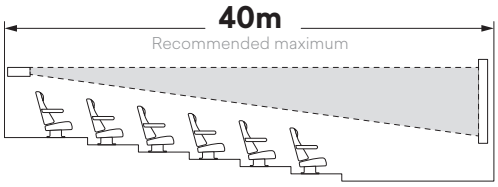
EXPERIENCE SOUND

KX-5946

3-WAY SCREEN CINEMA SYSTEM



The KX-5946 offers a significant improvement in audio quality through the addition of a dedicated midrange horn. This horn reproduces the crucial vocal band to deliver superior dialogue intelligibility.
Using sophisticated loudspeaker modelling techniques, the loading and pattern control have been engineered to achieve industry leading low distortion and smooth directivity characteristics.

Building on a long and successful history within the cinema industry, Krix's in-house research, development and manufacturing team deliver a strong focus on quality and rigorous production standards. Every speaker is comprehensively tested in an advanced acoustic measurement chamber. Tight production tolerances are upheld to ensure best-in-class product quality and reliability.

FEATURES

- The dedicated midrange horn with 6 inch neodymium driver provides superior dialogue intelligence, combined with the high frequency horn this ensures the loudspeaker system has consistent directivity across the critical vocal range.
- Patented constant directivity horn technology provides precise coverage, extremely uniform frequency response. The result is that every seat in the cinema experiences improvements in clarity and definition.
- Krix proprietary 'X Bracing' system within the low frequency enclosure reduces panel resonance and standing waves.
- Krix engineered bass driver featuring, large ferrite magnet structure, dual aluminium shorting rings and symmetrical gap geometry for minimum distortion at all levels.

System options	Bi-amplified passive crossover		Tri-amplified passive crossover		
Product code	**KX-5946.B**		**KX-5946.T**		
Frequency	Low	High	Low	Mid	High
Sensitivity (2.83 V/m, Half space[3])	108 dB	108 dB	108 dB	108 dB	111 dB
Input power rating[2]	950 W	320 W	950 W	180 W	130 W
Impedance	3 Ω	8 Ω	3 Ω	8 Ω	8 Ω
Crossover frequency	350Hz (Low - Mid)		350Hz (Low - Mid) 1600Hz (Mid - High)		
Frequency range	32 – 16000 Hz (-6 dB)				
Nominal dispersion	90° Horizontal, 40° Vertical				
Dimensions	2171 (H) x 850 (W) x 460 (D) mm		85 ½ (H) x 33 (W) x 18 (D) inches		
Net weight	115 kg		254 lbs		

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DETAILED SPECIFICATIONS

	Low Frequency	Horn system	
Part Number [5]	**KX-2640**	**KX-3916.B**	**KX-3916.T**
Sensitivity			
1 W/m, Free space	101 dB [1]	108 dB	108 dB (MF) 111 dB (HF)
1 W/m, Half space [3]	104 dB [1]	108 dB	108 dB (MF) 111 dB (HF)
2.83 V/m, Free space	105 dB	108 dB	108 dB (MF) 111 dB (HF)
2.83 V/m, Half space [3]	108 dB	108 dB	108 dB (MF) 111 dB (HF)
Impedance			
Nominal	3 Ω	8 Ω	8 Ω (MF) 8 Ω (HF)
Minimum	2.7 Ω	8.0 Ω	8.0 Ω (MF) 7.4 Ω (HF)
Maximum Input Voltage [4]	53 V	51 V	38 V (MF) 32 V (HF)
Maximum Input Power			
Continuous [2]	950 W	320 W	180 W (MF) 130 W (HF)
Peak	3800 W	1280 W	720 W (MF) 520 W (HF)
Recommended Processing	Subsonic 30 Hz, >12 dB/oct	Contact Krix for details	
Low frequency transducers	3 x 380 mm (15 inch) paper cone driver, ferrite magnet, vented pole peice, 75 mm (3 inch) edge wound copper voice coil, dual aluminium shorting rings.		
Low frequency enclosure	Vented B4 alignment tuned to 36 Hz, Krix proprietary 'X bracing', optimally damped with polyester fibre, MDF black vinyl finish.		
Mid & High frequency transducers	1 x 152 mm (6 inch) paper cone driver, neodymium magnet, 44 mm (1 ¾ inch) voice coil. 1 x 100mm (4 inch) ferrite magnet compression driver, titanium diaphragm, edge wound aluminium voice coil on high temperature polyimide former.		
Horns	90° x 40° constant directivity, thermoset resin reinforced with glass fibre.		
Horn enclosure	Rear enclosure volume selected to match horn acoustic loading. Internally braced and optimally damped with polyester fibre.		
Horn bracket	Tilt 0° to 15° downwards: Swivel ±15° degrees.		
Terminals	Krix proprietary, high current binding posts featuring an 8mm hole to accept large diameter cable. High visibility polarity indicators.		

NOTES

- All specifications are in accordance with the AES2-2012 standard and are in a form compatible with the Dolby® Atmos™ room design tool.
- Due to continued development, specifications may change without notice.
- Manufactured and sold under US Patents 7,044,265 B2 and 2011/0153282 A1.

1. Sensitivity measurements adjusted to the nominal 1W input power, calculated from the real part of the electrical input impedance over the operating frequency range.
2. Maximum AES continuous power capacity (AES2-2012) band limited test signal duration of two hours.
3. Half space sensitivity based on partial increase due to rear wall loading at low frequencies, estimated from the directivity index over operating frequency range.
4. RMS voltage required to deliver the maximum continuous power to the loudspeaker, IEC shaped pink noise with duration of two hours.
5. The KX-5946 is shipped in two parts comprising of a KX-2640 (Low Frequency component) and KX-3916 (Horn system component)

DETAILED DIMENSIONS