



**Blue Sky International**

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**Sky System One | SAT 6.5**

**MK II**

LUCASFILM

**Owner's Manual**

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# Safety Instructions



**WARNING:** To reduce the risk of fire or electrical shock, do not expose this equipment to rain or moisture. Do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel.

1. **READ INSTRUCTIONS** - Read all safety and operating instructions before operating this product.
2. **RETAIN INSTRUCTIONS** - Retain these safety and operating instructions for future reference.
3. **HEED WARNINGS** - Follow all warnings on this product and in the operating instructions.
4. **FOLLOW INSTRUCTIONS** - Follow all operating and use instructions.
5. **ATTACHMENTS** - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
6. **WATER AND MOISTURE** - Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
7. **ACCESSORIES** - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with accessories recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions and should use a mounting accessory recommended by the manufacturer.
8. **POWER SOURCE** - This product should be operated only from the type of power source indicated on the marking label on the back of the product. It is **IMPORTANT** to confirm that the voltage selector switch on the back of the SAT 6.5 MK II is set to the proper voltage setting. If you are unsure of the type of power that is supplied to your home, consult your product dealer or local power company.
9. **LIGHTNING** - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.
10. **OVERLOADING** - Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock.
11. **LIQUID ENTRY** - Never spill any liquid of any kind on the product.
12. **SERVICING** - Do not attempt to service this product yourself. Opening or removing covers, including any over bottom or side speaker drivers, may expose you to dangerous voltage or other hazards. Refer all service to qualified service personnel.
13. **DAMAGE REQUIRING SERVICE** - Unplug this product from the wall outlet and refer servicing to qualified personnel under the following conditions:
  - a. When the power-supply cord or plug is damaged.
  - b. If liquid has been spilled, or objects have fallen into this product.
  - c. If the product does not operate normally by following the operating instructions. Adjust only controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  - d. If the product has been dropped or damaged in any way.
  - e. When the product exhibits a distinct change in performance - this indicates a need for service.
14. **REPLACEMENT PARTS** - When replacement parts are required be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in risk of fire, electric shock, or other hazard.
15. **SAFETY CHECK** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
16. **HEAT** - This product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
17. **MOUNTING:** Unsafe mounting or overhead suspension of any heavy load can result in serious injury and equipment damage. Mounting a speaker should be done by qualified persons in accordance with all applicable local safety and construction standards. Be certain to follow the instructions provided by the manufacture the mounting bracket, be certain that is capable supporting the weight of the speakers to be mounted.

# 1. Sky System One | SAT 6.5 MK II Introduction

Blue Sky is a philosophy. We design each product to represent the highest ratio possible of performance to cost, providing the highest value added to our customers.

We will continually seek out opportunities to utilize the talent of the Blue Sky team to realize this philosophy. Our customer's value requirements will always be our prime focus, and only those products that achieve our performance value ratio will earn the right to carry the Blue Sky logo.

The Blue Sky SAT 6.5 MK II continues this lineage and philosophy of high value and superior performance products. Ultra high quality, THX approved, with a price vs. performance ratio that cannot be beat.

Thank you for choosing Blue Sky!

# 2. What is THX pm3®

Nearly two decades ago, George Lucas turned a passion for great sound into the world's most accepted and trusted solution for achieving it. The standard was named THX, and, today, with hundreds of thousands of home theatre customers and more than 3000 THX Certified movie theatres enjoying the benefits, the THX name has become nothing short of legendary. Simply put: when it comes to premium sound, no other name so closely defines **quality** for millions of movie-goers and home theatre enthusiast alike.

## THX IS ONE OF A KIND.

Today, a new landscape is emerging. A landscape comprised of hundreds of small, professional multi-channel facilities, whose need for differentiation, expert technical and marketing support and a true, multi-channel standard is becoming a competitive fact of life. Again, THX has a singular solution and this time it is called **THX pm3 Certification**.

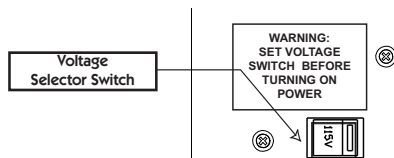


Blue Sky International has designed SAT 6.5 MK II and to conform to THX's rigorous standards and have been approved for use in THX pm3 Certified Studios. For information regarding THX pm3 Certification, please visit the THX website, [www.thx.com](http://www.thx.com), or contact Blue Sky International.

# 3. Important notes about the SAT 6.5 MK II and this Owner's Manual

## Voltage Selector Switch:

Prior to powering this unit, please confirm that the voltage selector switch, located on the back of the SAT 6.5 MK II, has been set to the correct voltage setting and that the proper fuse is being used. If you are unsure of the type of power that is supplied to your home or studio, consult your product dealer or local power company.



## Subwoofer Requirements:

For true full-range monitoring, Blue Sky strongly recommends using a subwoofer with the SAT 6.5 MKII. The SAT 6.5 MK II is designed to work with either the SUB 12 or SUB 15.

## This Owner's Manual:

This manual addresses Sky System One | SAT 6.5 MK II 2.1 applications. For information about 5.1 (or beyond) setup instructions, please consult the manual that comes with the BMC or visit the Blue Sky website (address listed below).

Please read this owner's manual carefully and contact Blue Sky International if you have any comments or questions. Contact information can be found on page 15 or you can visit [www.abluesky.com](http://www.abluesky.com).

# 4. SAT 6.5 MK II, what is included?

Each SAT 6.5 MK II includes the items listed below. Please carefully unpack each item and inspect the components for damage. If any part of the system has been damaged, please contact the dealer that supplied the product or Blue Sky directly.

## SAT 6.5 MK II Inventory:

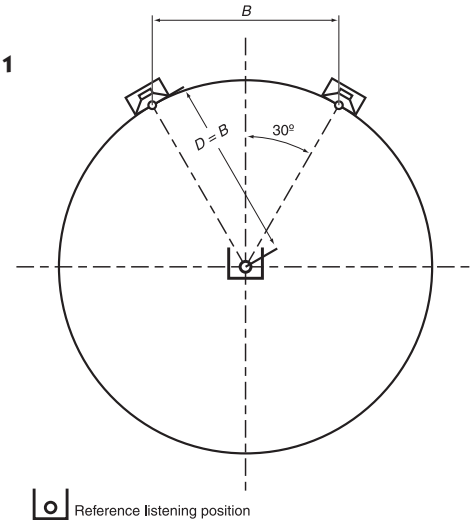
- 1 SAT 6.5 MK II
- 1 Power Cable
- 1 Owner's Manual
- 1 Warranty Card



## 5. Quick 2.1 System Setup Instructions

1. Blue Sky monitoring systems leave the factory fully calibrated. With the gain control on the SAT 6.5 MK II set to the reference mark, a 200mV (-11.7dBu) pink noise signal, with a bandwidth of 500 to 2kHz, will yield 90dB SPL at 1 meter. With the gain on the SUB 12 set to the reference mark, or -9dB on the SUB 15, 100mV (-13.7dBu) pink noise signal, with a bandwidth of 40Hz to 80Hz, on one of the inputs, will yield 90dB of output at 1 meter. Because most control rooms have some gain at low frequencies a good starting point for the subwoofer level is -3dB from the reference position. If you are using multiple subs, the gain may need to be even lower than this (depends on the acoustics of the studio and the placement of the subs). For more information with regard to the level controls, please see the manual that came with the SUB 12 or SUB 15, and page 6 & 7 of this manual [A Tour of the SAT 6.5 MK II Amplifier & Electronics].
2. The SAT 6.5 MK II, SUB 12 and SUB 15 are compatible with balanced XLR connectors / cables. The total number of XLR cables needed will depend on the system configuration. However for a basic 2.1 system, with one sub, you need a minimum of four XLR Cables. For more information on connecting your system, please see page 9 [System Signal Flow & Connections].
3. The first step in the installation process is to position the active subwoofer. Although you have great flexibility with regard to where an active subwoofer can be placed, a good starting point is centered between the left and right satellite speakers. This could be under a console / desk, behind the console / desk, etc. If you are using multiple subwoofers, you have even more flexibility. For an expanded subwoofer placement guide, please see page 13 [Subwoofer Placement Guide].
4. Once the subwoofer is in position, connect the two input cables from the left and right analog outputs from the mixing console, digital workstation or other source, to the left and right inputs on the subwoofer. For more information on connecting your system, please see page 9 [System Signal Flow & Connections].
5. Next, place the SAT 6.5 MK IIs into position. The recommended position for the monitors is based on an ITU standard and sets the speakers at 60 degrees from the listener, forming an equilateral triangle (a triangle with equal sides) - **See Figure 1**. Fortunately, this setup eliminates most of the math and is easily simplified to the following guidelines: If you want to sit 1 meter from the speakers, place the speakers 1 meter apart. If you want to sit 4 ft. from the speakers, place the speakers 4 ft. apart Etc. Ideally the SAT 6.5 MK II should be at seated ear height. If this is not possible, tilting the cabinet at the listening area can improve high-frequency coverage. For more information about placement see page 8 [SAT 6.5 MK II mounting and placement].
6. Once all the SATs are properly placed, connect the XLR cables from the left output on the back of the sub, to the input on the left SAT 6.5 MK II. Now do the same for the right channel, connecting the right output to the right SAT 6.5 MK II. Lastly, please plug the power cords into the IEC connectors on the SAT 6.5 MK IIs and the subwoofer(s). Prior to proceeding confirm that the system

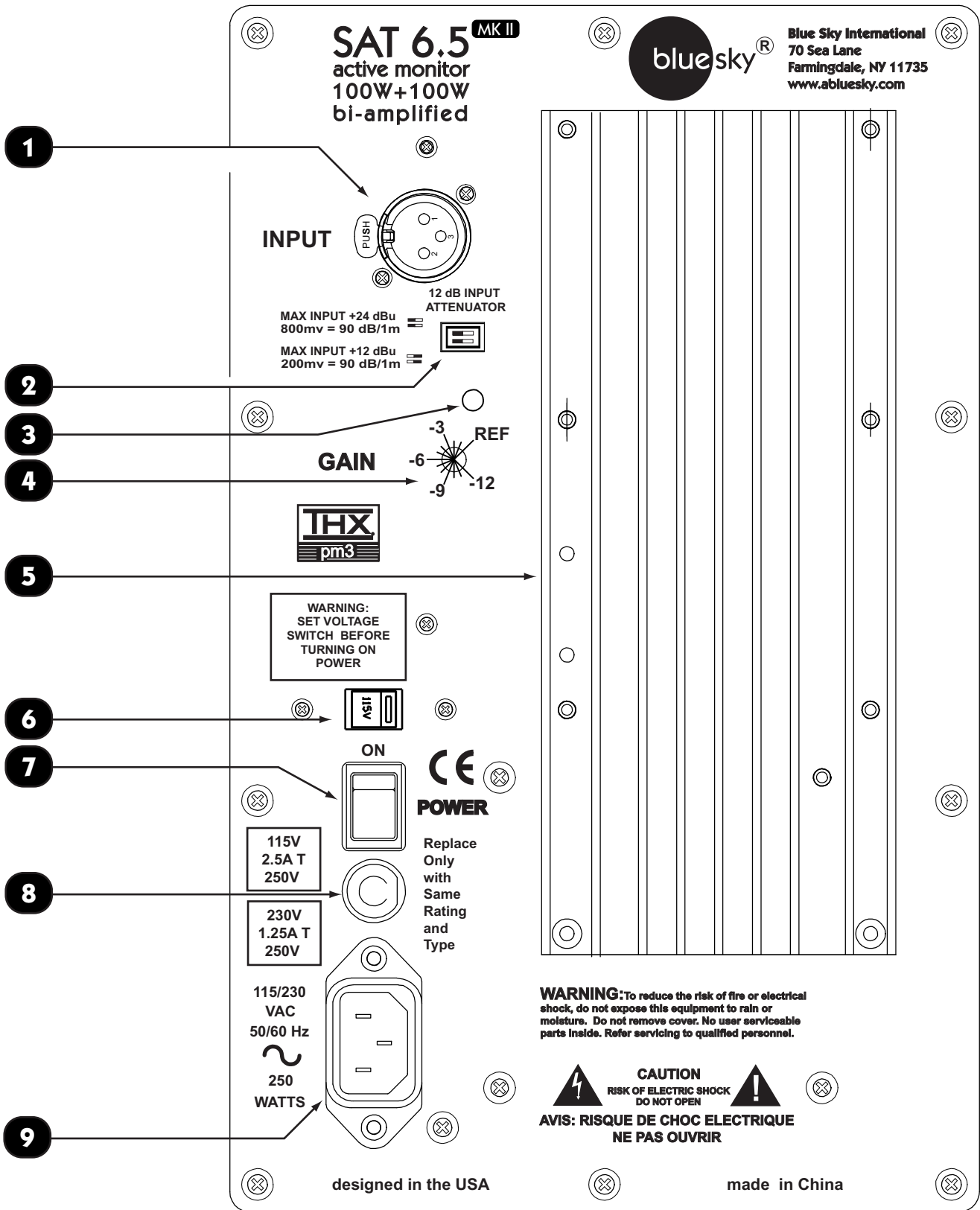
Figure 1



is wired correctly, as shown on page 9 [System Signal Flow & Connections].

8. At this point the Blue Sky monitoring system is correctly configured, and ready for the final step in the installation. Prior to plugging the system into the wall outlet, and powering up the system, do a final quick check of all connections and level settings.
9. If everything is correct, plug the power cords into an appropriate outlet / circuit. **Do not turn on the power switches, yet!** Some mixers and out-board equipment such as D-to-A converters and equalizers generate loud rail-to-rail pops when they initially turn-on. Depending on the level and the gain setting of the monitoring system, these pops could damage the monitors. To avoid this, always turn on equipment in the following sequence: All sources and mixer first, and then the monitoring system. Reverse this procedure when shutting down your equipment.
10. At this point the Blue Sky monitoring system is fully operational, and ready for use. Begin by playing familiar pieces of music (preferably reference quality recordings, with dynamic and full-range sound) which can assist you in the fine-tuning and exact positioning of both the SATs and the active subwoofer. It is important to remember that the positioning of the subwoofer in the room will impact the subwoofer level. You may find it necessary to increase or decrease the level from the reference position. This is OK, and is anticipated.
11. If a more exacting setup is required, using test signals and a SPL meter, please see Page 9 [Expanded Calibration Guide].
12. Just remember - Use your ears, they are the best audio tool you have and you will be amazed how accurate the setup can be if you use familiar, high quality audio material during the setup of the system.
13. Congratulations! You have now completed the setup of one of the world's finest monitoring systems. If you have any questions, please do not hesitate to contact us directly with your questions: Call (516) 249-1399 (9:00am to 5:30pm EST), e-mail at support@abluesky.com or visit the Blue Sky Forum at [www.abluesky.com/forum](http://www.abluesky.com/forum).

# 6. A Tour of SAT 6.5 MK II Amplifier & Electronics



## 6. A Tour of SAT 6.5 MK II Amplifier & Electronics

- 1. XLR INPUT 0dB** - This XLR input should be connected to a bass-managed output which includes a 12dB per octave 80Hz high-pass filter, such as the bass-managed outputs on the SUB 15, SUB 12, or BMC. This input is electronically balanced. Do not connect more than one source to this input. With the gain control on the SAT 6.5 MK II set to the reference mark, and the input attenuator set to the +24dBu setting, a 200mV (-11.7dBu) pink noise signal, with a bandwidth of 500 to 2kHz, will yield 90dB SPL at 1 meter. Refer to page 9 [System Signal Flow & Connections] for more information.
- 2. 12dB Input Attenuator Dip-Switches** - These dip-switches control the 12dB input "pad" on the XLR Input. With both dip-switches in the +24dBu position, the -12dB pad is in circuit. With both switches in the +12dBu position, it is out of circuit. The 12dB input attenuator, in combination with the gain control (Item 4 on this page), allows the user to adjust the gain from REF (200mv of 500 to 2kHz pink noise = 90dB SPL @ 1M) to -24dB.
- 3. Power LED** - This power LED indicates the SAT 6.5 MK II is powered ON.
- 4. GAIN** - This trim pot is a continuously variable gain control, with a range of -12 to REF (200mV of 500 to 2kHz pink noise = 90dB SPL @ 1M). In combination with the -12dB input pad, it allows for a range of -24dB to REF.
- 5. Amplifier Heatsink** - The heatsink provides essential cooling to the amplifiers inside the 6.5 MK II. Please ensure that proper air circulation is available for cooling.
- 6. Voltage Selector Switch** - This switch can be set to either 115 Volts or 230 volts. Prior to powering this unit, please confirm that the Voltage selector switch has been set to the correct voltage setting. If you are unsure of the type of power that is supplied to your studio, consult your product dealer or local power company. If your changing the Voltage, also confirm the proper fuse is installed [see number 8].
- 7. Power Switch** - Controls the power the internal amplifiers and all internal electronics.
- 8. FUSE** - Replace with same rating and type for your local voltage rating. For 115V applications use a 2.5 Amp T 250V and for 230 Volt applications use a 1.25 Amp T 250V fuse ("T" = Time Delay or SloBlo type fuse).
- 9. IEC RECEPTACLE** - Check voltage selector switch before connecting power. Connect to 115 Volt AC / 60Hz power source, rated for 250 WATTS or 230 Volt / 50Hz rated for 250 WATTS.

# 7. SAT 6.5 MK II Mounting & Placement

Monitor mounting and placement is often an afterthought, but in order to get the best imaging and overall performance from the SAT 6.5 MK II, it is important to place the speakers correctly.

### Monitoring Height:

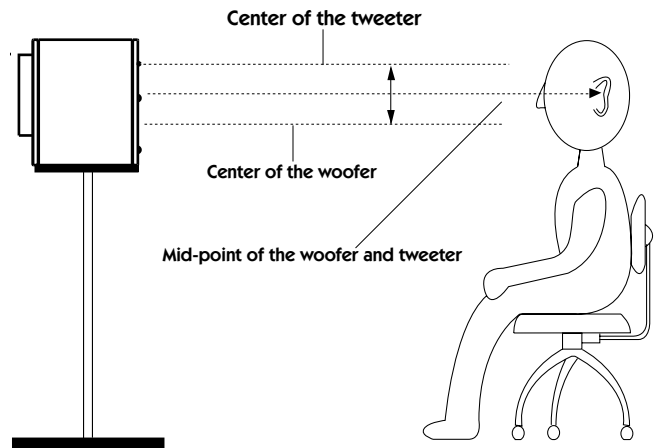
**Figure 2** shows the ideal monitoring height, with the SAT 6.5 MK II located perfectly at seated ear height. If this is not possible, tilting the cabinet at the listening area can improve high-frequency coverage.

### Monitoring Angle:

The recommended position for the monitors is based on an ITU standard and sets the speakers at 60 degrees from the listener, forming an equilateral triangle (a triangle with equal sides) - **See Figure 3**. Fortunately, this setup eliminates most of the math and is easily simplified to the following guidelines: If you want to sit 2 meters from the speakers, place the speakers 2 meters apart. If you want to sit 9 ft. from the speakers, place the speakers 9 ft. apart Etc.

### Wall Mount Options:

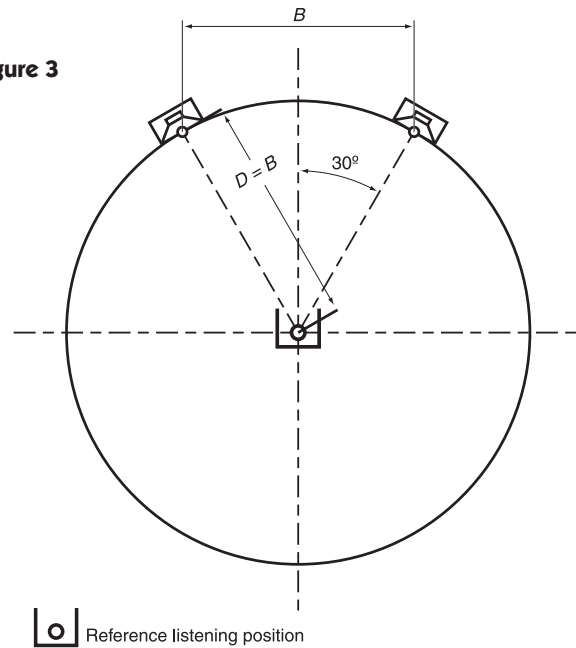
The SAT 6.5 MK II is compatible with OmiMount® 60 Series brackets, via the 1/4 X 20 inserts located in the bottom of the cabinet. The OmniMount® type 60 brackets are designed to support up to 60 pounds of weight when properly installed. Please visit [www.omnimount.com](http://www.omnimount.com) for more information, including detailed mounting instructions. Please see page 14 [Cabinet Dimension] for more information on insert locations.



**Figure 2**

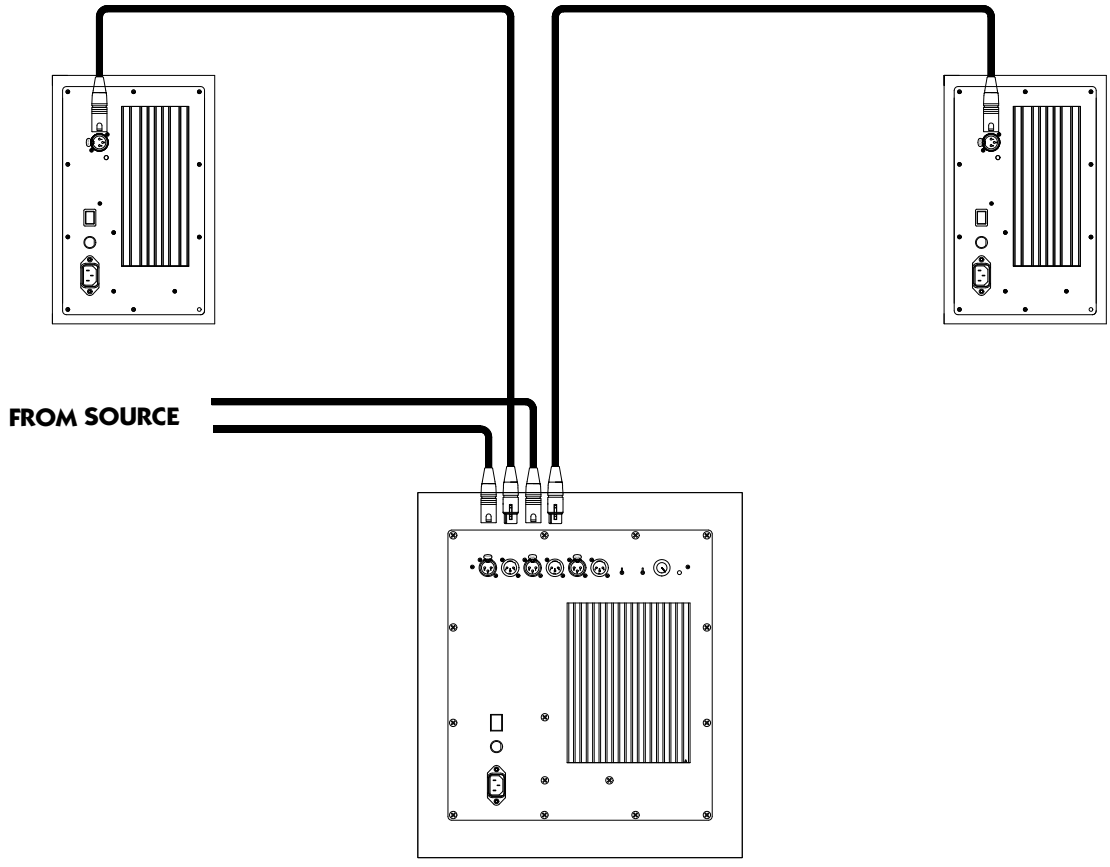
**MONITORING HEIGHT RECOMMENDATIONS**

**Figure 3**





# 8. System Signal Flow & Connections

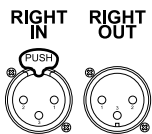


## 2.1 SYSTEM SIGNAL FLOW & CONNECTIONS

Above is a simple diagram showing a Sky System One / 2.1 Monitoring system. The diagram shows a stereo signal going from the source, to the subwoofer and from the SUB outputs to the inputs on left and right SAT 6.5 MK II monitors.

### Cable and connector wiring

Use high-quality, shielded cables to connect your console, workstation or other sources to your Blue Sky Monitoring system. Foil-shielded cables, such as Belden 8451, 8761, or 9501 should do quite well. Other high quality cables are available and those that incorporate better shielding will yield an overall higher noise rejection, lowering your systems susceptibility to external interference. Another important tip to keep in mind when wiring your system is to route all line level cables away from the AC and other power sources, this will reduce the probability of having AC hum emanating from your monitoring system.



	XLR	TRS	RCA
HOT ( + )	Pin 2	Tip	Tip
COLD ( - )	Pin 3	Ring	
SHIELD (GROUND)	Pin 1	Shield	Shield

## 9. Expanded Calibration Guide

### Instructions for electroacoustic calibration of a 2.1 audio system using a SPL meter and Blue Sky's test files.

Before starting this procedure you will need to download BlueSkyTestFiles.zip (an 18 MB zip file) by going to [www.abluesky.com/calibration](http://www.abluesky.com/calibration). To download the test file, "Right Click" and select "Save Target As". The file will begin downloading once a location has been selected.

Once downloaded, either burn the test files to a CD or import them into your DAW and follow the instructions below.

#### ADDITIONAL REQUIRED ITEMS

1. 2.1 Monitoring System
2. SPL Meter - such as the SPL meter sold by RadioShack in the U.S.

BlueSkyTestFiles.zip Includes 4 files:

- 1000Hz SINEWAVE -20dBFS.wav – a 1kHz file recorded at -20dBFS for electrical calibration
- 40-80Hz PINK NOISE -20dBFS.wav – a 40Hz to 80Hz bandwidth limited pink-noise file recorded at -20dBFS
- 500-2.5kHz PINK NOISE -20dBFS.wav – a 500Hz to 2.5Hz bandwidth limited pink-noise file recorded at 20dBFS
- Pink Noise full bw -20dBFS.wav – a full-bandwidth pink-noise file recorded at -20dBFS

**These test files are all mono files. Please make sure you hard assign them to the left and then the right, not both channels at the same time. If you are using a CD player use only one channel of the CD player.**

#### THEORY

The purpose of calibration is to adjust the overall electroacoustic system gain so that 0dBVU of electrical signal level equals a certain acoustic level at the listening position. Since most recording media is now digital, the reference electrical signal level is usually -20dBFS with 20dB of headroom. The reference SPL level however can vary based on the delivery media and speaker type.

Please note that the bandwidth limited signals that have been provided, limit many of the room interaction affects often associated with measuring SPL and broadband pink noise.

All test signals are recorded at -20dBFS including the 1 kHz sine wave tone. The sine wave tone is used to set the electrical output level throughout the signal path, right up to the point you get to the speakers, while the various pink noise signals are used for acoustic measurements and calibration.

The following procedure assumes you are calibrating the system to 85dBc SPL.

#### Step 1 **TURN OFF THE MONITORING SYSTEM (until step 4)**

Step 2 Remove all eq and dynamics from the signal path and set all controls to zero / unity gain. Play the 1kHz Sine Wave, hard assign it to the left channel only, and adjust the output fader so the output meter reads -20dBFS. If you are using an analog console, set the output level to 0 VU. Then hard pan the signal to the right channel output and repeat for the right channel. **Once calibrated do not move the output faders.**

Step 3 Mute everything and make sure the 1kHz tone is OFF.

Step 4 Now that the system has been electrically calibrated turn **ON** the 2.1 System.

Step 5 Assign the 500-2.5kHz pink noise signal to the left channel only. Make sure there is nothing coming from the right channel (or any other channels). Because this signal is bandwidth limited, you don't have to worry about turning the sub off.

There are two methods of setting the levels:

A. If you have a master monitor level control (console etc.), you can set the SAT 6.5 MK II gain control at reference and then adjust the monitor gain control for 85 dBc. Then mark the monitor level as your reference position.

B. The other method is to set master monitor level (console etc.) to the position you want reference level to be (such as unity gain as determined by the electrical calibration process in beginning of these instructions) and then use the volume control on the SAT 6.5 MK II to set 85 dBc. If you use this method you should make a note of the positioning, so you can always go back to the new "reference level" if the pot gets moved.

For either method:

SPL should be measured at the mix position, with the SPL meter at arms length, with the microphone at seated ear height, angled at approximately 45 degrees, and pointed at the center point between the left and right speakers.

Once the left channel is set to 85dBc, repeat this step for the right channel

Step 6 Feed 40-80Hz pink noise signal to the left channel only. Adjust the subwoofer level control until the subwoofer reads 85dBc (slow) at the mix position. The meter will bounce around a little, so you will need to do a mental average (*I tend to filter out the peaks in my mind, so I don't set the sub too hot*). The right channel should measure about the same and no additional adjustments need to be made.

Step 7 You can play the full-bandwidth pink noise, assigning it to the left and then the right channel (not at the same time). You should measure about 85dBc. It may be a little higher, because below 30Hz the room may have a little extra gain. No adjustments should be made with Full Bandwidth pink noise, unless you have an RTA (real time analyzer) or other spectrum analyzer.

Step 8 The calibration process has now been completed. Congratulations! If you have any questions, please do not hesitate to contact us directly with your questions. (516) 249-1399 (9:00am to 5:30pm EST) or visit our website / forum @ [www.abluesky.com](http://www.abluesky.com).

# 10. Subwoofer Placement Guide

## So now that my system uses an integral subwoofer, how do I place it in my studio for the best possible low frequency performance?

The low frequency response and efficiency of a subwoofer are heavily influenced by the acoustics of the playback environment. More specifically, the response is influenced by the room's dimensional ratios, types of construction and location of the subwoofer within that environment. You can significantly improve the subwoofer's in-room response and efficiency by experimenting with various room placements until you find an optimum location.

When placing the subwoofer there are several general guidelines that should be kept in mind. These include:

- Every acoustic space is unique and experimentation is an important key in finding the best possible location in your particular environment.
- A subwoofer becomes more acoustically efficient (has greater output) as you move it closer to a room surface (e.g. wall or floor).
- A subwoofer will give maximum output and maximum acoustic excitement when it is located in a corner.
- Under certain acoustic conditions corner locations are optimum; in others they can excite multiple "room modes", producing "muddy" or "boomy" sound.

### The following methods have been found to work successfully under most conditions:

The first method described below doesn't require any special test equipment. It does require a pair of good ears and familiar broad-spectrum music material – recordings with lots of energy across a wide frequency range (from low to high). The recordings should be highly dynamic and be of relatively high quality.

The second subwoofer placement method requires using a real time analyzer – such as those made by Gold Line™ or The Audio Toolbox(TM) by TerraSonde(TM). Although many home audio enthusiasts may not have access to this equipment, if you are having a sound system or home theatre system professionally installed, this information may be useful to the installer.

#### Method 1

Place the subwoofer at the main listening position and connect and make sure it is properly connected to your receiver. Turn on the CD or music source and make sure that the level of the subwoofer has been raised high enough so that low frequencies are not masked by the background noise in the room. Once you have roughly balanced the level, between the sub and main speakers, move around the room and pay careful attention to where the spectral response is smoothest and has the greatest low frequency extension, pay special attention to the corners and along the walls. Also, make sure to pay attention to where the system has its' greatest impact and definition. You are not just listening for the most boom, but rather where the bass is most accurate and natural sounding. Remember, because the subwoofer is basically omnidirectional, the best spot for the subwoofer can be next to, or even behind, the main monitoring area.

After finding the spot where the subwoofer has the best response in the room, place the subwoofer in that location. Now, listen from the main position and confirm that the subwoofers response is similar to when the positions were reversed. If it is, then leave the

subwoofer in that location. If not, continue to experiment with the subwoofer location until the most accurate and best response has been achieved.

#### Method 2

Subwoofer placement using a real time analyzer – Such as those made by Gold Line™ or The Audio Toolbox™ by TerraSonde™ etc.

Place the subwoofer at the main listening position and connect the subwoofer to your pink noise generator. Turn on your pink noise generator and make sure that the level of the subwoofer has been raised high enough so that low frequencies are not masked by the background noise in the room. Now set the analyzer to 1/12 octave resolution (or whichever setting provides the highest resolution on your particular analyzer), real time mode and begin to take measurements around the room. If the analyzer you are using has the ability to do real time averaging, then use this function to better analyze the spectral response. Please note that as you are doing measurements, it is best to keep the microphone at about 8 to 12 inches off of the ground, which is about the height of the center of the subwoofer driver.

As you walk around the room, be sure to pay careful attention to where the spectral response is smoothest and has the greatest low frequency extension, pay special attention to the corners and along the walls. Remember, because the subwoofer is basically omnidirectional, the best spot for the subwoofer can be next to, or even behind, the main monitoring area.

After analyzing the data and finding the spot where the subwoofer has the best response in the room, place the subwoofer in that location. Now, take some additional measurements from the listening position and confirm that the subwoofers response is similar to when the positions were reversed. If it is, then leave the subwoofer in that location. If not, continue to experiment with the subwoofer location until the smoothest and best response has been achieved.

#### Additional Notes:

It has been found that a subwoofers' in-room response can sometimes be improved by facing the drivers toward a wall. Again, experimentation is the key to finding the best possible location.

Properly designed subwoofers generate tremendous energy, so they may vibrate objects close to them. If you hear buzzing or vibrating objects, make sure to try and dampen those objects. Rattling, buzzing and other sympathetic resonances can make the subwoofer localizable and therefore should be avoided. Using a sine wave generator can be helpful in locating these acoustic anomalies.

# 11. Technical Information

## SAT 6.5 MK II Specifications

### Sealed Enclosure

Solid .75" MDF with 1" front / rear baffle and internal bracing  
 Viscoelastic energy absorbing front baffle coating  
 .25" x 20 inserts for attachment of Omnimount type 60 brackets  
 Dimensions (H x W x L):  
 12" x 8" x 11.88" (includes heatsink and tweeter wave guide)\*  
 \*For complete dimensions see page 14 [SAT 6.5 MK II Cabinet Dimensions].  
 Weight: 28.5 lbs.

### 1" Tweeter

Dual concentric diaphragm with integral wave-guide  
 High-power ferrite motor structure  
 Full video shielded

### 6.5" Hemispherical Woofer

6.5" high excursion woofer with vented motor  
 Cast aluminum frame  
 1.5" Aluminum voice coil  
 Copper shorting ring for lower distortion  
 Ultra low power compression design  
 Mica filled polypropylene cone w/ Rubber surround  
 Fully video shielded

### Amplifiers & Electronics

Discrete symmetrical bipolar design with localized feedback  
 100-Watts\* into 4-Ohm (6.5" woofer)  
 .01% THD + noise at rated power @ 1 kHz  
 100-Watts\* into 4-Ohm (Tweeter)  
 .01% THD + noise at rated power @ 1 kHz  
 \*Power is limited by protection circuitry.

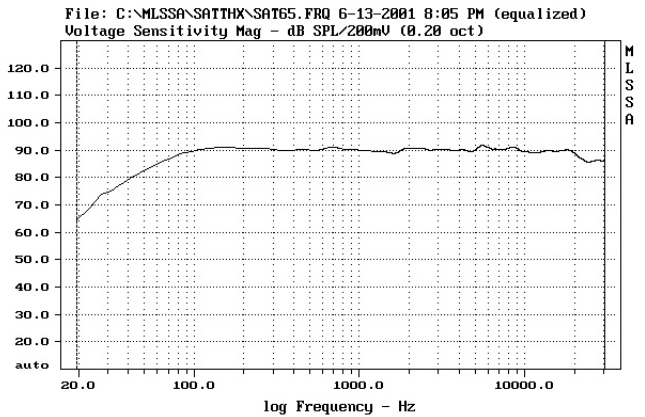
XLR electronically balanced input  
 Fixed and Adjustable gain controls  
 B00@ optimized crossover

Input impedance: 10K balanced  
 Common Mode Rejection 40dB typical @ 60Hz  
 Voltage Sensitivity (high gain) 200mv=90dB SPL @ 1 meter  
 Maximum Input Level: +24dBu balanced

Frequency Response: +/- 3dB 80Hz to 30kHz  
 +/-1.5dB 200Hz to 15kHz

Low Frequency Cutoff -3dB @ 80Hz  
 Internal Crossover Points 1.5kHz

# 12. Measurement Data

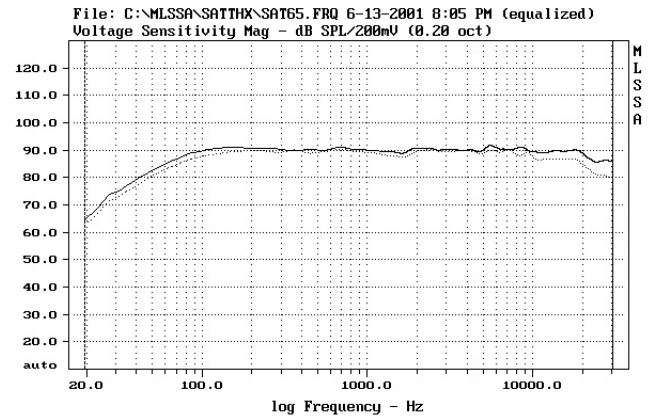


SAT 6.5 ON AXIS 2 METERS CORRECTED TO 1 METER

7-26-2001 6:09 PM

MLSSA: Frequency Domain

On axis frequency response. Measured at 2 meters, corrected to 1 meter.



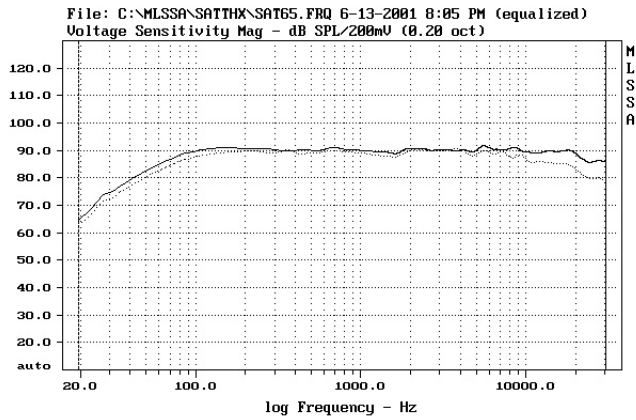
SAT 6.5 ON AXIS VS LISTENING WINDOW 0, +/-15H, +/-15V

7-26-2001 6:10 PM

MLSSA: Frequency Domain

On axis frequency response versus listening window. Listening window is an average of the +/- 15 degrees horizontal and +/- 15 vertical measurements.

# 12. Measurement Data

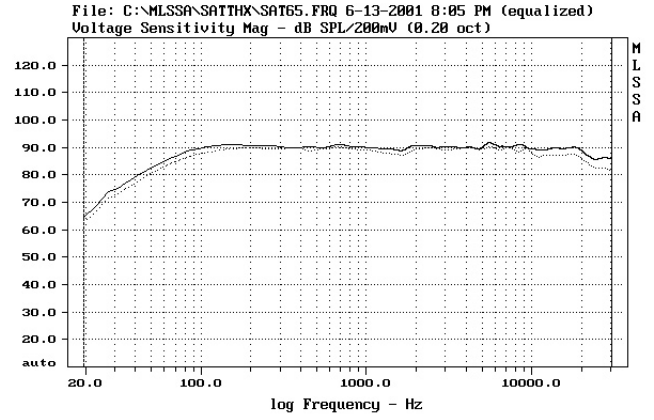


SAT 6.5 ON AXIS VS HORIZONTAL AVG 0, +/-15, +/-30 DEGS

7-26-2001 6:09 PM

MLSSA: Frequency Domain

On axis frequency response versus horizontal average. Horizontal average is comprised of +/-15 degree and +/- 30 degree measurements.

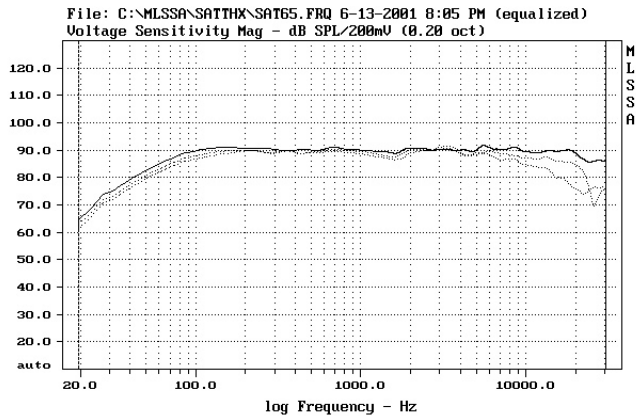


SAT 6.5 ON AXIS VS VERTICAL AVG 0, +/-15V

7-26-2001 6:11 PM

MLSSA: Frequency Domain

On axis frequency mag response versus average of 0 and +/-15 degree vertical measurements.

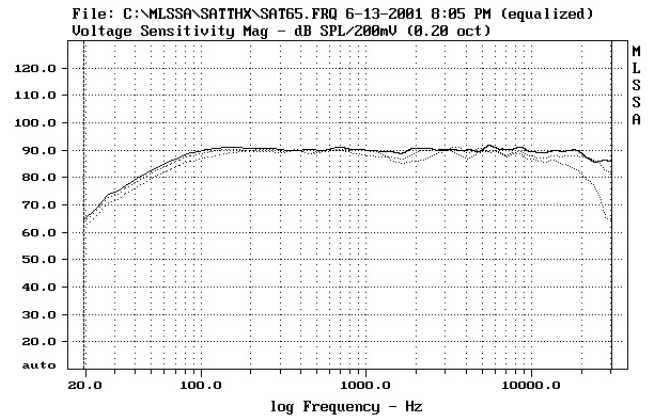


SAT 6.5 ON AXIS VS 15 AND 30 DEGS HORIZONTAL

7-26-2001 6:12 PM

MLSSA: Frequency Domain

On axis frequency response versus 15 and 30 degree horizontal measurements.



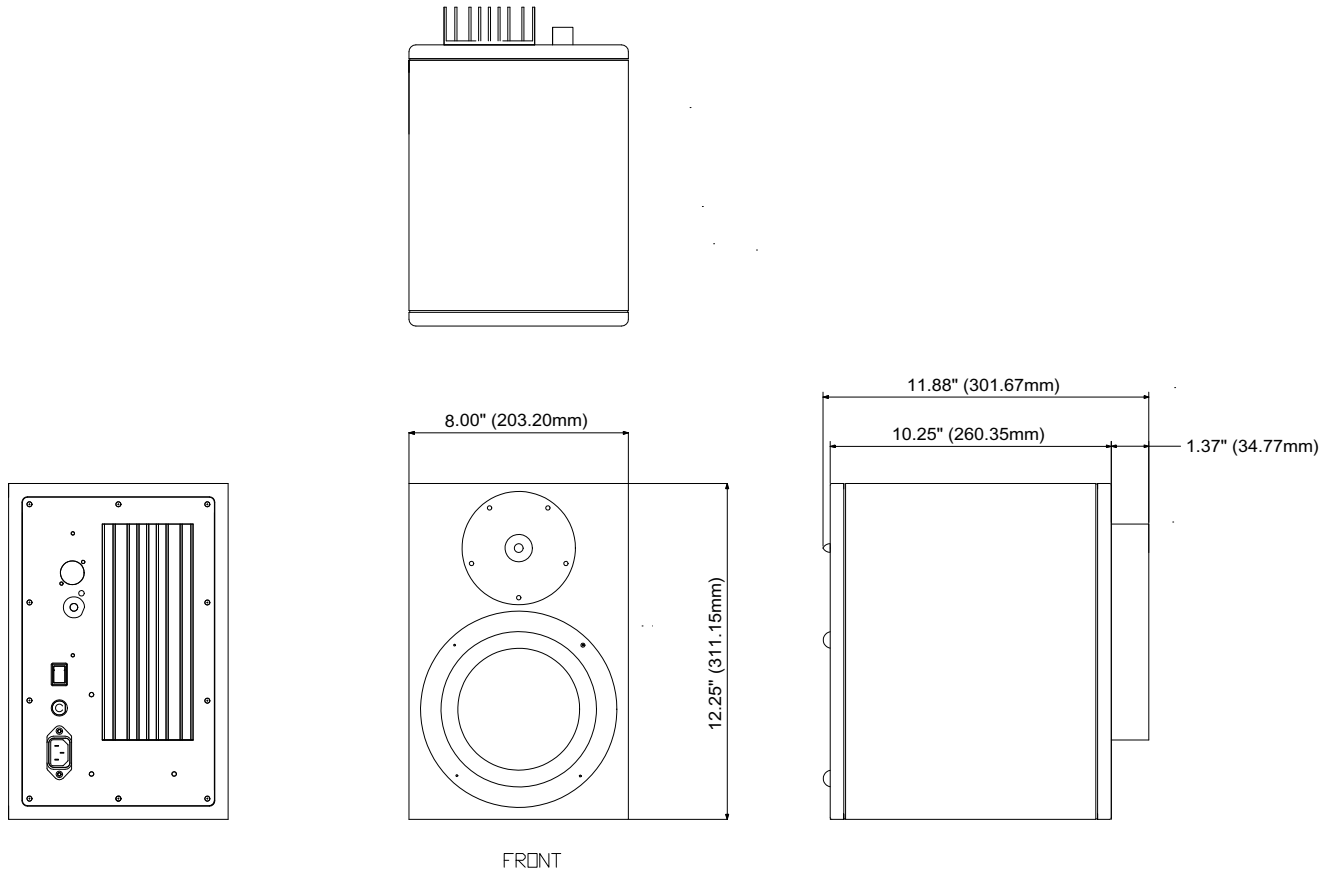
SAT6.5 ON AXIS VS +/-15 DEGS VERTICAL

7-26-2001 6:12 PM

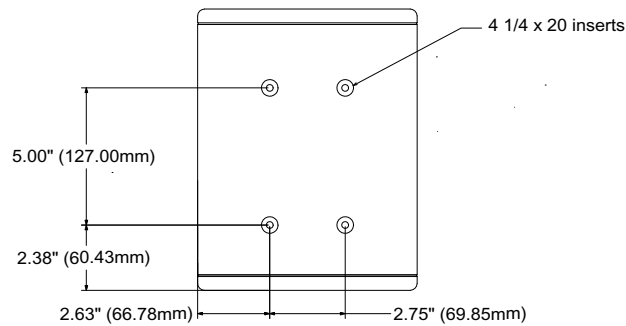
MLSSA: Frequency Domain

On axis frequency response versus +/-15 degrees vertical.

# 13. SAT 6.5 MK II Cabinet Dimensions



FRONT



## 14. Factory Service Instructions

Service for the U.S. versions of Blue Sky products is available only from our authorized distributor, Group One Ltd., located in Farmingdale, New York. (Service for Blue Sky products outside the United States can be obtained through local dealers or distributors.) If your monitor needs service, follow these instructions:

1. Review the manual and ensure that you have followed all setup and operating instructions.
2. Call (516) 249-1399 9:00am to 5:30pm EST and ask for Customer Service. Explain the problem and request an RA (Return Authorization) number. It is important to have your product serial number available when you call. You must have an RA number before you can obtain service.
3. Pack the product in its original packing material and box (do not return the power cord or the manual). If you don't have the original packing material and/or box, please let Customer Service know when you call for the RA number. Blue Sky is not responsible for any damage that occurs due to non-factory packaging.
4. Include a legible note stating your name, shipping address (no P.O. boxes), daytime phone number, RA number, and a detailed description of the problem, including how it can be duplicated
5. Write the RA number on the top of the carton.
6. Ship the product to the address below. We recommend United Parcel Service (UPS). Please insure the product regardless of shipping method.

**Blue Sky International**  
**ATTN: SERVICE DEPT / RA#**  
**70 Sea Lane**  
**Farmingdale, NY 11735**  
**USA**

7. Turnaround time is three to five business days depending on the problem. When calling for RA numbers, please ask Customer Service what the turnaround time is. The serviced product will be sent back to you via the same shipping method as received (i.e. if you ship your monitor UPS Ground it will be returned UPS Ground, UPS Red will be returned UPS Red etc...). This only applies to products serviced under the warranty.

## 15. General Contact Details

For sales and other enquiries, please contact Blue Sky at:

**Blue Sky International**  
**70 Sea Lane**  
**Farmingdale, NY 11735**  
**USA**

tel: 516 249 1399  
fax: 516 249 8870  
email [info@abluesky.com](mailto:info@abluesky.com)

To discover the very latest information check out our website at:

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





**Blue Sky International**

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Farmingdale, NY 11735  
[www.abluesky.com](http://www.abluesky.com)