

Dipole/Bipole Series Ceiling Speaker User's Installation Guide

Low Profile Dipole/Bipole, In-Ceiling, Coaxial, Infinite Baffle Loudspeaker, with Easy Install Grille

The easy to install CS series Dipole/Bipole speakers are a full range ceiling loudspeaker that incorporates high tech woofer materials with a butyl rubber surround and two fixed angle state-of-the-art Ferrofluid cooled dome tweeters.

This revolutionary combination provides superior and more natural wider big sound close to what you would experience in a movie theater that has multiple surround speakers. The dual purpose speaker is the perfect choice for both Side Surround and Surround Back applications in one package.

A simple switch on the Tweeter Bridge allows you to choose either Dipole for Side Surround or Bipole for the Surround Back function.

In the Dipole function the tweeters are purposely out of phase to create a Null around the listening area that detunes the localization for ambience. When set to Bipole the tweeters are in phase to enhance localization for Dolby Digital EX, DTS-ES and THX EX.

The Infinite Baffle design makes it the ideal choice for typical applications in open beam attic or enclosed ceilings.

For efficiency and consistency the CS DB series are timbre matched to the CS, FIT, FIT FastLoc and WS series of speakers.

In addition, the CS DB is available with a 3 position Base/Treble switch, to fine tune the acoustics and allow for various room surfaces.

The speaker grille color is white, and is a close match to Frazee White Shadow 181. It can be painted to match any décor. The speaker enclosure is a durable UV-resistant material that allows for both indoor and outdoor installations. Unlike other grilles that use magnets to hold them on they must be made of steel that will rust. The perforated powder-coated aluminum alloy grill is long-lasting, corrosion resistant and rust-free.

Four built-in expanding transverse dog leg clamps permit installation with or without pre-wire construction brackets in drywall or material with thickness of 7/32" to 1 3/16".

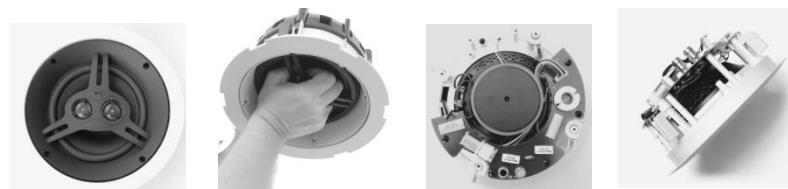
Electrical connection, up to 12 gauge wire, is made by two gold plated constant tension spring-loaded terminals.

With our limited Lifetime warranty you are assured years of superior trouble free operation. Red



SPECIFICATIONS for CS65DB Series	CS650DB	CS654DB
Driver with Butyl Rubber Surround	MetaPlex Composite	Woven Carbon Fiber
Tweeter, Dual 3/4", Diffraction-less Dome	Silk Ferrofluid Cooled	Ceramic Coated Aluminum Ferrofluid Cooled
Frequency Response	40Hz-20kHz	35Hz-21kHz
Power handling	5-125 Watts	5-150Watts
SPL @ 1 Watt/1 meter	90db	91.5db
Impedance 8 ohm Nominal	Fixed Crossovers	3 Position Crossovers
Diameter x Depth 9 5/8"(245mm)x 3 11/16"(94mm)		
Retro-fit Cutout Diameter 8 5/32" (207mm)		

Part Number	92094 CS654DB; 92093 CS650DB;
Manual URL	www.currentaudio.com
Accessories	NC6CB; New Construction Bracket Volume Control ZL45R, ZL60S, SpeKap



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Packaging and Enclosed Parts

Please inspect your pack for damaged or missing parts. Notify your supplier if any discrepancies occur.

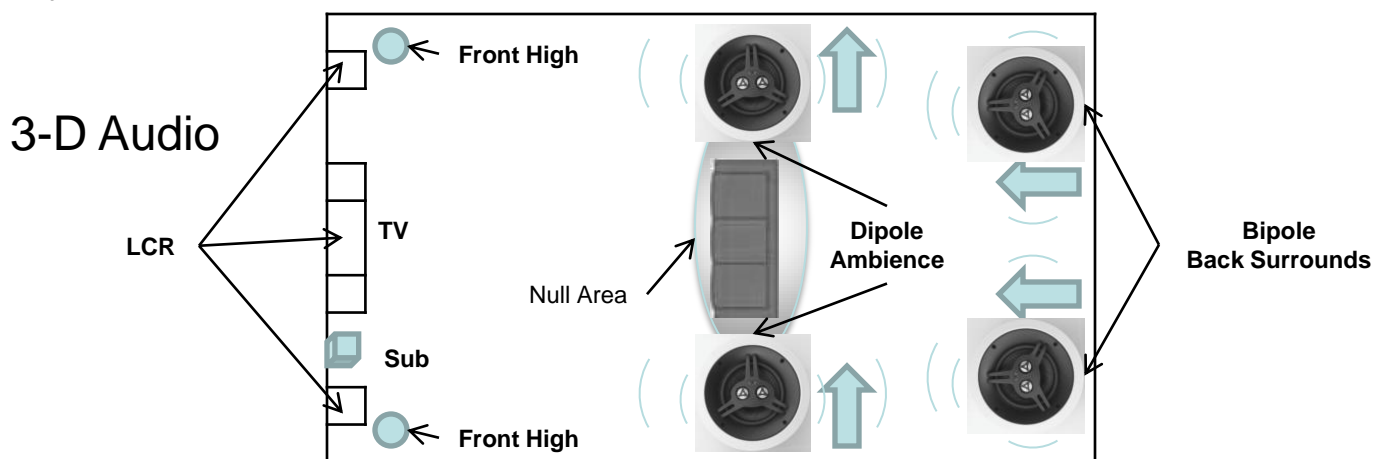
There are four (4) parts in the package: Two (2) main speaker housings and two (2) grilles.

Only simple hand tools are required for assembly and installation.

Required tools: #2 Phillips screwdriver only, if you have new construction brackets previously installed.

Drywall Hand saw if no New Construction Brackets were installed. A saber saw may be required if you are cutting into plywood.

Layout and Tweeter Orientation



This speaker is a combo Dipole/Bipole. The function is selected by a switch on the Tweeter Bridge and must be aimed according to the task. See Section 4 for the description of the Dipole/Bipole functions.

When used as surround Dipole speakers place them equal distance left and right from the listening area and from equal to or slightly behind the listening area. The tweeters in this application should be aligned parallel to the wall with the arrow facing to the right for correct null ambience.

When used as surround back Bipole speakers place them behind the listening area with the tweeters aimed forward for sound localization.

1

Using the supplied Trace Template, place the cutout template against the ceiling and trace along the inside circle. After using a stud finder to locate beams, it is suggested to cut a small pilot hole to verify no obstructions, such as pipes or beams, that could hinder the install.

Carefully cut out the ceiling material along the circle. A drywall saw is perfect for this step. Hold a box or trash can under your cutting to catch the debris.

NOTE: A stud finder may be helpful to locate the ceiling beams. You want to layout the hole to the side of any beams.



Trace Template

2

After you have cut your desired hole from the template, locate the speaker wire for that speaker. Pull enough wire slack down to attach the 2 conductor wire to the gold plated constant tension spring-loaded terminals.

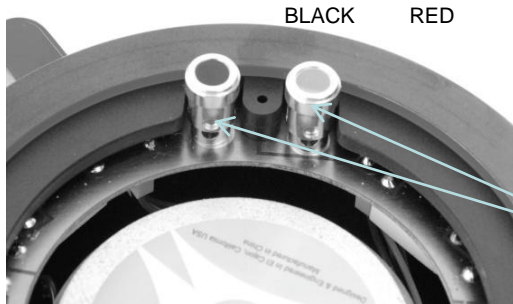
Remove about 2" of the outer jacket then strip about 1/2" insulation from each wire and slightly twist the strands to ensure all strands can be inserted into the hole. Refer to next picture for location of the gold plated constant tension spring-loaded terminals. (See Figure on next page)

Push down on the RED (+) colored Terminal and insert the Red or copper colored conductor all the way up to the insulation into the hole at the bottom of the terminal. Now release your finger from the terminal. Next do the same to the Black or silver colored conductor and insert into the BLACK (-) colored Terminal. Make sure there are NO whiskers from the strands that could cause a short. The other end of these wires will be connected to your amplifier or volume control. (See Figure on next page)

Note: Sometimes your wire color may be White (+) and Green (-).

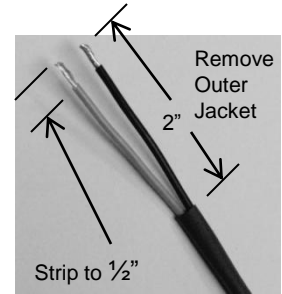
You now have a connection with the proper tension for continued operation that will not wiggle out or cause poor connection.

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Insert Wires as Shown

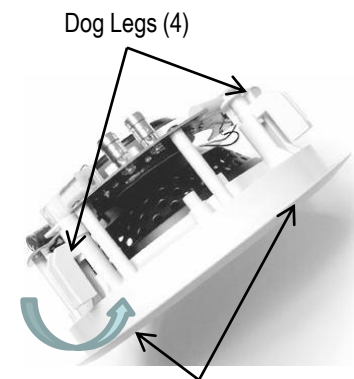
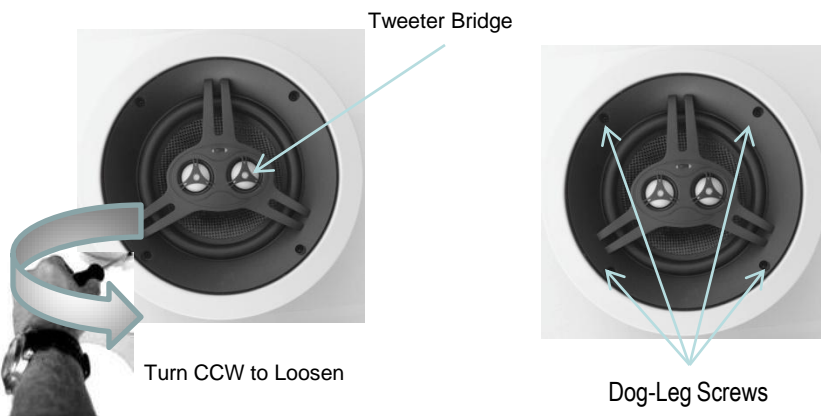
Gold Plated
Constant Tension
Spring-loaded
Terminals



Proper Wire Stripping

3

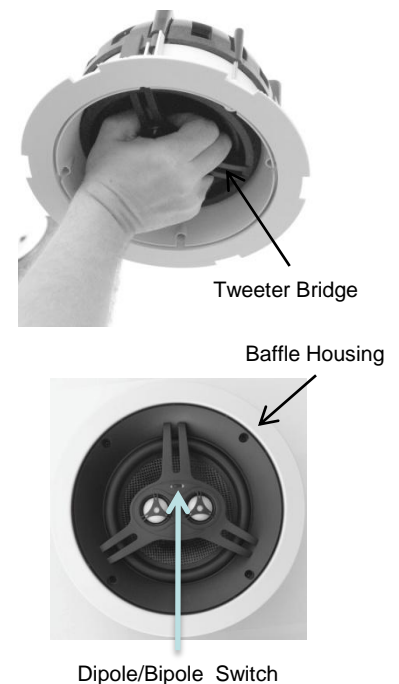
With the grille removed, loosen the four (4) Dog-Leg screws a $\frac{1}{2}$ turn counterclockwise with a #2 Philips screwdriver.



Turn Screw CW to Expand and Tighten

4

- Grab and hold the speaker by the built-in Tweeter Bridge Handle as shown. Do Not put fingers into the tweeter material in the center of the speaker.
WARNING! Denting or deforming the tweeter domes will change the acoustics of the speaker.
- Insert the connected speaker into the ceiling hole and with a #2 Phillips screwdriver tighten the four (4) Dog-leg screws (clockwise) until the Dog-legs open and clamp the speaker to the ceiling. If using a power drill or electric screw gun use the **lowest** torque setting. Over tightening may cause improper fit of the grille, damage to drywall and or damage to speaker.
- Before tighten down the Dog-legs adjust the tweeter orientation (See Figure "Layout and Tweeter Orientation").
On a Dipole installation, aim the speaker on the Left side of the room to point to the center Tweeter Bridge Leg at a right angle to the Right side of the Room. On the Right side of the room point the center Tweeter Bridge Leg to the Right side of the Room.
On the Rear bipole speakers aim both of the speaker center Tweeter Bridge Legs to the Front of the room toward the TV.
- **Set Dipole/Bipole Switch before installing grille.**
The switch on the Tweeter Bridge is to set the desired function of the speaker. In the Dipole setting each tweeter is purposely out of phase to create a null to reduce localization at the listening area. These side positioned speakers provide for accurate sound and ambience. In the Bipole position the tweeters are in phase to create a diffuse 360° soundfield with greater localization to the listening area.



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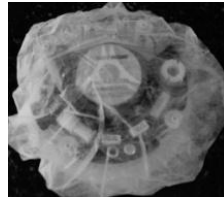
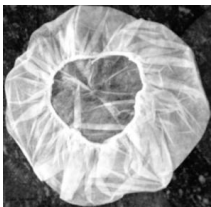
Painting the Speaker Grille

If grille requires painting, carefully remove the white scrim cloth on the inside of the Grille and save for reinstallation. This cloth is provided for aesthetic purpose only. Either spray paint the grille or use a stiff stipple paint brush. Do Not clog the perforated holes as this will impede the acoustics of the speaker.

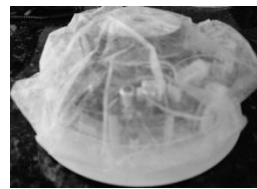
NOTE: If you have blown-in insulation and/or a potential rodent problem I suggest you install the SpeKap. It is a breathable membrane that will keep rodent droppings, debris, and insulation from entering the back of the speaker that could change the performance of the speaker. See figures

SpeKap

Breathable Membrane- Keeps Debris, Rodent Droppings and Insulation out of the Speaker



6.5" In-Ceiling



8" In-Ceiling

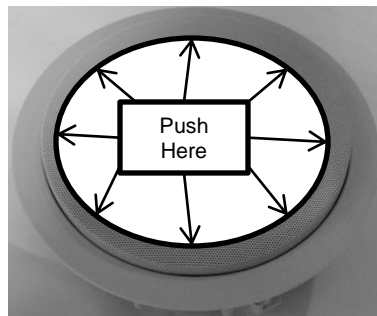


8" In-Wall

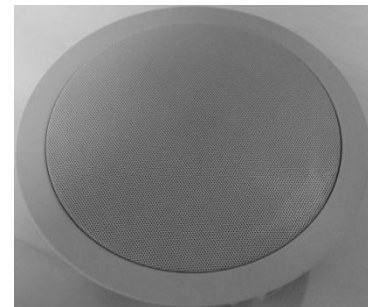
After Connecting Wires, Inserting Speaker, Cinching Down the Dog Legs and Aiming the Tweeter to the Sweet Spot; Insert the Grille into the Keeper System and Push it Flush to the Bezel. Do not push directly in the center Oil canning will occur. Push the grille down on the sides flush to the bezel.



Step 1, Align the Grille



Step 2, Grille Aligned



Step 3, Push Grille Flush to Bezel

Limited Lifetime Warranty

Current Audio speakers are warranted to be free from defects in materials and or workmanship to the original retail purchaser provided the speaker was purchased and installed from a Current Audio Authorized Dealer.

In the event of defective materials and or workmanship, Current Audio ,LLC will, without charge, repair or replace, at its option, the defective product. In order to make claim under this Warranty and to obtain performance of any obligation under warranty, please contact Current Audio LLC. Instructions will be given on how to return the defective product to Current Audio. Returned products must be shipped prepaid. Proof of purchase must be provided with the product.

The Warranty does not apply to damage not resulting from defective materials and or workmanship while in the possession of the original consumer or due to unreasonable use by the original consumer, which includes but not limited to improper installation, negligence, unauthorized repair or modification, aesthetic deterioration from the environment. Products purchased by unauthorized sources will void the warranty and not be honored.

Current Audio ,LLC is not liable for any incidental or consequential damages, so the above limitations or inclusion may not apply to you. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state within the United States.