

GoldenEar Technology®  
A Passion for Sonic Perfection®



## *Triton™ Seven*

High-Resolution Floorstanding Loudspeaker

OWNER'S MANUAL



### **CONGRATULATIONS!**

*Congratulations and thank you for purchasing GoldenEar Technology's® Triton™ speakers! You are about to hear the spectacular difference these very special speakers will make in your music and/or home theater system!*

*Our engineers' many years of experience in developing loudspeakers has led to this extraordinary product. In order to ensure that you experience maximum performance, please take a moment to fully read this owner's manual and familiarize yourself with the unique installation and set-up procedures for your Triton speakers.*

*Please visit our website at [www.GoldenEar.com](http://www.GoldenEar.com) for more information on the technology behind your new speaker system. If you have additional questions, contact your Authorized GoldenEar Technology Dealer or visit the Q&A page in the Tech Support section of our website.*

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### **UNPACKING YOUR TRITON LOUDSPEAKERS**

#### **Please Inspect for Shipping Damage**

Each loudspeaker leaves our plant in perfect condition. Any visible or concealed damage most likely occurred in handling after it left our plant and should be reported at once to your GoldenEar Technology Dealer and/or the delivery company that delivered your loudspeaker. Please unpack your system carefully.

Save all cartons and packing materials in case you move or need to ship your system. Record the serial number found on the back of the Triton loudspeaker here:

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(Serial Number)

Please go to <http://www.goldenear.com/support/registrationandwarranty> and use the serial number(s) above to complete your warranty registration.

## ASSEMBLY INSTRUCTIONS

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**Parts included:** Four threaded rubber feet;  
Four optional spikes;  
Four locking nuts.

### Instructions:

1. Install leveling feet or spikes (see “Using Optional Spikes” section, below):
  - a. On a soft elevated flat surface, such as a tabletop with a towel, carefully lay the Triton on its side with the base of the tower overhanging the edge of the table.
  - b. First, install a locking nut onto each foot and then screw each foot into the four threaded inserts on the bottom of the base.
  - c. Carefully return the speaker to the upright position with the help of another person — lift the speaker upright and lower it to the desired location; if using spikes, push down on the top of the speaker to force the spikes through the carpet and make contact with the floor beneath.
  - d. Once you have positioned the speakers, wiggle them to see if they are stable and level. Adjust the height of the leveling feet/spikes accordingly for best level and stability, and then tighten the locking nut.

### Using the Optional Spikes

In addition to the rubber feet, optional spikes have been included should you desire to use them. The use of these spikes will provide much greater stability when placing your loudspeakers on carpeting. It will also, according to many experts, result in an overall improvement in sonic performance.

**NOTE:** Using spikes on wooden or other floors which are susceptible to being scratched can cause damage to the floor. GoldenEar Technology is specifically not responsible for damage which may result from the use of spikes.

## PREVENTING SPEAKER DAMAGE

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**USE AN APPROPRIATE AMPLIFIER.** At high volumes a very powerful amplifier can overdrive your speakers and damage them. And if the amplifier is not powerful enough, it can produce distortion that can easily damage your speaker. (Consult your dealer for assistance.)



**DON'T BE FOOLED BY YOUR RECEIVER'S VOLUME CONTROL.** It only adjusts how loud, it is not an indication of power output. If your speakers begin to sound harsh or grating or if you hear other forms of distortion, turn down the volume immediately!



**PROPER SETUP IS THE KEY.** Please Note: Avoid use of tone controls and loudness controls as they will demand even more power from an amplifier.

GoldenEar Technology Triton speakers are efficient and can be driven to loud listening levels with moderate amplifier power. They are also able to handle the output of very powerful amplifiers. To prevent damage to your speakers, please read the following guidelines before hooking them up.

### Amplifier Distortion — #1 Threat to your New Speakers!

Amplifier distortion is the principal cause of speaker damage. When listening at loud levels your amplifier may run out of clean power. It will then begin to produce speaker-damaging distorted power. This will damage any brand of speaker very quickly! More powerful amplifiers are actually safer — For example: A 40 Watt/channel amplifier will have substantial distortion above 40 Watts. If driven to 50 Watts, this amplifier will deliver speaker-damaging distorted power! But a 100 Watt/channel amplifier will have very low distortion below 100 Watts. Therefore, when the speaker requires 50 Watts, this more powerful amplifier will deliver clean power and speaker damage is less likely to occur. (See your GoldenEar Technology dealer for amplifier recommendations.)

### Volume Setting

Do not be fooled by the Volume setting of your receiver/preamplifier. It only adjusts listening level — it is not a “power-output” dial. The amount of amplifier power actually used at a given Volume setting depends solely on the nature of the source material you are listening to (at a given Volume setting a quiet section of music will use less amplifier power than a loud section). With typical material, the rated output power of many receivers/amplifiers is often reached when the Volume is set to around -10dB, or between the “11” and “1 o'clock” settings with an analog control (with bass/ treble and loudness controls not used — otherwise rated power may be reached at even lower Volume settings). Remember, all amplifiers produce distortion when operated beyond their rated output power. The resulting distortion will damage all speakers! If you listen at loud levels, be careful to listen for the point of audible distortion — **if the speakers begin to sound distressed, turn the Volume down or your speakers and/or amplifier(s) will be damaged! This type of damage constitutes abuse and is not covered by the warranty.** If louder volumes are desired, consider a more powerful amplifier.

### There is Actually a Limit!

Even with these safer, more powerful amplifiers, there is a point at which you could have more power than the speaker can handle. At that point you will overpower the speaker and damage it. At loud levels do not increase bass/treble controls from zero and ensure that all loudness/contour/bass EQ buttons are off (otherwise rated output power will be reached at even lower volume control settings).

## The Right Amount of Power

A power-range rating is given in the specifications as a guide to indicate the approximate minimum and maximum power input of your GoldenEar Triton speakers. Amplifiers that meet or even exceed the speaker's power-range rating are recommended as their greater power reserves provide better sound. But always use the speakers within their power-range rating to prevent damage — that is, keep listening levels below the point of obvious audible distortion.

## SPEAKER PLACEMENT

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GoldenEar Technology Triton speakers are designed to allow flexible placement while providing a very large window of sound throughout your listening room. Please remember that although the following recommendations are usually valid, all rooms and listening sets-ups are somewhat unique, so do not be afraid to experiment with the speakers. Remember, whatever sounds best to you is correct.

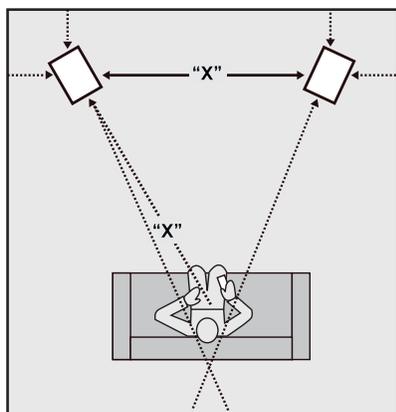
### Room Acoustics

GoldenEar Technology Triton speakers are designed to provide exceptional sound in a wide variety of domestic settings. It is important to note however that listening room construction, dimensions and furnishings all play a part in the quality of sound you will ultimately achieve from your new speakers. The listening room will impose its own character on the performance capabilities of the speaker system. Regarding the room, please note that:

- Mid and high frequencies are affected by the amount of soft furnishings in your room — curtains, carpets, sofas, wall coverings, etc. An excess of such items can result in a somewhat dull sound. The same room without any soft furnishings can produce an overall bright sound. The typical quantity of soft furnishings found in most living environments provides the right acoustic characteristics to allow the speakers to sound balanced;
- Concrete floors and walls tend to aggravate low-frequency standing wave problems and are less preferred;
- Rooms where height, width and length are similar should be avoided as they can exhibit significant low-frequency standing wave problems. This may result in reduced clarity. If no other room is possible, experiment with speaker placement to minimize acoustic problems.

The extra care you take in correctly positioning the speakers will result in greater listening enjoyment. So, keep the following guidelines in mind when deciding on the best speaker placement (see page 6):

## Positioning Triton as Left/Right Fronts



To ensure the best performance possible, observe the following placement guidelines:

**Accurate Timbre:** For the most accurate and natural timbre, speakers' high-frequency drivers should be at approximately ear level.

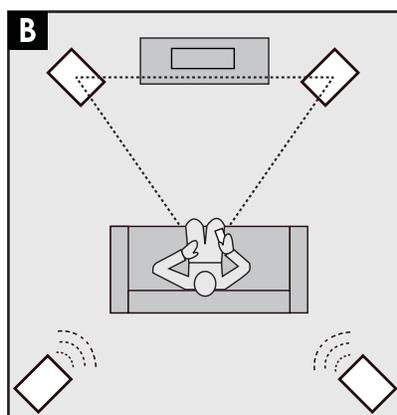
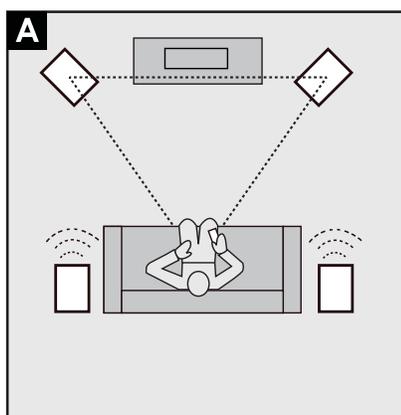
**Balanced Bass:** Placing speakers in corners will over-emphasize bass and reduce overall clarity. If possible, position speakers 8 in (20 cm) or more from the wall behind the speaker and as much as possible from either side wall. This will ensure better bass performance and optimal midrange clarity.

**Best Imaging:** Measure the distance from your main listening area to the left front speaker (we'll call this distance "X"). For optimal imaging and largest soundstage, place speakers "X" distance apart from each other

(and no less than  $\frac{3}{4}$  of that distance —  $\frac{3}{4}$  of "X"). To further optimize imaging, turn speakers inward so they point toward the listening position with their axes crossing just behind it.

## Positioning Triton as Surrounds

When used as surround speakers, Triton speakers may be located on the side or behind the listeners. When used on the sides, take care never to locate the speakers forward of the listeners (A). If the speakers are placed along the rear wall as surrounds, it is suggested that they be positioned fairly wide apart if possible. For instance, if there is a couch in the center of the rear wall on which the listeners will sit, try to position the speakers wider apart than the couch (B).



## Speaker Break-in

Your new Triton loudspeaker system should sound good right out of the box; however, an extended break-in period of 40-60 hours or more of normal playing time is required to reach full audiophile performance capability. Break-in allows the driver suspensions to work-in and crossover components to "heal," resulting in fuller and tighter bass, a more open "blossoming" midrange and smoother high frequency reproduction.

## SPEAKER CONNECTION

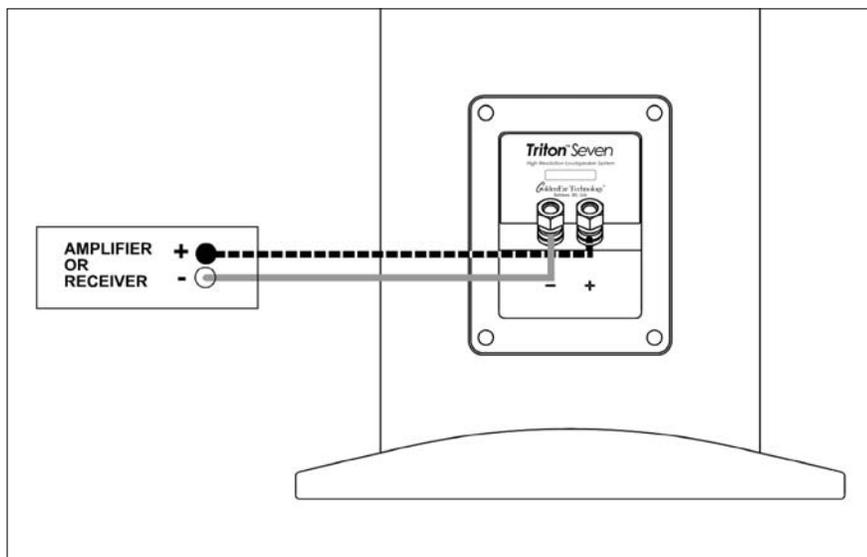


Turn your amplifier/receiver OFF before performing any connection steps, in order to prevent accidental damage to your amplifier.

Your Triton speakers are equipped with a set of 5-way binding posts that can be used with bare wire, pin or spade connectors or banana plugs. Tighten the posts firmly by hand, but do not over tighten them. Make sure all wires are firmly fastened. Always use high quality speaker wire of sufficient gauge for the distances you are running (see your dealer for assistance).

If the Triton speakers are your main set of speakers, you will hook up the left main/front channel red(+) terminal of your receiver or amplifier to the red(+) terminal of your left loudspeaker and the left main/front channel black(-) terminal of your receiver or amplifier to the black(-) terminal of your left loudspeaker (see figure below). Connect the right channel main/front channel red(+) terminal of your amplifier or receiver to the red(+) terminal of your right loudspeaker and the black(-) terminal of the right main/front channel of your receiver or amplifier to the black(-) terminal of your right loudspeaker. It is essential that both speakers be connected in the same way (in phase) to its own channel of the amplifier. If you experience a great lack of bass, it is likely that one speaker is out of phase (+ and - reversed) with the other.

If you are using the Triton speaker as surround speakers, hook up the left surround red(+) terminal of your receiver or amplifier to the red(+) terminal of your left surround speaker and the left surround black(-) terminal of your receiver or amplifier to the black(-) terminal of your left surround speaker. Connect the right surround red(+) terminal of your amplifier or receiver to the red(+) terminal of your right surround loudspeaker and the black(-) terminal of the right surround channel of your receiver or amplifier to the black(-) terminal of your right surround loudspeaker. Again, it is essential that both speakers be connected in the same way (in phase) to its own channel of the amplifier.





## Setting Bass and Treble Controls on Receiver or Amplifier

Normally we recommend that you set the "Bass" and "Treble" controls on flat (or off, or 0 dB). Same applies for a graphic equalizer; we recommend that you leave it flat (or off). This will give you the most accurate and natural sound. The reason for this recommendation is that we have discovered what is often thought to be improper sounding speakers is, in fact, a problem caused by the use of tone controls. *When in doubt, leave them out* (flat); this almost always results in the best possible and most natural sounding system performance.

## VERY IMPORTANT: Setting Channel Levels and Bass Management Systems

Multi-channel surround sound systems have a critical channel balancing procedure for setting the level for all speakers which must be followed if the system is to perform properly. Many problems relating to the overall sound of the system can be clearly traced back to improper system balance. Also note that multi-channel surround sound systems have bass management systems (systems which direct the bass to the various channels) which vary from unit to unit. This bass management system must also be properly adjusted. Many problems relating to the overall sound of the system can be traced back to improper bass management.

### Bass Management Settings:

If you are using your Triton speakers as part of a multi-channel home theater system, here are some general bass management setup guidelines:

- If you are NOT using a separate powered subwoofer, on your receiver or A/V processor's Speaker Setup Menu, set Left and Right main speakers to "**Large**" and set Subwoofer to "**No**". If you are using the Triton speakers for surround speakers, set the surround channels of your receiver/processor's bass management system to "**Large**" also.
- If you ARE using a separate powered subwoofer, on your receiver or A/V processor's Speaker Setup Menu, set all speakers to "**Small**" and set Subwoofer to "**Yes**". A good recommended starting point for the crossover setting for all channels that are using the Triton loudspeakers would be 80 Hz.

### Setting Channel Levels

On your receiver or A/V processor's Speaker Level Calibration Menu, set each speaker (channel) in the system to the same volume level. While you can get reasonable results doing this by ear, it is best to use an inexpensive Sound Pressure (SPL) meter to get better channel to channel balance. Some new receivers and processors have Auto Set Up functions that use a supplied microphone to set levels automatically.

## Complete Home Theater Systems

We strongly suggest that you use a matching GoldenEar Technology center channel speaker, rear/surround speakers and ForceField Subwoofer to complete your GoldenEar home theater system. Triton speakers can be used as rear or side surround speakers, with exceptional results for both music and movies.

## TROUBLESHOOTING

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If you experience any difficulties with your Triton speakers, try the suggestions described below. If you are still having problems, please consult your GoldenEar Technology Authorized Dealer for assistance.

1. Make sure all your system interconnects and power cords are solidly in place.
2. Check that no foreign objects or liquid has entered the speaker.
3. If no sound comes out or the sound is distorted in some way and you are sure the system is set up properly, please bring the loudspeaker to your GoldenEar Technology Authorized Dealer for assistance. But make sure you **Call First**.

## TECHNICAL ASSISTANCE

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It is our pleasure to offer assistance if you have any questions regarding your Triton speakers or their set-up. Please contact your nearest GoldenEar Technology dealer or contact us directly at 410-998-9134.

## RECYCLING AND REUSE GUIDELINES FOR EUROPE

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In accordance with the European Union WEEE (Waste Electrical and Electronic Equipment) directive effective August 13, 2005, we would like to notify you that this product may contain



regulated materials which, upon disposal, according to the WEEE directive, require special reuse and recycling processing. For this reason GoldenEar Technology (manufacturers of GoldenEar Technology speakers) has arranged with our distributors in European Union member nations to collect and recycle this product at no cost to you. To find your local distributor please contact the dealer from whom you purchased this product or go to our website at [www.goldenear.com](http://www.goldenear.com).

Please note that the product only falls under the WEEE directive. When disposing of packaging and other shipping material we encourage you to recycle through the normal channels.



## SERVICE

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Service and warranty work on your GoldenEar loudspeakers will normally be performed by your local GoldenEar Technology dealer. If, however, you wish to return the speaker to us, please contact us first, describing the problem and requesting authorization as well as the location of the nearest factory service center. **Please note that the address given in this booklet is the address of our office P.O. Box only. Under no circumstances should loudspeakers be shipped to our offices or returned without contacting us first and obtaining return authorization.**

GoldenEar Technology Offices  
P.O. Box 141  
Stevenson, Maryland 21153  
Phone: 410-998-9134

## SPECIFICATIONS

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### Triton Seven

<b>Speaker Dimensions:</b>	7- <sup>1</sup> / <sub>4</sub> " (18.3 cm) W x 11" (27.9 cm) D x 39- <sup>3</sup> / <sub>4</sub> " (101 cm) H* *(height is with base installed, no feet/spikes)
<b>Base:</b>	10- <sup>1</sup> / <sub>2</sub> " (26.5 cm) W x 14- <sup>1</sup> / <sub>2</sub> " (36.9 cm) D
<b>Weight:</b>	32 lbs. (15 kg)
<b>Frequency Response:</b>	29 Hz – 35 kHz
<b>Efficiency:</b>	89 dB
<b>Nominal Impedance:</b>	Compatible with 8 ohms
<b>Driver Complement:</b>	Two 5.25" high-definition cast-basket mid/bass drivers coupled to Two 8" planar sub-bass radiators One HVFR™ High-Velocity Folded Ribbon tweeter
<b>Rec. Amplification:</b>	10 – 300 Watt/channel

Specifications are subject to change without notice.





## LIMITED WARRANTY

### **5-YEARS FOR DRIVERS AND CABINETS, 3-YEARS FOR ELECTRONIC COMPONENTS**

GoldenEar Technology warrants to the original retail purchaser only that this GoldenEar Technology Loudspeaker Product (the "Product") will be free from defects in materials and workmanship for a period of five (5) years covering the drivers and cabinets, and three (3) years for the electronic components from the date of the original purchase from a GoldenEar Technology Authorized Dealer. However, this warranty will automatically terminate prior to the expiration of five (5) years for the drivers and cabinets and three (3) years for the electronic components if the original retail purchaser sells or otherwise transfers the Product to any other party. The original retail purchaser shall hereinafter be referred to as "you." Defective Products must be shipped, together with proof of date of purchase, prepaid insured to the Authorized Dealer from whom you purchased the Product, or to the nearest factory service center. Product(s) must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If, upon examination at the Factory or a GoldenEar Technology Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, GoldenEar Technology or the GoldenEar Technology Authorized Dealer will, at its option, repair or replace this Product at no additional charge, except as set forth below. All replaced parts and Product(s) become the property of GoldenEar Technology. Product(s) replaced or repaired under this Warranty will be returned to you, within a reasonable time, freight collect.

This Warranty does not include service or parts to repair damage caused by accident, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defects in materials or workmanship, or service, or repair or modification of the Product which has not been authorized by GoldenEar Technology. GoldenEar Technology makes no Warranty with respect to its Products purchased from dealers or outlets other than GoldenEar Technology Authorized Dealers. This Warranty is in lieu of all other expressed Warranties. If this Product is defective in material or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will GoldenEar Technology be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if GoldenEar Technology or a GoldenEar Technology Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation may not apply to you.

All implied warranties on the Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.



This product complies with the essential requirements of the EMC directive 89/336/EEC

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