP externo, Paso bajo @ 150 Hz hasta 450 Hz, según preajuste
SPL máximo ²	134 dB pico
Impedancia nominal	8Ω
Potencia	1200 W pico
Cobertura	Omni
Conectores	Entrada de altavoz/salida en paralelo 2x SpeakON NL4 Terminales de entrada seleccionables: IN+Enlace 1+/1- (paralelo), Enlace 2+/2- Enlace 1+/1-, IN+Enlace 2+/2- (POR DEFECTO)

Manipulación y acabados

Clasificación IP	IP54
Dimensiones (AnxAlxPr)	500 x 350 x 440 mm (19,7 x 13,8 x 17,3 pulg.)
Peso	18 kg (39,7 lb)

¹ Extensible con preajuste dedicado según el punto de cruce de medios.

² SPL máximo se calcula utilizando una señal con factor de cresta 4 (12 dB) medida a 1 m.

Notas:

Los altavoces pasivos requieren preajustes específicos cargados en amplificadores K-array integrados. Se introducen nuevos materiales y diseños en los productos existentes sin previo aviso. Los sistemas actuales pueden diferir en algunos aspectos de los presentados en este documento.

