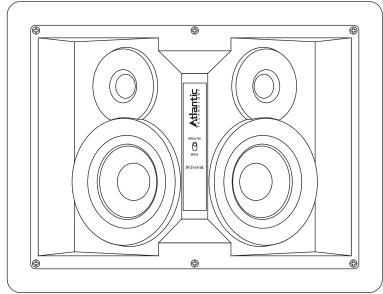
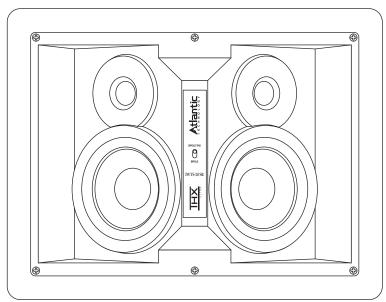
# **IWTS-14 SR and 30 SR**

High Performance In-Wall Surround Speakers



IWTS-14 SR



IWTS-30 SR



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# IWTS-14 SR and IWTS-30 SR High Performance In-Wall Surround Speakers

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 IWTS-14 SR and 30 SR 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 surround sound formats including Dolby Surround®, Pro Logic®, Dolby Digital 5.1®, Dolby Digital 7.1®, 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.

#### **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		

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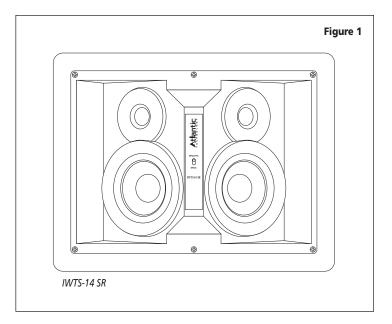
# **Speaker Descriptions**

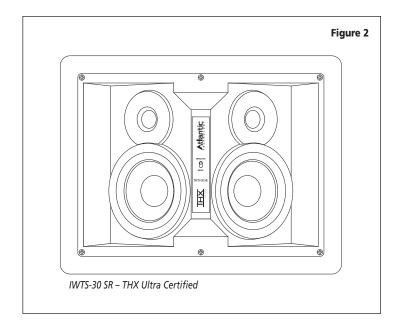
#### IWTS-14 SR and 30 SR

The IWTS-14 SR and IWTS-30 SR are in-wall surround speakers that deliver spacious, enveloping surround effects for top-grade home theater systems. They feature two angled banks of drivers facing front and rear that fill the listening area with the three-dimensional ambient sound essential for convincing, lifelike theater sound.

Both speakers incorporate dual woofers (4½" in the 14 SR, 5¼" in the 30 SR) and dual 1" soft dome tweeters. The speakers are switchable dipole/Bipole designs; that is, the two sets of drivers can either be set for out-of-phase (dipole) operation, for a diffuse, non-localizable sound, or set for in-phase (bipole) operation, for a more direct, localizable effect.

Either model can fill large home listening rooms with dramatic surround effects. However, because of its exceptional output capability, the IWTS-30 SR is THX Ultra-certified, a testimony to its outstanding performance and its suitability to being used in the very finest systems.





### **Speaker Setup**

### **Dipole/Bipole Operation of the IWTS SR Speakers**



In Dipole mode the IWTS SRs 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 on the speakers front baffle. 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.

#### **Placement**

Speaker/room interactions have a huge impact on the sound of the system. Moving the speakers just a little can make a dramatic difference in what you hear. Remember that the best acoustic placement of the speakers will vary from room to room. Use the following placement guidelines as a starting point. But also feel free to experiment. In fact, it may be beneficial to hook up the front LR and surround speakers with some extra wire and to simply drape the wire across the floor before installing the speakers permanently. This will allow you the opportunity to move the speakers around easily so you can find the best sonic and visual locations. Remember, it's very difficult to move in-wall speakers once they're installed!

#### **Home Theater**

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 LR speakers on either side of the television. The left and right front speakers should be far enough apart (6 to 10 feet 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 using a center channel speaker, a wider separation of the left and right front speakers is usually possible.

The center channel speaker should be placed directly above or below your television. It is important that the speaker is centered on the screen, not off to the side.

#### **Surround Effects and SR Speaker Locations**

The IWTS SR's shape allows great flexibility in placement. Due to their switchable Dipole/Bipole design, it's possible to place the speakers almost anywhere within the rear third of the room and get good results. However, the best location for surround speakers is straight out to the sides of, or slightly behind the primary listening area, approximately 1-2 feet above seated ear level to no less than 2 feet down from the ceiling.

As noted above, the surround speakers (as opposed to the back speaker(s) in a 6.1 or 7.1 channel system, see below) 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.

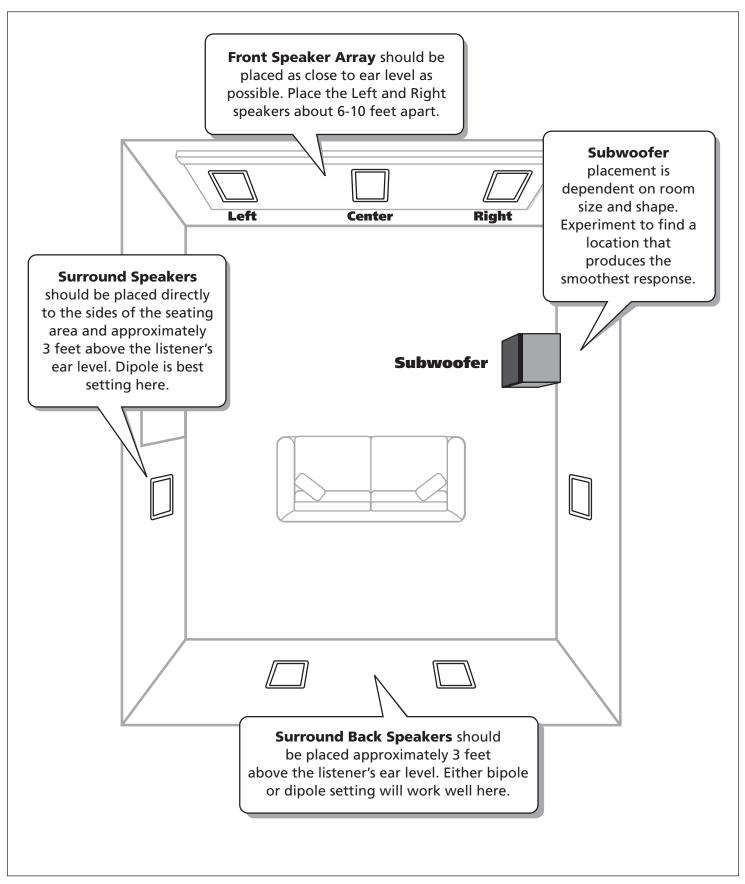
There are dedicated LEFT and RIGHT model IWTS SR speakers. This is clearly marked on the back of each speaker. Be sure that the Left side surround speaker is placed directly to the left side of the prime listening area (facing the screen) and the Right speaker is directly to the right side.

### 6.1/7.1 Channel Systems

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 use either IWTS SR model in Dipole or Bipole mode in the back of the room.

If you are using a THX Ultra 2 certified controller/receiver you should place the back surround speakers approximately 1 to 2 feet 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.

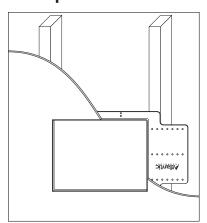
# **Speaker Placement**



### **Speaker Installation**

**NOTE:** We always recommend a professional be involved in the installation of the IWTS SRs.

# Installation of the IWTS SRs in New Construction with Optional Bracket

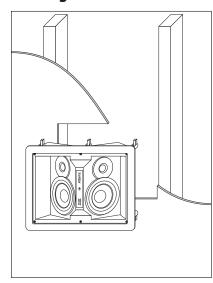


For new construction, we highly recommend that you use the optional IN-NC-14/30SR New Construction Bracket.

The lip on the New Construction Bracket must face outwards into the room. Sheetrock is then installed up to the lip, leaving a perfectly-defined mounting hole for the speakers.

Use a level to get it straight; this can't be fixed later.

# Installation of the IWTS-14 SR and 30 SR in Existing Construction



The IWTS SRs can be easily mounted in most any standard wall material, from ½ to 1½ inches thick. The IWTS SR rotating wall clamps firmly fix it to the wall surface after the proper cutout has been made. An important precaution to take before mounting:

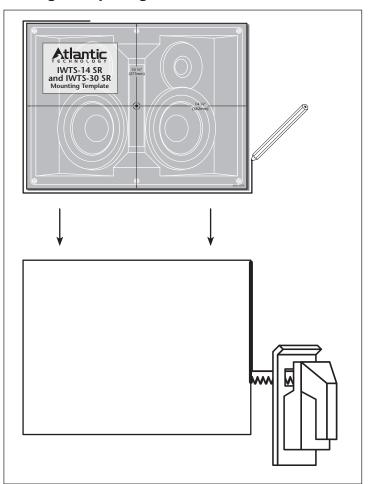
Keep the top and bottom of the actual mounting hole at least 1½ inches away from beams or studs to ensure that the clamps have adequate room to rotate. A crossbrace or other obstruction that's too close will stop them from properly doing their job.

#### Removing and Installing the Grille

Remove the grille from the speaker using an awl or the point of a drywall screw in a grille opening near one of the grille corners. Slowly pry the grille out, being careful not to damage the speaker's frame or its finish.

To re-install the grille later, press it carefully into the appropriate opening in the frame assembly. Since it's designed to fit snugly, please take your time and use care when installing the grille.

### **Cutting the Opening**

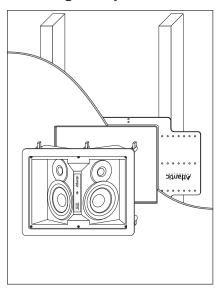


After determining the best location for the speaker as outlined above, use the enclosed template to cut the proper size hole.

#### 10¾ x 14¼" (273 x 362mm)

**WARNING:** Exercise extreme care before making any wall cuts to ensure that you will not cut through any wires, pipes, or other items that may be in the wall. You may sometimes, but not always, be able to determine the approximate location of wires and pipes by looking at the locations of nearby outlets and plumbing. But their location or absence is never an assurance that there is not something within the wall cavity.

#### **Installing the Speaker Assembly**



The clamping mechanism allows the wall material to range from ½" to 1½" (13 to 38 mm) in thickness. There must be a minimum depth behind the wall face of 35%" (92 mm). As noted above, be sure to keep the top and bottom of the cutout at least 1½" (38mm) away from obstructions, as the rotating clamps will not operate properly if you don't.

Insert the speaker into the cutout and using a level or square carefully align it so it is level. Tighten the mounting

screws, which will cause the attached clamps to rotate and position themselves properly behind the wall.

Continue to tighten until the speaker is snug in the wall. You want the bezel to conform to the wallboard, and the frame not to rattle from the speaker's vibration, *but be very careful not to overtighten the screws*.

It is strongly recommended that you hand-tighten the mounting screws the final few turns (after using an electric screwdriver set to "low torque") to avoid the possibility of damaging the frame.

### **Painting the Speaker Assembly**

The white plastic frame and the metal grille may be left as is, or painted to match your décor. To paint the frame, place the included Paint Shield over the drivers, then carefully spray paint with a plastic-compatible paint. To paint the grille, first remove it from the speaker, then spray using a slightly thinned paint or with two very light coats.

#### **Speaker Connection**



Strip about ½" (13 mm) of insulation from the connecting wires. Connect them to the appropriate push terminal, being careful to observe polarity (positive to the red terminal, negative to the black terminal).

## **Specifications**

•				
Model		IWTS-30 SR	IWTS-14 SR	
THX Certification		THX Ultra	NA	
Туре		2-way Dipole/Bipole Switchable	2-way Dipole/Bipole Switchable	
Drivers		(2) 5¼" (135mm) GLH§ (2) 1" (25mm) soft dome	(2) 4½" (115mm) GLH <sup>§</sup> (2) 1" (25mm) soft dome	
Frequency Response		80Hz – 20kHz ±3dB	100Hz – 20kHz ±3dB	
Nominal Impedance		6 Ohms	6 Ohms	
Crossover Frequency		3500Hz	4000Hz	
Sensitivity		87dB	87dB	
Recommended Amplifier Power		25 – 150 Watts RMS	25-125 Watts RMS	
Overall Dimensions (W x H x D)		15% x 12% x 3%" 397 x 308 x 96mm	15% x 12% x 3¾" 397 x 308 x 96mm	
Cutout Dimensions (W x H)		14¼ x 10¾ " 362 x 273mm	14¼ x 10¾" 362 x 273mm	
Weight (ea)		9lbs; 4.1kg	8lbs; 3.7kg	

<sup>§</sup>Graphite Loaded Homopolymer

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