

# Beale Street Audio

IWLCR4-MB, IWLCR4-BB

Dual 4" LCR 2-Way In-Wall Speakers

## Installation Guide



Get Reale. Get Beale.™

# Introduction

Congratulations and thank you for purchasing Beale Street In-Wall LCR speakers with Sonic Vortex®.

IWLCR4 Series speakers fit between the studs of a standard stud bay in either a horizontal or vertical orientation. This allows installing the IWLCR4s in all three front channel positions without having to cut studs or box framing. This allows a tight fit around flat panel TVs for great audio imaging that complements today's Ultra High Definition video displays.

While IWLCR4s can also be used for surround and back channels, don't forget Beale Street Audio also manufactures a complete line of in-ceiling speakers that will complement the IWLCR4s with Sonic Vortex at all speaker positions if preferred for placement of surround channels.

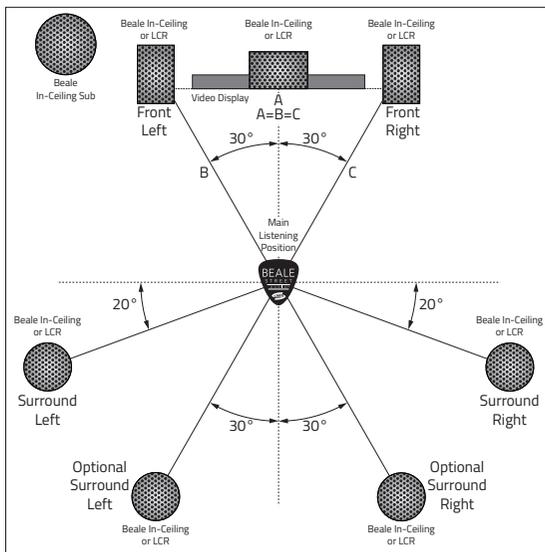
Sonic Vortex incorporates a compact Integrated Transmission Line Ported Enclosure. Most in-wall speakers do not utilize a back box, even fewer have an enclosure, and only a Sonic Vortex speaker has an Integrated Transmission Line Ported Enclosure. Without something behind the speaker driver the music 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 intended 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 IWLCR4 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 IWLCR4s have a shallow mounting depth of less than 4" 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.

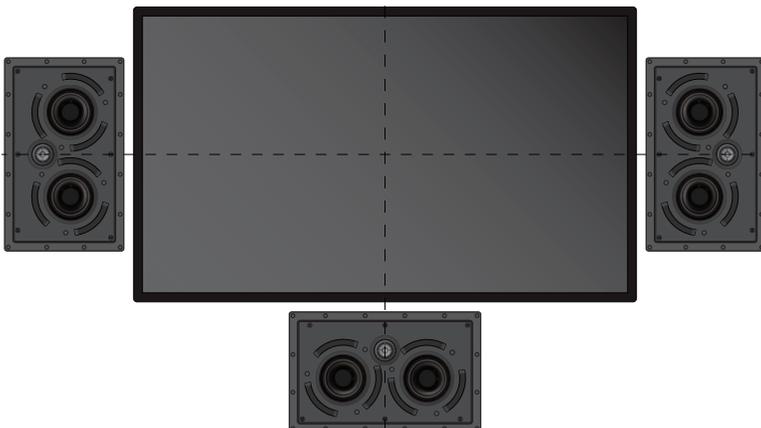
## Surround

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.

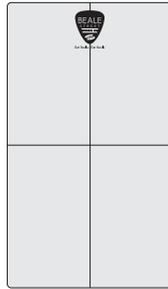
<b>SPEAKER WIRE GAUGE TABLE</b>	
<b>SPEAKER WIRE LENGTH</b>	<b>SPEAKER WIRE GAUGE</b>
150' (46m)	16AWG
400' (122m)	14AWG

# Installation

## EXISTING CONSTRUCTION

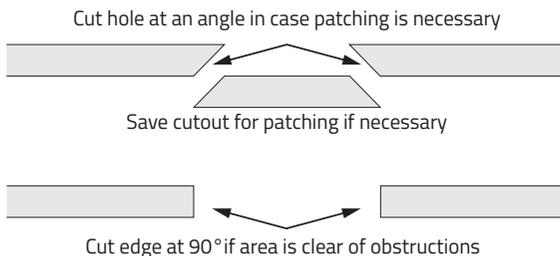
Speaker wire must be run from the equipment or volume control location to each potential speaker location.

- 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.
- 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.



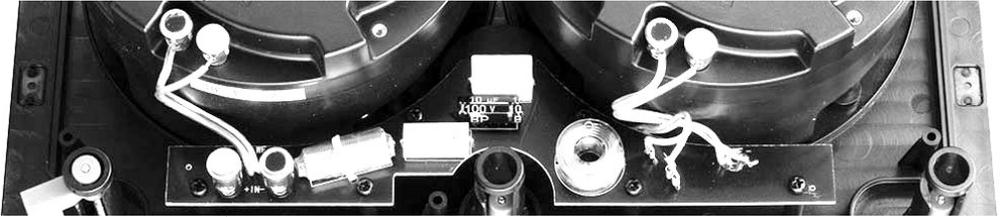
IWLCR4 Cutout Template

- 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

**DO NOT CONNECT AMPLIFIER  
DIRECTLY TO SPEAKER!**



**CONNECT AMPLIFIER  
TO - IN +**

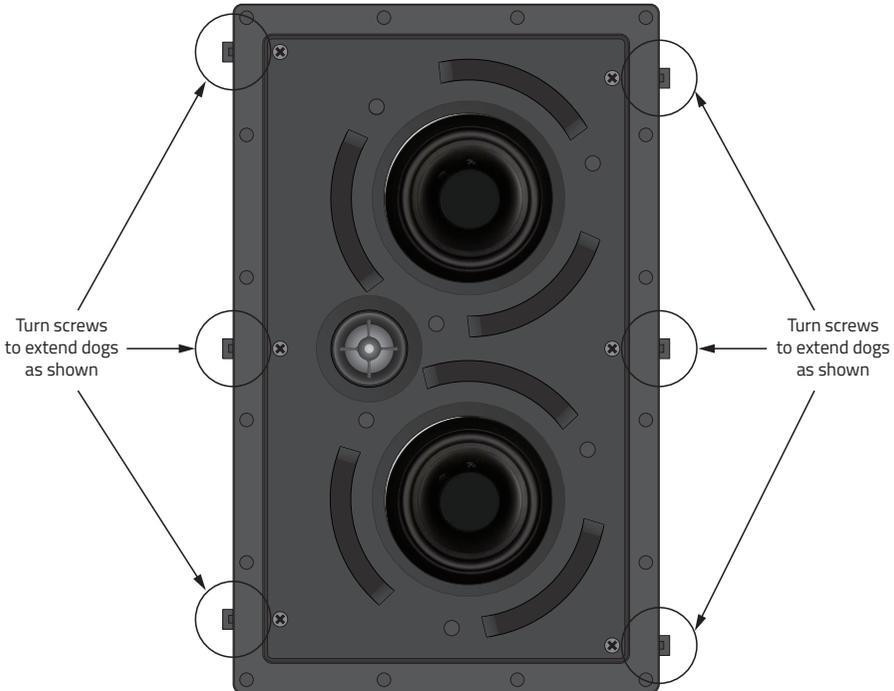
## Connections

- 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 AN AMPLIFIER TO AN IWLCR4, 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 six 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.

<b>SPEAKER TROUBLESHOOTING</b>	
<b>PROBLEM</b>	<b>SOLUTION</b>
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 LCR

### **IWLCR4-BB" In Wall 4" LCR**

- In Wall 2 Way
- Woofer: 4" Carbon Fiber
- 1" Titanium Tweeter
- Butyl Rubber Surround
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Nominal Impedance: 6Ω
- Installed Frequency Response: 86Hz to 25KHz
- Sensitivity: 92db
- Gold Spring Push Terminal Connector
- Depth: 3.9" 100mm
- Speaker Weight: 8.55lbs (3.87kg)
- Dimensions: 15.03" x 9.37" x 3.8" 382 x 238 x 97 mm
- Cutout: 13.98" x 8.33" 355 x 211.5mm
- Grille Size: 9.35" x 15.02" 237.5 x 381.5mm
- Frequency/Crossover Setting: Full range only
- Power Handling: 5-120W

### **IWLCR4-MB" In Wall 4" LCR**

- In Wall 2 Way
- Woofer: 4" Green Ribbed Injected Polypropylene
- 1" Aluminum Dome Tweeter
- Butyl Rubber Surround
- Sonic Vortex® Ported Transmission Line
- Magnetic Bezelless Grille; White - Paintable
- Nominal Impedance: 6Ω
- Installed Frequency Response: 89Hz to 24KHz
- Sensitivity: 92db
- Gold Spring Push Terminal Connector
- Depth: 3.9" 100mm
- Speaker Weight: 8.55lbs (3.87kg)
- Dimensions: 15.03" x 9.37" x 3.8" 382 x 238 x 97 mm
- Cutout: 13.98" x 8.33" 355 x 211.5mm
- Grille Size: 9.35" x 15.02" 237.5 x 381.5mm
- Frequency/Crossover Setting: Full range only
- Power Handling: 5-120W

# Limited Lifetime Warranty

For Beale Street Audio Branded In-Wall and In-Ceiling Speakers and Subwoofers Purchased after May 1, 2017

## Limited Warranty

Vanco warrants to you, the original consumer purchaser of speakers, that under proper use and conditions, and subject to the other conditions provided below, your speakers will be free from defective materials and workmanship for the life of the speakers. This warranty only applies to passive speakers. Active products, such as amplifiers, electronics, and powered subwoofers are not covered under the Lifetime Warranty. Please review the individual manual provided with each specific product for the warranty information.

## What Vanco Will Do

If a speaker proves defective in either material or workmanship, Vanco, at its option, will either (a) repair and return it to you, or (b) replace and ship you a new speaker of the same model, unless your model is no longer available, in which case Vanco may replace your speaker with a current model of comparable value. In either case, Vanco will pay the shipping charge of sending you (US only) a replacement speaker or your repaired speaker. If a current model is substituted for your speaker, a modification to the mounting surface may be required. Vanco is not responsible or liable to make, account for or pay the cost of any such modification.

## How To Make A Warranty Claim

The first step in making a claim under this limited warranty is to contact the Vanco authorized distributor/dealer where you purchased the speaker, or if you are unable to contact the distributor/dealer, you can contact Vanco directly, for instructions on what action to take. If it is necessary to return the speaker, it must be shipped in appropriate packaging to the destination given to you, prepaid with signature required for delivery, and be accompanied by (1) a document providing your name, address, phone number and email address, and a statement of why you believe the speaker is defective, and (2) a copy of your original receipt or bill of sale that identifies you as the original purchaser of the speaker and the authorized distributor/dealer you purchased it from ("Proof of Purchase"). You have the risk of loss or damage in transit to the destination, and therefore you are responsible for insuring the shipment for the full value of the speaker. Freight collect shipments will be refused. If Vanco determines this limited warranty does not cover your claim, your speaker will be returned to you freight collect.

## Exclusions and Limitations

This limited warranty does not cover:

- > Speaker failure caused by anything other than a defect in material and workmanship.
- > Consequential damage to other components, equipment or premises regardless of the reason.
- > The cost of removing and reinstalling your speaker.
- > The cost of returning your speaker to Vanco.
- > Any claims if you are unable to provide Proof of Purchase from a Vanco authorized distributor/dealer.

Warranty continued next page

# Limited Lifetime Warranty (cont)

For Beale Street Audio Branded In-Wall and In-Ceiling Speakers and Subwoofers Purchased after May 1, 2017

## **This Limited Warranty Is Null And Void If Your Speaker:**

- > Was used in an application or environment other than that for which it was intended
- > Misused, abused, improperly installed or removed
- > Damaged by any accident, disaster or other cause not related to defects in materials and workmanship.
- > You sell or otherwise transfer your speaker to any other person.
- > Was modified or repaired by anyone other than Vanco, or its serial number is altered, defaced or removed.

REPAIR OR REPLACEMENT OF YOUR SPEAKER UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. IN NO EVENT WILL VANCO BE LIABLE FOR ANY AMOUNT GREATER THAN THE ACTUAL PURCHASE PRICE PAID BY YOU FOR THE SPEAKER. VANCO SHALL NOT BE LIABLE FOR ANY FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES HOWSOEVER CAUSED. THIS LIMITED WARRANTY REPRESENTS THE ENTIRE WARRANTY AGREEMENT BETWEEN YOU AND VANCO REGARDING YOUR SPEAKERS AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY, FROM STATE TO STATE. SOME STATES LIMIT WHAT WARRANTIES MAY BE EXCLUDED AS WELL AS HOW LONG AN IMPLIED WARRANTY LASTS, SO THESE LIMITATIONS MAY NOT APPLY TO YOU.

The Vanco logo, Sonic Vortex logo, and Beale Street Audio Inc. logo are registered trademarks of Vanco International, LLC.

Vanco, Sonic Vortex, Beale Street Audio, Get Reale. Get Beale., the Vortex logo, and the Beale Street Audio logo are trademarks of Vanco International, LLC.



Get Reale. Get Beale.™



A NEW BRAND FROM 

Vanco International, LLC

506 Kingsland Drive

Batavia, IL 60510

Phone: 800.626.6445 Fax: 630.879.9189

[www.getbeale.com](http://www.getbeale.com)

©2019