



### Triad Speakers Warranty Information

For your convenience, we have included space below for you to record your speaker model and serial number, purchase date, dealer's name, and phone number. You will need the following information in the event your speaker needs servicing. Please keep this manual and the sales receipt in a safe place.

Model: \_\_\_\_\_ Serial #: \_\_\_\_\_

Dealer Name: \_\_\_\_\_

Purchase Date: \_\_\_\_\_ Phone #: \_\_\_\_\_

### Triad North American Warranty

Triad speakers are warranted to be free from defects in materials and workmanship for a period of ten (10) years, when operated under normal conditions.

### This Limited Warranty Period Begins on the Date of Purchase

This limited warranty is extended only to Triad products and is expressly in lieu of all other warranties expressed or implied.

Should any defect in materials or workmanship occur within the limited warranty period, customers in the United States should contact Triad Customer Service, to obtain a Return Authorization (RA) Number. Customers in Europe should contact their dealer for service.

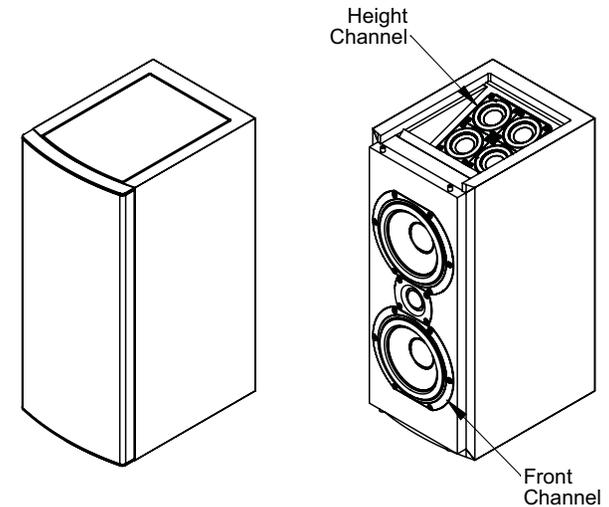
The product should be returned in its original packaging together with proof and date of purchase with the RA number clearly visible on outside of the box. At our discretion, we will repair or replace the product and return it, free from charge. If you do not have the original packaging for the product, contact your dealer or Triad Service, and we will provide it for you.

### Triad Speakers, Inc.

15835 NE Cameron Blvd. • Portland, Oregon 97230  
503.256.2668 Sales & Service  
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## Triad Dolby® Atmos Enabled Product Family



**InRoom Bronze LR-H Dolby® Atmos Enabled Speaker**

**InRoom Silver LR-H Dolby® Atmos Enabled Speaker**

# Message from the President

About your new Triad Dolby Atmos Enabled Speakers



Thank You...

For purchasing Triad's exciting line of Dolby® Atmos enhanced speakers designed for home theater aficionados, gamers and music lovers.

After over 2 years of development with Dolby® Labs as their development partner for Atmos speaker technology, Triad is proud to introduce a line of Atmos enhanced speakers approved and certified by Dolby Labs.

We design, engineer and manufacture each loudspeaker with pride in the United States of America with the utmost attention to quality, décor-friendly design, and with an emphasis on high performance sound.

With over 30 optional real wood veneers, and custom paint matching in Triad's modern Portland, Oregon factory, your speakers can now trully blend perfectly into your homes decor.

All Triad models, even the smallest, are fully engineered to deliver the rich natural sound Triad is famous for in open acoustical environments, especially in interior wall locations lacking the depth required for sealed enclosures.

All models share:

- Matched audio performance with timbre-matched components.
- Premium fabric dome tweeters and proprietary woofers.
- High quality crossover parts for smoothness and clear vocals.

We trust that you will hear these benefits each time you play them.

Thanks again and happy listening.

Larry Pexton

President of Triad Speakers, Inc.

# Specifications: Dolby Atmos Enabled LR-H

## **InRoom Bronze LR-H**

### **Cabinet Dimensions: (WxHxD)**

7 9/16" x 19 1/2" x 9 1/4" (19.2 x 49.5 x 23.6 cm)

### **Product Weight:**

21.8 lbs. (9.8kg)

### **Shipping Weight:**

23.3 lbs. (10.5kg)

### **Power Handling:**

Rec. amp. power 50 - 200 watts per channel

## **Traditional front firing L/R section**

*(identical to InRoom Bronze LCR)*

### **Drive Units:**

- (1) 1" Fabric dome neodymium
- (2) 5 1/4" Proprietary cone - Paper / fiber blend

### **Sensitivity:**

89 dB/1W/1m

### **Installed Frequency Response:**

88 Hz - 20 kHz (+/-3dB)

### **Nominal impedance:** 4 ohms

## **Atmos Enabled Height speaker**

*Certified by Dolby Labs to meet all performance criteria for Atmos Enabled Height speakers.*

### **Drive Units:**

- (4) 2" Full range proprietary neodymium

### **Frequency Response Range:**

f3: 180 Hz & 20 kHz

### **Sensitivity:**

89 dB/1W/1m

### **Nominal impedance:** 6 ohms

## **InRoom Silver LR-H**

### **Cabinet Dimensions: (WxHxD)**

8 3/4" x 22 7/16" x 11 3/16" (22.2 x 57.0 x 28.5 cm)

### **Product Weight:**

30.5 lbs. (13.8 kg)

### **Shipping Weight:**

36 lbs. (16.3 kg)

### **Power Handling:**

Rec. amp. power 50 - 200 watts per channel

## **Traditional front firing L/R section**

*(identical to InRoom Silver LCR)*

### **Drive Units:**

- (1) 1" Fabric dome neodymium
- (2) 6 1/2" Proprietary cone - Paper / fiber blend

### **Sensitivity:**

91 dB/1W/1m

### **Installed Frequency Response:**

80 Hz - 20 kHz (+/-3dB)

### **Nominal impedance:** 4 ohms

## **Atmos Enabled Height speaker**

*Certified by Dolby Labs to meet all performance criteria for Atmos Enabled Height speakers.*

### **Drive Units:**

- (4) 3" Full range proprietary neodymium

### **Frequency Response Range:**

f3: 130 Hz & 20 kHz

### **Sensitivity:**

89 dB/1W/1m

### **Nominal impedance:** 6 ohms

## Speaker Grill Installation & Removal

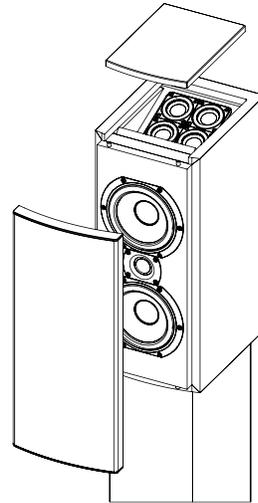
The LR-H has two grills, a “Press On” style grill for the height channel on top and a “Snap On” style grill for the front L/R channel.

### “Press On” Top Grill

Install 1st; remove 2nd.

To install, press gently on one of the grill’s side edges and push the grill onto the speaker. Repeat with the other side edge.

To remove the top grill, gently pull the front edge up & away from the speaker.



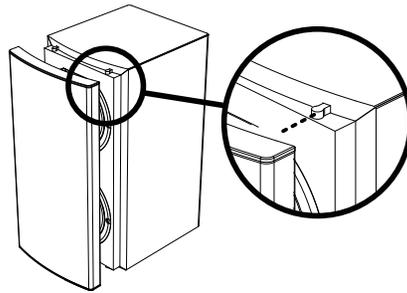
### “Snap On” Front Grill

Install 2nd; remove 1st.

Position the grill onto the front of the speaker aligning the grill clips to the studs.

Press gently on the outside top grill edge and push the grill onto the speaker. Repeat with bottom grill edge.

Do NOT play the speaker with the front grill installed unless the top grill is also installed.



## Finish Maintenance & Care

The paint finish on all Triad speakers are designed to last a lifetime with minimal care. If cleaning the surface becomes necessary, gently wipe the speaker grill with a soft cloth lightly dampened with a mild soap and water solution.

## Custom Paint

Custom paint is an available option from Triad at the time your speaker is ordered.

If you supply us with an actual paint sample or your paint’s make & model number, we can paint your new speaker any color you wish. The results will be superior, and you will also be supplied with a small bottle of touch-up paint.

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## Dolby® Atmos Enabled Speakers

### Dolby Atmos (™) and Sound Objects - Background Info

To free film makers from the limitations of channel-based audio, Dolby(™) created Atmos, a technology that lets them position and move sounds in three dimensions - to faithfully recreate how we experience sound in the real world.

Atmos is based on the concept of sound objects. In a Dolby Atmos equipped cinema, the state-of-the-art in movie sound, every sound in a scene, from a buzzing bee to a helicopter fly-by, can be a separate sound object. Each sound starts at a specific location in the scene; often they move. Film-makers can sonically isolate each sound object in a scene, position it precisely, and make it sound to move exactly where and how they want.

Since Dolby Atmos debuted in June 2012, movie studios have released or announced well over 140 feature films with Dolby Atmos; there are well over 750 Dolby Atmos cinemas equipped or announced worldwide.

### Dolby Atmos in the Home

Partnering with game, music, and broadcast content creators, Dolby has now developed the technology to translate the Atmos experience to home theaters. Dolby home Atmos is available on Atmos Blu-ray Discs and through streaming video services, requiring a Dolby Atmos-enabled AV Receiver or Pre-pro, (5.1, 7.1, etc) speakers at listener level & subs already installed in conventional home theaters, and two or more height speakers. Atmos also enhances most non-Atmos recorded content as well by adding a believable and organic height layer.

### Home Atmos - Speaker Configurations and Nomenclature

With Dolby home Atmos, there is a new way of referring to surround sound speaker configurations based on the standard nomenclature (2.0 stereo, 5.1, 7.1, etc.) for listener level speakers & subwoofers. A 3rd number is added at the end to specify the number of Atmos height speakers, either conventional ceiling or Atmos-enabled. For example, 7.1.4 describes a Dolby Atmos system with 7 listener level channels, 1 subwoofer channel, and 4 height speakers.

### Home Atmos – Set-up and Use

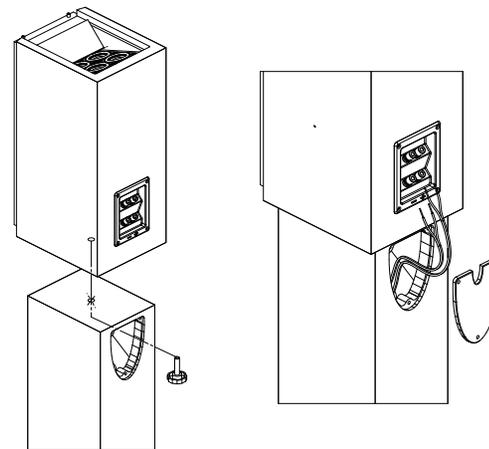
When setting up a Dolby Atmos enabled AVR or Pre-pro, you must tell it you have Atmos, the number of speakers in your system & where they are located, and whether your height speakers are Dolby Enabled or ceiling speakers. The processor decides - in real time - exactly which speakers to use from moment to moment to reproduce sound objects that you experience as real.

Any Dolby Atmos movie or game can play back on nearly any speaker configuration in the home. You will be able to hear the three dimensional placement and movement of sound in a Dolby Atmos movie or game whether you have a system with the minimum five listener level & two height speakers or the maximum 24

## Installing Dolby Atmos Enabled Speakers

### Pedestal Mounting

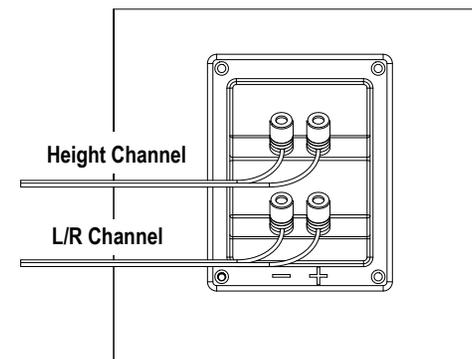
Once pedestal is assembled, run **2 pairs** of speaker wires from beneath the pedestal's base through the conduit and pull them out the opening at the top of the pedestal's back. Attach & tighten the speaker to the pedestal top from below using the knurled knob screw through the pedestal's top rear opening. Attach the rear cover plate with 3 screws included with the pedestal.



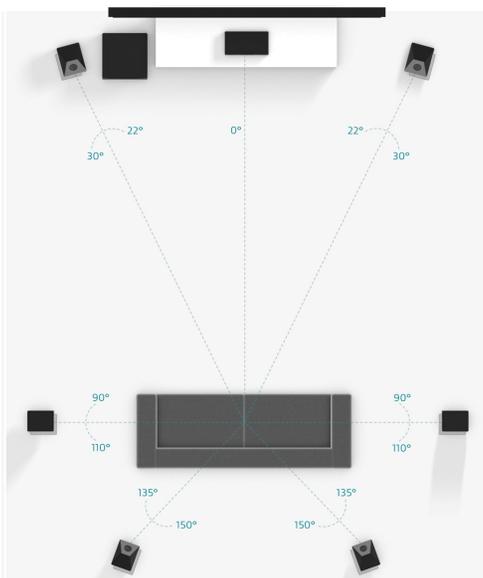
### Connecting Speaker Wires

On the back of the InRoom LR-H speaker you will find two sets of 5-way Binding-Post speaker wire connectors; one set (top) for the upward firing Dolby Atmos Height Channel and one set (bottom) for the traditional front firing Left or right L/R speaker.

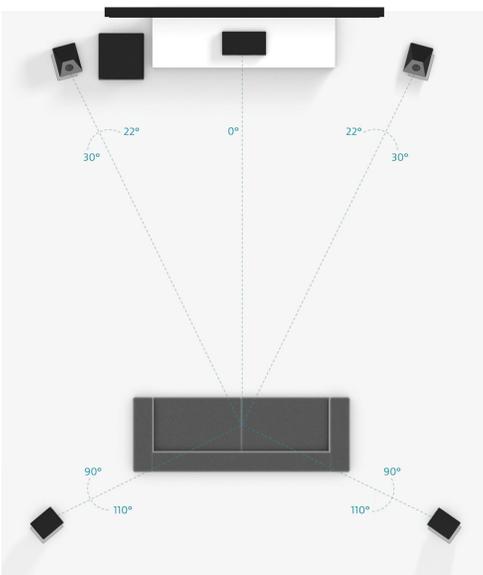
Unscrew the Binding-Post Cover to expose the wire hole; insert appropriate speaker wire (height channel or L/R channel) and then screw/tighten the cover to lock it onto the wire. Binding Posts are incompatible with dual banana plugs.



Remember to keep polarity correct; connect amplifier's + (positive) to speaker's + and amplifier's - (negative) to the speaker's - (negative). To avoid shorts, keep stray wire strands clear of adjoining connectors.



Recommended speaker placement for a 7.1.4 configuration using 4 Dolby Enabled speakers



Recommended front speaker placement for 5.1.2 or 7.1.2 configurations using 2 Dolby Enabled speakers

### Positioning Dolby Atmos Enabled Speakers (cont.)

In a 7.1.4 configuration the back two Dolby Atmos-enabled speakers should be placed in the back left and right speaker locations 130 to 150 degrees off axis from the primary listeners.

If you opt for 2 Dolby Atmos enabled speakers in a 5.1.2 or 7.1.2 configuration, you can still get an immersive experience with sounds moving overhead. Simply place the 2 Dolby Atmos-enabled speakers at the front left and front right speaker locations 22 to 30 degrees off axis from the primary listeners.

### Mixing Atmos Enabled Height Speakers with Ceiling Speakers

You can combine Dolby Atmos enabled speakers with ceiling-mounted speakers in your home theater with certain electronics (Verify with your AV Receiver manufacturer). This can be useful if, for instance, you have two speakers already installed in your ceiling and want to add two more height speakers but cannot install a 2nd pair in or on the ceiling. Instead, add two Dolby Atmos enabled speakers and repurpose the two existing ceiling speakers.

You will hear the top-level overhead sounds whether you're using ceiling speakers, Dolby Atmos enabled speakers, or a combination of both.

listener level & 10 height speakers in a Dolby Atmos home supersystem. The more speakers you have, the more precise audio object positioning becomes.

Any standard Blu-ray player can play a Dolby Atmos disc. We recommend a firmware update for all Blu-ray players, even new ones. To ensure proper decoding and playback of Dolby Atmos content, the player must connect to a Dolby Atmos-capable AVR or Pre-pro with the Blu-ray player set to Audio Bitstream Out and Secondary Audio Mix, a playback mode in which third party content is mixed with the primary soundtrack, switched OFF.

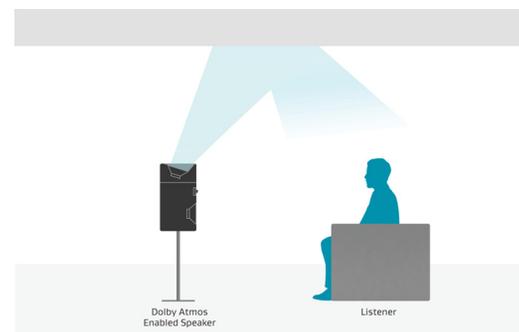
### Compatibility

Dolby's TrueHD format, used in Atmos Blu-ray discs, carries Dolby Atmos content in a special losslessly encoded object-based mix. Dolby Digital Plus™ used by leading streaming video providers supports Dolby Atmos, so you can play Dolby Atmos content from streaming devices as well. The current HDMI spec (v1.4 and later) fully supports Dolby Atmos. Dolby Atmos audio tracks are backward compatible and will play traditional 5.1 or 7.1 audio on non-Dolby Atmos systems.

For compatibility with non-Atmos recordings, Dolby Atmos electronics include an upmixer that upconverts all legacy non-Atmos recordings into a surround experience that uses Atmos height speakers to playback a spacious overhead ambience which Atmos extracts organically from the recording. You can choose to enable this feature or not.

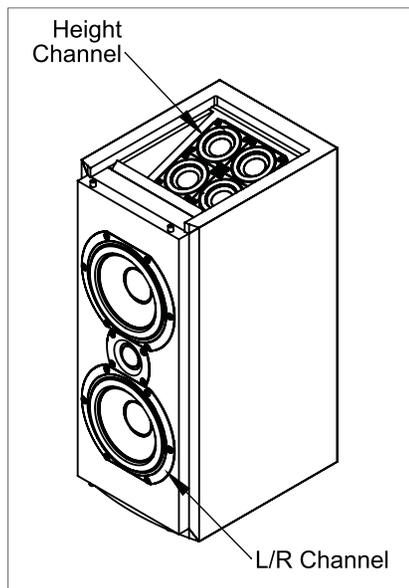
### Home Atmos – Speaker types

Dolby recommends two different ways for Atmos to recreate overhead sounds in the home with height speakers:



- **Dolby-enhanced speakers** add a top-firing height channel to a conventional forward firing LCR type speaker. Both forward and height channels have independent inputs and are fed by independent outputs on the AVR and amplifier.

Positioned at listener level and aimed at an upward angle, the top height channel reflects sound off the ceiling toward listeners. Its frequency response and directivity must meet very rigid and unique specifications in order for Dolby certify it for Atmos.



An enhanced height channel is integrated into your Triad InRoom LR-H home theater speaker.

Triad Speakers worked closely with Dolby as their development partner to create the original Dolby-enabled speaker specifications and prototypes specifically for those who do not want height speakers on or in their ceilings.

Dolby enabled speakers are not meant for center channel use as there is no center Height speaker in Atmos. Instead our matching InRoom LCR should be used as the center channel speaker.

• **Discrete Overhead Height Speakers** are not certified by Dolby, unlike Dolby-enabled speakers. Conventional in ceiling or on-ceiling speakers can be used. The particular type and location of these ceiling speakers will depend on a number of factors detailed elsewhere.

## Placing Dolby Atmos Enabled Speakers

### How many?

Dolby Atmos cinemas realistically recreate overhead sounds with a large array of speakers above the audience. For the home, Dolby requires a minimum of 2 height speakers, with at least 4 height speakers preferred whenever possible.

**Important note:** With Atmos, speakers must be added in pairs to ensure a balanced soundstage. A new speaker on the right side of the room must be matched by a similar speaker on the left side. This is true for speakers located at the listener level as well as at the ceiling. Exceptions to this rule are speakers in the center or center surround locations.

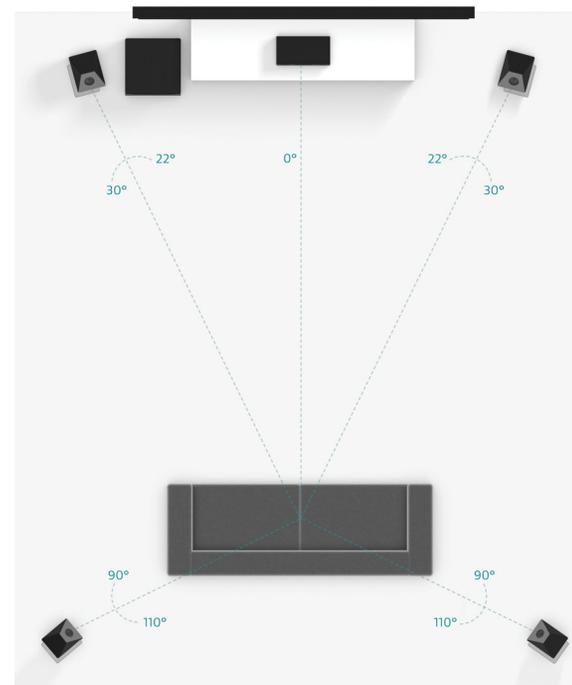


Dolby recommends using four or more height speakers.

## Positioning Dolby Atmos Enabled Speakers

For best sound, place your Dolby Atmos-enabled speakers centered at or slightly above your ear height when seated. Avoid placing Dolby Atmos enabled speakers higher than one-half the height of your wall. Make sure the speakers are at least 3 feet (0.9 meter) away from the nearest listener, ideally 5 feet (1.5 meters) or more.

You'll also get the best sound from Dolby Atmos-enabled speakers if your ceiling is flat (not vaulted or angled) and made of an acoustically reflective material, such as drywall, plaster, concrete, or wood. Do not use them with acoustic tiled ceilings. Dolby designed Atmos technology for rooms with ceiling heights of 8 to 12 feet (2.4 to 3.7 meters), but their testing indicates that you can hear incredible Dolby Atmos top-layer sound in rooms with ceilings as high as 14 feet (4.3 meters), although the effect may become more diffuse in rooms with higher ceilings.



Recommended speaker placement for a 5.1.4 configuration using 4 Dolby Atmos Enabled speakers

Two Dolby Atmos-enabled height speakers should always be in the front left and front right speaker locations of your system. With 4 Dolby Atmos-enabled height speakers in a 5.1.4 configuration, the other two should be positioned in the left and right side surround speaker locations 90 to 110 degrees off axis from the primary listeners.