



# TECHNICAL SPECIFICATIONS KF861

## DESCRIPTION

A 3-way triamp full range system in a trapezoidal vertically arrayable enclosure. Includes 2x 15-in woofers ("tuned" for dipolar directivity), 2x horn-loaded 10-in midrange cones and 2x 2-in exit compression drivers on separate 90 x 30 constant directivity horns.

## APPLICATIONS

The KF861 Virtual Line Array module is engineered for use in vertical arrays of no less than three and as many as 12 units. DSP-driven Tuned Dipolar Array effects create outstanding off-axis rejection to 100 Hz and below. Unique rigging system provides a new level of accuracy and repeatability. The system of choice for televised live events. Six year warranty.

Applications include:

- Major Televised Events
- Concert Tours

## DESCRIPTIVE DATA

Part Number	999331
Product Group	V
LF Subsystem & Loading	2x 15-in, Angled Baffles
MF Subsystem & Loading	2x 10-in Cone, Horn Loaded
HF Subsystem & Loading	2x 2-in Exit Compression Driver on Constant Directivity Horn
System Configuration	3-way, Full Range
Powering Configuration(s)	Triamplified Through MX Processor
Recommended High-Pass Frequency (24 dB/Octave)	40Hz
Cabinet Type (shape)	Horizontal Trapezoidal
Enclosure Materials	Baltic Birch Plywood
Finish	Black Catalyzed Polyurethane
Connectors	One each male and female AP6
Grill	Vinyl Coated Perforated Steel

## NOMINAL DATA

<b>Frequency Response (Hz)</b>	
±3 db	50Hz to 17kHz
-10 dB	40Hz
<b>Axial Sensitivity (dB SPL/1 Watt/1m)</b>	
LF	102
MF	111
HF	113
<b>Impedance (Ohms)</b>	
LF	4
MF	4
HF	5
<b>Power Handling (Watts)</b>	
LF AES Standard	2000
MF AES Standard	800
HF AES Standard	400



*KF861 shown in an array with three KF860s.*

## Calculated Maximum Output (dB SPL, @ 1m)

LF Peak	141.0
MF Peak	146.0
HF Peak	145.0
LF Long Term	135.0
MF Long Term	140.0
HF Long Term	139.0

## Nominal Coverage Angle / -6 dB points (degrees)

Horizontal	90
Vertical	30

## Dimensions inches millimeters

Height (front)	18.5	470
Height (rear)	12.875	327
Width	72	1829
Depth	32	813
Trapezoid Angle	5 degrees per side	

## Weights pounds kilograms

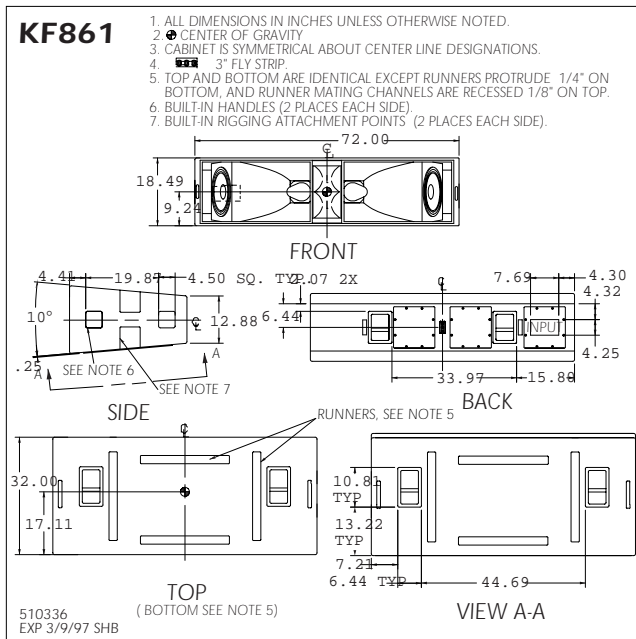
Net Weight	363	165.2
Shipping Weight	375	170.6





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## DIMENSIONAL DRAWING



## ARCHITECTURAL SPECIFICATIONS

The three-way full range loudspeaker systems shall incorporate 2x 15-in LF transducers, 2x 10-in cone MF transducers and 2x 2-in exit compression driver HF transducer.

The LF drivers shall be separated by a "tuned" distance that uses the Tuned Dipolar Array effect to achieve optimal low frequency pattern control. Each MF driver shall be loaded into a midrange horn constructed of 3mm birch plywood reinforced with high density polyurethane foam. The MF horn shall incorporate a phase/displacement plug. Each HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 90° (h) x30° (v).

System frequency response shall vary no more than  $\pm 3$  dB from 50 Hz to 17 kHz measured on axis. The low frequency section shall produce a Sound Pressure Level (SPL) of 102 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 141 SPL on axis at 1 meter. It shall handle 2000 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms. The midrange frequency section shall produce a Sound Pressure Level (SPL) of 111 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 146 SPL on axis at 1 meter. It shall handle 800 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 4 Ohms. The high frequency section shall produce a Sound Pressure Level (SPL) of 113 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 145 SPL on axis at 1 meter. It shall handle 400 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 5 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 15mm thickness void-free cross-grain-laminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in black catalyzed polyurethane. Input connectors shall be one each male and female AP6. The enclosure shall include oval steel tubing (one tube on each side) that accepts steel linking plates. The plates shall attach to the steel tubing with quick-release pins which shall be included. Sufficient precisely aligned pin holes shall be placed in the steel tubing and linking plates to allow for a variety of arraying angles and spacing. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grill backed with open cell foam to protect against dust.

The three-way full range loudspeaker shall be the EAW model KF861.

## SERVICE ITEMS

<b>LF: Complete Cone Driver</b>	EAW Part No.	804036
<b>MF: Complete Cone Driver</b>	EAW Part No.	804022
<b>HF: Complete Compression Driver/Tweeter</b>	EAW Part No.	803011
<b>Filter/Crossover Network: Complete Assembly</b>	EAW Part No.	201499