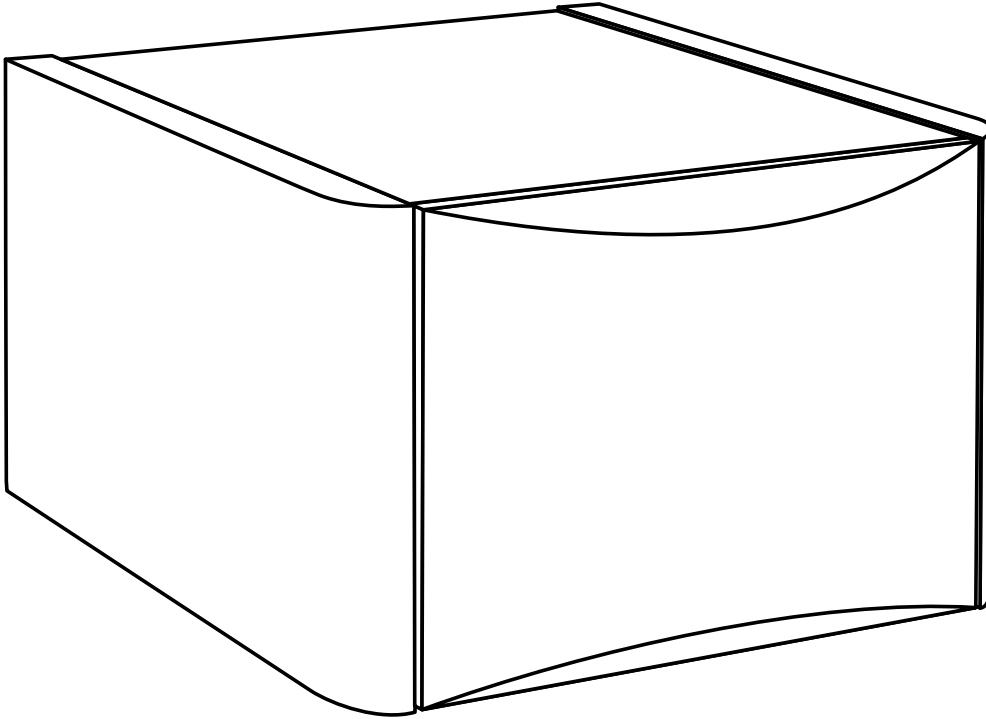


44-DA

Dolby Atmos[®]-Enabled Speaker



**AVAILABLE AT
DIGITAL CINEMA**

Atlantic
TECHNOLOGY

Instruction Manual

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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 _____

Date of Purchase _____

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44-DA High-Performance Dolby Atmos-enabled Loudspeaker

Thank you for choosing Atlantic Technology products. Your new speaker is precision-crafted to give you years of enjoyable, trouble-free service. This manual covers the Atlantic Technology 44-DA Dolby Atmos-enabled loudspeaker. It will show you how to incorporate this speaker into your present setup, and how to assemble a complete system.

The 44-DA can be used with current and past sound formats including Dolby Pro Logic IIz®, Dolby TrueHD and Dolby Atmos.

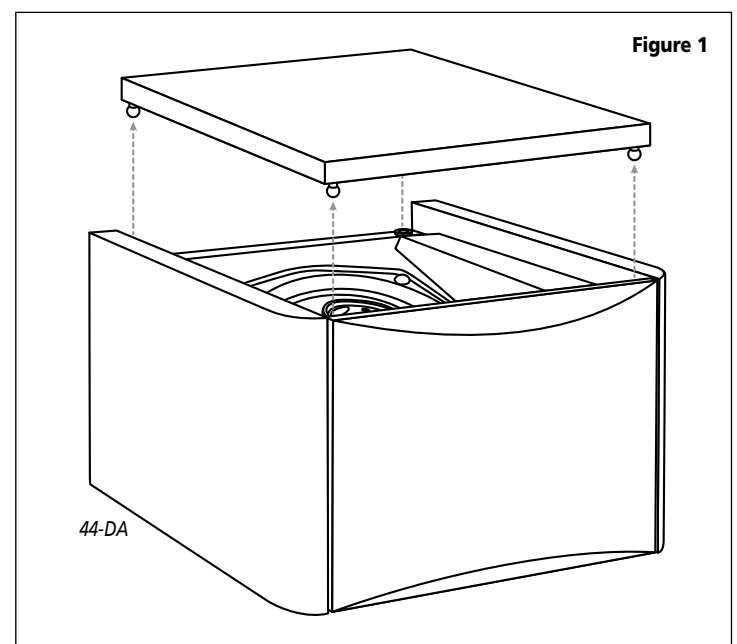
IMPORTANT: *Although it may seem like asking for driving directions, please take a few moments to read all of this booklet. It has many helpful tips and ideas on properly setting up and using your speakers. We promise that if you take the time to read and follow these tips you'll get better system performance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

Removing the Grilles

The included grilles are attached to the top of the enclosures with plastic stems that are inserted into rubber grommets. If you wish to remove the grille to view the speaker element, simply grasp the frame of the grille cover and gently lift the grille out. To re-attach it, reverse the process by lining up the plastic stems into their corresponding receptacles and push down on the grille frame.



What is Dolby Atmos?

Dolby Atmos® adds the essential characteristic that's been missing from the home theater experience: the sense of true audible three-dimensionality. Dolby Atmos-encoded movies deliver this experience, like no other movie format can.

You'll get a great immersive experience, no matter what kind of Dolby Atmos home theater setup you have. Dolby Atmos content is mixed as audio objects instead of traditional channels. This means the content is not tied to any specific playback configuration. Further, the technology automatically adapts the object audio to take full advantage of the number and placement of your speakers, from systems with five speakers on the floor and two speakers producing overhead sound to a system with as many as 24 speakers on the floor and 10 speakers producing overhead sound.

Additionally, the new Dolby surround upmixer used in today's A/V receivers and Processors allows for legacy channel-based content that has not been mixed for Dolby Atmos to be expanded to fill the flexible speaker layouts of a Dolby Atmos system providing a new dimension to your old movies.

Description

The Atlantic Technology 44-DA speaker was specifically designed to be used as the “elevation” component in a Dolby Atmos surround system.

Working closely with Dolby Laboratories, Atlantic Technology's research and engineering team developed the 44-DA with its unique vertically-firing Concentric Driver Array (CDA™) to deliver the excitement and realism of Dolby Atmos-encoded soundtracks with startling impact and holographic, three-dimensional realism. The 44-DAs frequency response and radiation pattern have been specifically engineered to meet these requirements.

The 44-DA speaker itself embodies the same high quality components—such as its long-excursion damped polypropylene 5 ¼” woofer, 1” silk-damped dome tweeter and optimized 1st-order Butterworth crossover—and meticulous attention to detail that are the hallmarks of all Atlantic Technology products.

The speaker module is designed to fit perfectly on top of Atlantic Technology's THX- certified 4400 LR speakers, creating an integrated, “one-piece” look. Additionally, because of their compact design and neutral appearance, the 44-DAs are well suited to being used on top of other speakers or, equally important, as “stand-alone” Dolby Atmos enabled speakers as part of a complete Dolby Atmos system.

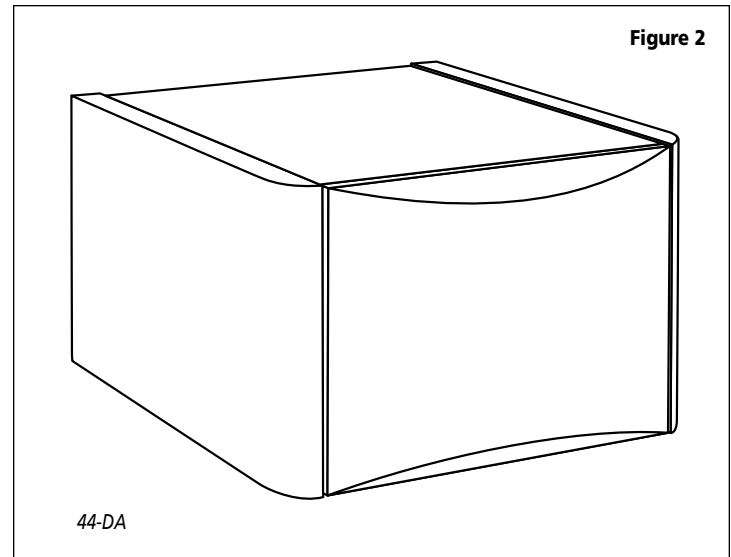


Figure 2

Placement in a Dolby Atmos-enabled System

The 44-DA delivers the “overhead” dimension in a Dolby Atmos-enabled home theater system. The Dolby Atmos-enabled speakers are used in addition to the usual speakers in a 5.1 or larger home theater system.

The 44-DA speakers allow you to experience overhead sounds when the speaker is placed at the same level as a traditional speaker. These Dolby Atmos-enabled speakers direct sound upward to reflect off the ceiling, as Figure 3 shows, to create a faithful reproduction of audio coming from above.

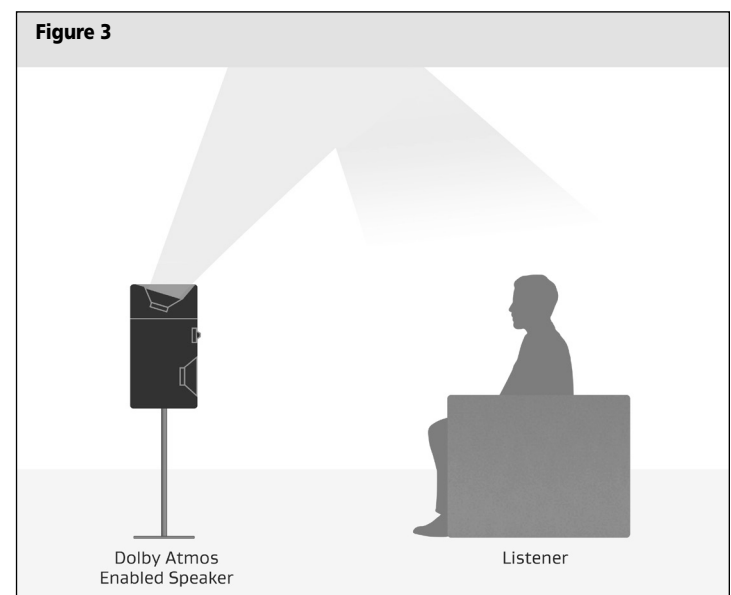


Figure 3

VERY IMPORTANT: The 44-DA speaker projects its sound from the top of the cabinet, not from the front like a conventional speaker. Do not place anything on the cloth grille on the top of the speaker, place the speaker in a cabinet or below a shelf. These situations will obstruct the sound path, impairing the performance, and possibly damaging the speaker elements beneath the cloth.

Placement...(continued)

Three Basic Configurations

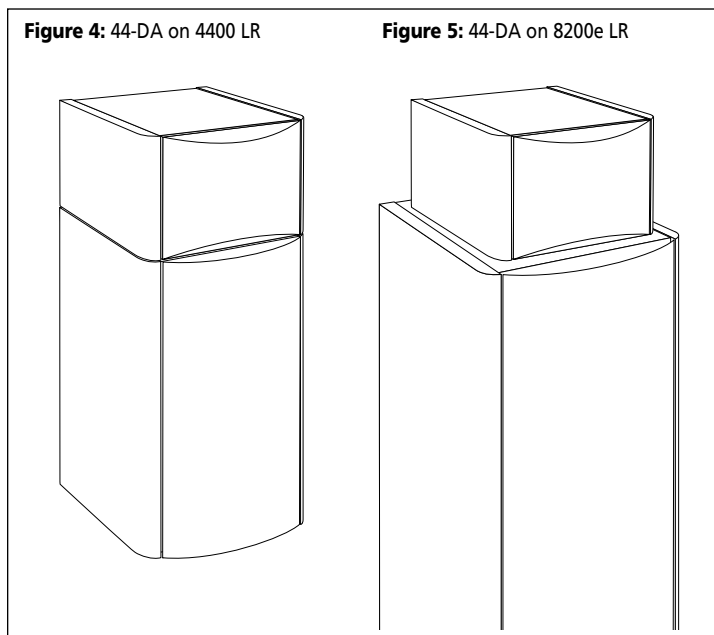
We will cover three basic configurations for Dolby Atmos systems. See Figure 8 opposite page.

- A 5.1.2 system, in which there are two 44-DA speakers in addition to the existing five speakers
- A 5.1.4 system, in which there are four 44-DA speakers in addition to the existing five speakers
- A 7.1.4 system, in which there are four 44-DA speakers in addition to the existing seven speakers

In all three system configurations, one pair of 44-DA speakers is located at the front of the room, very nearby or on top of the front Left and Right speakers. For optimal effect and to minimize the distracting effect of audio radiating directly at the listener position, the 44-DA should be no lower than the ear height of a seated listener. Also, try to avoid placing the speaker higher than one-half the height of your wall.

The 44-DA is sized and styled to fit perfectly on top of Atlantic Technology's THX-certified 4400 LR as shown. See Figure 4.

However, the 44-DA can be used with any high quality Left/Right speaker, from Atlantic Technology or another quality speaker brand. See Figure 5.



If space or room/furniture layout restrictions dictate that you cannot place the front 44-DA speakers directly atop the front L/R speakers, then place the 44-DAs as follows:

Laterally: within 2-3 feet max of the associated L/R speaker

Vertically: at least as high, but no more than 18" higher than the associated L/R speaker

For the side or back surround channels in a 5.1.4 or 7.1.4 system:

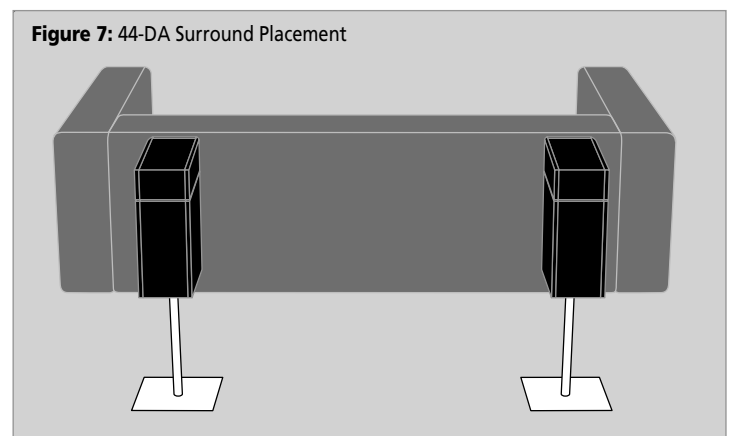
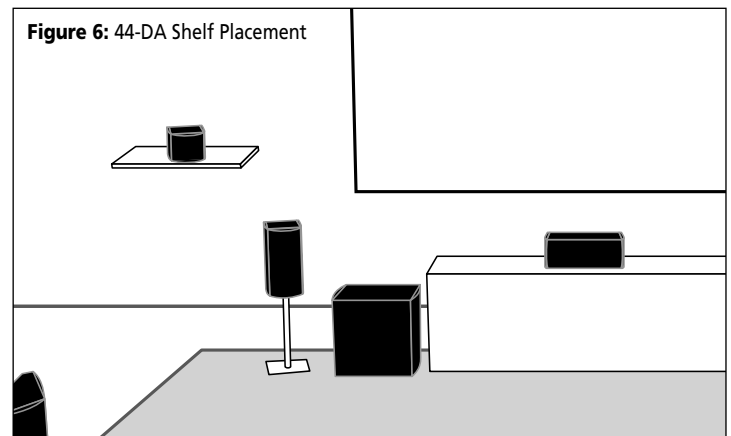
Either place the 44-DA directly on the associated surround speaker, or place it no more than 2-3 ft away laterally and within $\pm 18''$ vertically.

NOTE: If you are incorporating the 44-DAs into an existing 5.1 or 7.1 system with Dipole/Bipole surround speakers we recommend you set the surround speakers to Bipole and move them to ear level height if possible.

If you need guidance for a more complicated setup, or if you want more information about Dolby Atmos please visit their website at <http://www.dolby.com/us/en/technologies/dolby-atmos.html>

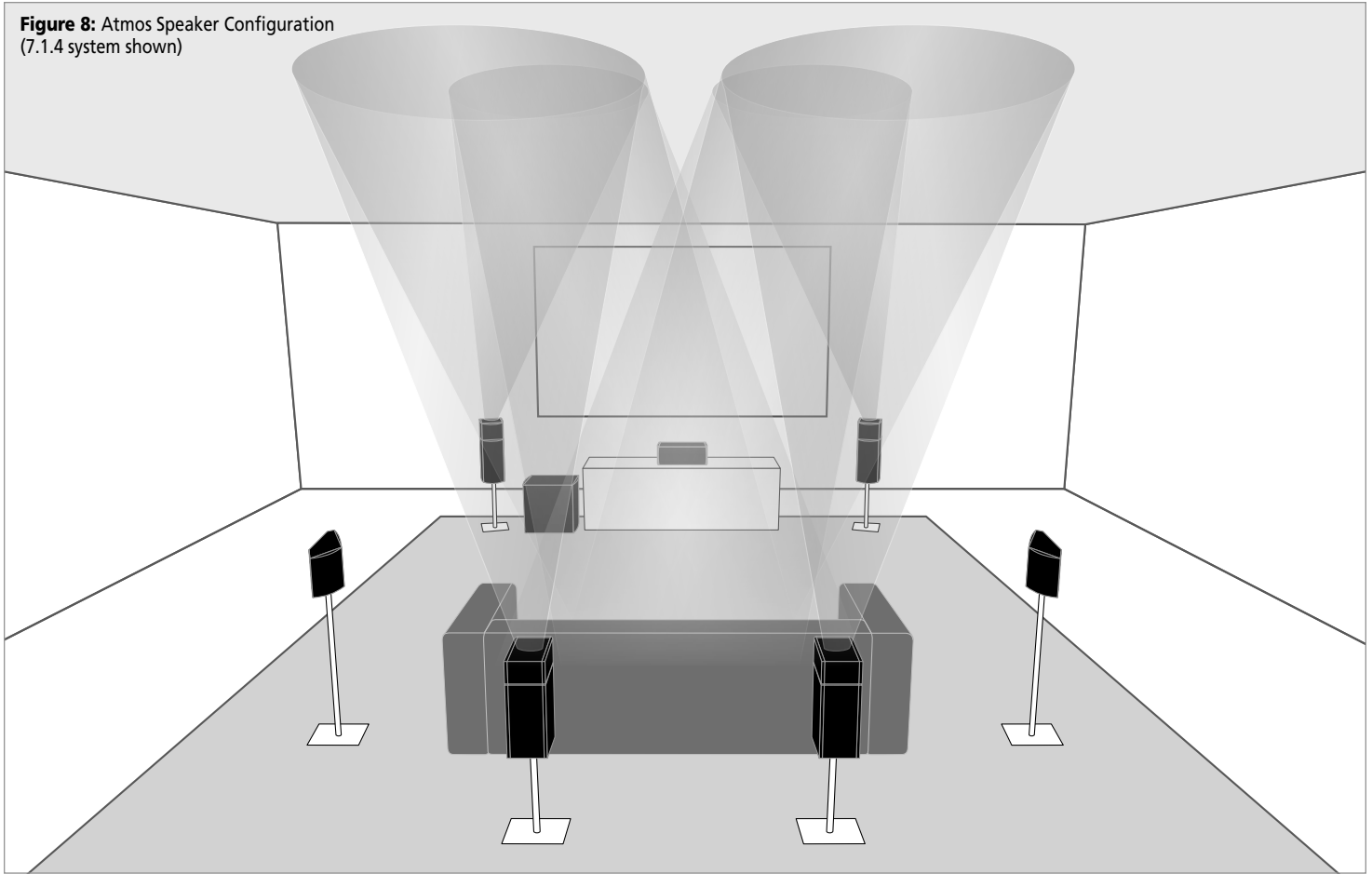
Combination: Overhead and Dolby Atmos Enabled Speakers

In some instances, a home theater system may already have overhead speakers that can be used to generate overhead audio. In this case, Dolby Atmos enabled speakers may be used to complement existing overhead speakers to create a full, four-speaker height experience. If existing speakers are in the front of the room, then Dolby Atmos enabled speakers may be used in the rear of the room and vice versa.



Speaker Placement

Figure 8: Atmos Speaker Configuration
(7.1.4 system shown)



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 angled pin connectors.

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 angled pin connectors, 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 push on the connector's cap.
4. Release the cap to "grab" the wire.

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 either by color, printing on the outer jacket, ridges on the outer jacket, or a thread intertwined with the wire strands.

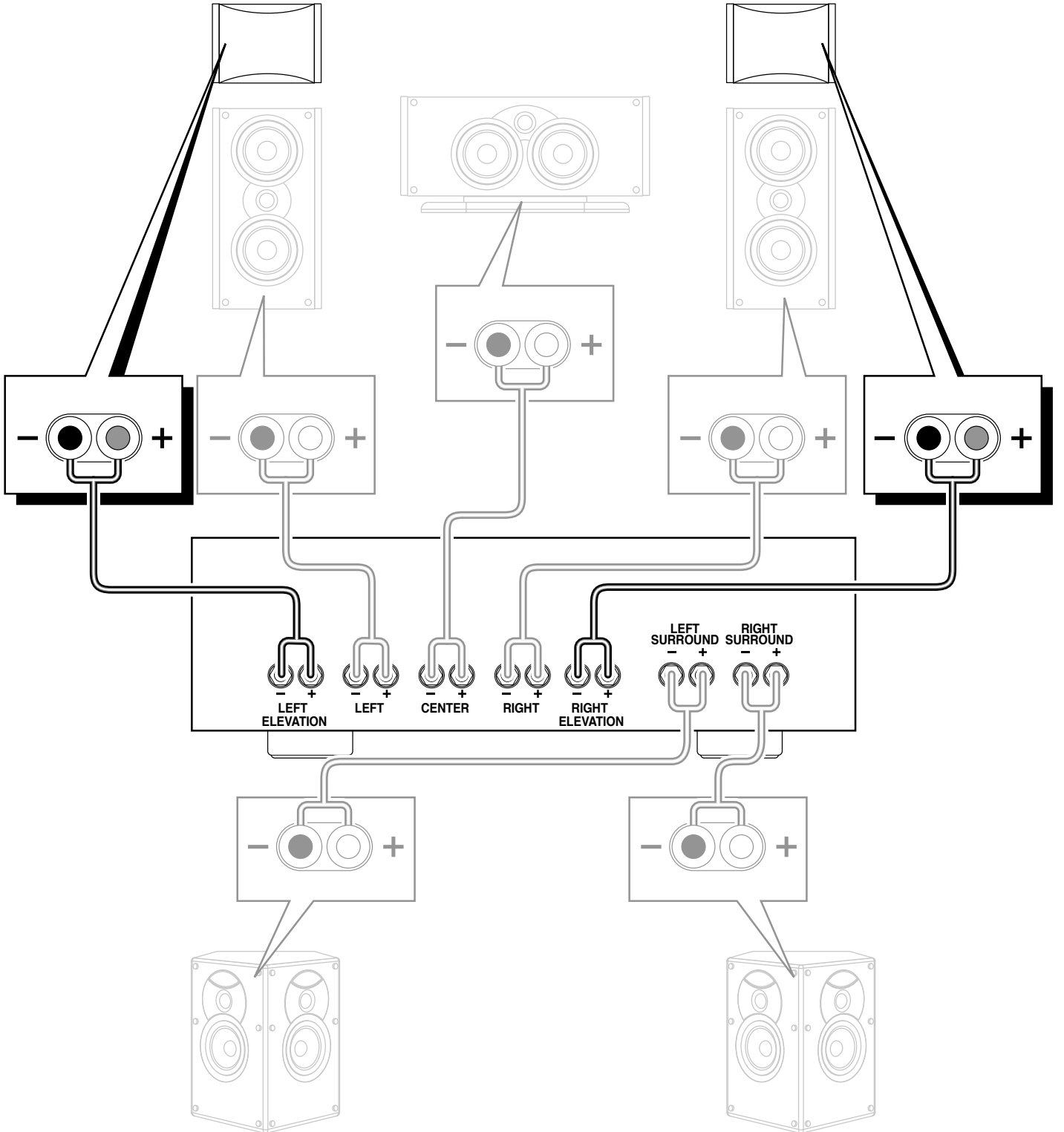
By convention, the marked wire is connected to the red (+) terminal.

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. Because terminology varies among manufactures please consult your A/V Receiver or Processor's instruction manual to identify the proper terminals to use when connecting Dolby Atmos-enabled speakers. In many cases they will be identified as either Dolby Atmos or Elevation or Height channels.

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

System Wiring (5.1.2 system shown)

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



Setting Levels

We recommend as a starting point to set the Atmos channels up to 4dB higher than the average level of the other channels. This will help prevent the Atmos channels from being washed out by the other channels.

As with any home theater set up the ultimate speaker placement and listening levels of your system are yours to choose. Take some time moving the speakers around and adjusting the levels to find the best sounding experience for your system and room acoustics.

A word about amplifier power...

IMPORTANT: *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. A complete Atlantic Technology home theater speaker setup will play very loudly when provided with enough undistorted power. If necessary, consult your dealer or Atlantic Technology for additional information.*

Care of Your Speakers

Clean your 44-DA 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. The grilles may be cleaned by first removing them from the speaker cabinet and gently vacuuming them, or by using a rolling sticky clothes lint remover.

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	44-DA
Type	Sealed box, Concentric Driver Array (CDA™)
Woofers	5¼" (135mm) damped polypropylene
Tweeter	1" (25mm) dome, silk-damped
Frequency Response	150 Hz – 20kHz ± 3dB
Impedance	6 Ohms
Crossover Frequency	3.5kHz
Crossover Type	Optimized 1st-order Butterworth
Recommended Amplifier Power	10 to 100 watts
Dimensions HxWxD	5 ½" x 8 ¾" x 9 ½" 141mm x 211mm x 242mm
Weight	7 lbs (3.2 kg)
Finishes Available	Satin Black and Gloss Black

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.

CDA is a trademark and Atlantic Technology is a registered trademark of Atlantic Technology International. Dolby, Dolby Atmos, Dolby Surround, Dolby Pro Logic IIz, Dolby TrueHD and the double-D symbol are trademarks of Dolby Laboratories. Specifications subject to change without notice.

Warranty

First, we'd like to thank you for purchasing an Atlantic Technology product. We wish you many years of enjoyment and satisfaction from it.

Second, be aware that you don't have to send in any Warranty card to be covered by the Limited Warranty. All you need to do is keep your original Invoice or Bill of Sale for proof of purchase, meet the stated requirements, and follow the instructions listed within that Warranty. Please attach your Original Invoice or Bill of Sale to this manual as proof of purchase and keep them in a safe place.

VERY IMPORTANT NOTE: PLEASE NOTE THAT ATLANTIC TECHNOLOGY PRODUCTS CARRY ONLY A 90 DAY LIMITED WARRANTY. YOU MUST MEET ALL THE BELOW REQUIREMENTS AND REGISTER ONLINE IN ORDER TO BE COVERED BY THE FREE EXTENDED SERVICE AGREEMENT TO ASSURE EXTENDED FREE PROTECTION!!

Free Extended Service Agreement

Atlantic Technology offers a free Extended Service Agreement that provides enhanced protection against product defects. In order to qualify for the free Extended Service Agreement you must:

1. Have purchased your Atlantic Technology products from an Authorized Atlantic Technology Reseller or Installer.
2. Go to www.atlantictechnology.com and click on Support>Register Your Warranty. Fill out the required information. Be sure to have your home address, name, address and invoice from the business you purchased, and the serial numbers of all Atlantic Technology products purchased. **THIS MUST BE DONE WITHIN 30 DAYS OF PURCHASE.**
3. If you purchased multiple Atlantic Technology products you will be able to enter them all using one online form. Model and Serial numbers can be found on the back of each unit and on the outside of their respective boxes.

Once all the criteria have been met, you qualify for a free Extended Service Agreement that entitles you to additional coverage against defects in workmanship and manufacturing for a period of up to 5 years on passive speakers and up to 1 year on powered speakers (including subwoofers). This coverage is in addition to the 90 Day Limited Warranty included with all Atlantic Technology products.

If you are not able to register your product using the internet, please call customer service at 781.762.6300.

Limited Warranty

Statement of Warranty: Atlantic Technology International Corp. warrants Atlantic Technology Products to be free from defects in material and workmanship for 90 days from the time of original purchase. This Warranty covers the original retail purchaser of this product only and is valid only in the Continental United States, Alaska, and Hawaii and all US Possessions.

Extended Service Agreement (only available in the Continental United States, Alaska, and Hawaii and all US Possessions): You must complete the Extended Service Agreement application, and meet all of the purchase criteria stated on that application, to receive an Extended Service Agreement that covers your Atlantic Technology products well beyond the standard 90 day Warranty.

To obtain Warranty service: Please contact your local Atlantic Technology reseller to determine if they are an Authorized Repair Center for Atlantic Technology products. You will need your original Invoice or Bill of Sale to prove Warranty eligibility. If your local dealer is not an Authorized Warranty Center you may contact us at 781-762-6300 for further help or to send the product back to us for service and repair. You must first get a Return Authorization Number from us to ship the product back, so it is imperative that you call us first.

What we are responsible for: We will pay for all labor and parts for covered items. If the repairs are eligible for coverage under the terms of this Warranty we will also pay for return shipping charges to you.

What you are responsible for: You must pack the product properly for safe shipping to your Authorized Dealer or us. You are responsible to pay for all packing, shipping, and insurance costs to get the unit(s) back to Atlantic Technology or your Authorized Dealer.

Optional replacement: We, at our option, may replace rather than repair your Atlantic Technology product with a new or reconditioned one of the same or similar design. The repair or replacement will be warranted for 90 days from date of receipt back to you. All details in terms of eligibility for an Extended Service Agreement will carry over from the original purchase to the replacement item.

What this Warranty does not cover: This Warranty does not cover defects resulting from accidents, damage while in transit, alterations, unauthorized repair, failure to follow instructions, misuse, fire, flood, and Acts of God. This Warranty will be void if the product's serial number has been altered or removed or if the product has been modified or defaced.

Exclusions and Limitations: Implied warranties, including those of fitness for a particular purpose and merchantability (an unwritten warranty that the product is fit for ordinary use) are limited to the period of any Warranty granted hereby. We will not pay for loss of time, inconvenience, loss of use, or property damage caused by your Atlantic Technology product or its failure to work, or any other incidental or consequential damages.

State law rights: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.

This Warranty is valid only when Atlantic Technology products are purchased from an Authorized Atlantic Technology Reseller in the Continental United States, Alaska, and Hawaii and all US Possessions. If you purchase Atlantic Technology products outside the United States please consult your local distributor or reseller for applicable Warranty coverage and restrictions.

Should you have any questions or problems please feel free to contact us at 781-762-6300 or through our web site, www.atlantictechnology.com.

