

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

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SENSITIVITY² | 111 dB | 111 dB | 109 dB | 107.5 dB | 109 dB | 107 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POWER HANDLING³ | 50W (20V) | 90W (27V) | 1600W (56V) | 225W (34V) | 1600W (56V) | 500W (45V) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POWER HANDLING (PEAK) | 200W | 360W | 6400W | 900W | 6400W | 2000W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAXIMUM SPL⁴ | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>HF KPT-Grand HF-T</p> <table border="1"> <tr><td>HIGHPASS CROSSOVER</td><td>4.2 kHz Linkwitz Riley 24 dB</td></tr> <tr><td>PEQ1</td><td>3.6 kHz Q: 2.2 Gain: -4 dB</td></tr> <tr><td>PEQ2</td><td>2.5 kHz Q: 2 Gain: -4 dB</td></tr> <tr><td>PEQ3</td><td>5 kHz Q: 5 Gain: -3 dB</td></tr> <tr><td>HF DELAY</td><td>0.81 ms</td></tr> <tr><td>OUTPUT GAIN</td><td>+2 dB</td></tr> </table> | | | 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 | <p>HF/MF KPT-Grand HF-N MF KPT-402-MF</p> <table border="1"> <tr><td>HIGHPASS CROSSOVER</td><td>400 Hz Linkwitz Riley 24 dB</td></tr> <tr><td>PEQ1</td><td>620 Hz Q: 2 Gain: -1 dB</td></tr> <tr><td>PEQ2</td><td>1.48 kHz Q: 5 Gain: -3 dB</td></tr> <tr><td>PEQ3</td><td>2.3 kHz Q: 7 Gain: -3 dB</td></tr> <tr><td>PEQ4</td><td>3.5 kHz Q: 7 Gain: -2 dB</td></tr> <tr><td>HF DELAY</td><td>0 ms</td></tr> <tr><td>OUTPUT GAIN</td><td>+3 dB</td></tr> </table> | | 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 | <p>ACTIVE PROCESSOR SETTINGS ARE NOT REQUIRED FOR MONO-AMP OPERATION</p> | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>MF KPT-402-MF</p> <table border="1"> <tr><td>HIGHPASS CROSSOVER</td><td>370 Hz Linkwitz Riley 24 dB</td></tr> <tr><td>LOWPASS CROSSOVER</td><td>7.6 kHz Linkwitz Riley 24 dB</td></tr> <tr><td>PEQ1</td><td>620 Hz Q: 2 Gain: -1 dB</td></tr> <tr><td>PEQ2</td><td>1.2 kHz Q: 5 Gain: -3 dB</td></tr> <tr><td>PEQ3</td><td>2.4 kHz Q: 6.5 Gain: -4 dB</td></tr> <tr><td>PEQ4</td><td>6 kHz Q: 5 Gain: -3 dB</td></tr> <tr><td>MF DELAY</td><td>0 ms</td></tr> <tr><td>OUTPUT GAIN</td><td>-2.5 dB</td></tr> </table> | | | 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 | <p>LF KPT-415-LF</p> <table border="1"> <tr><td>LOWPASS CROSSOVER</td><td>440 Hz Linkwitz Riley 24 dB</td></tr> <tr><td>PEQ1</td><td>230 Hz Q: 5 Gain: +3 dB</td></tr> <tr><td>PEQ2</td><td>250 Hz Q: 8 Gain: +2 dB</td></tr> <tr><td>PEQ3</td><td>380 Hz Q: 5 Gain: +3 dB</td></tr> <tr><td>PEQ4</td><td>290 Hz Q: 8 Gain: -2 dB</td></tr> <tr><td>LF DELAY</td><td>0 ms</td></tr> <tr><td>OUTPUT GAIN</td><td>0 dB</td></tr> </table> | | 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 |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>LF KPT-415-LF</p> <table border="1"> <tr><td>LOWPASS CROSSOVER</td><td>440 Hz Linkwitz Riley 24 dB</td></tr> <tr><td>PEQ1</td><td>230 Hz Q: 5 Gain: +3 dB</td></tr> <tr><td>PEQ2</td><td>250 Hz Q: 8 Gain: +2 dB</td></tr> <tr><td>PEQ3</td><td>380 Hz Q: 5 Gain: +3 dB</td></tr> <tr><td>PEQ4</td><td>290 Hz Q: 8 Gain: -2 dB</td></tr> <tr><td>LF DELAY</td><td>0 ms</td></tr> <tr><td>OUTPUT GAIN</td><td>0 dB</td></tr> </table> | | | 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 | | | | | | | | | | | | | | | | | | |
| LOWPASS CROSSOVER | 440 Hz Linkwitz Riley 24 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| LF DELAY | 0 ms | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| OUTPUT GAIN | 0 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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RECOMMENDED ACTIVE PROCESSOR SETTINGS

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.