

Beam Series

BM3000C

Compact System

Three way, Bass Reflex
1 x 18" (3" ventilated voice coil)
1 x APG ISOTOP™ driver

Features

Collinear Technology
Vertical & Horizontal Beam directivity control
Asymmetrical vertical coverage
Studio monitor quality

Applications

Fixed installation
High precision FOH system
Side Fill
Front Fill

Specifications

700 W AES
SPL@1m/1W 102 dB
SPL Max @ 1m 132 dB
4 Ohm
Horizontal coverage 60°
Vertical coverage +5°, -20°
40" x 26" x 29" (1000 x 660 x 720 mm)

Mono amplification mode
Processor LP3000C obligatory
Optional Subwoofer

The BM3000C is formed by one trapezoidal enclosure resulting in a 3-way acoustic system. The enclosure comprises a low/low-mid section with a 18" cone driver loaded in front panel position. The mid/high section comprises a coaxial 6,5" with a 1" HF driver, loaded by the exclusive APG ISOTOP™ waveguide.

This driver provides an efficiency of 108 dB SPL in the 1100 Hz-19 kHz bandwidth with a constant coverage of 60°H by 25°V.

The directivity is controlled by an asymmetrical horn, providing a natural 5° down-firing acoustic beam.

The PL3000LO option provides transit protection and flying hardware; it allows the installation of a specific optional wheel board for the transportation of the BM3000C.

The use of the LP3000C processor is mandatory. It optimizes the performance of the system BM3000C in full range mode or when combined with subwoofers when low frequency reinforcement is required. APG recommends the following subwoofers: SUB238S, TB115S, TB118S or TB215S.



BM3000C System

The APG BEAM series, BM3000C has been the subject of intensive development on passive filtering in order to offer high performance in a full range mono amplified system.

The BM3000C is a compact system fitted with 18" cone driver loaded in bass reflex with big volume.

It results in less power but the high sound quality reproduction in low frequencies combining dynamics and softness, comparable to a studio monitor speaker.

Its compactness and ergonomics make it the ideal system for fixed installation. The 3000C can also be used as a mobile and versatile system for medium power high precision applications.

Using the same collinear technology than the APG Matrix Array series, it is fully compatible as complement (front fill) for larger configurations set up with APG4000 & APG6000 systems.

Moreover, the directivity pattern of the "pre-orientated" mid/high horn naturally concentrates the acoustic energy towards the front listening zone without having to incline the loudspeaker itself. Therefore the reverberated energy coming from ceilings is reduced, which increases the intelligibility in difficult acoustical environments.

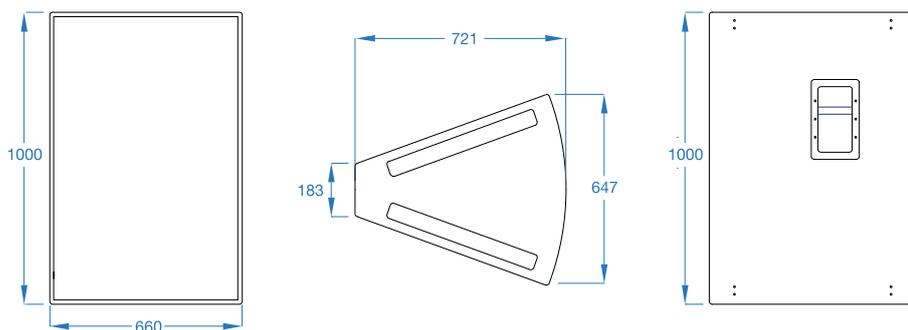
One BM3000C standart kit comprises two 3000C speaker and one LP3000C processor.

Only one amplifier is required to power one kit and must deliver a minimum of 2 x 800 W into 4 Ohm.

APG

BM3000C

Technical Specifications



Features

	Low section	High section
Frequency range with processor (± 3 dB)	50 -1100 Hz	1,1-19 kHz
Sensitivity @ 1W 1m, f > 100 Hz	102 dB SPL	103 dB SPL (1)
Maximum continuous level at 1m, f > 100 Hz		128 dB SPL
Peak level at 1m, f > 100 Hz		132 dB SPL
Directivity at -6 dB	60° H x 25° V (2)	
Nominal impedance	4 Ohm	

Components

	Low section	High section
Transducers	18" with ventilated driver	1x 6,5" + 1 x 1" HF coaxial driver
Coil diameter	75 mm (3")	50 mm (2") & 45 mm (1.75")
Type of load	Bass reflex	Isotop™ & elliptical horn

Power

Recommended amplification (3)	700 W to 1400 W / 4 Ohm
Peak	2100 W
AES (3)	700 W

Construction and characteristics

Cabinet	18 mm Finnish birch plywood
Crossover	Air core inductors, plastic film capacitors, wirewound resistors
Circuit protection	Thermal circuit breaker with automatic reload
Finish	Black, impact resistant aquarethane coating
Protection grill	Acoustically transparent perforated steel, 1.5 mm thick
Front face	Black, 10 mm acoustic foam
Connectors (4)	2 x SPEAKON NLM4P
Handles	2 x built-in steel bar
Rigging	8 x rigging points
Dimensions (H, W, D)	40" x 26" x 29" (1000 x 660 x 720 mm)
Net unit weight	114 lb (52kg)

Options and Accessories

PL3000C (5)	Steel frame for Protection, flying and wheel board installation 3000CPR
3000CPR (5)	Wheel board with strap for 1 speaker APG3000LO or APG3000C Unitary weight 37lb

Signal Processing

The LP3000C processor includes simulation of operating parameters that allows control of diaphragm displacement, voice coil temperature and amplifier clip. This processor also provides selection and phase alignment of the subwoofers.

We have included separate data for the High and Low Section in the Features table; although it is unusual to provide these in the specifications of a passive system such as BM3000C, it allows calculation of the precise amount of energy delivered by each transducer, and also the frequency range within which they operate.

(1) Sensitivity measures 103 dB before power shaping and 107dB afterwards. Power shaping optimizes system linearity and increases power handling in the given frequency range.

(2) Dispersion is controlled from 1 kHz. The angles given here are irrelevant below this frequency.

(3) In order to take full benefit of the dynamic performance, sonic quality and reliability of the speakers, the recommended amplification must at least correspond to the AES rating. Lesser amplification is acceptable for applications requiring less power (near-field, distributed systems,...), whilst not being less than half the AES rating. The AES power handling corresponds to a 2 hour test using weighted pink noise (peak factor of 6dB) through a frequency range of one decade.

(4) The SPEAKON 4 connectors are wired pin 1+/-1.

(5) The wheel board is equipped with 4 orientable wheels of 5" (125mm) with bracke on each. Four 4 mm corner steel on the wheel board provides protection and flying points.

(6) Connection patch PCM (mono) is made up of 4 SPEAKON 8 and 4 SPEAKON 4, 4 female XLR3, 4 male XLR3.

5 YEARS WARRANTY A five years warranty covers passive filters, transducers and compression drivers. The warranty does not cover cosmetic damages and damages due to misuse, improper installation, or damages caused by alterations.

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