KF810P

Installation Line Array

- Light. Small. Loud.
- Architecturally Transparent
- Concealed Wiring and Rigging
- True Narrow 80° or True Wide 110° Horizontal Dispersion Choice

OVERVIEW

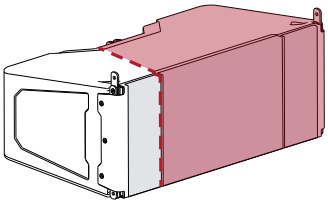
The KF810 line array system offers best-in-class output, true broadband pattern control, and integrated 3-way performance, hallmarks of the legendary KF series.

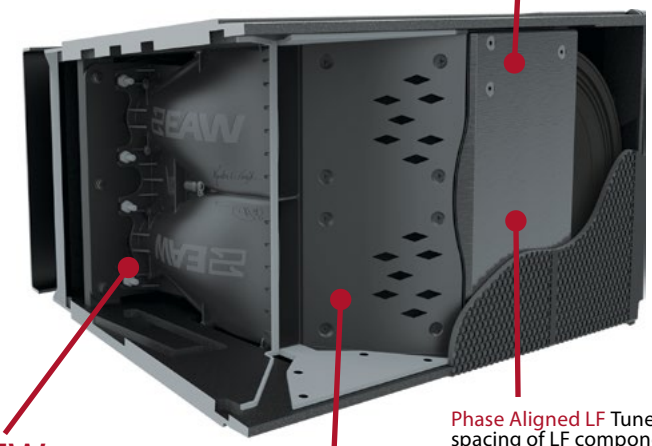
The KF810P incorporates specific design features tailored for the installation market: clean aesthetics offered in black or white, invisible wiring, and concealed 3-point rigging. A weather rated option allows for long term permanent installation in demanding environments backed by EAW's full warranty.

Engineered for a wide variety of applications, the compact KF810 module is comprised of dual 3in voice coil high frequency compression drivers, four 5in mid-frequency transducers and two 3in voice coil high power 10in LF drivers. The output of these sources unites through an integrated horn that occupies nearly the entire forward face of the speaker enclosure, delivering up to 145dB with accurate pattern control to 250Hz to master the most challenging acoustic spaces.

INSIDE EAW CORE TECHNOLOGIES

Side View Cross Section





Symmetry of Sources
Symmetrical arrangement of acoustic sources along a common axis for utmost consistency throughout the coverage pattern

NEW

Isophasic Waveguide
PATENT PENDING
Transforms the acoustic input source to a true Isophasic output allowing multiple enclosures to combine seamlessly

Concentric Summation Array (CSA)
A method of seamlessly integrating MF and HF components within a single horn. With CSA, multiple subsystems sum coherently, without interruption to either HF or MF wavefronts

Phase Aligned LF Tuned spacing of LF components to extend pattern control without the need for enormous horns

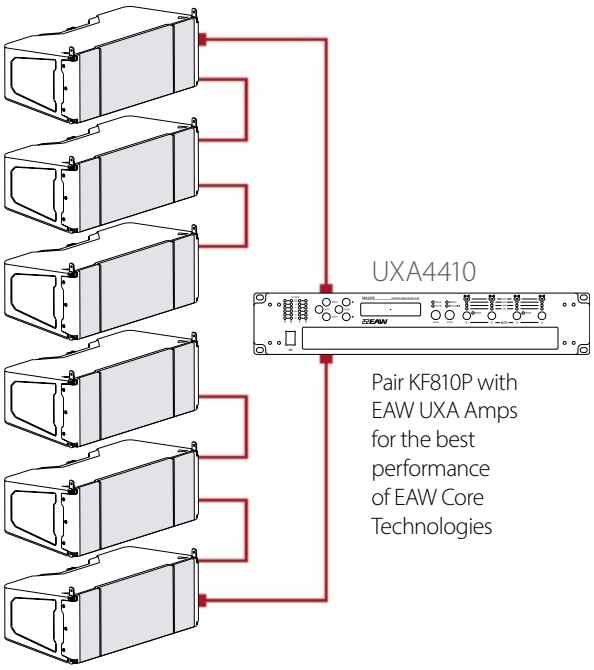
INSTALL FEATURES

- Cover Plate
- Concealed Bolted Rigging
- Pluggable terminal block connector

One Main Street | Whitinsville, MA 01588 | Tel 800 992 5013 / 508 234 6158 | www.eaw.com

EAW EASTERN ACOUSTIC WORKS

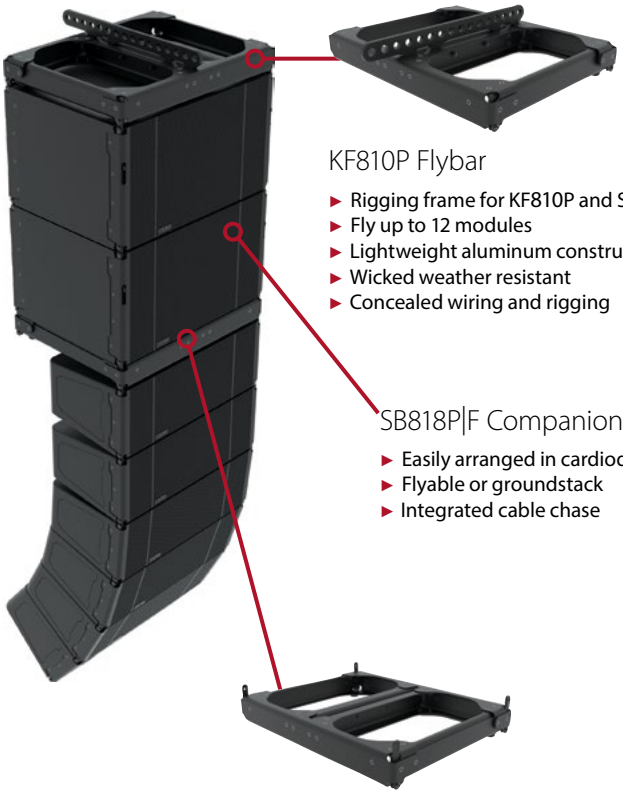
RECOMMENDED AMPLIFIER CONFIGURATION FOR KF810P



Pair KF810P with EAW UXA Amps for the best performance of EAW Core Technologies

MODEL	PER CHANNEL	PER AMPLIFIER
UXA4810	1	4
UXA4406	2	4
UXA4410	3	6

RIGGING CONFIGURATION



KF810P Flybar

- Rigging frame for KF810P and SB818P
- Fly up to 12 modules
- Lightweight aluminum construction
- Wicked weather resistant
- Concealed wiring and rigging

SB818P|F Companion Subwoofer

- Easily arranged in cardiod
- Flyable or groundstack
- Integrated cable chase

KF810P Adapter Bar

- Couples KF810P to SB818P
- Doubles as a groundstack bar
- Lightweight aluminum construction
- Wicked weather resistant
- Consistent visual with flybar

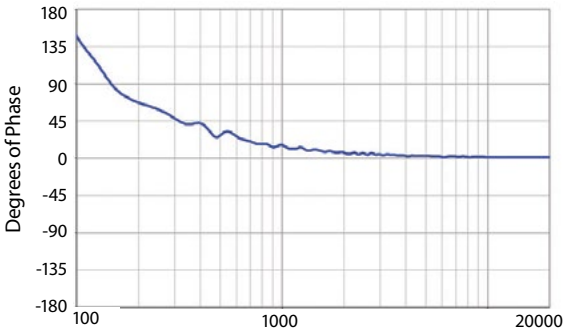
NEW ISOPHASIC WAVEGUIDE

PATENT PENDING

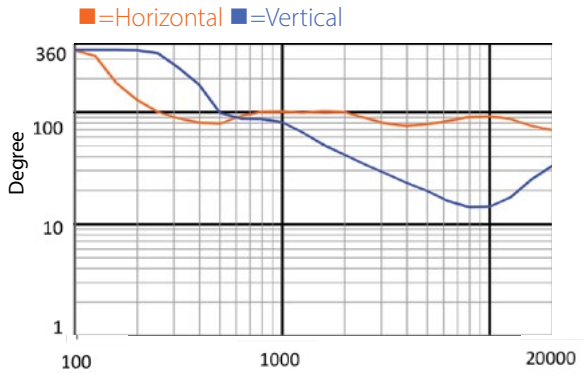
- Transforms the acoustic source to a true isophasic output
- No internal acoustic reflections or distortions
- Focused pattern control with maximum acoustic gain

Designed in the EAW engineering laboratory in Whitinsville, Massachusetts, our USA patent pending, Isophasic Waveguide with a Triovular Bi-lens Conoid™ Phaseplug is a new development in the field of acoustic research. The innovative waveguide equalizes the path length from the transducer to the exit to achieve isophasic output that intrinsically controls the vertical and horizontal pattern. This technology allows each cabinet in the array to combine into a single phase-aligned acoustic source.

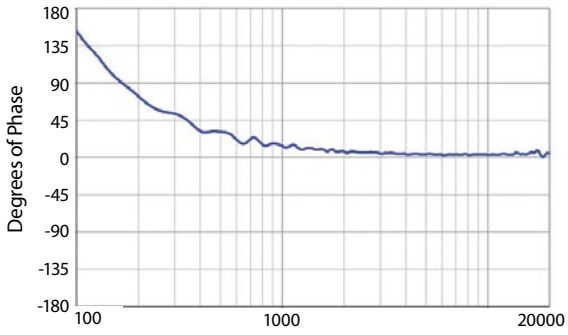
Phase KF810P|80



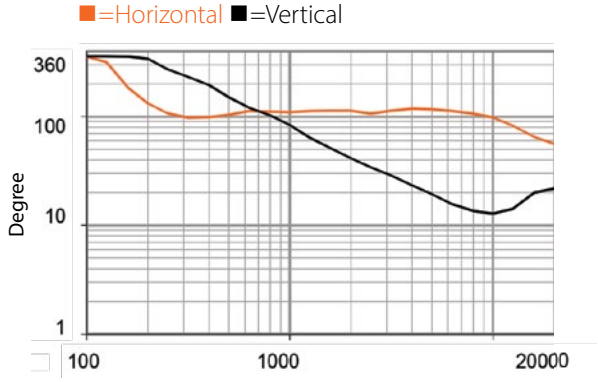
Beamwidth KF810P|80



PHASE KF810P|110



Beamwidth KF810P|110



TECHNICAL SPECIFICATIONS

3-WAY BI-AMP PASSIVE INSTALLATION LINE ARRAY

PERFORMANCE		
Max SPL[1]	145dB	
Operating Range[2]	50 Hz to 20 kHz	
Nominal Beamwidth[3]	KF810|80 = 80° Horizontal x 10° Vertical	
	KF810|110 = 110° Horizontal x 10° Vertical	
RMS Power Handling[4]	LF: 1000w	HF: 500w
Input Impedance[5]	LF: 8 Ω	MF/HF: 8 Ω

CONFIGURATION		
Subsystem	***Transducer***	***Loading***
LF	2X 10in, 3.0in Voice Coil	Ported, Phase Aligned
MF	4X 5in, 1.7in Voice Coil	Horn-loaded w/CSA™ Aperture
HF	2X 1.4in exit, 3in Voice Coil	Isophasic Waveguide

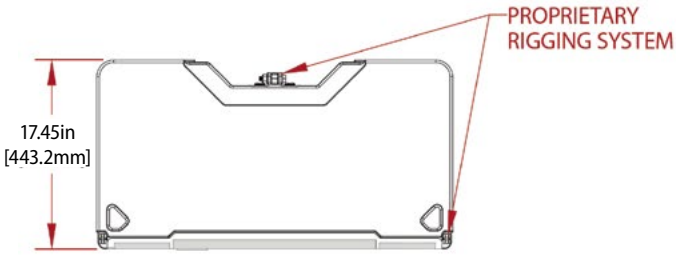
Operating Mode	***Amplifier Channels***	***External Signal Processing***
Bi-amp	LF, MF/HF	DSP w/EAW Focusing

PHYSICAL	
Physical/Rigging	3-Point Integrated Rigging
Dimensions (H×W×D)	12.6 x 32.9 x 17.4in (320 × 835 × 443mm)
Net Weight	88lbs (40kg)
Shipping Weight	98lbs (44.5kg)
Flyware	KF810P|FLYBAR/ADAPTERBAR - See Resolution
Angle Increments	0.0°, 0.9°, 2.0°, 3.2°, 4.3°, 5.4°, 6.6°, 7.7°, 10.0°

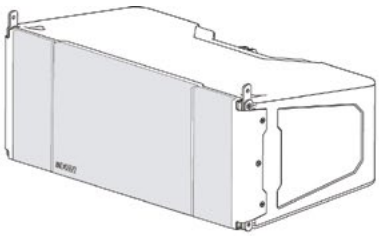
ORDERING DATA		
Description	EAW KF810P 3-way Bi-Amp Passive Line Array	
Part Numbers	***Black***	***White***
KF810P|80	2070007-90	2070132-90
KF810P|110	2070120-90	2070131-90
Subwoofer		
SB818P|F	2070134-90	2070180-90
Accessories		
KF810P|Flybar	2070266-90	2070328-90
KF810P|Adapter	2070352-90	2070360-90

1 Calculated max SPL at 1m with 4:1 (12dB) crest factor pink noise. Specified as whole space (free field) for full range loudspeakers, half space for subwoofers.
2 Operating Range: Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.
3 Nominal Beamwidth: Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.
4 Accelerated Life Test: Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.
5 Nominal Impedance: Selected 4, 8, or 16 ohm resistance such that the minimum impedance point is no more than 20% below this resistance over the Operating Range.

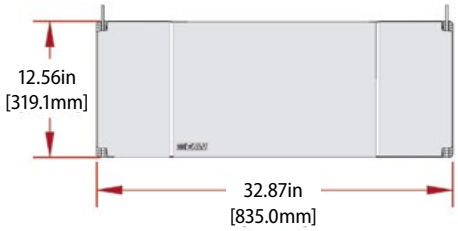
DETAILED DIMENSIONS

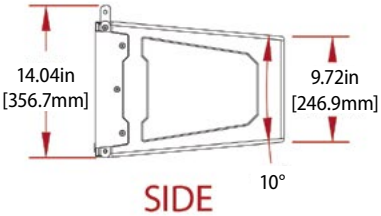


TOP/BOTTOM

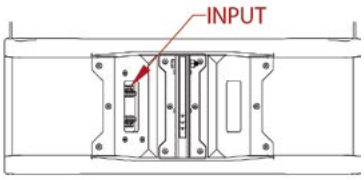


KF810P|80
KF810P|110



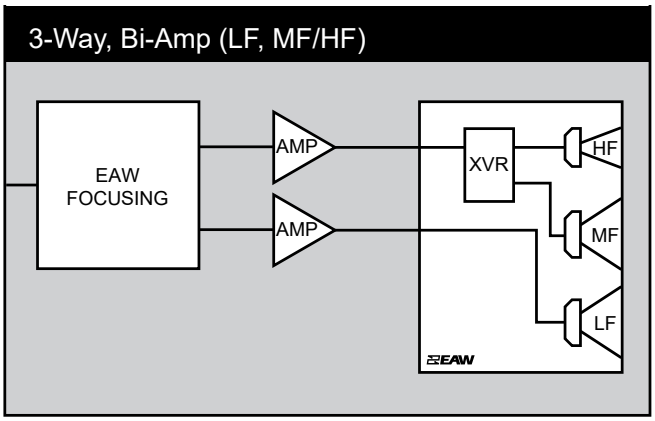


SIDE



REAR

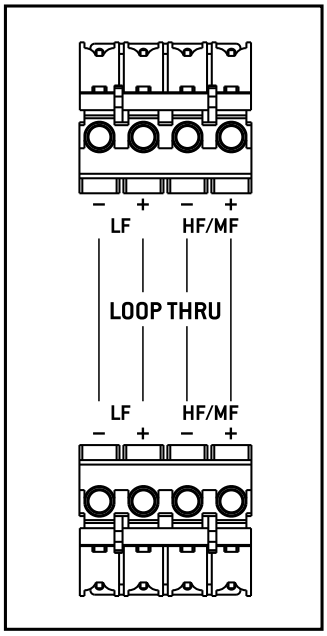
SIGNAL DIAGRAM



Signal Diagram Abbreviations & Definitions

LF/MF/HF	Low Frequency / Mid Frequency / High Frequency
AMP	User Supplied Power Amplifier
XVR	Passive LPFs, HPFs, and EQ integral to the loudspeaker
EAW Focusing	Digital Signal Processor capable of implementing EAW Focusing

INPUT PANEL



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EASTERN ACOUSTIC WORKS
One Main Street
Whitinsville, MA 01588
Tel 800 992 5013 / +1 508 234 6158
www.eaw.com