



# SPECIFICATIONS KF855

## FEATURES

- VA™ MF/HF downfill system
- 10-in MF on asymmetrical horn
- 2x 2-in exit HF on separate horns with separate coverage areas
- Frequency shading integrates HF horns when powered together
- Power HF horns separately for maximum control
- For portable use only

## DESCRIPTION

A complex 2-way mid/high system in a multi-baffle trapezoidal enclosure designed for down fill from a flown EAW Stadium Array. Includes a horn-loaded 10-in cone (down angled 10 degrees) and 2x 2-in exit compression drivers on separate constant directivity horns. The two HF horns (angled down 10 and 45 degrees) may be powered separately or in parallel with complex internal passive filter providing frequency shading to integrate the two horns. Powering mode is switchable: bi-amplified (HF horns in parallel with internal filter and powered by a single amp channel) or bi-amplified (HF horns powered separately). When in parallel mode, a switch allows attenuation of the lower (45°) HF horn according to trim height.

## APPLICATION

The KF855 is engineered to serve as the downfill loudspeaker in an EAW concert touring Stadium Array, providing coverage to the most expensive front row seats. The two HF horns may be powered separately or in parallel. The system may be inverted to reach balconies in converted 'movie palaces' or similar venues. Six year warranty.

Applications include:

- |                |                  |
|----------------|------------------|
| Concert Tours  | Corporate Events |
| Large Theaters | Stadiums         |
| Cathedrals     | Live Music Clubs |

## PERFORMANCE

<b>Frequency Response (1 Watt @ 1m)</b>	
±3 db	200 Hz to 17 kHz
-10 dB	170 Hz
<b>Axial Sensitivity (dB SPL, 1 Watt @ 1m)</b>	
MF	109
HF	112
<b>Impedance (Ohms)</b>	
MF	8
HF	7 (Horns in parallel) 2x 12 (horns separate)
<b>Power Handling, AES Standard (Watts)</b>	
MF	400
HF	2x 200 (horns separate) 1x 400 (horns parallel)



<b>Calculated Maximum Output (dB SPL @ 1m)</b>	
MF Peak	141.0
HF Peak	141.0
MF Long Term	135.0
HF Long Term	135.0
<b>Nominal Coverage Angle, -6 dB points (degrees)</b>	
Horizontal	55
Vertical	70 (+10,-60 from horizontal axis)
<b>Recommended High-Pass Frequency</b>	
24 dB/Octave	250Hz (for use with KF850EF)

## PHYSICAL

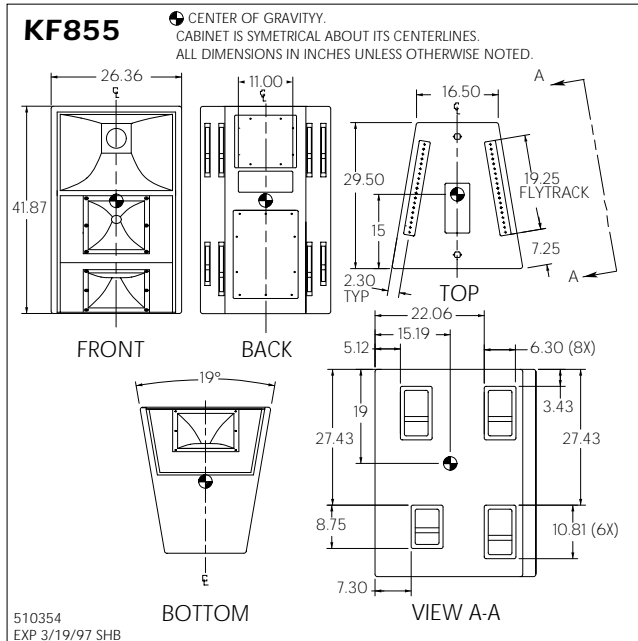
MF Subsystem	1x 10-in horn loaded cone	
HF Subsystem	2x 2-in exit compression driver on horn	
Configuration	2-way, mid/high, downfill	
Powering	Switchable: Bi-amp (HF horns parallel) or bi-amplified (HF horns powered separately)	
Controls (switches, knobs)	Downfill powering mode and attenuation switching	
Cabinet Type (shape)	Trapezoidal with angled baffles	
Enclosure Materials	Baltic birch plywood	
Finish	Black catalyzed polyurethane	
Connectors	Parallel Horns: 1 each male and female AP6 Independent Horns: 2 each male and female AP6	
Suspension Hardware	2X 19-position flytrack (top)	
Grille	Vinal coated perforated steel, foam backed	
Options	179001 flyclip with ring 179002 flyclip with hook 255010 caster pallet CP850	
<b>Dimensions</b>		
	inches	millimeters
Height	42	1067
Width (front)	26.38	670
Width (rear)	16.5	419
Depth	29.5	749
Trapezoid Angle	9.5°	
<b>Weights</b>		
	pounds	kilograms
Net Weight	240	109.2
Shipping Weight	252	114.7





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## DIMENSIONAL DRAWING



Manufacturing tolerances are +/-0.13 and +/-1°

## A & E SPECIFICATIONS

The two-way loudspeaker systems shall incorporate a 10-in cone MF transducer and 2x 2-in exit compression driver HF transducers.

The MF driver shall be loaded into a vertically asymmetrical midrange horn constructed of 1/8-in birch plywood reinforced with high density polyurethane foam. The MF horn's asymmetrical shape shall direct MF energy down at a nominal angle of 10°. The MF horn shall incorporate a phase/displacement plug.

Each HF driver shall be loaded on a constant directivity horn with a combined nominal coverage pattern of 55° (h) x 40° (v). The two HF horns shall abut vertically. The upper HF horn shall be angled down 10°. The lower HF horn shall be angled down 45°. An internal passive filter network shall provide system equalization and frequency shading creating optimal integration between the two HF horns.

The system shall include a switch allowing the two HF drivers to be powered in parallel or separately. An control shall be provided allowing the lower HF driver to be attenuated when the two drivers are powered in parallel.

System frequency response shall vary no more than ±3 dB from 200 Hz to 17 kHz measured on axis. The mid 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. The HF section shall handle 200 Watts of amplifier power (AES Standard) and shall have a nominal impedance of 7 Ohms when the section is powered in parallel.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of 1/2-in 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 three each male and female AP6 (M/F for parallel HF section, dual M/F for separately powered HF sections). Two 19-in flytracks shall be installed on the top of the enclosure. The front of the loudspeaker shall be covered with a vinyl coated perforated steel grille backed with open cell foam to protect against dust.

The two-way mid/high loudspeaker shall be the EAW model KF855.

