

# Blue Sky Sat 6D Studio Monitor Owner's Manual

Sat 6D Owner's Manual, V1.0

www.abluesky.com

### A Letter from Blue Sky

Dear Audio Professional,

Congratulations and thank you for selecting the Blue Sky Sat 6D studio monitor.

The Blue Sky Sat 6D delivers the absolute truth in music reproduction. The Sat 6D is a technical tour de force, and establishes a new benchmark for compact studio monitors.

The Blue Sky Sat 6D is proudly handcrafted in the USA for the discerning professional, who wants the ultimate in sonic purity, accurate dynamics, startling impact, and control. All with great depth and three-dimensionality.

Please take a few minutes to read through this owner's manual prior to using your Blue Sky Sat 6D monitors. This will help you to understand the basic functions and capabilities of the monitors. It will also allow you to maximize the exceptional performance for which they were designed.

Your Blue Sky monitors have undergone extensive tests for safety, functionality and technical performance. No Blue Sky monitor ever leaves our factory until we are totally satisfied in its technical and musical performance.

We hope that you enjoy your new Blue Sky Sat 6D monitors.

Sincerely,

Blue Sky International

## Sat 6D

Active Studio Monitor

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Please contact Blue Sky International if you have questions not addressed in the owner's manual. www.ablusky.com

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### IMPORTANT SAFETY INSTRUCTIONS





This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.



This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.

**Warning:** Permanent hearing loss may occur if studio speaker systems are used at high volume for any prolonged period of time. Please exercise good judgment when playing back your music material.

**Warning:** Please note, you can adapt over time to a higher volume of sound, which may sound normal but can be damaging to your hearing. Set your studio's overall volume to a safe level, and consult a trained professional if you have further questions.

### **IMPORTANT SAFETY INSTRUCTIONS**

1. Read Instructions.
2. Keep these Instructions.
3. Heed all Warnings.
4. Follow all Instructions.
5. Do not use near water.
6. Clean only with a dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
8. Unplug this apparatus during lightning storms or when unused for long periods of time.
9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
10. The Sat 6D must be placed on a firm, level surface where it is not exposed to dripping or splashing liquids.
11. Do not place flammable material above or beneath a Sat 6D.
12. Before making connections to a Sat 6D, ensure that the power is off and other components are in mute or stand-by mode. Make sure all cable terminations are of the highest quality, free from frayed ends, short circuits, or cold solder joints. Be especially careful when connecting to terminals marked which may have hazardous voltages on them during operation.

13. THERE ARE NO USER SERVICEABLE PARTS INSIDE A BLUE SKY SAT 6D.

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### SAT6D Design Features

The Sat 6D monitor is designed and assembled in the USA.

#### **Electronics**

The Sat 6D features both XLR Analog inputs and AES/ EBU Digital inputs. The Sat 6D will automatically switch to Digital if both Analog and Digital inputs are connected. In addition, Digital pass thru and Digital Stereo L/R selector switches are provided.

The DSP crossover filters are derived using Blue Sky proprietary BOO optimization software. This includes driver (woofer/tweeter) time alignment.

The Digital circuitry features FR4 6-layer circuit boards, Burr-Brown 192 kHz/24 Bit A/D & 192 kHz/24 D/A, and Cirrus Logic Digital receiver and sample rate convertor. In addition, the Sat 6D has a "Pure-Digital" mode for 48 kHz and 96 kHz operation, where the native input from the AES/EBU receiver is sent straight to the DAC, and does not go through the sample rate convertor.

The Sat 6D has a USB data port for speakers settings, updates and room correction input which includes a 1/3 octave 31 band digital graphic equalizer, selectable parametric EQ, pink noise generator, adjustable time delay and gain control.

The Sat 6D has 450-watts of Hypex UcD amplifier power with trickle down N-core technology.

The electronics are designed and assembled in the USA.

#### **Transducers**

The Sat 6D has a custom USA designed and built 6 ½" cast frame woofer with a neo radial motor structure, and a 1" Scan-Speak ring radiator tweeter made in Denmark.

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#### **Modes of Operation**

The Sat 6D can be set to operate in 4 modes of operation.

#### Mode # 1

The default Blue Sky mode for the Sat 6D is in the 80-hz sealed setting with 80-hz filter off. This mode uses the default sealed plate on the rear of the Sat 6D.

This mode of operation has been designed to optimally blend and work seamlessly with the Blue Sky Sub 12D.

#### Mode # 2

The default Blue Sky mode for the Sat 6D can be revised to run in sealed "extended" mode. This mode has the 80-hz filter off, and also uses the Blue Sky default sealed plate on the rear of the Sat 6D. By selecting the extended or port setting on the DSP switch settings (back of the Sat 6D), the Sat 6D will provide quasi-full range output with the added benefit of the sealed alignments transient response and clarity.

This mode of operation, like the above, has been designed to optimally blend and work seamlessly with the Blue Sky Sub 12D.

### <u>Mode # 3</u>

This mode of operation for the Sat 6D operates in the ported "80-hz" mode, and uses the Blue Sky ported plate on the rear of the Sat 6D (requires you to remove the sealed plate, and replace with the port plate), and by selecting the ported setting and engaging the 80-hz filter, on the DSP switch settings (back of the Sat 6D), the Sat 6D will provide output to 80 Hz.

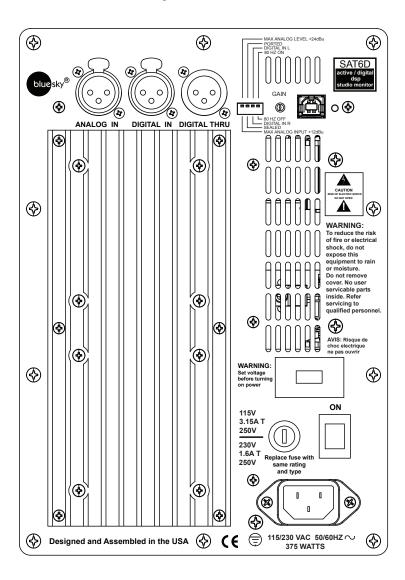
This mode of operation, like the above, has been designed to optimally blend and work seamlessly with the Blue Sky Sub 12D.

#### Mode # 4

This mode of operation for the Sat 6D operates in the ported "extended" mode. This mode uses the Blue Sky ported plate on the rear of the Sat 6D (requires you to remove the sealed plate, and replace with the port plate), and by selecting the extended or port setting, with the 80-hz filter off, on the DSP switch settings (back of the Sat 6D), the Sat 6D will provide full range output to 40 Hz, with the added benefit of maximum acoustic output.

**NOTE:** Which mode works best in your studio is dependent on several factors, i.e., room acoustics, speaker placement and relative position, etc. We encourage you to take advantage of the unique flexibility of the Sat 6D, and find the unique solution that works best in your studio.

### **Back Panel Layout**



### Analog

- Balanced XLR

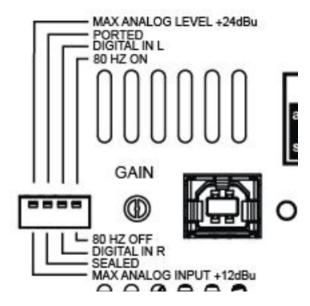
### Digital

- AES Digital input / XLR, 110-ohm
- Select right or left speaker switch setting.
- AES Digital output / XLR, 110-ohm, to other Sat 6D (If you selected left speaker, the digital through would go from the Digital output / Thru to the Digital input on the right Sat 6D.)

#### **USB**

- This input is for connecting to a computer to make system adjustments, and for loading new Blue Sky firmware updates.

### Switch Settings



### Max Analog Level

- Default factory setting is +12 dBu.
- +12 dBu / +24 dBu options

### Mode of Operation

- Default factory setting is sealed, 80-hz filter off
- Engage the 80-hz filter when running ported with a Sub 12D.

### Digital Input

- Default factory setting is Left.
- If using the Digital Output, and the Digital Input is into a Sat 6D is selected as Left, please makes sure to change the other Sat 6D to Right.

### **Connection Steps**

Position the Sat 6D monitors where you intend to use it in your studio system.

The following steps describe how to connect Blue Sky Sat 6D to your studio system:

- 1. Turn off all power sources and components before connecting inputs and outputs.
- 2. Neatly arrange and organize wiring to and from the Blue Sky Sat 6D and all components. Separate AC wires from audio cables to prevent hum or other unwanted noise from being introduced into the system.
- 3. Connect the outputs of your mixing console or computer workstation to the appropriate analog balanced XLR input, or AES XLR input on the Sat 6D.
- 4. If you are using a Blue Sky Sub 12D in a 2.1 mode, connect the outputs of your mixing console or computer workstation to the appropriate analog balanced XLR input, or AES XLR input on the Sub 12D, THEN, connect via the Analog or Digital outputs on the Sub12D to the required input on the Sat 6D.
- 5. If you are using Digital inputs, please make sure you are using 110-ohm AES digital cables, not standard balanced cables. They are not the same.
- 6. If you are using Digital inputs, please make sure to correctly configure your Sat 6D as either left or right. You can send the digital input into either speaker, and then via the Digital out / Thru, route the digital signal to the other Sat 6D.
- 7. Connect the supplied AC power cord to the IEC power cord receptacle.
- 8. Plug the AC power cord into AC power outlet.

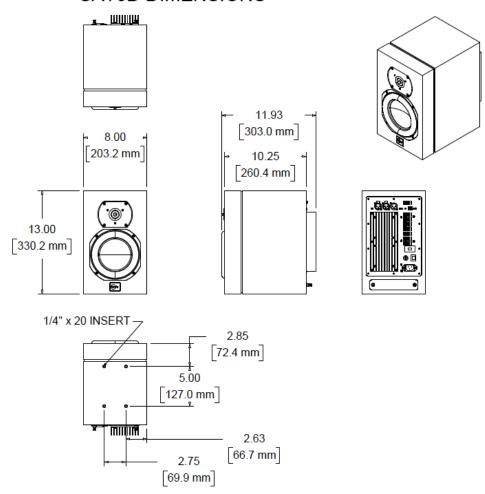
#### **IMPORTANT!**

When powering up any system, turn the Sat 6D monitors on last. When powering down, turn it off first. This will prevent any turn-on and turn-off thumps.

Always mute or fully attenuate the input level when switching sources. Do not change input connections to the Sat 6D when the speaker is powered on.

### **Specifications**

### SAT6D DIMENSIONS



### SYSTEM PERFORMANCE

- +/- 1.5 dB 45 Hz to 20,000 Hz (full range input)
- +/\_ 1.5 dB 80 Hz to 20,000 Hz (bass managed input)

#### **Product Dimensions**

- 13" x 8" x 11 3/4" (H x W x D w/ heat-sink)
- 20 pounds

### **Packed Dimensions**

- 19" x 14" x 17" (H x W x D)
- 22 pounds

### Blue Sky Sat 6D packaging contains the following:

- 1 (one) Blue Sky Sat 6D
- 1 (one) Blue Sky "port" plate with captive fasteners
- 1 (one) Blue Sky power cord [6.6' 2 meters long]
- 1 (one) Blue Sky warranty card
- 1 (one) Blue Sky safe operating guide

Carefully unpack each piece and check for shipping damage. If there is any damage, or if anything is missing, please contact your dealer, or Blue Sky.

#### **IMPORTANT!**

Save all packing materials!

They are custom designed to protect the unit during transportation or shipping. If the packing becomes lost or damaged, please contact your dealer, or Blue Sky before attempting to transport your unit

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### Warranty

Our goal is for you to be happy with your Blue Sky International product, and we will go the extra yard to make sure this is always the case. You can count on that pledge!

Blue Sky warrants the materials, workmanship, and proper functioning of this product for a period of two years from the date of purchase as long as the product was operated in accordance with its operating manual.

### Please review the enclosed warranty card for specific Blue Sky warranty information.

In the event of such a failure, please contact your Blue Sky dealer or directly to Blue Sky. In either scenario, an RMA will be issued so that the product can be promptly repaired by Blue Sky.

In the rare case of warranty issues you will need your serial number and original bill of sale or online receipt.

This warranty is extended to the original purchaser only and is not transferable.

One last point, we would ask you to please register your product so that we can better keep you informed of any product updates. We want you to be a happy with your Blue Sky product now, and into the future.

Our goal is to have extremely satisfied customers who will become life-long customers and advocates for Blue Sky.

Please visit the Blue Sky website to register your Blue Sky Sat 6D.

www.abluesky.com

### **Contact Information**

Blue Sky International
vww.abluesky.com
516.249.1399
Notes:

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