



GOTHAM | FATHOM

Engineered and built to perform like no other.



“...the JL Audio guys are serious audiophiles who have both the technical know-how and manufacturing wherewithal to build world-class subwoofers.”

– Chris Martens, [The Perfect Vision](#), February 2007



When JL Audio entered the home audio market, we made a commitment to create products with the highest standards of performance and quality... products that epitomize our “ahead of the curve” motto.

It is this pursuit of great audio that drives the dedicated team of professionals at JL Audio. It inspires us to explore new amplifier and loudspeaker technologies, to push the envelope further with every new design, and to build our products with uncommon attention to detail.

We think you will easily see our commitment to quality in every Fathom® and Gotham®. But more importantly, we know you will hear it every time you experience a film or listen to a great piece of music.

We thank you for your interest in our products and we look forward to earning a place in your audio experience.

Andy Oxenhorn - President

Lucio Proni - CEO and Chief Engineer



“...the Gotham is a massively overbuilt (think “mil-spec”) subwoofer that doesn’t know the meaning of the term ‘dynamic constraints’.”

– [The Perfect Vision](#)



Driver Manufacturing

Special, patented drivers like the massive W7's and thin-line TW5's used in JL Audio home subwoofers require proprietary assembly techniques and tightly monitored production disciplines that ensure consistency and quality.

To meet these needs, our Miramar, Florida loudspeaker assembly facility has been specifically designed and equipped to build all of our cutting-edge loudspeakers. There is no other facility like it in the world... and no production team more dedicated to total quality.

Gotham® Manufacturing

Each Gotham® enclosure takes over two weeks to produce in our Miramar, Florida factory, passing through multiple phases of fabrication and finishing.

The body of the enclosure is molded in solid fiberglass with proprietary damping technologies and carefully engineered internal bracing to create a highly inert structure. Wall thickness exceeds 1-inch (25 mm) and requires precision CNC equipment to perform secondary machining of all openings before our skilled craftsmen prepare, finish, and hand polish each one to the highest furniture-grade standards.

Final assembly, inspection and testing are carried out in a "clean room" environment to ensure that the Gotham's function is every bit as impressive as its form. No other subwoofer in the world is built like this... and no other subwoofer performs like it.

Final Assembly

Fathom® and Gotham® powered subwoofers are assembled by a highly skilled team in our Miramar, Florida factory. Each assembly technician is responsible for the entire assembly process and follows documented procedures to ensure quality and consistency.

Ergonomic workstations with hydraulic lifts and multiple torque-controlled tools allow for efficient and precise assembly of every product to the exact specifications established by the Engineering Department.

Precision doesn't just happen... it is carefully engineered and maintained.

Testing

Quality is engineered into every one of our products. It must also be verified and documented with defined, repeatable test protocols.

To this end, every Fathom and Gotham's components are tested individually and as a connected system before assembly. At the end of final assembly, every subwoofer must pass a battery of electrical, functional and acoustic tests before it ships to our authorized dealers.



Loudspeaker Technology

Gotham® and Fathom® subwoofers offer a vast performance envelope that unleashes all of the dynamics in your audio experience. It all starts with exceptional subwoofer drivers.

JL Audio's engineering department is at the forefront of research into fundamental loudspeaker behavior. We have developed proprietary electromagnetic and suspension analysis systems and invested heavily in state-of-the-art manufacturing and testing. This has borne subwoofer drivers widely considered as reference standards for linear displacement and dynamic stability. It has also resulted in numerous U.S. and International Patents issued for technologies that refine and extend the performance envelope of the dynamic driver.

Designing and building superior drivers lies at the core of our passion for audio... and this gives our powered subwoofer systems a huge advantage.

DMA-Optimized Motor System

DMA is JL Audio's proprietary Dynamic Motor Analysis system aimed at improving dynamic motor behavior. As a result of DMA optimization, our loudspeaker's motor systems remain linear in force over an extreme range of excursion while maintaining a highly stable fixed magnetic field over a wide power range. This leads to vastly reduced distortion and accurate transient performance... or put simply: tight, clean, articulate bass.

OverRoll™ Surround

(U.S. Patent #5,687,247 and #5,949,898)

The OverRoll™ surround spans over the driver's mounting flange, utilizing available diameter wasted in conventional speakers. This allows the use of the wider roll necessary to control high-excursions without sacrificing precious cone area.

W-Cone™

(U.S. Patent #6,496,590)

The W-Cone™ is a unit-body cone assembly that delivers astonishing cone stiffness with minimal mass. The shape also provides incredible torsional rigidity, which is critical to maintaining voice coil alignment at the suspension limits.

Floating-Cone™ Attach Method

(U.S. Patent #6,501,844)

This assembly technique ensures proper surround geometry in the assembled speaker for better excursion control and dynamic voice coil alignment.

Plateau-Reinforced Spider Attachment

(U.S. Patent #6,118,884)

A derivative of JL Audio's VRC™ technology, this bulletproof suspension attachment relieves stress from the spider material at high-excursions for enhanced reliability.

Elevated Frame Cooling Technology

(U.S. Patent #6,219,431 and #6,229,902)

This feature delivers cool air through slots directly above the top-plate to the voice coil of the speaker. This not only enhances power handling, but also sound quality by minimizing dynamic parameter shifts and power compression.

Radially Cross-Drilled Pole Piece

(U.S. Patent #6,243,479)

This innovative venting system greatly enhances thermal dissipation and power handling by directing air flow onto the voice coil former, working in conjunction with the Elevated Frame technology.

In addition to the patented technologies listed above, multiple U.S. and International patents are currently pending.

Gotham® and Fathom® systems incorporate JL Audio's highest technology subwoofer drivers. Each model-specific drive unit has been methodically designed for its intended task and is built with fanatical attention to detail in our Miramar, Florida factory.





Electronics

To fully realize the benefits of JL Audio's long excursion drivers, a huge amount of controlled power is needed.

These lofty power requirements create a difficult challenge when the realities of typical home electrical circuits are considered.

To tackle this, our electronics engineering team conducted a through analysis of demanding program material in order to balance current draw and actual output power requirements relative to the subwoofer system's impedance characteristics. The result of this research led to advanced switching amplifier designs with massive toroidal transformers and very high output voltage capabilities, each precisely optimized for its driver.

The Gotham g213 amplifier, for example, delivers clean output voltage equivalent to 3,800 watts RMS (referenced to the nominal driver impedance), while operating comfortably within a typical household electrical circuit.

It may not be magic, but it certainly borders on it.

Automatic Room Optimization

Murphy's law of low-frequency acoustics prescribes that a subwoofer will generally sound best in the most impractical spot in the room... a fact that home theater and audio enthusiasts battle constantly. Subwoofer placement almost always involves a compromise between sonic performance, practicality and aesthetics.

To face this dilemma head on, JL Audio subwoofer systems incorporate a clever piece of technology called Automatic Room Optimization (A.R.O.).

The A.R.O. system self-generates a series of calibration tones, measures the response at the listening position, analyzes the shape and magnitude of the primary response error and automatically configures an appropriate filter to tame it. The system effectively allows for smooth, well-balanced sub-bass from a variety of locations that may have been less than ideal without A.R.O.

To accomplish this complex feat, all you have to do is:

- 1) Connect the included calibration microphone to the front panel of the subwoofer.
- 2) Press the "calibrate" button on the front panel of the subwoofer system.
- 3) Hold the microphone at the primary listening position.
- 4) A few minutes later, you have completed this one-time setup routine.

You won't need a computer or any other external equipment, and you won't need to navigate and manipulate complex interfaces... a fine example of technology in the service of man, if there ever was one.

We simply could not find a good reason to place user controls at the back of the product, so we put them on the front, right above the woofer. It costs more to build them this way, but some things in life are worth a few more dollars... like not having to use a mirror and a flashlight to make a level adjustment.



GOTHAM®

Your first look will tell you that you are looking at something very special... your first listen will confirm it beyond a shadow of a doubt.

The beauty of the Gotham® extends well beyond its exotic design and exceptional craftsmanship, and aims right at the core of musical and cinematic enjoyment.

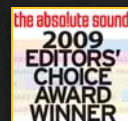
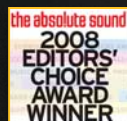
With limits well beyond the needs of the typical home theater application, a Gotham® delivers a weight and integrity of reproduction that can only come from a system that is always in control. Its ability to convey subtleties is as impressive as its prodigious output capabilities.

The luxurious, handcrafted gloss-black finish is complemented by machined aluminum and stainless steel accents for a look and feel that is elegant and spectacular at the same time. More importantly, the beautiful cabinet houses a pair of JL Audio's highest-technology subwoofer drivers.

When demanded by program material, the Gotham's prodigious amplifier can deliver voltage equivalent to 3,800 watts of RMS power to take full advantage of the twin drivers' four inches of peak-to-peak excursion capability.

Listening to a Gotham® reveals an entirely new dimension of subwoofer performance... a dimension so satisfying that listening to lesser subwoofers will forever become an act of compromise.

Gotham®:
Devastating.



Editors' Choice

– 2008 & 2009, [The Absolute Sound](#)

The Gotham g213 produces state-of-the-art bass that will improve the highest of high-end systems. I've heard no other subwoofer that can match it.

– Jeff Fritz, [Ultra Audio](#)

There is apparently information in the subsonic region that fills out the sound of a concert hall. Once you've heard it, you can't go back.

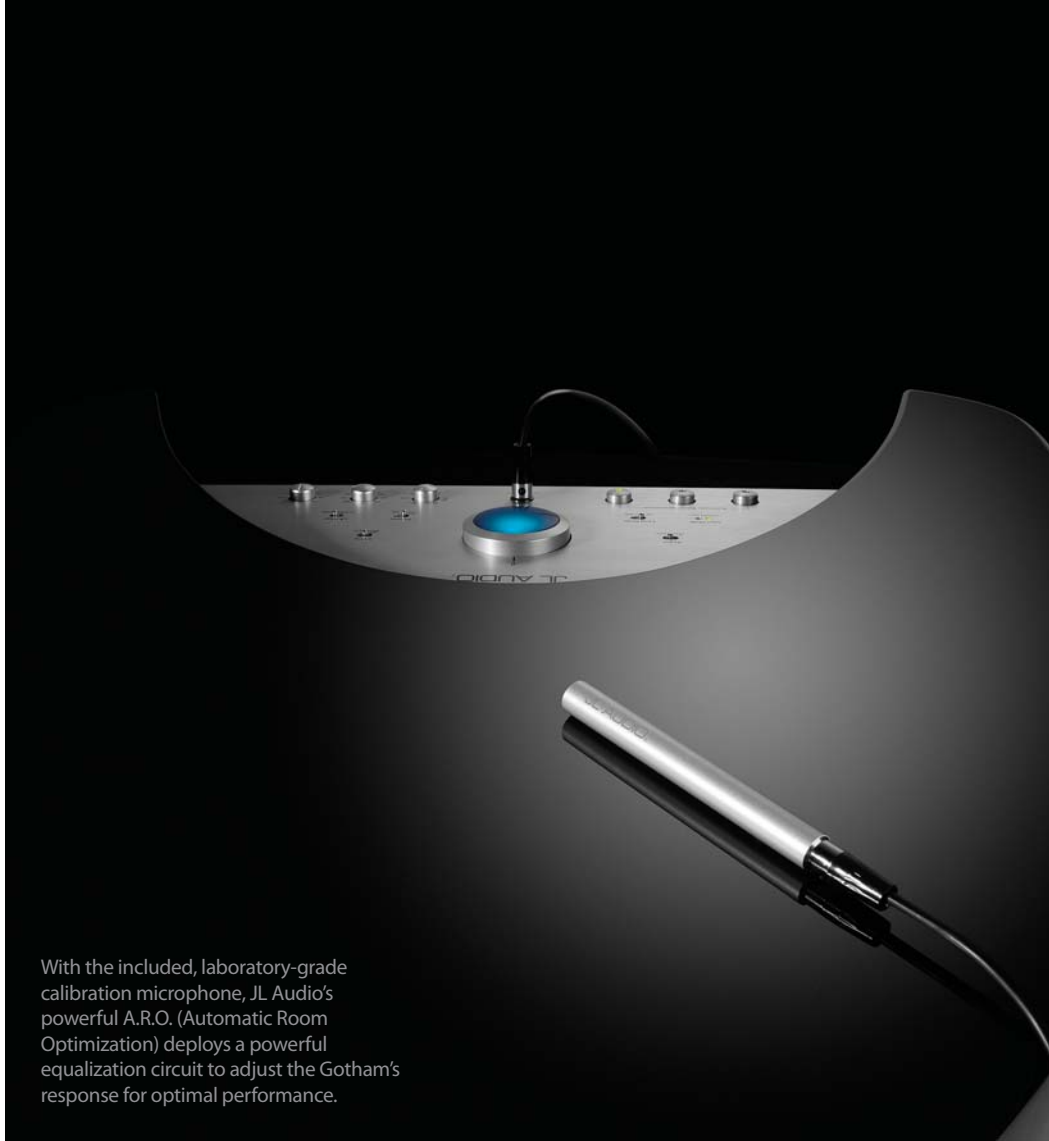
– Jacob Heilbrunn, [TONEAudio](#)



JL AUDIO®
Ahead of the curve

GO THAM
9213

Made in USA



With the included, laboratory-grade calibration microphone, JL Audio's powerful A.R.O. (Automatic Room Optimization) deploys a powerful equalization circuit to adjust the Gotham's response for optimal performance.

“While it’s true that you should never judge a book by its cover or a subwoofer by its luxurious, hand-rubbed gloss-black finish, one look at the Gotham g213 creates instant desire.”

– Darryl Wilkinson, [Home Theater](#)



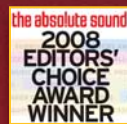
Separate woofer and control panel grilles allow control access without removing the larger grille and also offer a choice of three distinct visual presentations.

**"But do they ROCK?
The answer to that question is YES!"**

– Jeff Dorgay, TONEAudio, (Fathom® f110)

**"The JL Audio Fathom is of reference
quality, and a benchmark by which all
other subwoofers can be judged."**

– Robert Harley, The Perfect Vision,
February 2007 (On the Fathom f113)



Editors'

– 2008 & 2009, The Absolute

"What are they, exactly? I can't answer that in a nutshell. Not if you want more specific than fantastic. The condensed version is that they are relatively small, insanely well-built, extremely powerful, very smooth, tight, detailed to a fine line, clean, poise-laden, dynamically proficient, utterly kick-ass subwoofers."

– Colin Miller, Secrets of Home Theater and High Fidelity

"Two JL Audio Fathom f113 subwoofers produced dramatic changes in my audio system. Never before had new audio gear reshaped the depth and width of the soundstage, doubled the dynamic range, and increased the transparency, all at the same time."

"The Fathoms' reproduction of double bass had ear-boggling dynamics and pace."

– Larry Greenhill, Stereophile
September 2007



"Subwoofer of the Year"

- The Perfect Vision, January 2007 (Fathom f113)

"Editors' Choice"

- The Perfect Vision, Winter 2007 (Fathom f112)

"Golden Ear Award"

- Absolute Sound, August 2007 (Fathom f113)

"Class A – Recommended Component"

- Stereophile, 2007-2010, (Fathom f113) • 2010 (Fathom f212)

"Best Sound in Show"

- Home Theater Magazine, September 2006 (CEDIA Demonstration)

"Product of the Year"

- Home Theater & Sound, January 2007 (Fathom f113)

"Reviewers' Choice"

- Home Theater & Sound, January 2007 (Fathom f113)



Choice

Sound (Fathom f112 & f113)



FATHOM®

FATHOM®

The challenges associated with designing high-output compact subwoofer systems can be daunting. In most cases, designers sacrifice low-frequency extension or output capability in order to keep a design acceptably small.

The Fathom® subwoofers sacrifice nothing, thanks to the dynamic advantages of their proprietary JL Audio drivers. These exceptional woofers allow for a true subwoofer passband and very high output, while keeping distortion well below audible thresholds. To extract full benefit from the excursion envelope of its woofer design, each Fathom® employs an uncommonly powerful switching amplifier with a large toroidal transformer and a patented circuit designed to enhance control and fidelity.

The compact design and conventional form factor of the Fathoms apply beautifully to most home theater applications, including built-in designs. Front-mounted controls make them comfortable to set up and adjust, while JL Audio's exclusive Automatic Room Optimization circuit makes sure that response is smooth, even in challenging rooms.

"Subwoofers of the Gods"

– Chris Martens, The Perfect Vision, February 2007



Fathom®:
Irresistible.



Fathoms are in daily use in many renowned recording studios and mastering suites, as well as the finest home audio and theater systems... anywhere where sonic excellence is a priority.

The f212 is the flagship of the Fathom® lineup, offering 3 kilowatts of power to drive its twin 12-inch active drivers.





Fathom® models:

f110: 10-inch driver, 1 kW amplifier

f112: 12-inch driver, 1.5 kW amplifier

f113: 13.5-inch driver, 2.5 kW amplifier

f212: twin 12-inch drivers, 3 kW amplifier



Neutrik® Combo-XLR and Cardas® RCA jacks provide inputs for balanced or unbalanced signals in stereo or mono. A single XLR output allows for interconnection of multiple Fathoms while using one as the master control unit.

Each Fathom® model is available in a gloss black or satin black finish with a black fabric grille.

“The JL Audio Fathom f113 is the single best A/V product I have experienced.”

– Randall Smith, [Home Theater Sound](#), October 2006



The same minds that engineered JL Audio's reference-grade Fathom® and Gotham® powered subwoofers have created an amazing in-wall subwoofer solution, centered on a purpose-engineered, thin-line driver with patented technology.

Housing this exotic driver, is a critically engineered enclosure with a unique floating mount design to minimize wall excitation. The enclosure features extensive architectural features aimed at improving rigidity while keeping a very low profile and minimal wall thickness.

A paintable fine steel-mesh grille, also designed to control vibration, is included for each enclosure in a system.

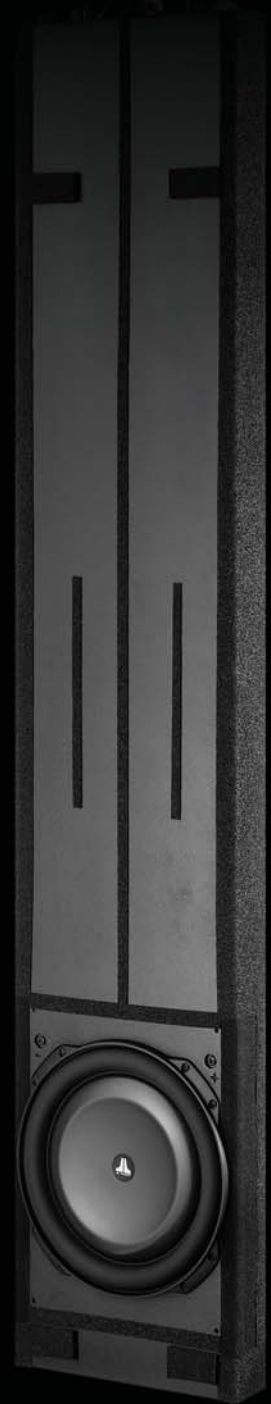
Each IWS system is driven by a rack-mountable, purpose-tuned amplifier, capable of delivering up to 2 kW of clean power, and armed with serious processing features, including our acclaimed Automatic Room Optimization system.

There is no need to lower your expectations when selecting this remarkable in-wall solution... it's a real Fathom®.

Introducing the
Fathom® IWS:
**True, stand-alone,
JL Audio subwoofer
performance that
disappears into
your walls.**



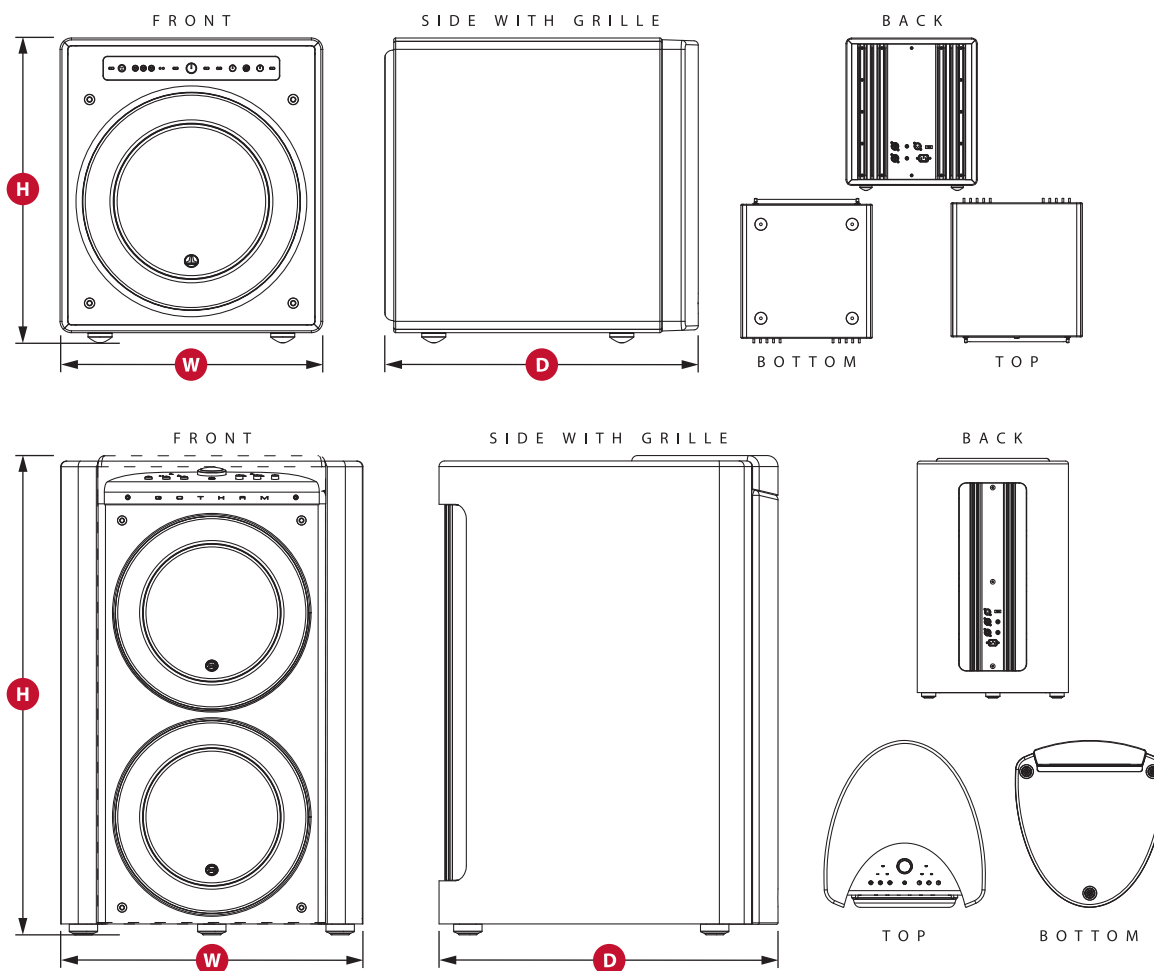
Choose from single or dual cabinet Fathom® IWS systems, each powered by a rack-mountable switching amplifier with the full suite of Fathom® processing capabilities, including our Automatic Room Optimization (A.R.O.) system.



Subwoofer Specifications

Model	Enclosure Type	Driver(s)	Frequency Response	Effective Piston Area	Effective Displacement	Amplifier Power	Dimensions (H x W x D)*	Net Weight	Cabinet Finish
Gotham®									
g213	Sealed, with non-parallel walls	Twin 13.5-inch (nominal diameter)	19 – 200 Hz (±3dB)	214.70 sq. in. (0.1386 sq. m)	773 cu. in. (12.7 liters)	3800 watts RMS short-term	34.13 in. x 21.50 in. x 24.00 in. 867 mm x 546 mm x 610 mm	360 lbs. (163 kg)	High-Gloss Black
Fathom®									
f110	Sealed	Single 10-inch (nominal diameter)	(anechoic) 27 – 111 Hz (±1.5dB) –3 dB at 25 Hz / 120 Hz –10 dB at 19 Hz / 155 Hz	60 sq. in. (0.0387 sq. m)	160 cu. in. (2.6 liters)	900 watts RMS short-term	15.64 in. x 12.92 in. x 17.27 in. 397 mm x 328 mm x 439 mm	67 lbs. (30 kg)	High-Gloss Black or Satin Black
f112	Sealed	Single 12-inch (nominal diameter)	(anechoic) 21 – 119 Hz (±1.5dB) –3 dB at 19 Hz / 150 Hz –10 dB at 17 Hz / 167 Hz	84 sq. in. (0.0542 sq. m)	287 cu. in. (4.7 liters)	1500 watts RMS short-term	18.50 in. x 15.0625 in. x 17.75 in. 470 mm x 384 mm x 451 mm	115 lbs. (52 kg)	High-Gloss Black or Satin Black
f113	Sealed	Single 13.5-inch (nominal diameter)	(anechoic) 20 – 86 Hz (±1.5dB) –3 dB at 18 Hz / 127 Hz –10 dB at 16 Hz / 154 Hz	107.35 sq. in. (0.0693 sq. m)	386 cu. in. (6.3 liters)	2500 watts RMS short-term	19.25 in. x 16.50 in. x 19.25 in. 489 mm x 419 mm x 489 mm	130 lbs. (59 kg)	High-Gloss Black or Satin Black
f212	Sealed	Twin 12-inch (nominal diameter)	(anechoic) 20 – 97 Hz (1.5dB) –3 dB at 19 Hz / 110 Hz –10 dB at 15 Hz / 157 Hz	168 sq. in. (0.1084 sq. m)	574 cu. in. (9.4 liters)	3000 watts RMS short-term	31.96 in. x 14.92 in. x 20.39 in. 812 mm x 379 mm x 518 mm	220 lbs. (100 kg)	High-Gloss Black or Satin Black

* All height dimensions include feet, depth dimensions include grilles.



In-Wall Subwoofer Specifications

Specifications	Fathom® IWS-SYS-1	Fathom® IWS-SYS-2
Enclosure Type:	Single Sealed Enclosure	Two Sealed Enclosures
Driver(s):	13.5-inch (nominal diameter)	13.5-inch (nominal diameter) in each of two enclosures
Frequency Response (anechoic):	26 Hz - 101 Hz (+/- 1.5 dB) -3dB at 25 Hz / 112 Hz -10dB at 22 Hz / 150 Hz	26 Hz - 101 Hz (+/- 1.5 dB) -3dB at 25 Hz / 112 Hz -10dB at 22 Hz / 150 Hz
Effective Piston Area:	98.26 sq. in. 0.0634 sq. m.	196.51 sq. in. 0.1268 sq. m.
Effective Displacement:	147.3 cu. in. (2.41 liters)	294.6 cu. in. (4.82 liters)
Amplifier Power:	1000 watts RMS short-term	2000 watts RMS short-term
2 x 4 Enclosure Dimensions: (H) Height x (W) Width x (D) Depth Measurements do not include padding material.	70 in. x 13.75 in. x 2.94 in. 1,778 mm x 349 mm x 75 mm	
2 x 6 Enclosure Dimensions: (H) Height x (W) Width x (D) Depth Measurements do not include padding material.	55 in. x 13.75 in. x 4.70 in. 1,397 mm x 349 mm x 119 mm	
Cabinet Finish:	Black Texture-Coated	Black Texture-Coated
Amplifier Dimensions: (H) Height x (W) Width x (D) Depth Height Dimensions DO NOT include feet.	3.5 in. x 17.4 in. x 17.9 in. 89 mm x 442 mm x 455 mm	
Amplifier Net Weight:	35 lbs. (15.9 kg)	43 lbs. (19.5 kg)
Grille Dimensions: (H) Height x (W) Width x (D) Depth	17.25 inches x 20 inches 438 mm x 508 mm	
Wall Opening Dimensions: (W) Width x (H) Height	14.5 inches x 17.25 inches 368 mm x 438 mm	
Grille Finish:	White (paintable)	



Features:

All Fathom® & Gotham® Models:

Unbalanced Inputs:

Stereo or Mono (two RCA jacks)

Balanced Inputs:

Stereo or Mono (two female XLR jacks)

Output To Slave:

Balanced (one male XLR jack)

Input Modes:

Master or Slave

Level Modes:

Reference (fixed gain) or Variable from full mute to +15 dB over reference gain

Power Modes:

Off, On or Automatic Signal-Sensing

Light Modes:

Off, On or Dim

Low Pass Filter Mode:

Off, 12 dB per octave or 24 dB per octave

Low Pass Filter Crossover Frequency:

Variable from 30 Hz – 130 Hz

Polarity:

0 or 180 degrees

Phase:

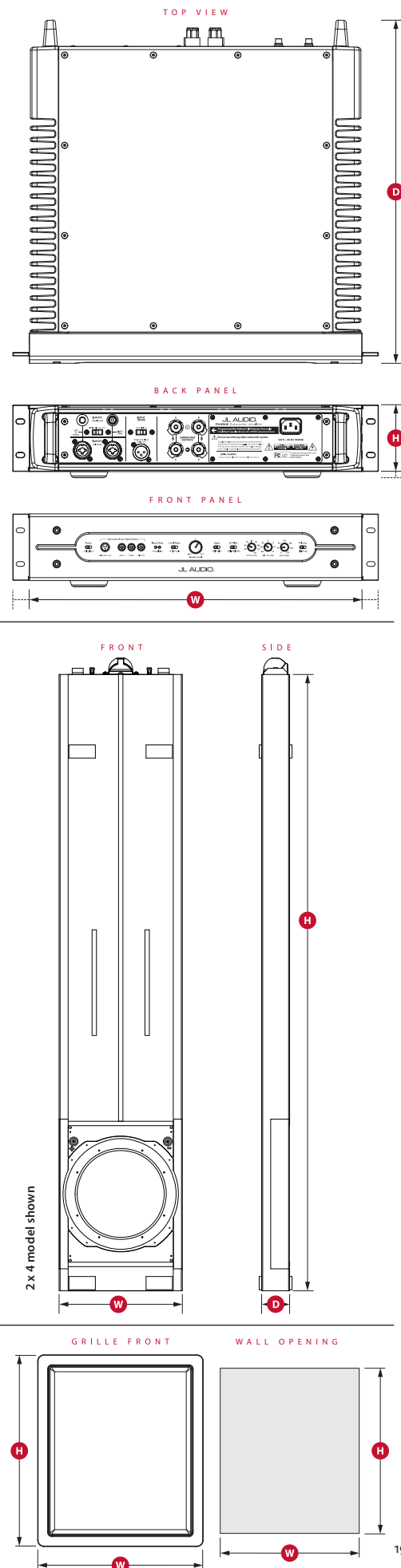
Variable from 0 – 280 degrees

E.L.F. Trim:

Variable from -12 dB to +3 dB at 25 Hz

Automatic Room Optimization (A.R.O.):

with included, laboratory-grade calibration microphone, defeatable





Ahead of the Curve

MOBILE | MARINE | POWERSPORTS | **HOME**

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©2010 JL Audio, Inc. • U.S. PATENTS: #5,734,734 #5,949,898 #6,118,884 #6,229,902 #6,243,479 #6,294,959 #6,501,844 #6,496,590 #6,441,685 #5,687,247 #6,219,431 #6,625,292 #D472,891 #D480,709 Other U.S. & Foreign patents pending. Due to our policy of continuous product development, all specifications are subject to change without notice.



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