

## Preparation:

### Tools For Installation

- Pencil
- Drill
- Tape Measure
- Wire Cutter
- Phillips Screwdriver
- Utility Knife
- Safety Eye Wear
- Gloves
- Sandpaper

### Speaker Wire Guide

- 18AWG minimum - for distances up to ..... 10 ft
- 16AWG - from ..... 10 to 50 ft
- 14AWG - from ..... 50 to 100 ft

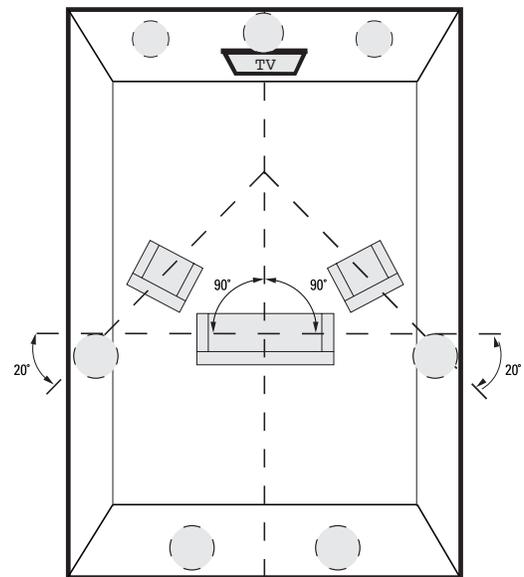
### Considerations

- Where is the best place to install the speakers?
- Where do the speakers sound the best?
- Separate the speakers 6 - 10 feet apart.

### Placement

There are many options for proper speaker placement depending upon speaker type and application. It's important to carefully plan the placement of your speakers, as installation requires that you cut a hole in your wall or ceiling.

(See **Diagram 1.**) Typical speaker placement for a 5.1 and 7.1 speaker system.



**Diagram 1**

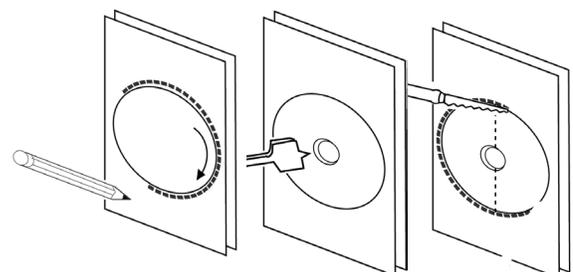
## Installation:

### Cut Out

**NOTE: This is the most important part of the entire installation.**

If you are not certain whether any obstructions exist behind the desired mounting area, you should start by cutting a small hole in the center of your penciled mounting hole with a drywall saw.

Trace along the included template. Cut along the traced line using a drywall saw or rotary drill. Use a piece of sandpaper to sand down the cut out edge for a smoother contour. (See **Diagram 2.**)



**Diagram 2**

## Mounting

Mount the speaker utilizing its built-in EZ Mount System. While firmly holding the tweeter bridge, simply push the speaker up against the drywall and turn it clockwise about 15 degrees. This will engage the EZ Mount System and the dog ears will move outward forcing the speaker snug up against the drywall, as shown in the diagram. (See Diagram 3.)

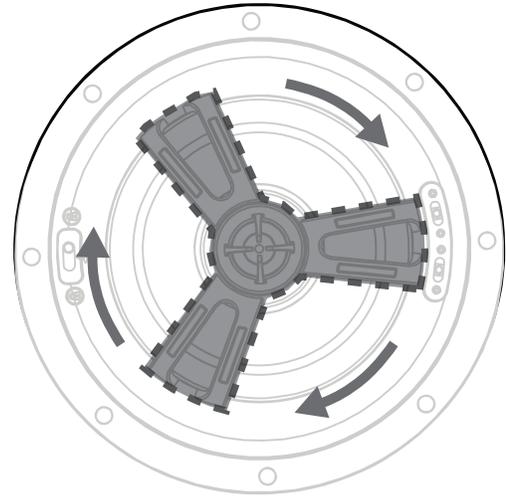
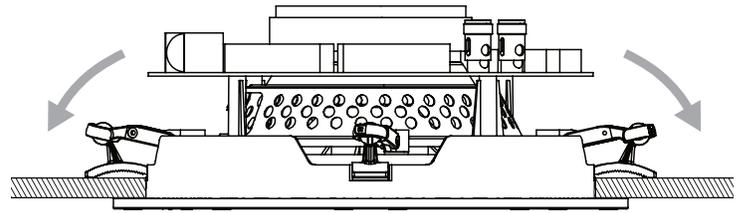


Diagram 3



## Lock in Place

With the speaker in place, slide the lock switch from the unlocked position to the locked position. The speaker is now installed and ready for use. (See Diagram 4.)

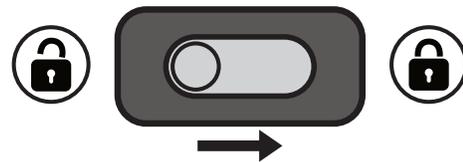


Diagram 4

## Connection

When connecting any speakers to the amplifier or receiver, always make sure the power is off. Locate the connection terminals on the back of your receiver or amplifier. Always make sure to connect audio out from the back of your receiver or amplifier to the speakers. (See Diagram 5.)

**NOTE:** Not all Amplifier/Receivers can safely play more than one pair of speakers at once. Please refer to your owner's manual for impedance and wattage compatibility.

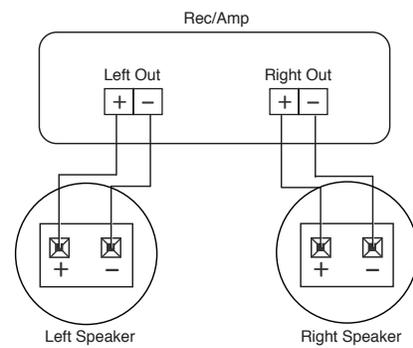


Diagram 5

## Adjustment

On select models ( \*Performance, Reference ) of OSD Black Series, a front mounted 3 position  $\pm 3$ dB bass & treble contour switches can be used to tailor high frequencies according to speaker placement or the listeners preference. (See Diagram 6.)

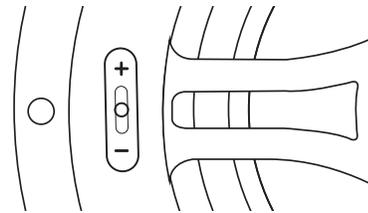


Diagram 6

## Pivoting Tweeter

Your Black series speaker comes from the factory with the tweeter centered in the neutral position. This will provide the smoothest response. However, select models come with a pivoting tweeter so you can focus the sound directly towards the listening area if needed. In order to do this, carefully press on the edge of the tweeter baffle in the direction you wish to focus the sound. (See Diagram 7.)

**CAUTION:** When adjusting the pivoting tweeter be sure not to touch the dome as you may cause damage to the speaker.

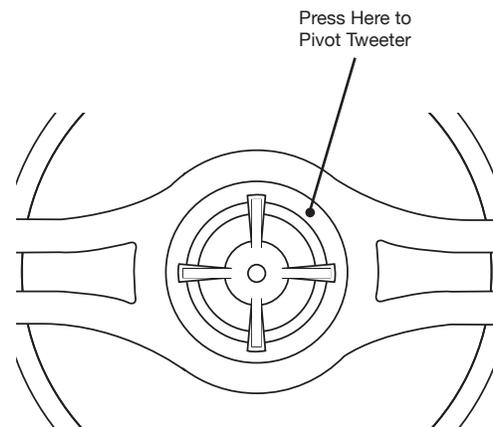


Diagram 7

**R62 EZ**

6.5" 2-Way Ceiling Speaker  
Woofer: Injection PP Cone  
Tweeter: 1" Pivoting Neodymium  
Adjustable Bass/Treble  
EZ Mount System  
Perfect Edge™ Magnetic Grille  
Power Handling: 120W Max  
Sensitivity: 89dB 1w/1m  
12dB Crossover  
Freq Response: 50Hz - 20kHz  
Impedance: 8 ohms  
Dimensions: 9.05" x 3.14"  
Cutout: 7.87"

**R61 EZ**

6.5" 2-Way Ceiling Speaker  
Woofer: PP Cone  
Tweeter: 1" Pivoting Neodymium  
EZ Mount System  
Perfect Edge™ Magnetic Grille  
Power Handling: 100W Max  
Sensitivity: 88dB 1w/1m  
Freq Response: 60Hz - 20kHz  
Impedance: 8 ohms  
Dimensions: 9.05" x 3.14"  
Cutout: 7.87"

NOTE: All specification and dimensions are subject to change without notice.

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**WARRANTY**

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All Optimal Speaker Design speaker products have Limited Lifetime Warranty against defects in materials and workmanship. Proof of purchase must accompany all claims. During the warranty period Optimal Speaker Design will replace any defective part and correct any defect in workmanship without charge for either parts or labor. Optimal Speaker Design may replace returned speakers with a product of equal value and performance. In such cases, some modification to the mounting may be necessary and are not Optimal Speaker Designs responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by Optimal Speaker Design. The unit must be returned to Optimal Speaker Design at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damaged resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by Optimal Speaker Design.

Optimal Speaker Design sells products only through authorized dealers and distributors to ensure that customers obtain proper support and service. Any Optimal Speaker Design product purchased from an unauthorized dealer or other source, including retailers, mail over dealers and on-line sellers will not be honored or serviced under existing Optimal Speaker Design warranty policy. Any sale of product by an unauthorized source or other manner not authorized by Optimal Speaker Design shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, you must email customer service at [RMA@audiogeargroup.com](mailto:RMA@audiogeargroup.com) for a Returned Merchandise Authorization (RMA) number# then the unit must be shipped to Optimal Speaker Design at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the speaker(s) in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

This Warranty Does Not Cover: Damage caused by abuse, accident, misuse, negligence, or improper operation (installation) • Any products that have been altered or modified • Any product whose identifying number of decal, serial #, etc. has been altered, defaced or removed • Normal wear and maintenance.