Blue Sky International
70 Sea Lane
Farmingdale, NY 11735
www.abluesky.com

MediaDesk™ 2.1 Monitoring™ System

Owner's Manual

Version 1R | June 10, 2004

Contents

Safety Instructions

AVIS: RISQUE DE CHOC ELECTRIQUE
NE PAS OUVIR

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 subwoofer 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.

1. MediaDesk 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.

To that end we are proud to introduce MediaDesk™, a full-range monitoring system optimized for such applications as computer-driven audio recording and production. Easily expandable to a 5.1 system, as with all Blue Sky monitoring systems, MediaDesk 2.1 incorporates two ultra-compact 2-way satellite speakers, each featuring a high-quality 4" driver and a 1" tweeter, along with a dedicated 8" powered subwoofer and bass-management system. As mentioned, MediaDesk can be easily upgraded to a 5.1 system, with the addition of the 5.1 upgrade. The 5.1 Upgrade includes three more satellite speakers, a three channel amplifier module, a wired remote calibration and volume control, and three sets of high-level speaker wire.

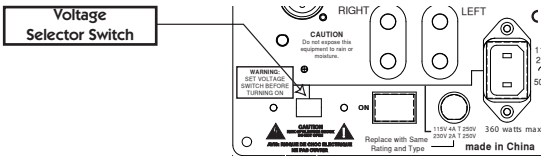
We hope that this systems brings you years of accurate and problem free operation. We ask that you take the time to read this manual, register the product and visit our website for any updated information regarding this product. If you have any questions please don't hesitate to contact us. www.abluesky.com

Thank you for choosing Blue Sky!

2. Important notes about MediaDesk 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 subwoofer, has been set to the correct 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.



The Owner's Manual:

This manual addresses MediaDesk 2.1 applications. For information about the optional 5.1 Upgrade Kit please consult the manual that comes with it 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 16 or you can visit www.abluesky.com.

3. MediaDesk 2.1, what is included?

A MediaDesk 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.

MediaDesk 2.1 System Inventory:

2	MediaDesk Satellite speakers (SATs)
1	MediaDesk Subwoofer
2	10 Foot length of copper speaker cable
4	Subwoofer Isolation Feet
2	MediaDesk Angle Adjustment Feet
1	Power Cable
1	Owner's Manual
1	Warranty Card

4. Quick Setup

1. If you haven't already done so, carefully remove all items from the packaging and confirm that everything that is listed on page 4 is included. [2.1 System - What is included?].

2. MediaDesk systems leave the Blue Sky factory fully calibrated. With the 2.1 gain control set to the reference mark (which is at 12 o'clock on the gain control) and the input attenuator set to +12dBu, a 200mV (-11.7dBu) pink noise signal, with a bandwidth of 500 to 2kHz, will yield 90dB SPL at 1 meter for the satellite. Because most small monitoring rooms have some gain at low frequencies a good starting point for the subwoofer level is -3dB from the reference position. For more information with regard to controls, see page 7 [A Tour of the 2.1 MediaDesk amplifier and I/O].

3. MediaDesk is compatible with XLR and RCA input connections. If you need to connect MediaDesk to a sound card or need more information on connecting your system please see page 6. You will need a total of two (2) XLR or RCA inputs cables for a stereo monitoring configuration (not supplied). For more information on connecting your system, please see page 6 [System Signal Connection and Level Settings].

4. The first step in the installation process is to position the active subwoofer. Although you have great flexibility with regard to where the 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. For an expanded subwoofer placement guide, please see page 10 [Subwoofer Placement Guide].

5. 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 6 [System Signal Connection and Level Settings].

6. Next, place the MediaDesk SATs 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 (39.37 inches) from the speakers, place the speakers 1 meter apart. If you want to sit 2 ft from the speakers, place the speakers 2 ft apart. Etc. The monitors can be positioned on a console, desk, on stands, etc. Ideally the MediaDesk SAT 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 [MediaDesk SAT mounting and placement options].

7. Once all the SATs are properly placed, connect the speaker wire from the left high-level outputs on the back of the sub, to the input on the left SAT. Now do the same for the right channel, connecting the right output to the right SAT. Please make sure that you connect positive to positive and negative to negative, so that both SATs are in-phase. Lastly, please plug in the power cord to the IEC connector on the subwoofer. Prior to proceeding confirm that the system is wired correctly, as shown on page 6 [System Signal Connection and Level Settings].

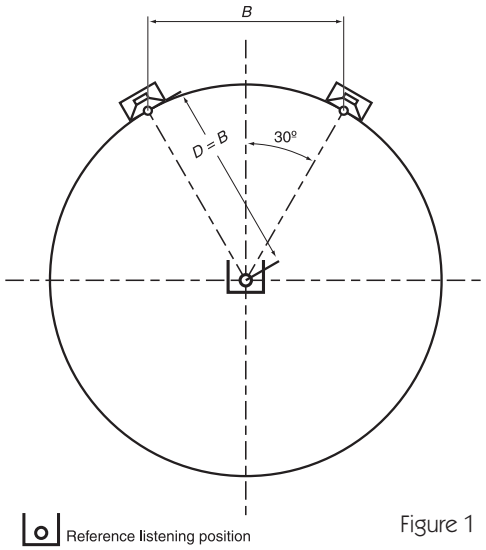


Figure 1

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 cord into the wall outlet. **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 MediaDesk monitoring system.

10. At this point the Blue Sky monitoring system is fully operational, and ready for use. Begin by playing familiar pieces of music, 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 audio material during the setup of the system.

13. Congratulations! You have now completed the set up 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. (516) 249-1399 (9:00am to 5:30pm EST)

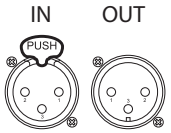
5. System Signal Connection and Level Settings

Below are some basic outlines of ways someone may interface MediaDesk with their audio system. These may or may not apply to your specific application, but they should be able to show the basic concept for most applications.

CABLE WIRING SPECIFICATIONS

Most users of the MediaDesk system will be using ready made cables, however if you need to wire your own cables, follow the wiring specifications below.

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



XLR INPUTS (ELECTRONICALLY BALANCED)

Figure 2: shows the XLR inputs being fed the output of a standard pro audio mixer. The MediaDesk XLR inputs can handle up to +24dBu of signal level at the input and are compatible with most, if not all professional gear. If your mixer has TRS outputs, you should purchase TRS to XLR cables (found at most pro audio retailers) and feed the XLR input. We recommend this because, TRS outputs are also balanced signals and you should use them with the XLR input (as apposed to the RCA input) for the best performance.

INPUT ATTENUATOR SWITCH (XLR INPUTS ONLY)

Figure 4: Certain professional audio devices have a great deal of electrical output and gain (up to +24dBu) and under certain conditions it may not be advantages to reduce the output gain from your source (such as with a D to A converter). Under these conditions we recommend that you switch the input switch to the **+24dBu setting**. However, if you are not running the signal into the XLR input at a high level and you are interested in more gain from the monitoring system or you want to match the voltage sensitivity of our other products, then set the switch to the +12dBu position.

RCA INPUTS

Figure 3: The RCA inputs on MediaDesk are compatible with a myriad of consumer and computer audio gear, such mixers, CD players, Hi-Fi pre-amps etc. Figure 3 shows another common application, the RCA inputs on MediaDesk being fed by the output of a standard computer sound card. This requires the use of an optional adaptor cable, to go from the 3.5mm stereo jack to two RCA outputs. These cables are available from most electronic retailers, computer stores and pro audio dealers. Consult the manual or help files that came with your sound card for specific setup information. Please confirm that the software setting are not constraining or limiting the response of the system in any way (often an issue with laptop computer audio settings).

Speaker Level Outputs / SAT speaker level inputs

Figure 5: This drawing shows the proper way to insert bare wire into the binding posts which are on the subwoofer outputs and SAT inputs. When inserting bare wire, please make sure that there are no strands protruding out that may create a short-circuit. These binding posts are compatible with wire gauges up to approximately 10 gauge.

Figure 2

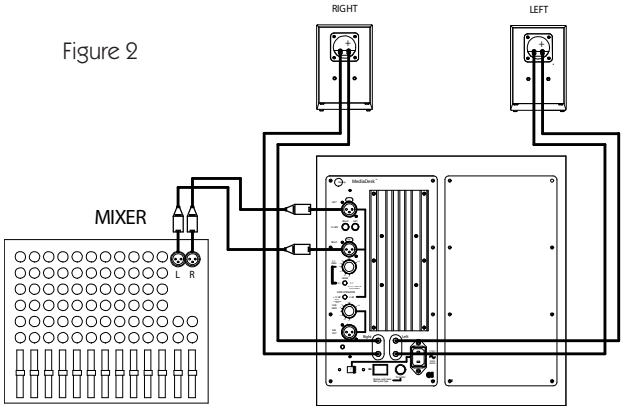


Figure 3

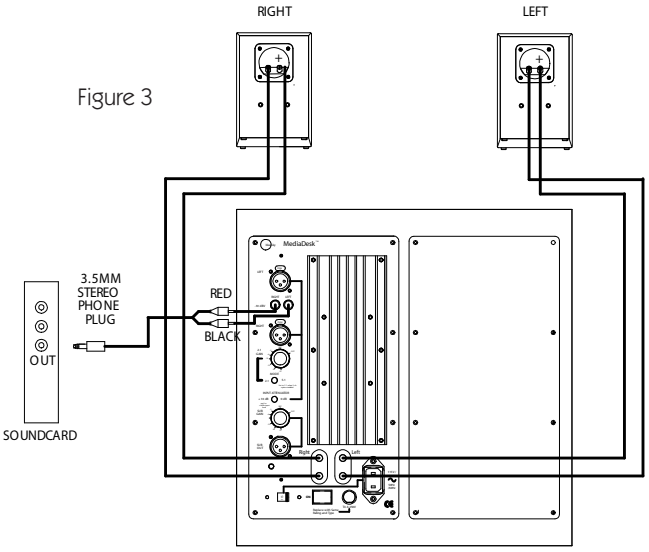


Figure 4

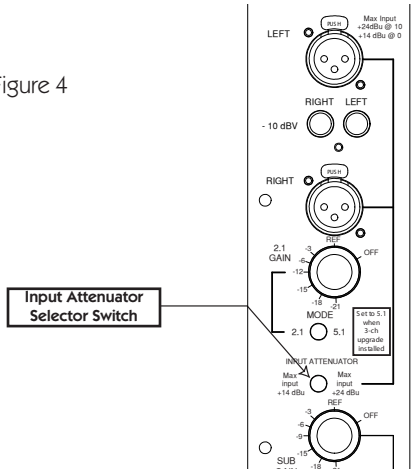
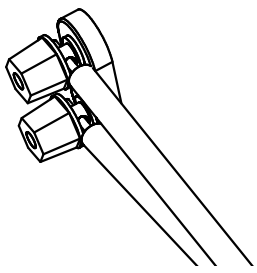
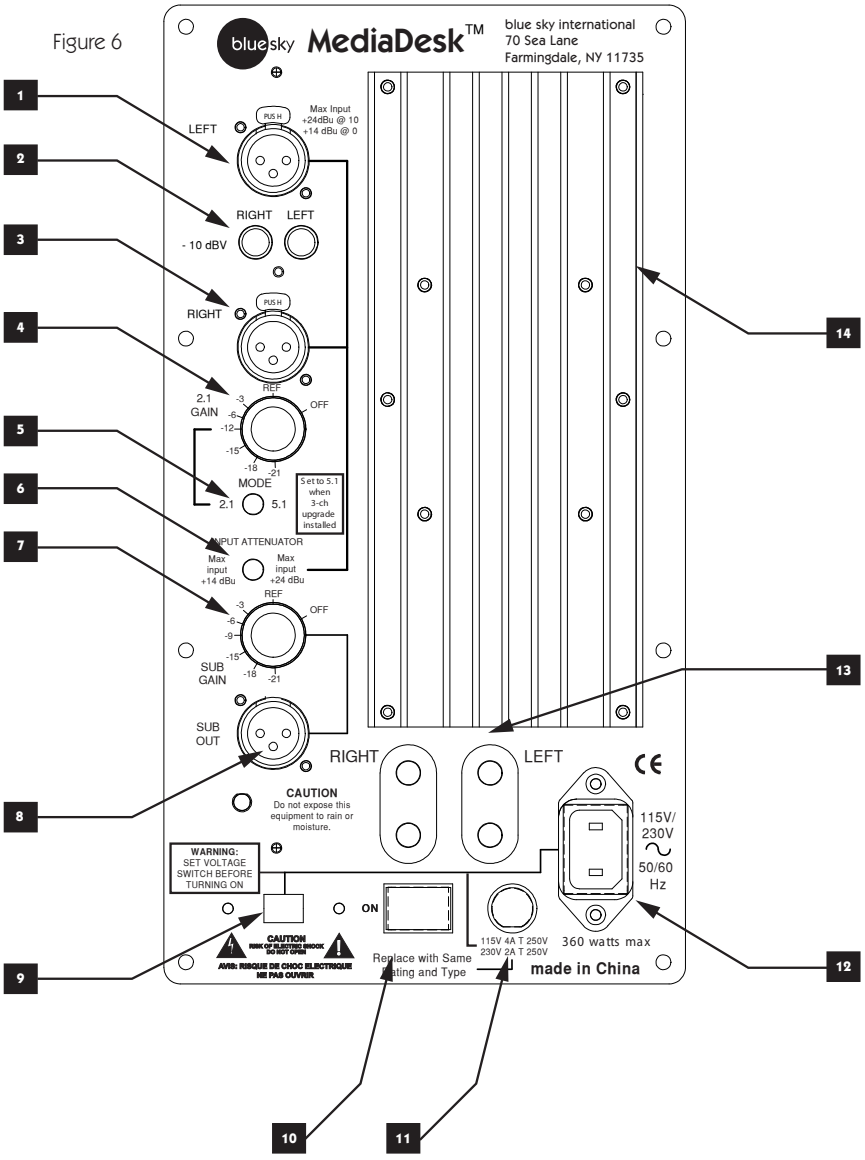


Figure 5



6. A Tour of the 2.1 MediaDesk Amplifier and I/O

Figure 6



1. **LEFT XLR IN** - This XLR input should be connected to the left output of your console or digital workstation. The inputs are electronically balanced. Do not connect more than one source to these inputs. Refer to page 6 for more information [System Signal Connection and Level Setting].
2. **LEFT and RIGHT RCA IN -** These are unbalanced RCA type inputs that are designed to work with -10 dBV sources, such as consumer sound cards, CD players, some mixers, etc. Refer to page 6 for more information [System Signal Connection and Level Setting].
3. **Right XLR IN** - This XLR input should be connected to the right output of your console or digital workstation. The inputs are electronically balanced. Do not connect more than one source to these inputs. Refer to page 6 for more information [System Signal Connection and Level Setting].
4. **2.1 Gain -** This knob controls the overall system gain. The subwoofer gain knob [7 detailed below], tracks this setting. The gain should be adjusted for best signal to noise performance.
5. **Mode Selector Switch -** The switch should be set to the mode that corresponds to the system configuration. If you set the switch to 5.1 mode, without having the 3 channel upgrade kit installed, the system will not pass any audio.
6. **Input Attenuator Switch -** The input attenuator switch only works on the XLR inputs and is designed to allow MediaDesk to interface with various types of professional audio equipment. Refer to page 6 for more information [System Signal Connection and Level Setting].
7. **Subwoofer Gain -** This knob controls the relative subwoofer level as compared to the overall system output. This setting tracks the overall system level. For more information on setting subwoofer level, please refer to page 5 [Quick Setup] and page 9 [Expanded Calibration Guide].
8. **Subwoofer Out -** This balanced XLR output can feed additional subwoofers for increased bass performance.
9. **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, located on the back of the subwoofer, has been set to the correct 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. If your changing the Voltage, please also confirm the proper fuse is installed [see number 11].
10. **Power Switch -** Controls the power to all the three amplifiers and all internal electronics.
11. **FUSE -** Replace with same rating and type for your local voltage rating. For 115V applications use a 4 Amp T 250V and for 230 Volt applications use a 2 Amp T 250V fuse.
12. **IEC 320 RECEPTACLE** - Check voltage selector switch before connecting power. Connect to 115 Volt AC / 60Hz power source, rated for 360 WATTS or 230 Volt / 50Hz rated for 360 WATTS. MediaDesk is a class II device that does not require a safety ground. Only use the supplied power cord or an IEC approved power cord without a safety ground pin.
13. **Speaker Outputs -** These connectors are high quality binding post that are compatible with both bare speaker wire and other speaker connectors (such spades and banana plugs). Please always maintain proper phase and be careful to avoid short-circuits between output terminals.
14. **Amplifier Heatsink -** The heatsink provides essential cooling to the amplifiers inside MediaDesk. Please ensure that proper air circulation is available for proper cooling.

7. MediaDesk Mounting and Placement Options

Monitor mounting and placement is often an afterthought, but in order to get the best imaging and overall performance from MediaDesk, it is important to place the speakers correctly. **Figure 7** shows the ideal placement, with the MediaDesk SAT located perfectly at seated ear height. However, there are many other ways to mount or place MediaDesk, which can work equally as well.

Figure 7

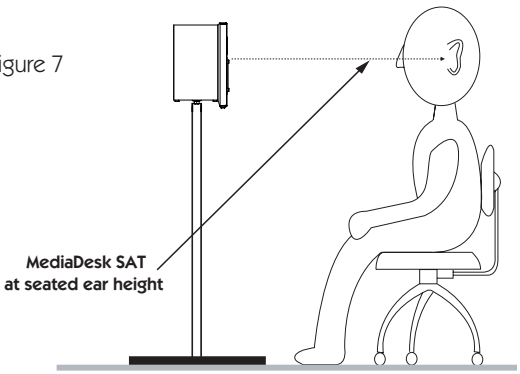


Figure 8: Cabinet angled back

Most users of MediaDesk will be using the system around or near a computer workstation. The design of the MediaDesk SAT takes this into acount and makes it easy to place the speakers on a typical desk and have them pointed at the user's ears. The angle of cabinet also reduces reflections off of the desk, improving imaging and overall performance.

Figure 8

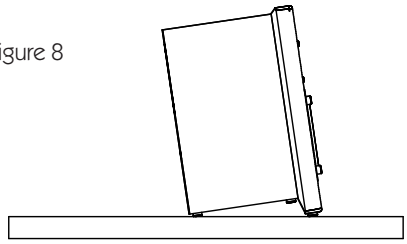


Figure 9: Cabinet level with baffle hanging over

This drawing shows the MediaDesk SAT being placed so that cabinet has no up or down angle. This maybe an ideal way to mount the SATs if you are placing them on a shelf that is at seated ear height, or a conventional speaker stand with a flat top.

Figure 9

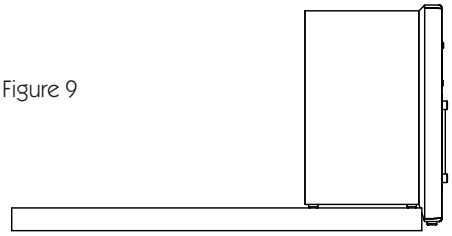


Figure 10: MediaDesk Angle Adjustment Foot

The MediaDesk Angle Adjustment Foot alows you to place the MediaDesk SAT on a flat surface and adjust the front baffle angel from 0 degrees (shown in picture) to +5 degrees (baffle angled down). This drawing illustrates the MediaDesk being placed so that the cabinet has no up or down angle.

Figure 10

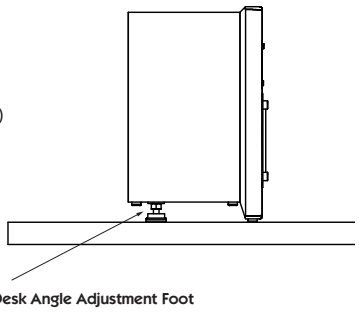
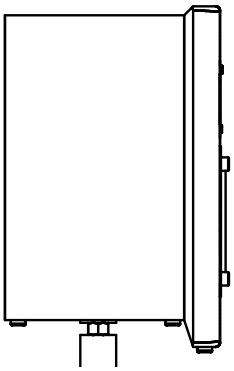


Figure 11: Optional Microphone Stand Adaptor

Although not supplied by Blue Sky International, a standard 5/8" x 27 female to 3/8" x 16 male adapter, allows you to adapt the center insert on the MediaDesk SAT so that it is compatible with a standard mike stand, which typically has a 5/8" x 27 fine male thread.

Figure 11



Wall Mount Options (not shown)

The MediaDesk SAT is compatible with two types of wall mount brackets. The first mounting option is via the 2 1/4 X 20 inserts on the back of the MediaDesk SAT. These inserts are compatible with BT Technologies BT-5 Brackets (www.btech-usa.com). It is also compatible with OmiMounts 10 Series, via the 3/8" X 16 insert in the bottom of the cabinet (www.omnimount.com). For more details on these mounting inserts please see page 12 [Satellite Cabinet Dimensions].

8. 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. 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 electroacoustics 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 MediaDesk 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, you can set the sat 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 to the position you want as a reference level and then use the volume controls to set 85 dBC. If you use this method you should mark the knob position with a grease pencil so you can always go back to reference level if the knob 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).

Step 8 You are finished and the calibration process has been completed – enjoy!

9. 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 omni-directional, 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™.

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.

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 omni-directional, 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.

10. Technical Information

This next section outlines the components, specifications and performance data that make this product such a uniquely high value.

In order to continually improve all of its products Blue Sky reserves the right to change these specifications without notice.

MediaDesk 2.1 Specifications

General Specifications

Input Impedance (all inputs)

20k Ohms balanced Input attenuator =+12 dBu
52k Ohms balanced Input attenuator =+24 dBu
5k Ohms unbalanced RCA input

Common Mode Rejection Ratio
40 dB typical @ 60Hz (balanced input only)

Maximum Input Level
+12 / +24 dBu balanced (Set by input attenuator)
+14 dBu unbalanced

Subwoofer maximum output +24 dBu balanced
Subwoofer output impedance 200 ohms balanced

Amplifier power output Note:

Long term power output is limited by the speaker protection circuitry

Short term power output 1 channel driven:
65 watts x 1 @ <.05% THD into 4 ohms @ 1 kHz

Short term power output 2 channels driven :
55 watts x 2 @ <.05% THD into 4 ohms @ 1 kHz

Subwoofer power output:
65 watts x 1 @ <.05% THD into 4 ohms @ 50 HZ

Mains voltages:
115/230V 50/60 HZ switchable

Maximum power consumption:
380 watts

Satellite

- Lacquer finished baffle
- Low diffraction front baffle design with flush mounted drivers
- Solid 3/4" MDF enclosure with 1" MDF baffle
- Dimensions: Please see page 12
- Weight 5 lbs.
- 1/4"x 20 inserts for attachment of OmniMount
- 3/8" x16 insert for attachment to microphone stand with adapter (adapter not supplied)
- 4" cast frame Neodymium hemispherical woofer
- 1" fabric dome Neodymium tweeter
- Fully video shielded
- Satellite Low frequency crossover 110 Hz
- Tweeter Crossover Frequency 2.0 kHz

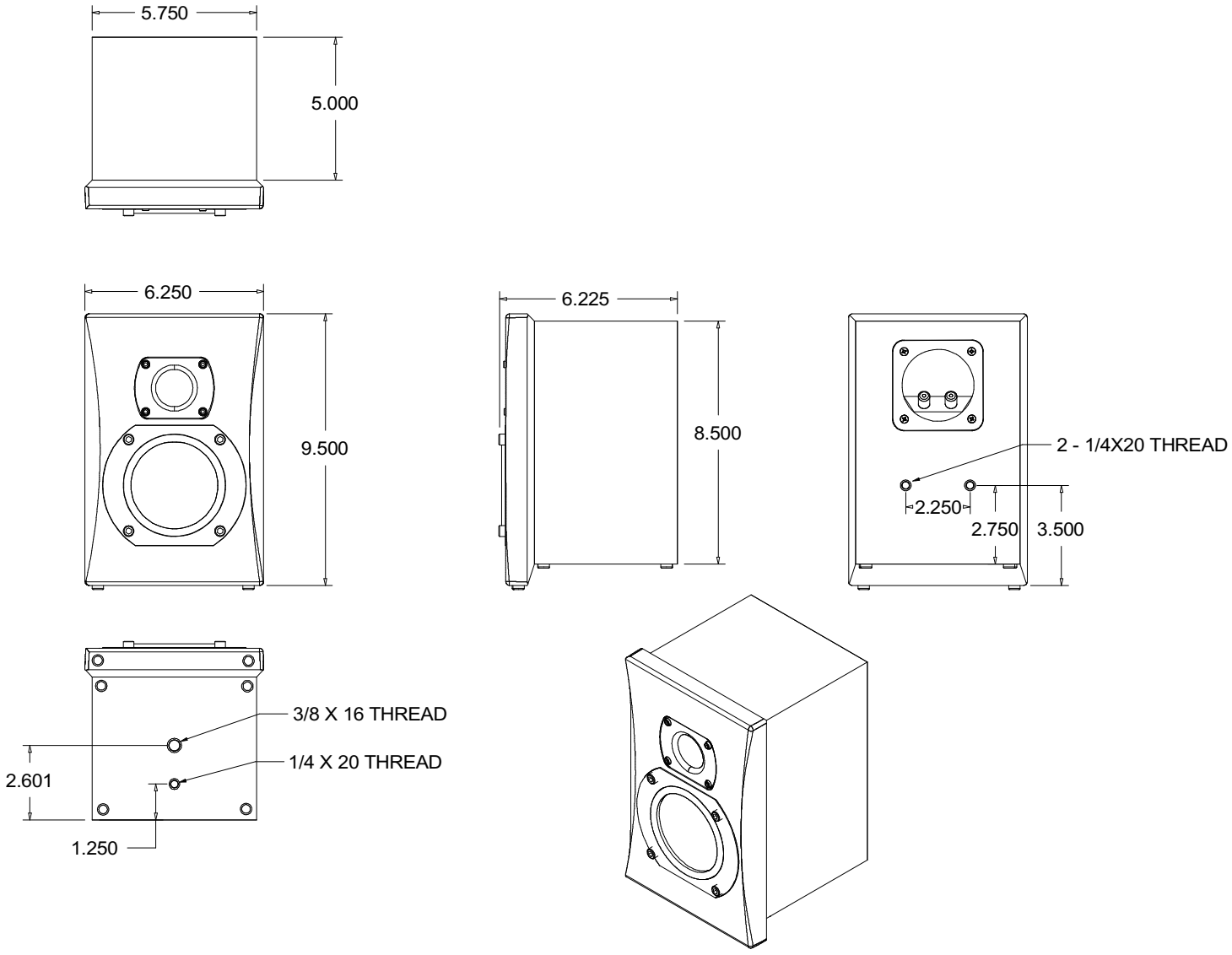
The following specifications are measured using the MediaDesk Amplifier

- Frequency Response Satellite
  +/- 2.5dB 300 to 10 kHz
  +/- 3.0dB 110 to 20 kHz
- Voltage Sensitivity (at reference gain)
  -12 dBu = 90dB SPL @ 1M
  Balanced Input attenuator set to +12 dBu
  1 dBu = 90 dB SPL @ 1M
  Balanced Input attenuator set to +24 dBu
  240 mV = 90 dB SPL @ 1M
  RCA input 4 ohm nominal impedance

8" Sealed Box Subwoofer

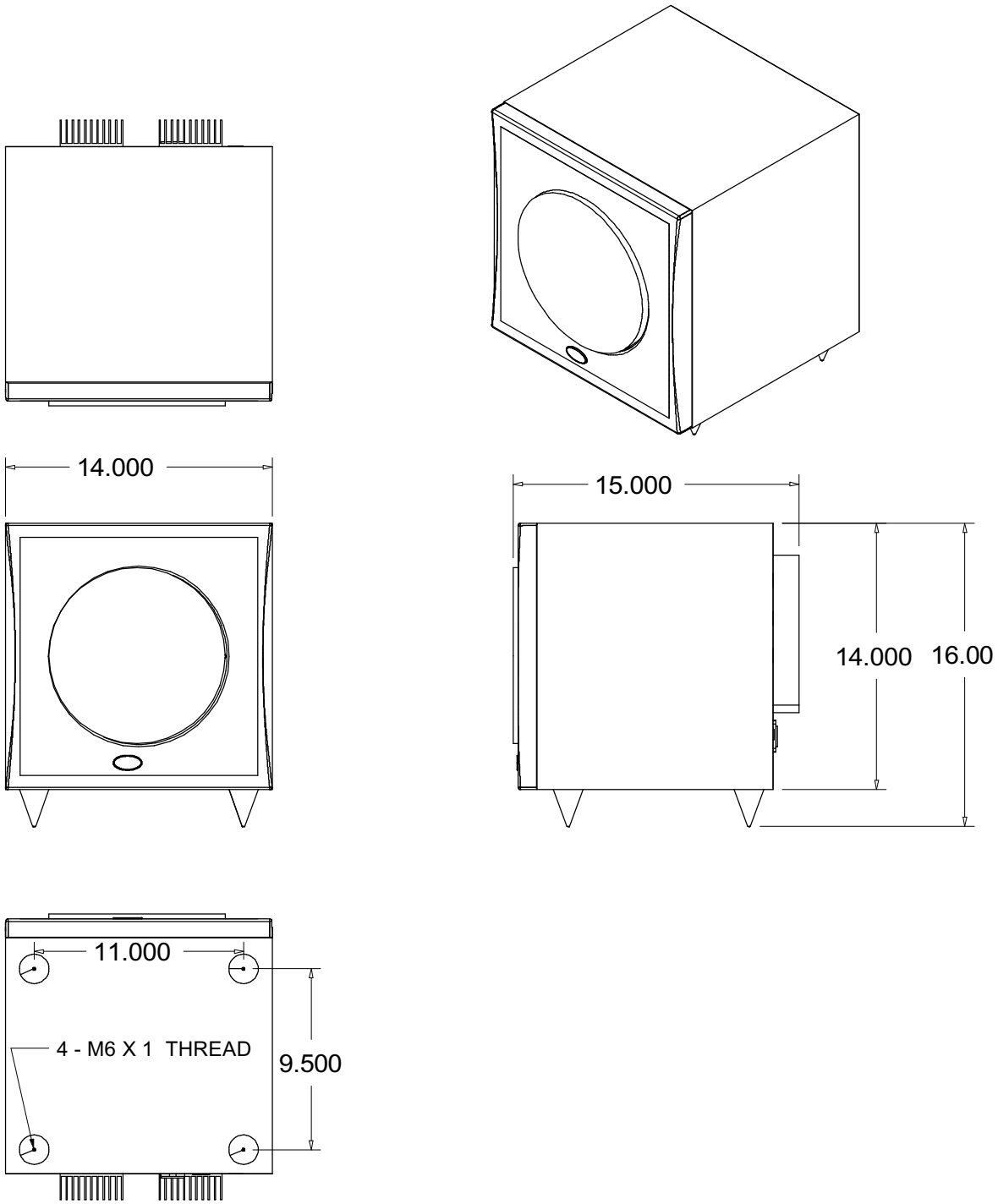
- Fully video shielded.
- Vented motor
- Foam surround
- Coated non-resonance paper cone
- Solid 3/4" MDF construction with 1" MDF baffle
- Flush mounted driver
- Isolation feet are included.
- Inserts for optional attachment of spiked feet provided
- Dimensions: 16" H x 14" W x 15" D (including heatsink and grille)
- Weight 45 lbs.
- Frequency Response Subwoofer
  Anechoic Response:
  35 to 110Hz +/-3dB
  Typical In-Room Response:
  20 to 200Hz (3000 Cubic Feet)

11. Satellite Cabinet Dimensions



MediaDesk SAT Dimensions in US/English Standard (inches)

12. Subwoofer Cabinet Dimensions



MediaDesk SUB Dimensions in US/English Standard (inches)

13. 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.

14. 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

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

www.abluesky.com

Blue Sky International
70 Sea Lane
Farmingdale, NY 11735
www.abluesky.com