

PROFICIENT

# Protege™

OWNER'S MANUAL

## Ceiling Speakers

C851 • C801 • C791 • C646 • C641  
C626 • C621 • C612 • C606 • C501

### SPEAKER PLACEMENT

Before installing your Ceiling Speakers, you should consider their placement carefully, taking into account the location of electrical, plumbing and other fixtures. Contact your Dealer for assistance if you are unsure of the best location for your particular listening environment.

**Placement In Ceiling:** When placing your speakers into the ceiling, they should ideally be located above the primary listening area.

If the speakers are positioned far away from the primary listening area, simply adjust the pivoting tweeters so they are pointed towards it. **Note:** To avoid possible damage to the pivoting tweeters, read the section entitled **"SPEAKER ADJUSTMENTS"** in this manual prior to performing the tweeter adjustment.

In a very large room with high ceilings, it may be necessary to place additional speakers throughout the room. Contact your Proficient Audio Systems Dealer for assistance.

### MOUNTING SURFACE PREPARATION

#### New Construction - Unfinished Ceilings

A Pre-Construction Bracket, available from your Dealer, may be installed prior to drywall application across joists (up to 24" on-center) where a speaker will be located. After the hole is cut and the drywall is installed, the speakers are then easily installed following the instructions for mounting in **"Finished Ceilings"** below. **Note:** If the speakers are to be mounted more than 24" on-center, a special **"Extra Long Wing"** is available from your Dealer.

#### Finished Ceilings

Prior to the actual installation of the speakers, it will be necessary to run cables to the speaker locations. See your Dealer for more information about cable installation. After the cable has been properly installed, you are ready to mount the speakers. Following the simple steps listed below will result in a professional looking installation:

1. Determine the best area to mount your speakers. This area of the ceiling should be free of obstructions such as electrical conduit, HVAC ducts, or water lines. This can best be determined by noting the placement of fixtures and gaining access to an attic or crawl space for further analysis of the location of such obstacles.
2. Find the joists nearest the desired speaker mounting location. We highly recommend using a good stud-finder tool for this procedure. If you are lining up the speakers to some other object or molding in the room, make sure you consider the size of the baffle, which extends beyond the mounting hole.
3. Mark the hole. A template for setting the hole is provided in the box. Position the template in the desired position and pencil an outline on the ceiling.

4. Cutting the hole. **CAUTION: 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, cutting at a 45° angle towards the inside of the hole. (See Diagram 1) Cutting the small hole at this angle will make drywall repair much easier, using the piece cut out. Once you have determined that there aren't any obstructions in your desired mounting location, start cutting the finished hole at a 90° angle to the ceiling surface.

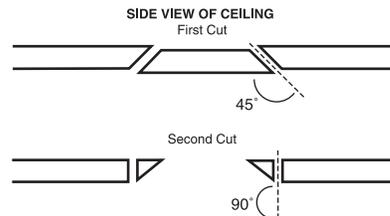


Diagram 1:  
Ceiling Cut Out

5. Add insulation. If the area in the ceiling is not already insulated, add an adequate amount of insulation material to loosely cover the back of the speaker. If the insulation material used is faced with foil or paper, position the foil or paper away from the speaker.



**CAUTION: Speaker components can get hot while playing music at moderate to high volume levels. There should be nothing at all touching the speaker. Material in proximity to the back of the speaker must have at a minimum 1" or 26mm clearance for non-flammable materials and more for flammable materials like plastic vapor barriers.**

## SPEAKER INSTALLATION

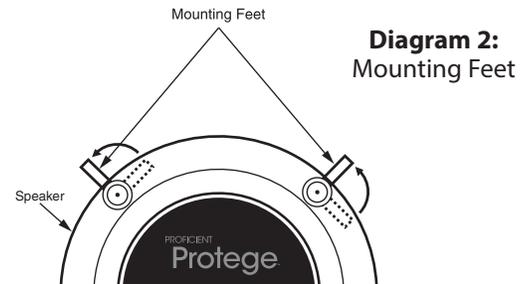
The unique integral four-foot mounting system incorporated into each Ceiling Speaker allows for a quick installation by following these easy steps:

1. Remove the grille from the speaker baffle.
2. Attach the speaker cable (observing the proper polarity with your amplifier, + to + and - to -). Make sure the left channel of the amplifier is connected to the left speaker, the right channel is connected to the right speaker, etc.
3. Make sure the mounting feet are turned inward to clear the opening, and insert the speaker into the ceiling. Position the speaker into the hole. **Note:** *The speaker is designed to flex and conform to any small imperfections in the ceiling's surface.*

Tighten the four screws on the front of the baffle only enough to make the speaker become snug against the ceiling. As you tighten the screws, the feet will automatically flip into an outward position (See Diagram 2), thereby clamping the drywall between the feet and the speaker.

**CAUTION: Over-tightening may warp the baffle, crack the ceiling or cause difficulty in aligning the grille.**

4. Reattach the grille onto the speaker baffle.



## SPEAKER ADJUSTMENTS

The Ceiling Speakers come from the factory with the tweeter facing straight out from the baffle. This will result in the overall smoothest response. However, depending on your particular primary listening area, room acoustics, ceiling height, or personal preference, you may find the sound more pleasing by pointing the tweeters in a particular direction. If additional treble is desired in the primary listening area, point the tweeter towards that area; and if less treble is required, point the tweeter away. Push gently at the edge of the tweeter to point it in the desired direction. (See Diagram 3)

**NOTE:** *The tweeters on the C606 do not pivot.*

**CAUTION: Avoid touching metal dome tweeters, as damage may occur (C851, C801, C646 & C641).**

### Tweeter Adjustment (C851, C801, C646 & C641):

The switch labeled TREBLE allows for 3dB of treble adjustment. Your speakers were shipped with the treble switch in the “-” position, providing the most linear frequency response. If you desire more treble, move the switch to the “+” position, and the tweeter will play 3dB higher. To return to the neutral setting, push the switch back to the “-” position. (See Diagram 4)

### Woofer Adjustment (C851, C801, C646 & C641):

The switch labeled BASS allows for 3dB of bass adjustment. Your speakers were shipped with the bass set to “-”. This setting provides the flattest bass frequency response. If you desire more bass, push the switch to the “+” position and the bass will play 3dB higher. To return to the neutral setting, push the switch back to the “-” position. (See Diagram 4)

Diagram 3:  
Tweeter

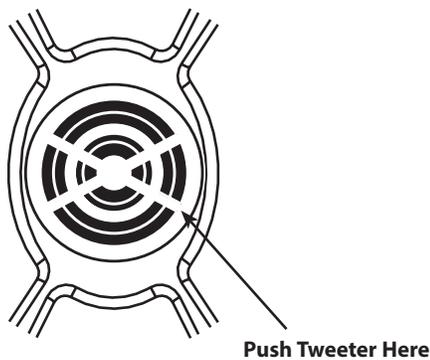
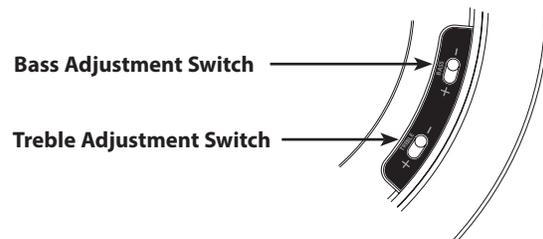


Diagram 4:  
Adjustment Switches



## PAINTING THE GRILLES

We recommend painting your grilles prior to installation. If you decide to paint them in the future, it's best to remove the grilles by simply detaching them from the speakers. Do not paint the grilles while they are installed on the speakers.

Before painting, be sure to remove the cloth material from beneath the grille. Once painted, place the cloth back to its position beneath the grille.

When painting, be careful not to clog the holes of the grille. The sound of the speaker will be dramatically reduced if the perforations in the grille are covered in paint.

Proficient recommends only light spray painting using five parts thinning agent to one part paint.

## SPEAKER SPECIFICATIONS

	<b>C851</b>	<b>C801</b>	<b>C791</b>
<b>Woofers:</b>	8" Kevlar® Cone with Cast Magnesium Woofer Baskets	8" Graphite Cone	8" Polypropylene Cone
<b>Tweeters:</b>	1" Pivoting Aluminum Dome	1" Pivoting Aluminum Dome	1" Pivoting Soft Dome
<b>Contour Switches:</b>	±3dB Bass & Treble	+3dB Bass & Treble	–
<b>Power Handling:</b>	175 Watts	150 Watts	125 Watts
<b>Frequency Response:</b>	28Hz - 22kHz	28Hz - 22kHz	36Hz - 20kHz
<b>Impedance:</b>	8Ω	8Ω	8Ω
<b>Sensitivity:</b>	92dB 1W/1m	92dB 1W/1m	92dB 1W/1m
<b>Grilles:</b>	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets
<b>Diameter x Depth:</b>	11½" x 4¼"	11½" x 4¼"	11½" x 4¼"
<b>Ceiling Cut Out:</b>	9¾"	9¾"	9¾"
	<b>C646</b>	<b>C641</b>	<b>C626</b>
<b>Woofers:</b>	6½" Kevlar® Cone with Cast Magnesium Woofer Baskets	6½" Graphite Cone	6½" Graphite Cone
<b>Tweeters:</b>	1" Pivoting Aluminum Dome	1" Pivoting Aluminum Dome	1" Pivoting Silk Dome
<b>Contour Switches:</b>	+3dB Bass & Treble	+3dB Bass & Treble	–
<b>Power Handling:</b>	150 Watts	125 Watts	100 Watts
<b>Frequency Response:</b>	32Hz - 22kHz	32Hz - 22kHz	45Hz - 20kHz
<b>Impedance:</b>	8Ω	8Ω	8Ω
<b>Sensitivity:</b>	92dB 1W/1m	92dB 1W/1m	91dB 1W/1m
<b>Grilles:</b>	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets
<b>Diameter x Depth:</b>	9¼" x 3⅝"	9¼" x 3⅝"	9¼" x 4"
<b>Ceiling Cut Out:</b>	8¼"	8¼"	8¼"
	<b>C621</b>	<b>C612</b>	<b>C606</b>
<b>Woofers:</b>	6½" Polypropylene Cone	6½" Polypropylene Cone	6½" Polypropylene Cone
<b>Tweeters:</b>	1" Pivoting Silk Dome	1" Pivoting Soft Dome	¾" Soft Dome
<b>Power Handling:</b>	100 Watts	85 Watts	75 Watts
<b>Frequency Response:</b>	45Hz - 20kHz	45Hz - 20kHz	45Hz - 20kHz
<b>Impedance:</b>	8Ω	8Ω	8Ω
<b>Sensitivity:</b>	91dB 1W/1m	91dB 1W/1m	90dB 1W/1m
<b>Grilles:</b>	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets	Thin-Bezel held by Neo Magnets
<b>Diameter x Depth:</b>	9¼" x 3⅝"	9¼" x 3⅝"	9¼" x 3⅝"
<b>Ceiling Cut Out:</b>	8¼"	8¼"	8¼"
	<b>C501</b>		
<b>Woofers:</b>	5¼" Polypropylene Cone		
<b>Tweeters:</b>	½" Pivoting Polyamide Dome		
<b>Power Handling:</b>	75 Watts		
<b>Frequency Response:</b>	40Hz - 20kHz		
<b>Impedance:</b>	8Ω		
<b>Sensitivity:</b>	90dB 1W/1m		
<b>Grilles:</b>	Thin-Bezel held by Neo Magnets		
<b>Diameter x Depth:</b>	7¾" x 3¼"		
<b>Ceiling Cut Out:</b>	6⅛"		

Features and specifications are subject to change without notice.

## LIMITED TEN-YEAR WARRANTY

Proficient Audio Systems ("Proficient") warrants to the original retail purchaser only ("you") that this product will be free from defects in materials and workmanship for a period of ten years (the "Warranty Period"), subject to the limitations and exclusions set out in this Limited Warranty. This warranty is not transferable to subsequent owners of the product. If you discover a defect in material or workmanship within the Warranty Period, you can obtain warranty service by contacting Proficient during the Warranty Period at 800.472.5555 or techsupport@proficientaudio.com or by sending the product to Core Brands at 12471 E. Riverside Drive, Eastvale, CA 91752 or to the dealer from whom you purchased the product. Defective products must be shipped, prepaid and insured, together with proof of purchase. Warranty service requests made without proof of date of purchase will be denied. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk of loss or damage in transit is to be borne by the purchaser.

If, upon examination by Proficient or its authorized dealer, it is determined that the unit is in fact defective, Proficient will, at its option:

- Repair or replace the product at no additional charge; or
- If the model is no longer available and can not be repaired effectively, replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Proficient assumes no responsibility or liability for such modification.

Proficient will bear the cost of returning the repaired or replaced product to you, freight prepaid. All replaced parts and product become the property of Proficient Audio Systems. The foregoing is your sole and exclusive remedy for breach of warranty. If the product is not found to be defective, Proficient will contact you to arrange for return of the product to you, at your expense.

For technical inquires, please call 800.472.5555 or e-mail us at techsupport@proficientaudio.com. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.

### EXCLUSIONS:

- This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product by unauthorized dealers. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions.
- This Warranty will be void if:
  - the Serial Number on the product has been removed, tampered with or defaced.
  - the product was not purchased from an authorized dealer.

**THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES. PROFICIENT EXPRESSLY DISCLAIMS ALL SUCH OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT.** In no event will Proficient be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Proficient has been advised of the possibility of such damages, or for any claim by any other party. Notwithstanding the above, if you qualify as a "consumer" under the Magnuson-Moss Warranty Act, then you may be entitled to any implied warranties allowed by law for the Warranty Period. Further, some states do not allow limitations on how long an implied Limited Warranty lasts or allow the exclusion or limitation of consequential damages, so such limitations may not apply to you.

### ATTENTION TO OUR VALUED CONSUMERS:

To insure that consumers obtain quality pre-sale and after-sale support and service, Proficient products are sold exclusively through authorized dealers. **Proficient products are not sold online** by Proficient or its authorized dealers, and this warranty is **VOID** if the products have been purchased from any internet reseller. To determine if your Proficient reseller is authorized, please call Proficient at 800.472.5555 or go to [proficientaudio.com](http://proficientaudio.com).

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