Veritas™

OWNERS MANUAL

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ENERGY®
LOUDSPEAKERS
MUSICAL TRUTH™

WELCOME TO MUSICAL TRUTH™

The new ENERGY® Veritas™ Series

*Congratulations on your purchase of the new Veritas™ Series speakers from **ENERGY®** Loudspeakers. The proprietary technology in the Veritas™ series has taken years for the engineering division to design and implement into this groundbreaking new speaker series.*

Veritas™ follows the lead of its predecessors by adhering to four main goals.

1) *To preserve the original recorded sound as closely as possible – Musical Truth™*
2) *To reduce distortion to its lowest possible measurement*
3) *To maintain wide and constant dispersion, for superb stereo imaging and soundstage*
4) *To maintain a wide signal bandwidth, even in the smallest of enclosures*

*These goals are strictly adhered to in all stages of transducer, crossover and enclosure design as well as in the prototyping, electrical engineering, and all listening tests. The Veritas™ series has been designed from its conception to musically outperform anything in its price range. The new technologies realized by the engineering group have dramatically reduced distortion. New transducer and baffle designs have realized improvements in diffraction, which vastly improves the stereo imaging of a speaker. This new series embodies all that **ENERGY®** Loudspeakers has tried to accomplish in our 20+ years of loudspeaker design and manufacturing.*

We hope you will enjoy your speakers for many years, and that the setup and placement suggestions contained in this manual will serve to further enhance your listening pleasure.

If you have any problems with the set up of your speakers you can do one of the following:

1) *After reading and understanding this manual, contact your retailer for assistance. The **ENERGY®** Veritas™ network of dealers has been trained to help our customers learn more about the products they have purchased and to assist in obtaining the ultimate in performance from them.*
2) *Contact us via e-mail by way of the **ENERGY®** Website. This way we can get back to you quickly with answers to your questions at your convenience. (www.energy-speakers.com)*
3) *Contact us by phone during regular business hours (8:30–5:00-EST) at 416-321-1800.*

*We truly believe your new **ENERGY®** Veritas™ series speakers will provide a lifetime of enjoyment and pleasurable listening experiences!*

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Break in Procedures

It is VITAL that your new Veritas™ speakers be allowed to break In properly before you perform any precise set up procedures, system adjustments, and before you play them at higher volume levels.

The best method of performing the break in is to play a full range musical passage at a moderate level as long as possible. Utilizing the repeat function on your CD or DVD player can assist greatly.

Optimum sound will not be achieved until approximately 100 hours of playing time. After break-in, the volume level can be increased. Do not play the speakers at higher levels until the break in process has been completed. The transducers need to "loosen up", and until this occurs, damage can result to the transducers.

Set-Up Basics

There are three basic steps in the successful installation of the system.

1) *Decide where you wish to place the speakers*
2) *Connect the speakers*
3) *Adjust the controls where necessary*

The most vital part of the set up procedure to realize the goal of getting the best sound your room, and equipment has to offer, is proper placement of the speakers. Please wait until the speakers are fully broken in before experimenting with precise speaker placement. There are a few do's and don't's with regards to speaker placement.

1) *With regards to the front speakers, try not to place them too close or too far apart. The "1.5 times the width" rule applies, and is required for good stereo imaging from the front speakers. See the Advanced Set Up section for details.*
2) *The center channel speaker needs to be centrally located so that the dialog appears to be coming from the center of the TV or Screen. See the Advanced Set Up section for details.*
3) *The rear channel Veritas™ 2.0R are quite flexible with regards to placement, but still require care when choosing the placement. Study your room carefully and decide whether the side walls are best, or the rear walls. The goal is to try to position the speaker system around you, so that you are "surrounded" by the information from the different channels. The choice of rear speaker placement depends greatly on the position of the listeners. The ultimate goal, is to have the rear speakers approximately the same distance from the listeners as the front speakers. If the room's layout does not allow for this, then the basic rule is to place the front and rear speakers in the room so that they form a square or rectangle around the listeners. More details are found ahead.*

Advanced Set Up

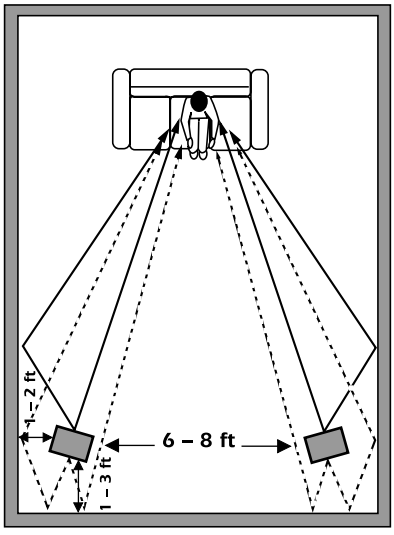
POSITIONING THE FRONT SPEAKERS

The placement of the front speakers in relation to the listener is absolutely critical. The perfect set up would place the listener at the end of a triangle, with the distance from speaker to listener being 1.5 times the width between the two speakers. The minimum distance between the speakers is 6-8 feet, any less and the stereo imaging will be quite poor.

The optimum room shape would be a rectangular room, with the speakers along the short wall, facing towards the other short wall. Placement in corners, and against a wall is not recommended. Try to keep the speakers, especially rear vented models a minimum of 2 feet from the back wall, and corner placement is usually the worst of all possible places to put a speaker.

The ***ENERGY®*** *design philosophy of Wide and Constant Dispersion provides a wide image, and clarity off axis from the speaker. For best results, utilize the side walls of the room to enhance the size and depth of the image.* ***See Figure 1A.***

FIGURE 1A



Advanced Set Up

PLACEMENT OF THE CENTER CHANNEL V2.0C

The center channel needs to be placed either above or below the TV monitor, but as close to the TV as possible. The center channel carries dialogue information which should sound like it is emanating from the center of the TV. If using a Rear Projection Television, then above is probably your only choice. If you have a front projection system, than you have alternate choices of either stand mounting, or placement on furniture, etc.

When deciding on the center channel speaker placement, it is important to place the speaker so that the edge of the speakers' front is at the edge of the shelf or stand supporting it. Unwanted diffraction would occur if the center channel is situated too far back into a cabinet or other surface with edges that could impede the dispersion of the speaker. ***See Figure 1B.***

PLACEMENT OF THE REAR CHANNEL V2.0R SPEAKERS

The Rear Channel V2.0R speakers are optimally placed on either the sides of your listening area, or the rear walls. The V2.0R has been designed with installation flexibility as its key goal. The side firing mid-fill transducers coupled with the front firing woofer and tweeter combine to produce various levels and effects depending on the speakers' location, and how the "SoundField Management" System is adjusted. The following are suggestions of where you can place your V2.0R speakers. ***See Figure 1B.***

SIDE POSITION

The optimal placement for the V2.0R's on the side of the room, would be beside the listening area, a few feet behind the couch, at a height approximately 2/3 of the wall height from the floor. The "SoundField Management" System can be adjusted in many different ways. Refer to the separate section for adjusting the "SoundField Management" System.

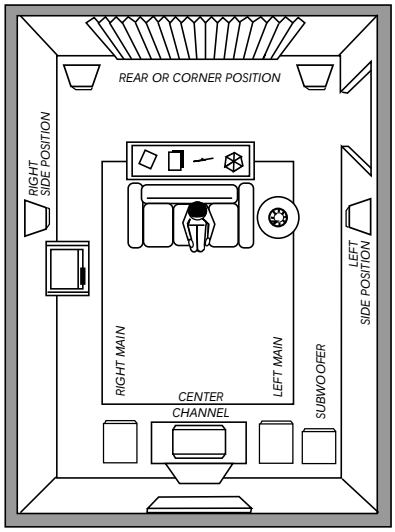
REAR POSITION

The rear wall can also be used for placement of the rear V2.0R speakers. The optimum placement would be on either side of the listening area, but not in the corners of the room. Experimentation with the "SoundField Management" System will yield many different results. Refer to the separate section for adjusting the "SoundField Management" System.

CORNER POSITION

If you are limited to a corner placement of the rear channel speakers, we have designed a special "SoundField Management" mode for this purpose. It will turn off the side firing mid-fill driver above the control panel. Please notice that the two rear channel speakers are mirror-imaged of each other. When mounting the speakers, be sure to put the control panel facing the corner. This way the corner facing mid driver will not emanate sound. The other mid driver which faces out into the room, will produce sound.

FIGURE 1B



Proper Usage of the Veritas™ Stand for V2.1 and V2.2 Models

The Veritas™ Stand has been purpose built not only to improve the looks of the Veritas™ bookshelf models V2.1 and V2.2, but also to place the speakers at the optimum height.

The Veritas™ speakers incorporate inserts into the speakers' bottom, to allow physically attaching the speaker to the stand for enhanced safety. Please follow the instructions in this order.

1) *Begin assembly of the stand, one by one, carefully following the directions included in the stands' packaging.*
2) *Decide if you wish to use filler material in the stands before you complete the assembly process. Filler will not only add weight to the stand, but mass, which helps provide a solid foundation for the speaker. As well, filler material helps eliminate resonances that can transfer to the floor and "color" the resulting sound from the speaker.*
3) *Complete the assembly of both stands.*
4) *Place the speaker on the stand.*
5) *Using the hardware supplied with the stand, attach the speaker to it by inserting the two Philips head bolts from the bottom of the stands' top plate into the insert on the speakers' bottom. Hand tighten only!*
6) *The front bolt goes through the front hole on the top plate, inserted from the bottom. Insert the bolt into the speaker, the insert is situated in the middle of the speakers' base. The second bolt inserts into the semi-circular rear foot on the back of the speaker.* ***See Figure 2A.***
7) *Once both are in place, tighten them both with a Philips screwdriver.*

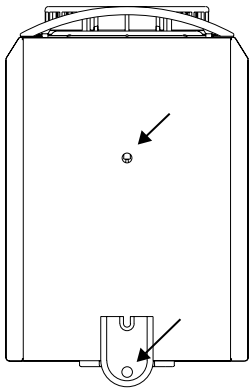


FIGURE 2A

The speaker is now attached providing better stability, better sound, and of course great looks! ***See Figure 2B.***

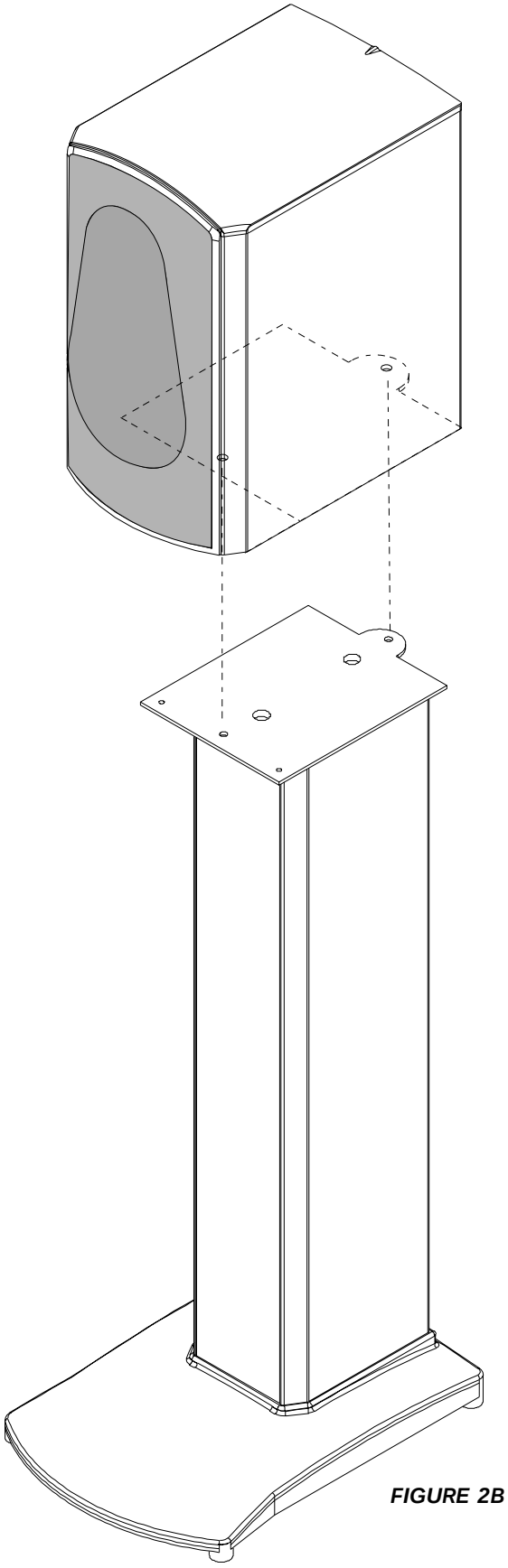


FIGURE 2B

Connection Instructions

The Connections for the Veritas™ Series speakers are quite similar to any standard speaker with bi-wire/ bi-amp options. There are 4 Gold Plated Connectors on the rear of the speaker enclosure, and although they look unique, they are traditional in function.

TRADITIONAL CONNECTION METHOD

1) *Using your choice of bare wire, banana-type jacks, or spade lugs, connect the speaker cable (minding the positive and negative polarities), to the lower set of connectors. Ensure the terminals are tight.*
2) *Repeat the procedure for the second speaker.* ***See Figure 3.***

NOTE: Please ensure the positive and negative terminals on the speaker match the positive and negative terminals on the amplifier. Reversing these will cause an abnormal sound, and a total reduction of bass frequencies under normal listening conditions.

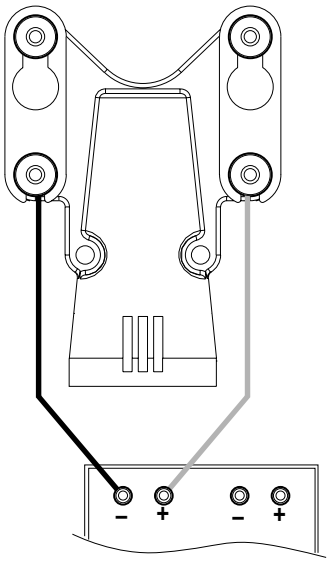


FIGURE 3

BI-WIRE METHOD

This method involves using 2-channels of amplification, with multiple cables and connectors, to access both sets of terminals on the Veritas™ Loudspeakers. The benefit of bi-wiring is to reduce noise, and reduce the likelihood of grounding problems, as you will have twice the thickness of cable between the amp and speakers as the traditional method would provide. For more details on the benefits of bi-wiring, please discuss this your authorized ***ENERGY®*** *retailer.*

NOTE: Before starting, remove the gold straps, which connect the top and bottom set of terminals. To remove the straps, loosen the connectors, pull the straps up, and then towards you through the large hole. Make sure you put them in a safe place for future use.

1) *Using your choice of bare wire, banana-type jacks, or spade lugs, connect one speaker cable from the amplifier (minding the positive and negative polarities) to the top set of connectors. Ensure the terminals are tight.*
2) *Next, connect the second cable, from the amplifier (same channel, secondary connectors) to the lower set of terminals on the Veritas™ speaker.* ***See Figure 4.***

NOTE: Notice the upper and lower terminals accept the wire from a different angle, this is to simplify the connection process by making access easier, and to improve cosmetics by allowing easier "dressing" of the cables.

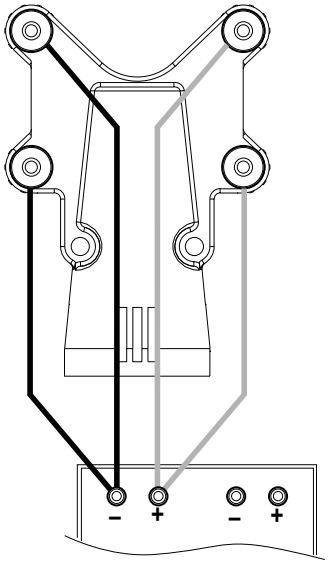


FIGURE 4

BI-AMPLIFICATION METHOD

This connection system involves the use of two separate amplifiers to power one set of speakers. The idea is to have one stereo amplifier connected to one speaker, and another identical amplifier powering the second speaker. This is often referred to as "Vertical" Bi-amplification. It is the only method ***ENERGY®*** *recommends.*

BI-AMPLIFICATION WIRING INSTRUCTIONS

NOTE: Before starting, remove the gold straps, which connect the top and bottom set of terminals. To remove the straps, loosen the connectors, pull the straps up, and then towards you through the large hole. Make you sure you put them in a safe place for future use.

1) *Using your choice of bare wire, banana-type jacks, or spade lugs, connect one speaker cable from the amplifier (minding the positive and negative polarities) to the top set of connectors. Ensure the terminals are tight.*

2) *Next, connect the second cable, from the amplifiers other channel to the lower set of terminals again ensuring a tight connection.*
3) *Repeat Steps 1 and 2 for the second loudspeaker using the second amplifier.* ***See Figure 5.***

NOTE: Notice the upper and lower terminals accept the wire from a different angle, this is to simplify the connection process by making access easier, and to improve cosmetics by allowing easier "dressing" of the cables.

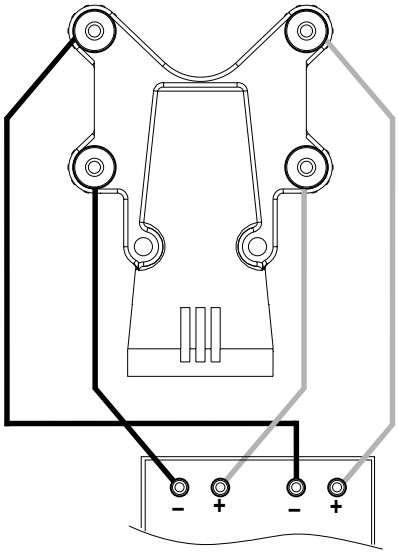


FIGURE 5

CONNECTION OF V2.0R

1. *Please ensure the gold straps are in place between the upper and lower terminals before starting. Using your choice of bare wire, banana-type jacks, or spade lugs, connect the speaker cable from the amplifier (minding the positive and negative polarities), to the lower set of connectors. Ensure the terminals are tight.*
2. *Repeat the procedure for the other rear channel speaker.* ***See Figure 6.***

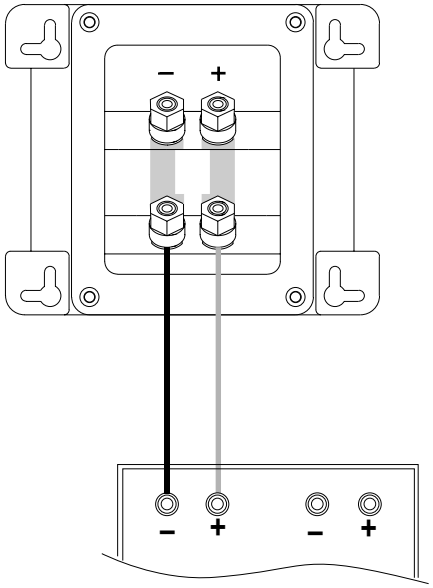


FIGURE 6

Connecting the Veritas™ 2.0R Rear Channel Surround Speaker

NOTE: The four connectors on the V2.0R speaker differ slightly from the other models.

PLEASE READ THIS SECTION CAREFULLY.

Under normal circumstances, you will never have the need to bi-wire, or bi-amplify the rear channel speakers in a typical home theater system. If you are unsure, in the meantime you may choose to connect them using the Standard Connection Method described below. Ask your authorized ***ENERGY®*** *Veritas™ dealer if there are any questions about your systems' particular needs.*

BI-WIRING AND BI-AMPLIFICATION

If you wish to bi-wire, or bi-amplify the V2.0R Rear Channel speakers, you may do so, however the terminals on the back are slightly different from the terminals found on the other models. The same four connectors are present, the difference being the type of connector, and the shape and type of gold-strap used to connect the upper and lower set of terminals. Refer to the Connection Instructions for Bi-Wiring, and Bi-Amplification for details on how to wire in this manner.

NOTE: To remove the straps from V2.OR, loosen the gold terminals, and pull the strap out to the right. It should easily fall out of place. Make sure you put them in a safe place for future use.

Adjusting the V2.0R Rear Channel speaker

The exclusive and patented "Soundfield Management" System allows adjustment of the surround field in different room environments, to compensate for different direct to reflected sound ratios. The controls permit adjustment of the soundfield type, and the relative level of the side firing drivers compared to the front drivers.

In a perfect world, all of the 5 speakers in a home theater would be the same distance from the listener. But when trying to implement a system into your room environment, this isn't always possible. The direct to reflected sound ratio is what allows the ear to judge distance and depth of the sound.

There are two controls on the "Soundfield Management" Control panel which is located behind the speaker grill on either the left or right side. The speakers are mirror imaged. ***See Figure 7.***

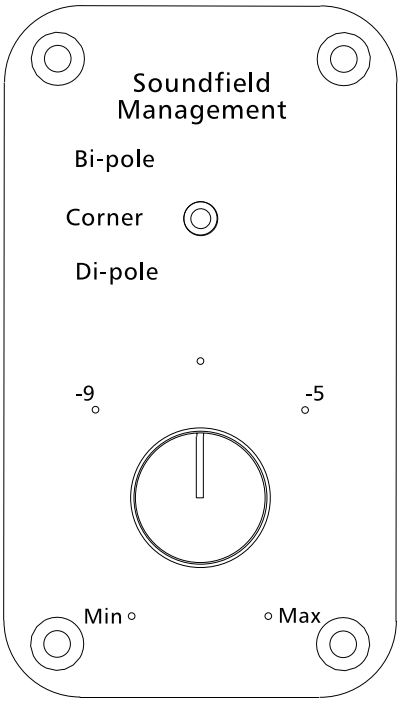


FIGURE 7

MODE SWITCH

The first control is the 3-Position Mode Switch. It allows you to customize the type of soundfield the speaker will produce.

Note: Regardless of the switches' position, the two front drivers are always functioning.

1) *In the "Corner" Position, one of the two side firing drivers are disengaged. The side-firing driver above the control panel is disengaged, while the other side firing driver remains active.*
2) *In the Bi-pole position the two side firing drivers are engaged and are operating in phase with each other. The resulting sound field is more expansive, and with correct placement, the sound will reflect off of room boundaries to create a large and expansive sounding surround field.*
3) *In the Di-pole position the side drivers are active, but are wired out of phase from each other. The resulting sound field is even more expansive, and can create an even larger effect than the bi-pole mode.*

LEVEL CONTROL

The Level Control adjusts the relative output of the side firing drivers compared to the front drivers. At the maximum setting they are approximately 1 dB lower in volume than the front drivers. The minimum setting turns the side firing drivers completely off.

HOW TO SET UP THE CONTROLS

The following chart (Diagram "B") will explain how to set up the controls on the Soundfield Management System. But follow these instructions first.

1) *The first thing you must do is measure two distances. First measure the distance between the listening position and one of the front speakers (D1 on Diagram "A"), then measure the distance between the listening position and the rear speakers, (D2 on Diagram "A"). Subtract the two measurements, and the resulting number is the difference. The bottom scale of the chart shows the difference in distance. See Diagram "A" for assistance, and Diagram "B" for the actual chart.*

Note: We do not recommend having the distance between the listener and the rear speakers to be greater than the front measurement.

2) *Locate the measured difference on the bottom scale of the graph (Diagram "B"), then follow the line up to where it intersects with the horizontal line and look to the left scale to see the level control setting recommendation. The grayed section shows when the Switch should be in Bi-Polar Mode, and the rest of the chart shows the Di-Polar Mode as the selected mode.*

3) *Always experiment with the controls, and adjust them to your liking, the chart will give you a good starting point, but each room is different, and depending on the V2.0R's location, furniture placement and materials in the room, adjustments may be necessary.*

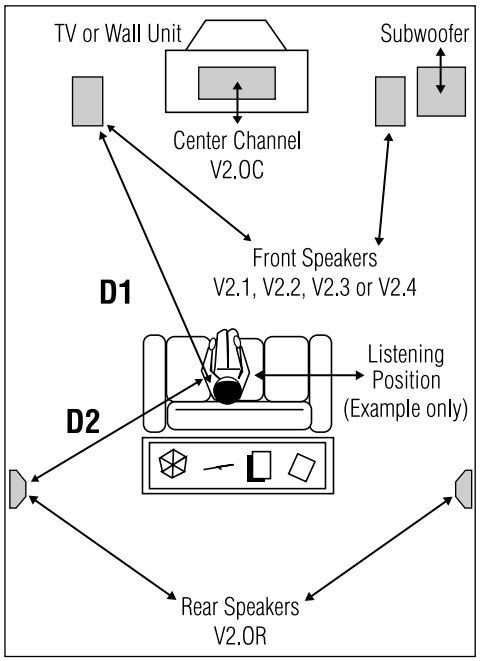


DIAGRAM A

Specifications

	V2.1 Bookshelf	V2.2 Bookshelf	V2.3 Floorstanding	V2.4 Floorstanding	V2.0C Center Channel	V2.0R Rear Channel
Speaker System	Bass Reflex Rear Vented	Bass Reflex Rear Vented	Bass Reflex Front Vented	Bass Reflex Front Vented	Bass Reflex Rear Vented	Acoustic Suspension
Recommended Amplifier Power	100 watts	150 watts	200 watts	250 watts	150 watts	100 watts
Impedance	8 ohm nominal	8 ohm nominal	8 ohm nominal	8 ohm nominal	8 ohm nominal	8 ohm nominal
Minimum Impedance	4 ohm	4 ohm	4 ohm	4 ohm	4 ohm	4 ohm
Frequency Response +/- 3dB (Typical Room Response)	45-20,000 Hz	40-20,000 Hz	35-20,000 Hz	30-20,000 Hz	50-20,000 Hz	70-20,000 Hz
Usable Base Response - 10dB (Anechoic Measurement)	39 Hz	35 Hz	29 Hz	25 Hz	40 Hz	46 Hz
Sensitivity (Two speakers in a typical room)	89dB	89dB	90dB	90dB	89dB	89dB
Crossover Points	1.8kHz	550Hz, 2.0kHz	300Hz, 550Hz, 2.0kHz	300Hz, 550Hz, 2.0kHz	2.0kHz	1.8kHz
Operating Range	Tweeter: 1.8kHz and > Woofer: ~ to 1.8kHz	Tweeter: 2.0kHz and > Midrange: 550Hz-2.0kHz Woofer: ~ to 550Hz	Tweeter: 2.0kHz and > Midrange: 550Hz-2.0kHz Woofer 2: ~ to 550Hz Woofer 1: ~ to 300Hz	Tweeter: 2.0kHz and > Midrange: 550Hz-2.0kHz Woofer 3: ~ to 550Hz Woofer 2: ~ to 300Hz Woofer 1: ~ to 150Hz	Tweeter: 2.0kHz and > Woofer: ~ to 2.0kHz	Tweeter: 1.8kHz and > Woofer: ~ to 1.8kHz Mid-Band: 200Hz-10kHz
Components	1" Aluminum Dome Tweeter 1-6-1/2" Linear Tandem Drive Woofer	1" Aluminum Dome Tweeter 2" Aluminum Dome Midrange 1-6-1/2" Linear Tandem Drive Woofer	1" Aluminum Dome Tweeter 2" Aluminum Dome Midrange 2-6-1/2" Linear Tandem Drive Woofers	1" Aluminum Dome Tweeter 2" Aluminum Dome Midrange 3-6-1/2" Linear Tandem Drive Woofers	1" Aluminum Dome Tweeter 2-6-1/2" Linear Tandem Drive Woofers	1" Aluminum Dome Tweeter 2-3" Mid-Band Fill Drivers 1-6-1/2" Linear Tandem Drive Woofer
Dimensions	H - 15" / 38cm D - 12-1/2" / 31.7cm W - 8-3/4" / 22cm	H - 18" / 45.7cm D - 13" / 33cm W - 8-3/4" / 22.2cm	H - 40-1/2" / 102.8cm D - 13" / 33cm W - 8-3/4" / 22.2cm	H - 46" / 116.8cm D - 17" / 43.1 cm W - 8-3/4" / 22.2cm	H - 8-3/4" / 22.2cm D - 12-3/4" / 32.3cm W - 23" / 58.4cm	H - 14-1/2" / 36.8cm D - 7-1/4" / 18.4cm W - 12-3/8" / 31.4cm
Shipping Weight	55lbs / 24.75kg (Dual)	69lbs / 31kg (Dual)	68lbs / 30.6kg	95lbs / 42.7kg	39lbs / 17.5kg	38lbs / 17.1kg (Dual)
Cabinet Finishes	Cherry Veneer w/ Black HG Black w/ Black	Cherry Veneer w/ Black HG Black w/ Black	Cherry Veneer w/ Black HG Black w/ Black	Cherry Veneer w/ Black HG Black w/ Black	Cherry Veneer w/ Black HG Black w/ Black	High Gloss Black with Reversible Trim Panels
Accessories	2 Silver Cone Isolators Rubber Bumpers	2 Silver Cone Isolators Rubber Bumpers	Spike Kit Rubber Bumpers	Spike Kit Rubber Bumpers	Rubber Bumpers	Two Reversible Trim Panels

Safety Concerns

IMPORTANT: Please retain the carton and packing materials for this ENERGY® Veritas™ product to protect it in the event you ever need to transport the unit for any reason. Product received damaged at a service center that has been shipped by the end user in other than the original packaging, will be repaired, refurbished and properly packaged for return shipment at the end user's expense.

CARE OF THE FINISH

Your new Veritas™ series speakers should be gently cleaned with only a damp cloth and warm water from time to time to remove any dust or fingerprints. Do not use an abrasive cleaner, or any type of ammonia based cleaners, or window type cleaners. To remove the dust from the grill cloth, use the brush attachment on your vacuum cleaner or a slightly dampened sponge or dust free cloth.

SPIKED AND RUBBER FEET

The Veritas™ V2.1 and V2.2 bookshelf loudspeakers include two rubber feet. These are to be attached to the speaker in the front corners when used with other stands, or if placed on a bookshelf or other stable surface. The bumpers are self adhesive and will protect the speaker as well as the surface it sits on. The rear of the speaker is supported by the single rest in the middle. ***See Figure 8.***

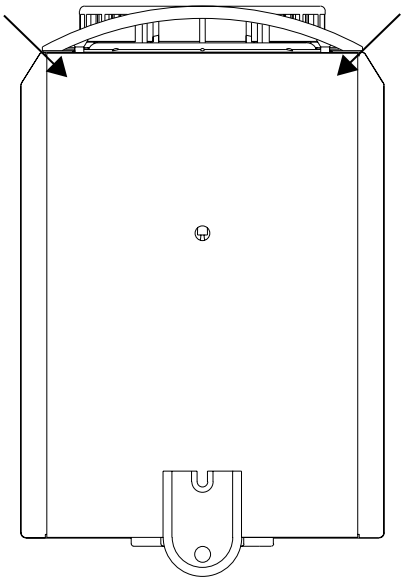


FIGURE 8

The V2.3 and V2.4 floor standing models however have four metal spikes included, with five insert locations. Use the spikes only on a carpeted surface as they can damage hardwood floors. You have a choice of using three spikes, two in the front, one in the rear, or four spikes, one in each of the speakers' corners. ***See Figure 9.***

NOTE: Use the four spike option if you are concerned about stability.

After installing the spikes and locating the speaker, do not move the speaker by any type of dragging motion. It can not only scratch the floor, but the inserts in the base of the speaker could be damaged. Always completely lift the speaker up to relocate its position.

SPIKE INSTALLATION INSTRUCTIONS

To insert the spikes, place the speaker carefully on its side, and insert the spikes into the desired locations. Then turn the spike by hand to the right until it is firmly seated. The spikes can also be used as levelers in case the floor is not perfectly level. ***See Figure 9.***

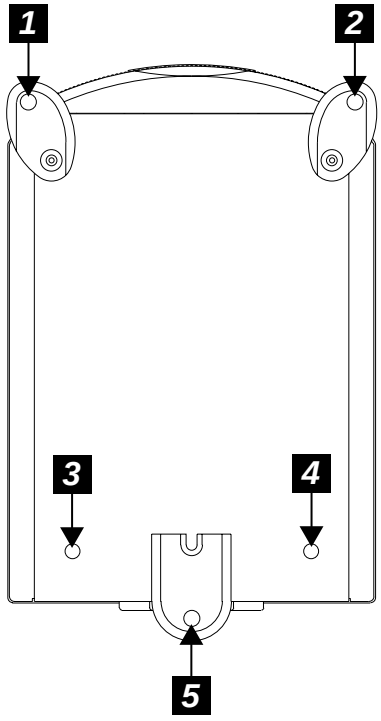


FIGURE 9

Limited Warranty Policy in the United States and Canada

ENERGY® LOUDSPEAKERS *warrants this product to the retail purchaser against any failure resulting from original manufacturing defects in workmanship or materials. The warranty is in effect for a period of 5 years from date of purchase from an authorized* ***ENERGY®*** *dealer and is valid only if the original dated bill of sale is presented when service is required.*

The warranty does not cover damage caused during shipment, by accident, misuse, abuse, neglect, unauthorized product modification, failure to follow the instructions outlined in the owner's manual, failure to perform routine maintenance, damage resulting from unauthorized repairs or claims based upon misrepresentations of the warranty by the seller.

Warranty Service

If you require service for your ***ENERGY®*** *loudspeaker(s) at any time during the warranty period, please contact:*
1) the dealer from whom you purchased the product(s),
2) ***ENERGY® NATIONAL SERVICE****, 203 Eggert Road, Buffalo, N.Y. 14215 Tel: 716-896-9801*
3) ***ENERGY® LOUDSPEAKERS****, a division of Audio Products International Corp., 3641 McNicoll Avenue, Scarborough, Ontario, Canada, M1X 1G5, Tel: 416-321-1800.*
4) Additional service centers can be found by checking the ***ENERGY® LOUDSPEAKERS*** *website: www.energy-speakers.com or, by calling either of the above numbers.*

You will be responsible for transporting the speakers in adequate packaging to protect them from damage in transit and for the shipping costs to an authorized ***ENERGY®*** *service center or to* ***ENERGY® LOUDSPEAKERS****. If the product is returned for repair to* ***ENERGY® LOUDSPEAKERS*** *in Scarborough or Buffalo, the costs of the return shipment to you will be paid by* ***ENERGY®****, provided the repairs concerned fall within the Limited Warranty. The* ***ENERGY®*** *Warranty is limited to repair or replacement of* ***ENERGY®*** *products. It does not cover any incidental or consequential damage of any kind. If the provisions in any advertisement, packing cartons or literature differ from those specified in this warranty, the terms of the Limited Warranty prevail.*

Warranty Outside of the United States and Canada

Outside North America, the warranty may be changed to comply with local regulations. Ask your local ***ENERGY®*** *dealer for details of the LIMITED WARRANTY applicable in your country.*

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