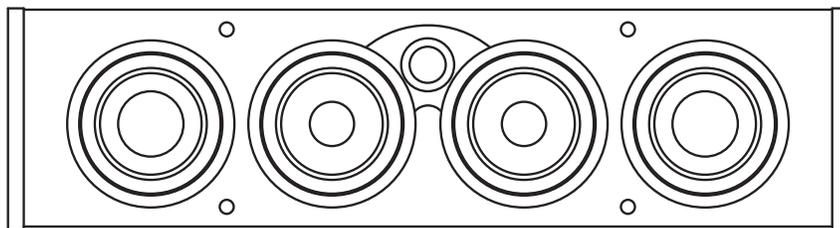
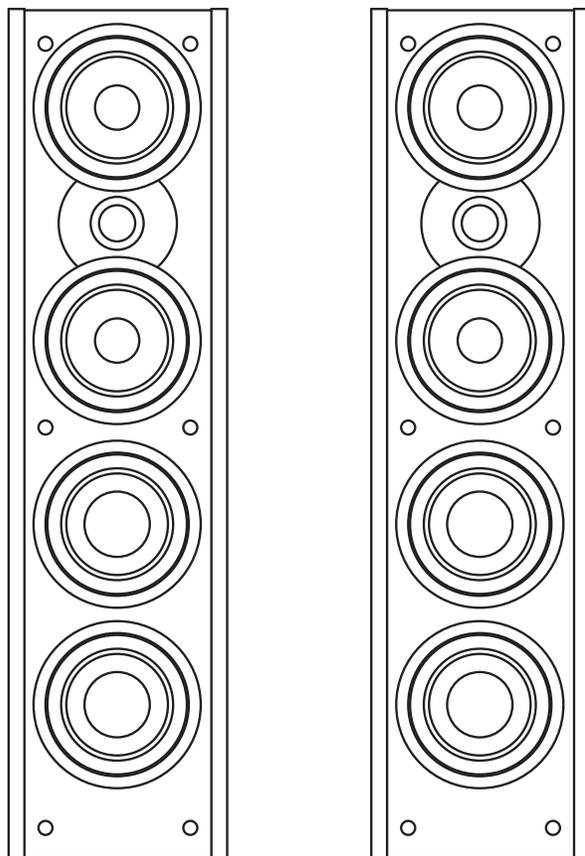


System FS-3200

High Performance Loudspeaker Components



 **Atlantic Technology**[®]
bringing entertainment home[™]

Instruction Manual

Table of Contents

- 2 Unpacking the Speakers**
- 2 Attaching the Grilles**
- 3 Individual Component Descriptions**
 - 3 Model FS-3200 LR and FS-3200 C Speakers
 - 3 Acoustic Controls
 - 3 Optional Model 2200 SR Surround Speakers
- 4 Assembling the Speakers**
- 5 Placement**
 - 5 Speaker Placement and Home Theater
 - 5 Speaker Placement for a 3-Piece System
- 6 Speaker Placement — Optional Surround and Subwoofer**
 - 7 Surround Effects and Speaker Locations
 - 7 6.1 and 7.1 Channel Systems
- 7 Connecting Your System**
- 8 System Wiring**
- 9 System Setup**
 - 9 Bass Management
 - 9 Operation of Rear Panel Controls on the FS-3200s
 - 9 Dipole/Bipole Operation of the 2200 SR Speakers
 - 9 Setting Levels
- 10 Care of Your Speakers**
- 11 Specifications**

System FS-3200 High Performance Loudspeaker Components

Thank you for choosing Atlantic Technology products. Your new speaker components are precision-crafted to give you years of enjoyable, trouble-free service. This manual covers the Atlantic Technology System FS-3200 speaker components. It will show you how to incorporate these components into your present setup, as well as how to assemble a complete system from them. These systems can be used with all current and past sound formats including Stereo, Dolby Surround®, Pro Logic®, Dolby Digital 5.1®, Dolby Digital EX®, DTS®, DTS ES®, DTS ES Discrete®, DTS Neo:6®, DVD-Audio and SACD Audio.

IMPORTANT: *Although it may seem like asking for driving directions, please take a few moments to read all of this booklet. It has many helpful tips and ideas on properly setting up and using your system. We promise that if you take the time to read and follow these tips you'll get better system performance and more enjoyment.*

Unpacking the Speakers

Use care when unpacking the speakers. Remember to keep the original boxes and packing material, in the unlikely event the speakers need servicing, or if you move.

Attaching the Grilles

The included metal grilles are held to the front of the enclosures with powerful neodymium magnets. There are depressions on the back of the grille that the magnets fit into. Once the speakers are in their final position. Position the grille over the magnets on the baffle. Move them together slowly and when you get close enough, the magnets will draw the grille in and hold it tight. Be careful not to get your fingers caught between the grille and the cabinet.

For Future Reference

Record the serial number and date of purchase for each speaker here. The serial number is found on the speaker terminal panel on the back of the enclosure.

Serial Number _____

Serial Number _____

Serial Number _____

Date of Purchase _____

The contents of this manual are Copyright © 2003 by Atlantic Technology International, Corp., and may not be duplicated or reproduced by any means, whether physical, electronic or otherwise without prior written consent from Atlantic Technology International, Corp.

Atlantic Technology and the Atlantic Technology logo are registered trademarks of Atlantic Technology International, Corp.

Specifications are those in effect at the time of printing. Atlantic Technology International, Corp. reserves the right to change specifications or designs at any time without notice without obligation to modify existing units.

Individual Component Descriptions

Model FS-3200 LR and FS-3200 C Speakers

The Model FS-3200LR and FS-3200C Speakers are high-performance 2-way systems intended for use with the latest generation of flat screen video displays. The advanced design of these speakers deliver detailed, articulate sound, for a dramatic viewing experience. Each speaker contains two GLH (Graphite Loaded Homopolymer) 4½-inch (115mm) woofers, two GLH 4½-inch Pressure Drivers and an advanced 1" (25mm) ferrofluid-cooled, damped soft dome tweeter with a powerful neodymium magnet structure. The drivers are mounted in an acoustically inert, heavily braced MDF enclosure and are magnetically shielded so they may be placed close to any type of video monitor without concern of video interference.

For accurate reproduction of a multi-channel soundtrack, the three front-channel speakers must have the same essential tonal balance. Therefore, using two FS-3200LR speakers and an FS-3200C speaker across your front soundstage for the Left, Center, and Right channels will provide an exceptionally smooth and coherent sonic signature.

Acoustic Controls

System FS-3200 includes unique acoustic controls to help maximize its performance in your room. These controls are explained in greater detail on page 9.

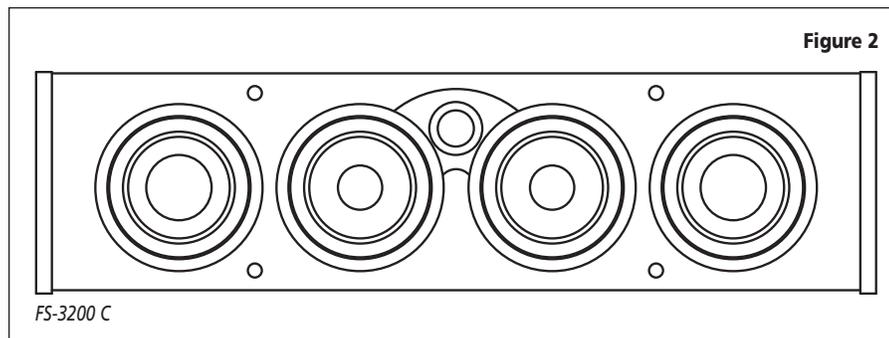


Figure 2

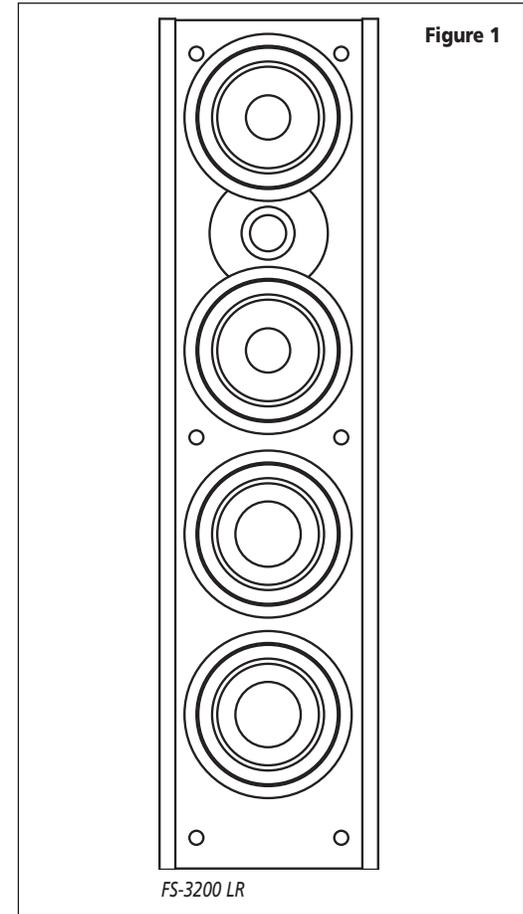


Figure 1

NOTE: Although the speakers in the Atlantic Technology System FS-3200 are acoustically and cosmetically matched to each other for ideal results, they may also be used with other Atlantic Technology components and a wide variety of speakers from other manufacturers with excellent results.

Optional Model 2200 SR Surround Speakers

The Model 2200 SR Dipole/Bipole Surround Speakers (Figure 3) are intended for use in multi-channel audio/video sound systems as dedicated side or back surround channel speakers. The 2200 SR enclosure has two 4½" (115mm) GLH woofers and two of the same high performance soft dome tweeters found in the 2200 front speakers. The surround speakers can be switched between Dipole and Bipole operation. These settings are explained on page 8, "Dipole/Bipole Operation of the SR Speakers."

Because of their small size, both the model 920 LR and 1200 LR make an excellent surround speaker. When using either LR as a surround speaker, the best results will be obtained if the speakers do not aim directly at the listening area. Mount the LR's on the side walls, above and slightly behind the listening position (See page 6).

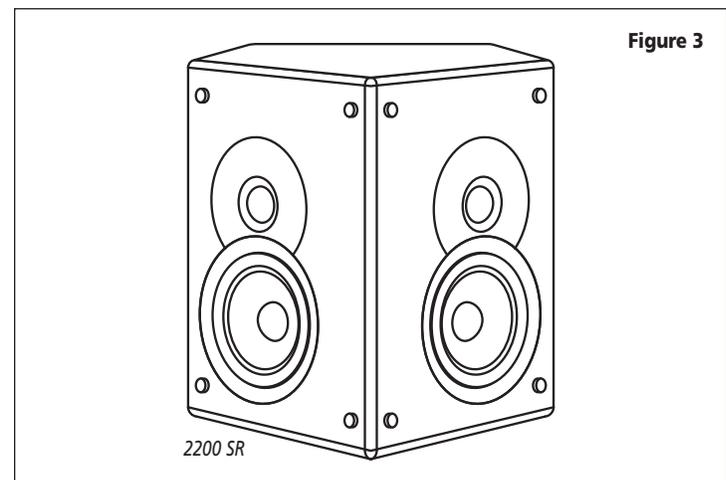
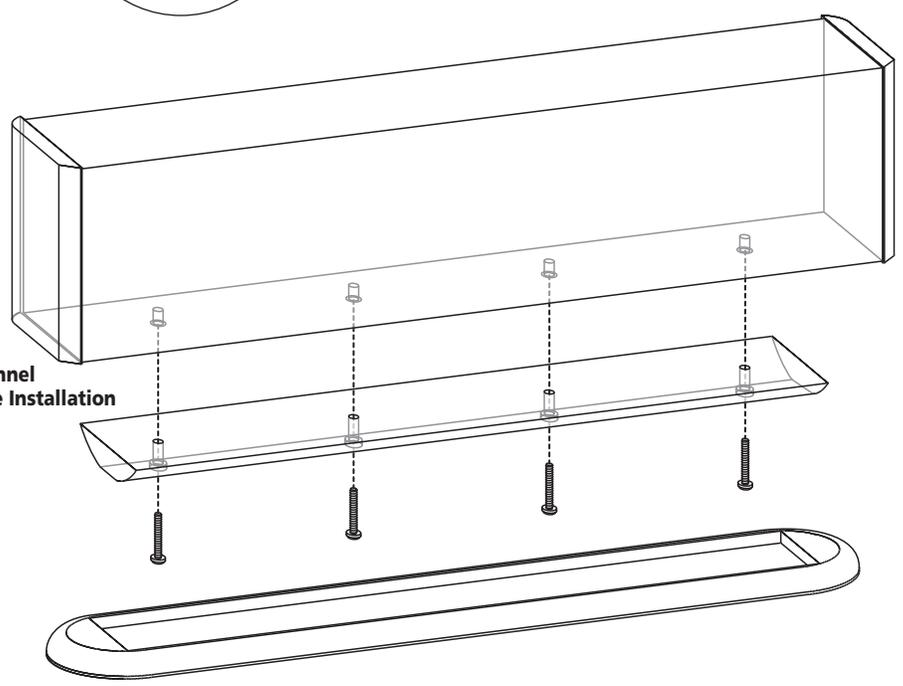
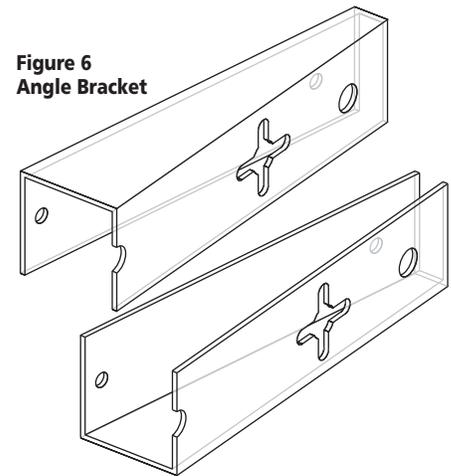
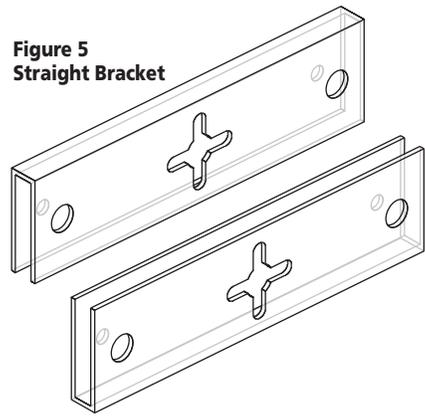
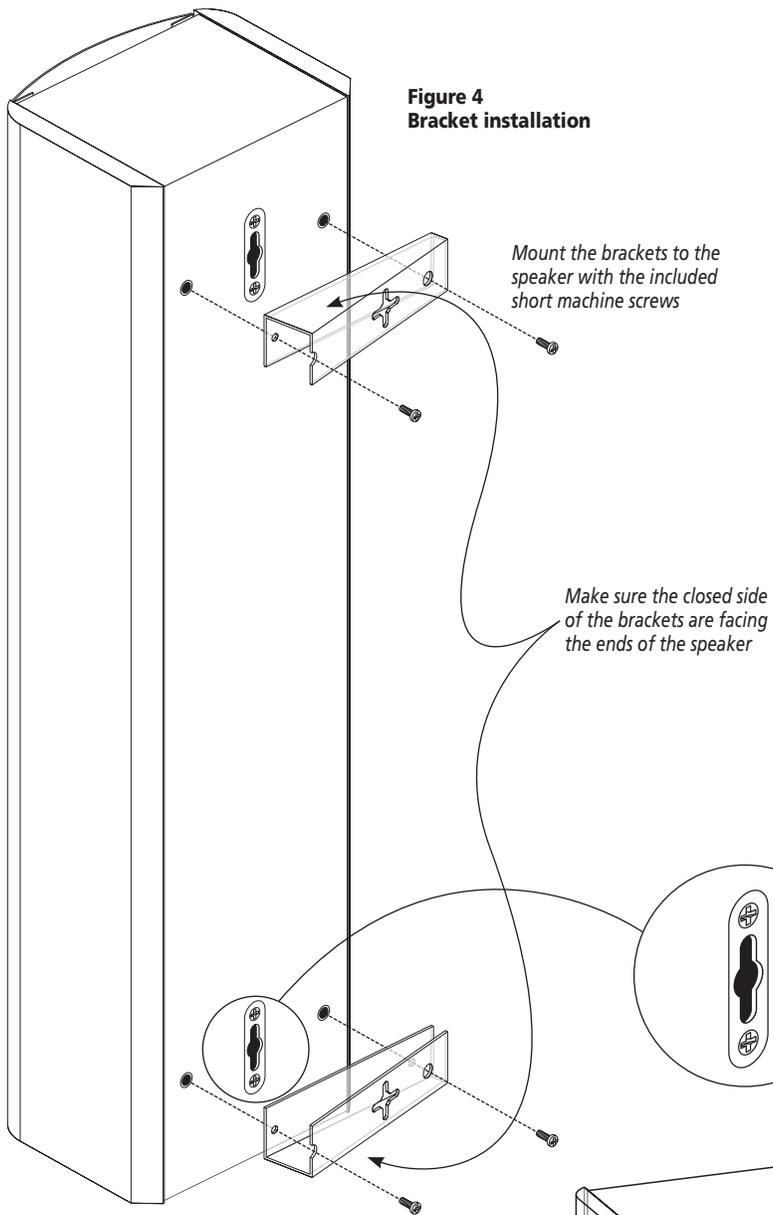


Figure 3

Assembling the Speakers



Placement

Speaker/room interactions have a significant impact on the sound of the system. The Model FS-3200 speakers have been designed to deliver outstanding performance when mounted on the wall or used with their optional floorstands.

Speaker Placement and Home Theater

Remember that the primary goal of a good home theater is not to make you believe that you are in a movie theater. It's to make you believe you're in the movie. For a home theater system, place the FS-3200LR speakers on either side of your flat screen display. The left and right front speakers should be far enough apart (6 to 10 feet, 2-3 meters, is usually best) that you get a good stereo "image" when they are playing alone, but not so far apart that the sound seems to be disembodied from the TV, distracting you from the picture.

When also using a center channel speaker, a wider separation of the left and right front speakers is usually possible. You may choose to "toe" the LR speakers in, aiming them approximately at the prime listening position with the Angle Bracket (supplied - See figure 6). This can be particularly useful if the front LR speakers are fairly far apart.

The FS-3200C center channel speaker can be mounted either above or below the video display. This speaker also comes with your choice of two wall-mount brackets, a Straight Bracket that points the speaker straight ahead, and an Angle Bracket that either points the speaker down at the listeners (if it's mounted above the display) or up at the listeners (if it's mounted below the display).

In addition, the FS-3200C can also be used as a traditional set-top center channel speaker. Should you choose to use it that way, we've included Atlantic's exclusive Rocker Base. This base attaches easily to the bottom of the speaker so that it may be tilted up or down towards the listening area as needed. Alternately, the speaker can be placed directly on a shelf or on the television without the rocker base, if desired. Four self-adhesive rubber feet are included to prevent vibration and protect the mounting surface. See figure 7 to attach the Rocker Base

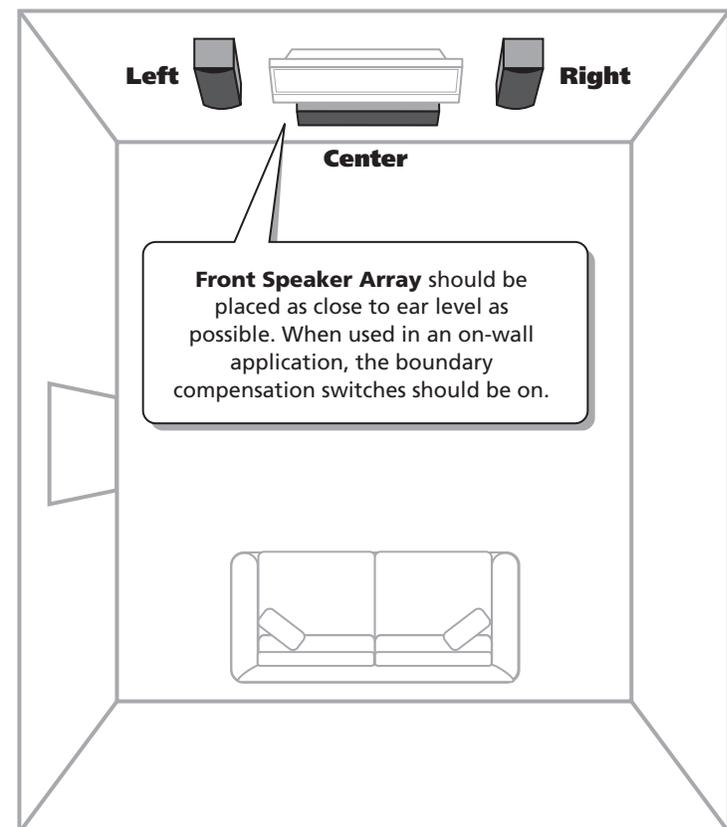
IMPORTANT NOTE *Try to keep the LR and C tweeters at approximately the same height (within 12-18 inches) and aimed at ear level when seated. Doing so provides a more realistic spread of the sound into the room, making for a much better sonic experience for a group of listeners and reducing the need to sit in a precise "sweet spot."*

When mounted on the wall, the FS-3200LR speakers may be turned "upside down" so the tweeter is either at the top or the bottom end of the cabinet, depending on whether the FS-3200C is mounted above or below the video screen. You may also simply mount the speakers to the wall using the built-in keyhole bracket.

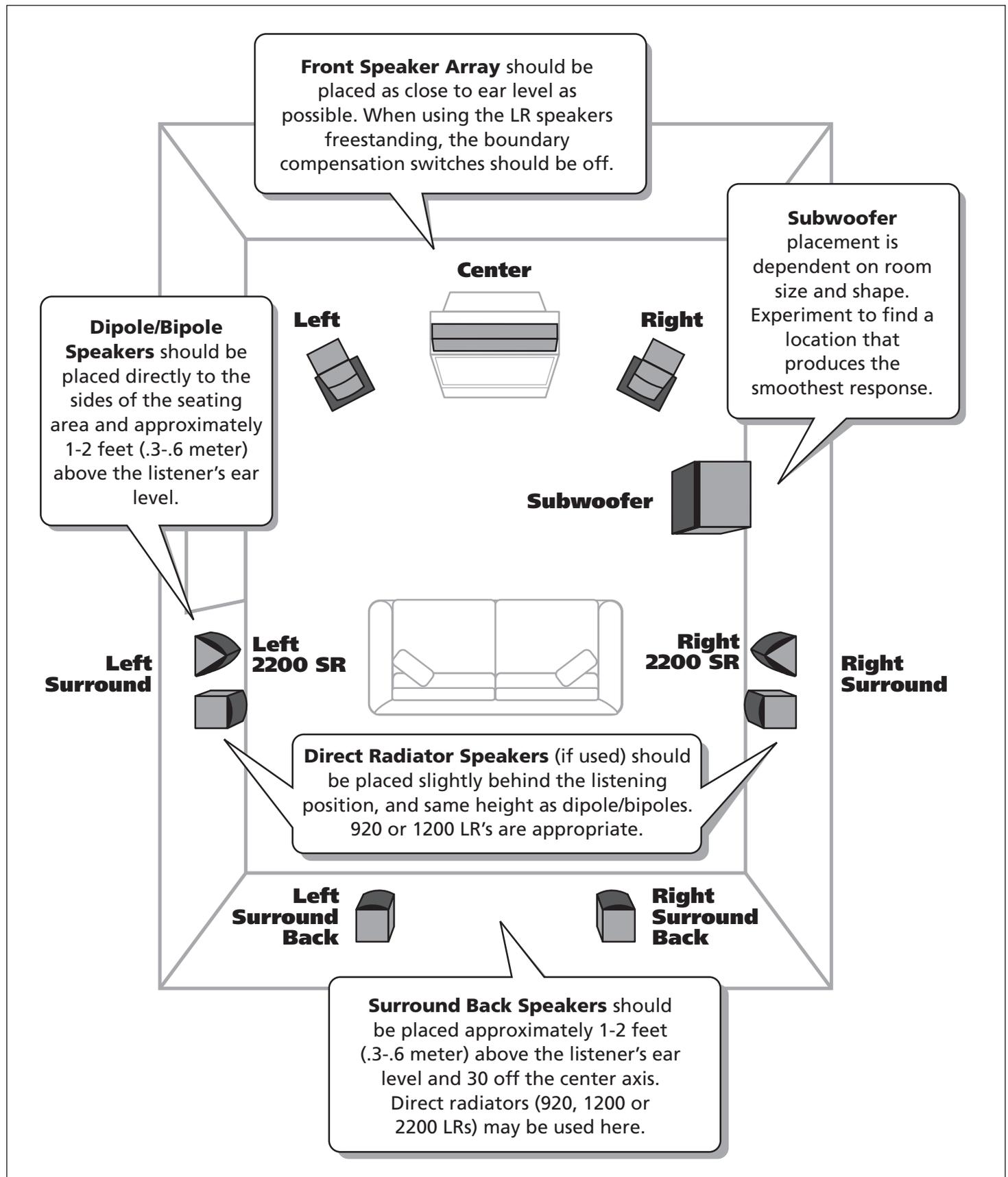
Because of the high quality components used, these speakers are very heavy for their size and care must be used when hanging them. Be sure to use a strong screw to drive into the wall, one whose head and shaft will fit properly within the keyhole opening and slot. Also be sure to drive the screw directly into a stud or to use a mounting device (such as a molly-bolt) that is capable of safely holding the speaker's weight. Never simply drive a nail or screw into sheet rock or other wall materials, as this mounting method may not be sufficient to safely support the weight of the speaker.

NOTE: *Always consult a knowledgeable installer regarding the proper mounting hardware to use with your speakers.*

Speaker Placement for a 3-Piece system



Speaker Placement — Optional Surround and Subwoofer



Surround Effects and Speaker Locations

All Atlantic Technology speakers are “voiced” to the same standards of tonal neutrality and sonic accuracy. We design all of our speakers to transmit the program material into the listening environment as precisely as possible. Therefore, any of our surround speakers, such as our model 2200SR Bipole/Dipole surround speakers, would be an excellent match for an FS-3200-based home theater system. Begin with the side speakers set to “Dipole,” then experiment with the Bipole/Dipole switch to obtain the most pleasing and realistic effect in your listening room.

See your Atlantic dealer or visit our website (www.atlantictechnology.com) for more information.

The best location for surround speakers is straight out to the sides, or slightly behind the primary listening area, approximately 1-2 feet (.3-.6m) above seated ear level, but no closer than 2 feet (.6m) from the ceiling. (See figure 6.) The surround speakers are primarily intended to re-create the ambient sounds taking place in the movie scene. Therefore, throughout most of a movie or TV program you may not be consciously aware of output from these speakers. In other words, don't worry if you aren't hearing the surround speakers. Please try to avoid the trap of turning the surrounds up and up so that you hear them most of the time. The result will be a much less believable surround experience.

6.1 and 7.1 Channel Systems

For best performance in a 7.1 channel system, we recommend using another pair of 920, 1200 or 2200 LR's on the back wall, and 2200 SR's on the side walls.

If you are setting up a system that uses back surround speaker(s) as well as side surrounds (Dolby Digital EX, DTS ES, etc.) you can choose to use either SR model speakers in Dipole or Bipole mode or another pair of front LR speakers in the back of the room. If the 2200 SR's are used as back surrounds in a 6.1 or 7.1 channel system, they should be installed with the Right speaker placed over the listener's left shoulder and the Left speaker placed over the listener's right shoulder. About one-third of the way out from the corners in most rooms is a good starting point.

If you are using a THX Ultra 2 certified controller/receiver, you should place the back surround speakers approximately 1 to 2 feet (.3-.6m) apart in the center of the back wall. The special circuitry in the processor will help to create a believable and effective surround field using this placement. Please read the electronics manual to learn more about this placement option.

Connecting Your System

We recommend that you connect your system using high quality dual conductor stranded wire of 16 gauge or heavier, for lengths up to 25 feet (8m). Remember, the lower the gauge number, the heavier the wire. Use heavier gauge wire for longer runs. Please contact your audio/video dealer or installer for specific cable recommendations and further information regarding special circumstances. The terminals themselves are designed to allow the use of very heavy speaker wire or connectors. Be sure to tighten them securely, but don't over-tighten them.

WARNING: To prevent risk of electrical shock or damage to your equipment, always switch off the amplifier or receiver when making any system connections.

You can connect your speakers by using a variety of audio connectors such as banana plugs, pin connectors, spade lugs, etc., or you can:

1. Remove ½" (13mm) of insulation from each wire end.
2. Twist the stranded wire together, keeping the two ends separate.
3. Place the appropriate wire through the postholes in the connectors. These holes are revealed when you loosen the connector's capscrew.
4. Tighten down the capscrew tightly, but be careful not to over tighten it.
5. Check the tightness of the capscrews 24 hours after hookup and occasionally after that, as they can loosen over time.

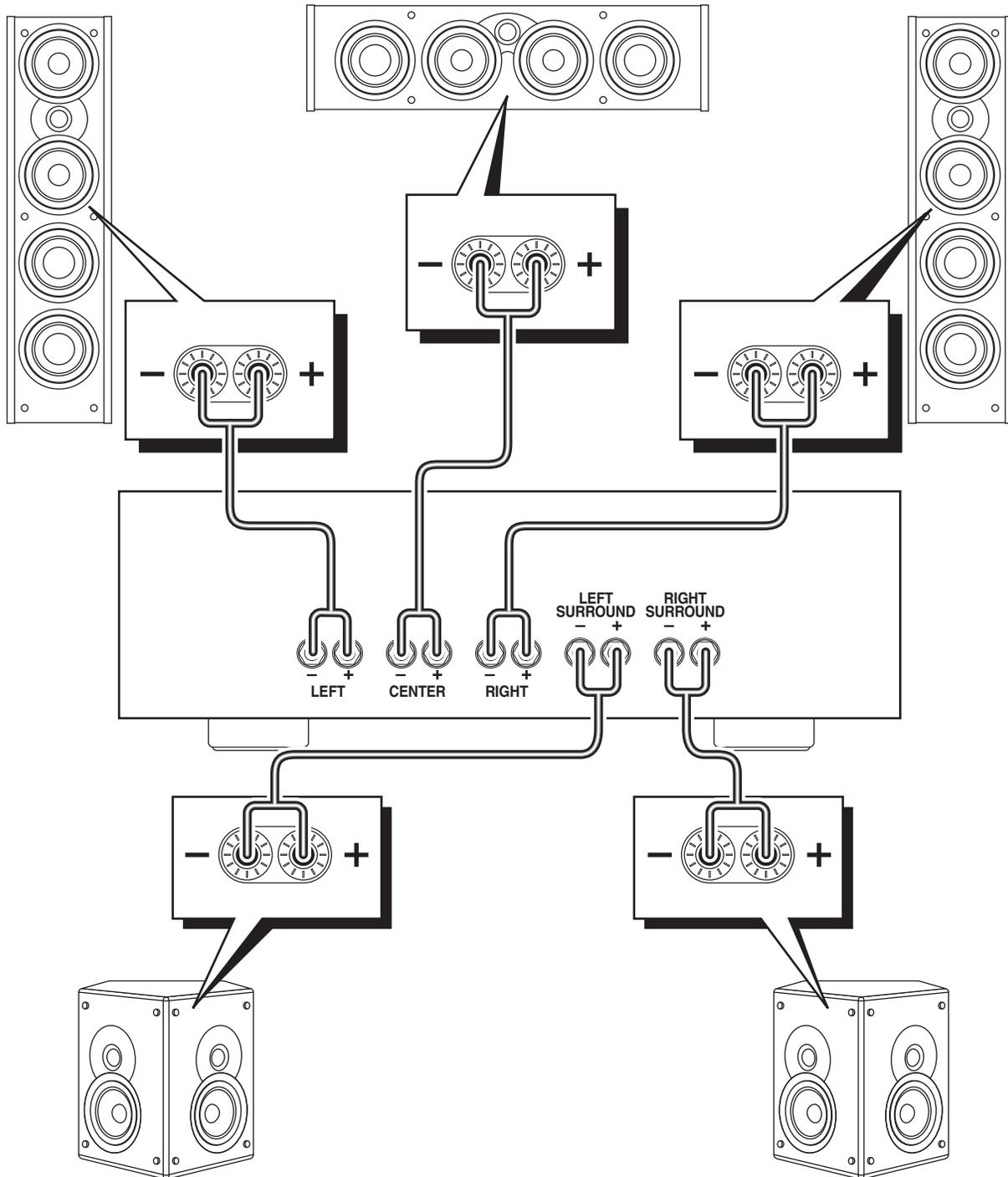
We recommend that you check your local electrical codes to make sure that you are not using improper connectors. It's important to observe polarity while making speaker connections: red (+) terminals on the amplifier to red (+) on the speaker; black (-) on the amplifier to black (-) on the speaker. Look carefully at the wires you are using and note that one of the conductors of each pair will typically be identified by color, printing on the outer jacket, ridges on the outer jacket, or a thread intertwined with the wire strands. By convention, the marked wire is connected to the red (+) terminal. Whether you are connecting a complete system, or adding a single speaker component to your present system, the wiring should look like the system wiring diagrams on the opposite page

WARNING: Before turning on the amplifier, be certain that no stray wire strands are touching across any terminals as this might damage your amplifier.

Finally, check the polarity of your front speakers by listening to some stereo music with good bass content. If the sound seems “hollow”, unusually spread out, or seem to have weak bass, recheck your connections for proper polarity and correct any out of phase connections by reversing the connections to one speaker only, if necessary.

System Wiring

Be sure to connect red (+) on the speaker to red (+) on the amplifier and black (-) on the speaker to black (-) on the amplifier.



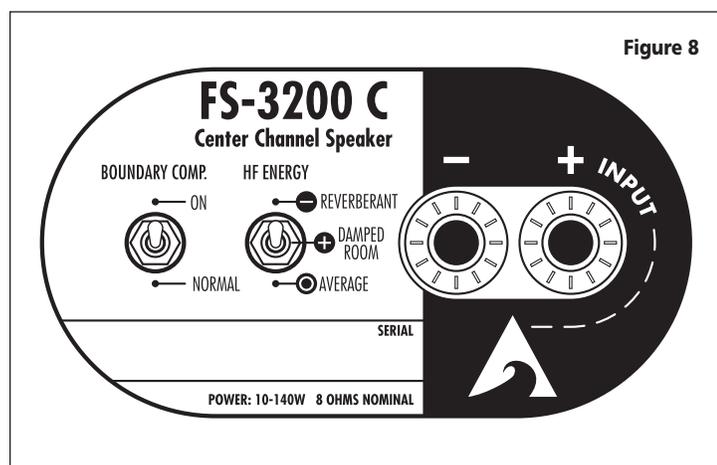
System Setup

Bass Management

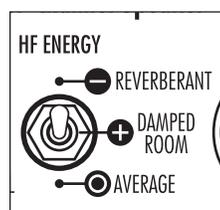
Some older surround sound decoders and receivers offer a choice of “Normal” or “Wide-band” modes for the center channel speaker. The 3200 LR and C speakers are designed to be used in the Normal mode.

Modern digital processing multi-channel systems provide a Bass Management menu, which typically requires you to select between “Small” or “Large” speakers during system set-up. Since these speakers have been designed to work with a dedicated subwoofer, please set all the speakers to Small.

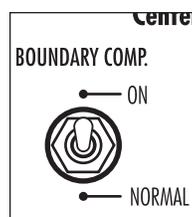
Many of the newer surround receivers and processors give you a choice of subwoofer-to-satellite crossover frequency. If yours does, we recommend that you start with a setting of around 80Hz for the smoothest blend between the subwoofer and the 3200 speakers.



Operation of Rear Panel Controls on the FS-3200s



High Frequency Energy This control changes the tilt or rolloff slope of the tweeter in order to compensate for varying room acoustics. Use the Average position for rooms with a reasonably balanced combination of hard reflective surfaces (sliding glass doors and bare walls) and soft absorptive surfaces (thick carpeted floors and overstuffed furniture). The Reverberant position is meant for rooms with an abundance of hard surfaces, while the Damped Room setting raises the tweeter’s output to counteract the effect of an overly absorptive, acoustically “dead” room.



Boundary Compensation Putting this switch to the “On” position adjusts the lower frequency output to compensate for the typical sound colorations caused by placing the speaker very close to a large surface, such as a TV screen, a wall, or on a shelf in an entertainment unit. If your FS-3200 speakers are mounted as described above, you may prefer their sound when the Boundary Compensation control is engaged. Conversely, if they are free-standing, away from large surfaces (such as when the 3200 LR speakers are used with their optional floorstands), you may prefer the sound with the position in the “Normal” position.

NOTE: In all cases, we recommend you try both switches in their various positions and use the settings that sound best in your particular room. Note that the settings of the Left, Center, and Right speakers may differ from each other.

Dipole/Bipole Operation of the 2200 SR Speakers



In Dipole mode the 2200 SR’s produce ambience with minimal localization (best for most movies and video soundtracks), and more localizable sound in the Bipole mode (preferred for some music recordings). Switching between Dipole and Bipole mode is easily accomplished using a toggle switch conveniently located in the speakers rear terminal cup. Please note that the vast majority of the time in movies and TV broadcasts the surround speakers are called upon to reproduce the environmental sounds that are used as cues to help get you immersed in the scene on the screen. Once the surround speakers are properly positioned in the listening area, we recommend that you begin with the dipole mode, as this usually delivers the most involving and believable surround performance in most situations. However, as noted above, feel free to experiment with both switch positions.

Setting Levels

When setting up a complete home theater we strongly recommend that you use a Sound Pressure Level (SPL) meter. As of this writing Radio Shack® has one that’s affordably priced (approximately \$40-\$60) that can be used effectively. To use this meter, turn on your system, put the processor/receiver in Test Mode and set its main volume control somewhere between -20 dB and 0dB (or a reasonably loud level in your listening room). Sit in the prime listening position, set the SPL meter to the 70dB scale, slow response, and C weighting. Hold the meter with the microphone pointed up towards the ceiling and in front of you. Cycle the test tone from speaker to speaker, setting each to the same level (usually 75dB) using the individual level settings available in the processor/receiver (please see the instructions for your processor/receiver if you are unsure of how to access the test signal or level controls).

IMPORTANT NOTE: The power recommendation for these speaker systems assumes that you will not operate your amplifier/receiver in a way that produces distortion. Even rugged speakers like these can be damaged by an amplifier driven into audible distortion. The harsh amplifier distortion (“clipping”) that occurs in this situation will eventually cause damage to the speaker system. This type of damage may be cumulative and can build up over time, as the amplifier is driven into overload again and again. Such damage is easily identifiable through examination of the damaged speaker’s voice coil and is not covered by the warranty.

These systems will play very loudly when provided with enough undistorted power to do so. If necessary, consult your dealer or Atlantic Technology for additional information.

Care of Your Speakers

Clean your cabinets using a soft, lint-free cloth. If you wish, you can slightly moisten the cloth with plain water. Do not use any other cleaning agents or chemicals. Be careful not to get any water on the driver cones or tweeter domes. After carefully removing the grilles from the speakers by pulling them forward, gently clean them with a quick pass from a vacuum cleaner with a brush attachment. This should remove any dust accumulation. Reattach them by lining up the magnet depressions in the back of the grilles with the magnets on the speaker baffle and slowly moving them closer until they connect with each other.

Avoid placing your speakers in direct sunlight or near a source of heat that may, over time, damage the finish.

IMPORTANT: SAVE YOUR BOXES! *If you can do so, save the cartons, packing pieces, and plastic bags that came with your speakers. They will be useful in case you move or have to ship your loudspeakers for any reason. In any case, save all packing materials until you are certain that the systems have suffered no damage in shipment. If you find such damage, either visible or internal, contact your dealer immediately.*

Specifications

Model	FS-3200 LR	FS-3200 C
Type	2-way M-T-M array with Bass Pressure Drivers	2-way M-T-M array with Bass Pressure Drivers
Drivers	Woofer (2) 4 ½" (115mm) GLH [§] Pressure Drivers (2) 4 ½" (115mm) GLH [§] Tweeter (1) 1" (25mm) soft dome	Woofer (2) 4 ½" (115mm) GLH [§] Pressure Drivers (2) 4 ½" (115mm) GLH [§] Tweeter (1) 1" (25mm) soft dome
Frequency Response	75Hz – 20kHz ±3dB	75Hz – 20kHz ±3dB
Nominal Impedance	8Ω	8Ω
Crossover Frequency	3.75kHz, 3rd order	3.5kHz, 3rd order
Sensitivity	89dB	89dB
Recommended Amplifier Power	10 – 140 Watts RMS	10 – 140 Watts RMS
Magnetic Shielding	Yes	Yes
Dimensions w/ grilles (W x H x D)	6.5 x 25 x 5" 165 x 635 x 127mm	25 x 6.5 x 5"* 635 x 165 x 127mm
Weight (ea)	16lbs; 7.3kg	16.5lbs; 7.5kg w/base

[§]Graphite Loaded Homopolymer

*Height without base.

Specifications are those in effect at the time of printing. Atlantic Technology reserves the right to change specifications or appearance at any time without notice.

THX, and THX Select are trademarks of THX Inc. Dolby Digital, 5.1, Dolby Stereo and Dolby Pro Logic are trademarks of Dolby Laboratories Licensing Corporation. DTS is a registered trademark of DTS Technology.



343 Vanderbilt Avenue Norwood, MA 02062 (781) 762-6300 www.atlantictechnology.com

015-1320