



<u>SuperCenter</u>

Ultra-High Performance Center Speakers

OWNER'S MANUAL



#### **CONGRATULATIONS!**

Congratulations and thank you for purchasing GoldenEar Technology's SuperCenter speaker! You are about to hear the spectacular difference this very special center channel speaker will make in your multi-channel music and 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, assembly and set-up procedures for your SuperCenter speaker.

Please visit our website at 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.

#### YOUR NEW GOLDENEAR SPEAKERS

GoldenEar SuperCenter speakers are designed to fit beautifully in a wide variety of horizontal placement applications. Their modest dimensions and attractive contemporary design allow for easy installation in many locations. To get the best performance possible and for a product that lasts a lifetime, we strongly recommend that you follow the placement and setup guidelines provided in this manual.

## Cleaning

Do not use a strong or abrasive cleaner on your new speakers. Clean them only with a damp cloth, but do not get them wet. A lint roller is an effective way to remove lint and dust from the cloth grilles.

#### PREVENTING SPEAKER DAMAGE



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. <u>Please Note:</u> Avoid use of tone controls and loudness controls as they will demand even more power from an amplifier.

GoldenEar Technology SuperCenter 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 all of 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 SuperCenter 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.

# UNPACKING YOUR SUPERCENTER LOUDSPEAKER

# 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 SuperCenter loudspeaker here:

(Serial Number)	

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

#### INSTALLING THE OPTIONAL FEET

If you are going to set your SuperCenter Speaker on a table or bookshelf that is below ear-level, (or on a shelf above the TV that is above ear-level), you will want to install the optional adjustable leveling feet in order to angle the speaker up (or down) towards the listeners. The SuperCenter is supplied with brass inserts designed to go into the bottom of the speaker to hold adjustable feet to give you the option of angling the speaker. Install the feet as follows:

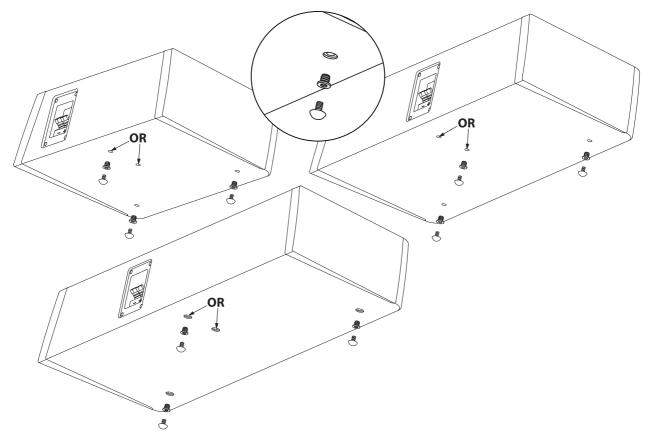
Tools required: Small Hammer (to tap in brass inserts)

Parts included: Three threaded Brass Inserts

Three Adjustable rubber leveling feet

#### Instructions:

- 1. Carefully lay the SuperCenter on its top (bottom facing up) on a soft padded flat object, such as a table with a towel or blanket, taking care not to damage the speaker or grille.
- 2. There are four pre-drilled holes on the bottom of the speaker under the grill cloth;
  - a. Locate the holes by feeling through the cloth (see figure below) Two of the holes are approximately 2" back from the front and about 12" apart (x), 20" apart (XL). or 26" apart (XXL).
  - b. There are two rear holes to choose from (see figure below) depending on the depth of the surface you will place the SuperCenter speaker on and the desired angle. One is located farther back than the other. Select one of these holes that best fits your installation;
- 3. Install the three brass inserts into the holes you've chosen to use. The grill cloth will act somewhat like a spring and pop the inserts out if you don't hit them fairly hard to get them started. Then continue with the hammer until sure the inserts are fully seated against the bottom of the speaker.
- 4. Insert leveling feet, place the speaker in its desired position and use the feet to angle and level the speaker as desired.





#### SPEAKER PLACEMENT

GoldenEar Technology SuperCenter speakers are designed to allow flexible placement while providing a very large window of sound and excellent dialog intelligibility 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.



IMPORTANT: Do Not Set Anything On Top of your GoldenEar SuperCenter speaker as the top surface has moving parts under the cloth.

#### A Note About Room Acoustics

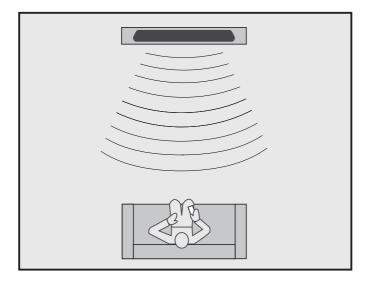
GoldenEar Technology SuperCenter speakers are designed to provide exceptional sound in a wide variety of domestic settings. It is important to note however that listening room construction, dimensions and furnishings all play a part in the quality of sound you will ultimately achieve from your new speakers. 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.

# Positioning the SuperCenter Speaker

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



**Accurate Timbre:** For the most accurate and natural timbre, the speaker's high-frequency driver should be at, or aimed at, approximately ear level. Use the included optional leveling feet if you need to angle the SuperCenter so it points up (or down) at the listener.

**Balanced Bass:** Placing speakers close to walls will emphasize bass and may reduce overall clarity. If possible, position the speaker 8 in (20 cm) or more from the wall behind the speaker. This will ensure better bass performance and optimal midrange clarity.

**Location:** Typical placement for your SuperCenter will be directly above or below your display/screen. Since the center channel speaker handles the majority of dialog it is important that it be located in close proximity to the center of the viewing area.

Position the speaker flush with the front of the TV or speaker shelf to minimize unwanted sound reflections. If the center-channel speaker is not approximately the same distance away from the primary listening position as your front speakers, use your A/V receiver's/processor's speaker distance menu to electronically adjust for differences in distance. If installing the SuperCenter in a cabinet space, please note that although the SuperCenter speakers have passive radiators located on top, since these produce only a low frequency pressure wave, only a minimal (1"-2") clearance above the speaker is required.

## Speaker Break-in

Your new SuperCenter loudspeaker 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.

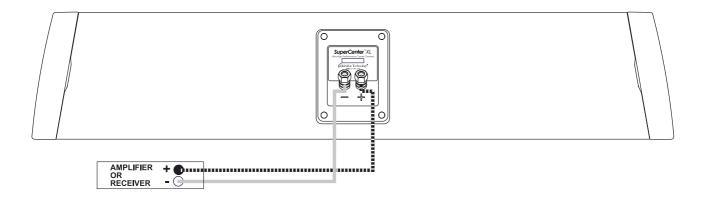


#### **SPEAKER CONNECTION**



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

Your SuperCenter speaker is 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 As shown above, hook up the left main/front channel red(+) terminal of your receiver or amplifier to the red(+) running (see your dealer for assistance).



As shown above, hook up the center channel red(+) terminal of your receiver or amplifier to the red(+) terminal of your SuperCenter loudspeaker and the center channel black(-) terminal of your receiver or amplifier to the black(-) terminal of your SuperCenter. It is essential that all speakers in your system 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. If you want more bass, raise your subwoofer's "Level" control (or raise the subwoofer level on you're a/v receiver), keeping in mind that even a little turn of the knob can make a big difference in the 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.

#### COMPLETE HOME THEATER SYSTEMS

We strongly suggest that you use matching GoldenEar Technology speakers for left/right main and rear/surround speakers, and a ForceField™ subwoofer, to complete your GoldenEar home theater system. Of particular note, all the GoldenEar speakers are designed specifically to make a perfect match with the SuperCenter speakers, for a complete GoldenEar home theater system. And if you don't have Triton speakers with built-in subs, a GoldenEar ForceField sub (or two) will complete your spectacular GoldenEar home theater system.

# Setting Channel Levels and Bass Management in Multi-Channel Home Theater Systems

Multi-channel surround sound systems have bass management systems (systems which direct the bass to the various channels) which vary from unit to unit. Many problems relating to the overall sound of the system can be traced back to improper bass management. Also note that 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.

**HOME THEATER SYSTEM BASS MANAGEMENT SETTINGS:** On your Home Theater receiver or A/V processor's Speaker Setup Menu, in a typical home theater setup using powered subwoofers (either built-in like the Triton towers, or standalone like a ForceField subwoofer) **all channels using SuperCenter speakers should be set to "Small."** A good starting point for the crossover would be the standard default of 80Hz. All bass below the specified frequency will be sent to your subwoofer(s) - Triton towers in a TritonCinema Home Theater (with Left/Right Main Tritons set to "Large"), or to your ForceField subwoofer(s).

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.



#### TROUBLESHOOTING

If you experience any difficulties with your SuperCenter speaker, 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 speaker to your GoldenEar Technology Authorized Dealer for assistance. But make sure you *Call First*.

#### **SERVICE**

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 products or parts 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

#### TECHNICAL ASSISTANCE

It is our pleasure to offer assistance if you have any questions regarding your SuperCenter speaker 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



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 <a href="https://www.goldenear.com">www.goldenear.com</a>.

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.

# **SPECIFICATIONS**

#### SuperCenter X

**Speaker Dimensions:** 5-3/4" (14.6 cm) H\* x 20" (50.8 cm) W x 11" (28.0 cm) D

\*(height is with no feet)

Weight: 15 lbs. (7.0 kg) Frequency Response: 45 Hz - 35 kHz

Efficiency: 90 dB

**Nominal Impedance:** Compatible with 8 ohms

**Driver Complement:** Two 5-1/4" cast-basket mid/bass drivers

One High-Velocity Folded Ribbon (HVFR™) high-frequency radiator

One 7" x 10" quadratic planar low-frequency radiator

**Rec. Amplication:** 20 - 200 Watt/channel

SuperCenter XL

**Speaker Dimensions:** 5-3/4" (14.6 cm) H\* x 29" (73.5 cm) W x 11" (28.0 cm) D

\*(height is with no feet)

Weight: 21 lbs. (9.5 kg) 36 Hz - 35 kHz Frequency Response:

Efficiency: 91 dB

**Nominal Impedance:** Compatible with 8 ohms

**Driver Complement:** Two 5-1/4" cast-basket mid/bass drivers

One High-Velocity Folded Ribbon (HVFR™) high-frequency radiator

Two 6-3/4" x 8" quadratic planar low-frequency radiators

**Rec. Amplication:** 20 - 250 Watt/channel

SuperCenter XXL

**Speaker Dimensions:** 5-¾" (14.6 cm) H\* x 35" (88.9 cm) W x 11" (28 cm) D

\*(height is with no feet)

Weight: 31 lbs. (14 kg) **Frequency Response:** 33 Hz - 35 kHz

91 dB Efficiency:

**Nominal Impedance:** Compatible with 8 ohms

**Driver Complement:** Four 5-1/4" high-definition cast-basket mid/bass drivers

One High-Velocity Folded Ribbon (HVFR™) high-frequency radiator Two 6-¾" X 8" planar low-frequency radiators One 7" X 10" planar low-frequency radiator

Rec. Amplification: 20 - 350 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.

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

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