

Beale Street Audio

P4-MB, P4-BB 4" In-Ceiling/In-Wall 2-Way Pancake
IPLCR4-MB, IPLCR4-BB Dual 4" LCR 2-Way Pancake
Ultra Shallow Depth Pancake Speakers

Installation Guide



Get Reale. Get Beale.™

Introduction

Congratulations and thank you for purchasing Beale Street Audio Pancake speakers with Sonic Vortex®.

Why are they called Pancake Speakers? Because they not only produce a delicious sound with a remarkably flat performance curve, but they are just about as flat as a pancake with a less than three inch mounting depth.

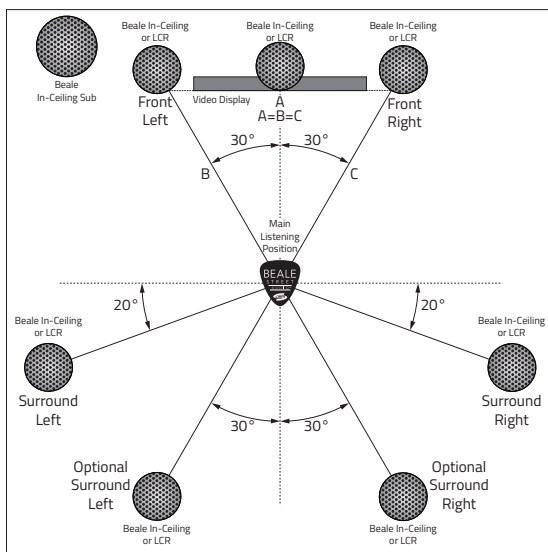
Sonic Vortex incorporates a compact Integrated Transmission Line Ported Enclosure. Most In Ceiling speakers do not utilize a back box, even fewer have an enclosure, and only a Sonic Vortex speaker has an Integrated Transmission Line Ported Enclosure. Without something behind the speaker driver the music not only plays into the room, but also bleeds into adjoining rooms such as the attic or an occupied room. The bleed negatively affects performance, and sound consistency.

Sonic Vortex changes all that with its Transmission Line Ported Enclosure that directs all of the sound from the speaker driver into the room it is intend to be in, so you get to enjoy your speakers without disturbing the rest of the house. Great bass response, stereo image, and big sound that you can't get with any other In Ceiling speaker.

Beale Street Audio Pancake speakers install with ease using the 'dog' mounting system and magnetic bezelless grilles for fast, clean installations.

Please follow the instructions in this manual to assure proper installation and to achieve the full performance and satisfaction you would expect from Beale Street Audio.

Speaker Placement



Even though the Beale Street Audio P4-MB and IPLCR4-MB have a shallow mounting depth of less than 3" when installing in wall/in ceiling speakers, (or in wall/in ceiling anything for that matter) it is always a good idea to find out what is in the wall/ceiling before cutting holes. Be aware of the location of plumbing, electrical and structural elements that may affect speaker placement.

Stereo

It is also a good idea to locate stereo speakers so they are centered to the main listening position in which the user/s will normally be located. Whenever possible, try to position the left and right speakers at the same distance from each other as they are from the main listening position.

Subwoofer

Subwoofers are omni-directional so placement of in wall/in ceiling subs is somewhat less critical, but placement can be affected (good and bad) by corners and walls, so try to find a location that will be somewhat unaffected by placement.

Speaker Placement

Angled

If using the 'Angled In' speakers, be sure to position them so the speakers are facing into the room and directed toward the main listening position.

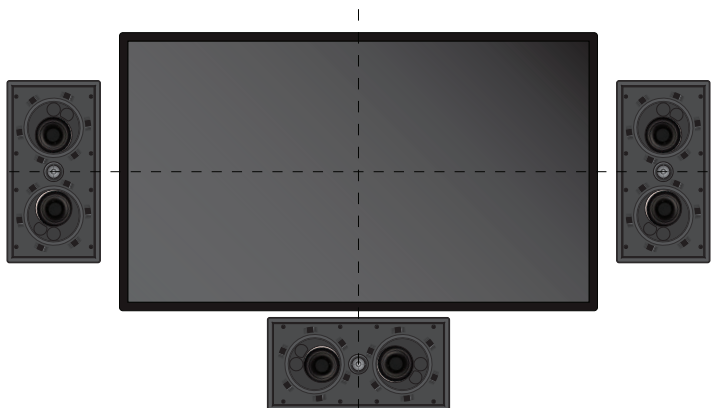
Surround

Locate surround speakers according to the recommendations in the surround processor's owner's manual.

LCR

LCR speakers can be used in any position of a stereo or surround system other than subwoofer. They are ideal for front center channel and are also a great choice for front and rear left/right channels. Using the same LCR in all positions of a surround system can also improve the user experience by providing seamless performance from channel to channel by using the same model in all positions.

When using LCRs, position the video display so the center of the display is approximately eye level from a typical seated viewing position. Locate the LCRs as shown in the image below, centered to the horizontal and vertical axes (left/right and up/down alignment not horror movie weapons). Locate the center channel as close to the bottom or top of the video display as possible, to give dialogue and other 'focused audio content' that plays through center channel speaker the impression of emanating directly from the center of the video display.



Installation

SPEAKER WIRE

Pull one run of 16AWG stranded speaker wire from the amplifier location to each speaker location. If in pre-wire, while the walls are open and it's easy, pull extra wire to any location that may be desirable to add speakers at a later date. Leave extra length of wire on each end to allow making connections and installing/removing speakers.

Use the chart below to determine the proper gauge of wire, based upon wire length from the amp to the speakers. If using volume controls, include the total length from the amp to the volume control and then to the speakers.

SPEAKER WIRE GAUGE TABLE	
SPEAKER WIRE LENGTH	SPEAKER WIRE GAUGE
150' (46m)	16AWG
400' (122m)	14AWG

NEW CONSTRUCTION

Beale Street Audio speaker installation can be simplified by using an Beale Street Audio new construction EZBracket®, (sold separately; visit www.getbeale.com for additional information). This is installed prior to drywall installation and allows for precise speaker placement and simplifies the final installation of the speaker.

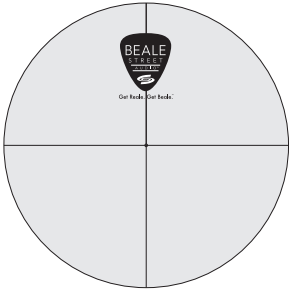
EXISTING CONSTRUCTION

Speaker wire must be run from the equipment or volume control location to each potential speaker location.

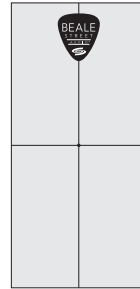
- Choose a location for each speaker that is free of obstructions created by joists, HVAC duct-work, electrical wire runs, plumbing or anything else that might not allow for the depth of the speaker or create interference or noise.

Installation

- Once you have determined your locations, use a pencil to mark the hole to cut out for the speaker using the supplied template. Don't forget to allow for the size of the speaker bezel if you are installing the speaker near a sidewall or other item that could become an obstacle.
NOTE: Round grille and square grille finish both use the same drywall cutout.

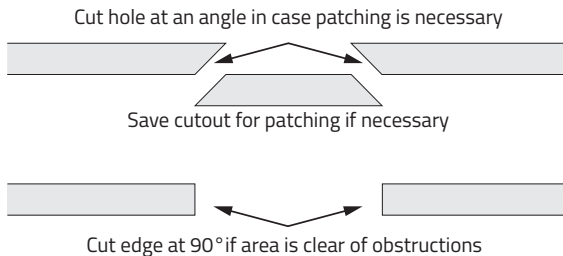


P4-MB Cutout Template



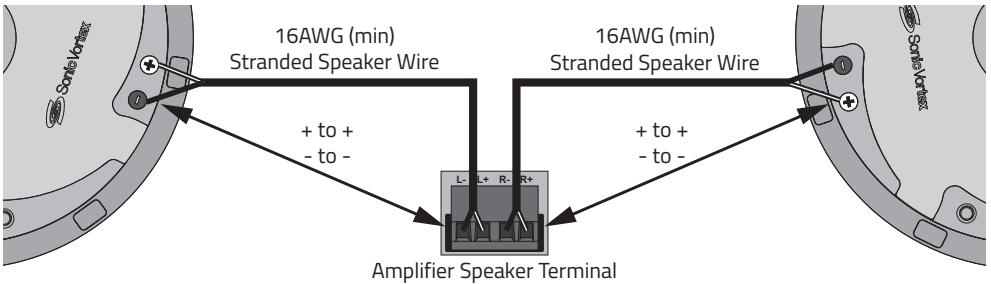
IPLCR4-MB Cutout Template

- If you are unsure of potential obstacles, carefully cut your holes using an angle to the inside of the cutout area. This will allow you to "plug" the hole easily if needed. If the area is clear and is a good location for the speaker, go ahead and cut the edges of the opening at 90 degrees to accommodate the speaker diameter.



Installation

P4-MB

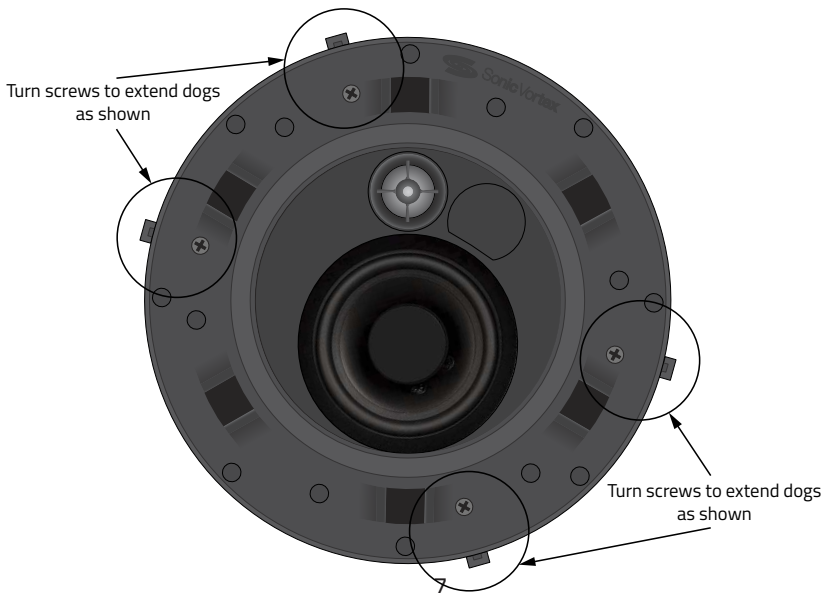


Connections

- Strip the insulation on each conductor approximately 1/2" (12.7mm) and insert to the speaker terminals. Ensure that there are no stray strands of wire protruding from the connectors that can cause shorts. Observe proper polarity (+ to + and – to – for each speaker and at the amplifier) and that surround channels are properly positioned and connected, if used.

Installation

- With the 'dogs' flush to the side of the speaker, insert the speaker into the cutout and tighten each of the four screws to swing the dogs out, and clamp the speaker to the drywall. Do not overtighten.



Installation

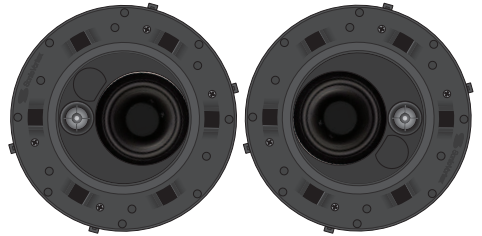
P4-MB Orientation

For best results in a stereo application when using P4-MB speakers, be sure to install the left and right speakers symmetrically so the woofers and tweeters are oriented as mirror images as shown below. This will improve stereo imaging and overall audio performance. Orienting the woofers and tweeters in random positions will result in less than ideal performance.

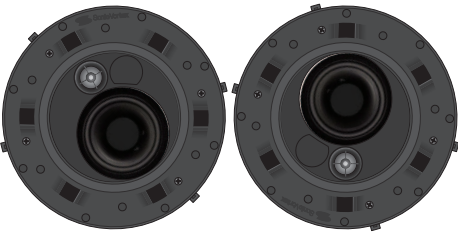
DO THIS: (Tweeters Vertical)



OR THIS: (Tweeters Horizontal)



DO NOT DO THIS: (Tweeters in Random Positions)

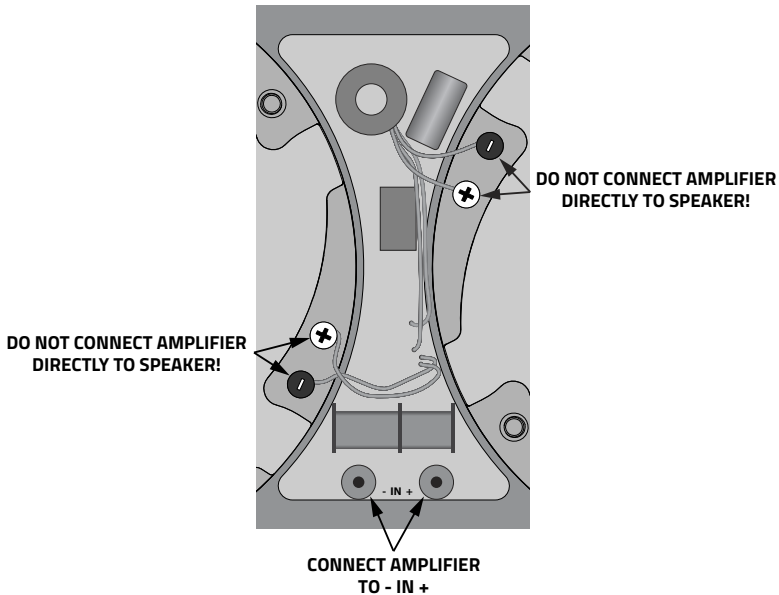


Attach Grille

- Attach the round grille to speaker. The grille attaches with magnets so it will just snap into place.

Installation

IPLCR4-MB



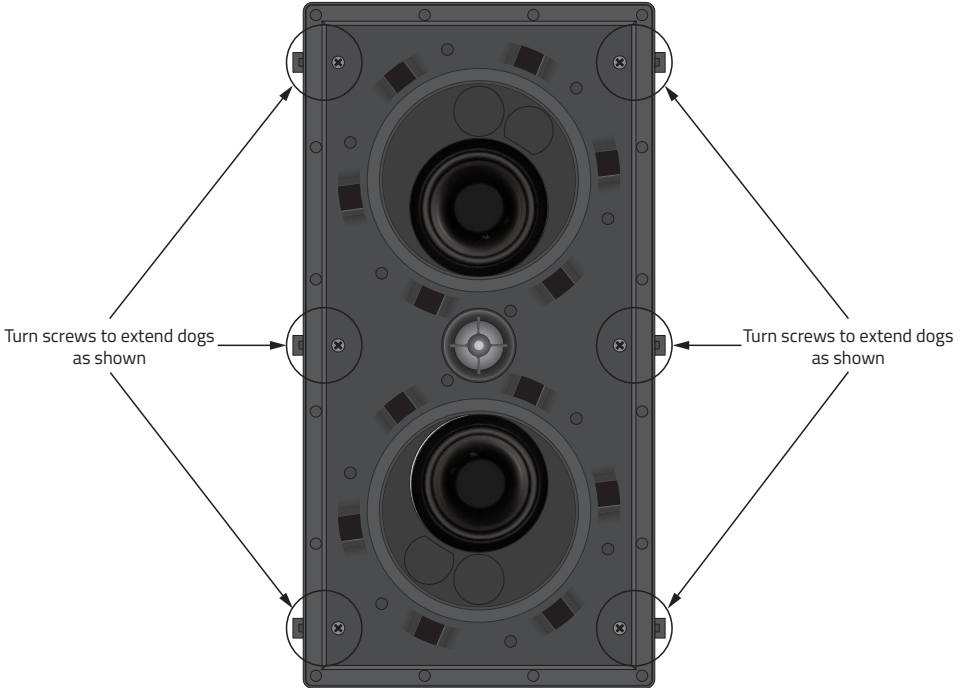
Connections

- Strip the insulation on each conductor approximately 1/2" (12.7mm) and insert to the speaker terminals. Ensure that there are no stray strands of wire protruding from the connectors that can cause shorts. Observe proper polarity (+ to + and – to – for each speaker and at the amplifier) and that surround channels are properly positioned and connected, if used.
- WHEN CONNECTING THE AMPLIFIER TO THE IPLCR4-MB, CONNECT THE AMP TO THE APPROPRIATE IN -/+ TERMINALS AS SHOWN. DO NOT CONNECT THE AMP DIRECTLY TO THE DRIVERS.

Installation

Installation

- With the 'dogs' flush to the side of the speaker, insert the speaker into the cutout and tighten each of the eight screws to swing the dogs out, and clamp the speaker to the drywall. Do not overtighten.



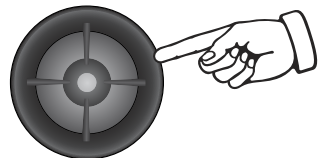
Attach Grille

- Attach the grille to the speaker. The grille attaches with magnets so it will just snap into place.

Pivoting Tweeter

- With the speaker installed, the tweeter can be pivoted to point directly into the main listening area for tighter imaging of high frequency content. Pointing the tweeter away from the main listening area will create a more ambient sound.

Carefully press the edge of the tweeter as shown to pivot the tweeter to the desired position.



Installation

Painting

The grille may be painted, but go as light as possible to not to clog the fine holes with paint. Only paint grilles when they have been removed from the speakers and be sure to remove the cloth on the backside of the grille before painting. If the cloth is not removed for painting, it will absorb the paint and clog the grille, significantly affecting the sound...and not in a good way. (We have taken great effort to eliminate any 'color' from the sound of our speakers, so let's try to keep it that way...OK?)

TROUBLESHOOTING

Beale Street Audio speakers are designed to function trouble-free. Most problems that occur are due to simple issues. If you have trouble, please check the list of simple fixes below.

SPEAKER TROUBLESHOOTING	
PROBLEM	SOLUTION
NO SOUND	Verify that there is audio from the source selected. Select another source if necessary.
	Ensure that the amplifier is turned on and connected properly.
	Check any connections at other devices, such as a volume control. Temporarily bypass the control if needed.
	Check wire connections at each speaker not producing sound for good contact to bare wire, not wire insulation.

Specifications

4" IN WALL/IN CEILING

P4-MB 4" In Wall/In Ceiling 2 Way

- In Wall or In Ceiling 2 Way
- Woofer: 4" Fluted Injected Poly
- 3/4" Aluminum Dome Tweeter
- Butyl Rubber Surround
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Impedance: 8Ω
- Installed Frequency Response: 62Hz to 24KHz
- Sensitivity: 88db
- Gold Spring Push Terminal Connector
- Depth: 2.76" 70.2mm
- Speaker Weight: 2.62lbs (1.19kg)
- Cutout: " 8.4" 214mm
- Diameter: 9.5" 241.4mm
- Frequency/Crossover Setting: Full range only
- Power Handling: 5-80W
- EZBracket Size: F

P4-BB 4" In Wall / In Ceiling 2 Way

- In Wall or In Ceiling 2 Way
- Woofer: 4" Carbon Fiber Cone
- Tweeter: 3/4" Titanium Dome
- Surround: Butyl Rubber
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Impedance: 8Ω
- Installed Frequency Response: 59Hz to 25KHz
- Sensitivity: 88db
- Gold Spring Push Terminal Connector
- Depth: 2.76" 70.2mm
- Speaker Weight: 2.62lbs (1.19kg)
- Cutout: " 8.4" 214mm
- Diameter: 9.5" 241.4mm
- Frequency/Crossover Setting: Full Range Only
- Power Handling: 5-80W
- EZBracket Size: F

4" LCR

IPLCR4-MB 4" LCR

- In Wall 2 Way
- Woofer: Dual 4" Fluted Injected Poly
- 1" Aluminum Dome Tweeter
- Butyl Rubber Surround
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Impedance: 6Ω
- Installed Frequency Response: 62Hz to 24KHz
- Sensitivity: 92db
- Gold Spring Push Terminal Connector
- Depth 2.82" 71.5mm
- Speaker Weight: 6lbs (2.72kg)
- Cutout: 18.31" H x 8.74" W (465mm x 222mm)
- Grille Dimensions: 19.62" H x 10.06" W (498mm x 255.4mm)
- Frequency/Crossover Setting: Full Range Only
- Power Handling: 5-120W
- EZBracket Size: Does not apply

IPLCR4-BB 4" LCR

- In Wall 2 Way
- Woofer: Dual 4" Carbon Fiber Cones
- Tweeter: 1" Titanium Dome
- Surround: Butyl Rubber Surround
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Impedance: 6Ω
- Installed Frequency response: 62Hz to 20KHz
- Sensitivity: 92db
- Gold Spring Push Terminal Connector
- Depth 2.82" 71.5mm
- Speaker Weight: 5.95lbs (2.7kg)
- Cutout: 18.31" H x 8.74" W (465mm x 222mm)
- Grille Dimensions: 19.62" H x 10.06" W (498.4mm x 255.4mm)
- Frequency/Crossover Setting: Full range only
- Power Handling: 5-120W
- EZBracket Size: Does not apply