



# Blue Sky Sub 12D

## Owner's Manual

Sub 12D  
Owner's Manual, V1.0

[www.abluesky.com](http://www.abluesky.com)

## A Letter from Blue Sky

Dear Audio Professional,

Congratulations and thank you for selecting the Blue Sky Sub 12 subwoofer.

The Blue Sky Sub 12D delivers the absolute truth in music reproduction. The Sub 12D is a technical tour de force, and establishes a new benchmark for compact sub woofers.

The Blue Sky Sub 12D is proudly handcrafted in the USA for the discerning professional, who wants the ultimate in sonic purity, accurate dynamics, startling impact, and control.

Please take a few minutes to read through this owner's manual prior to using your Blue Sky Sub 12D. This will help you to understand the basic functions and capabilities of the Sub 12D. It will also allow you to maximize the exceptional performance for which it was designed.

Your Blue Sky Sub 12D has undergone extensive tests for safety, functionality and technical performance. No Blue Sky subwoofer ever leaves our factory until we are totally satisfied in its technical and musical performance.

We hope that you enjoy your new Blue Sky Sub 12 subwoofer.

Sincerely,

Blue Sky International

# Sub 12D

Active Studio Subwoofer

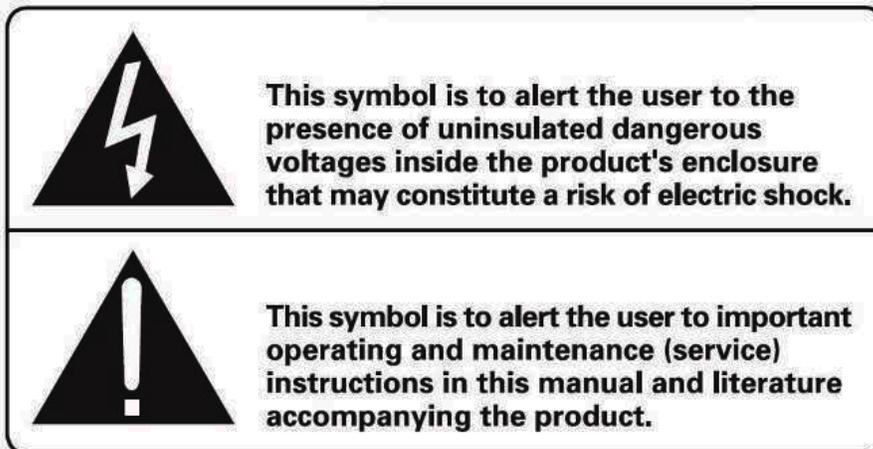
## TABLE OF CONTENTS

Safety Information.....	Pages 4 & 5
Design Features.....	Page 6
Back Panel Layout.....	Page 7
Switch Settings.....	Page 8
Connection Steps.....	Page 9
Specifications.....	Page 10
What comes in the Box.....	Page 11
Warranty.....	Page 12
Contact Information.....	Page 13

Please contact Blue Sky International if you have questions not addressed in the owner's manual.  
[www.ablusk.com](http://www.ablusk.com)

This product is manufactured in the United States of America. © 2014 by Blue Sky International.  
All rights reserved

## IMPORTANT SAFETY INSTRUCTIONS



**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 Sub 12D 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 Sub 12D.
12. Before making connections to a Sub 12D, 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 Sub 12D.

## **Sub 12D Design Features**

The Sub 12D is designed and assembled in the USA.

### **Electronics**

The Sub 12D features both XLR Analog inputs and AES/ EBU Digital inputs. The Sub 12D 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 system 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 Sub 12D 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 Sub 12 D includes Digital 2.1 Bass Management. In addition, variable crossover frequency adjustments, and high pass and low pass filters.

The Sub 12D has a USB data port for speakers settings, updates and room correction input which includes a digital graphic equalizer, selectable parametric EQ, pink noise generator, adjustable time delay and gain control.

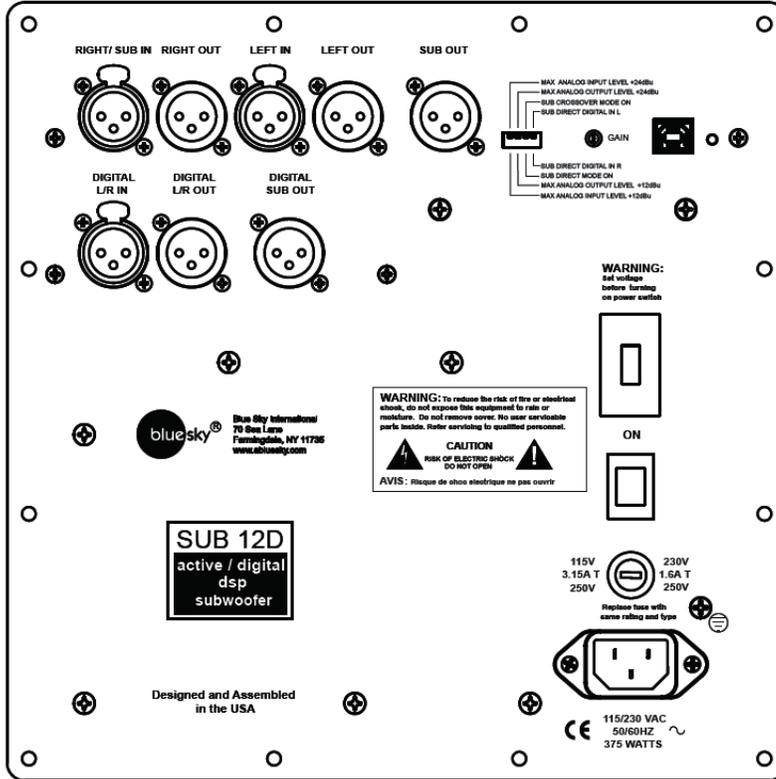
The Sub 12D has 400-watts of amplifier power.

The electronics are designed and assembled in the USA.

### **Transducers**

The Sub 12D has a custom designed and built 12" cast frame woofer with a very long and linear x-max.

## Back Panel Layout



### Analog

- Balanced XLR input & output
- Please note you can use the AES Digital output, to connect to the Sat 6D AES Digital input, even if you used Analog inputs (Sub IN L/R) to the Sub 12D.
- The analog sub out can be used to drive additional subwoofers.

### Digital

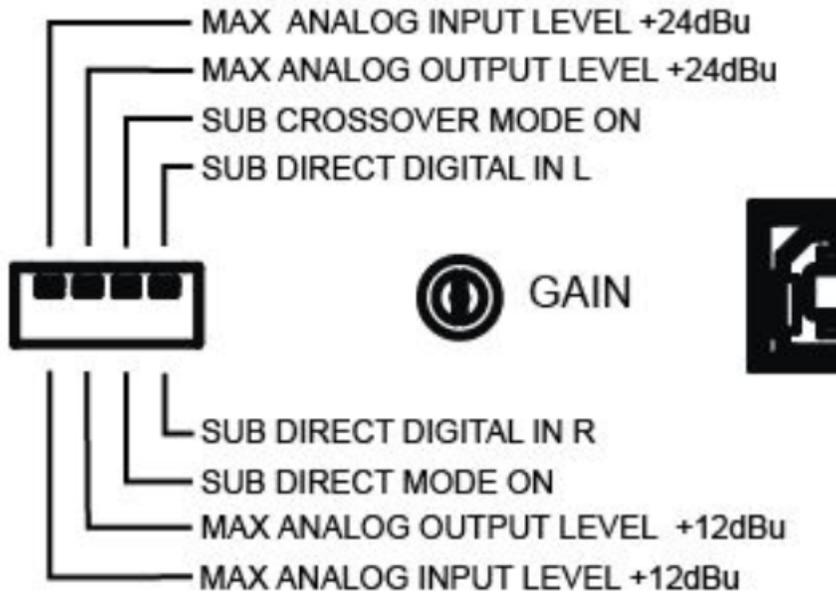
- AES Digital input / XLR, 110-ohm
- AES Digital input (L/R IN) / XLR, 110-ohm for 2.1 Digital Bass Managed input
- AES Digital output (L/R OUT) / XLR, 110-ohm, to Sat 6D AES Digital input.
- If using the AES Digital Output, and the Digital Input is into a Sat 6D which is selected as Left, please make sure to change the other Sat 6D to Right.
- The Digital sub out can be used to drive additional subwoofers.

**Important** - You can use either the analog input or digital inputs, but NOT both. In either mode, you can use both the analog and digital outputs.

### 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 Input & Output Level

- Default factory setting is +12 dBu for both.
- +12 dBu / +24 dBu options
- In the analog mode, with the input switch set to +24 dBu , +4 dBu in analog equals -20 dBFS in digital.
- In the analog mode with the input switch set to +12 dBu, -8 dBu in equals -20 dBFS in digital.
- With the max Analog input level set to +24 dBu, and the analog output level set for +12 dBu, the analog gain is one (1).
- If the max input level is set for +24 dBu, any output level set to +24 dBu, the analog gain is one (1).
- You can use a combination of input analog input level switches and output switches to increase or decrease the analog output levels.

### Mode of Operation

- With the Sub 12D crossover mode on, the Sub 12D has an 80 Hz 12 dB per octave high pass filter on the monitor outputs, including the digital left and right out, and a 24 dB per octave low pass filter feeding the Sub 12D.
- The cutoff frequency can be changed with software through the USB interface.
- With the sub direct mode switch on, the crossovers are disabled; the left right outputs and digital left right output are muted. This mode may be used when the Sub 12D is used with a Blue Sky BMC or the Blue Sky AMC controller.

## Connection Steps

Position the Sub 12 where you intend to use it in your studio system.

The following steps describe how to connect Blue Sky Sub 12D to your studio system:

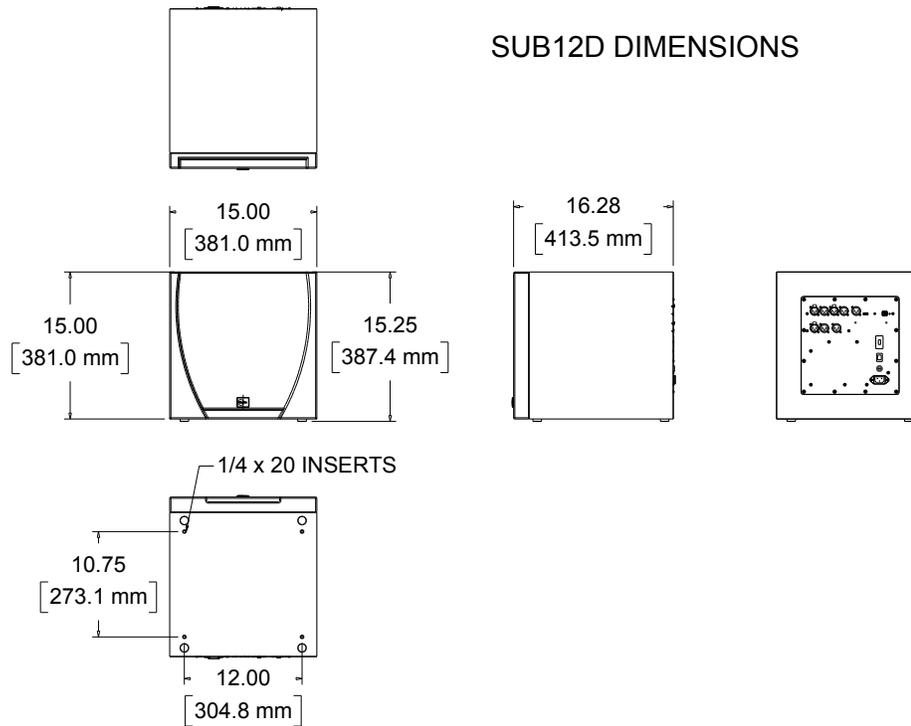
1. Turn off all power sources and components before connecting inputs and outputs.
2. Neatly arrange and organize wiring to and from the Blue Sky Sub 12D and all components. Separate AC wires from audio cables to prevent hum or other unwanted noise from being introduced into the system.
3. If you are 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.
4. 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.
5. Connect the supplied AC power cord to the IEC power cord receptacle.
6. Plug the AC power cord into AC power outlet.

### **IMPORTANT !**

If the Sub 12D is used with Blue Sky Sat 6D monitors, it is recommended that you power up the Sub 12D before the Sat 6D monitors, and turn the Sub 12D off last, after first turning off the Sat 6D monitors.

Always mute or fully attenuate the input level when switching sources. Do not change input connections to the Sub 12D when the speaker is powered on.

## Specifications



### SYSTEM PERFORMANCE

- +/- 1.5 dB 25 Hz to 200 Hz

### Product Dimensions

- 15.25" x 15" x 16.25" (H x W x D)  
- 50 pounds

### Packed Dimensions

- 23" x 22" x 21" (H x W x D)  
- 55 pounds

## Blue Sky Sub 12D packaging contains the following:

- 1 (one) – Blue Sky Sub 12D
- 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

## 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 on-line 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 Sub 12D.

[www.abluesky.com](http://www.abluesky.com)

## Contact Information

Blue Sky International

[www.abluesky.com](http://www.abluesky.com)

T 516.249.1399

Notes:

---

---

---

---

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

This product is manufactured in the United States of America. © 2014 by Blue Sky International.  
All rights reserved.