

MUSIC. REAL. EMOTION.

 **HYBRID AUDIO  
TECHNOLOGIES**

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**“** Hybrid Audio Technologies means world-class car audio speaker systems!”

**Scott Buwalda**

### Letter from the Founder, Scott Buwalda:

My inspiration for Hybrid Audio Technologies sprouted as good friends sat in a coffee shop in Louisville, Kentucky, USA as we shared our collective disenchantment with the direction that the current high-end car audio speaker manufacturers were going with their products. At one point the question was posed ‘why don’t you just build the ultimate car audio speaker line and start your own company?’ So I did. And here we are today, producing products that are recognized around the world as the finest car audio speakers available, at any price.

In our short tenure, Hybrid Audio has amassed a long list of accolades from the media, dealers, and enthusiastic consumers that use and enjoy our products. And then there are organized sound quality competition results - the ultimate “litmus test” of a products efficacy against its competitors; cars equipped with Hybrid Audio Technologies products have won more North American and World Championships in the past five years than all other front-stage speaker manufacturers combined. In fact, the highest-scoring sound quality competition vehicle of all time, in any format, in any part of the world is my own personal show car which, naturally, utilizes Hybrid Audio Technologies products.

In short, our philosophy is to build products that are new and exciting, that have no equal, and are surpassed only by our commitment to honest-to-goodness customer service and guaranteed lifetime value. So when can I be honored to have you as a Hybrid Audio Technologies client?



# OUR FOUNDATION

Hybrid Audio Technologies is an organic company based in the United States of America, in a suburb of beautiful Atlanta, Georgia; Hybrid Audio remains the only USA-based high-end speaker company. Each and every Hybrid Audio staff member and Team Hybrids competitor spend an inordinate amount of time listening to, testing, and refining our speakers and speaker systems in a variety of configurations and settings to ensure that the Hybrid Audio Technologies product performs well beyond its price range, and significantly exceeds the performance of our competitor's products.

Being a small company, we rely heavily on word-of-mouth testimonials and endorsements across the web, in blogs, community discussion boards, reviews, and verbal endorsement. We have also been honored many times in non-advertisement media reviews, the truest form of media evaluation. We feel that non-commissioned media reviews and enthusiast testimonials carry a considerable amount of credibility, and we are honored to be the high-performance speaker brand of choice amongst the enthusiast car audiophile community and specialty retailers across the world. We invite you to do an Internet search and see for yourself the hundreds of independent tests and reviews conducted on our products, and likewise, witness heartfelt comments from thousands of satisfied listeners! We may not be a household name but we can assure you that we build a product that far exceeds that of our competition.



A view of the actual bistro where the idea of Hybrid Audio Technologies was born — Louisville Kentucky, USA.



Hybrid Audio Technologies headquarters and administrative offices— Cumming Georgia, USA.

Hybrid Audio Technologies is an Atlanta, Georgia, USA-based Corporation, solely owned by an American citizen, with a satellite office in Worcs, United Kingdom. All design and engineering is done “in house” and all of our products are new, and not your typical “re-badged” products manufactured for others; Hybrid Audio speaker systems are one-of-a-kind products that have no equal and no equivalent in the industry. We continuously strive to bring to you new and exciting products that put a priority on performance, excellent QA/QC, and incredible sound quality “right out of the box.”

# TEAM HYBRIDS



Team Hybrids has established itself as the premier autosound competition team today, with branches of our team in countries all over the world. We sweep trophies at World Championships using Hybrid Audio product; it's what we do!

Team Hybrids members are not only car owners, they are enthusiasts and active in the aftermarket autosound community. Team Hybrids members take pride in being a step above others while utilizing their extensive contacts to help others, responsibly market the Team Hybrids program, and advance the business of Hybrid Audio Technologies.

[teamhybrids.com](http://teamhybrids.com)

Since inception in 2005 and our first competition in 2006, Hybrid Audio-equipped cars have won national and North American titles, league championships, and world championships counting in the hundreds.

The highest-scoring car of all time, in any format, in any part of the world, at any time is owned by Hybrid Audio's founder, Scott Buwalda.



Letter from IASCA stating Scott Buwalda's 2011 championship score is the highest ever recorded in organized competition (and due to rule changes capping available scores, shall remain as the highest score ever recorded).



# Legatia SE & Pro Stage VI

"The Legatia Special Edition 2-way is unmatched anywhere on the planet!"  
Pete • Japan

The world's finest car audio speaker systems, at any price, are the Stage VI Legatia Special Edition (SE) and Pro Series drivers.

Built upon the widely-acclaimed Stage V Legatia Series, the Legatia Special Edition and Pro Series is a collection of seriously-enhanced drivers for the pinnacle of sound reproduction, and the yardstick by which other brands are compared.

Legatia SE and Pro products are sold in a la carte speaker pairs or as component sets, allowing the end-user to design a custom "bespoke" system of Legatia SE and Pro products, or a combination of Legatia SE and Pro products and other Hybrid Audio Technologies product offerings.

The SE series midranges and midbass utilize the same exact mounting topology as the Stage V Legatia products for immediate 'drop-in' upgrade potential.

The Legatia SE and Pro systems are the benchmark speakers systems from Hybrid Audio Technologies. Legatia SE and Pro is the enduring brand of choice for critical audiophiles, world championship car audio competitors, or for those that require the very best in audio loudspeakers.

Grilles and re-cone kits are available for Legatia SE midrange / midbass drivers.

Gift boxes are beautifully-finished golden oak display boxes with laser-etched Hybrid Audio logo.



	L1 Pro	L1 Pro R2	L3 Pro	(Not Pictured) L4 Carbon	L6 Carbon
Frequency Response:	700 Hz - 32 kHz	550 Hz - 40 kHz	249 Hz - 13 kHz	135 Hz - 7.5 kHz	57 Hz - 5.5 kHz
Sensitivity (2.83 V/1 meter):	93.5 dB	92.0 dB	94.0 dB	91.0 dB	91.0 dB
Continuous Power Handling*:	40 watts	50 watts	60 watts	75 watts	125 watts
Max Transient Power Handling*:	100 watts	120 watts	80 watts	150 watts	200 watts
Recommended Power Range*:	10 - 100 watts	15 - 125 watts	25 - 100 watts	25-150 watts	40-200 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm	4 ohm	4 ohm
Diameter:	58mm (2.28")	58mm (2.28")	99mm (3.9")	118mm (4.65")	164.5mm (6.5")

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

	L3SE	L4SE	L6SE	L8SE
Frequency Response:	113 Hz - 18 kHz	92 Hz - 18 kHz	50 Hz - 10 kHz	40 Hz - 3.8 kHz
Sensitivity (2.83 V/1 meter):	89.0 dB	91.0 dB	92.5 dB	92.0 dB
Continuous Power Handling (RMS)*:	60 watts	70 watts	170 watts	180 watts
Max Transient Power Handling*:	150 watts	175 watts	225 watts	240 watts
Recommended Power Range*:	25 - 150 watts	25 - 175 watts	40 - 200 watts	50 - 250 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm	4 ohm
Diameter:	93mm (3.7")	118mm (4.65")	181mm (7.1")	225mm (8.85")

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

# Legatia Stage V



"These are flat out the best car audio speakers I have used."  
Eitan • Framingham, MA

The widely-acclaimed Legatia Series is Hybrid Audio Technologies "Stage V" product line; Hybrid Audio's original product offered starting in 2006, and competition-proven worldwide; the product that defined the company and its quality.

Legatia is a truly high-end approach to in-car sound quality and acoustical performance. Legatia products are sold in a la carte speaker pairs or as component sets, allowing the end-user to design a custom "bespoke" system of Legatia products, or a combination of Legatia and other Hybrid Audio Technologies product offerings. A multitude of possible two-, three-, and four-way systems can be assembled using Legatia products.

Legatia drivers are sensitive and perform exceptionally under high power conditions and its design allows for extended, high-amplitude listening sessions. Legatia kits work well in a variety of low to high-power applications, including head unit power to large outboard amplification.

The Legatia systems are the benchmark speakers systems from Hybrid Audio Technologies and are eclipsed by only the Legatia Special Edition series products.

Truly a high-end alternative for any audio system, Legatia is the enduring brand of choice for persons picky about their audio reproduction, or for those interested in winning world championships in organized sound quality competition.

Grilles and re-cone kits are available for Legatia midrange / midbass drivers.

Legatia L8SDS Shallow Depth Direct Replacement for BMW Under-Seat Applications under development.

	L1V2	L3V2	L4
Frequency Response:	2,500 Hz - 25,000 Hz	113 Hz - 18,000 Hz	100 Hz - 17,000 Hz
Sensitivity (2.83 V/1 meter):	93.0 dB	88.6 dB	89.4 dB
Continuous Power Handling (RMS)*:	20 watts	50 watts	60 watts
Max Transient Power Handling*:	75 watts	125 watts	150 watts
Recommended Power Range*:	10-100 watts	25-125 watts	25-150 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm
Diameter:	55mm (2.16")	93mm (3.7")	118mm (4.65")

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.



L3V2



L6V2



L1V2

Hybrid Audio Technologies now offers the incredible L1V2 tweeters without their aluminum housing for OEM and small-format installations.



PTC75

**For use in active systems** to protect tweeters from amplifier and digital signal processor malfunction, particularly during "auto tuning", and amplifier over-powering.

	L6V2	L8V2
Frequency Response:	49 Hz - 9,500 Hz	40 Hz - 3,800 Hz
Sensitivity (2.83 V/1 meter):	92.5 dB	91.5dB
Continuous Power Handling (RMS)*:	160 watts	160 watts
Max Transient Power Handling*:	215 watts	215 watts
Recommended Power Range*:	40-200 watts	40-250 watts
Nominal Impedance:	4 ohm	4 ohm
Diameter:	181mm (7.1")	225mm (8.85")

\* With recommended minimum crossover frequency  
All specifications subject to change without notice.



L4



L2X / L3X

**Network components:**  
Audiophile grade

**Capacitors:**  
Low tolerance metalized polypropylene film

**Inductor:**  
Aircore

**Resistors:**  
Low tolerance non-inductive

**Terminals:**  
Nickel-plated spring loaded push terminals

# Clarus Stage IV



"Best CAE Reviewed Speakers of the Last Decade."  
Car Audio & Electronics Magazine

Hybrid Audio Technologies Stage IV offering, Clarus, joins the ranks of the winningest brand in organized sound quality competition since Hybrid Audio Technology's inception and was reviewed by Car Audio & Electronics Magazine as one of the finest component sets ever tested.

Many Clarus design cues were gleaned from the Stage V Legatia series, and developed with an obsessive attention to detail. Clarus offers higher grade materials, improved power handling and midbass authority, with an elevated tonal character and spectral balance over other products in Clarus' price range and beyond.

Clarus drivers are sensitive and perform exceptionally under high power conditions and its design allows for extended, high-amplitude listening sessions. Clarus kits work well in a variety of low to high-power applications, including head unit power to large outboard amplification.

Clarus kits include the exceptional C1 competition-grade tweeters. The C1 driver is a 20mm diameter impregnated silk textile dome neodymium tweeter with high-loss rubber suspension for exceptional polar response.

Clarus kits include two-way passive crossovers, all encased in a display-ready housing that features nickel-plated push terminals.

Grilles and various tweeter mounting options are included with all Clarus kits.

8, 10, 12, and 15-inch subwoofers are also available within the Stage IV Clarus series. (Pg 22)

## MIDBASS

### Frame:

Cast Aluminum

### Cone:

Hybrid paper blend with water proof treatment

### Dustcap:

Hybrid paper blend with water proof treatment

### Surround:

Inverted high-loss rubber surround

### Spider:

Phenolicized fabric and tinned tinsel leads

## CROSSOVER

### Network components:

Audiophile grade

### Capacitors:

Low tolerance metalized polypropylene film

### Inductors:

Aircore

### Resistors:

Low tolerance non-inductive



## TWEETER

### Dome:

Silk

### Voice Coil:

20mm

	C51 -2	C61 -2
Frequency Response:	55 Hz - 22,000 Hz	50 Hz - 22,000 Hz
Sensitivity (2.83 V/1 meter):	92.0 dB	93.6 dB
Continuous Power Handling (RMS)*:	110 watts	120 watts
Max Transient Power Handling*:	230 watts	250 watts
Recommended Power Range*:	25 - 150 watts	25 - 175 watts
Nominal Impedance:	4 ohm	4 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.



# Unity Stage III



"Bright, crisp, detailed, sweet and enjoyable with awesome sonic cues and sound staging."  
Adam Rayner • Talk Audio Magazine UK

Hybrid Audio Technologies Stage III speaker system, Unity, is one of Hybrid Audio Technologies' newest products offerings, and was designed for the discerning individual interested in a product between the Stage II Imagine and Stage IV Clarus product lines. Unity takes the Imagine systems reviewed by Car Audio & Electronics Magazine as "one of the top-11 best bargain speakers available" and improved it with Stage IV Clarus-level enhancements.

The efficacy of the Unity series is due in large part to the incorporation of several design tenets from the Stage IV Clarus series. The Unity series offers incomparable performance in its price range, boasting exceptional power handling and midbass authority, with an accurate tonal character and spectral balance any music lover will appreciate.

Unity series is a melding of the best features of the Imagine line with Clarus-level adaptations to make a budget-friendly high-end alternative; Hybrid Audio loosely calls the Unity line 'Clarus Junior.'

Unity kits include the exceptional Stage IV Clarus C1 competition-grade tweeters. The C1 driver is a 20mm diameter impregnated silk textile dome neodymium tweeter with high-loss rubber suspension for exceptional polar response.

An additional Clarus-level enhancement is the inclusion of two-way passive crossovers containing the same crossover and tweeter attenuation topology as Clarus, all encased in a display-ready housing with gold-plated screw terminals.

Grilles and various tweeter mounting options are included with all Unity kits.

## MIDBASS

### Frame:

Cast ABS

### Cone:

Hybrid paper blend with water proof treatment

### Dustcap:

Hybrid paper blend with water proof treatment

### Surround:

Inverted high-loss rubber surround

### Spider:

Phenolicized fabric and tinned tinsel leads

## CROSSOVER

### Network components:

Audiophile grade

### Capacitors:

Low tolerance metalized polypropylene film (HP)  
Metalized electrolytic capacitor (LP)

### Inductors:

Aircore

### Resistors:

Low tolerance non-inductive



## TWEETER

**Dome:**  
Silk

**Voice Coil:**  
20mm

	U51 -2	U61 -2
Frequency Response:	55 Hz - 22,000 Hz	50 Hz - 22,000 Hz
Sensitivity (2.83 V/1 meter):	91.8 dB	93.2 dB
Continuous Power Handling (RMS)*:	100 watts	100 watts
Max Transient Power Handling*:	230 watts	230 watts
Recommended Power Range*:	20 - 150 watts	20 - 150 watts
Nominal Impedance:	4 ohm	4 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

# Imagine Stage II



"One of the top-11 best bargain speakers available."  
Car Audio & Electronics Magazine

Hybrid Audio Technologies Stage II offering, Imagine, is Hybrid Audio Technologies' best-selling product and is a favorite amongst specialty retailers and consumers because of its price to performance ratio. Imagine systems easily out-perform competitor's speaker systems costing twice to three times the price. Imagine is designed for the discerning individual, interested in more than just an 'OEM replacement speaker.'

The efficacy of the Imagine series is due in large part to the incorporation of several design tenets from the Stage IV Clarus series. The Imagine series offers incomparable performance in its price range, boasting exhibiting exceptional power handling and midbass authority, with an accurate tonal character and spectral balance any music lover will appreciate.

Imagine kits include grilles and component set conversion items, including midbass phase plugs, tweeter cups and hardware, connection wire, and an extra set of magnet decals, for the ultimate coaxial or component set flexibility.

6.5, 8, 10, and 12-inch subwoofers are available within the Stage II Imagine series. (Pg 24)

157-2 DIRECT REPLACEMENT FOR HARLEY-DAVIDSON®



TWEETER

**Dome:**  
Silk

**Voice Coil:**  
25mm

**Tweeter Passive Crossover:**  
Low-Tolerance Mylar Capacitor



MIDBASS

**Frame:**  
Cast ABS

**Cone:**  
Hybrid paper blend with water proof treatment.

**Phase Plug:**  
Cast ABS

**Surround:**  
Inverted high-loss rubber surround

**Spider:**  
Phenolicized fabric and tinned tinsel leads



	151-2	161-2V2	157-2	169-2V2
Frequency Response:	55 Hz - 22,000 Hz	50 Hz - 22,000 Hz	75 Hz - 20,000 Hz	40 Hz - 22,000 Hz
Sensitivity (2.83 V/1 meter):	91.4 dB	93.2 dB	93.6 dB	94.5 dB
Continuous Power Handling (RMS)*:	100 watts	100 watts	100 watts	100 watts
Max Transient Power Handling*:	230 watts	230 watts	230 watts	230 watts
Recommended Power Range*:	20 - 150 watts	20 - 150 watts	20 - 150 watts	20 - 150 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm	4 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

# Mirus Stage I

"I could not find a single fault with this product!  
Very linear throughout the volume range."  
Ben • Bloomington, IL

Hybrid Audio Technologies Stage I offering, Mirus, joins the ranks of the winningest brand in organized sound quality competition since Hybrid Audio Technology's inception and has all the heritage of its more expensive siblings, but at an affordable price point.

Mirus is Latin for "astonishing" and is loosely termed our "entry-level" speaker system, for at the price point of Mirus, nothing else compares for accurate sound reproduction. Mirus speaker systems out-perform similarly-priced competitor's products both in sound quality, spectral balance, and faithful reproduction of the musical source.

The efficacy of the Mirus series is due in large part to the incorporation of several design tenets from the Stage II Imagine series. The Mirus series offers incomparable performance in its price range, boasting exceptional power handling and midbass authority, with an accurate tonal character and spectral balance any music lover will appreciate.

The Mirus midbass features a high-quality stamped steel frame, which plays a critical role in aligning the voice coil and allows for the inverted mounting of the rubber surround to optimize edge-mode damping and shallow grille clearance.

Mirus kits include a permanent coaxially-mounted, 20mm diameter impregnated silk textile dome neodymium tweeter with high-loss rubber suspension for exceptional polar response. The tweeter pole piece effectively centers the tweeter forward of the cone for optimal operation and includes a unique swiveling feature to allow for aiming of the tweeter.

Grilles are optional for many of the Mirus series coaxials.

## TWEETER

**Dome:**  
Silk

**Voice Coil:**  
20mm

**Tweeter Passive Crossover:**  
Low-Tolerance Mylar  
Capacitor



## MIDBASS

**Frame:**  
High-quality stamped steel

**Cone:**  
Hybrid paper blend with water proof treatment.

**Pole Piece:**  
Cast ABS

**Surround:**  
Inverted high-loss rubber surround

**Spider:**  
Phenolicized fabric and tinned tinsel leads



	M41-2	M51-2	M61-2
Frequency Response:	90 Hz - 22,000 Hz	60 Hz - 22,000 Hz	55 Hz - 22,000 Hz
Sensitivity (2.83 V/1 meter):	89.2 dB	90.8 dB	92.6 dB
Continuous Power Handling (RMS)*:	50 watts	70 watts	80 watts
Max Transient Power Handling*:	100 watts	140 watts	150 watts
Recommended Power Range*:	10 - 75 watts	10 - 100 watts	10 - 100 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

	M57-2	M69-2
Frequency Response:	55 Hz - 22,000 Hz	50 Hz - 22,000 Hz
Sensitivity (2.83 V/1 meter):	92.6 dB	93.4 dB
Continuous Power Handling (RMS)*:	80 watts	80 watts
Max Transient Power Handling*:	150 watts	150 watts
Recommended Power Range*:	10 - 100 watts	10 - 100 watts
Nominal Impedance:	4 ohm	4 ohm

\* With recommended minimum crossover frequency  
All specifications subject to change without notice.

# Clarus

SUBWOOFERS

## Stage IV



"Clarus subwoofers are by far the most accurate and well built sub I've had the pleasure of listening to."  
Steve McIntyre • Olympia, WA

Building on the enthusiastic reception garnered for the Imagine series subwoofers, Hybrid Audio Technologies began working on an enhanced line-up of subwoofers in the Clarus range starting in mid-2012. The exhaustive process of developing a complete line-up of low-inductance, low-distortion subwoofers was realized over and approximate calendar year in research and development, and real-world testing, resulting in the impressive offering you see here. The design efficacy of the Clarus subwoofers includes immediate upgrade potential with Imagine series subwoofers in similarly-sized enclosures and hole-cut-out diameters. Other features boast increased nominal and thermal power handling, lower inductance, larger displacement courtesy of longer linear Xmax, and the option of two dual voice coil alignments (dual two ohm and dual four ohm), allowing for a wide variety of connection options.

The Clarus subwoofers were originally designed to satisfy the typical 8-inch, 10-inch, and 12-inch sizes. Due to an incredible amount of feedback from our enthusiast community and dealer base for a true high-end large-diameter sound quality subwoofer, we developed the 15-inch driver to compliment the other three sizes.

The Clarus subwoofers are the ideal multi-format subwoofer speaker system, and are an upgrade for the Imagine-series subwoofer drivers. At home in virtually any enclosure arrangement – from sealed, to vented, to infinite baffle and bandpass – the Clarus range of subwoofers are going to impress even the most critical listener with speed and articulation, bottom-octave authority, with a total inductance profile that is not just low, but flat over stroke, frequency, and power. You'll know how serious this driver is at first glance as you take in the cast frame and heavy-duty nickel-plated spring-loaded push terminals, but its proof will be upon first listen as the Clarus subwoofer does what it does best: articulating the nuances of your favorite recordings to effectively reproducing significant sound pressure levels.



**SUBWOOFER**

**Frame:**  
Cast Aluminum

**Cone:**  
Polypropylene

**Surround:**  
Inverted high-loss rubber surround

**Motor:**  
Massive overhung ferrite motor assembly with bumped back plate and pole piece venting

	C8SW	C10SW	C12SW	C15SW
Frequency Response:	30 Hz – 1 kHz	25 Hz - 1 kHz	25 Hz - 1 kHz	20 Hz - 800 Hz
Sensitivity (2.83 V/1 meter):	90.2 dB	90.2 dB	92 dB	92 dB
Continuous Power Handling (RMS):	175 watts	200 watts	250 watts	800 watts
Max Transient Power Handling*:	350 watts	400 watts	500 watts	1600 watts
Recommended Power Range*:	50 – 200 watts	75 - 250 watts	100 - 300 watts	250-750 watts
Nominal Impedance (Selectable):	2x4 & 2x2 ohm	2x4 & 2x2 ohm	2x4 & 2x2 ohm	2x4 & 2x2 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

# Imagine

SUBWOOFERS

## Stage II

"What a great subwoofer to mate with my beloved Hybrid Audio Legatia front-stage!"  
Brennan • Akron, Ohio

The Imagine I6SW was the first subwoofer ever offered by Hybrid Audio Technologies. Originally designed to suit saddle-bag installations on touring motorcycles, the efficacy of the design was quickly proven in a wide variety of installations in virtually any automobile, where a small vented enclosure subwoofer could be used where space was at a premium. In Spring 2009, the first I6SW prototypes were developed by company founder and lead designer Scott Buwalda, and the concept of an Imagine subwoofer line-up was born.

All the while the I6SW had been developed and launched to an enthusiastic reception of enthusiasts, custom installers, and motorcycle and ATV riders, we were working on the larger counterparts to the Imagine I6SW, the 8-inch Imagine I8SW and the 10-inch I10SW. In January 2011, final prototypes were approved for production after a long and strenuous program of evaluation by several Hybrid Audio specialty retail dealers for their use and assessment in the field. The combined efforts of our dealers and our own R&D team affirmed the design concept for a budget-friendly high-end sound quality subwoofer, and the I8SW and I10SW product was commenced. Production began in August 2011, and was completed in October 2011, after an in-process change was made to the reverse-roll surround to ensure reliability and longevity operation. The Imagine I8SW and I10SW were launched in late November 2011 and complete the Imagine subwoofer offering.

The Imagine subwoofers are the ideal multi-purpose sound quality subwoofer speaker driver. Mechanical and electrical parameters are amenable to a variety of vented and sealed enclosures. At home in virtually any arrangement, the Imagine subwoofer is Hybrid Audio's Stage II subwoofer, boasting exceptional performance and a high-fidelity design philosophy.



### SUBWOOFER

**Frame:**  
Stamped Steel

**Cone:**  
Polypropylene

**Surround:**  
Inverted high-loss rubber surround

**Motor:**  
Massive overhung ferrite motor assembly with bumped back plate and pole piece venting

	I6SW-V2	I8SW	I10SW	I12SW-V2
Frequency Response:	32 Hz - 800 Hz	30 Hz - 800 Hz	28 Hz - 800 Hz	25 Hz - 800 Hz
Sensitivity (2.83 V/1 meter):	90 dB	90 dB	91 dB	91 dB
Continuous Power Handling (RMS):	120 watts	160 watts	200 watts	225 watts
Max Transient Power Handling*:	180 watts	230 watts	250 watts	450 watts
Recommended Power Range*:	40 - 150 watts	40 - 150 watts	50 - 200 watts	75 - 250 watts
Nominal Impedance:	4 ohm	4 ohm	4 ohm	4 ohm

\* CONSERVATIVE power rating with recommended minimum crossover frequency.  
All specifications subject to change without notice.

# DESIGN TENETS

## »» Super wide-bandwidth operation.

Hybrid Audio Technologies designs ensure that the midbass or midrange in each component system effectively reproduce an extremely wide bandwidth, exceeding six or more octaves. Of particular importance is the ability of Hybrid Audio Technologies drivers to operate within the bandwidth of the human vocal range, ensuring point-source tonality, and phase-coherent imaging and staging due to a single point-source.

## »» Proprietary blend diaphragms with virtually negligible cone break-up.

Of particular notability in the Hybrid Audio Technologies line-up is the use of proprietary paper blends for all midrange and midbass diaphragms. Paper is widely acknowledged as the best-damping material, as it provides the near optimum balance of strength and weight. This topology also ensures soft, almost negligible cone break-up modes (distortions) being emanated from the diaphragm.

## »» Good power handling without manifesting extreme power compression over the usable bandwidth.

All Hybrid Audio Technologies designs allow for use in extremely high-power applications without readily manifesting power compression and boast high nominal and thermal power handling.

## »» Extremely light moving mass for exceptional impulse and transient response.

Race cars get light wheels because there is a benefit to less rotational mass. The same rules apply for speakers. Having extremely light cone materials ensures that the music is tracked well, and that impulse response is extremely good in all Hybrid Audio Technologies speakers.

## »» Diaphragms that exhibit superior polar response.

Hybrid Audio Technologies tweeter designs utilize no larger than a 25mm tweeter diaphragm, as it's widely acknowledged that smaller-diameter tweeters offer superior polar response and extended use without significant listener fatigue.

## »» Low- and high-resonance tweeter applications

Hybrid Audio Technologies builds both low- and high-resonance tweeters for different in-car applications. The end-user can take advantage of low resonance, tuned chamber options in ring radiator or soft dome format, or high-resonance dome format for the ultimate in system flexibility.

## »» Excellent on- and off-axis frequency response.

Hybrid Audio Technologies incorporation of diaphragm material, diameter, and geometry, in concert with phase plug pole pieces, low-inductance profiles and light moving mass ensures that all Hybrid Audio Technologies designs work well both on- and off-axis.

## »» Low distortion motor topologies and flat/wide BL.

The motors of the midrange midbass units manufactured by Hybrid Audio Technologies provide for a flat and wide BL curve (as a learning note, BL is the equivalent of torque in a car; a car with a flat and constant torque curve provides much better acceleration and performance than a car with a peaky, non-constant torque curve). Reduced distortion and greater dynamics are the immediate sonic benefits.

## »» Low inductance profiles.

Inductance is the biggest limiter of high frequency extension and modulation of inductance with stroke, frequency and power, and is the primary source of intermodulation distortion (IMD). Hybrid Audio Technologies speaker systems ensure optimization of the total inductance profile.

## »» Enhanced Driver Suspensions

All Hybrid Audio Technologies midrange and midbass designs utilize inverted butyl rubber high-loss surrounds which are highly consistent, terminating mechanical vibrations well, and having a low stiffness for positive damping of resonances. Spiders are designed for optimal performance, where vibrations in the spider are well damped and do not translate into the former or the cone.

## »» Quality factors amenable for infinite baffle operation.

Mechanical and electrical parameters are amenable to a variety of different installations and speaker locations. Hybrid Audio Technologies midrange and midbass drivers are intended to be used in an infinite baffle configuration ensuring fool-proof installation and exceptional sound quality "right out of the box."

## »» Intensive development of speakers and not relying on passive filtering and equalization or tweeters crossed too low.

One of Hybrid Audio Technologies's main design tenets is to spend the time and resources necessary to make the speakers exceptional in the design phase, and then use simpleton filtering to protect only for thermal protection at resonance. Simply put, board-mounted equalization corrects poor speaker design. Likewise, a poorly designed midrange or midbass requires the use of a tweeter crossed into the vocal spectrum. None of our designs, in any series, use crossovers that contain any form of equalization beyond simple tweeter attenuation, and likewise, none require the use of the tweeter to "carry" the vocal input signal. See "super wide-bandwidth operation," left.

## »» Class-leading cosmetics.

You can tell a Hybrid Audio Technologies design because it looks nothing like other speakers on the market. All of our designs are fresh, and not "rebadged" derivatives of other, existing speaker designs.

## »» Significantly undervalued products that out-perform competitors' products.

All Hybrid Audio Technologies designs are priced significantly undervalued for the performance you get, and no other competing brand outperforms a Hybrid Audio Technologies product in their respective price ranges.



Hybrid Audio founder and CEO Scott Buwalda at his design workstation.



[hybrid-audio.com](http://hybrid-audio.com)

770.888.8200