

#### TECHNICAL SPECIFICATIONS KF850EF

### DESCRIPTION

A 3-way triamplified full range system in a trapezoidal enclosure. Includes a 15-in woofer in a wave guide cavity with ARC™ device, a horn-loaded 10-in midrange cone and a 2-in exit compression driver mounted coaxially in the wave guide cavity on a 55 x 40 constant directivity horn...

### **APPLICATIONS**

The KF850 Virtual Array loudspeaker is the world touring standard, accepted in more technical riders than any other loudspeaker. True 3-way design dramatically improves the quality of vocal reproduction while the cone-driven midrange horn and horn-loaded woofer extend pattern control to the lowest octaves. Effective for large format permanent or portable applications. Six year warranty.

## Applications include:

Concert Tours Corporate Events Large Theaters Stadiums Cathedrals Live Music Clubs

DESCRIPTIVE DATA			
Part Number	999100		
Product Group	S		
LF Subsystem & Loading	1x 15-in Horn Loaded Cone in Wave Guide Cavity with ARC™		
MF Subsystem & Loading	1x 10-in Horn Loaded Cone		
HF Subsystem & Loading	1x 2-in Exit Compression Driver on Constant Directivity Horn		
System Configuration	3-way, Full Range		
Powering Configuration(s)	Triamplified		
Recommended High-Pass Frequency (24 dB/Octave)	60Hz		
Cabinet Type (shape)	Trapezoidal		
<b>Enclosure Materials</b>	Baltic Birch Plywood		
Finish	Black Catalyzed Polyurethane		
Connectors	1 each male and female AP6		
Suspension Hardware	(4) 19-postition Flytracks (2 each top and bottom)		
Grill	Vinyl Coated Perforated Steel, Foam Backed		
Options	179001 Flyclip with ring 179002 Flyclip with hook Mounting Bracket 255010 Caster Pallet 850		

#### **NOMINAL DATA**

Frequency Response (Hz)		
±3 db	86Hz to 17kHz	
-10 dB	65Hz	
Axial Sensitivity (dB SPL/1 Watt/1m)		
LF	102	
MF	109	
HF	112	



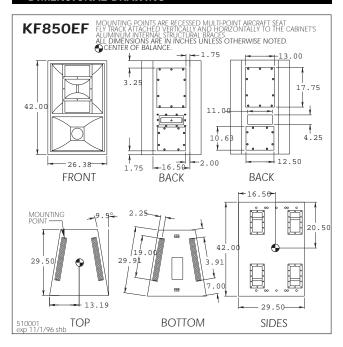
Impedance (Ohms)				
LF	8			
MF	8			
HF	10			
Power Handling, AES Standard (Watts)				
LF	1000			
MF	400			
HF	200			
Calculated Maximum Output (dB SPL, @ 1m)				
LF Peak	138.0	·		
MF Peak	141.0			
HF Peak	141.0			
LF Long Term	132.0			
MF Long Term	135.0			
HF Long Term	135.0			
Nominal Coverage Angle / -6 dB points (degrees)				
Horizontal	55			
Vertical	40			
Recommended Complementary Systems				
Sub	SB850/SB1000e			
Dimensions	inches	millimeters		
Height	42	1067		
Width	26.375	670		
Width (Front)	26.375	670		
Width (Rear)	16.5	419		
Depth	29.5	749		
Trapezoid Angle	9.5 degrees per side			
Weights	pounds	kilograms		
Net Weight	250	113.8		
Shipping Weight	258	117.4		
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#### DIMENSIONAL DRAWING



#### SERVICE ITEMS

LF: Complete Cone Driver:

EAW Part No. 804036

MF: Complete Cone Driver

EAW Part No. 804022

HF: Complete Compression Driver/Tweeter

EAW Part No. 803011

Filter/Crossover Network: Complete Assembly

EAW Part No. 201062

#### ARCHITECTURAL SPECIFICATIONS

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

The LF driver shall be mounted in a wave guide cavity for optimum low frequency directivity. The 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. The HF driver shall be mounted in the wave guide cavity directly in front of the LF driver and shall be loaded on a constant directivity horn with a nominal coverage pattern of 55° (h) x 40° (v). An acoustical filter shall be installed in the LF waveguide cavity behind the HF section to absorb refracted HF energy. An internal filter network shall provide system equalization.

System frequency response shall vary no more than ±3 dB from 86 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 138 SPL on axis at 1 meter. It shall handle 1000 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms. The midrange frequency section shall produce a Sound Pressure Level (SPL) of 109 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 400 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 8 Ohms. The high frequency section shall produce a Sound Pressure Level (SPL) of 112 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 200 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 10 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. A total of four 19-positition flytracks (2 each top and bottom) shall be provided. 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 KF850EF.