

REVEL[®]

PERFORMA³[™]

C208/C205 Center Channel Loudspeaker Owner's Manual

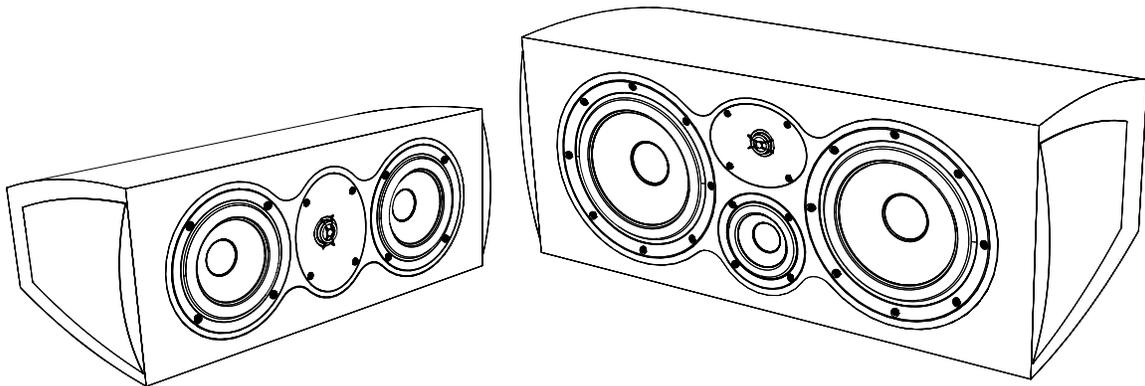


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ABOUT REVEL PERFORMA3 CENTER CHANNEL LOUDSPEAKERS

Thank you for purchasing Revel Performa3 center channel loudspeakers. These loudspeakers feature flexible placement options and sleek designs, allowing them to blend-in easily with your existing décor. They deliver an impressive combination of uncompressed dynamic range and low distortion across the entire audible spectrum.

Revel C208 and C205 low-frequency transducers and the C208 midrange transducer feature distortion reduction mechanisms that stabilize the flux field during operation, assuring low distortion even at high listening volumes. These precision transducers utilize ribbed aluminum cones for ideal piston-like behavior that eliminates a major source of resonances that are clearly audible in most other loudspeakers. Their cast aluminum frames eliminate another source of resonances that is common in many lesser-quality loudspeakers.

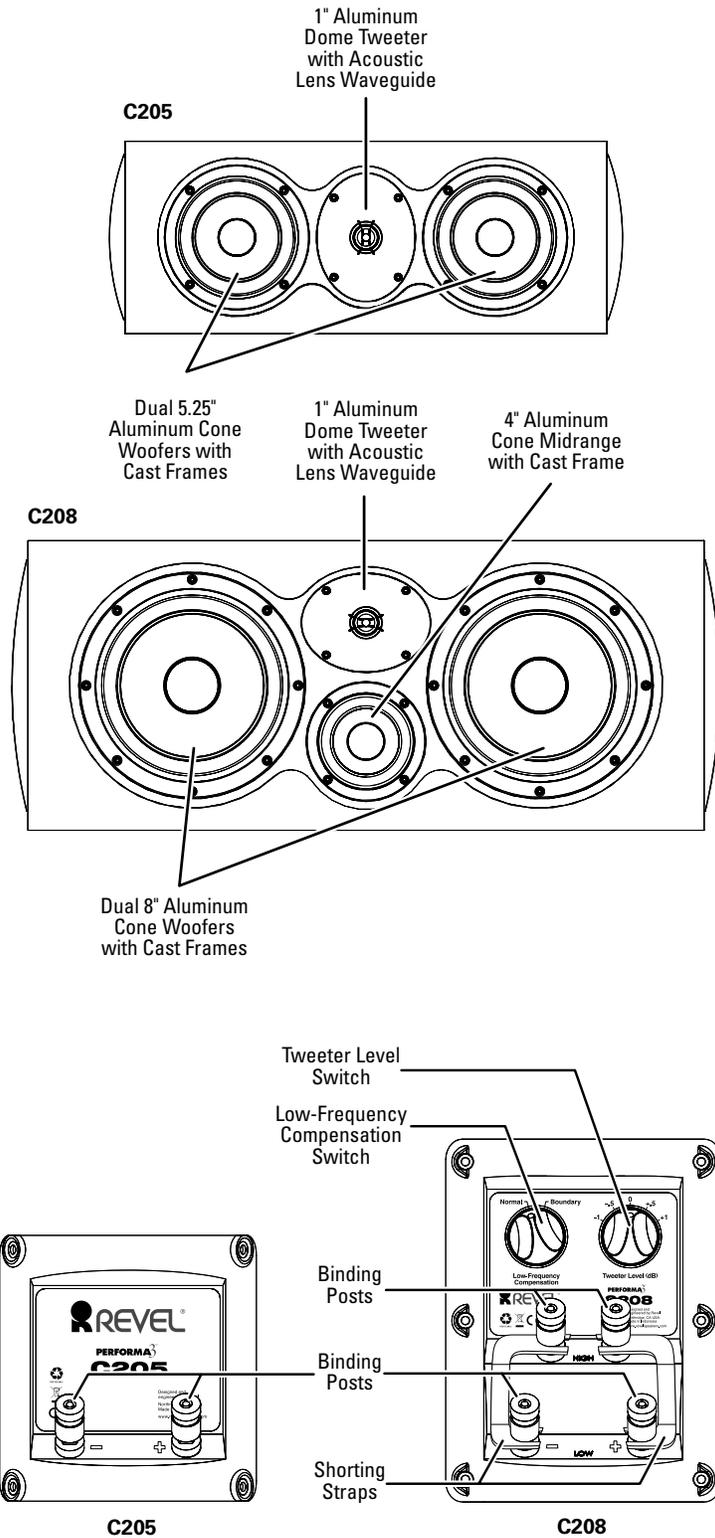
The C208 and C205 tweeter has been created around a newly-designed motor and dome assembly that sets a new standard of transparency for the Performa3 category. The tweeter's integrated acoustic lens waveguide is based on a breakthrough mathematical approach that accurately matches the tweeter's dispersion to that of the midrange transducer 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 C208 and C205 are housed in enclosures that are similar to our flagship Ultima2 Series. These fully-curved enclosures feature sleek curved tops and bottoms, which are inherently stiffer than conventional box shapes and are formed with contiguous wood layers that prevent splitting. They feature strategically-oriented bracing that eliminates the possibility of enclosure-induced coloration. These beautiful, modern enclosures are finished in high-gloss piano black, high-gloss piano white (C205 only) or genuine American walnut in a process (developed and overseen by Italian luxury cabinet makers) that exceeds automotive finish quality. The loudspeaker grilles are designed to minimize sonic diffraction or veiling and provide a clean, subtle appearance. The magnetic grille attachment method completely eliminates ugly hardware on the loudspeaker baffle, so if you decide to use the loudspeakers without grilles they will look like they were designed to be used without grilles.

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. The C208 network provides a calibrated high-frequency level control that allows precise fine-tuning of the sound while maintaining a very tight acoustic match between loudspeakers. Revel-designed binding posts are heavily gold plated and include an articulated section that allows for more secure connections when using spade lugs. The C208 includes two sets of binding posts that enable the loudspeakers to be bi-wired or bi-amped.

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.

C208/C206 OVERVIEW



TWEETER LEVEL SWITCH (C208)

This switch alters the tweeter's output by -1dB , -0.5dB , 0dB , $+0.5\text{dB}$, or $+1\text{dB}$.

CAUTION: Do not operate the switch while audio is playing through the speaker.

LOW-FREQUENCY COMPENSATION SWITCH (C208)

This switch compensates for less-than-ideal loudspeaker placement near a wall, or in an entertainment center.

- Select "Normal" if the loudspeaker is placed on a stand, more than two feet (0.61m) away from walls or other large objects.
- Select "Boundary" if the loudspeaker is installed into an entertainment center or shelving unit or if the loudspeaker is located less than two feet (0.61m) from walls or other large objects.

CAUTION: Do not operate the switch while audio is playing through the speaker.

BINDING POSTS

These gold-plated terminals provide connections from the power amplifier(s).

The C208 has one pair of high-frequency and one pair of low-frequency binding posts that come from the factory connected by a pair of shorting straps (see below). The two sets of binding posts can be configured for single-wired, bi-wired, or bi-amped connections. Refer to the *Making Connections* section on page 5 for additional information.

SHORTING STRAPS (C208)

Two gold-plated shorting straps that configure the loudspeaker for single-wired connections are installed at the factory. The shorting straps must be removed when the binding posts are re-configured for bi-wired or bi-amped connections. Refer to the *Making Connections* section on page 5 for additional information.

INSTALLATION CONSIDERATIONS

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

Advanced Revel design features allow the C208 and C205 to achieve exceptional acoustical precision. As a result, experimenting with loudspeaker placement and listening room acoustics will have the most significant impact on the loudspeakers' performance.

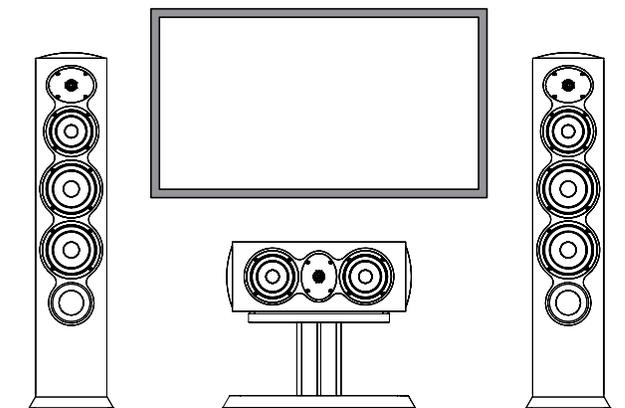
The C205's performance is optimized for the most common center-channel speaker placement options: near a wall, on a stand or inside a cabinet or entertainment center.

LOUDSPEAKER PLACEMENT

We recommend that you remove all obstructions between the loudspeaker and the primary listening position. For instance, a coffee table between the loudspeaker and the primary listening position will create reflections that will degrade timbre which can make film dialog more difficult to understand. Placing the loudspeakers near large objects may also cause unwanted reflections.

STAND-MOUNTING

Optional Performa3 C Stand pedestal stands are available for the C208 and C205 that place the loudspeakers at the proper height for installation below a TV display. Refer to the assembly instructions that are included with the stands for additional information.

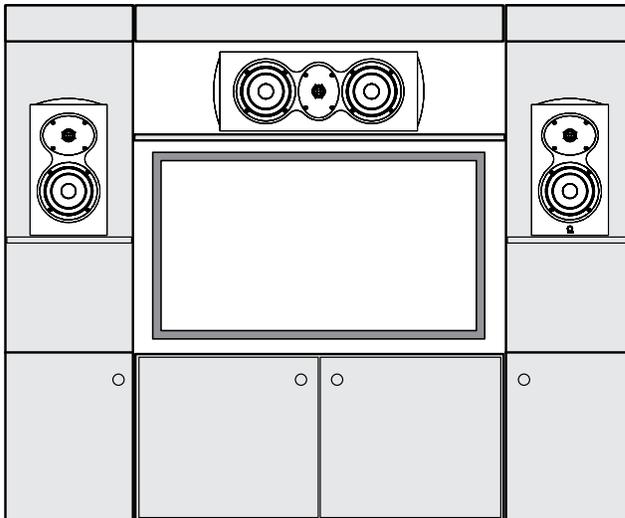


- When mounting the loudspeaker on the C Stand, if the speaker/stand is placed more than approximately two feet (0.6m) from the front wall, set the C208's Low-Frequency Compensation Switch in the "Normal" position.

FLUSH-MOUNTING

When flush-mounting the C208 and C205 inside of a cabinet or entertainment center:

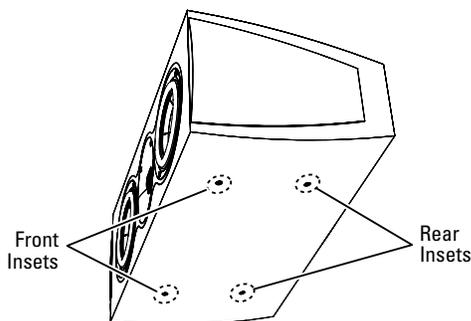
- Make sure that the front of the loudspeaker is flush with the front edge of the mounting shelf and surrounding surfaces.



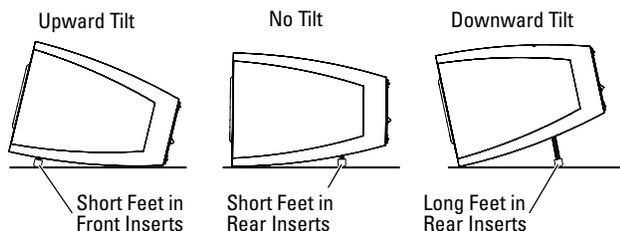
- Set the C208's Low-Frequency Compensation Switch in the "Boundary" position when flush-mounting the speaker.
- If necessary to aim the loudspeaker directly at the listeners' ears, use the supplied long feet to angle the loudspeaker down if it is placed above the TV display, or use the supplied short feet to angle the loudspeaker up or straight forward if it is placed below the TV display. See *Adjustable Feet*, on page 5.

ADJUSTABLE FEET

C208 and C205 loudspeakers include two sets of adjustable feet, one short and one long that let you angle the loudspeaker up or down so it is aiming towards listeners' ears when it is installed above or below a TV display. The feet screw into the threaded inserts on the bottom of the speaker.



- To tilt the loudspeaker upward, install the set of short feet into the front threaded inserts on the bottom of the loudspeaker. Adjust the feet so that the loudspeaker achieves a level balance.
- To aim the loudspeaker straight forward (with no tilt), install the set of short feet into the rear threaded inserts on the bottom of the loudspeaker. Adjust the feet so that the loudspeaker achieves a level balance.
- To tilt the loudspeaker downward, install the set of long feet into the rear threaded inserts on the bottom of the loudspeaker. Adjust the feet so that the loudspeaker achieves a level balance.



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 loudspeaker; connect the amplifier's negative (-) terminal to the negative (-) terminal on the loudspeaker. Do not reverse polarities (that is, do not connect + to -, or - to +) when making connections. Doing so will cause diminished dialog intelligibility 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 mis-terminated, resulting in considerable degradation of sound quality.

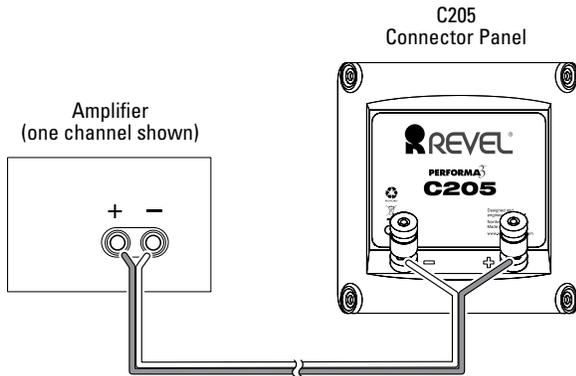
CAUTION: Revel C208 and C205 loudspeakers are designed to be used with an external crossover (high-pass filter), such as is found in the center channel outputs of surround processors and audio/video receivers. An 80Hz crossover frequency is ideal, and will minimize dynamic compression and distortion. If desired, the C208 may be used with crossover frequencies as low as 50Hz.

If the AVR/processor only offers "Large" and "Small" settings for the center channel, select the "Small" setting for both the C208 and C205.



C205 CONNECTIONS

The C205 features gold-plated binding posts that allow single-wire connection.



C208 CONNECTIONS

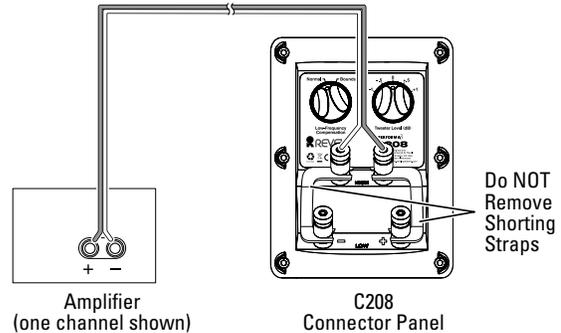
Before making connections to the C208, note the following:

- The standard connection method uses a single loudspeaker cable. The C208 is equipped with two pairs of input terminals to allow for bi-wiring or bi-amping. While Revel does not endorse one particular connection method over another, these additional connection options are available if desired. The design of this loudspeaker is such that optimal performance can be attained using the standard connection method.
- When making bi-amped connections, both power amplifier channels must receive identical input signals from the associated preamplifier. If the associated preamplifier does not offer two connectors for the center channel, a “Y” adaptor is required.
- If desired, contact your authorized Revel dealer for information about the suitability of power amplifier components before connecting the C208 to your power amplifier(s).
- Review the owner’s manuals for all associated audio components to determine their correct connection procedures.

C208 Single-Wired Connection

NOTE: Do not remove the shorting straps between the speaker terminals.

Single-wired connections are the most common. These are made between one pair of C208 input terminals and one power amplifier output channel as shown below.

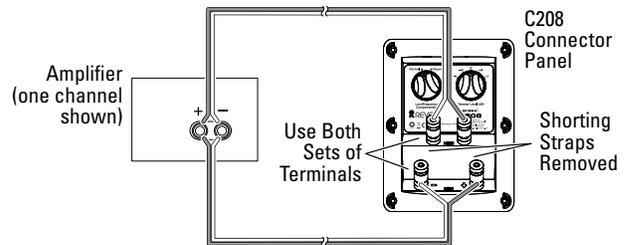


To make single-wired connections, connect one loudspeaker cable to the desired set of C208 input terminals. (The high-frequency – “HIGH” – input terminals are recommended.) Then connect the other end of that loudspeaker cable to the desired power amplifier output channel.

C208 Bi-Wired Connections

CAUTION: Remove the shorting straps before making bi-wired connections. Failure to do so may cause damage to some power amplifiers.

Bi-wired connections use two sets of loudspeaker cables to connect both sets of C208 input terminals to a single power amplifier output channel as shown below.



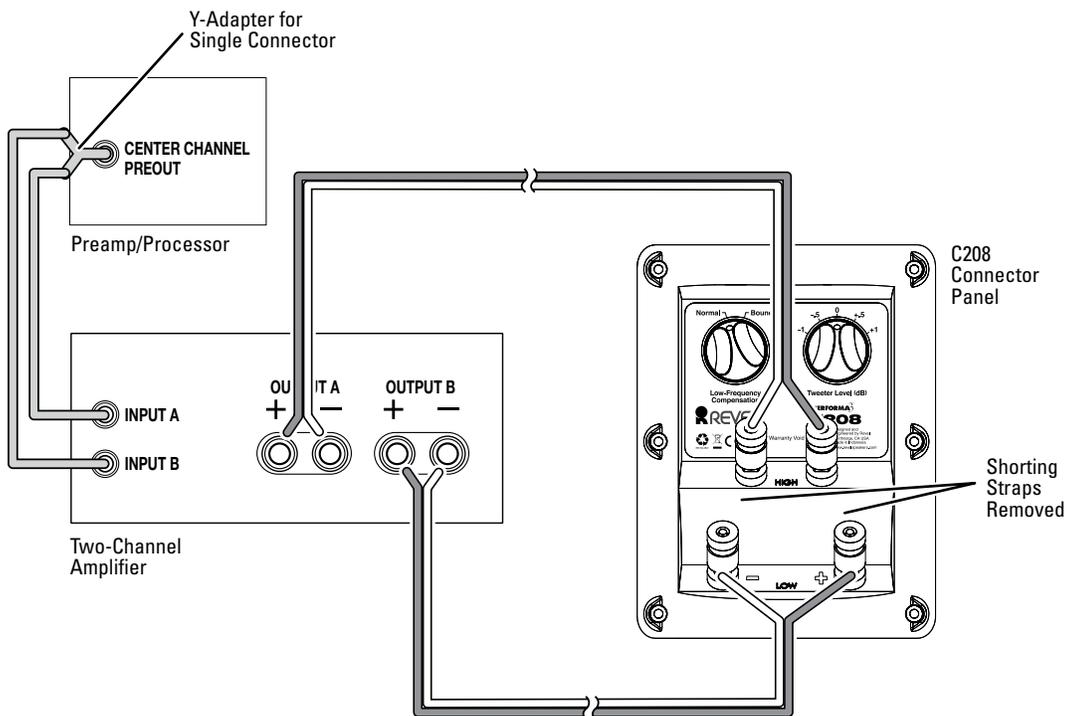
1. Remove the shorting straps.
2. Connect one loudspeaker cable to the high-frequency set of C208 input terminals. Then connect the other end of that loudspeaker cable to the desired power amplifier output channel.
3. Connect another loudspeaker cable to low-frequency set of C208 input terminals. Then connect the other end of that loudspeaker cable to the same power amplifier output channel that you connected in step 2.

C208 Bi-Amped Connections

CAUTION: Remove the shorting straps before making bi-amped connections. Failure to do so may cause damage to some power amplifiers.

Bi-amped connections are made between both pairs of C208 input terminals and two separate output channels of a single power amplifier. Each C208 input is connected to an individual power amplifier channel, which can sometimes increase sonic performance.

NOTE:
When making bi-amped connections, both power amplifier channels must receive identical input signals from the associated preamp/processor. If the associated preamp/processor only has one connector for the center channel, a "Y" adapter is required.



1. Remove the shorting straps.
2. Connect one loudspeaker cable to the high-frequency set of C208 input terminals. Then connect the other end of that loudspeaker cable to the desired power amplifier output channel.
3. Connect another loudspeaker cable to the low-frequency set of C208 input terminals. Then connect the other end of that loudspeaker cable to the other output channel of the same power amplifier you connected to the high-frequency input terminals.

4. Connect both amplifier channel inputs to the center channel output of the preamp/processor. If the preamp/processor only has one connector for the center channel, use a "Y"-adaptor.

NOTE: Do not use an electronic crossover network when bi-amping a Revel C208 loudspeaker. Doing so will cause a considerable degradation of sound quality.



OPTIMIZING PERFORMANCE

C208 ADJUSTMENTS

As discussed in the *C208/C205 Overview* section on page 2, the C208 has Low-Frequency Compensation and Tweeter Level adjustments that allow you to tailor its performance for your individual listening situation and personal preferences.

Once you have installed and connected your loudspeaker we suggest following these steps the first time you turn your new C208 loudspeaker on:

1. Set the Tweeter Level switch to 0. (The control should normally be left in the default "0" position.)
2. Set the Low Frequency Compensation switch to the appropriate position.
 - Select the Normal setting if the loudspeaker is located at least 3 feet (0.91m) from walls.
 - Select the Boundary setting if the loudspeaker is flush-mounted in an entertainment center or shelving unit or if the loudspeaker is located less than about 2 feet (0.61m) from walls and other objects.

CAUTION: Do not operate the switch while audio is playing through the speaker.

3. Begin playback of a familiar film or music source.
4. Listen from the primary listening position, increasing the volume to a comfortable level.
5. Experiment with the loudspeakers' placement to achieve the best overall tonal balance, and spatial integration with the front left and front right loudspeakers. There should be little tonal change in a sound as it moves from left to right or right to left. Refer to the *Installation Considerations* section on page 4 for additional information about loudspeaker placement.
6. If necessary, adjust the Tweeter Level switch on the loudspeaker to change high-frequency balance and timbre to fine-tune the overall tonal balance with that of the front left and front right speakers.

CAUTION: Do not operate the switch while audio is playing through the speaker.

7. Experiment with the Low-Frequency Compensation switch to achieve the best low-frequency performance for your particular listening room and installation.

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.

CARING FOR YOUR LOUDSPEAKERS

GRILLES

Revel Performa3 center channel speakers feature grilles with a magnetic attachment method that eliminates unsightly attachment hardware from the speaker baffle, so if you decide to use your speakers with the grilles removed they will retain their elegant appearance.

CABINET FINISH

The cabinet's wood veneer finish does not require routine maintenance. Cabinet surfaces that have been marked with dust, fingerprints, or other dirt can be cleaned using a soft cloth – preferably micro-fiber, and high quality auto wax. Take care not to come in contact with the transducers.

Use caution to avoid contacting the rubberized trim on the sides of the loudspeaker with auto wax. If necessary, the rubberized trim can be cleaned with denatured alcohol on a microfiber cloth.

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

CAUTION: To prevent cabinet damage, do not use a cloth made with steel wool or metal polish to clean the cabinet. To prevent possible transducer damage, do not apply furniture polish directly to the cabinet.

SPECIFICATIONS

C208

Type:	3-way dual 8" center channel loudspeaker
Low-frequency transducer:	Two 8" (200mm) aluminum cones, with cast frames
Midrange transducer:	4" (100mm) aluminum cone, with cast frame
High-frequency transducer:	1" (25mm) aluminum dome, with acoustic lens waveguide
Recommended amplifier power range:	50 – 350 watts
Low-frequency extension:	34Hz (–10dB); 41Hz (–6dB); 50Hz (–3dB)
Nominal impedance:	8 ohms
Sensitivity (2.83V/1m):	89dB
Crossover frequencies:	375Hz; 2.45kHz
Enclosure type:	Sealed
Controls:	Low-frequency contour; high-frequency level
Inputs:	Dual gold-plated binding posts with shorting straps
Available finishes:	Piano black, high-gloss walnut
Dimensions (H x W x D):	11-13/16" x 28-15/16" x 13-3/4" (300mm x 735mm x 350mm)
Weight:	51.5 lb (23.4kg)

C205

Type:	2-way dual 5-1/4" center channel loudspeaker
Low-frequency transducer:	Two 5-1/4" (130mm) aluminum cones, with cast frames
High-frequency transducer:	1" (25mm) aluminum dome, with acoustic lens waveguide
Recommended amplifier power range:	50 – 120 watts
Low-frequency extension:	46Hz (–10dB); 62Hz (–6dB); 80Hz (–3dB)
Nominal impedance:	8 ohms
Sensitivity (2.83V/1m):	89dB
Crossover frequencies:	1.7kHz
Enclosure type:	Sealed
Inputs:	Gold-plated binding posts
Available finishes:	Piano black, piano white, high-gloss walnut
Dimensions (H x W x D):	7-7/8" x 21" x 11-1/2" (200mm x 532mm x 292mm)
Weight:	26.1 lb (11.9kg)



WARRANTY

Revel Series speakers are warranted against defects. The duration of the speaker's warranty depends on the laws in the country in which it was purchased. Your local Revel retailer can help you determine the length of your warranty.

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