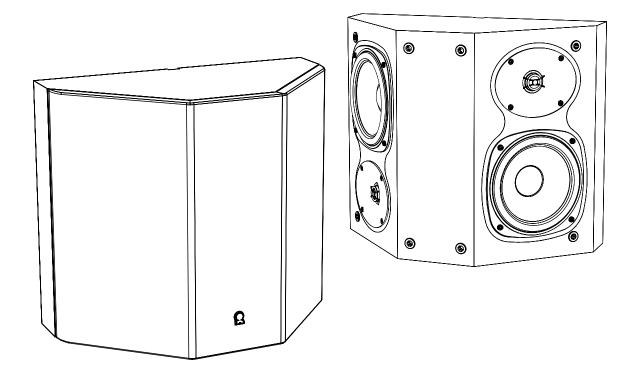


# S206 Surround Channel Loudspeaker Owner's Manual





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# ABOUT REVEL PERFORMA3 S206 SURROUND CHANNEL LOUDSPEAKERS

Thank you for purchasing Revel Performa3 S206 surround channel loudspeakers. This dedicated surround-channel loudspeaker features smooth, unifom response over a very wide listening area, enabling it to produce a lifelike surround-sound environment that enhances your entertainment's realism for multiple listeners. The speaker's two sets of transducers operate in a bi-polar configuration, which maximizes the speaker's timbre match with that of other Revel Performa3 speakers and further integrates the entire system's sound into a spacious, enveloping surround-sound environment.

The S206 tweeters feature an integrated acoustic lens waveguide that is based on a breakthrough mathematical approach that accurately matches the tweeters' dispersion to that of the low-frequency transducers in the crossover region. This gives the loudspeaker very smooth sound far off-axis — an important contributor to overall sound quality, providing consistent sound over an exceptionally wide listening area. In fact, this new waveguide actually *increases* the tweeter's dispersion at higher frequencies.

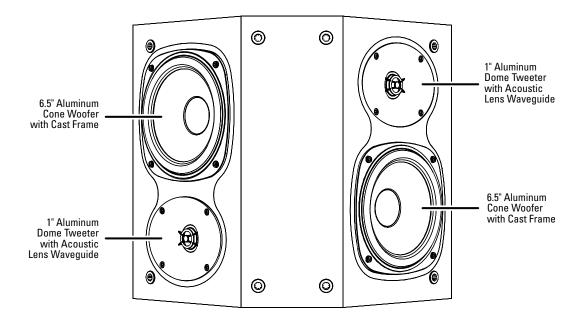
The S206 enclosure features strategically-oriented bracing that eliminates the possibility of enclosure-induced coloration.

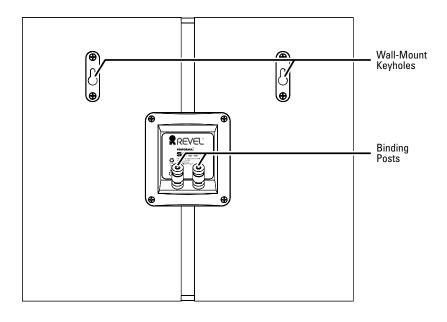
Revel Performa3 crossover networks feature carefully-selected components that contribute to great performance and benchmark-setting value. These high-order crossover networks dramatically reduce distortion and dynamic compression for clear sound that maintains the same quality over a very wide dynamic range. These precision networks optimize the speakers' timbral accuracy, enhancing musical enjoyment for listeners who are anywhere in the room, not only those seated on-axis to the loudspeakers.

During development, every Revel loudspeaker model is compared to competitive models in our unique position-independent double-blind listening lab. This process utilizes the latest psychoacoustic research to assure that these listening tests are valid, enabling us to verify that all Revel loudspeakers are superior to their competitors before they are allowed to go into production.



# **S206 OVERVIEW**





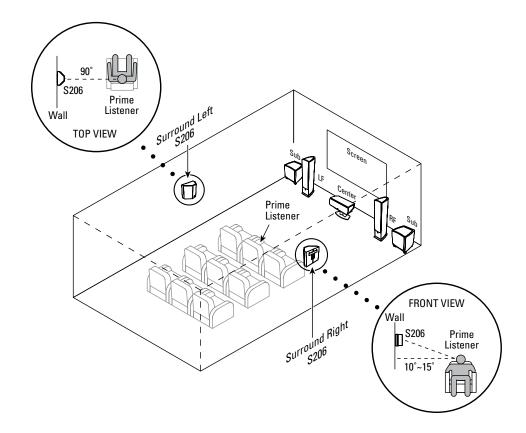
# **INSTALLATION CONSIDERATIONS**

Loudspeaker fidelity depends on the following three factors: loudspeaker accuracy, loudspeaker placement and listening room acoustics.

Advanced Revel design features allow the S206 to achieve exceptional acoustical precision, and the ability to seamlessly blend with other Revel Performa3-series speakers in 5.1- and 7.1-channel systems.

## **PLACEMENT IN 5.1-CHANNEL SYSTEMS**

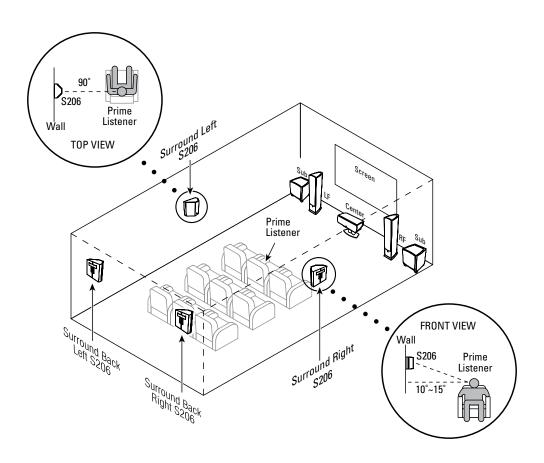
The most common 5.1-channel home theater system configuration uses a pair of Performa3 S206 surround loudspeakers, placed on the side walls above the listening area, as shown in the illustration below. The loudspeaker's radiation pattern is optimized for use at 90 degrees to the sides of the primary listening area. This occurs when the loudspeakers are placed along the side walls, directly to the sides of the prime listening position (90 degrees to the prime listeners' ears). The ideal height is located at 10 to 15 degrees above the prime listener's ears.





# **PLACEMENT IN A 7.1-CHANNEL SYSTEM**

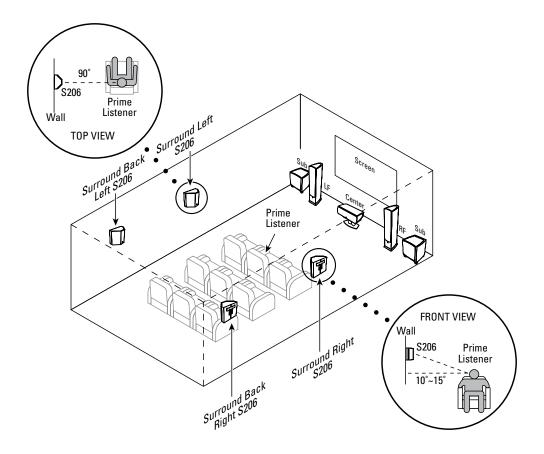
- 7.1-Channel surround-sound controllers can independently drive two pairs of surround loudspeakers: a pair of Surround Left/Right speakers and a pair of Surround Back Left/Right speakers.
  - The recommended configuration is with the Surround Left and Surround Right S206 loudspeakers placed on the side walls as in a 5.1-channel system, and the Surround Back Left and Surround Back Right S206 loudspeakers placed on the rear wall, as shown in the illustration below.





# **PLACEMENT IN A 7.1-CHANNEL SYSTEM**

• If you cannot place the Surround Back loudspeakers on the rear wall, place them on the side walls, further towards the room's back wall.



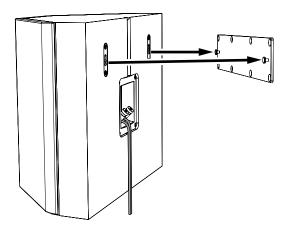


#### **WALL-MOUNTING THE S206**

The Performa3 S206 loudspeakers come with an integral wall mounting system. Built-in mounting keyholes on the rear of the speaker are designed to be used with the supplied wall-mount bracket.

CAUTION: Revel does not supply hardware to mount the supplied bracket on a wall. It is the customer's responsibility to select wall-mounting hardware that is appropriate for their wall's materials and construction. Revel recommends that installation should only be done by qualified individuals who are experienced in affixing and installing wall-mounted electrical equipment, and who understand and observe all relevant safety precautions. HARMAN International Industries, Inc. disclaims any liability whatsoever for injury or damage to persons or property arising from installation of its products or use of hardware it provides.

After the bracket is mounted on the wall and the speaker is connected to the amplifier (see *Making Connections*, on this page), slip the speaker's mounting keyholes over the bracket pegs, as shown in the illustration below.



#### MAKING CONNECTIONS

CAUTION: Never make or break connections unless all system components are powered off.

#### **OBSERVE PROPER POLARITY**

Connect the amplifier's positive (+) terminal to the positive (+) terminal on the corresponding speaker; connect the amplifier's negative (-) terminal to the negative (-) terminal on the corresponding speaker. Do not reverse polarities (that is, do not connect + to -, or - to +) when making connections. Doing so will cause poor stereo imaging and diminished bass response.

#### SPEAKER CABLE

Use high-quality loudspeaker cable with a maximum total loop resistance of 0.07 ohms or less for each wire run. Refer to the table below to determine the appropriate wire gauge for your installation.

## MINIMUM WIRE GAUGE

Maximum Wire Length (Feet)	Maximum Wire Length (Meters)	Minimum Wire Gauge (AWG)
< 87	< 27	6
< 69	< 21	7
< 58	< 18	8
< 43	< 13	9
< 34	< 10	10
< 27	< 8	11
< 22	< 7	12
< 17	< 5	13
< 14	< 4	14
< 11	< 3.5	15
< 9	< 3	16
< 7	< 2	17
< 5	< 1.5	18

**NOTE:** High loop resistances that exceed 0.07 ohms (for each wire run) will cause the loudspeaker's filter network to be misterminated, resulting in considerable degradation of sound quality.

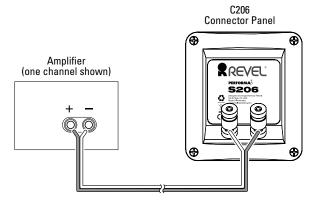
CAUTION: Revel S206 loudspeakers are designed to be used with an external crossover (high-pass filter), such as is found in the surround channel outputs of surround processors and audio/video receivers. A crossover frequency of 80Hz or higher must be used to minimize dynamic compression and distortion.

If the AVR/processor only offers "Large" and "Small" settings for the surround channels, select the "Small" setting.



#### **S206 CONNECTIONS**

The S206 features gold-plated binding posts that provide secure connection for speaker cables terminated with banana plugs, spade lugs, pin connectors or bare wire.



Connect both loudspeakers using the same method, using speaker cables of the same length for each speaker.

• Review the owner's manuals for all associated audio components to determine their correct connection procedures.

## **CARING FOR YOUR LOUDSPEAKERS**

## LOUDSPEAKER VOLUME LEVELS

The high-order filters employed in Revel Performa3 series loudspeakers include steep cut-offs to reduce potential transducer damage from "out-of-band" frequencies. Combined with carefully selected transducers and filter network components, this approach helps the Performa3 floorstanding loudspeakers maintain their performance under extreme operating conditions.

However, all loudspeakers have limits when it comes to continuous playback. To avoid exceeding these limits, avoid playback at volume levels that distort or strain the sound.

CAUTION: To avoid damage, reduce volume level immediately if the loudspeaker sound is not clean and clear.

#### **CABINET FINISH**

The cabinet's painted finish does not require routine maintenance. Occasionally use a soft cloth that has been dampened with water to remove any fingerprints or dust from the cabinet. Take care not to come in contact with the transducers.

To clean the grille, gently vacuum it using a soft-bristled brush vacuum attachment with the vacuum cleaner set to the lowest possible suction.



# **SPECIFICATIONS**

# **S206**

Type:	2-way dual 6-1/2" bipole surround loudspeaker
Low-frequency transducer:	Two 6-1/2" (165mm) aluminum cones, with cast frames
High-frequency transducer:	Two 1" (25mm) aluminum domes, with acoustic lens waveguides
Recommended amplifier power range:	50 – 150 watts
Low-frequency extension:	52Hz (–10dB); 58Hz (–6dB); 65Hz (–3dB)
Nominal impedance:	8 ohms
Sensitivity (2.83V/1m):	89dB
Crossover frequency:	1.4kHz
Enclosure type:	Sealed
Inputs:	Gold-plated binding posts
Available finishes:	Matte black
Dimensions (H x W x D):	13-1/2" x 15-3/4" x 8-1/2" (343mm x 400mm x 216mm)
Weight:	16.3 lb (7.4kg)



# **LIMITED WARRANTY**

A valid serial number is required for warranty coverage. This Revel warranty protects the original retail purchaser for a period of five (5) years (parts and labor) from any failure as a result of original manufacturing defects so long as:

- 1. The Revel products were purchased within the 50 United States, its territories or Canada.
- 2. The dealer from whom the Revel products were purchased was authorized to sell such products at the time of the original purchase.
- 3. The original, dated Bill of Sale is presented whenever service is required during the warranty period.

The balance of this warranty is transferable only if the used product is purchased from an authorized Revel dealer. This warranty is only valid for service within the United States, its territories and Canada; please contact an authorized Revel dealer for warranty and service information.

Any Revel product not performing satisfactorily may be returned to the factory for evaluation. Return authorization must first be obtained by either calling or writing Customer Service prior to shipping the product. The customer is responsible for shipping charges to the

factory. Customer Service will pay return shipping charges within the United States only in the event that the product is found to be defective as mentioned above. There are other stipulations that may apply to shipping charges.

There is no other express warranty on this product. Neither this warranty nor any other warranty, express or implied, including implied warranties of merchantability and fitness, shall extend beyond the warranty period. No responsibility is assumed for any incidental or consequential damages, so that the above exclusion or limitation may not apply.

This warranty provides specific legal rights. Other states may provide additional rights. This warranty is applicable in the United States, its territories and Canada. Outside of the United States, its territories and Canada, please contact an authorized Revel dealer for warranty and service information.

The information this document contains is subject to change without notice. In the event that there are differences between this warranty and the provisions of any advertisements, documentation, product brochures or packaging cartons, the terms of this warranty will prevail.

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