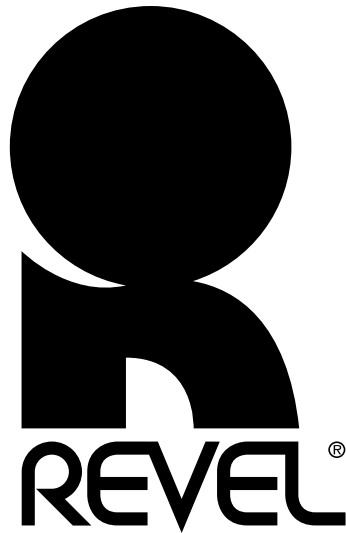


Revel® Performa® C52 Loudspeaker

Owner's Manual





3 Oak Park
Bedford, MA 01730-1413 USA
Telephone: 781-280-0300
Fax: 781-280-0490
www.revelspeakers.com

Customer Support
Telephone: 781-280-0300
Sales Fax: 781-280-0495
Service Fax: 781-280-0499

harman specialty group

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REVEL Performa C52
OWNER'S MANUAL

TABLE OF CONTENTS

Documentation Conventions	4
About the C52	5
<i>Highlights • Product Registration</i>	
Unpacking	6
Loudspeaker Overview	8
<i>Driver Complement • Cabinet • Filter Network • Input Panel</i>	
Loudspeaker Placement	10
<i>Flush Mounted • On Top of Monitor • Stand Mounted • Adjustable Spikes</i>	
Making Connections	13
<i>Single-Wired Connections • Bi-Wired Connections • Vertical Bi-Amplified Connections • Horizontal Bi-Amplified Connections</i>	
Optimizing Performance	18
<i>Loudspeaker Volume Levels</i>	
Specifications	20
<i>Dimensions & Weight</i>	
Obtaining Service	21
Index	22
Notes	23

DOCUMENTATION CONVENTIONS

This document contains general safety, installation, and operation instructions for the Revel Performa C52 Center-Channel Loudspeaker. It is important to read this document before attempting to use this product. Pay particular attention to safety instructions.

WARNING Calls attention to a procedure, practice, condition, or the like that, if not correctly performed or adhered to, could result in injury or death.

CAUTION Calls attention to a procedure, practice, condition, or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

Note Calls attention to information that is essential to highlight.

ABOUT THE C52

Thank you for purchasing the Revel Performa C52 center-channel loudspeaker. The C52 delivers exceptional freedom from coloration and distortion across a wide dynamic range, making it the perfect companion for the Revel Performa F52 and F32 front loudspeakers. Four proprietary transducers, sophisticated filter networks, and flexible placement options allow the C52 to serve as the center channel in the most demanding home entertainment systems.

The C52 features advanced woofer and midrange motor structures that include two high-grade Neodymium magnets placed at the center of the motor structures, inside the voice coils, for improved magnetic shielding. Inside the motors, black-plated steel shield cups facilitate heat dissipation for higher power handling. Integrated aluminum flux stabilization rings minimize modulation inside the motor static gap flux fields, greatly reducing distortion. Copper rings inside each motor gap reduces distortion even further. Both rings are optimally sized and placed to maintain constant linear voice coil inductance with forward and backward cone motions.

Combining superior form and function, the C52 transducers feature a distinctive design that provides smoother frequency response. The woofer and midrange cones are constructed with Organic Ceramic Composite material to reduce distortion, while the spiders are constructed with a high-strength Nomex blend with optimized geometry for increased linearity.

A true three-way center-channel, the C52 delivers a broad range of frequencies with striking detail. Two 8-inch (203mm) woofers provide high excursion capabilities, reproducing low frequencies with spectacular dynamic range. Housed in its own separate sub-enclosure, a 5.25-inch (133mm)

midrange handles critical mid-band frequencies with natural tonal balance over a wide dynamic range. A 1-inch (25mm) aluminum dome tweeter, incorporating a custom designed wave-guide, blends perfectly with the midrange and reproduces high frequencies well above the audible spectrum.

High-order filters at 235Hz and 2kHz optimize loudspeaker on and off-axis response, helping to ensure smooth octave-to-octave balance and timbral accuracy. Separate woofer, midrange, and tweeter filter boards prevent mutual interference between filter network components, dramatically reducing distortion over a wide dynamic range. Removable shorting straps and gold-plated binding posts accommodate single-wired, bi-wired, and bi-amplified connections.

Placement Compensation and High Frequency Level switches allow the C52 to deliver stellar center-channel performance, even when confronted with less-than-ideal loudspeaker placement and listening room acoustics. The Placement Compensation switch offers three settings to accommodate loudspeaker placement in a bookcase or wall unit; on top of a video monitor or above a rear projection screen; or placed on a stand. A separate High Frequency Level switch achieves precise balancing of high frequencies for optimal timbral balance.

The C52 cabinet is constructed with 0.75-inch (19mm) thick walls and extensive internal bracing to reduce cabinet-induced colorations. Rounded baffle edges minimize diffraction and optimize off-axis response for smoother high-frequency reproduction. Two threaded inserts on the bottom of the cabinet accommodate adjustable spikes, providing optimal loudspeaker stability and positioning. A sonically optimized grille is also included.

About the C52 (continued)

Since 1996, Revel has stood at the forefront of loudspeaker design. Backed with Harman International's extensive research and design facilities, all Revel Loudspeakers benefit from cutting-edge tools.

- A multi-channel listening lab allows for double-blind listening tests.
- A laser interferometer enables detailed driver and cabinet analysis.
- Multiple large anechoic chambers provide precise tests and measurements.
- Finite element analysis produces advanced loudspeaker modeling.
- A stereo lithography apparatus helps to achieve tight tolerances.

Adding to the proud lineage of Revel's Ultima and Performa Series Loudspeakers, the C52 further solidifies Revel's reputation as the leading designer and manufacturer of high-quality, high-performance loudspeakers. Each C52 is individually hand-tuned during manufacturing to match the production reference standard within a fraction of a decibel, ensuring incomparable loudspeaker-to-loudspeaker consistency. As a result, the C52 is the obvious choice for unrivaled center-channel performance.

HIGHLIGHTS

- Optimal center-channel performance
- Two proprietary 8-inch (203mm) woofers with Organic Ceramic Composite cones
- Proprietary 5.25-inch (133mm) midrange with Organic Ceramic Composite cone
- Proprietary 1-inch (25mm) aluminum dome tweeter incorporating a proprietary wave-guide
- Separate woofer, midrange, and tweeter

filter boards

- Placement Compensation switch
- Adjustable calibrated tweeter level
- Flexible placement options
- Advanced woofer and midrange motor structures
- Magnetic shielding
- Large voice coils for wide dynamic range without compression
- Gold-plated binding posts
- Removable gold-plated shorting straps
- Hand-tuned to match the production reference standard within a fraction of a decibel
- Adjustable spikes
- Elegant cabinet design in real wood veneer finishes

PRODUCT REGISTRATION

Please register the C52 within 15 days of purchase. To do so, register online at www.revelspeakers.com or complete and return the included product registration card. Retain the original, dated sales receipt as proof of warranty coverage.

UNPACKING

The C52 requires special care and handling during unpacking. Pay particular attention to the precautions that appear in this section and to other precautions that appear throughout this owner's manual.

Note

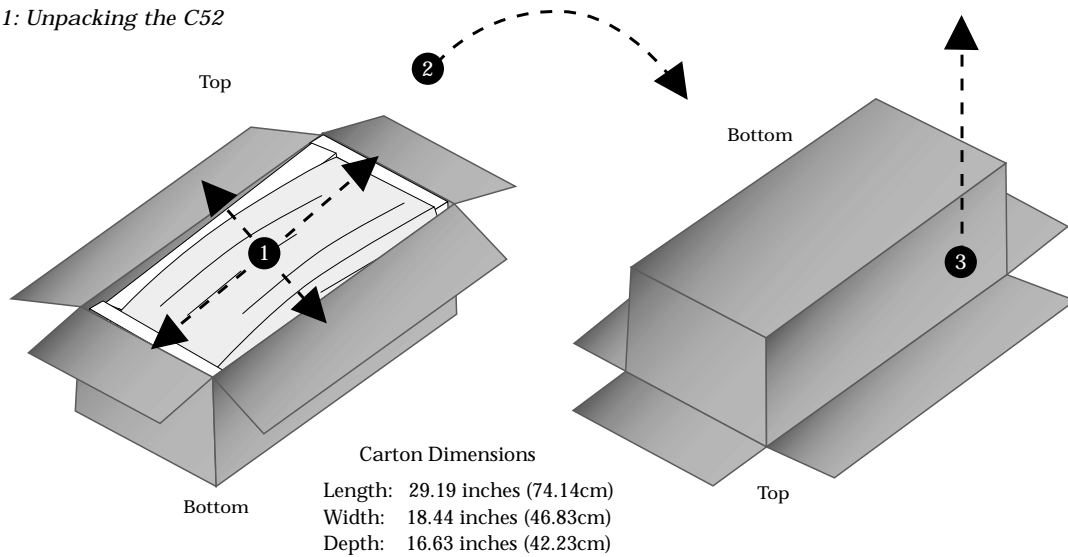
When unpacking, save all packing materials for possible future shipping needs.



REVEL Performa C52

OWNER'S MANUAL

Figure 1: Unpacking the C52



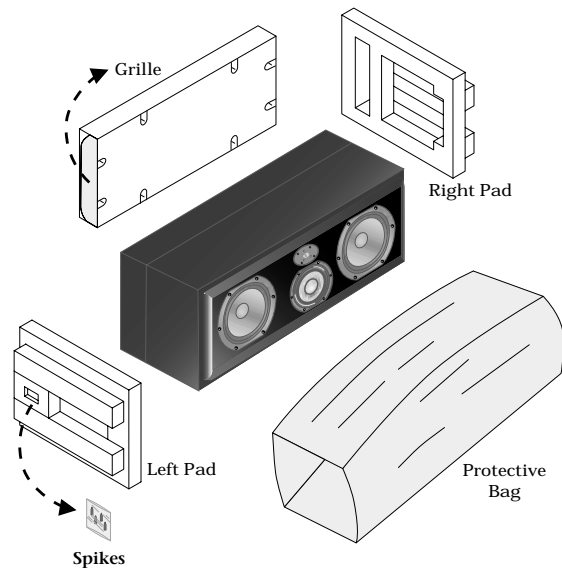
To unpack the C52:

1. Place the packing carton upright on a soft towel or carpeted floor and fully open the top flaps as shown in step 1 of Figure 1 (above).
2. Without allowing the top flaps to close, stand the packing carton in an inverted position as shown in step 2 of Figure 1.
3. Lift the packing carton off of the loudspeaker as shown in step 3 of Figure 1. Use caution to avoid damaging the loudspeaker cabinet. At this point, the loudspeaker will be upside-down.
4. Leaving the protective end pads on, place the speaker on one end (one end-pad will be on the floor under the speaker; the other will be at the top).
5. Remove the grille and the top end pad.
6. Carefully turn the C52 until it is resting on the end where you just removed the end pad.
7. Remove the remaining end pad and the protective bag.

8. (Optional) If you plan to install the spikes, lay the speaker down so the bottom is facing upward (the holes for the spikes will be exposed).

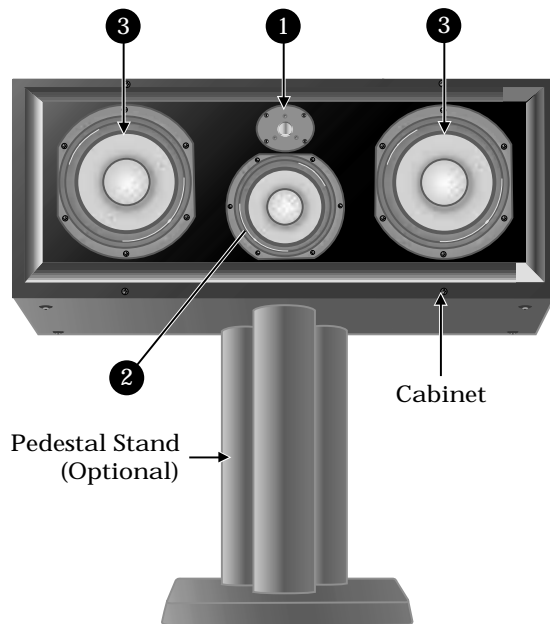
Remove the spikes from the left pad and attach them to the bottom of the loudspeaker. Refer to “Adjustable Spikes” on page 12 for detailed installation instructions.

Figure 2: Packing Materials



LOUDSPEAKER OVERVIEW

Figure 3: C52 Loudspeaker (Front View)



The numbers in Figure 3 (above) correspond with the numbered items in the “Driver Complement” section.

DRIVER COMPLEMENT

The numbers in Figure 3 (above) correspond with the numbered items in this section.

1. Proprietary 1-inch (25mm) aluminum dome tweeter incorporating a proprietary wave-guide
2. Proprietary 5.25-inch (133mm) midrange with Organic Ceramic Composite cone
3. Two proprietary 8-inch (203mm) woofers with Organic Ceramic Composite cones

CABINET

Reduces cabinet-induced colorations with 0.75-inch (19mm) thick walls and extensive internal bracing. Rounded baffle edges minimize diffraction and optimize off-axis response for smoother high-frequency reproduction. Two threaded inserts on the

bottom of the cabinet accommodate spikes, which provide adjustable tilt when the C52 is placed on or above a video monitor.

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 and a high-quality furniture polish. Use a high-quality wax for a higher-gloss finish.

- To clean the cabinet, apply furniture polish to a soft cloth; then use the cloth to lightly wipe the cabinet surface.
- To clean the grille, gently vacuum using a soft-bristled brush vacuum attachment.

CAUTION

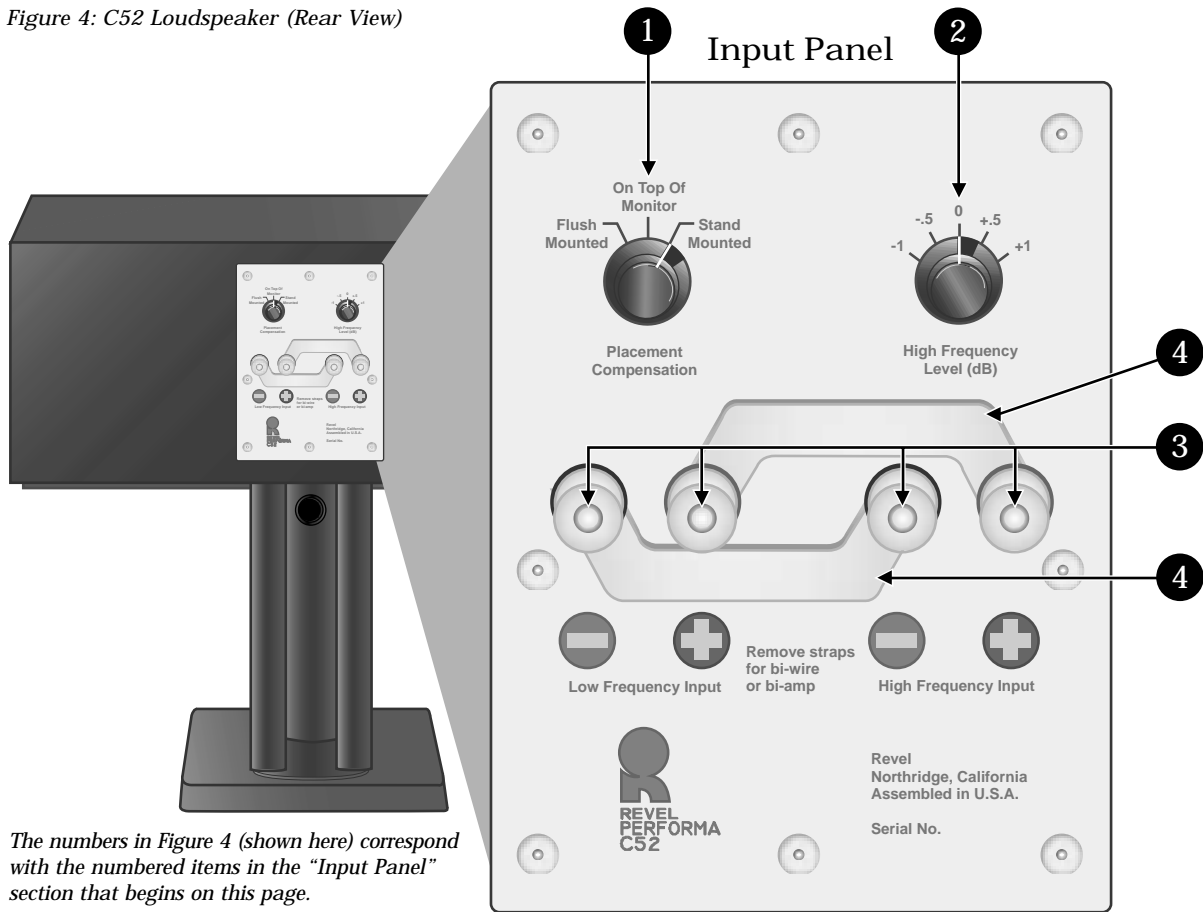
To prevent cabinet damage, do not use any cloth containing steel wool or metal polish to clean the cabinet. To prevent possible transducer damage, do not apply furniture polish directly to the cabinet.

FILTER NETWORK

Optimize loudspeaker on and off-axis response with high-order filters at 235Hz and 2kHz, helping to ensure smooth octave-to-octave balance and timbral accuracy. Separate woofer, midrange, and tweeter filter boards prevent mutual interference between filter network components, dramatically reducing distortion over a wide dynamic range. Removable shorting straps and gold-plated binding posts accommodate single-wired, bi-wired, and bi-amplified connections, while separate Placement Compensation and High Frequency Level switches provide precise balance to compensate for less-than-ideal listening room acoustics and loudspeaker

placement.
INPUT PANEL

Figure 4: C52 Loudspeaker (Rear View)



The numbers in Figure 4 (shown here) correspond with the numbered items in the "Input Panel" section that begins on this page.

The numbers in Figure 4 (below) correspond with the numbered items in this section.

1. Placement Compensation Switch

Optimizes the C52's response to different loudspeaker placements. Refer to the "Loudspeaker Placement" section for more information.

- Select the Flush Mounted setting if the C52 is placed in a bookcase or wall unit.
- Select the On Top of Monitor

setting if the C52 is placed on top of a video monitor or mounted on a shelf.

- Select the Stand Mounted setting if the C52 is placed on a stand (such as the optional pedestal stand).

Note

Rotating the Placement Compensation switch clockwise increases low-frequency output.

2. High Frequency Level (dB) Switch

Alters tweeter output levels by -1, -0.5, 0, +0.5, or +1dB.

3. Input Terminals

Provide high and low-frequency connections from the associated power amplifier(s). One pair of high-frequency and one pair of low-frequency gold-plated binding posts are available. The input terminals can be configured for single-wired, bi-wired, or bi-amplified connections. Refer to the "Making Connections" section for additional information.

4. Shorting Straps

Accommodate single-wired, bi-wired, and bi-amplified connections. Two gold-plated shorting straps are installed for single-wired connections. The shorting straps must be removed when the input terminals are configured for bi-wired or bi-amplified connections. Refer to the "Making Connections" section for additional information.

LOUDSPEAKER PLACEMENT

Loudspeaker fidelity depends on the following three factors:

1. Loudspeaker accuracy
2. Listening room acoustics
3. Loudspeaker placement

Advanced Revel design features allow the C52 to achieve stunning acoustical precision with exceptional freedom from coloration and distortion across a wide dynamic range. As a result, experimenting with loudspeaker placement will have the most significant impact on the C52's performance.

In general, it is recommended to remove all obstructions between the C52 and the primary listening position. The Placement Compensation switch can be used to optimize the C52's performance for the loudspeaker placement options described in this section.

The C52 is magnetically shielded to minimize any effect on CRT video monitors. However, small, stray magnetic fields may affect large CRT monitors located in close proximity to the C52. These magnetic fields decrease rapidly with distance, so moving the C52 farther away from the monitor will reduce interference. It is important to confirm that the C52 is suitable for use with the intended CRT monitor.

Note

DLP, LCD, LCoS and Plasma display devices are not affected by magnetic fields.

FLUSH MOUNTED

Set the Placement Compensation switch to Flush Mounted if the C52 loudspeaker is placed in a bookcase or wall unit as shown in Figure 5 (top-right).

ON TOP OF MONITOR

Set the Placement Compensation switch to On Top of Monitor if the C52 loudspeaker is placed on top of a video monitor as shown in Figure 6 (center-right).

If desired, spikes can be added to the bottom of the cabinet to create the proper tilt angle. Refer to the “Adjustable Spikes” section for additional information.

STAND MOUNTED

Set the Placement Compensation switch to Stand Mounted if the C52 loudspeaker is placed on a stand as shown in Figure 7 (bottom-right). An optional pedestal stand is available at authorized Revel dealers.

CAUTION

Loudspeakers placed on stands or video monitors may fall if tipped or improperly positioned. To avoid this, anchor the loudspeaker and stand using the same procedures and hardware used to anchor bookcases, wall units, and other furniture. Harman Specialty Group assumes no responsibility for proper selection and installation of hardware or for any personal injuries or product damages resulting from improper installation or a fallen loudspeaker.

Figure 5: Flush Mounted

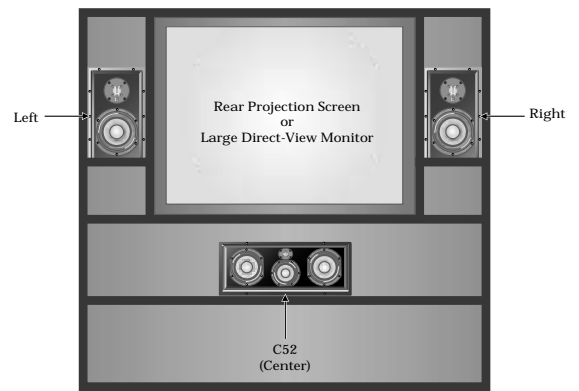


Figure 6: On Top of Monitor

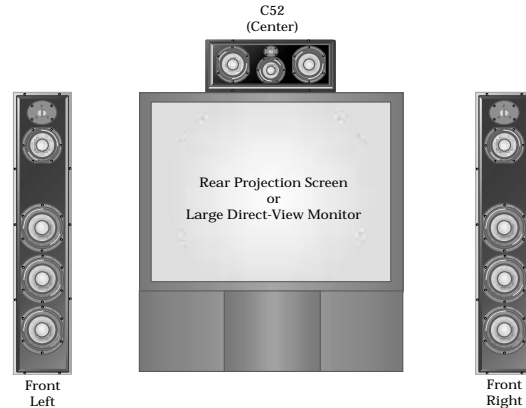
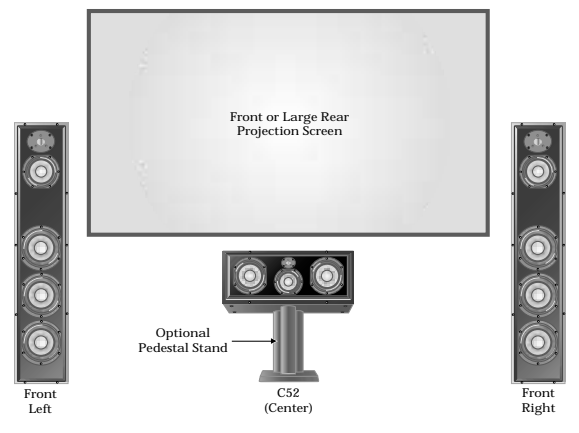


Figure 7: Stand Mounted



ADJUSTABLE SPIKES

When the C52 is shipped, spikes are attached to the left pad identified in Figure 2. For optimal sound quality, the spikes can be positioned in the threaded inserts on the bottom of the cabinet.

Both 1.5-inch (38mm) and 2.25-inch (57mm) adjustable spikes are included, allowing for achievement of the proper tilt angle when the C52 is placed on top of a video monitor as shown in Figure 6 or a shelf. For best results, the C52 should be tilted so the front of the speaker is facing directly toward the listener's ears.

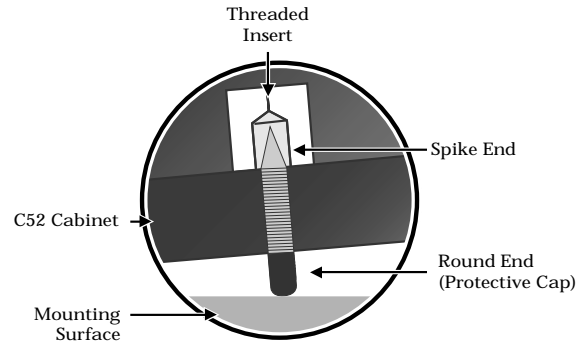
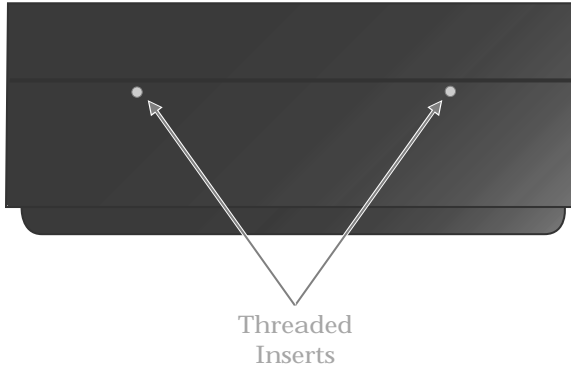
To install and position the spikes:

1. Place the C52 on its side on a soft towel or carpeted floor.
2. Select the appropriate set of spikes to create a tilt angle that aligns the tweeter with the listener's ears.
 - Select the 1.5-inch spikes for a slight downward tilt as shown on the left side of Figure 8 (below).
 - Select the 2.25-inch spikes for a greater tilt as shown on the right side of Figure 8 (below). These spikes are required for higher loudspeaker placement.
3. Locate the two threaded inserts on the bottom of the cabinet. These inserts are identified on the left side of Figure 9 (next page).
4. Rotate the first spike clockwise, spike end first, to attach it to the threaded insert.
5. Repeat step 4 using the other spike and threaded insert. Make sure the two spikes are evenly threaded to achieve a level balance.
6. Place the protective caps over the round end of the spikes as shown on the right side of Figure 9 (next page) to prevent the spikes from scratching the mounting surface.
7. When both spikes have been inserted, stand the C52 in the upright position. If needed, adjust the spikes to achieve a level balance.

Figure 8: Tilting the C52



Figure 9: Adjustable Spikes



MAKING CONNECTIONS

The C52 features gold-plated binding posts and shorting straps that allow it to be configured for single-wired, bi-wired, or bi-amplified connections.

CAUTION

- Never make or break connections unless all system components are powered off.
- Remove the shorting straps identified in Figure 4 before making bi-wired or bi-amplified connections. Failure to do so may cause damage to some power amplifiers.

Before making connections, note the following:

- Use high-quality loudspeaker cable with a maximum total loop resistance of 0.07Ω or less (for each wire run). Refer to the table in the next column to determine the appropriate maximum wire gauge.

Maximum Wire Gauge

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

Note

High loop resistances that exceed 0.07Ω (for each wire run) will cause the filter network to mis-terminate, resulting in considerable degradation of sound quality.

Making Connections (continued)

- Make all connections observing the proper polarity, positive-to-positive (+) and negative-to-negative (-).
- Vertical bi-amplified connections must be made with identical power amplifiers. Horizontal bi-amplified connections can be made with identical or non-identical power amplifiers with identical “gain factors.”
- When making bi-amplified connections, both power amplifiers must receive identical input signals from the associated preamplifier. A “Y” adaptor is required if the associated preamplifier does not offer two connectors per output channel.
- The standard connection method uses a single loudspeaker wire. The C52 is equipped with two pairs of input terminals to allow for bi-wiring or bi-amplification. 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.
- If desired, contact an authorized Revel dealer for information about the suitability of power amplifier components before connecting the C52 to the associated power amplifier.
- Review the owner’s manuals for associated audio components to determine their connection procedures.

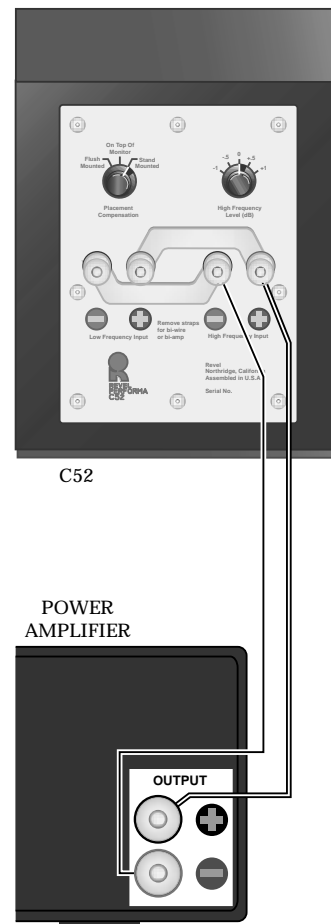
SINGLE-WIRED CONNECTIONS

Single-wired connections are the most common. These are made between one pair of C52 input terminals and one power amplifier output channel as shown in Figure 10 (below).

To make single-wired connections:

1. Connect one pair of loudspeaker wires to the desired pair of C52 input terminals. (The high-frequency input terminals are recommended.)
2. Connect the same pair of loudspeaker wires to the desired power amplifier output channel.

Figure 10: Single-Wired Connections



BI-WIRED CONNECTIONS

Bi-wired connections are made between both pairs of C52 input terminals and one power amplifier output channel as shown in Figure 11 (right).

To make bi-wired connections:

1. Remove the shorting straps identified in Figure 4.
2. Connect one pair of loudspeaker wires to the high-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to the desired power amplifier output channel.
3. Connect another pair of loudspeaker wires to the low-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to the same power amplifier output channel that was selected in step 2.

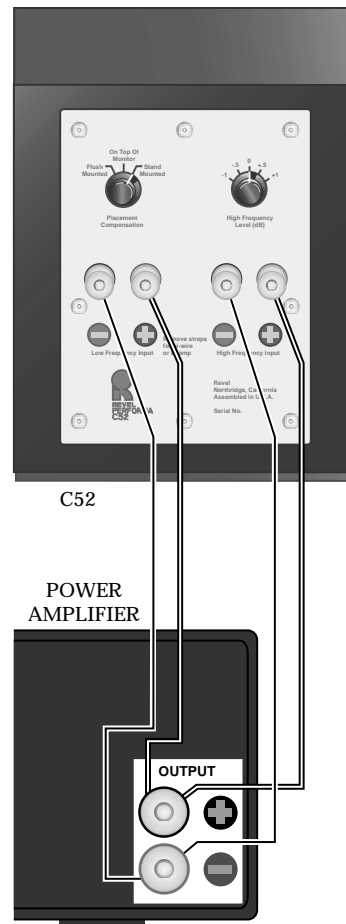
VERTICAL BI-AMPLIFIED CONNECTIONS

Vertical bi-amplified connections are made between both pairs of C52 input terminals and two separate power amplifier output channels. These output channels can be on one or two power amplifiers. However, if two power amplifiers are used, these power amplifiers must be identical. Vertical bi-amplified connections are shown in Figure 12 (next page).

Note

When making vertical bi-amplified connections, both power amplifiers must receive identical input signals from the associated preamplifier. A “Y” adaptor is required if the associated preamplifier does not offer two connectors per output channel.

Figure 11: Bi-Wired Connections



Vertical Bi-amplified Connections

(continued)

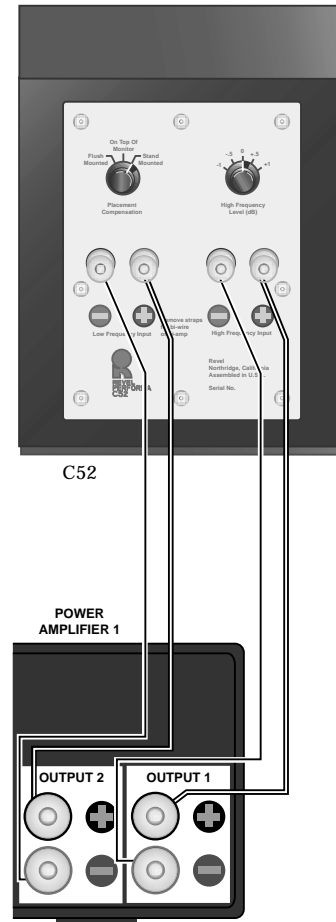
To make vertical bi-amplified connections:

1. Remove the shorting straps identified in Figure 4.
2. Connect one pair of loudspeaker wires to the high-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to the desired power amplifier output channel.
3. Connect another pair of loudspeaker wires to the low-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to a separate power amplifier output channel.

Note

Vertical bi-amplified connections must be made using two separate output channels on one power amplifier or separate output channels on two identical power amplifiers.

Figure 12: Vertical Bi-Amplified Connections



HORIZONTAL BI-AMPLIFIED CONNECTIONS

Horizontal bi-amplified connections are made between both pairs of C52 input terminals and two separate output channels on two separate power amplifiers. The high-frequency pair of C52 input terminals is connected to one power amplifier, while the low-frequency pair is connected to another power amplifier.

These power amplifiers can be identical or non-identical, but must have identical gain factors. If the gain factors are not identical, a means of adjusting the input level of at least one power amplifier is required. Horizontal bi-amplified connections are shown in Figure 13 (next page).

Note

When making horizontal bi-amplified connections, both power amplifiers must receive identical input signals from the associated preamplifier. A “Y” adaptor is required if the associated preamplifier does not offer two connectors per output channel.

To make horizontal bi-amplified connections:

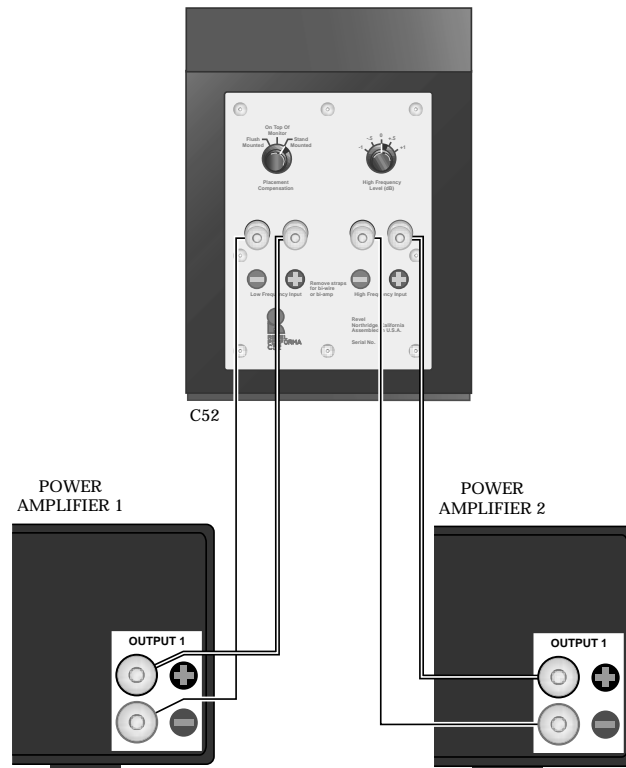
1. Remove the shorting straps identified in Figure 4.
2. Connect one pair of loudspeaker wires to the high-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to the desired power amplifier output channel.

3. Connect another pair of loudspeaker wires to the low-frequency pair of C52 input terminals. Then connect the same pair of loudspeaker wires to the desired output channel on another power amplifier.

Note

Horizontal bi-amplified connections can be made using identical or non-identical power amplifiers. However, these power amplifiers must have identical gain factors. If the gain factors are not identical, a means of adjusting the input level of at least one power amplifier is required. Contact an authorized Revel dealer for assistance.

Figure 13: Horizontal Bi-Amplified Connections



OPTIMIZING PERFORMANCE

To optimize the C52 for best performance:

1. When the C52 is connected, set the High Frequency Level switch to 0. (Different listening rooms may require other High Frequency Level switch settings.)
2. Set the associated multi-channel controller or receiver for an 80Hz crossover (or higher), even if the loudspeaker setup does not include a subwoofer. In its absence, the associated multi-channel controller or receiver will use bass management to route frequencies below 80Hz to the front left and right channels, without losing center-channel low-frequency information.
 - The C52 must be used with at least an 80Hz crossover.
 - Selecting the appropriate crossover based on accurate in-room response measurements will result in decreased distortion, accurate timbre, and increased dynamic capabilities.
 - Contact an authorized Revel dealer for assistance setting the associated multi-channel controller or receiver for the appropriate crossover.
3. Set the Placement Compensation switch to correspond with the C52's placement.
 - Select the Flush Mounted setting if the C52 is placed in a bookcase or wall unit.
 - Select the On Top of Monitor setting if the C52 is placed on top of a video monitor or mounted on a shelf.

- Select the Stand Mounted setting if the C52 is placed on a stand (such as the optional pedestal stand).
4. Begin playback of a familiar multi-channel music or film source. Make sure to set the associated multi-channel controller or receiver to a mode that uses the center channel.
 - It is recommended to listen to well-recorded dialogue from more than one film source, as sound quality varies from film to film.
 5. Listen from the primary listening position, increasing volume to a comfortable level.
 6. Experiment with the Placement Compensation switch setting to compensate for effect of loudspeaker placement on the C52's timbre and overall balance.

Note

Rotating the Placement Compensation switch counterclockwise increases low-frequency output.

7. If desired, experiment with the High Frequency Level switch to change high-frequency balance and timbre.

LOUDSPEAKER VOLUME LEVELS

High-order filters include steep cut-offs to reduce potential damage from “out-of-band” frequencies. Combined with carefully selected transducers and filter network components, this approach helps the C52 to maintain its performance under extreme operating conditions.

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

CAUTION

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

Note

- *Refer to step 2 on the previous page for information about C52 crossover requirements.*
 - *If desired, contact an authorized Revel dealer for information about the suitability of power amplifier components before connecting the C52 to the associated power amplifier.*
-

SPECIFICATIONS

DIMENSIONS & WEIGHT

Width: 24.63 inches (62.56cm)

Height: 10.88 inches (27.64cm)

Depth: 10.56 inches (26.82cm) with grille
9.25 inches (23.50cm) without grille

Weight: 40.75 pounds (18.48kg) with grille
40 pounds (18.14kg) without grille

Specification	Value	Definition
Sensitivity	<ul style="list-style-type: none">• 90dB SPL with 2.83 Vrms @ 1 meter (4 pi anechoic)	Indicates the amount of power the associated power amplifier must deliver to drive the loudspeaker at reasonable volume levels. Conservatively-rated specifications indicate moderate sensitivity, meaning that a massive power amplifier is not required to drive Revel loudspeakers to reasonable volume levels in large listening spaces.
Impedance	<ul style="list-style-type: none">• 6Ω (nominal)• 3.1Ω (minimum @ 292Hz)	Indicates whether the loudspeaker presents a “difficult” or “easy” load on the associated power amplifier. Combined with moderate phase angles, a minimal impedance specification of 3.1Ω allows a reasonably designed power amplifier to drive Revel loudspeakers.
Filter Network	<ul style="list-style-type: none">• Three-way, high-order acoustic response @ 235Hz and 2kHz	Indicates the acoustical characteristics of the filter network. Steep filters indicate an optimized filter network that produces minimal acoustical interference, low distortion, and expansive dynamic range. Revel’s filter networks feature point-to-point hand-wiring with carefully selected components. Woofer, midrange, and tweeter filter boards are independent of one another. Each includes provisions for single-wired, bi-wired, and bi-amplified connections as well as flexible controls for user adjustments.
Target Response	<ul style="list-style-type: none">• ±0.5dB from 60Hz to 20kHz	Indicates sound quality in context with the individual loudspeaker’s application, considering the acoustical impact of its placement. An ideal response goal, a target response is not flat at either end of the audible spectrum and is used when the ideal reference is not a flat line.

Specifications are subject to change without notice.



REVEL Performa C52

OWNER'S MANUAL

Specifications (continued)

Specification	Value	Definition
In-Room Response	<ul style="list-style-type: none">• ± 0.5dB from 70Hz to 18kHz	<p>Indicates sound quality in context with other specifications. A breakthrough measurement, this specification closely correlates to sound quality in a single curve—a long-standing goal of loudspeaker engineers.</p> <p>In-room response is measured through the use of large anechoic chambers. The loudspeaker's response is measured every 10 degrees, horizontally and vertically, for a total of 72 response measurements.</p> <p>The in-room response curve is a prediction of how the loudspeaker would measure in a typical room. Research and observation reveals that ubiquitous on-axis response curves cannot distinguish between two loudspeakers with radically different sound qualities.</p>
First Reflections Response	<ul style="list-style-type: none">• ± 0.5dB from 70Hz to 17kHz	<p>Indicates the response listeners hear in relation to the first reflections from walls, ceilings, and floors. This specification indicates that Revel loudspeakers will remain accurate, even in listening rooms that cast strong reflections.</p>
Listening Window Response	<ul style="list-style-type: none">• ± 1.0dB from 65Hz to 18kHz	<p>Indicates the on-axis response of the loudspeaker. An improved on-axis measurement, this specification reduces the visual confusion of inaudible interference. It retains full accuracy without using "spectral smoothing," which results in significant data loss.</p>
Low-Frequency Extension	<ul style="list-style-type: none">• -10dB @ 36Hz• -6dB @ 49Hz• -3dB @ 60Hz	<p>Indicates the low-frequency response of the loudspeaker. Studies have shown that the -10dB specification best correlates to controlled listening tests. At low frequencies, most loudspeaker and listening room combinations demonstrate significant "room gain," which produces an increase in levels as frequencies decrease. Unlike the -3dB specification, the -10dB specification reflects the steepness of low-frequency roll-offs.</p>

Specifications are subject to change without notice.

OBTAINING SERVICE

To obtain warranty and non-warranty service information, contact an authorized Revel dealer. Refer to the included Revel warranty card for warranty information.

INDEX

A-C

about the C52 5-6
adjustable spikes 5, 7, 8, 11, 12-13
bi-amplified connections 5, 8, 10, 13, 14, 15-20
bi-wired connections 5, 8, 10, 13, 14, 15, 20
binding posts 5, 8, 10, 13 (*see also* input terminals)
C52, about the 5-6
cabinet 5, 6, 7, 8, 11, 12
care and maintenance 8
CAUTION 4, 8, 11, 13, 19
cones 5
connections
 bi-amplified 5, 8, 10, 13, 14, 15, 16, 17, 20
 bi-wired connections 5, 8, 10, 13, 14, 15, 20
 horizontal bi-amplified connections 14, 16-17
 making 13-17
 single-wired connections 5, 8, 10, 13, 14, 20
 vertical bi-amplified connections 14, 15-16
CRT video monitors 10

D-G

dimensions 20
documentation conventions 4
driver complement 6, 8
filter network 5, 8, 13, 19, 20
first reflections response 21
flush mounted 9, 11, 18
frequency response 5
grille 5, 7, 8, 20

H-I

high frequency level switch 5, 8, 10, 18
high-frequency input terminals 10, 14, 15, 16, 17
highlights, C52 6
horizontal bi-amplified connections 14, 16-17
impedance 20
in-room response 18, 21
input panel 9-10
input terminals
 high-frequency 10, 14, 15, 16, 17
 low-frequency 10, 15, 16, 17 (*see also* binding posts)

L-M

listening room acoustics 5, 8, 10
listening window response 21
loudspeaker overview 8-10
loudspeaker placement
 about 5, 8, 9, 10-12, 18
 flush mounted 9, 11, 18
 on top of monitor 5, 8, 9, 11, 12, 18
 stand mounted 9, 11, 18
loudspeaker volume levels 19
loudspeaker wires 14, 15, 16, 17
low-frequency extension 21
low-frequency response 21
low-frequency input terminals 10, 15, 16, 17
making connections 13-17
maximum wire gauge 13
midrange 5, 8, 20
motor structure 5

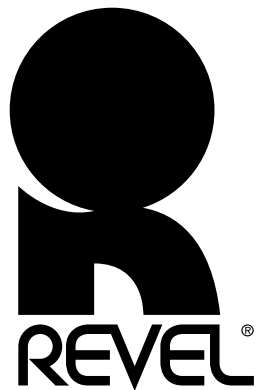
N-P

Note 4, 6, 7, 9, 10, 13, 15, 16, 17, 18, 19
obtaining service 21
off-axis response 5, 8
on top of monitor 9, 11, 18
on-axis response 21
optimizing performance 18-19
packing materials 6, 7
placement compensation switch 5, 8, 9, 10, 11, 18
power amplifiers 10, 13, 14, 15, 16, 17, 19, 20
preamplifiers 14, 15, 17
product registration 6

S-W

safety information 4, 8, 11, 13, 19
sensitivity 20
shorting straps 5, 8, 10, 13, 15, 16, 17
single-wired connections 5, 8, 10, 13, 14, 20
specifications 20-21
spikes, adjustable 5, 7, 8, 11, 12-13
stand mounted 9, 11, 18
table of contents 3
target response 20
tweeter 5, 8, 10, 12, 20
unpacking 6-7
vertical bi-amplified connections 14, 15-16
warranty card 6, 21
weight 20
wire gauge, maximum 13
woofers 5, 8, 20





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