KPT-535-4

3-WAY EXTENDED BASS BEHIND THE SCREEN CINEMA SYSTEM

KLIPSCH PROFESSIONAL | CINEMA | DATA SHEET

RECOMMENDED USE

UP TO
500 SEATS (approximately 8000 ft² or 743 m²)

PRODUCT OVERVIEW

With its high efficiency, low distortion, controlled directivity and flat frequency response, the THX®-certified KPT-535-4 behind the screen system delivers the unbridled dynamics and intense realism required for today's most exciting soundtracks.

An enhanced version of the KPT-535, this system features a KPT-415-LF quad 15" direct-radiating bass unit for greater output in large auditoriums. Yet it retains the smaller system's 24" depth, minimizing the valuable theater space consumed by the area behind the screen.

The dialogue range is superbly handled by a KPT-402-MF Tractrix® horn fronting a K-1133 two inch exit titanium compression driver. And, a KPT-Grand HF Tractrix Horn ensures smooth, effortless treble reproduction. This advanced Tractrix horn geometry and compression driver technology creates a large soundstage with well-defined imaging, resulting in a more genuine, lifelike sound.

The KPT-535-4 is available with a passive processor for bi-amp or mono-amp operation.

DESIGNED AND MADE IN THE USA

USING DOMESTIC AND IMPORTED COMPONENTS

In 1946, Paul W Klipsch, genius & maverick, hand-built his first loudspeaker in a tin shed with the intention of bringing live music into his living room. Remember great sound? We do, too. Today, Klipsch's cinema series speaker enclosures are made in the USA, by proud craftsmen in Hope, Arkansas. Just like PWK intended.

AVAILABLE VERSIONS

KPT-535-4-T THX

Tri-amp version without passive processor

KPT-535-4-B

Includes a passive processor for Bi-amp operation

KPT-535-4-M

Includes a passive processor for Mono-amp operation

SYSTEM COMPONENTS

	KPT-535-4-T	KPT-535-4-B	KPT-535-4-M
HF	KPT-Grand HF-T	KPT-Grand HF-N*	KPT-Grand HF-T
MF	KPT-402-MF	KPT-402-MF	KPT-402-MF
LF	KPT-415-LF	KPT-415-LF	KPT-415-LF
NETWORK	-	-	KPT-535/4 N2

* Includes Passive Processor

SYSTEM SPECIFICATIONS

FREQUENCY RESPONSE[1] (+/- 3 dB)	43 Hz - 19 kHz
FREQUENCY RANGE (-10 dB)	26 Hz - 20 kHz
SENSITIVITY[2]	107 dB
MAXIMUM SPL[4]	131 dB
HORIZONTAL COVERAGE	90° +/- 30° 200 Hz - 16 kHz
VERTICAL COVERAGE	60° +/- 30° 300 Hz - 16 kHz
DIRECTIVITY INDEX (DI)	8 dB
DIRECTIVITY FACTOR (Q)	6.3
HEIGHT	86" (218.44cm)
WIDTH	39.75" (100.97cm)
DEPTH	23.75" (60.33cm)
WEIGHT	280 lbs. (127.1 kg)

1 Frequency response behind a screen relative to X-curve and with active processing applied
2 SPL at 1M, half-space anechoic with 2.83V input
3 AES standard, continuous pink noise, 6 dB peaks
4 Calculated at 1M half-space at power handling input

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	KPT-535-4-T			KPT-535-4-B		KPT-535-4-M
	HF	MF	LF	HF/MF	LF	HF/MF/LF
SENSITIVITY[2]	111 dB	111 dB	109 dB	107.5 dB	109 dB	107 dB
POWER HANDLING[3]	50W (20V)	90W (27V)	1600W (56V)	225W (34V)	1600W (56V)	500W (45V)
POWER HANDLING (PEAK)	200W	360W	6400W	900W	6400W	2000W
MAXIMUM SPL[4]	128 dB	130 dB	135 dB	129 dB	135 dB	131 dB
MAXIMUM SPL (PEAK)	134 dB	136 dB	141 dB	135 dB	141 dB	137 dB
NOMINAL IMPEDANCE	8 ohm	8 ohm	2 ohm	5 ohm	2 ohm	4 ohm

RECOMMENDED ACTIVE PROCESSOR SETTINGS

HF — KPT-Grand HF-T

HIGHPASS CROSSOVER	4.2 kHz Linkwitz Riley 24 dB		
PEQ1	3.6 kHz	Q: 2.2	Gain: -4 dB
PEQ2	2.5 kHz	Q: 2	Gain: -4 dB
PEQ3	5 kHz	Q: 5	Gain: -3 dB
HF DELAY	0.81 ms		
OUTPUT GAIN	+2 dB		

MF — KPT-402-MF

HIGHPASS CROSSOVER	370 Hz Linkwitz Riley 24 dB		
LOWPASS CROSSOVER	7.6 kHz Linkwitz Riley 24 dB		
PEQ1	620 Hz	Q: 2	Gain: -1 dB
PEQ2	1.2 kHz	Q: 5	Gain: -3 dB
PEQ3	2.4 kHz	Q: 6.5	Gain: -4 dB
PEQ4	6 kHz	Q: 5	Gain: -3 dB
MF DELAY	0 ms		
OUTPUT GAIN	-2.5 dB		

LF — KPT-415-LF

LOWPASS CROSSOVER	440 Hz Linkwitz Riley 24 dB		
PEQ1	230 Hz	Q: 5	Gain: +3 dB
PEQ2	250 Hz	Q: 8	Gain: +2 dB
PEQ3	380 Hz	Q: 5	Gain: +3 dB
PEQ4	290 Hz	Q: 8	Gain: -2 dB
LF DELAY	0 ms		
OUTPUT GAIN	0 dB		

HF/MF — KPT-Grand HF-N / KPT-402-MF

HIGHPASS CROSSOVER	400 Hz Linkwitz Riley 24 dB		
PEQ1	620 Hz	Q: 2	Gain: -1 dB
PEQ2	1.48 kHz	Q: 5	Gain: -3 dB
PEQ3	2.3 kHz	Q: 7	Gain: -3 dB
PEQ4	3.5 kHz	Q: 7	Gain: -2 dB
HF DELAY	0 ms		
OUTPUT GAIN	+3 dB		

LF — KPT-415-LF

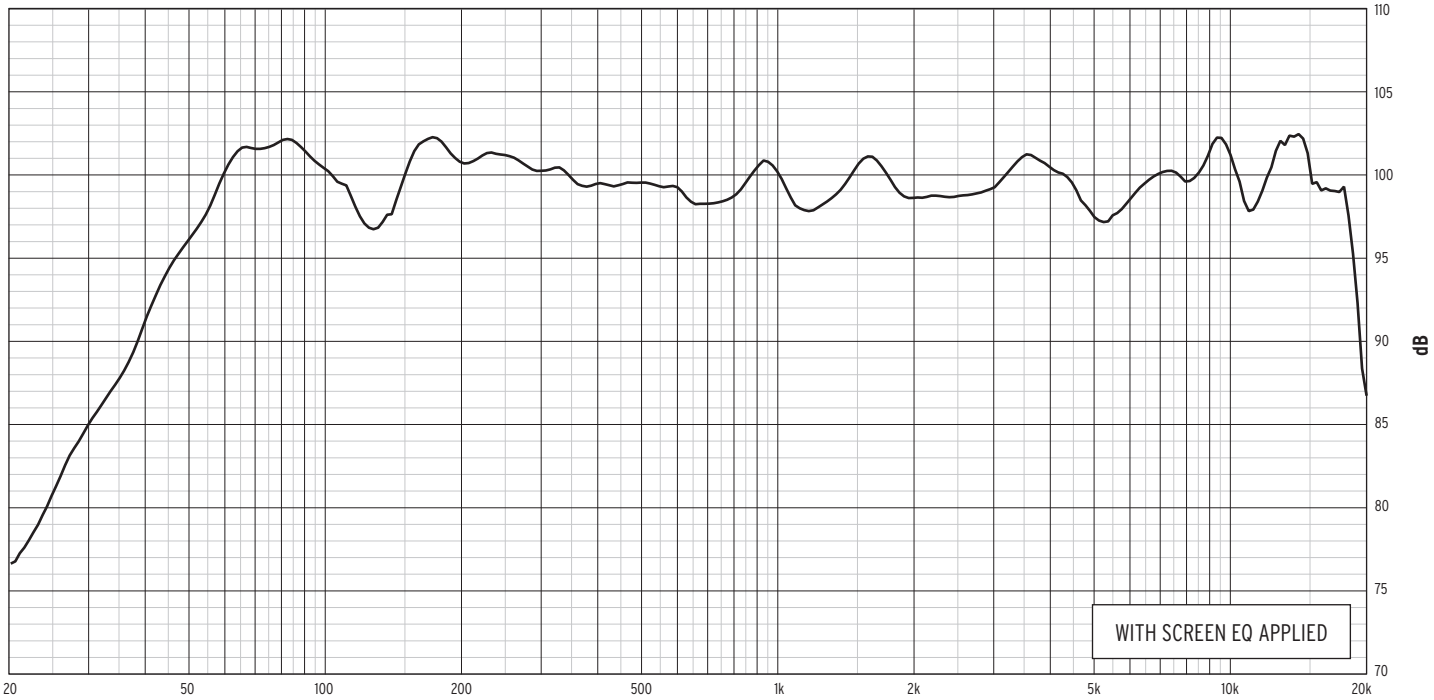
LOWPASS CROSSOVER	440 Hz Linkwitz Riley 24 dB		
PEQ1	230 Hz	Q: 5	Gain: +3 dB
PEQ2	250 Hz	Q: 8	Gain: +2 dB
PEQ3	380 Hz	Q: 5	Gain: +3 dB
PEQ4	290 Hz	Q: 8	Gain: -2 dB
LF DELAY	0 ms		
OUTPUT GAIN	0 dB		

ACTIVE PROCESSOR SETTINGS ARE NOT REQUIRED FOR MONO-AMP OPERATION

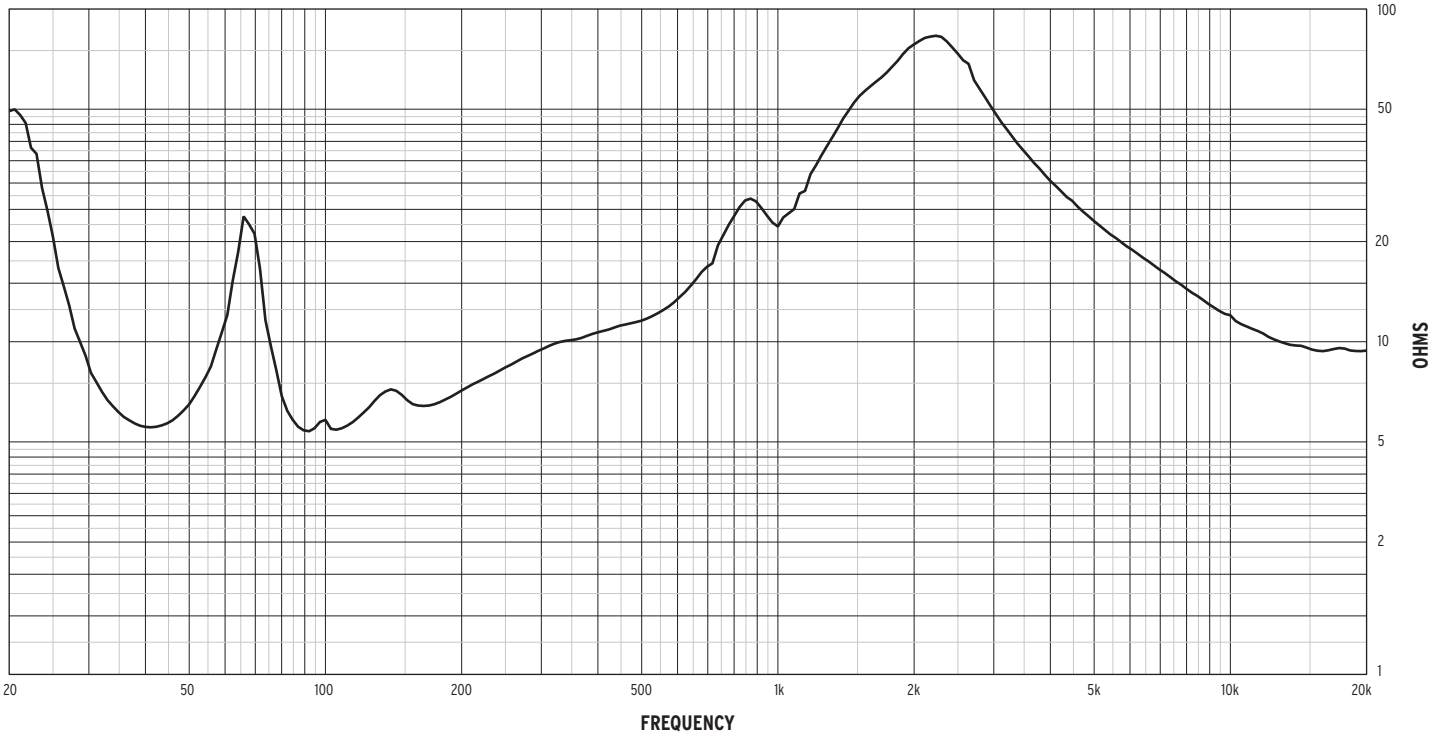
Digital Signal Processing (DSP) equipment is required for the Tri-amp and Bi-amp versions of the KPT-535-4. Digital Signal Processing is not required for proper operation of the mono-amp version (KPT-535-4-M), as the passive processor takes care of all the equalization/crossover requirements for the system.

The DSP parameters listed above are to establish crossover, gain, equalization and delay. They are recommended for the initial set-up evaluation and will yield the corresponding component specifications at the top of this page.

FREQUENCY RESPONSE



IMPEDANCE



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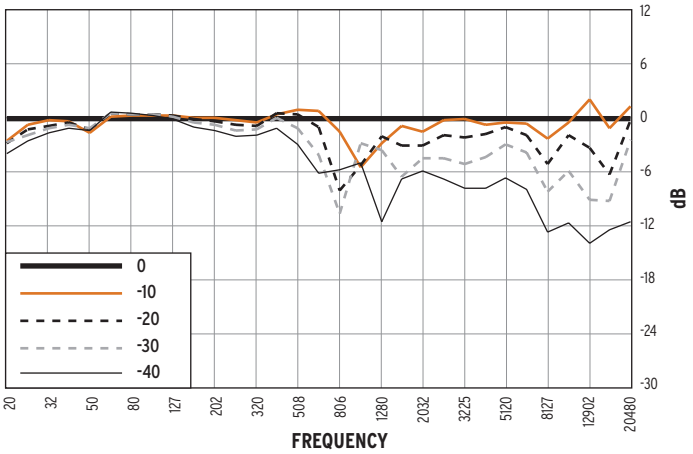
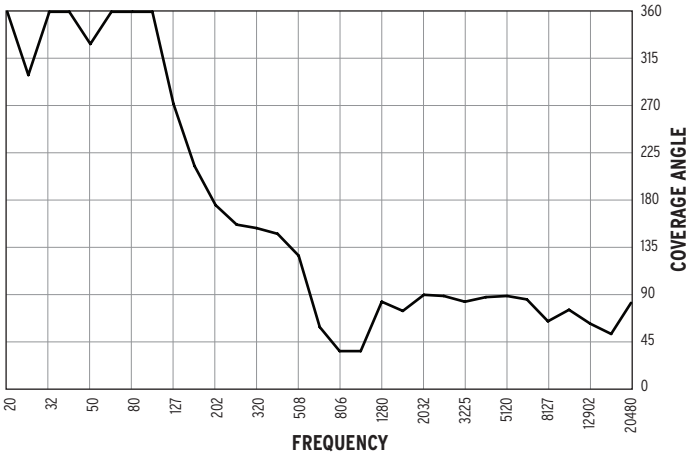
3-WAY EXTENDED BASS BEHIND THE SCREEN CINEMA SYSTEM

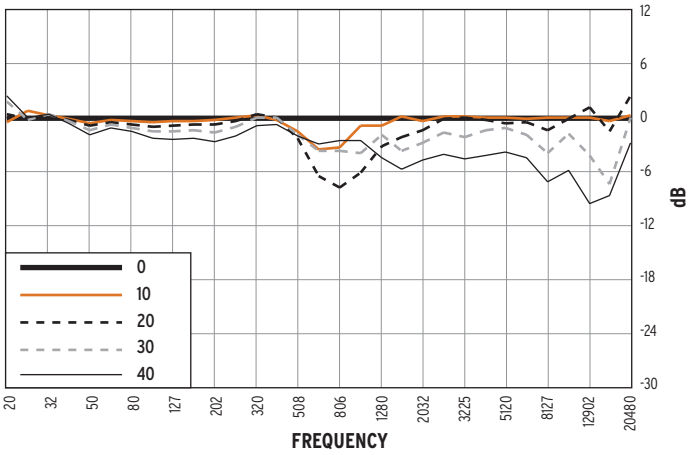
HORIZONTAL OFF AXIS TRANSFER FUNCTION LEFT



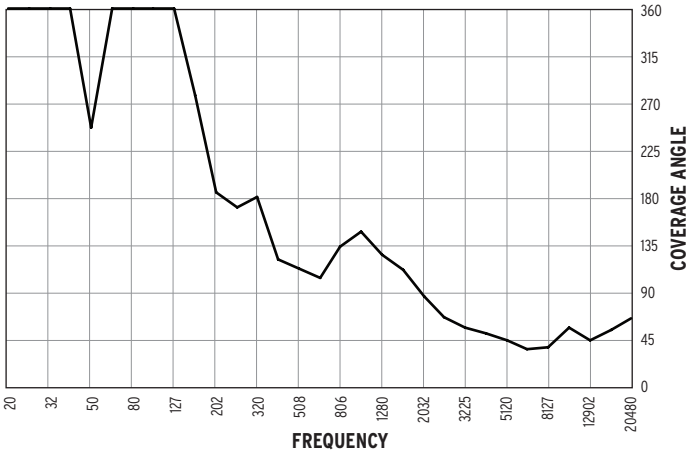
HORIZONTAL COVERAGE (-6dB)



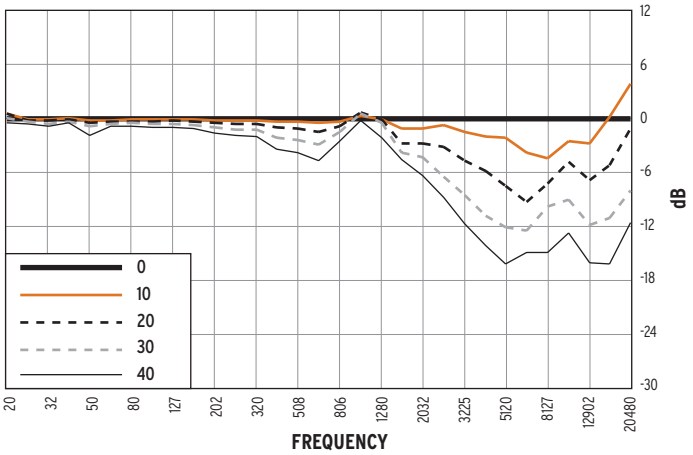
HORIZONTAL OFF AXIS TRANSFER FUNCTION RIGHT



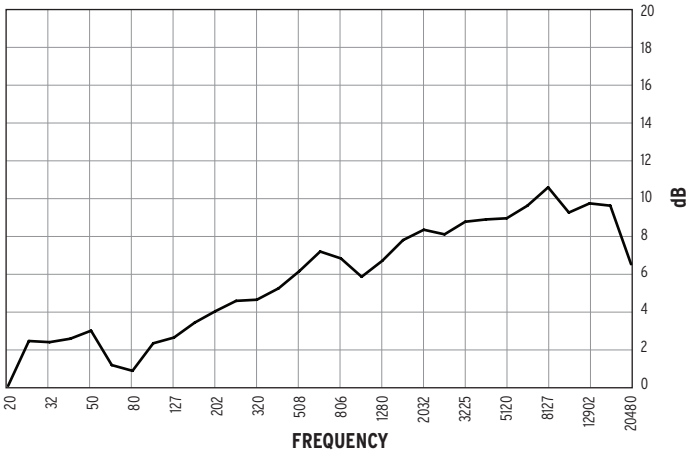
VERTICAL COVERAGE (-6dB)



VERTICAL OFF AXIS TRANSFER FUNCTION



DIRECTIVITY INDEX



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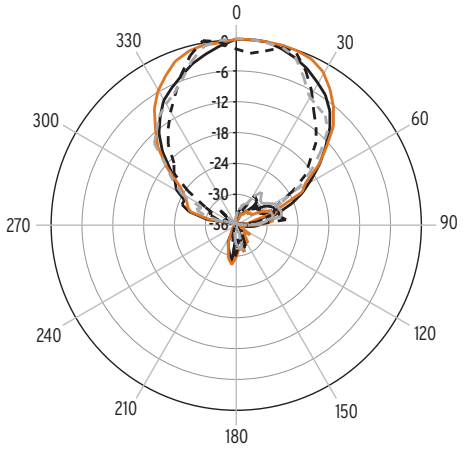
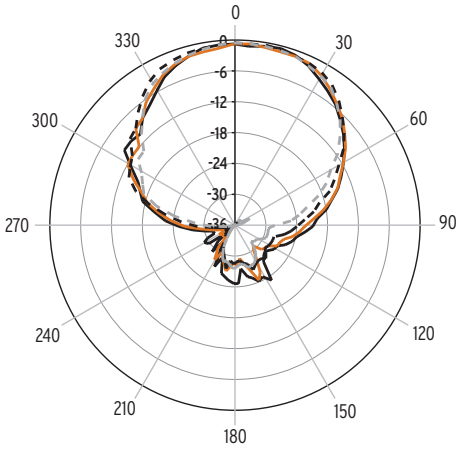
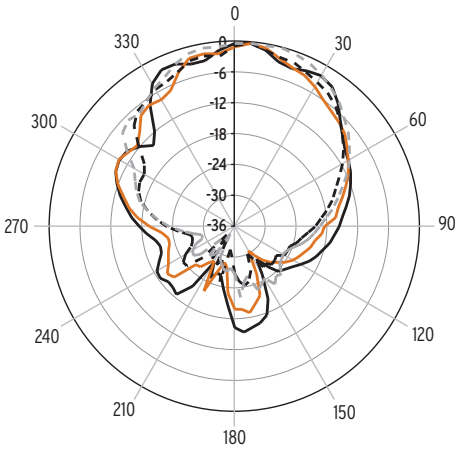
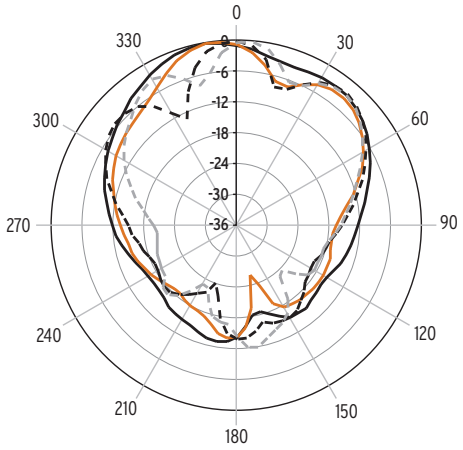
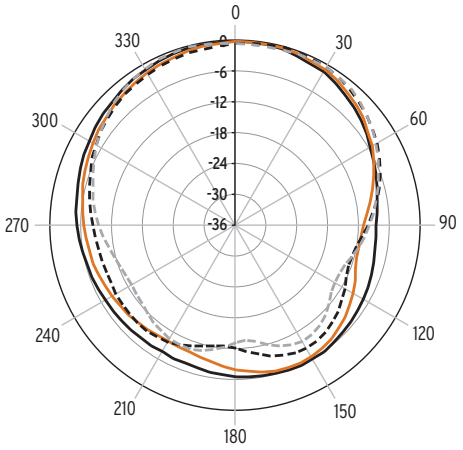
HORIZONTAL 1/3 OCTAVE POLARS











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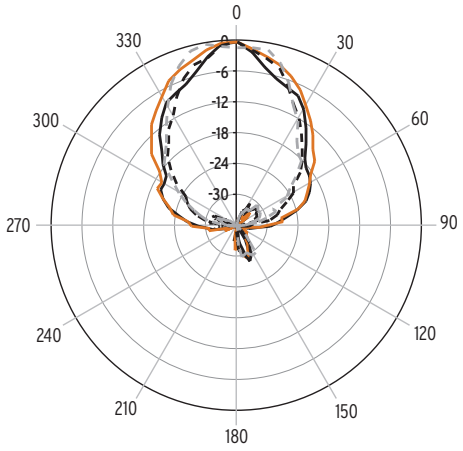
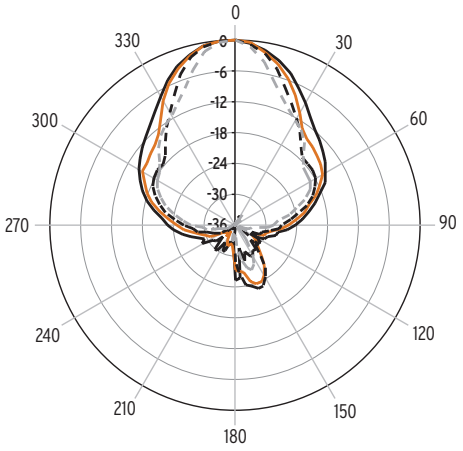
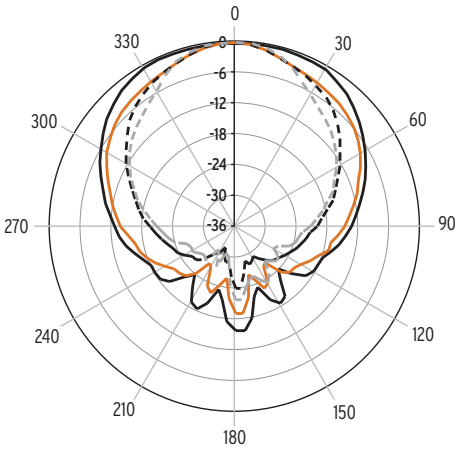
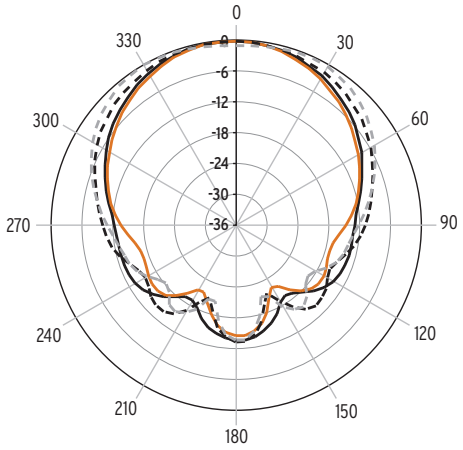
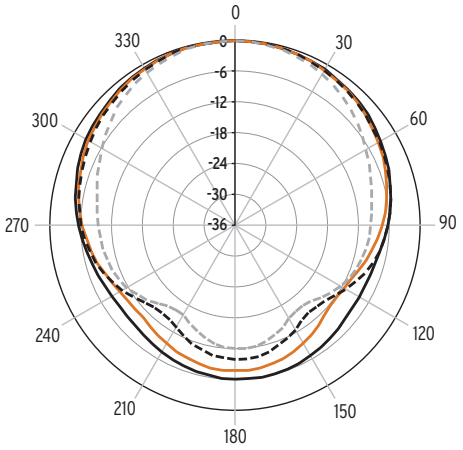
VERTICAL 1/3 OCTAVE POLARS











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ARCHITECTURAL SPECIFICATIONS

The KI-398-RGL two-way professional cinema surround speaker system shall include an 15" (380 mm) K-48-ST low-frequency transducer utilizing a 3" (75 mm) voice coil, 104 ounce (2.95 kg) magnet and motor magnet assembly and a KDE-75-8P 3" (76.2 mm) titanium diaphragm high-frequency 60-ounce (1.70 kg) magnet compression driver mounted on a 90˚ X 50˚ injection molded modified Tractrix Horn. Signal shall be applied to the transducers via a full-range frequency-dividing network. The enclosure tuning shall be of a vented design.

Frequency response shall be 51 Hz to 18 kHz, +/- 3 dB, with the -10dBpoint at 38Hz, measured at three meters, half-space anechoic. The high-frequency dispersion angle shall be 90˚ X 50˚ nominal. Directivity shall be 8 dB . Sensitivity shall be 100dB SPL, measured at one meter, half-space anechoic, with a 2.83V input. Power handling shall be 600 watts (57 volts), to AES standards, continuous pink noise, 40 Hz to 10 kHz, 6 dB peaks. Calculated maximum continuous output at one meter shall be 126dB SPL. Nominal impedance shall be 8 ohms, with 5.5 ohms minimum at 90 Hz.

The internal passive crossover frequency shall be 750Hz with a slope of 24dB/ octave on the low frequency and 24dB/octave on the high- frequency. Signal connections shall be made via a two point barrier strip.

The enclosure panels shall be CNC-fabricated using .75" (19mm) 7-ply natural hardwood plywood, assembled using rabbet and dado joinery. The motorboard baffle shall be 1" (2.54cm) molding grade MDF. Dimensions for the enclosure shall be 39" (99.1 cm) high by 16.0" (40.04 cm) deep by 19.8" (50.2cm) front width and 6.8" (17.2cm) rear width in a symmetrical trapezoidal shape, with both side panels angled at 22.5˚ Net weight shall be 78 lbs. (35.5kg).

Enclosure flying capability shall be provided via sixteen internal 3/8"-16 thread mounting points, 4 points per panel with additional compatibility with readily available commercial flying hardware.

The system shall be a Klipsch KI-398-RGL loudspeaker.

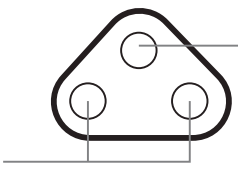
NEED HELP WITH YOUR PRO SYSTEM DESIGN?

You need to make the best impression, from the initital job quote through the completed installation. We can help choose the best Klipsch speakers for the application and help design a system that unleashes your venue's full potential.

Send us your plans or questions to us at:

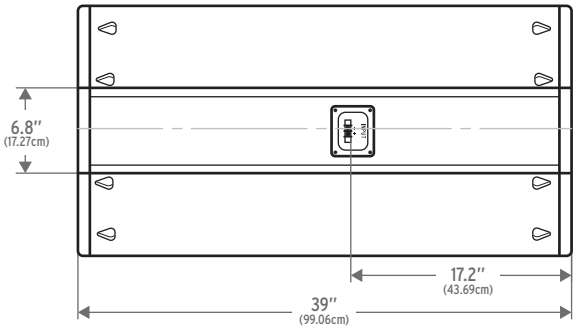
PROSYSTEMDESIGN@KLIPSCH.COM

NOT A SUSPENSION POINT! 8 PLCS on each side and 8 PLCS on each top and bottom panels

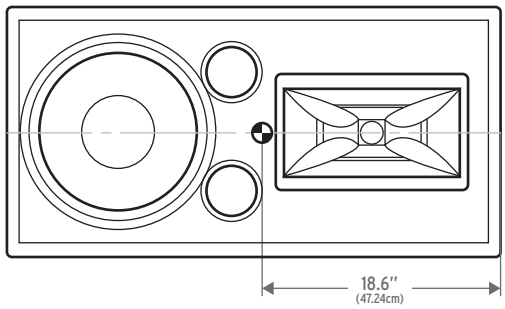


3/8"-16 threaded hole suspension point 4 PLCS on each side panel and 4 PLCS on top and bottom panels

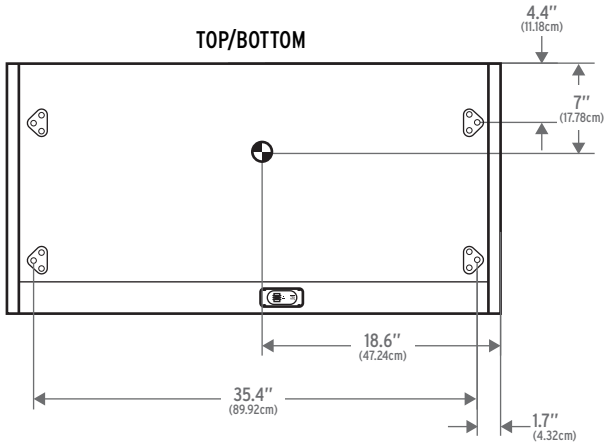
BACK



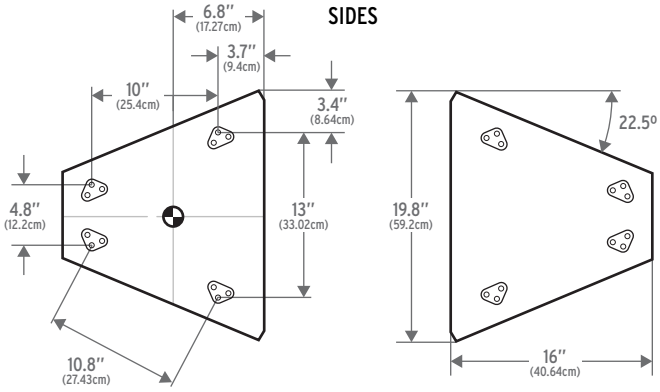
FRONT



TOP/BOTTOM



SIDES



CENTER OF GRAVITY

ORDERING INFORMATION

KI-398-RGL

PART NUMBER	MODEL NAME	FINISH	PACKED QUANTITY	DESCRIPTION	UPC
1015031	KI-398-B-RGL	Black	1	Standard 8 ohm speaker	743878027792

KI-398 SIDE-PLATE MOUNTING KIT

PART NUMBER	MODEL NAME	FINISH	PACKED QUANTITY	DESCRIPTION	UPC
1061616	KI-398-RGL PLT Mounting Kit	Black	1	2 Side-Plates plus hardware	NA

KI-398-RGL CARTON DIMENSIONS

HEIGHT	41.5" (105.4cm)
WIDTH	21.0" (53.3cm)
DEPTH	17.0" (43.2cm)

KI-398 SIDE-PLATE MOUNTING KIT CARTON DIMENSIONS

HEIGHT	1" (2.5cm)
WIDTH	18.5" (33.0cm)
DEPTH	12.5" (31.8cm)