6020A

Data Sheet Genelec 6020A Active Home Theater Systems



GENELEC®

The Genelec 6020A is a compact twoway active loudspeaker designed for high quality Home Theater systems.

Designed as an active loudspeaker, the 6020A contains drivers, power amplifiers, active crossover filters and protection circuitry. The 6020A excels in applications where space is at a premium, taking full advantage of the innovations and unconventional design features created by Genelec's R&D team. The all-aluminium Minimum Diffraction Enclosure™ (MDE[™]) and advanced Directivity Control Waveguide[™] (DCW[™]) technologies are carefully matched with advanced amplifier and electronics circuitry and the latest drivers. Bass response extends down to 65 Hz (-3 dB) while distortion is exceptionally low due to a uniquely new rear reflex port design. The system's excellent directivity characteristics and accurate imaging together with its compact size and flexible mounting options make the 6020A the perfect loudspeaker for a wide range of applications.

As the amplifiers are integrated into the loudspeaker enclosure, the only connections required are the mains supply and the line level input signal, making the 6020A very easy to set up and use. The integrated design allows the amplifiers and the drivers to be calibrated as a single unit in the factory. This eliminates the effects of component tolerances and ensures consistent quality. The cast aluminium cabinet has rounded corners and a hard-wearing painted outer surface available in black, white or silver finish.

The bass frequencies are reproduced by a 105 mm (4") bass driver.

The high frequency driver is a 19 mm (³/₄["]) metal dome. Uniform dispersion control is achieved with the revolutionary DCW[™] technology pioneered by Genelec, which has also resulted in perfect phase and delay uniformity at the crossover frequency. Both drivers are magnetically shielded.

The amplifier unit contains an active crossover. This is the ideal method for dividing the input signal between the driver units, allowing the overall response of the system to be optimized to an extent impossible with a passive system. XLR and RCA line level input connectors provide easy connection to the preamplifier or decoder. The active crossover controls 'Treble Tilt' and 'Bass Tilt' allow the 6020A to be exactly matched to any application.

The amplifier unit is built into the speaker enclosure. The bass and treble amplifiers both produce 20 watts of output power. The fast, low distortion amplifiers are capable of driving a stereo pair to peak output sound pressure levels in excess of 105 dB at 1 m.

A combination of five 6020A's and the matching Genelec 5050A subwoofer can create a dynamic and detailed soundstage like no other home theater loudspeaker system of the same size category. Contact your local Genelec dealer for an audition and see Genelec's Home Theater website www.genelec-ht.com for more information of Genelec's Home Theater loudspeaker line.

SYSTEM SPECIFICATIONS		
	6020A	
Lower cut-off frequency, -3 dB	< 65 Hz	
Upper cut-off frequency, -3 dB	<u>≥</u> 21 kHz	
Free field frequency response	66 Hz – 20 kHz (± 2.5 dB)	
Maximum short term sine wave acoustic output on axis in half space, averaged from 100 Hz to 3 kHz	@ 1 m ≥ 96 dB SPL @ 0.5 m ≥ 102 dB SPL	
Maximum long term RMS acoustic output in same conditions with IEC weighted noise (limited by driver unit protection circuit	@ 1 m ≥ 95 dB SPL	
Maximum peak acoustic output per pair with music material	@ 1 m ≥ 105 dB SPL	
Self generated noise level in half space at 1 m on axis (A-weighted)	≤ 10 dB	
Harmonic distortion at 85 dB SPL at 1 m on axis Freq: 50100 Hz > 100 Hz	< 3% < 0.5 %	
Drivers, magnetically shielded Bass Treble	105 mm (4") cone 19 mm (^{3/} 4") metal dome	
Weight	3.7 kg (8.1 lb)	
Dimensions Height including Iso-Pod™ table stand Height without Iso-Pod™ table stand Width Depth	242 mm (9 ¹ / ₂ ") 230 mm (9 ¹ / ₁₆ ") 151 mm (6") 142 mm (5 ⁵ / ₈ ")	

AMPLIFIER SECTION	
	6020A
Bass amplifier short term output power Treble amplifier short term output power (Long term output power is limited by driver unit protection circuitry)	20 W at 8 Ohm load 20 W at 8 Ohm load
Amplifier system THD at nominal output	≤ 0.08 %
Mains voltage	100, 120 or 230 V
Power consumption (average) Idle Full output	5 VA 50 VA

Selectable Autostart function for signal sensing Standby/On switching

CROSSOVER SECTION	
	6020A
Connectors: XLR female, balanced 10 kOhm RCA female, unbalanced 10 kOhm	pin 1 gnd, pin 2 +, pin 3 - pin +, ring gnd
Input level for 100 dB SPL output at 1 m	-6 dBu at volume control max
Volume control range	-80 dB relative to max output
Output signal level is 0 dB relative to input signal level but adjustable by volume control	
Crossover frequency, Bass/Treble	3.0 kHz
Treble Tilt control operating range	0 to –2 dB @ 15 kHz
Bass Tilt control operating range in –2 dB steps	From 0 to -6 dB @ 100 Hz

The 'CAL' position is with all tone controls set to 'off' and the input sensitivity control to maximum (fully clockwise).

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