



#### Introduction

Congratulations on your purchase of the Outsiders Series Loudspeaker system and thank you for choosing Parasound. Your new Outsiders were developed using the finest loudspeaker and crossover components available. Extensive computer modeling and countless hours of listening were spent to insure accurate audio reproduction in a variety of installations where placement compromises must sometimes be made.

The kevlar woofer cones with polyurethane rubber surrounds and the ferrofluid-treated wide dispersion tweeters are carefully constructed to resist the effects of hostile weather climates. The specially molded cabinets are hermetically sealed to resist the elements.

Please take a few minutes to read these instructions thoroughly to make the installation easier and insure optimum performance.

# **Unpacking and Inspection**

Carefully unpack your Outsiders and locate the enclosed accessories:

# **Qty Description**

- 2 Outsiders loudspeakers
- 2 Mounting brackets
- 2 Plastic speaker-to-bracket mounting knobs
- 1 Bag with four round stickers to cover unused bracket mounting holes

Be sure to carefully inspect the speakers for any signs of shipping damage. If you notice any, contact your Parasound Dealer immediately. Save your carton and packing inserts for safe transport in case you move or your loudspeakers ever require shipping.

### **Precautions**

If you have any doubts about your ability to install outdoor loudspeakers, you should consider the services of a custom installer. If you plan to install them yourself, always use good quality tools to save time and make the installation go more smoothly.

Determine the final location of both left and right speakers pulling any wire or mounting hardware since changes to one speaker may affect the other either aesthetically or acoustically. Look for pipes, wiring or any other conflicting material that might be damaged before beginning the installation.

# **Prewiring**

Before you purchase loudspeaker wire, check local building codes to make sure that the wire is rated to comply with applicable local safety codes such as UL or CL-2. Use only stranded wire no thinner than AWG 16, and for runs longer than 100 feet, we recommend a minimum of AWG 14. When pulling wire, take care not to pull the wire too fast to prevent stretching the wire or scorching the insulation from friction. Leave 2 to 3 feet of excess loudspeaker wire at both ends; it is easier to trim off excess wire than to splice additional wire. When securing speaker wire, be careful not to pierce the insulation with nails or staples.

For best performance and easier troubleshooting, always "home run" wiring when installing multiple speakers rather than connecting from one speaker to the next. When connecting multiple speakers, make sure that the power amplifier is capable of adequately driving the combined impedance of the speakers. If not, you may need additional amplifiers or an impedance protection device that are often built into loudspeaker selection boxes.

# **Choosing Your Mounting Locations**

Placement affects the performance of all loudspeakers. To obtain maximum bass output, locate each speaker near the junction of two walls or a wall and ceiling.

Be aware that outdoor speaker placement makes it nearly impossible to hear the same level of bass as you would hear indoors where the enclosed cavity reinforce low frequencies. Never attempt to drive the speaker to attempt to reach the same outdoor levels you would expect from indoor loudspeakers. This could damage the loudspeakers and/or amplifier.

If you hear distortion from the loudspeakers, you should reduce the volume. If you think your amplifier cannot adequately drive the loudspeakers, consult your Parasound dealer for advice.

### **Outdoor Location Considerations**

Outsiders Series loudspeakers are designed to resist most weather conditions. Please observe the following precautions to extend their life:

- 1. Avoid exposure to direct sunlight to prevent the loudspeakers from being subjected to heat and ultraviolet radiation.
- 2. Outsiders use stainless steel grills and mounting screws. But even stainless is not immune to extended exposure to salt air. You should take care to minimize its extremely corrosive effects. If you live near salty water or where there is salty fog, mount your loudspeakers where you can easily disconnect them, rinse them well with fresh water and store them dry indoors when not in use. Loudspeaker corrosion is evidence of extended exposure to salt air or salt water and is not covered under warranty.
- 3. Never locate your Outsiders directly on the ground where pooled water could reach the grill or driver units. If they must be located near the ground, place an object underneath them to raise them above puddles.
- 4. **Warning!** Never submerge the loudspeakers or attempt to operate them underwater. This could lead to risk of shock.
- 5. Do not locate the speakers closer than two feet to any direct heat source such as an exposed radiator or heating duct.

# **Outsiders Series Mounting Brackets**

The unique mounting brackets included with your Outsiders Series loudspeakers allow you to mount the speaker quickly, and in a variety of angles and positions.

# **Mounting the Outsiders**

- 1. Determine the location on the wall where you will mount each Outsiders speaker.
- 2. Determine the position and angle of the mounting bracket.
- 3. Fasten the bracket to the wall with screws or bolts that can support the speaker. You must use the supplied shoulder washers to avoid scratching the bracket's epoxy powder paint. If you scratch or chip the paint, you will compromise its resistance to corrosion.
- 4. Gently slide the speaker into the bracket and align the recessed threaded holes at each end of the speaker with the corresponding holes in the bracket.
- 5. Screw the plastic knob with the metal bolt through the bracket into the threaded hole in the end of the speaker. It's not necessary to apply excessive force on the knobs to hold the speaker in place. Repeat for the other end of the speaker.
- 6. Position the speaker at the desired angle and hand-tighten the knobs.
- 7. Loosen the bracket knobs slightly when you want to pivot the speaker, then retighten.

### **Connecting Speaker Wire to the Outsiders Series Loudspeakers**

Outsiders Series Loudspeakers employ gold-plated five-way binding posts, so you can connect either spade lugs, banana plugs, or bare wire. When using bare wire, we recommend that you "tin" the speaker wire with solder to help prevent oxidation. Note that the rear of the Outsiders Series cabinet has a recess to help facilitate routing speaker wire.

Route an appropriate length of wire that is no thinner than 16 AWG to each speaker and be sure to maintain correct + and - polarity to insure correct phasing. Most wires have a ridge or pattern on one of the conductors to help keep the polarity consistent.

If the installation requires the wire to be exposed to direct sunlight or buried, you may want to use special underground/UV resistant wire. Seal holes where wires enter exterior walls to prevent air or water leaks.

### **Covering Holes When Not Using Brackets**

The four small round "dots" are used to cover the recessed threaded bushings when you don't attach brackets to your Outsiders. They simply cover up the holes.

# Repainting the Grills

Before painting, lightly sand both sides of the grill. After painting, make sure to blow through the perforations to make sure none were closed by paint. After the paint dries, we recommend an additional clear-coat for protection.

### **Maintenance**

Keep your Outsiders Series loudspeakers clean and free of debris such as leaves and dirt. It's a good idea to wipe the outside of the cabinet with a soft cloth and a quick application of spray or paste wax to keep the finish looking new. Do not remove the grill to expose the drivers or attempt to disassemble the cabinets.

### In Case of Trouble

If you suspect a problem with your Outsiders Series loudspeakers, first recheck all your connections. If only one speaker is inoperative, the trouble may be caused by another component or even a defective hookup cable. We suggest you contact your authorized Parasound Dealer or Installer, or call Parasound Technical Service. We may be able to suggest diagnostic tests you can easily perform yourself and which will save you a lot of trouble.

If we determine that the speaker should be returned to Parasound or an Authorized Warranty Center for inspection and possible servicing, call for the location of a Warranty Center near you. If you choose to send it to Parasound, you must call or write to obtain a Return Authorization number. You will be asked to repack the unit in its original packing and an outer cardboard carton for proper protection in transit. We will give you shipping instructions. We may refuse units that arrive without the correct Return Authorization number; an unsuitable shipping carton or that has evidence of improper internal packing. We cannot accept collect shipments. After repair under warranty, the unit will be returned to you prepaid.

## **Outsider Series Loudspeaker Specifications**

### **Outsider L**

Frequency Response 50 Hz-22 kHz +/- 3 dB

Nominal Impedance8 OhmsMinimum Impedance6 OhmsSensitivity 1 Watt/1 Meter89 dB

RMS Power Range 10-100 Watts

Woofer Size 5 1/4"
Cone Material Kevlar

Surround MaterialButyl RubberTweeter Size1" DomeTweeter Diaphragm MaterialAluminum

Crossover Slope 12 dB per octave

Crossover Frequency 1.5 kHz

#### **Outsider S**

Frequency Response 58 Hz-22 kHz +/- 3 dB

Nominal Impedance8 OhmsMinimum Impedance6 OhmsSensitivity 1 Watt/1Meter89 dBRMS Power Range10-70 WattsWoofer Size4 1/2"Cone MaterialKeylar

Surround MaterialButyl RubberTweeter Size1" DomeTweeter Diaphragm MaterialAluminum

**Crossover Slope** 12 dB per octave

Crossover Frequency 1.7 kHz



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