

Be Heard, Not Seen

PSB CustomSound In-Wall Speaker System

CW260 - 6.5" Surround Speaker System

The CW260 is a high performance in-wall surround speaker and is the first design of its type. It is optimized to the task of being a surround via having 2 (switchable) radiation patterns. These dual patterns both give it a more diffuse soundfield than conventional systems, as required for best surround sound. The CW260 has two wide range 2" units cross firing at 90 degrees to each other (one 45 degrees left the other 45 degrees right). The drive units are mounted on a contoured mounting plate. These contours are essential in obtaining a smooth response from the high frequency drive units and to allow their energy to appropriately fire away from the listening position.

A surround speaker creates a diffuse sound field by bouncing much of the sound energy off of the room's surfaces while reducing the energy that arrives at the listener's ears directly. With the CW260 we achieve that in two modes: Bipole and Dipole. Dipole operation puts the two wide range units out of phase so that their energy cancels on a plane bisecting the two units. If a listener is on or near that plane he hears very little direct energy and the most diffuse sound possible. Bipole operation is similar but the units are now connected in phase. With a Bipole system diffuse sound is achieved by virtue of the driver's directivity and that the drivers are aimed away from the listener. Adding the bipole mode gives a less extreme option and also makes listener placement less critical. A design challenge, overcome with the CW260 was to achieve a balanced power response with both modes, as switching between the modes will strongly impact the total radiated power in some frequency ranges. The crossover circuitry contains response correction that is switched concurrently with the bipole/dipole switching.

A 6 1/2" woofer augments the range of the dual 2" units. "Dog leg" style mounting clips ensure quick and easy mounting.

The CW260 includes 2 switches. One is for the above mentioned bipole/dipole mode. The second is for overall treble level, handy for optimizing the system to differing room acoustics.

In-wall loudspeakers must deal with limited space within the confines behind the wall. Wall cavities are not built to any standard volume so open back in-wall speakers must work within a wide range of wall cavity volumes. PSB accomplishes this by giving the woofers higher mass and stiffness than with conventional "in room" enclosures. Extensive simulations and testing have shown that our designs deliver high-performance sound quality with a broad range of wall cavity volumes. The CW260 can be used with the CWS8 subwoofer/CWA-1 subamplifier combination.

The CW260 can be used as rear channel surrounds for all PSB surround systems.

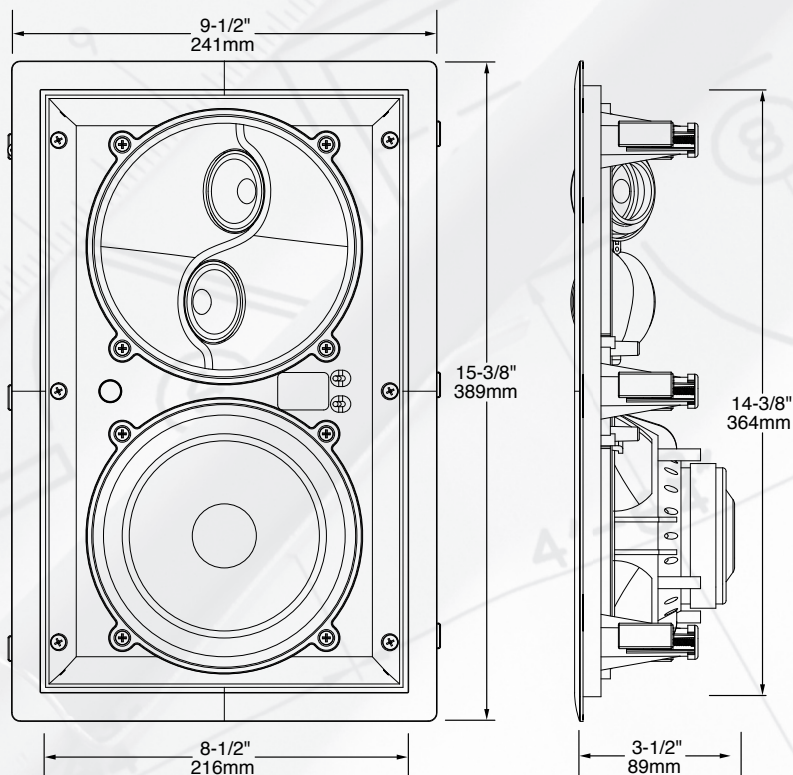
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SPEAKERS



CW260 - 6.5" Surround Speaker System

- Highly diffuse radiation for best surround effect
- Switchable between Bipole and Dipole radiation patterns
- Three Driver, 2-way system with special wide range flat power response 2" units and 6 1/2" fiberglass textured polypropylene woofer
- Performance Enclosure and new construction bracket available
- Bipole/Dipole and Treble level switches allow for response adjustments

Frequency Range (-6dB):	50-21,000Hz
Recommended Power:	20-100 Watts
Impedance (Nominal):	8 Ohms (3.5 Ohm min. in Dipole)
Sensitivity (2.83V @1m):	87dB SPL
Drivers:	6-1/2" Woofer dual 2" wide range units
Overall Dimensions (W x H x D):	9-1/2 x 15-3/8 x 3-1/2"
Cut-out Dimensions (W x H):	8-1/2 x 14-3/8"



Installation Notes

- Bipole surround systems work well when mounted high on the wall.
- For best Dipole response the system should be placed near ear level on side walls, perpendicular to prime listening areas.
- If the system is placed with its long dimension horizontal (or in some ceiling applications) the dual array should be unscrewed and repositioned by 90 degrees.
- Make small exploratory hole and check for obstructions in wall cavity before cutting mounting hole.
- Mounting template provided.
- Lightly fill wall cavity with fiberglass 2 feet above and below system. Use standard 4" fiberglass split to half thickness. Use 1" thick fiberglass behind system.
- Adjust electric screwdrivers to appropriate torque. Tighten mounting screws firmly but do not over tighten!
- Set Dipole/Bipole switch to appropriate position
- Set Treble switch to positive (+) position if listening position is distant from speakers. Set Treble switch to negative (-) position if listening position is close to speakers.
- See manual for more installation hints.

To Reach US Customer Service dial 1 888 772 0000 ext 4445 or 4342

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