

KH 310 A - Active Studio Monitor

Technical Data

Acoustics

Free field frequency response	34 Hz - 21 kHz, ± 3 dB
Pass band free field frequency response	36 Hz - 20 kHz, ± 2 dB
Self-generated noise (with input gain set to 100 dB for 0 dBu)	< 20 dB(A) at 10 cm
Total harmonic distortion < 0.5 % at 95 dB SPL at 1 m	> 85 Hz
Max. SPL in full space / calc. in half space at 3% THD at 1m	110.3 / 116.3 dB SPL (averaged between 100 Hz and 6 kHz)
Bass capability: Max. SPL in half space at 3% THD at 1m	104.5 dB SPL (averaged between 50 Hz and 100 Hz)
Max. short term SPL with IEC-weighted noise (IEC 60268-5) at 1 m, in typical listening conditions	113 dB(C) SPL
Max. short term SPL with music material at 2.3 m, in typical listening conditions (pair)	100 dB(C) SPL (full range) 107 dB(C) SPL (with subwoofer)
Max. long term SPL with pink noise at 2.3 m, in typical listening conditions (single/pair)	93 / 99 dB(C) SPL (full range) 94 / 100 dB(C) SPL (with subwoofer)

Electronics

Bass / Midrange / Treble Class AB amplifiers, cont. (peak) output power*	150 W (210 W) / 70 W (90 W) / 70 W (90 W)
Controller design	Analog, active
Crossover frequencies	650 Hz / 2 kHz
Crossover slope	24 dB/oct, 4th order
Equalization - Bass	0, -2.5, -5, -7.5 dB
Equalization - Low Mid	0, -1.5, -3, -4.5 dB
Equalization - Treble	+1, 0, -1, -2 dB
Protection circuitry	Independent thermo limiters for woofer, midrange dome and tweeter. Woofer soft clip and excursion limiters
Infrasonic filter - frequency; slope	15 Hz; 6 dB/oct
Input	XLR, analog electronically balanced
Impedance, electrically balanced	> 13k Ohms
Input gain control (sensitivity)	0 dB to -15 dB
Output level control	94, 100, 108, 114 dB SPL
CMRR	> 56 dB @ 100 - 15 kHz
Max. input level	+24 dBu
Displays and indicators - power on	Neumann logo "White"
Displays and indicators - limit / clip	Neumann logo "Red"
Mains Power Supply, voltage; frequency	100-240 V~; 50/60 Hz
Power consumption - idle	24 W
Power consumption - full output	300 W

Mechanics

Cabinet surface finish, colour	Painted wood and polyurethane, Anthracite (RAL 7021). Aluminum electronics panel, Black.
Baffle cover	Optional removable metal grille
Operating conditions	+10° C to +40° C (+50° F to +104° F), <90% RH, non-condensing
Transport/storage condition	-25° C to +70° C (-13° F to 158° F), <90% RH, non-condensing
Drivers	Magnetically shielded
Woofer	210 mm (8 1/4")
Midrange	75 mm (3")
Tweeter	25 mm (1")
Mounting points	2 x M8 on side panels, depth from outside of cabinet 25 mm (1"). Rear panel screws for attaching LH 41 base plate. Rear panel bracket.
Product dimensions (height x width x depth), mm (inches)	253 x 383 x 292 mm (10" x 15 1/8" x 11 1/2")
Net volume, internal / external	16.2 liters / 28.3 liters
Product weight	13.0 kg (28 lbs 11 oz)
Packed dimensions (height x width x depth), mm (inches)	590 x 380 x 360 mm (23 1/4" x 15" x 14 1/8")
Packed weight and cube	16.8 kg (37 lbs 1 oz), 0.081 m ³
Delivery includes	1x KH 310 A 3x Main cables (European, UK and US version) 4x Self-adhesive feet 1x Operating manual 1x Supplement "Getting Started Quickly"