

Hugh Robjohns MIBS reviews the largest Blue Sky 2.1 monitoring system.

Blue Sky is well known for its range of compact high performance monitoring systems – the System One, Pro Desk, and Media Desk systems are all relatively compact 2.1 designs, but the Big Blues reviewed here can hardly be called compact. Enormous seems a more appropriate term...and loud. We are talking 2KW of amplifier power on tap in the full 2.1 system which comprises a pair of SAT 12 active three-way monitors, plus a single SUB 15 active subwoofer. Additional monitors (and even an extra sub) can be added to expand the system for surround sound duties if required.

The Big Blues are well named – each SAT 12 monitor measures 381mm (15 inches) wide by 711mm (28 inches) high, and is 432mm (17 inches) deep. Not surprisingly given their bulk they are also pretty heavy, weighing in at just less than 42kg each (92lbs), so some assistance is required when unpacking and rigging them – not to mention a requirement for very sturdy stands. The cabinets are constructed from three-quarter inch MDF with one inch panels front and back. These speakers won't win many domestic acceptance awards, but they have a certain industrial, no-nonsense look that will appeal to some.

Overview

The SAT 12 'satellite' speaker is a three-way, sealed-cabinet design, complete with

integrated three-channel amplifier (and line-level crossover) providing 200W each to the bass and midrange driver, plus 100W to the tweeter. The bass driver is borrowed from Blue Sky's smaller SUB 12 subwoofer and features a mica-filled polypropylene 'hemispherical' cone with a long-throw two-inch vented motor coil assembly and cast aluminium chassis. The four-inch midrange driver looks similar to that in the Media Desk system and uses another hemispherical design, this time with an aluminium alloy cone – but the motor system is much more powerful. The tweeter is the distinctive Vifa XT25 dual-concentric design with its waveguide 'nose.' All three drivers are magnetically compensated, and the crossover points are set at 300Hz and 3kHz, so the midrange driver covers the most critical three octave band alone.

The amplifier panel in the rear of the SAT 12 has two analogue balanced input XLRs, the first being labelled as a 'full range' input which is claimed to enable the system to deliver a frequency response stretching between 45Hz and 30kHz (± 3 dB). However, the system is really intended to be used with the associated SUB 15 subwoofer, in which case the second, dedicated '80Hz input' XLR is used. This incorporates a phase-corrected 12dB/octave high pass filter at 80Hz to integrate correctly with the sub's built-in high-pass satellite filtering. Each XLR input has an associated pair of dip switches to alter the input sensitivity, the maximum input level being +12dBu with switches in the 0dB position, and +24dBu in the -10dB position.

In addition, a recessed rotary level trim attenuates up to 12dB from the nominal input level, with markings at 1dB increments.

A removable sub-baffle carries the tweeter and midrange units, enabling them to be rotated as a pair so that the SAT12 can be used horizontally without sacrificing imaging precision too much – ideal if the speaker needs to be horizontal to serve as a centre channel below a screen, for example. Around the perimeter of this sub-baffle are four slotted triangular apertures, lined internally with open-cell foam. The handbook refers to these as a proprietary 'Multi-Aperture Acoustic Diffraction Absorber' – they are essentially used in place of a more conventional waveguide or horn approach to control cabinet diffraction effects and help maintain a smooth mid and high frequency response off-axis.

The SAT 12 is well equipped with room-matching equalisation facilities. Each driver is provided with four dip switches to adjust its relative level by ± 3 dB in 1dB increments, and baffle compensation provides up to 11dB of LF attenuation to correct the bass boost caused by mounting the speaker in a baffle wall. Another pair of dip switches control the bright blue LED on the front baffle, which is factory set to shine constantly when the monitor is powered. Flipping these switches changes the operation so that the LED only flashes briefly when the monitor is first turned on; my preferred option and reducing the risk of snow-blindness! An IEC mains input socket, separate fuse holder, voltage

BLUE SKY'S BIG BLUE



SUB 15

Blue Sky's largest subwoofer to date is a sealed cabinet design with a massive 15-inch long-throw driver - and long throw means about two and a half inches! The cabinet is built from three-quarter inch MDF with one inch baffles, just like the SAT12s, to measure roughly 21 x 21 x 18 inches. It weighs a hefty 57kg, so make sure you have assistance when unpacking and installing.

A 1kW power amp is built in; complete with comprehensive bass management facilities for a stereo (2.1) system. Inputs are provided for full range left and right channels, and these are summed and low pass filtered (24dB/octave Linkwitz-Riley at 80Hz) to feed the subwoofer amplifier. A dedicated unfiltered subwoofer input is also provided, along with an output for daisy-chaining an additional subwoofer.

In the default 'Blue Sky' filter mode, the left and right channels are high pass filtered (80Hz, 12dB/octave) and presented on outputs to feed the satellites. The filtering complements that built into most Blue Sky satellite monitors to provide an overall 24dB/octave slope. However, the system also allows the filtering to be configured manually, if required, by switching to 'Universal mode.' In this case the high pass satellite outputs are filtered at 24dB/octave, with a user-adjustable turnover frequency between 50 and 160Hz.

In both cases, the subwoofer level can be adjusted from a reference sensitivity downwards, with markings at 3dB and 6dB intervals. The subwoofer output polarity can also be inverted with a toggle switch. The normal bandwidth of the subwoofer is specified as 30-200Hz, but the bottom end can be extended electronically to 20Hz if required - although you'd need a very large and well treated room to benefit. There is also an auto-power facility that shuts the unit off in the absence of an input signal for 15 minutes.

selector and on-off switch (there are no facilities for remote on-off control) are also provided on the rear panel, along with a permanently illuminated power LED.

Surprisingly, given the bulk and weight of the SAT 12, there are four quarter-inch threaded sockets on the rear panel for bolting the speaker to an Omnimount or Powerdrive wall bracket, and another four in the base. You'd need a lot of faith in your wall structure and bracket fittings, but I'm assured it is possible to mount the speakers in this way! I think I'd stick with good old fashioned steel floor stands and Blu Tack myself.

Listening

I hooked the Big Blue monitors up alongside my own reference three-way PMC IB1s (powered by a Bryston 4B amplifier) and carefully matched the levels so I could switch between them as the auditioning progressed. Initially, I used the SAT 12's flat response input without the sub, and then swapped inputs and added the sub later.

The first impression of the Big Blues on their own is of a very accurate and smooth response, free of colourations and resonances. They tended to sound a little bass light compared to the PMCs in my room, which was surprising given the cabinet sizes but this tallies with the specifications and frequency response plots published in the excellent handbook. The monitors were all placed well out into the room, so there was little if any LF

reinforcement from boundaries. The clarity and resolution through the mid and upper bands bordered on the scary. Any sonic imperfections in the source material were revealed starkly and without mercy - but equally, the sublime balances of really high quality material were revealed in all their intricate glory. Most notably, the neutrality and precision of the sound stage from these Big Blues was quite excellent, portraying the most complex of mixes with ease. Similarly, the stereo imaging was very broad and stable, with superb front to back depth on suitable recordings and a razor sharp centre image. Simple coincident stereo recordings were portrayed with lifelike perspectives and scale. My only real niggle was that to my old BBC-trained ears, the top end was a little forward compared to some traditional British monitor designs, but this was easily addressed with the HF driver level switches.

Dynamics were handled accurately and without any hint of compression even at silly levels, and transients had a real snap to them. The system clearly has more than enough headroom for most monitoring applications and never sounded strained. Equally, I found it easy and enjoyable to audition these speakers over extended sessions without listening fatigue - a reliable sign of a good monitor in my experience. The bass end was very fast, tuneful and tight - all familiar benefits of the sealed box design.

After reconfiguring to incorporate the enormous subwoofer (the handbook gives very good, easy to follow, instructions for aligning the complete system), I repeated my listening tests. This time the bass energy easily matched (and could exceed, if required) that of the big PMCs, to provide a well balanced, solid sound. The sub reduces the workload of the SAT12s considerably allowing even greater headroom, but it didn't cloud the excellent midrange in any obvious way that I could hear. It is not uncommon to find lesser subwoofers generating such high levels of harmonic distortion that the benefits of extended bass response are negated by masked midrange resolution - but that's certainly not the case here. I found that the standard 30Hz mode worked best in my room. Switching to the 20Hz mode seemed to cause a lot more structural rattles without any real sonic benefit.

This Big Blue system impressed me very much. Like the company's smaller systems the emphasis is clearly on accuracy and precision with a lot of detail. There is no doubt that this is a true high-end monitoring speaker system, as the price tag implies, and it would be well suited to professional mastering, mixing and post-production applications. This flagship Blue Sky monitoring system deserves serious audition for anyone investing at this quality level.

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Prices

Complete 2.1 Big Blue system:

2x SAT12 + 1x Sub 15 £5985

Individual SAT12 (200+200+100W) £1995

Individual Sub 15 (1000W) £1995

(All prices exclude VAT)

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