



Loudspeaker Owner's Manual & Warranty

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ASCEND
ACOUSTICS

INTRODUCTION

Congratulations on your purchase of an Ascend Acoustics loudspeaker system. We know you are excited to setup your speakers and begin your listening experience. Before you begin, please take a moment and browse through this owner's manual, it will serve as an aid to help you achieve the best sound in your unique environment. Please feel free to contact us anytime. We can be reached at (310) 719-9786 or by email at techsupport@ascendacoustics.com. Our website address is www.ascendacoustics.com. We invite you to check our site regularly for the latest news, reviews, helpful hints and our thriving online community.

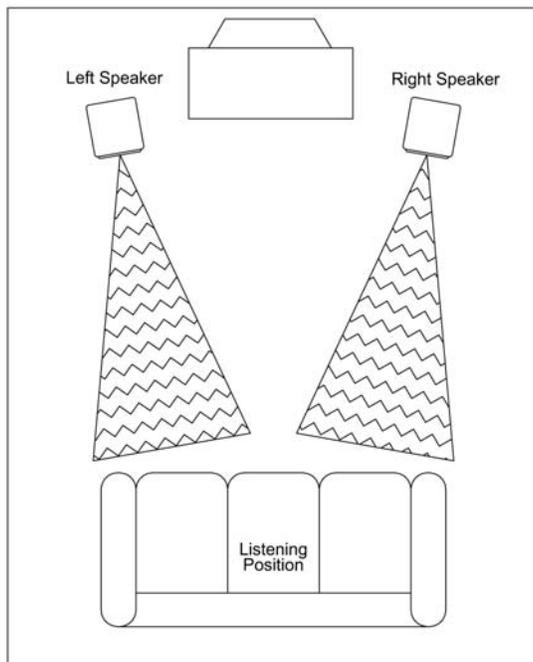
UNPACKAGING

Before you begin, please inspect the outer carton for any possible freight damage. Your speakers were shipped from our factory in perfect condition. If you suspect any freight damage, please contact us or the authorized distributor you made your purchase from "before" you continue. When you are confident that there is no freight damage, carefully remove each speaker from the box by gripping the sides of the speaker and lifting out. Do not grip the speaker by its grille frame. Please keep in mind that the speaker grille and speaker components can be damaged if not properly handled. Please be sure to save all packaging materials as our money back guarantee is conditional upon this and you will need the original packaging if your speakers should ever require servicing.

SPEAKER PLACEMENT

Optimum speaker location usually involves a compromise between aesthetics and personal sound preference. Ideally, left and right front channel speaker locations should be chosen in order to minimize any reflections. Walls, floor, and furniture can alter the response of the speaker. All Ascend Acoustics loudspeakers are designed to perform in real world listening environments, but very few rooms share the same acoustic properties due to variances in size, reflections, wall thickness and material, even carpeting. Due to all of these variables, you can follow a few basic rules of thumb and achieve excellent results in your unique environment. The below recommendations are suggestions, the best placement is always what sounds best to you.

Stereo – Left / Right Pair



STEP 1: CHOOSE YOUR LISTENING POSITION

This is the most common location you will be relaxing in while enjoying your speakers. Generally, it is the center of a couch or your easy chair.

STEP 2: POSITION SPEAKERS IN THE FRONT OF THE ROOM, POINTING TOWARDS THE LISTENING POSITION

Speakers should be located at least one (1) to two (2) feet in front of the wall behind them and the sound should have a direct path with no obstructions to the listening position. If the speakers are on either side of an entertainment center or similar structure, position so that the front of the speakers are closer to the listening position than the front of the structure. Try to minimize any obstructions between the left and right channels. To minimize reflections and maximize sound quality, we recommend the use of speaker stands for our stand-mountable speakers. If these speakers must be placed on a bookshelf, please move the speakers to the front edge so that no shelving hangs in front of the speaker.

Wall Mounting: Another popular setup option is to wall mount the speakers. In this situation, we recommend 3 inches of clearance behind our rear-ported speakers while our HTM series speakers can be placed directly against any rear walls. Important note: Ascend Acoustics recommends that all wall mount brackets used to mount our speakers be securely mounted to wall studs. Please avoid using all types of sheetrock anchors.

STEP 3: ORIENT THE SPEAKERS

For “HTM-200 SE” series speakers, orient the left/right speakers vertically with the tweeters to the inside. From top to bottom the speaker should be in a woofer-tweeter-woofer configuration.

STEP 4: SELECT THE VERTICAL HEIGHT OF THE SPEAKERS

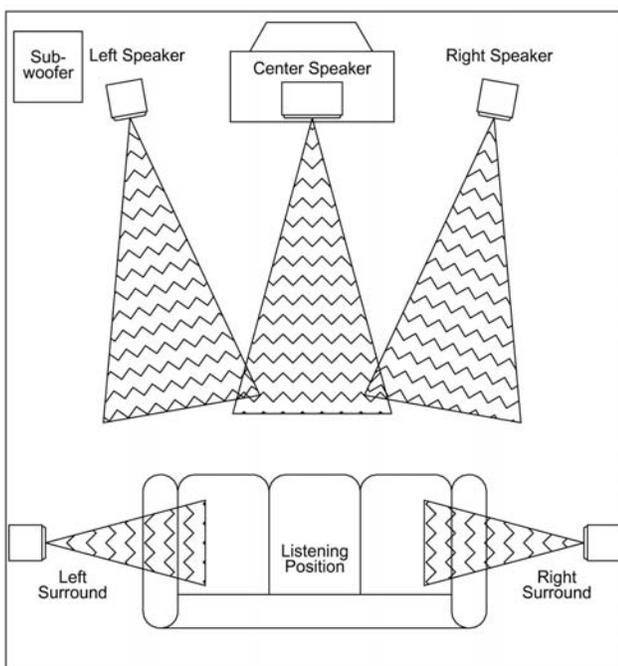
Optimum height is achieved with the tweeter at ear level while you are seated at your listening position. If this is not achievable, or if the speakers are mounted in a bookshelf, position the speakers so that the tweeter is higher than ear level as opposed to lower. The tweeter is the smallest transducer located on the front baffle of the speaker.

STEP 5: DETERMINE SEPARATION DISTANCE BETWEEN LEFT AND RIGHT SPEAKERS

Measure the distance from the listening position to the midpoint between the left and right speakers. Multiply this number by 0.73. This number is a good starting point for the separation distance between the left and right speakers, however, experimentation is best. Be sure that the speakers are positioned so that the midpoint between them is directly perpendicular to the listening position forming a ‘T’ configuration. Try to avoid locating either speaker too close to a sidewall.

STEP 6: TOE-IN LEFT AND RIGHT SPEAKERS

We recommend that you slightly angle in both left and right speakers so that the tweeter is aiming directly at the listening position, this angle should be between five (5) and ten (10) degrees.

Home Theater 5.1 System Suggested Speaker Placements

higher or lower than ear-level. If the speaker is to be placed below the television set, we recommend it to be at least 18” above the floor in order to reduce “floor bounce”. For “HTM-200 SE” speakers, lay the speaker on its side horizontally so that the tweeter is closest to your ear-level in a woofer–tweeter–woofer configuration (from left to right). Please note it is quite common for the center channel speaker to be positioned with a vertical height which is higher or slightly lower than the listening position.

STEP 4: POSITION THE LEFT AND RIGHT CHANNEL SPEAKERS

Please follow the abovementioned placement guidelines for a stereo left/right pair. Optimum left/right/center channel blending is obtained when the left and right channel speakers are equidistant from the center channel speaker.

STEP 1: CHOOSE YOUR LISTENING POSITION

This is the most common location you will be relaxing in while enjoying your speakers. Generally it is the center of a couch or your easy chair.

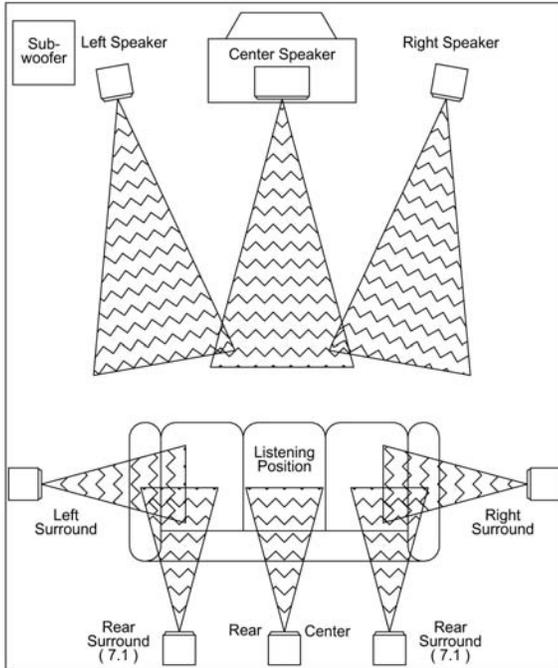
STEP 2: SELECT CENTER CHANNEL SPEAKER LOCATION

Locate the center channel speaker directly on top or below your television set. Do not be concerned about distortion to your TV picture due to the magnetic field generated by the speaker*. Every Ascend center channel speaker is available in a fully magnetically shielded version. Try to position this speaker so that it is centered directly across from your Listening Position. (*Note: flat-panel TV’s do not require magnetic shielded speakers)

STEP 3: CENTER CHANNEL SPEAKER ORIENTATION

All Ascend Acoustics center channel speakers are designed to have symmetrical vertical dispersion when placed horizontally. This means that good results will be obtained if the speaker is situated

Home Theater 6.1 & 7.1 Suggested Placement



STEP 5: SELECT SURROUND CHANNEL SPEAKER LOCATIONS

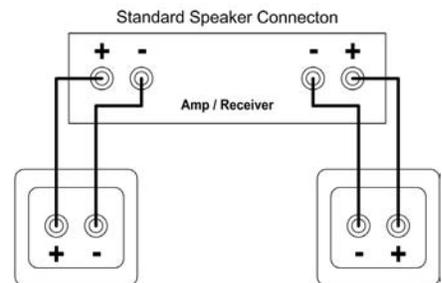
Choosing a location for the surround speakers requires some ingenuity and creativity to balance room aesthetics with function. Try to place these speakers to the left and right of your listening position (at least 3 feet away) and aiming directly at each other. We also recommend a vertical height of 2 to 3 feet above your listening position. Distance between these speakers should be the same or greater than the distance between the front left and right speakers. Do not be concerned with any reflections; these will only enhance the desired ambient sound characteristics of the surround channels. Please see the placement diagrams for 5.1, 6.1, and 7.1 recommended surround placement. Please note, if you intend to place the surrounds behind the listening position against the rear wall and aiming towards the front of the room, be sure your listening position is at least 3 feet away from the rear speakers.

STEP 6: SURROUND SPEAKER ORIENTATION

For “HTM-200 SE” series speakers, orient the left/right surround speakers vertically with the tweeter closer to the rear wall. If the speakers are behind the listening position, orient vertically with the tweeters to the outside. In typical 6.1 and 7.1 systems, it is common to use our CMT series center channel lying horizontal several feet behind and above the listening position.

CONNECTION TO AMP OR RECEIVER

Once the initial speaker locations are chosen and your audio system is TURNED OFF, you may connect each speaker to its appropriate output channel on the back of your amplifier or receiver. Ascend Acoustics recommends the use of quality 14 gauge or larger diameter copper stranded speaker wire. All of our loudspeakers are equipped with high quality gold plated 5-way binding posts that allow for an easy and secure connection with the majority of cables and terminations available. We don’t believe any particular kind of speaker wire termination is better than any other, however, the use of banana plugs does allow the ability to quickly remove and reconnect the wires.

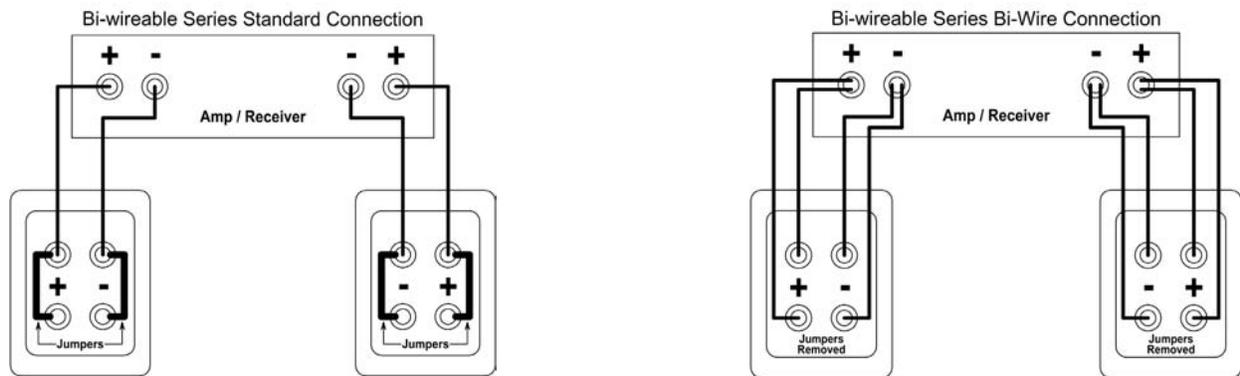


Be careful to connect the (+) and (-) amp/receiver outputs to their respective (+) and (-) input terminals on the back of each speaker. Red refers to plus or positive, while black refers to minus or negative. Once all appropriate connections have been achieved, you may power the system and enjoy. In order to receive maximum performance, it is critical to wire the speakers “In-Phase”, meaning ALL speakers in your audio system have been wired positive to positive and negative to negative.

Bi-Wiring

Several of our loudspeakers offer the ability to be bi-wired. If your speakers have 2-pairs of inputs on the back (as opposed to 1-pair) and one set is labeled “High-Frequency” while the other is labeled “Low-Frequency”, your speakers have the option to be bi-wired. Bi-wiring offers the ability to send the high frequency signals and low frequency signals distinctly to the high frequency and low frequency section of the speaker’s internal crossover. This is accomplished by running 2-pairs of cables off of one set of amp or receiver outputs directly to the respective input on the crossover. The theory is that by separating these frequencies, certain intermodulation distortions can be minimized, thus improving the overall performance of the speaker.

If you intend to bi-wire, you must remove the pair of metal jumpers connecting the left and right high frequency inputs to the low frequency inputs. For standard speaker wire connection, the pair of metal jumpers must remain connected or the speaker will not function properly. Please note, improper speaker wire connections can damage both the speaker and your receiver or amplifier. If you are unsure of a particular connection scheme, please contact us.



TWEAKING

By adjusting speaker location, you may fine-tune the sound of your system to your personal taste.

Locating your loudspeakers closer to walls and room corners can enhance bass response. For rear-ported speakers, air will flow freely in and out of this port at high velocity. This airflow should not be inhibited; therefore the rear baffle of this loudspeaker should be located at least 3-4" away from a wall or any other obstacle. Bass response can be further enhanced by the addition of a powered subwoofer.

High frequency and midrange response (vocals) can be improved by minimizing any obstructions that are in the direct path of the output of the loudspeaker to the listener. Further improvement can be realized by the use of speaker stands, which will also enhance stereo imaging.

USE WITH A SUBWOOFER

Ascend Acoustics encourages the use of a powered subwoofer to enhance bass reproduction. All of our bookshelf and home theater speakers are designed to blend seamlessly with today's subwoofers. If you own a subwoofer and are having difficulty achieving a natural sounding transition between speaker and subwoofer or if the system sounds "boomy," we recommend you try the following.

1. If you are using a surround sound processor or receiver, be sure the hi-pass filter is enabled. For most receivers, this is enabled by setting the speakers to the "small" setting in the speaker configuration setup. This filter limits low frequencies from reaching the speakers yet allows them to pass thru to the subwoofer, thereby enhancing overall sound quality and improving the blend between subwoofer and speaker. For further details, please consult the manufacturer of your processor/receiver or browse through its documentation.
2. Check the subwoofer and speaker phasing. If your subwoofer has a phase switch, simply reverse the phase and listen once again. If you detect an improvement, leave the subwoofer phase in that position. If your subwoofer does not have a phase switch, turn off the power on all of your audio equipment and disconnect all speakers except the subwoofer and the front left and right channels. Reverse the positive and negative speaker wires at the input terminals of both left and right speakers. Power on the system and listen. Repeat this procedure once again, reversing the speaker wires back to their original configuration. If you cannot hear any improvement with the speaker leads in the reverse configuration, then leave in the original configuration. If you do hear an improvement in the reverse wiring, then leave in this position. It is critical that all speakers be wired in the same phase as the front left and rights.

WARRANTY**ASCEND ACOUSTICS
LIMITED 5 & 7 YEAR TRANSFERABLE WARRANTY**

ASCEND ACOUSTICS, INC., herein referred to as "Ascend," warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below) for a period of five (5) years for HTM, CBM and CMT series loudspeakers, seven (7) years for Sierra series loudspeakers, from the original date of purchase.

Warranty coverage is extended to all end users of our products, original or secondary. Any owner other than the original purchaser must notify Ascend of a transfer of ownership within thirty (30) days in writing or by website registration. A copy of the original purchase invoice will be necessary to complete transfer of warranty.

Ascend's obligation under this warranty is limited to repairing and/or replacing any component which it finds defective in material or workmanship under normal, non-commercial conditions of use. Any replacement product will be warranted for the remainder of the original warranty period. Removal or alteration of the factory-applied serial number will void this warranty.

Ascend shall not be liable for any monetary damages whatsoever (including, but not limited to, special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, or any other pecuniary loss) arising out of the use of, or inability to use, this product, even if Ascend has been advised of the possibility of such damage. Ascend and its suppliers' entire liability under any provision of their warranty shall be limited to the amount actually paid for the product.

This warranty does not cover damage due to acts of God, fire, accident, abuse, misuse, cosmetic damage, or modification of, or to any part of the product. This warranty does not cover damage due to attempted repair by anyone other than Ascend authorized technicians, or damage due to improper installation or operation. Any unauthorized repairs will void this warranty.

All products returned to Ascend for warranty repair must be packaged in original or equivalent packaging and accompanied by a return authorization number issued by an Ascend representative. Return authorizations may be obtained by contacting Ascend. All transportation charges for products shipped to Ascend are the responsibility of the customer and must be paid in advance. Any damage to product incurred during transportation to Ascend is the sole responsibility of the customer.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON OUR PART, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ASCEND ACOUSTICS, INC. NEITHER ASSUMES, NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT, ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, REPAIR OR RETURN OF ANY PRODUCT.

SPECIFICATIONS

	HTM- 200 SE	CBM- 170 SE	CMT- 340 SE	Sierra-1
Frequency response	74 Hz - 22 kHz ± 3dB	58 Hz - 22 kHz ± 3dB	48 Hz - 22 kHz ± 3dB	44Hz - 22kHz ± 3dB
Nominal impedance	8 ohms	8 ohms	8 ohms	8 ohms
Power handling*	25 - 200 watts	25 - 200 watts	25 - 240 watts	55 - 200 watts
Sensitivity	87 dB	89 dB	90 dB	86.5 dB
Cabinet Tuning	acoustic suspension	pass reflex via rear port	pass reflex via rear port	pass reflex via rear port
Cabinet Material	MDF	MDF	MDF	VLAM™, Laminated Bamboo
Dimensions H x W x D**	11" x 6.5" x 6.375"	12" x 9" x 10"	21" x 7.5" x 10.5" ***	14.25" x 7.5" x 10.5"
Weight	10 lbs. each	14 lbs. each	24 lbs. each	20 lbs. each
Tweeter(s)	(1) 27mm high definition soft dome tweeter w/double chambered neodymium magnet, ferrofluid cooled voice coil, wide dispersion faceplate, shielded (2) proprietary 4" long throw polygel cone, cast chassis, rubber surround, vented pole piece, high-compliance, magnetically shielded	(1) 27mm high definition soft dome tweeter w/double chambered neodymium magnet, ferrofluid cooled voice coil, wide dispersion faceplate, shielded (1) proprietary 6.5" long throw polygel cone woofer w/phasing plug, non-resonant polymer chassis, rubber surround, shielded	(1) 27mm high definition soft dome tweeter w/chambered magnet assembly, ferrofluid cooled voice coil, wide dispersion faceplate, shielded (2) proprietary 6.5" long throw polygel cone woofer w/phasing plug, non-resonant polymer chassis, rubber surround, shielded	(1) 26mm high-definition soft dome tweeter w/integrated elastomer wave guide, wide surround, low-viscosity magnetic fluid cooling, pole-piece damping chamber. (1) proprietary 5.25" long throw mineral-filled polypropylene cone, cast frame, copper shorting rings, low-inductance motor assembly, vented pole-piece and vented spider.
Woofers	(2) proprietary 4" long throw polygel cone, cast chassis, rubber surround, vented pole piece, high-compliance, magnetically shielded	(1) proprietary 6.5" long throw polygel cone woofer w/phasing plug, non-resonant polymer chassis, rubber surround, shielded	(2) proprietary 6.5" long throw polygel cone woofer w/phasing plug, non-resonant polymer chassis, rubber surround, shielded	(1) proprietary 5.25" long throw mineral-filled polypropylene cone, cast frame, copper shorting rings, low-inductance motor assembly, vented pole-piece and vented spider. (2) high-performance gold plated all metal 5 way binding posts
Connections	(2) gold plated all metal 5 way binding posts	(2) gold plated all metal 5 way binding posts	(4) gold plated all metal 5 way binding posts, bi-wire	(2) high-performance gold plated all metal 5 way binding posts
Inserts	(2) ¼" x 20 inserts for mounting to stands/brackets	(2) ¼" x 20 inserts for mounting to stands/brackets	(1) ¼" x 20 inserts for mounting to stands	(1) ¼" x 20 inserts for mounting to stands
Magnetic Shielding	full magnetic shielding	full magnetic shielding	full magnetic shielding	option available
Warranty	5 yr parts and labor	5 yr parts and labor	5 yr parts and labor	7 yr parts and labor

* Unclipped peaks

** With grille on

*** CMT-340 SE center dimensions are 7.5" x 21" x 10.5"