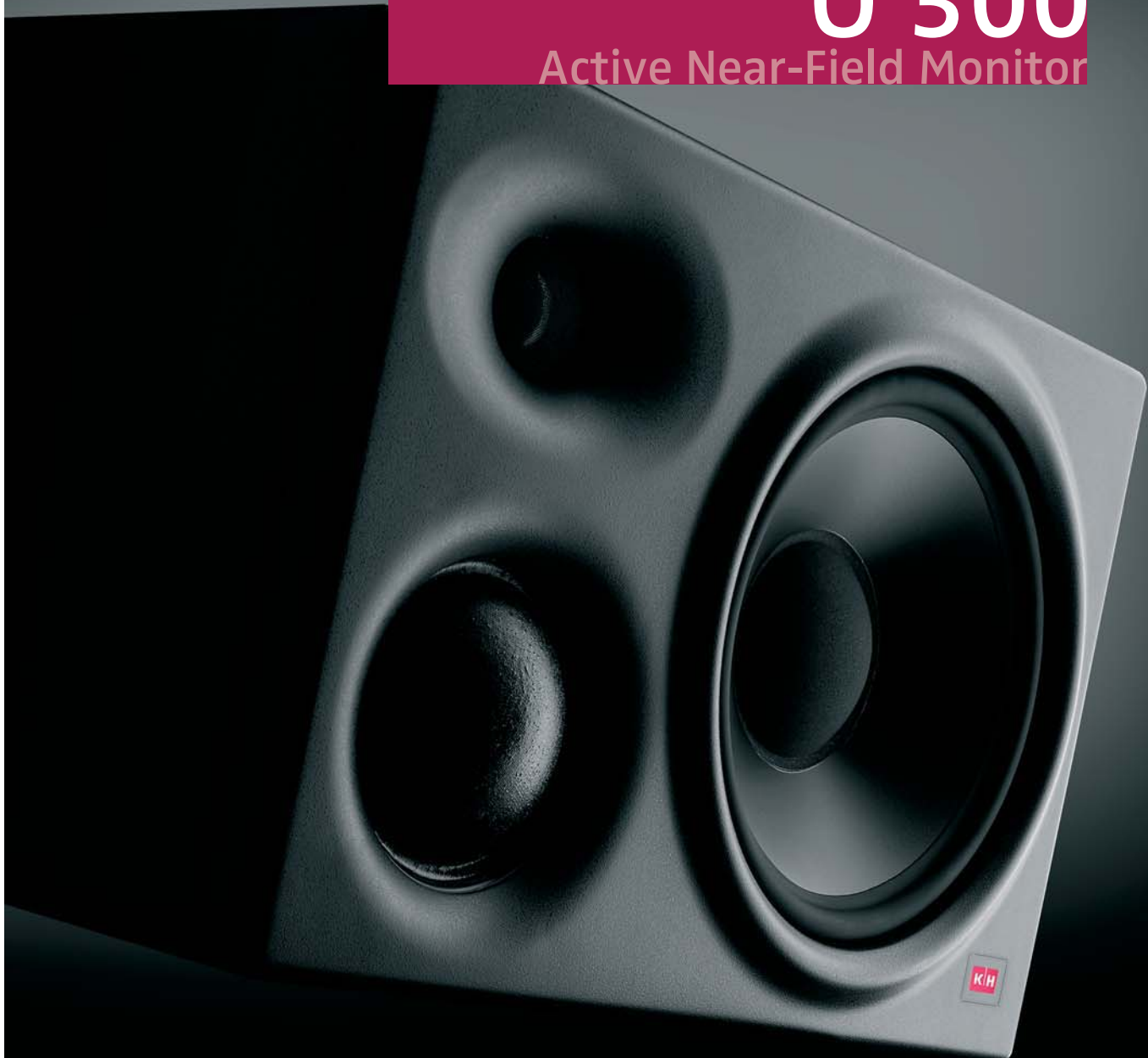


**K | H**  
Klein + Hummel

**NEW**

**0 300**

Active Near-Field Monitor





## In developing the O 300

the goal was to achieve the most accurate, uncolored sound, combined with ideally shaped waveguides, in a compact size. Complex computer simulations and extensive listening tests were conducted. The results are unheard of: this 3-way monitor produces a neutral, equalized sound stage which is unparalleled in its class. Precise bass response, perfect dispersion patterns, and a stunningly real sound stage with remarkable image focus and depth leave nothing to be desired. Now available without the digital components of the successful O 300 D.

### Technical Data

Free field frequency response 1	40 Hz – 20 kHz, ± 2 dB
Free field frequency response 2	35 Hz – 24 kHz, ± 3 dB
Self-generated noise level at 10 cm	< 20 dB(A)
THD < 0.5 % at 1 m distance	100 Hz @ 95 dB/SPL
Nominal power capacity	–
Max. SPL	112.8 dB/SPL
In half space at 3 % THD	100 Hz and 6 kHz
Averaged between	

### Electronics

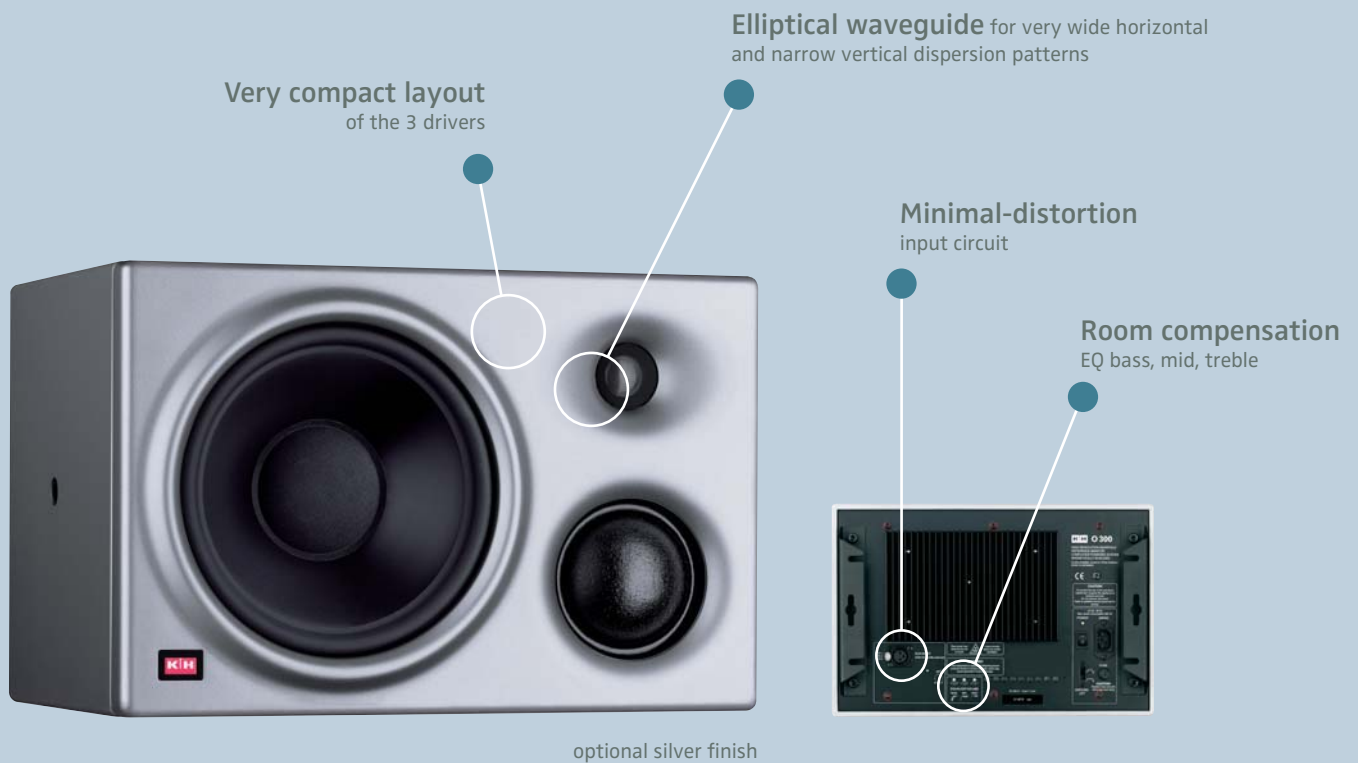
Woofers amplifier, continuous output power*	150 W
Woofers amplifier, peak output power*	250 W
Midrange amplifier, continuous output power*	65 W
Midrange amplifier, peak output power*	75 W
Tweeter amplifier, continuous output power*	65 W
Tweeter amplifier, peak output power*	110 W
Controller design	Analog, active
Crossover	
Frequency	650 Hz/3.3 kHz
Slope	24 dB/oct.
Equalization: Low cut	–
Bass	0; – 2.5; – 5; – 7.5 dB
Mid	1.5; 0; – 1.5; – 3; dB
Treble	2; 1; 0; – 1; dB
Phase adjustment delay	–
Protection circuitry	Limiter: low, mid, high
Subsonic filter frequency; slope	30 Hz; 6 dB/oct.
Input, analog	
Impedance, electronic symmetry	XLR, 14 kΩ
Input sensitivity	+ 6 dBu
Attenuator	0 – 28 dB
CMRR	> 60 dB @ 15 kHz
Output, analog	–
Displays, indicators: power on	K + H logo "red"
limit/clip	K + H logo "blinking"
display	–
Mains	230 V AC; 120 V AC available
Power consumption	
Idle	18 VA
Full output AC; DC	240 VA

### Mechanical Specs

Height x width x depth	10 x 15.1 x 11.4"
Net volume internal	18.3 liters
Weight	30.8 lb
Drivers	Magnetically shielded
Woofers	8"
Midrange	3"
Tweeter	1"
Mounting points	2 x M8 on sides Rear panel bracket
Mounting hardware	LH 25 + LH 28/LH 29 – –
Cabinet surface	Painted
Color standard	Anthracite
optional	silver finish or white
Special (add-on price)	On request
Baffle cover optional	Metal grille, removable

Near-Field

O 300



## O 300 Active Studio Monitor

### Sophisticated 3-way system

- The most important frequency spectrum lies in the ideal broadcast zone of the loudspeaker
- Extremely low-distortion reproduction
- Exceptionally neutral sound stage from 40 Hz to 20 kHz
- No standing waves in enclosure
- No partial coloration
- No comb-filter effect

### Unconventional enclosure concept

- Very compact enclosure constructed of advanced materials
- Avoidance of resonance via combination of MDF and LRIM (Low Resonance Integral Molding)
- Very accurate bass reproduction via sealed enclosure
- Precision centers of loudspeakers are on one plane
- Homogenous baffle with no diffraction or fastening elements and with excellent self-damping properties
- Extremely wide effective listening area for main monitor via horizontal installation
- Modern design
- Numerous installation possibilities
- Optional baffle cover/grill
- Magnetically shielded

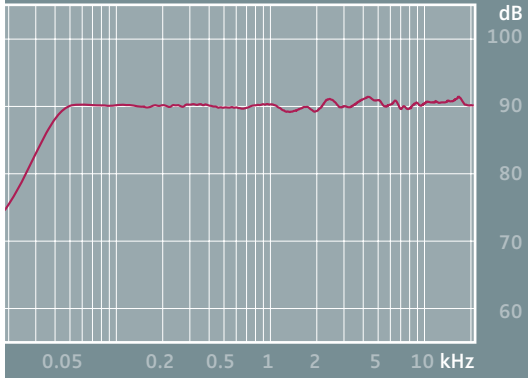
### Functional waveguide

- Dispersion is horizontally wide
  - ▶ Increased freedom of movement at mixing console
  - ▶ Vertically narrow sound dispersion reducing early reflections off console surface
- Perfect dispersion pattern

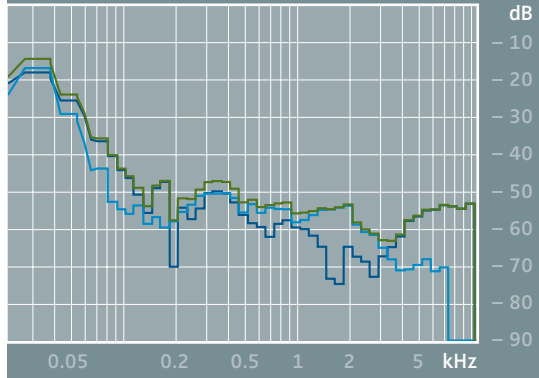
### Advanced electronics

- Integrated electronic limiter for each driver
- Active crossover equalizer with 24 dB/oct.
- AF-input equipped with minimal distortion input circuit
- Power and overload/limiter-display integrated into Klein + Hummel logo
- 3 x 4 room-matching circuitry for different placement options

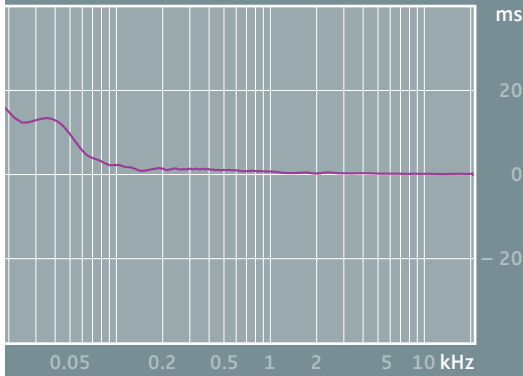
## Frequency response



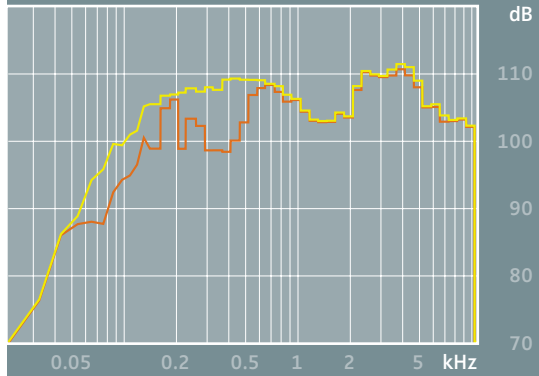
## THD at 95 dB/SPL in 1 m



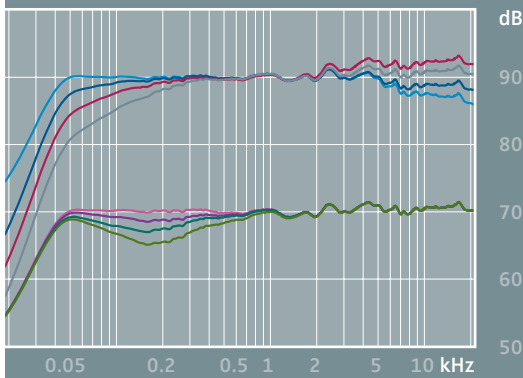
## Group delay



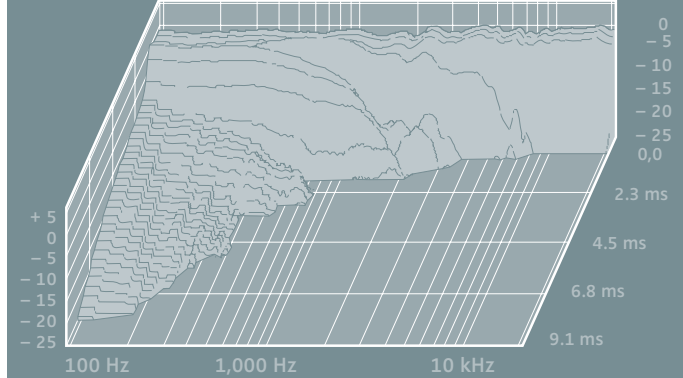
## Max. SPL in 1 m at 1 % and 3 % THD



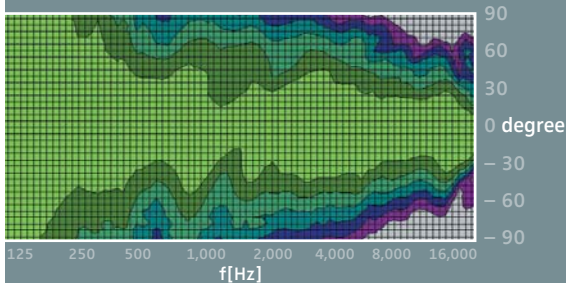
## Room compensation EQ: bass, mid, treble



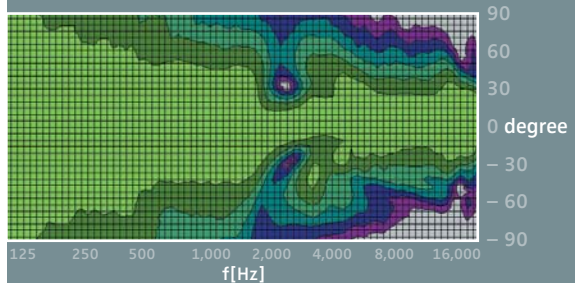
## Cumulative spectral decay



## Horizontal directivity



## Vertical directivity



0 to 3    -3 to 0    -6 to -3    -9 to -6    -12 to -9    -15 to -12    -18 to -15    -21 to -18  
Decrease of SPL (dB)



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