





Tools

Laser scanning vibrometer, 4pi anechoic chamber, Multichannel Listening Lab



TechnologiesDiffraction-reducing

large-radius front baffle heads, magnesium woofer and midrange diaphragms

Revel History



1997

Technologies

Inverted titaniumdome woofers, neodymium motor structures, low-distortion flux and shorting rings



Revel® Ultima Gem,® Ultima™ Sub15



Ultima Gem

1998

Technologies
Selectable
boundarycompensation
switching,
dipole/bipole
switching,
ultralowdiffraction baffles

Systems

Ultima Voice,™ Ultima Embrace, Ultima Salon®

1999

Systems Ultima Studio,® Performa™ F30

Performa F30





loudspeakers.

he Revel® brand was begun in 1996 with the express goal of building the world's finest loudspeakers. Undertaking such a goal – let alone accomplishing it – would require an investment in research, engineering and manufacturing facilities unprecedented for a startup company. Yet with the resources of Harman International fully behind it, the very first Revel system, the Ultima Gem® loudspeaker, caught the attention of reviewers and audiophiles around the world. The consensus? "Live music in the home just doesn't get any better."

More than a decade later, Revel systems continue to set the standard for acoustical accuracy, benefiting from cutting-edge design tools unavailable to most manufacturers. The proprietary anechoic chambers and Multichannel Listening Lab facilitate precise measurements and double-blind listening tests under conditions that duplicate a wide variety of listening environments. A laser interferometer enables comprehensive driver and cabinet assessments at every stage of development. Finite-element analysis streamlines advanced loudspeaker modeling. Stereo lithography equipment allows Revel engineers to achieve the tightest manufacturing tolerances.

By design, Revel Concerta™ Series loudspeakers offer outstanding value. But you can be assured that they've been developed with the same stringent attention to musical honesty and engineering precision that are the hallmarks of every Revel system.



Tools
Klippel
loudspeaker
analyzer

Performa F52



Technologies
Multilayered
one-piece MDF
enclosures, alltitanium woofer
and midrange
diaphragms,
new-generation
neodymium
magnet structures,
pure-berylliumdome tweeters,
3rd generation
high-frequency

2000

Technologies

Monopole/dipole

switch, three-band

parametric room

EQ, long-excursion

woofers

Systems

Performa C30,

Performa S30,

Performa B15

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Technologies

Low-distortion auxiliary bass radiators, Micro Ceramic Composite diaphragms, neodymium magnet structures, LF roomcompensation

Systems

switching

Ultima Sub30, Performa M22, Performa F32, Performa C32 2005

Technologies

New highfrequency waveguide

Systems

Concerta™ Series, Performa F52, Performa C52 YEARS

2007waveguides,

hyperbolic port technology

SystemsUltima2 Series







Multichannel Listening Lab

Revel engineers have developed testing procedures that are unique in their ability to meaningfully portray sound quality, and no loudspeakers are more exhaustively tested than Revel loudspeakers. Few manufacturers have access to an anechoic chamber for testing purposes; Revel engineers have three. Of course, listening is the ultimate test, and the proprietary Multichannel Listening Lab is the ultimate environment for listening under controlled conditions. Equipped with pneumatic platforms that precisely position speakers relative to listeners, along with acoustically "transparent" scrims that keep the speakers hidden from view, the MLL guarantees that all loudspeakers – Revel speakers, as well as those of competitors – are evaluated on their sonic merits alone.

Sophisticated Design Tools

How will the diaphragm of a new transducer design perform at high frequencies? Is a cabinet prototype radiating unwanted acoustic energy? The laser interferometer provides definitive answers, taking much of the guesswork out of loudspeaker design. In-house stereo lithography can produce working driver assemblies directly from a computer in a matter of hours, saving months of development time. Revel engineers may not log longer hours than their counterparts in other companies, but they almost certainly have more time to innovate.

Exclusive Technologies

Concerta loudspeaker drivers feature Micro Ceramic Composite (MCC) diaphragms that combine low mass with high rigidity. These proprietary diaphragms function pistonically over the entire operating range of their drivers, dramatically limiting distortion. Concerta midrange and woofer drivers feature die-cast alloy frames, oversized magnetic assemblies with flat spiders and real butyl-rubber surrounds. Concerta tweeters feature underhung voice coils, ferrofluid magnetic damping and advanced neodymium motor systems for optimal performance. Constant Acoustic Impedance[™] (CAI[™]) waveguide* technology provides ideal acoustic loading across a tweeter's frequency range, as well as flat response over a wider listening area. Concerta internal dividing networks feature steep-slope, high-order filters and components with tolerances as tight as 3% – for outstanding sonic consistency from unit to unit.

*patent no. 7,197,443

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Musical truth, beautifully expressed.

F12 Loudspeaker



s the principal loudspeakers in a stereo music system, or the main front speakers in a multichannel surround system, three-way Concerta F12 speakers provide signature Revel timbral accuracy with astonishing bass and dynamic range. Occupying less than a square foot of floor space, the F12 creates a vivid, expansive soundstage and packs more than enough muscle to effortlessly reproduce any program peak.

Low frequencies, down to an impressive 28Hz (-10dB), are reproduced by dual 8" deep-anodized cone woofers with high power-handling voice coils and flat, high-excursion spiders. Midrange frequencies are exquisitely reproduced by a 5-1/4" driver with a die-cast frame. Lively, distinct highs from the 1" anodized Al-dome tweeter with CAI waveguide assembly are dispersed to precisely match the midrange, resulting in unprecedented seamlessness and coherence. The tweeter's neodymium magnetic assembly features an underhung voice coil, ensuring linearity and low distortion. The Concerta F12 is endowed with both the power and subtlety to bring any form of home entertainment stirringly to life.







F12

Black

Sensitivity:	90.5dB SPL, with 2.83V @ 1m (4 pi anechoic)	
Impedance:	6 Ohms (nominal)	
Filter Network:	3-Way, high-order @ 575Hz and 3.0kHz	
Frequency Response:	In-room response: ±1.0dB from 58Hz to 18kHz Low-frequency extension: –10dB @ 28Hz Bandwidth: –6dB @ 40Hz and 45kHz	
Recommended Amplifier Power:	20 – 200 Watts	
Dimensions (H x W x D):	42-3/8" x 9-3/4" x 14-3/8" (1074mm x 248mm x 363mm) (includes grille and feet without spikes; spikes add 1-1/2" [38mm] to height)	
Weight:	62.6 lb (28.4kg)	
Available Finishes:		



Cherry

High-Performance 3-Way Loudspeaker System

Dual 8" deep-anodized cone woofers 5-1/4" Deep-anodized cone midrange 1" Anodized Al-dome tweeter CAl waveguide Steep-slope, high-order crossover Heavily braced MDF enclosure Bi-amp-capable Magnetically shielded Black or cherry finish





The Concerta reference monitor.

n the parlance of audio professionals, a reference monitor is a compact studio loudspeaker with neutral timbre, highly suitable for the accurate mixing and mastering of recorded audio. In the experience of many audio enthusiasts, monitors are an ideal choice for serious listening at home, as the Concerta M12 amply demonstrates.

The M12 delivers outstanding timbral accuracy over a remarkably wide frequency range from a compact enclosure that fits virtually anywhere. The 6-1/2" woofer features a rigid deep-anodized cone coupled to a die-cast frame with a high-excursion butyl-rubber surround and oversized ceramic magnet, for tight low-frequency response to 41Hz (-10dB). The 1" anodized Al-dome tweeter with the proprietary CAI waveguide optimizes dispersion over a wide listening area, while reducing distortion and dynamic compression at elevated listening levels. A powerful yet compact neodymium motor system maximizes sensitivity, and ferrofluid magnetic cooling contributes realistic musical dynamics. A steep-slope, high-order crossover features ultratight 3% precision tolerance components. Without a doubt, the Concerta M12 raises compact performance to a new level of realism.





M12

Sensitivity:	87dB SPL, with 2.83V @ 1m (4 pi anechoic)
Impedance:	8 Ohms (nominal)
Filter Network:	2-Way, high-order @ 2.5kHz
Frequency Response:	In-room response: ±1.5dB from 65Hz to 15kHz Low-frequency extension: –10dB @ 41Hz Bandwidth: –6dB @ 48Hz and 45kHz
Recommended Amplifier Power:	20 –150 Watts
Dimensions (H x W x D):	13-3/4" x 8-1/8" x 11-7/8" (350mm x 225mm x 295mm) (includes grille; with optional stand, height is 39-1/4" [996mm])
Weight:	19.2 lb (8.7kg)

Available Finishes:





High-Performance 2-Way Loudspeaker System

6-1/2" Deep-anodized cone woofer

1" Anodized Al-dome tweeter

CAI waveguide

Steep-slope, high-order crossover

Heavily braced MDF enclosure

Magnetically shielded

Black or cherry finish

Optional STANDM12 pedestal

stand available



M12 mounted on the optional STANDM12 loudspeaker stand.



The center of attention.

ultichannel movie soundtracks typically assign most of a movie's dialogue, much of its musical score and any sound effects associated with mid-screen action to the center-channel signal. Reproducing all of those sounds properly requires a highly accurate speaker with a wide dynamic range. The Concerta C12 center speaker is engineered to ensure that all centerchannel sound is presented consistently and with excellent intelligibility over a wide listening area. Equipped with a quartet of sophisticated drivers, all with truly pistonic deep-anodized diaphragms, the C12 features two 6-1/2" die-cast-frame woofers with high power handling and extended low-frequency response to 50Hz (-10dB). The critical midrange frequencies are reproduced by a 4" driver with a die-cast frame that is acoustically isolated within its own subenclosure.

A 1"-dome tweeter with a neodymium magnet and flared CAI waveguide effortlessly handles the high frequencies, keeping them clean and clear at any output level.

The C12 includes a tilt control for optimal positioning of the loudspeaker when it is wall-mounted either above or below a video monitor, and an optional stand is available for floor placement.





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Sensitivity:	90dB SPL, with 2.83V @ 1m (4 pi anechoic)
Impedance:	6 Ohms (nominal)
Filter Network:	3-Way, high-order @ 500Hz and 2.8kHz
Frequency Response:	In-room response: ±1.5dB from 85Hz to 15kHz Low-frequency extension: –10dB @ 50Hz Bandwidth: –6dB @ 60Hz and 45kHz
Recommended Amplifier Power:	20 – 175 Watts
Dimensions (H x W x D):	9-1/8" x 20-7/8" x 10-3/8" (232mm x 530mm x 258mm) (includes grille; with optional stand, height is 21-3/8" [537mm])
Weight:	32 lb (14.5kg)

Black Cherry

Available Finishes:



High-Performance 3-Way Center Channel Loudspeaker System

Dual 6-1/2" deep-anodized cone woofers 4" Deep-anodized cone midrange

4 Deep-anodized cone midrange

1" Anodized Al-dome tweeter

CAI waveguide

Steep-slope, high-order crossover

Heavily braced MDF enclosure

Bi-amp-capable

Magnetically shielded

Black or cherry finish

Optional STAND C12 floor

stand available

C12 mounted on the optional STAND C12 loudspeaker stand.



he Concerta S12 will perform brilliantly in any multichannel audio system, but just how it performs will depend on where you place it and what you ask of it. A two-way system with dual woofers and dual tweeters in an angled enclosure, the S12 features three distinct modes of operation, configurable with a convenient front-panel switch. In dipole mode, the driver pairs operate in reverse phase to minimize localization; this is ideal for reproducing the surround channels of matrixed movie soundtracks. Bipole mode brings the drivers into phase, for localized imaging that's well suited to discrete formats such as SACD,™ DTS,® Dolby® Digital and other multichannel music sources. Monopole mode deactivates one driver pair when precise imaging is desired, as with discrete multichannel pop music, for example. For use in 7.1-channel systems, the S12 features dual separated crossovers and dual speaker inputs for even greater versatility. By removing the shorting straps on the binding posts, one S12 can function as two distinct surround loudspeakers in a single enclosure, when space is at a premium.



Best performance in a supporting role.



Black

	312	
Sensitivity:	87dB SPL, with 2.83V @ 1m (2 pi anechoic)	
Impedance:	8 Ohms (nominal)	
Filter Network:	2-Way, high-order @ 2.5kHz	
Frequency Response:	In-room response: ±3dB from 72Hz to 20kHz Low-frequency extension: –10dB @ 59Hz Bandwidth: –6dB @ 64Hz and 45kHz	
Recommended Amplifier Power:	20 – 120 Watts	
Crossover Frequency:	2.2kHz	
Dimensions (H x W x D):	11-3/4" x 13-1/4" x 7" (300mm x 337mm x 178mm)	
Weight:	12.3 lb (5.57kg)	
Available Finishes:	SHEET .	



High-Performance 2-Way Surround Loudspeaker System

Dual 5" deep-anodized cone woofers
Dual 1" anodized Al-dome tweeters
CAl waveguides
Bipole/dipole/monopole operation
High-order crossover

Magnetically shielded Black or white finish with matching grilles

Heavily braced MDF enclosure







Deep, realistic Revel bass, wired or wireless.

he Revel Concerta B120 is a high-performance powered subwoofer, designed to add essential bass response to any music or home theater system, particularly those built around Concerta Series loudspeakers. The B120 subwoofer delivers accurate and authoritative bass from a surprisingly compact enclosure. Adjustable controls, parametric room equalization and multiple connection options provide unequaled placement flexibility, and allow you to optimize low-frequency performance for any listening environment. An optional wireless transmitter greatly simplifies installation.

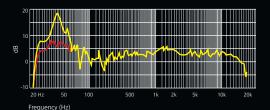
Featuring a 12" woofer with 1-1/2" peak-to-peak excursion and a 250-watt (RMS) amplifier, the B120 adds serious bass punch with very low distortion, even at the lowest frequencies and at high output levels. A huge 2"-diameter copper voice coil on a Kapton® bobbin, along with sophisticated cooling, contributes to impressive power handling and freedom from dynamic compression.





Frequency Response:	±0.5dB in the pass-band	
Low-Frequency Extension (Anechoic):	–3dB at 36Hz, –6dB at 32Hz, –10dB at 29Hz	
Maximum Amplifier Output:	20Hz – 150Hz with no more than 0.1% THD, 250W RMS, 300W dynamic	
Low-Pass Crossover Frequencies:	50Hz – 150Hz, 24dB/octave, continuously variable	
Power Requirements:	120V AC @ 60Hz, 2A	
Dimensions (H x W x D):	17-3/4" x 15-3/4" x 14" (450mm x 400mm x 356mm) (including feet and grille)	
Weight:	51 lb (23.2kg)	
Available Finishes:	Rlark Silver Charry	





Transducer

The B120's proprietary woofer diaphragm is constructed of Micro Ceramic Composite (MCC), a new material created by deep-anodizing both sides of an aluminum core. Anodizing both sides of an aluminum core adds strength and stiffness – but very little weight – to a material already well suited for use in transducer diaphragms.

The B120 spider incorporates a superior-strength Nomex®/cotton blend with optimized geometry for increased linearity.

The large ceramic magnet motor system includes a 2"-(51mm)-diameter copper voice coil wound on a Kapton® bobbin for impressive power handling and freedom from dynamic compression. A vented center pole facilitates heat dissipation, allowing more efficient cooling for high-power handling and low compression.

Built-In Wireless Receiver

With an optional TX1 wireless transmitter connected to your audio system, the B120 can be placed anywhere in your room within reach of an AC outlet. One or two B120 subwoofers can be operated with a single TX1 transmitter.

Amplifier

250W RMS, 300W dynamic power

Fully Parametric Room EQ

Any subwoofer's performance will be affected by the acoustics of the room in which the subwoofer is used, and where in the room the sub is situated. Certain low-bass frequencies may be adversely affected by standing waves (also known as room modes), where some frequencies are exaggerated (peaks), while others might be diminished (dips). To tame the subwoofer's response in the listening room, the B120 features a parametric room EQ function, with controls for frequency, level and bandwidth to tune out roominduced response anomalies.

Cabinet/Port

The B120 cabinet is constructed of rigid MDF with extensive internal bracing to reduce cabinet-induced colorations. A downward-firing port allows for placement against a wall or in a cabinet. Rubber-padded feet ensure optimal stability on any floor surface.



Introducing loudspeakers engineered to perform on walls, not just hang on them.



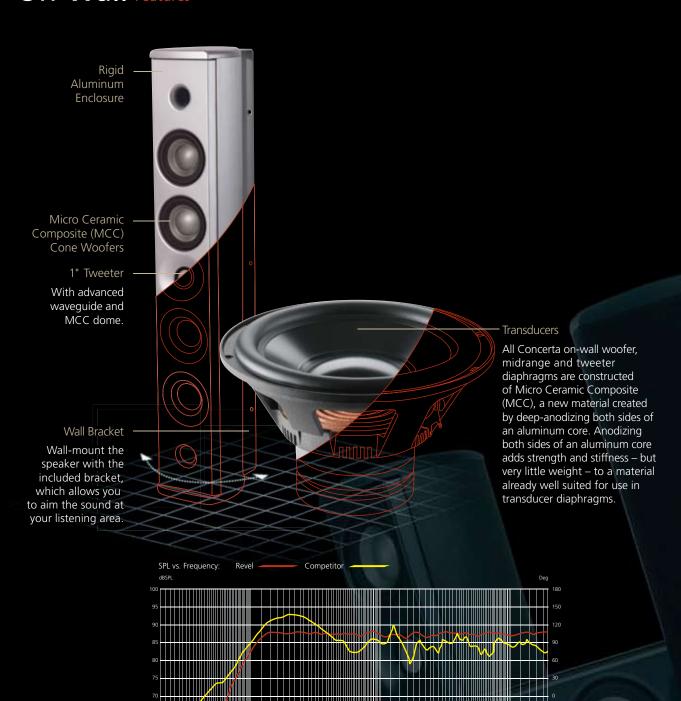
With appropriate hardware, it's possible to affix virtually any compact loudspeaker to a listening room wall, and manufacturers are free to promote any model of a certain size and weight as "wall-mountable." But very few audio manufacturers have the facilities and expertise needed to determine just how their on-wall systems will sound when actually placed on or near a wall.



The performance of Revel Concerta on-wall loudspeakers has been extensively evaluated in a variety of on- and near-wall installations through blind listening tests in the Revel Multichannel Listening Lab. Using proprietary 36-point anechoic measurements, Concerta on-wall speakers have been shown to deliver remarkably flat frequency response across an exceptionally wide listening area for clean, accurate sound in real-world listening rooms. None of the competing systems tested under identical conditions performed as well. Remarkably, Revel engineers could not identify a single competing on-wall system they considered suitable for on-wall use, based on either laboratory measurements or double-blind listening tests.

At a time when many consumers are looking for audio systems to complement their on-wall video displays, Concerta on-wall loudspeakers are the clear choice for anyone interested in serious sound.

On-Wall Features



Proven Performance: SPL vs. Frequency Chart

To maximize the performance of the Concerta on-wall loudspeakers, Revel engineers relied on precise measurements of the on- and off-axis response in an anechoic chamber from 36 separate listening angles. In addition, in order to confirm their sonic performance, the speakers also underwent unique double-blind listening tests to prove their sonic superiority over the competition. The chart shows the response of a Concerta on-wall system versus its best-performing on-wall competitor. It was no contest. The Revel systems exhibited nearly ideal response. No competing system even came close.







	M8	M10/C10
Driver Complement:	Dual 3" (75mm) woofers, 1" (25mm) tweeter	Dual 3" (75mm) woofers, dual 3" (75mm) midrange drivers, 1" (25mm) tweeter
Crossover:	2-Way at 2.2kHz	2-1/2-Way at 400Hz and 2.2kHz
LF Extension:	–3dB @ 110Hz –6dB @ 100Hz –10dB @ 90Hz	–3dB @ 110Hz –6dB @ 100Hz –10dB @ 80Hz
Sensitivity (2.83V @ 1m, 2π):	88dB	89dB
Impedance:	8 Ohms	8 Ohms
Dimensions (H x W x D):	11-5/8" x 4-1/4" x 4-1/2" (296mm x 107mm x 113mm)	22-15/16" x 4-1/4" x 4-1/2" (582mm x 107mm x 113mm)
Weight:	3.45 lb (1.6kg)	6.75 lb (3.1kg)

Available Finishes:





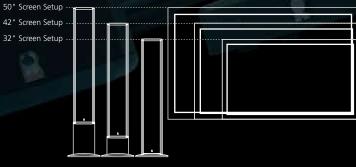


	D 120
Frequency Response:	±0.5dB in the pass-band
Low-Frequency Extension (Anechoic):	–3dB at 36Hz, –6dB at 32Hz, –10dB at 29Hz
Maximum Amplifier Output:	20Hz – 150Hz with no more than 0.1% THD, 250W RMS, 300W dynamic
Low-Pass Crossover Frequencies:	50Hz – 150Hz, 24dB/octave, continuously variable
Power Requirements:	120V AC @ 60Hz, 2A
Dimensions (H x W x D):	17-3/4" x 15-3/4" x 14" (450mm x 400mm x 356mm) (including feet and grille)
Weight:	51 lb (23.2kg)

Available Finishes:



Black



Three different bases are included with the M10.

Raise the height of your M10 speakers to match the height of your display on a shelf, table or credenza.

M10 mounted on the optional STANDM10 loudspeaker stand.

On-wall speakers with genuine Revel sound.



Revel speakers are esteemed by audiophiles and music professionals the world over for their timbral accuracy and dynamic range. Concerta on-wall systems were developed with the stringent attention to musical honesty and the manufacturing precision that are Revel hallmarks. These qualities are dramatically embodied in the LCR8, a 3-channel system that is mounted in a single enclosure.

In addition to the innovative LCR8, the series includes a highly capable center channel loudspeaker, a choice of satellites and an impressive 250-watt powered subwoofer. The B120 sub can be connected directly to your system or operated wirelessly with an optional transmitter, for complete placement freedom.

Concerta on-wall speakers are voice-matched for use in any combination to build movie and music systems of uncommon realism. They feature advanced drivers utilizing MCC cones and domes, along with high-order crossovers. Housed in rigid aluminum enclosures styled to complement the look of LCD and plasma displays, Concerta on-wall systems will fill any room with brilliant, distortion-free sound from virtually any amplifier.



