

# NOLA



## PRODUCT LINE 2006

Accent Loudspeaker Technology, Ltd.  
1511 Lincoln Avenue  
Holbrook, NY 11741  
<http://www.NolaSpeakers.com>

## TABLE OF CONTENTS

<b>About Nola</b> .....	1
<b>Open Baffle Series</b>	
Grand Reference IV.....	4
Pegasus Reference Xtreme.....	6
Viper Reference.....	11
Viper IIA.....	12
Viper IA.....	13
<b>Home Theater Series</b>	
LCR Reference.....	15
T Bolt III Subwoofer.....	16
NolaWall.....	17
<b>Cable and Accessories</b>	
IP-1 Isolation Platform.....	18
Blue Thunder Speaker Cable.....	19
Thunderbass Subwoofer Interconnect Cable.....	20
<b>Specifications</b> .....	21

### LEGAL NOTICES:

©2006 Accent Loudspeaker Technology, Ltd. All Rights Reserved. No portion of this document may be reproduced without written consent of Accent Loudspeaker Technology, Ltd. All specifications subject to change without notice. *Rev 7/17/2006*

## About Nola

---

Carl J. Marchisotto, Accent Loudspeaker Technology's President and Chief Engineer, has been designing audio equipment since 1973.

Carl launched his career at Dahlquist, where he spent fifteen years as the Chief Designer and Vice President of Engineering. During his tenure at Dahlquist, Carl developed the DQ-8, DQ-12 and the flagship DQ-20 loudspeakers (still revered today), as well as the Dahlquist LP-1 crossover and the CM-1 preamplifier.

In 1991, Carl and Marilyn Marchisotto founded Acarian Systems, Ltd. (manufacturers of the acclaimed Alón line of loudspeakers). Acarian Systems debuted at the January 1992 Consumer Electronics Show in Las Vegas, where the widely acclaimed Alón IV had its first showing. Over the next thirteen years, Acarian developed a wide range of loudspeakers and cabling, including the Grand Reference System - considered by many to be the finest loudspeaker in the world.

In 2004, Carl and Marilyn formed Accent Speaker Technology Ltd. and created the Nola product line. Today, the company manufactures a complete line of loudspeakers - ranging from \$549 in-walls to the \$160,000 Grand Reference System - along with custom cabling designed to enhance the performance of any loudspeaker.



Accent Loudspeaker Technology was founded with the belief that it could bring the live musical experience to a broader number of people than had been previously reached. Carl Marchisotto's speaker designs have not only met this goal, but have been held in the highest regard by music lovers and reviewers alike. They have collected innumerable awards and won the praise of critics all over the globe.

## Nola Technology

---

Several technologies set Nola's loudspeakers apart from the competition. They include:

### DIPOLE DRIVERS

Nola's open baffle loudspeakers feature midranges and tweeters that operate in dipole mode, using a cone driver without an enclosure. This system eliminates four major resonant problems that hamper all midrange enclosure systems and cause the sound to take on a mechanical coloration:

1. Enclosure panel resonance
2. Enclosure air column resonance, due to air trapped in the enclosure — resulting in standing waves
3. Delayed resonance, due to sound retransmitted through the cone
4. Driver resonance, due to stiffness of trapped air causing the driver to resonate close to its operating band

Nola open baffle loudspeakers are not hampered by any of the above. To operate in this environment, special drivers were developed that employ a cobalt magnet mounted on a cast frame, driving a low mass tri-laminate cone. These drivers combine lightning-fast response, very low distortion and inaudible coloration levels in a single design. Special baffle structures were created for the mid/high frequency range that are sculpted to reduce diffraction to minimal levels. The result is an open, natural and clear sound with excellent depth and soundstage performance.

### COBALT (ALNICO) MAGNETS

Many Nola loudspeakers feature premium cobalt (alnico) magnets. The powerful field generated by these magnets contributes to the natural reproduction of harmonic textures.

### MULTI-BOARD HAND-WIRED CROSSOVERS

Nola loudspeakers feature hand-wired crossovers without fuses or current-limiting devices, which would compromise signal integrity. The tri-wired speakers use three separate boards, oriented in space so that they do not interfere with each other. This is a true tri-wired system - from the drivers back to the amplifier - for minimum possible distortion

and coloration. The bi-wired systems use two separate crossover boards to create a true bi-wired system.

Nola's reference-model loudspeakers use an external crossover module for improved performance. The external crossover prevents colorations due to interactions between the driver magnets and crossover components, and also prevents mechanical vibration of the crossover components for a smoother, more open sound.

## **MULTI-WIRING**

Multi-Wiring is a method of connecting loudspeakers to an amplifier (or amplifiers) for improved clarity and detail. Each driver or set of drivers in the loudspeaker has its own independent set of cables for connection to the amplifier. This separation of electrical connections to the drivers prevents distortions and colorations due to circulating currents within the loudspeaker, and reduces intermodulation distortions within the speaker cables. Multi-Wiring also allows the use of specialized cable constructions, optimized for different frequency ranges to attain better performance. For example, in the Blue Thunder speaker cable, the low-frequency cable uses a coaxial construction with both solid core and stranded silver wire, while the high-frequency section uses a uniaxial construction of stranded silver wire, resulting in improved openness and clarity.

With all of Nola's products, the use of Blue Thunder speaker cable in single, bi-wire, or tri-wire configurations is strongly recommended for best performance. Mismatched cables can cause sonic distortions, such as boomy bass, hard midrange, bright or dull treble, poor sound staging, nasality, poor dynamics and veiled sound.

## **For More Information**

For the latest Nola product information, specifications, news and reviews, please visit:

**<http://www.NolaSpeakers.com>**

## **Grand Reference IV**

*Open Baffle Series*

The **Grand Reference IV** provides state-of-the-art acoustic performance and delivers a sound that is closer than ever to a live experience. In addition, it offers expanded performance in the areas of clarity, wide-band dynamics, frequency range, high frequency transient reproduction, musicality and soundstage reproduction.



The system, consisting of seven main pieces, is comprised of the following:

- Two Main Towers with external bi-wired passive crossover
- Two Passive Subwoofer Towers
- One Variable Low Pass Filter (Electronic)
- Two IP-1 Crossover Isolation Platforms

## **GRAND REFERENCE MAIN TOWER**

The Main Tower employs a total of 19 of the highest quality transducers per channel. The Main Towers are built in mirror-imaged arrays for accurate imaging. Bass and mid-bass frequencies from 40 Hz to 400 Hz are reproduced by four advanced 8-inch cast frame woofers per channel. Two woofers are mounted vertically at the top and two are mounted vertically at the bottom of the Main Tower. The four 8-inch woofers employ cast, surface treated magnesium cones with natural rubber surrounds and solid copper-machined phase plugs. Perfect piston response is maintained to a high 5 kHz, far beyond their 400 Hz operating ranges, for excellent impact and low coloration. The woofers are mounted in individual sealed chambers. Cabinet walls are bonded with proprietary damping layers for inaudible coloration. The four woofers operate with staggered bass resonant frequencies to increase the speed-bandwidth product.

The all-important midrange system consists of six 110mm tri-laminate cast frame transducers per tower, operating on an open baffle over the range of 400 Hz to 3500 Hz and driven by premium Alnico magnet systems. The midrange transducers are deployed in a short vertical line array, between the

woofers and adjacent to the tweeters. The open baffle Alnico midrange drivers provide excellent low-level resolution and dynamics, while eliminating cabinet coloration. Harmonic structure is especially accurate, while the special transient response of this driver allows clear separation of the attack, sustain and decay elements of musical sounds — for a more life-like reproduction.

The high-frequency transducer system consists of nine 4-inch ribbon tweeters per tower, operating in a short vertical line array. These transducers are true ribbons wherein the conductor and the diaphragm are one and the same. The moving mass is only .0061 gram for near-instant acceleration. Extreme high-level transient attacks are taken in stride without harshness, allowing for instance, live levels of cymbals and other harmonically rich musical sounds to be reproduced. Driven by heavy neodymium magnet systems, these transducers are equally comfortable reproducing nuance and extreme peak levels. Nine small ribbons are utilized in lieu of one large ribbon to exploit the superior control of the smaller diaphragm for greater accuracy.

#### **GRAND REFERENCE SUBWOOFER TOWER**

The **Grand Reference IV** Subwoofer Towers are designed to complement the response of the main towers from 16 Hz to 40 Hz. The Main Towers operate full range to their acoustic rolloff while the Variable Low Pass Filter rolls off the response of the Subwoofer Tower at 40 Hz. A separate high-current, stable amplifier is required to drive these towers. Each Subwoofer Tower consists of four high-output 12-inch transducers operating in a vertical array. Each transducer is isolated in a separate vented chamber to eliminate inter-driver interference. A 3-inch diameter exponential flared port is provided for each 12-inch transducer. The port is flared both on the inside of the enclosure as well as the outside, for minimum low-frequency distortion. Special low distortion voice coils, driven by massive double-stacked 7 lb. magnets for each driver, provide greater than 1¼-inch peak-to-peak linear excursions. Output at 20 Hz with both towers driven is greater than 120 dB.

#### **VARIABLE LOW PASS FILTER**

Based on a design pioneered by Carl Marchisotto when at Dahlquist in 1976, this remains the preferred way to integrate a subwoofer system with a high-quality, wide-band main transducer. The LP1 provides continuously variable cut-off frequencies from 37 Hz and up. Stereo bass is also provided. Fine touch-up equalization is provided to trim the extreme low-frequency response on each channel to match different rooms.

## **Pegasus Reference Xtreme**

*Open Baffle Series*

#### **The Dream:**

- **Life size images**
- **Instantaneous transient response**
- **Towering output over the entire frequency range**
- **Zero distortion at any useable level**
- **Unlimited low level resolution and harmonic accuracy**
- **Small footprint**

The **Pegasus Reference** loudspeaker has been upgraded to the **Pegasus Reference Xtreme**.

While a perfect loudspeaker would be able to reproduce any musical signal at any level without distortion or coloration, we realize that no loudspeaker can be flawless. Nevertheless, with innovative design and careful implementation we can more closely approach the ideal. Relatively large loudspeakers are required to produce lifelike dynamics, especially at low frequencies. However, most large loudspeakers suffer from limitations related to coloration, imaging, low-level resolution, bass integration, harmonic accuracy, coherency, transparency and soundstaging. In addition, large loudspeakers may be difficult to place in a room.

**Pegasus Reference Xtreme** was developed to greatly reduce or eliminate these limitations. Bringing over thirty years of experience to bear upon this project, designer Carl Marchisotto would not be satisfied with a design until he would purchase it himself. This is very different from the typical large corporation “design by committee” routine.

#### **Coloration**

**Pegasus Reference Xtreme** is built in two sections that are stacked one on top of the other. The upper section contains all the drivers except the four bass drivers that are located in the lower section. The upper section now uses a high gloss, black acrylic sub baffle to further reduce coloration. A major problem with large loudspeakers having extended bass is in isolating the bass vibrations so they do not obscure low level mid band information. The best



solution is to use separate bass enclosures as in the *NOLA GRAND REFERENCE*. However, this is both very expensive and takes up considerable floor space. **Pegasus Reference Xtreme** utilizes a built-in ball bearing system as an effective means of dealing with this problem.

Loudspeaker coloration is most audible through the critical midrange frequencies. **Pegasus Reference Xtreme** utilizes two midrange drivers operating in open baffle dipole mode. The open baffle mode eliminates coloration due to cabinet resonances, air chamber standing wave resonances and delayed through-the-cone resonances. These drivers utilize a new 110mm tri-laminate cone, developed to improve low level resolution. These transducers are driven by the highest quality Alnico magnet systems for the lowest possible musical distortion and very wide dynamic contrasts. Two are utilized to double power handling and provide a better match to the air.

The high frequency drivers are domes operating in the dipole mode to eliminate the slowing of the response and resultant slight mechanical sound typical of sealed-back domes. These magnesium / aluminum alloy domes are also driven by twin Alnico ring magnets for the lowest possible distortion and widest dynamic contrasts. Two drivers are utilized to double power handling and provide a better match to the air.

A unique upper bass driver is rear mounted and upward firing. This driver operates as a dipole over the upper bass range with extremely fast response, as there is no enclosure to slow the response. This 200mm driver has its own crossover and also uses an Alnico magnet for highest quality response.

Twin 220mm mid-bass drivers are forward firing in isolated sealed chambers and reproduce the mid-bass through the lower midrange with authority and accuracy. These drivers employ machined magnesium cones with solid copper phase plugs for high speed and low coloration. These mid-bass drivers are the same as used in the *Nola Grand Reference*.

Upper section cabinet coloration is greatly reduced by using a built-in ball bearing system to absorb vibration and provide isolation from the lower section cabinet.

Four 200mm bass drivers are located in the lower section. They are arrayed in an opposing force vibration-cancelling mode with two drivers on each side and operate as a sealed system. These drivers use the composite fiber cone driven by an Alnico magnet system. Improved cone control is provided by this arrangement, as mechanically the cones are working against each other.

## Imaging

The **Pegasus Reference Xtreme** is only 9½ inches wide through the mid-bass to lower mid frequency range. This minimizes diffraction distortion and its negative impact on stereo imaging. Many large speakers can be twice this width, substantially degrading imaging. **Pegasus Reference Xtreme** can disappear into the sound stage like a mini-monitor such as *NAPOLEON*, but with life-like image size and dynamics over the whole frequency range.

From the critical midrange on up, **Pegasus Reference Xtreme** uses the same 45-degree mirror imaged array originally developed for the *NOLA GRAND REFERENCE*, which uses 9 ribbon tweeters and 6 midrange drivers. In **Pegasus Reference Xtreme** we use two midranges and two tweeters – but with the same advantage of lifelike image size and improved focus. The mid-high frequency array operates as a cross between a line source and a point source and as in the *NOLA GRAND REFERENCE* possesses the advantages of both. The mid- and high-frequency baffles use a sculpted mirror-imaged shape to further reduce diffraction distortion and baffle reflections. Since the upper bass, midrange and high frequency drivers operate as dipoles, they naturally limit the amount of sound that is bounced off the floor, side walls and ceiling, via dipole cancellation, for a clearer view into the recorded sound stage.

## Low Level Resolution

Several techniques are employed to maximize low level resolution. First, all drivers are designed to reproduce the smallest details of the music signal. The drivers are engineered to have very low loss and therefore will respond accurately to signals in the milliwatt range. We can do this because *we design all of the drivers* for our own use. We do not use off-the-shelf units as many manufacturers do. There is no feeling of needing a lot of power to “get the speaker going”. This quality also makes low-level listening a reality. However, larger amplifiers, as long as they are very high quality, will provide a sense of greater ease and life-like dynamics.

Second, the sensitive mid / high frequency crossovers are mounted in a separate external module, which sits just behind the speaker. This approach isolates these circuits from the magnetic, electric and vibration fields, which abound inside the speaker enclosure near the speaker drivers. Thus low-level information, normally obscured, is now revealed.

Third, the crossovers are all hard-wired using oxygen-free copper wire. No printed circuit boards or fuses are used anywhere in order to preserve low-level resolution.

Fourth, the crossover components are state of the art. Proprietary low loss polypropylene 1200 volt capacitors are utilized - same as in the *NOLA GRAND REFERENCE IV*. While it is common practice to compromise on inductor quality for low frequencies by using non-linear iron core or ferrite core units, this approach was found to be not good enough for **Pegasus Reference Xtreme**. Indeed the low frequency inductor is a massive custom linear air core design *employing 17 pounds of oxygen free copper!* This inductor is distortion-free at levels beyond 1000 watts with no loss of milliwatt low level information.

Fifth, the crossover module now sits on the IP-1 Isolation Platform, which uses the same sophisticated ball bearing isolation system as the speaker, to further improve low level resolution. The crossover module now utilizes 5 pairs of premium solid copper binding posts and *Nordost Valhalla* spade-to-spade jumpers, to provide the highest quality connection from crossover to speaker.

### **Bass Integration**

Instead of using large bass drivers with small midranges or large and medium size bass drivers in the same cabinet with smaller midranges, **Pegasus Reference Xtreme** eschews these common approaches and uses a different concept which avoids integration limitations. All bass drivers are in fact the same size and have the same moving mass, so we have crossovers from and to units with identical parameters in the bass range. These drivers are utilized in three different ways to cover the bass range. However, the character of the bass, by definition, is the same from below 20 Hz through 500 Hz and this eliminates bass integration problems and helps to allow **Pegasus Reference Xtreme** to sound like a single driver.

### **Harmonic Accuracy**

### **Transparency**

### **Coherency**

### **Soundstaging**

These are all related. **Pegasus Reference Xtreme** utilizes only slow slope, essentially linear phase type crossovers throughout. While **Pegasus Reference Xtreme** is technically a 5½ way system, it speaks with one voice from top to bottom. This crossover design allows excellent pulse

reproduction for superb transient response and sound staging. High slope crossovers (24 dB is popular, and some use infinite slope) all compromise transient response, harmonic accuracy and soundstaging, to ultimately produce an unnatural sound. The Alnico magnet systems used in the system promote natural harmonic structures without the “edge” so often associated with dynamic systems. The combination of harmonically correct low distortion drivers, low phase shift crossovers with low energy storage, reduced diffraction and excellent transient response, maximizes all of the above qualities.

### **Room Placement**

Because **Pegasus Reference Xtreme** is built in two stackable pieces, optimum room placement is much easier to obtain than with typical single piece heavier construction. Also, the use of ball bearing isolators reduces resonance and allows easier placement in the room.

### **Xtreme Crossover Module**

The Xtreme Crossover Module was developed for our statement loudspeaker, the new Grand Reference IV. It was found that this same technology yielded greatly improved performance for Pegasus so it has become the standard crossover module for the **Pegasus Reference Xtreme** as well. The module has been increased in size in order to accommodate the oversize ultra-premium passive components. Capacitors wound with silver and gold conductors and rated at an extreme 1200 volts are utilized. Solid copper foil inductors and silver mono-filament crossover wires are also standard. The net result of all the changes is a substantial improvement in sonic performance across the entire spectrum without sacrificing the musicality of the design.

## Viper Reference

*Open Baffle Series*

Nola's Viper line of open baffle speakers has been upgraded for improved performance and fit and finish. The **Viper Reference** replaces the Viper Signature and is six inches taller than other Viper models.

The **Viper Reference** utilizes the same twin cast-magnesium bass drivers as used in the **Nola Grand Reference** -- a speaker many regard as the finest available. The midrange is our latest cast-frame Alnico magnet 110mm transducer, originally developed for the **Pegasus**. Our proven twin Alnico magnet metal dome tweeter reproduces the high frequencies. This transducer provides a wealth of natural musical detail without "etch" or hardness. Both midrange and tweeter operate as open baffle dipoles for the most "open" sound.



The **Viper Reference** utilizes an external crossover unit with five pairs of solid copper binding posts for connection. Spade to spade jumpers of Nordost Valhalla monofilament wire connect the crossover to the speakers. The crossovers utilize only proprietary polypropylene capacitors and linear air-core inductors for maximum sound quality. For maximum performance of this advanced crossover system, we recommend the addition of our **IP-1 Isolation Platform** under the crossover unit. This uses a ball bearing suspension system to eliminate the deleterious colorations that crossover vibrations produce.

All Viper models now use high gloss, solid acrylic sub baffles to stiffen and damp the main front baffle. These not only look better but also further reduce coloration resulting in a more natural sound than that produced by all wood or all polymer enclosures. All drivers are now mounted with machine screws and threaded inserts in the cabinet. Wiring is now hidden and runs inside the front baffle.

The **Viper Reference** breaks new ground in providing a true reference grade loudspeaker with both a reasonable price and modest footprint.

## Viper IIA

*Open Baffle Series*

Nola's Viper line of open baffle speakers has been upgraded for improved performance and fit and finish. The **Viper IIA** is an upgraded version of the Viper II.

The **Viper IIA** uses two newly designed 220mm cast-frame bass drivers with aluminum cones. These bass drivers operate in perfect piston mode over their whole operating range. The first breakup mode is at 5000 Hz while in the system; the woofer is operated to only 500 Hz. This performance greatly reduces distortion and coloration throughout the full range. Each bass driver is mounted in a separate sealed chamber. Each chamber is a different size in order to provide an improved speed-bandwidth product and a smoother room LF response. The dual woofers provide improved room loading throughout the lower midrange and mid-bass with increased power handling. Both woofers are run in parallel for maximum amplifier control. These bass drivers are "trickle down" versions of the cast magnesium units used in the **Nola Grand Reference**.

All of the loudspeakers in the Viper series feature open baffle midrange and high frequency transducers that are deployed in a 45 degree mirror-imaged array (the same as the **Grand Reference**) to provide more realistic image sizes while retaining excellent image focus. The new midrange driver, originally developed for **Pegasus**, features a cast frame, tri-laminate 110mm cone driven by a premium Alnico magnet system for a natural reproduction of mid-band frequencies which cannot be duplicated when using conventional magnets.

The high frequency transducer is a 25mm magnesium / aluminum dipole dome driver. The dipole dome sounds much more natural as opposed to using a separate tweeter mounted in the rear. The dipole rear wave is coherent with the front wave since the same diaphragm generates it.



All Viper models feature removable front and rear grilles that allow the Viper the most open sound, completely free of obstructions for the midrange and tweeter.

All Viper models now use black high gloss, solid acrylic sub baffles to stiffen and further damp the main front baffle. Drivers are mounted with machine screws and threaded inserts in the cabinet.

## **Viper IA**

*Open Baffle Series*

The Nola Viper I has been upgraded to the **Viper IA**. The **Viper IA** now uses a "trickle down" version of the mid bass drivers used in the Grand Reference. These cast frame aluminum cone drivers, which are also used in the Viper IIA, allow piston behavior up to 5 kHz. In the **Viper IA** they are used only up to 500 Hz, ensuring very low coloration. The new midrange driver created for the **Viper IA** utilizes the same tri-laminate cone and cast frame as used in the Viper IIA but without the Alnico magnet. Upgraded crossover components provide improved performance.



Additional upgrades include a solid, high gloss, black acrylic sub baffle for improved front baffle damping and lower coloration. All drivers are mounted with machine screws and threaded inserts pressed into the baffle. The mid/high frequency wiring harness is now hidden and runs inside the front baffle. The net result of these upgrades is to provide significantly improved performance in addition to fit and finish.

Removable front and rear grilles allow the **Viper IA** the most open sound possible - completely free of obstructions for the mid range and tweeter.

## **LCR Reference**

*Home Theater Series*

The **LCR Reference** loudspeaker employs open baffle technology to eliminate box coloration from home theater reproduction, as well as provide a perfect match when



used as a center channel with other Nola open baffle main speakers. It also functions well with other brands of low-coloration main speakers when highest quality voice reproduction is required from the center. It can be used as left, center and right speakers or as surround speakers. For instance, a maximum quality home theater can be set up using **Viper II A** main speakers with an **LCR Reference** as center and a pair of **LCR Reference** loudspeakers as surrounds. The **T Bolt III** subwoofer would complete the system. Five **LCR Reference** loudspeakers and a **T Bolt III** subwoofer can also be used.

The **LCR Reference** utilizes four drivers in a 3-way system. Twin, sealed 6½-inch bass drivers flank a vertical array of a 110mm tri-laminate open baffle dipole midrange driver featuring a new Alnico magnet system, and a 1-inch aluminum alloy dipole dome tweeter (same as used in the **Viper II A**). The open baffle array of midrange and tweeter provides the spacious, coloration free, dynamic and alive sound that Nola speakers are known for worldwide. Wide, smooth, horizontal coverage is provided when used as a horizontal center channel. When a pair is used vertically, one can be turned upside down to produce a mirror-imaged pair with excellent focus.

## **T Bolt III**

*Home Theater Series*

The **T Bolt III** subwoofer uses the same bass driver technology found in our \$160,000 **Grand Reference System**. A blend of natural and synthetic fibers was formulated to create a woofer cone that is both extremely rigid, yet lighter in weight than Kevlar, aluminum, magnesium or titanium cones. A voice coil was developed to provide ultra long excursion while dramatically reducing distortion-producing back EMF. An extremely rigid cast frame, improved for the **T Bolt III**, was engineered to support the huge magnetic structure required to control this outstanding woofer.



Nola maintains the stringent rigidity required for the overall system by constructing a cabinet entirely of 1-inch thick MDF panels bonded with wood adhesive and completely clamped during the drying process. The cabinet has been improved for the **T Bolt III**. To further reinforce the design, Nola created a dual front baffle, "box-within-a-box" construction, which creates a completely sealed, exceptionally rigid cabinet. A front firing design, the **T Bolt III** can be placed in various locations — such as in a cabinet — without affecting performance.

The amplifier's output stage employs discrete components and runs in Class A/B mode to provide a level of performance only associated with the finest high-end amplifiers. To properly integrate with a wide range of loudspeakers, the **T Bolt III** features a continuously variable low pass crossover (40Hz to 160Hz) and a continuously variable phase control (0 to 180 degrees). A sensing circuit allows the subwoofer to be automatically powered on and off by the preamplifier or receiver.

The result is an innovative subwoofer that has both the high-speed attack of a small woofer and the enormous energy at low frequencies of very large woofers. The **T Bolt III** Subwoofer provides powerful and dynamic yet detailed bass reproduction to recreate reality at all sound levels — from very soft and delicate to very loud and powerful. This wide range dynamic contrast is lacking in other subwoofers, both large and small.

The **NolaWall** in-wall speaker allows correct matching of other Nola loudspeakers in multi-channel and home theater systems. Built to the same high-standard as Nola's other models, it features a true wood (MDF) thick baffle for the drivers to work against. While others may use a thin plastic baffle, Nola has utilized a thick MDF baffle for superior performance. Drive units are based upon 6½-inch bass/midrange and 1-inch silk soft dome tweeter developed for the **Mini** minimonitor.



No-compromise construction continues with hand-wired crossovers utilizing polypropylene capacitors and air-core inductors. No fuses or printed circuit boards are used to avoid signal degradation. Wiring is oxygen-free copper, and all connections are soldered.

The new **NolaWall** crossover utilizes the technology of the **Mini**, and a newly-developed tweeter provides higher resolution.

Performance is characterized by good bass response to 55 Hz, along with a dynamic and quick transient response to match other Nola loudspeakers. Easy mounting is via a separate steel frame. A paintable steel perforated grille in white is included.

The concept for the IP-1 Isolation Platform was born out of the research that went into developing the Nola Pegasus loudspeaker. In order to greatly reduce the deleterious effects of low frequency cabinet vibrations on the low-level resolution of the system, the cabinet was split into two parts stacked vertically and a ball bearing system was developed to isolate the cabinets. The micro movement of the balls absorbs vibrations and prevents these vibrations from modulating the upper section.



In order to provide the cleanest performance, our top models utilize an external crossover. This eliminates the sonic coloration due to vibrations from the drivers on the sensitive crossover circuitry. Carl Marchisotto has used this technique since 1992 with the introduction of Phalanx. It was then found that speakers generated a great deal of floor-born low frequency vibrations which would then couple back to the crossovers, and in a high-resolution system this also degraded the sound. In order to address this effect, the IP-1 was developed.



The IP-1 greatly reduces this effect and provides cleaner sound. It consists of two platforms that stack on top of each other and then are placed under the external crossover. The lower platform has inserts to accept the threaded spikes that come with the loudspeaker and these spikes contact the floor. One layer of ball bearings rides in a set of hardened steel tracks between the two platforms. Another set of ball bearings sits on top of the upper platform. The crossover box sits on top of the upper ball bearing set.

Improved soundstaging, better low level and high level dynamics and a greater purity of sound results from the use of the IP-1.

**Dimensions:** 9"W x 11½"D x 3¼" H (when sitting on the spikes)

**Finish:** Black Lacquer

**MSRP:** \$1800 per pair

## **Blue Thunder**

*Cable and Accessories*

Blue Thunder speaker cable is manufactured by Accent Speaker Technology to meet the demanding requirements of Nola loudspeakers. These cables are specially constructed to complement Nola's neutral sound, and are offered in either bi-wire or tri-wire sets.

To avoid sonic degradation due to dielectric losses, Blue Thunder employs an extremely thin layer of plastic insulation over the conductors. While thick cables with heavy plastic insulation may seem appealing, they do not provide the best sonic performance.

The low frequency and high frequency positive cables are loosely bundled in a monofilament covering, and the low frequency and high frequency negative cables are bundled in another monofilament covering. In this way, parasitic impedance between the positive and negative conductors is avoided, and the sonic coloration it causes is also avoided. The cable coverings are specially selected to avoid vibration, electric or magnetic interaction with the conductors.

The construction of the low range and the high range conductors is optimized for the frequencies each carries. The low frequency construction is coaxial, employing a solid core silver-plated oxygen-free copper center conductor. The high frequency construction is uniaxial and employs fine gauge silver-plated oxygen-free copper conductors in conjunction with fine gauge oxygen-free copper conductors.

Blue Thunder speaker cables are pre-terminated in heavy-duty gold-plated spade lugs for ease of application. They are also available terminated in Banana plugs. Effective gauge is 13 a.w.g. Jacket color is Royal Blue.

Blue Thunder cable is available in lengths from 6 feet. Price is proportional to the 10-foot length.

**MSRP:** Bi-wire, 10 feet: \$600 per set  
Tri-wire, 10 feet: \$825 per set



## **Thunderbass**

*Cable and Accessories*

After the **T Bolt III** subwoofer was developed, it was discovered that performance was compromised under certain conditions. The lack of bass extension and detail was eventually traced to the interconnect cable: it was found that many interconnect cables will compromise the bass quality of the **T Bolt III** subwoofer.



A special interconnect cable, Thunderbass, was developed and optimized for bass quality. When this cable is used, the **T Bolt III's** bass response improved significantly, and the main speakers sounded more transparent as well.

In addition, the qualities that make Thunderbass excellent for connecting to a subwoofer — focus, dimensionality, superior soundstaging and dynamics — are also in abundance when the cable is used full range. For this purpose, Thunderbass is also sold in pairs.

**Construction:** Gold plated, solid copper RCA connectors  
Reinforced, low-loss dielectric, double shielded

**Color:** Black

**MSRP:** Minimum of 5 feet  
5 – 10 feet: \$29.50 a foot.  
Additional lengths over 10 feet: add \$25 a foot over 10 feet.  
1 meter pair, \$195, \$50 per additional meter pair

<b>Model</b>	<b>Impedance</b>	<b>Response</b>	<b>Power</b>	<b>Dimensions</b>	<b>Finish</b>	<b>MSRP</b>
Grand Reference IV	8 nom. / 7 min. (main), 1 min. (subwoofer)	16Hz - 40Hz (subwoofer) 40Hz - 46kHz (main)	700W/ch max. (main) 1000W/ch max. (subwoofer)	12"W x 84"H x 16"D, 300 lbs. (main) 13"W x 84"H x 26"D, 300 lbs. (subwoofer)	Matched Select Santos Rosewood standard; optional Piano finish	\$140,000 system, standard finish \$160,000 system, Piano finish
Pegasus Reference Xtreme	8 nom. / 4 min.	20Hz - 25kHz	30W/ch min.	65" H x 9½" W x 25" D, 190 lbs.	Merlot Walnut wood or Light Ash wood. Other woods available.	\$55,000/pair
Viper IA	8 nom. / 6 min.	38Hz - 25kHz	10W/ch min.	40"H x 10"W x 15"D, 70 lbs.	Cherry Wood with black cloth Light Ash Wood with black cloth	\$4,000/pair
Viper IIA	8 nom. / 4 min.	35Hz - 25kHz	10W/ch min.	40"H x 10"W x 15"D, 75 lbs.	Cherry Wood with black cloth Light Ash Wood with black cloth	\$5,500/pair
Viper Reference	8 nom. / 4 min.	28Hz - 25kHz	10W/ch min.	40"H x 10"W x 15"D, 75 lbs.	Cherry Wood with black cloth	\$12,000/pair
LCR Reference	8 nom. / 4 min.	40Hz - 25kHz	30W/ch min.	25"H x 9"W x 11½"D, 45 lbs.	Cherry Wood or Black Ash Wood with black cloth	\$2,195 each
T Bolt III	N/A	20Hz - 160Hz	N/A	16"H x 16"W x 18"D (20"D w/ amplifier), 85 lbs.	Black Ash Wood or Cherry Wood with black cloth	\$1,795 each
NolaWall	8 nom. / 7 min.	55Hz - 20kHz	30W/ch min.	14"H x 10"W, 6 lbs.	Solid White	\$549/pair