



SPECIFICATIONS KF650z

FEATURES

- Compact Virtual Array™ three-way system
- Vented, LF horn-loaded MF/HF (60° x 45° coverage pattern)
- 15-in LF, 10-in MF, 3-in voice coil/1.4-in exit HF
- Switchable powering: Tri-amp or Bi-amp (passive LF/MF)
- For portable use or permanent installation

DESCRIPTION

A 3-way full range system in a vented trapezoidal enclosure. Includes a 15-in woofer, vented, a horn-loaded 10-in midrange cone and a 1.4-in exit compression driver on a 60° x 45° constant directivity horn. Powering mode is switchable: bi-amplified (passive LF/MF crossover) or tri-amplified.

APPLICATION

The KF650z Virtual Array™ system's true 3-way design dramatically improves the quality of vocal reproduction while its cone-driven midrange horn extends pattern control into the lower octaves. Universal suspension hardware (flytrack with integral 3/8"-16 mounting point) supports permanent or portable applications. Six year warranty.

Applications include:

Concert Tours	Ballroom Events
Band PA	Convention Centers
Corporate Events	Live Music Club
Large Houses of Worship	

PERFORMANCE

Frequency Response (Hz)

±3 db	65 Hz to 17 kHz
-10 dB	50 Hz

Axial Sensitivity (dB SPL, 1 Watt @1m)

Bi-amped LF/MF	100
LF	100
MF	109
HF	110

Impedance (Ohms)

Bi-amped LF/MF	8
LF	8
MF	8
HF	8

Power Handling, (Watts Continuous)

Bi-amped LF/MF	700
LF	700
MF	400
HF	160



Recommended High-Pass Frequency

24 dB/Octave	50 Hz
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Calculated Maximum Output (dB SPL @ 1m)

Bi-amped LF/MF Peak	134.5
LF Peak	134.5
MF Peak	141.0
HF Peak	138.0
Bi-amped LF/MF Long Term	128.5
LF Long Term	128.5
MF Long Term	135.0
HF Long Term	132.0

Nominal Coverage Angle, -6 dB Points (degrees)

Horizontal	60
Vertical	45

PHYSICAL

LF Subsystem	1x 15-in, vented
MF Subsystem	1x 10-in horn-loaded cone
HF Subsystem	1x 1.4-in exit compression driver on constant directivity horn
Configuration	3-way, full range
Powering	Switchable: bi-amplified (passive LF/MF crossover) or tri-amplified
Controls (switches, knobs)	Powering mode switch
Cabinet Type (shape)	Trapezoidal
Enclosure Materials	Baltic birch plywood
Finish	Wear-resistant textured black paint

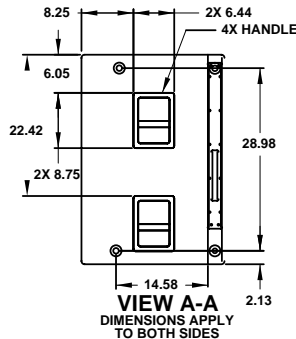
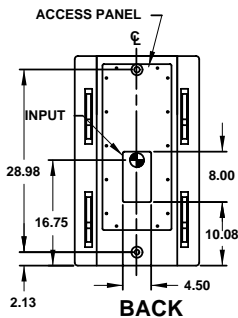
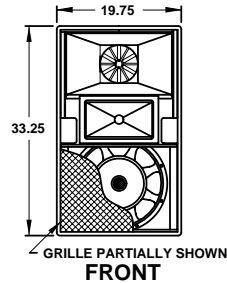
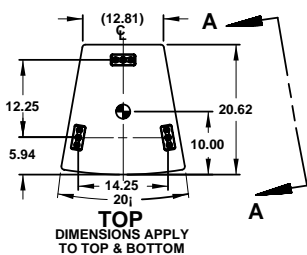




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DIMENSIONAL DRAWING

1. SYMBOL INDICATES 3.00 X 1.35 FLYTRACK.
2. SYMBOL INDICATES MOUNTING POINT, 3/8-16 THREADED HOLE (FLYTRACK).
3. SYMBOL INDICATES CENTER OF BALANCE.



509097 (A)
8/31/99

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

PHYSICAL continued

Connectors	2x Neutrik NL4 Speakon 2x Neutrik NL8 Speakon
Suspension Hardware	(6) 3-position flytracks with integral 3/8"-16 threaded mounting points (3 each top and bottom)
Grille	Powder coated perforated steel, foam backed

Dimensions	Inches	Millimeters
	Height	33.3
Width (front)	19.8	502
Width (rear)	12.9	328
Depth	20.6	524
Trapezoid Angle	10 Degrees per Side	
Weights	Pounds	Kilograms
	Net Weight	135.0
Shipping Weight	142.0	64.6

A & E SPECIFICATIONS

The three-way full range loudspeaker system shall incorporate a 15-in LF transducer, a 10-in cone MF transducer and a 1.4-in exit compression driver HF transducer.

The LF driver shall be mounted in a vented enclosure tuned optimum low frequency response. The MF driver shall be loaded into a midrange horn constructed of 1/8-in birch plywood reinforced with high density polyurethane foam. The MF horn shall incorporate a phase/displacement plug. The HF driver shall be loaded on a constant directivity horn with a nominal coverage pattern of 60° (h) x 45° (v). An internal passive filter network shall provide system equalization and fourth order acoustical crossover between the low and mid frequency sections in bi-amped mode .

System frequency response shall vary no more than ±3 dB from 65 Hz to 17 kHz measured on axis. In bi-amped mode, the low/mid section shall produce a Sound Pressure Level (SPL) of 100 dB SPL on axis at 1 meter with a power input of 1 Watt, and shall be capable of producing a peak output of 134.5 SPL on axis at 1 meter. It shall handle 700 Watts of amplifier power (continuous) and shall have a nominal impedance of 8 Ohms. The HF section shall produce a Sound Pressure Level (SPL) of 110 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 160 Watts of amplifier power (continuous) and shall have a nominal impedance of 8 Ohms.

In tri-amped mode, the low frequency and high frequency sections shall meet all bi-amped mode performance criteria. In addition, the midrange frequency section in tri-amped mode 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 (continuous) and shall have a nominal impedance of 8 Ohms.

The loudspeaker enclosure shall be trapezoidal in shape. It shall be constructed of multi-ply, void-free cross-grain-laminated Baltic birch plywood and shall employ extensive internal bracing. It shall be finished in wear-resistant textured black paint. Input connectors shall be 2x Neutrik NL4 Speakon and 2x Neutrik NL8 Speakon. The system shall include a switch allowing it to be operated in bi-amp or tri-amp powering mode. A total of six 3-position flytracks with integral 3/8"-16 threaded mounting point (3 each top and bottom) shall be provided. The front of the loudspeaker shall be covered with a powder coated perforated steel grille backed with open cell foam to protect against dust.

The three-way full range loudspeaker shall be the EAW model KF650z.

