

6010B

Data Sheet Genelec 6010B Active Loudspeaker



GENELEC®

The Genelec 6010B is a very compact two-way active loudspeaker designed for computer sound systems and other close proximity listening applications. Its small size, amazing sound quality and rugged construction make the 6010B an ideal portable sound system for the travelling professional user and a constant source of enjoyment for active free time.

Designed as an active loudspeaker, the 6010B contains drivers, power amplifiers, active crossover filters and protection circuitry. The 6010B 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 73 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 6010B 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 6010B 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.

The high frequency driver is a 19 mm ($\frac{3}{4}$ in) metal dome. Uniform dispersion control is achieved with the revolutionary DCW™ technology pioneered by Genelec, which has also resulted in improved phase and delay uniformity at the crossover frequency.

The bass frequencies are reproduced by a 76 mm (3 in) driver.

Both drivers have neodymium magnets, which cause minimal magnetic stray field, making the 6010B safe to use near sensitive graphical displays. The drivers are also protected against thermal overload.

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. Distor-

tions and losses inherent in a high level passive crossover are also avoided. An RCA line level input connector provides easy connection to a preamplifier, computer sound card or a portable MP3 player. The active crossover controls 'Desktop Control' and 'Bass Tilt' allow the 6010B to be exactly matched to any application.

The bass and treble amplifiers each produce 12 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 102 dB at 1 m. Automatic thermal overload protection ensures reliable operation of the amplifier in all situations.

The signal sensing ISS™ Autostart function of the 6010B powers it up when playback begins. Automatic powering down of the loudspeaker happens one hour after the playback has ended and the loudspeaker goes to standby mode. The power consumption in standby mode is less than 0.5 watts. The loudspeaker will automatically and rapidly start up once an input signal is detected from the source.

A combination of five 6010B's and the matching Genelec 5040B subwoofer can create a dynamic and detailed soundstage like no other loudspeaker system of the same size category. Contact your Genelec dealer for an audition and see Genelec's website www.genelec.com for more information of Genelec's loudspeaker line.

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SYSTEM SPECIFICATIONS	
	6010B
Lower cut-off frequency, -3 dB	< 73 Hz
Upper cut-off frequency, -3 dB	> 21 kHz
Free field frequency response	74 Hz – 18 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 > 93 dB SPL @ 0.5 m > 99 dB SPL
Maximum long term RMS acoustic output in same conditions with IEC weighted noise (limited by driver unit protection circuit)	@ 1 m > 91 dB SPL
Maximum peak acoustic output per pair with music material	@ 1 m > 102 dB SPL
Self generated noise level in half space at 1 m on axis (A-weighted)	< 5 dB
Harmonic distortion at 80 dB SPL at 1 m on axis Freq: 70...400 Hz > 400 Hz	< 3% < 0.5 %
Drivers Bass Treble	76 mm (3 in) cone 19 mm (3/4 in) metal dome
Weight	1,4 kg (3.1 lb)
Dimensions Height including Iso-Pod™ table stand Height without Iso-Pod™ table stand Width Depth	195 mm (7 ¹¹ / ₁₆ in) 181 mm (7 ¹ / ₈ in) 121 mm (4 ³ / ₄ in) 114 mm (4 ¹ / ₂ in)

AMPLIFIER SECTION	
	6010B
Bass amplifier short term output power Treble amplifier short term output power (Long term output power is limited by driver unit protection circuitry)	12 W at 8 Ohm load 12 W at 8 Ohm load
Amplifier system THD at nominal output	< 0.08 %
Mains voltage	100, 120, 220 or 230 V
Power consumption (average) Standby Idle Full output	<0.5 W 5 W 35 W

CROSSOVER SECTION	
	6010B
Signal input connector RCA female, unbalanced 10 kOhm	pin +, ring gnd
Input level for 90 dB SPL output at 1 m	-6 dBu at volume control max
Sensitivity control range	-12 dB relative to max output
Crossover frequency, Bass/Treble	3.0 kHz
Desktop control operating range	0 to -4 dB @ 200 Hz
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).