

Ascolto® AH4035

Ascolto® – the intelligent series of active column speakers. Thanks to the elegant slim-line design and the customizable color, they integrate seamlessly into any given environment.

The full-aluminium body and front grid provide maximum protection against dust and splash water, complying with IP54 standard. High quality components, such as the acoustically perfect-matched premium neodym drivers produce accurate and natural sound (music and speech).

Our active line arrays employ the latest DSP technology, allowing beam steering and sound shaping for optimal intelligibility in even the most demanding locations.

Column speaker	Width in mm	Hight in mm	Depth in mm
Ascolto AH0835	116	1050	121
Ascolto AH1635	116	1780	121
Ascolto AH2435	116	2486	121
Ascolto AH3235	116	3204	121
Ascolto AH4035	116	4266	121
Ascolto AH4835	116	4972	121
Ascolto AH5635	116	5690	121
Ascolto AH6435	116	6408	121

Technical datas

GENERAL SPECIFICATIONS

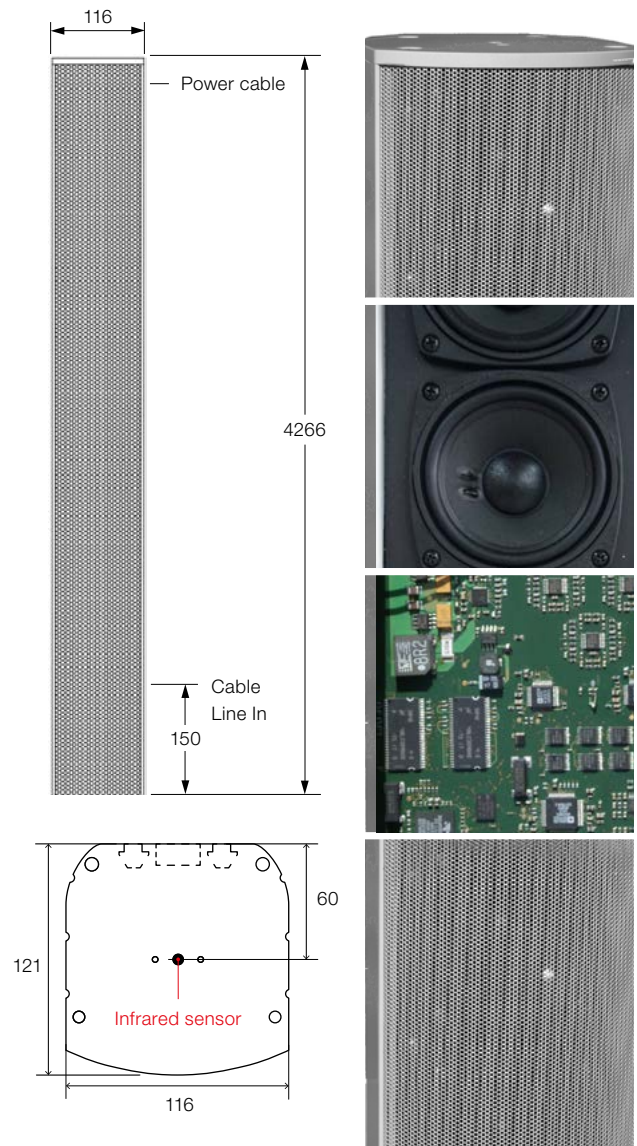
Dimensions (H x W x D)	4266 x 116 x 121 mm
Weight	20.4 kg
Housing	Aluminium, powder-coated
Temperature range	0 °C to 40 °C
Standard colour	RAL 9010
Special colours	RAL or NCS
Protection	IP54
Certificate	CE

ACOUSTIC SPECIFICATIONS

Frequency	80 Hz – 20 kHz
SPL max. (Nominal/Peak)	106 dB/ 109 dB at 10 m 104 dB/ 107 dB at 20 m 103 dB/ 106 dB at 30 m 100 dB/ 103 dB at 40 m 98 dB/ 101 dB at 50 m
Coverage angle horizontal	130°
Tilting angle vertical	-60° to 60°
Opening angle vertical	8° to 40°
Typical Throw/Max. Throw	35 m/ 40 m
Dynamic range	102 dB
Transducers	40 x 3.5" Full range Neodym
Sensitivity (1 W/1 m)	88.7 dB

ELECTRICAL SPECIFICATIONS

Audio Input 1	Line
Input level nominal	0 dBu (2.19 Vpp)
Input level max.	10 dBu (6.92 Vpp)
Type	Balanced
Impedance	20 kΩ at 1 kHz



Audio Input 2	100 V
Input level	39.2 dBu (200 Vpp)
Type	Balanced with transformer
Impedance	20 kΩ at 1 kHz

Power amplifier	
Type	PWM (Class-D)
Output power	40 × 35 W RMS (8 Ω)
Power efficiency	86 %
THD+N	0.07 % at 10 W RMS/Channel
Input signal	Balanced
Channel protections	Thermal shutdown (> 150 °C) Output short circuit

DSP	
Processor	48 bit fixed point DSP 76 bit internal accumulator 145 MHz
Sample rate	48 kHz
A/D Conversion	Resolution: 24 bit linear PCM Conversion: 1 bit delta-sigma 256 × Sample rate: 48 KHz SNR: 102 dB (A-weighted)
D/A Conversion	Resolution: 24 bit linear PCM Conversion: upsampling 128 × Sample rate: 48 KHz SNR: 102 dB (A-weighted)
Signal processing	Beam forming filtering Input equilization (8 Biquad) Volume: -120 dB FS to 0 dB FS Delay: 0–30 m, step 0.1 m Dynamic Compressor 2-bands Input signal activity detector

Control module	
Processor	32 bit ARM-Cortex M3 RISC 50 MHz
Network interface	RS485, Full Duplex, 115'200 baud/s
Processor activities	DSP Booting DSP Mounting PWM Power amp. functions controlling PWM Power amp. status monitoring Audio Input channel funct. controlling Auto Stand-by Controlling RS485 Communication Panel LEDs controlling Firmware update

PSU-Modul	
Voltage range	90–264 VAC
Input Frequency	47–67 Hz
Energy efficiency	91 % at 230 VAC
Input current	4 A at 230 VAC (full load) 8 A at 115 VAC (full load)
Power consumption	
- steady state voltage	790 VA
- open circuit voltage	30 VA
- stand-by	5 VA

Dimensions and fitting (measuring in mm)

