

Ascolto® FF

2-way 4" coaxial driver
beam-steering
column speakers

DESCRIPTION

The ASCOLTO - Series FF is a new highlight from AVE Stuttgart, featuring its precious coaxial loudspeakers with a 4.0-inch woofer and a 1.0-inch dome tweeter, made both of neodymium. With an exceptionally successful design closely integrated with cutting-edge technology, the new FF Series stands at the forefront of all AVE digitally steerable column speakers. Even more precise, clearer, and refined in sound behavior, the Ascolto - Series FF sets a new standard for natural sound reproduction and clarity. Particularly in acoustically challenging environments like halls, lecture halls, churches, mosques, conference rooms, and museums, where conventional active line array speakers often fall short, the Ascolto - Series FF truly excels.

The ASCOLTO - Series FF is available in four different sizes: FF0870, FF1670, FF2470, and FF3270. Ideal for short distances, the FF0870 model offers exceptional performance, while the FF1670 and FF2470 column speakers are recommended for longer distances — up to the mighty FF3270, designed for the farthest throw. With pronounced bass presence, they deliver outstanding sound quality, and their lowest frequency range can be effectively supplemented with a subwoofer for enhanced musical performance. Each digitally steerable column speaker ASCOLTO - Series FF can also be equipped with a Dante™ network module for added versatility.

FEATURES

- 2-way high-quality neodymium drivers
- The innovative automatic digital equalizer for best graceful music listening
- Extremely clear sound spectrum and precise resolution
- Advanced air attenuation compensation
- Elegantly designed aluminum alloy housing
- Advanced 5-beam technology and powerful beam control capabilities
- High-quality DSP processing performance
- Innovative Anti Reverberation System ARS®

APPLICATIONS

- | | | |
|--|---|---|
|  Auditorium |  Classroom |  Cultural tourism projects |
|  Meeting Room |  Conference Center |  Exhibitions |
|  Lecture Hall |  Large Hall |  Transportation hubs |
|  Command Hall |  Multi-purpose venue |  Challenging acoustic spaces |



Technical Parameters

Acoustic Specifications ¹		FF0870	FF1670	FF2470	FF3270
Transducers		Neodymium coaxial driver with 4" woofer + 1" dome tweeter			
Number of Transducers		8	16	24	32
Frequency Response ²		80 Hz — 20 kHz (±2 dB) 50 Hz — 20 kHz (-10 dB)			
Horizontal Coverage		110° (-6 dB average 500 Hz to 8 kHz)			
Vertical Steering (0.1° intervals)		-60° to +60°			
Vertical Opening Angles (0.1° intervals)		20° to 40°	10° to 40°	8° to 40°	6° to 40°
Throw distance	Typical	20	30	40	50
	Maximum	25	35	45	55
Peak SPL ³	1m	130 dB @ 1 m	136 dB @ 1 m	140 dB @ 1 m	144 dB @ 1 m
	Typical throw	108 dB @ 20 m	108 dB @ 30 m	106 dB @ 40 m	106 dB @ 50 m
	Max throw	107 dB @ 25 m	107 dB @ 35 m	105 dB @ 45 m	105 dB @ 55 m
Electrical Specifications					
Line Input Level Maximum		10 dBu (6.92 Vpp)			
Line Input Type		Balanced			
Input Impedance		20 kΩ @ 1 kHz			
Amplifier Type		PWM (Class D)			
Output Power	RMS	8×70 W	16×70 W	24×70 W	32×70 W
	MAX	8×140 W	16×140 W	24×140 W	32×140 W
THD+N		0.025% @ 10 W _{rms/channel} , 1 kHz			
AC Range		90 VAC to 264 VAC (Universal Input) , 47 Hz- 67 Hz , PFC			
Power Consumption	Stand-By	4 VA	8 VA	12 VA	16 VA
	Idle	12 VA	24 VA	36 VA	48 VA
	Continuous	360 VA	720 VA	1080 VA	1440 VA
	Peak	468 VA	936 VA	1404 VA	1872 VA
DSP Processor		48 bit Fixed Point DSP - 76 bit internal Accumulator - 145 MHz			
A/D Conversion		24 bit Linear PCM - 1 bit Delta-Sigma 512x - 48 kHz - SNR: 112 dB (A-Weighted)			
D/A Conversion		24 bit Linear PCM - Upsampling 128x - 48 kHz - SNR: 105 dB (A-Weighted)			
Control Processor		32 bit ARM-Cortex M3 - 50 MHz			

1. Measured outdoors under semi-anechoic full-space conditions using typical filter and delay settings, unless noted.

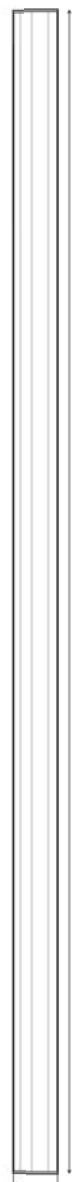
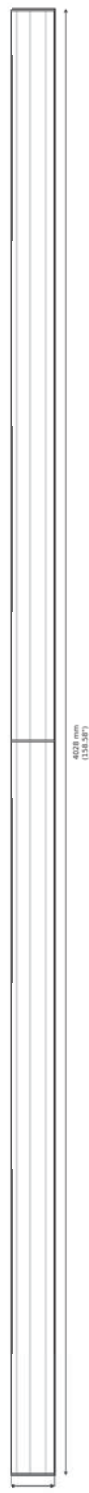
2. Column speaker data is 1/3-octave averaged, measured on-axis at 1 meter with 1 W per channel. Specified bandwidth assumes full-space conditions.

3. Levels refer to pink noise (100 Hz-20 kHz, 6 dB crest), at limiter onset.

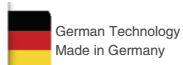
Technical Parameters

General Specifications	FF0870	FF1670	FF2470	FF3270
Audio Inputs Connector	3-pole, 3.81 mm-pitch			
RS485 Connector	3-pole, 3.81 mm-pitch			
Dante Network Connector	100 Mbit/s Ethernet RJ45			
Power Connector	3-pole Wago cod. 770-213/035-000			
Cabinet	Powder Coated \ Aluminum Extrusion			
Protection Class	IP54 (on request)			
Colour	White (RAL 9010) , Support customized colors			
Temperature Range	0° C to 40° C (32° F to 102° F)			
Electrical Protection Class	IEC 61140 - Class 1			
Certificates	CE			
Height (mm)	1174	2014	3044	4028
Width (mm)	122			
Depth (mm)	120			
Weight (kg)	10.3	18.8	28.7	37.6

Technical Parameters

FF0870122 mm (4.80")
110 mm (4.33")**FF1670**122 mm (4.80")
120 mm (4.72")**FF2470**122 mm (4.80")
110 mm (4.33")**FF3270**122 mm (4.80")
120 mm (4.72")

Note: FF3270 = 2x FF1670 stacked, bottom unit upside down



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