NDLA



PRODUCT LINE 2013

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<u>About Nola</u>

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 \$1,500 bookshelf speakers to the \$278,000 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.

<u>Nola Technology</u>

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 trilaminate 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 lowfrequency 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 VI Gold

The Nola Grand Reference VI Gold represents maior a upgrade to our flagship loudspeaker system. All elements of the system that affect sound quality have been upgraded. Drivers now number 54 of the highest quality transducers for the system.

The true ribbon tweeters have been fitted with twice as powerful neodymium magnets, which double the acceleration of the diaphragm while further reducing the very low distortion. The special Alnico magnet midrange drivers have reduced mass and optimal phase plugs for faster response and lower distortion. The magnesium woofers have been redesigned for much greater speed and "openness" life-like sound. for The



subwoofer drivers have been improved with lower noise and distortion.

In addition, the external passive crossovers now use the newly developed **UnisonTM** technology so that one pair of mono amps or one stereo amplifier can drive all four towers. The subwoofer venting system and the wiring, which is now Nordost mono-filament silver, have all been redesigned for superior performance.

The system, consisting of eight pieces, comprises the following:

- Two Main Towers
- Two external passive crossover units
- Two passive Subwoofer Towers
- Two IP-1A ball bearing crossover isolation platforms

GRAND REFERENCE MAIN TOWER

The Nola Grand Reference VI Gold Main Towers employ a total of 23 of the highest quality transducers per channel. The Main Towers are built in mirrorimaged arrays for accurate imaging. Eight unique magnesium cone 4¹/₂ inch cast frame woofers per channel reproduce bass and mid-bass frequencies from 40 Hz to 400 Hz with unmatched speed and power. Four woofers are mounted at the top and four are mounted at the bottom of the Main Tower. The eight $4\frac{1}{2}$ inch woofers employ cast, surface-treated magnesium cones with natural rubber surrounds, GOLD-machined phase plugs and are driven by powerful ALNICO ring magnets for perfect harmonic structure and no overhang. Perfect piston response is maintained to a high 10 kHz, far beyond their 400 Hz operating ranges, for excellent impact and low coloration. The very low moving mass sets these drivers apart from typical woofers, and allows this range to be reproduced without delay or compression. The towers have four separate chambers with two woofers mounted in each chamber, and each chamber is loaded by an individual rearmounted double-flared port. There are a total of four rear-mounted ports per Main Tower. Cabinet walls are bonded with proprietary damping layers for inaudible coloration.

This low frequency section of the Grand Reference VI Gold reduces the moving mass to only 27% of that of previous versions. The effect of this reduction in mass is a quantum improvement in providing a life-like bass attack and "open" vocals.

The all-important midrange system consists of six 110mm tri-laminate cast frame transducers per tower, operating on an open baffle dipole array over the range of 400 Hz to 3500 Hz and driven by premium Alnico magnet systems. The six 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 midrange coloration. Harmonic structure is especially accurate, while the special transient response of this driver (as has been commented on before) 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 true 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 as well as extreme peak levels. Nine small ribbons are utilized in lieu of one large ribbon in order to take advantage of the superior control of the smaller diaphragm, for greater accuracy.

GRAND REFERENCE SUBWOOFER TOWER

The **Nola Grand Reference VI Gold** Subwoofer Towers are designed to complement the response of the Main Towers from 12 Hz to 40 Hz. The crossover to the Main Towers is handled by the new **UnisonTM** passive crossover for a major leap forward in coherency. 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 interdriver 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 seven pound magnets for each driver provide greater than $1\frac{1}{4}$ inch peak to peak linear excursions. Output at 20 Hz with both towers driven is greater than 120 dB. Proprietary damping material is applied to the cabinet walls to further reduce coloration. The effect of the Subwoofer Towers is to add "space" and dimensionality such that the listener is transported to the venue where the event was recorded.

<u>Concert Grand Reference Gold</u>

The Nola Concert Grand **Reference Gold** loudspeaker is our ultimate two tower loudspeaker system. Its performance is only exceeded by the Nola four tower Grand Reference VI system. The Concert Grand Reference Gold is an open baffle short line source employing design twelve state of the art transducers per tower. The system is configured in mirror imaged pairs.

Two 12 inch subwoofers, in separate ported chambers, cover sub-bass range to below 18 Hz. These drivers are fast as well as powerful



and sound nothing like "typical" subwoofers.

Four magnesium cone, $4\frac{1}{2}$ " woofers in the upper ported chamber cover the mid-bass range with very high speed and no overhang. These drivers have only slightly heavier moving mass than our midrange driver and are four times lighter than typical mid-bass drivers, while providing four times the acceleration. Operating as perfect pistons over their whole range to 400Hz, with the first breakup mode far out of range at 10 kHz, they allow extreme clarity, devoid of delay in this critical region that can only be compared to the sound of "live music."

The four 4½" midrange drivers are operated in a line source, open dipole array. They utilize state of the art, hand built construction, including premium Alnico magnet systems and ultra light tri-laminate cones.

The tweeter is a unique design for us from Raven and is a single 12" long pure ribbon driver. This design allows ribbon operation from 1 kHz up and employs an MMX alloy that is six times stiffer than aluminum. This alloy allows the 12" ribbon to have low distortion without the bending and twisting distortions common with conventional long ribbons or the added coloration of planar magnetic drivers. Dispersion above 10 kHz is aided by employing a second smaller true ribbon super tweeter, for seamless blending of the extreme high frequencies out to 100 kHz.

The **Nola Concert Grand Reference Gold** employs the unique 5-way **UnisonTM** crossover technology, implemented on six separate boards, to allow one pair of amplifiers or one stereo amplifier to drive the system. The system is supplied with a dedicated ball bearing double platform isolation base and premium spikes.

Baby Grand Reference Gold

The NOLA Baby Grand Gold Reference employs technology recently developed for the Grand Reference VI and the Concert Grand **Reference**. These include the development of new 220 mm magnesium bass transducers which now incorporate massive Alnico ring magnets for even lower distortion and improved clarity over the whole range. These new bass drivers also incorporate solid copper phase plugs that are now gold plated. The gold plating is not for cosmetic reasons but instead is used because the soft gold layer damps the copper plug to eliminate anv vestige of coloration from these drivers.



Bass is tighter with improved definition.

We have also developed a new true ribbon tweeter. The new ribbon driver extends high frequency response to 100 kHz. This extended bandwidth provides an increased sense of "reality" over the whole range including the bass. Highs are "airier" and more transparent with an increase in spatial resolution and "depth."

The **Baby Grand Reference Gold** is a two-tower system utilizing four magnesium Alnico woofers, eight open baffle dipole Alnico midrange drivers and eight extended response true ribbon tweeters. This open baffle design operates as a short line source for life-like image size, even in a large room. Enclosure coloration in the critical mid- and high-frequency range is nonexistent – something that cannot be achieved with any kind of box loudspeaker.

The $3\frac{1}{2}$ way **UnisonTM** crossover utilizes state of the art silver/gold/oil polypropylene capacitors, hand wired on three crossover boards mounted internally.

The loudspeaker includes a twin platform ball bearing isolation base with premium spikes to provide isolation from floor transmitted vibrations for the crossover boards as well as the loudspeakers.

<u>Metro Grand Reference Gold</u>

The NOLA Metro Grand Reference Gold is a compact floor standing loudspeaker that provides state of the art sound quality in small to medium rooms. The Metro Grand Reference Gold uses only one square foot of floor space. Technology developed for the Grand Reference VI and the Concert Grand Reference have been "trickled down" to provide performance that is the cutting edge for what can be achieved in this size platform.

The 160 mm magnesium gold bass drivers utilize massive Alnico ring magnets for increased clarity and definition and even lower distortion. The solid copper phase plugs are gold plated to provide damping by the soft

eference have been " to provide is the cutting edge achieved in this size genesium gold bass nassive Alnico ring reased clarity and en lower distortion. bhase plugs are gold

gold layer over the solid copper. This concept eliminates any last vestige of coloration from these drivers. Bass is tighter with improved definition.

We have also developed a new true ribbon tweeter. This new driver extends the high frequency response to 100 kHz. This extended bandwidth provides an increased sense of "reality" over the whole range including the bass.

The lack of any enclosure in the midrange or high frequency range eliminates any possible enclosure coloration in this critical region – something that cannot be achieved with any kind of box loudspeaker.

Newly developed polypropylene/silver/gold/oil capacitors provide increased resolution for the $3\frac{1}{2}$ way **UnisonTM** hand wired crossover. The crossover is implemented on three separate crossover boards, internally mounted. Flat copper ribbon coils and Nordost Mono-Filament Silver wire is used throughout.

The **Metro Grand Reference Gold** utilizes a double platform ball bearing isolation base to further reduce floor-borne vibrations which tend to "muddy" the sound.

The **Metro Grand Reference Series III** is ideal when the expansive musical sound of the **Baby Grand Reference Gold** is desired -- but in a smaller room.

Micro Grand Reference Gold

The NOLA Micro Grand Reference Gold is a stand mounted loudspeaker that utilizes the same driver and crossover technology as other Reference Gold models such as the Baby Grand **Reference Gold.** Unlike most stand mounted speakers, the Micro Grand Reference Gold utilizes our 3½ way Unison[™] crossover, four driver technology -- basically a reduced size version of our statement floor standers. The driver array utilizes our 45 degree, mirrorimaged concept for midrange and tweeter. The twin 120mm gold magnesium cone woofers are now driven by massive Alnico ring magnets for increased definition, clarity and even lower distortion. The solid copper phase plugs are gold plated to provide damping by the soft gold layer over the solid copper. This concept eliminates any last vestige of coloration from these drivers. Bass is tighter with more impact. The 110 mm



tri-laminate dipole midrange also uses an Alnico magnet for the lowest possible distortion.

The new true ribbon tweeter is also incorporated which extends response to 100 kHz. This extended bandwidth provides an increased sense of "reality" over the whole range including the bass.

The lack of any enclosure in the midrange or high frequency range eliminates any possible enclosure coloration in this critical region -- something that cannot be achieved with any kind of box speaker.

Latest developments in passive components allow the incorporation of silver / gold / oil polypropylene capacitors to complement the pure copper flat ribbon air core inductors in the crossover. Nordost silver mono-filament wire is used throughout.

The **Micro Grand Reference Gold** utilizes a built-in double platform base with custom ball bearing isolators to further reduce coloration due to floor borne vibration. The bases are finished in true piano black.

Metro Grand Reference Series III Reference Standard Collection

The NOLA Metro Grand Reference Series III a compact floor standing loudspeaker that provides state of the art sound quality in small to medium rooms. The Metro Grand Reference Series III uses only one square foot of floor space. Technology developed for the Grand Reference VI and the Concert Grand Reference have been "trickled down" to provide performance that is the cutting edge for what can be achieved in this size platform.

Twin 160 mm magnesium cone woofers are low mass designs and combine high speed, deep bass and very low distortion. Each woofer is housed in a separate chamber and is separately tuned with its own port.



Bass is tighter with improved definition. The open baffle midrange driver is a very low mass design and is driven by a premium Alnico magnet system for the lowest distortion and elimination of box coloration over the critical midrange frequencies.

We have also developed a new true ribbon tweeter. This new driver extends the high frequency response to 100 kHz. This extended bandwidth provides an increased sense of "reality" over the whole range including the bass.

The lack of any enclosure in the midrange or high frequency range eliminates any possible enclosure coloration in this critical region -- something that cannot be achieved with any kind of box loudspeaker. Newly developed polypropylene/oil capacitors provide increased resolution for the $3\frac{1}{2}$ way **UnisonTM** hand wired crossover. The crossover is implemented on three separate crossover boards, internally mounted. Flat copper ribbon coils and Nordost Mono-Filament Silver wire is used throughout.

The Metro Grand Reference Series III utilizes a double platform ball bearing isolation base to further reduce floor-borne vibrations which tend to "muddy" the sound

The Metro Grand Reference Series III is ideal when the expansive musical sound of the **Baby Grand Reference** is desired -- but in a smaller room.

Micro Grand Reference Series II Reference Standard Collection

The Nola Micro Grand Reference Series II is a stand-mounted loudspeaker that utilizes the same driver technology and concept as the floor standing Baby Grand Reference and Metro Grand Reference loudspeakers. Driver complement consists of two magnesium woofers, one Alnico magnet open baffle midrange, and one open baffle true ribbon tweeter in a $3\frac{1}{2}$ way UnisonTM Unison™ crossover design. The crossover topology, new with the Series II, provides an even coherent, immediate, and more dynamic response from the drivers. Uncharacteristically, the increase in resolution is accompanied by an even more musical presentation. The driver array utilizes our 45-degree mirror-imaged concept for midrange and tweeter. The twin 120mm castframe magnesium woofers operate in an optimum rear vented enclosure. The vent is an oversized, double-flared design that eliminates



port noise. The 110mm cast-frame tri-laminate cone midrange uses an Alnico magnet and operates as an open baffle dipole to eliminate enclosure coloration. The open baffle true ribbon tweeter eliminates any kind of diaphragm, as the ribbon is the diaphragm. The moving mass of this design is about 25 times less than any known dome tweeter. The result is effortless detail without hardness. The lack of enclosure in the middle and high frequencies eliminates a large source of coloration.

The 3½ way **Unison[™]** crossover is implemented on three internal crossover boards for maximum quality. It employs only top quality audiophile grade components throughout, including 630-volt close tolerance polypropylene capacitors and flat wound pure copper coils. Wiring is with Nordost monofilament silver wire. The crossover boards are hard wired (no printed circuits) for maximum quality.

The Micro Grand Reference Series II utilizes a built-in double platform base with custom ball bearing isolators to further reduce coloration due to floor-borne vibration. The bases are finished in true piano black finish. The Micro Grand Reference Series II brings stand mounted speaker performance to a new level. A dedicated stand is available which provides optimum sound quality.

Reference Center Channel Series II Reference Standard Collection



The **Nola Reference Center Channel Series II** loudspeaker employs open baffle technology to eliminate box coloration from home theater reproduction and to provide a perfect match to other Nola Reference models such as Baby Grand Reference, Metro Grand Reference and Micro Grand Reference. It matches our other Reference models both in concept and in quality. Four state of the art transducers are utilized in this 3-way system with a vertically employed array for the open baffle midrange and ribbon tweeter, flanked by two horizontally deployed woofers. This array provides wide horizontal dispersion.

New to the **Reference Center Channel Series II** is the use of the recently developed $Unison^{TM}$ crossover design. This crossover design provides increased clarity, dynamic response and immediacy.

The bass drivers are 180mm diameter cast frame units with magnesium cones operating in twin sealed enclosures. Ultra-low distortion motor systems allow for clean, tight, deep bass to 35 Hz. The midrange is handled by our premium custom Alnico magnet driver operating in open baffle dipole mode as in our other Reference models. The high frequency driver is the custom Nola version of the Raven true ribbon tweeter. This transducer has 25 times less mass than any known dome tweeter for unsurpassed resolution without hardness. Fatigue-free long time listening (as with a movie) is a given. The ultimate in "live", open, and spacious reproduction is provided.

The **Nola KO** loudspeaker is the top model in the Boxer Collection. While it incorporates the easy to drive characteristics of other Boxer Collection models, it also incorporates state of the art concepts used in our top Reference Series products at a much more affordable price.

Utilizing our mirror-imaged short line source open baffle array, the **Nola KO** provides the "open", spacious, and transparent sound that sets Nola apart. The **Nola KO** can fill medium to large rooms with ease, while providing very high sound quality.

The **Nola KO** utilizes four high-speed, low-mass $4\frac{1}{2}$ " midrange drivers operating as dipoles to eliminate box coloration. The high frequency



section employs four exotic 1" silk dome tweeters that provide excellent detail, wide effortless dynamics and luxurious smoothness. The low frequency section utilizes two 7" cast frame metal cone bass drivers, each operating in separate ported chambers. These bass drivers operate as perfect pistons over their whole range for dynamic, fast, and tuneful bass. True phase plugs, long throw high power voice coils, and sophisticated, heavy magnet structures are also utilized. A 90 dB sensitivity at 2.8 volts and an average 8 ohm impedance allow the **Nola KO** to be driven by a wide range of amplifiers, both solid state and vacuum tube. New **UnisonTM** crossover technology provides improved amplifier utilization for higher effective efficiency, as well as superb "single driver coherency."

The **Nola KO is** provided in either a true piano cherry or a true piano black finish. Four removable grilles (front, sides, and rear), premium spikes and piano black bases are also provided.

The Nola Contender is a slim floor-standing tower loudspeaker that is the step up from the very popular Nola Boxer bookshelf. Compared to the Boxer, the Contender offers sonic improvements in the areas of depth reproduction, dynamic range, low level resolution and bass extension. The low frequency response has been extended to а conservative 35 Hz with usable response to 25 Hz. The bass quality of the Contender. however. maintains the quick and nimble characteristic of the Boxer.

The driver complement consists of two low mass



 $6\frac{1}{2}$ inch bass drivers and one high resolution silk soft dome tweeter in a vertical array. Each bass driver is housed in a separate chamber and is individually ported. This technique, while costly, eliminates driver interference and provides increased clarity. The upper driver is ported to the rear, while the lower driver is loaded by a downward firing port. The chambers are tuned to different frequencies to provide the smoothest and most extended inroom bass response.

The **Contender** is a true 3-way system with the benefit of increased midrange clarity, yet it maintains the coherency of a good 2-way. We feel this approach, while more costly, is superior to a $2\frac{1}{2}$ -way design where both the bass and bass/midrange drivers have to cope with deep bass reproduction.

The **Contender** maintains the smooth 8-ohm impedance characteristic and high 90dB sensitivity of the **Boxer** so that use with amplifiers of 30 watts or more is feasible. The **Contender** footprint is the same as the **Boxer**.

<u>Boxer</u>

The **Boxer** is a 2-way standmounted monitor built to Nola standards throughout. It incorporates a low-mass 6¹/₂-inch bass/midrange driver with а laminated pulp cone for low coloration and high speed. The high frequency driver is a highresolution silk dome tweeter with smooth extended response. In a diffraction ring addition. is utilized. The bass driver is loaded by a rear firing twin-flared port for



low distortion and noise. Although the main priority here is the best possible mid-range quality (as in all Nola speakers), the bass response has been extended to 44 Hz in order to provide a full range sound. Rear connection is by a pair of high quality all metal gold-plated 5-way binding posts. These connectors are fixed directly to the cabinet, thereby omitting the sonically deleterious effects of plastic connection plates often used.

The all-important crossover is a shallow slope design with excellent phase characteristics. The construction employs only point-to-point hand wiring of very high quality components. Capacitors are 630-volt high purity polypropylene types and only air core inductors are used. Resistors are close tolerance 2% metal types.

Wiring is proprietary low-loss oxygen-free copper. The crossover also incorporates a shock-isolation system in order to minimize the effects of vibration for a cleaner sound. The 90dB sensitivity combined with an 8-ohm impedance makes the **Boxer** easy to drive.

The net result is a wide range dynamic transducer that is accurate but is also truthful to the music. The sound stage is very large and "open", yet has excellent focus. The low distortion provided by the **Boxer** means that long listening sessions are possible without fatigue.

Announcer

The Nola Announcer is a high performance center channel loudspeaker that perfectly matches the Nola Contender and the Nola Boxer for multi-channel and home theater applications.

The **Announcer** employs two $6\frac{1}{2}$ inch bass / mid-range



drivers and one high resolution silk dome tweeter. These are the same high quality drive units that are used in **Contender** and **Boxer**. The bass / midrange drivers are housed in a sealed cabinet for ease of installation and excellent dialogue intelligibility in real-world applications. The **Announcer** is fully shielded to prevent video interference when placed close to video displays. Special techniques are employed in order to allow installation above or below the video display.

The high 93dB sensitivity and smooth impedance allow ease of interfacing with "real world" electronic systems.

IP-1 Isolation Platform

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.

Blue Thunder

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 biwire 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.

Grand Reference VI Gold

Impedance:	8 nom. / 4 min. (main), 4 nom. / 1 min.(subwoofer)
Frequency Response:	40Hz - 100kHz (main), 12Hz - 40Hz (subwoofer)
Power:	1100W/ch max. (main), 1000W/ch max. (subwoofer)
Dimensions:	12"W x 84"H x 16"D, 300 lbs. (main),
	13"W x 84"H x 26"D, 400 lbs. (subwoofer)
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Concert Grand Reference Gold

Impedance:	8 nom. / 4 min.
Frequency Response:	18Hz - 100kHz
Dimensions:	71"H x 15"W x 22"D (overall including bases); 275 lbs. net/side
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Baby Grand Reference Gold

Impedance:	8 nom. / 4 min.
Frequency Response:	20Hz - 100kHz
Dimensions:	62"H x 12"W x 16"D (overall with bases); 18"W x 22"D (bases);
	200 lbs. net/side
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Metro Grand Reference Gold

Impedance:	8 nom. / 4 min.
Frequency Response:	25Hz - 100kHz
Dimensions:	45"H x 111/2"W x 131/2"D (overall including bases and spikes);
	45"H x 9½"W x 13½"D (cabinet); 95 lbs. net
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Micro Grand Reference Gold

Impedance:	8 nom. / 4 min.
Frequency Response:	38Hz - 46kHz
Dimensions:	24"H x 9.5"W x 9.5"D (speakers); 2"H x 11.5"W x 11.5"D
	(bases); 35 lbs. net/side
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Metro Grand Reference Series III

Impedance:	8 nom. / 4 min.
Frequency Response:	25Hz - 100kHz
Dimensions:	45"H x 111/2"W x 131/2"D (overall including bases and spikes);
	45"H x 9½"W x 13½"D (cabinet); 85 lbs. net
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Micro Grand Reference Series II

Impedance:	8 nom. / 4 min.
Frequency Response:	38Hz - 46kHz
Dimensions:	24"H x 9.5"W x 9.5"D (speakers); 2"H x 11.5"W x 11.5"D
	(bases); 35 lbs. net/side
Finish:	True Piano Rosewood with True Piano Black bases is standard.
	Piano Black and other finishes available by special order.

Reference Center Channel Series II

Impedance:	8 nom. / 4 min.
Frequency Response:	35Hz - 46kHz
Dimensions:	48"H x 10"W x 15"D, 110 lbs. net/side
Finish:	True Piano Rosewood is standard. Piano Black and other finishes available by special order.

KO

Impedance:	8 nom. / 4 min.
Frequency Response:	30Hz - 28kHz
Dimensions:	48"H x 10"W x 15"D, 110 lbs. net/side
Finish:	True Piano Cherry high gloss or True Piano Black high gloss

Contender

Impedance:	8 nom.
Frequency Response:	35Hz - 28kHz
Power:	30W/ch min.
Dimensions:	44"H x 8"W x 12"D, 50 lbs.
Finish:	True Piano Cherry high gloss or True Piano Black high gloss

Boxer

Impedance:	8 nom.
Frequency Response:	44Hz – 28kHz
Power:	30W/ch min.
Dimensions:	15½"H x 8"W x 11½"D
Finish:	True Piano Finish Cherry Wood or True Piano Black/Black Cloth
	Grill

Announcer

Impedance:	8 nom.
Frequency Response:	55Hz - 28kHz
Dimensions:	8"H x 19"W x 12"D, 30 lbs.
Finish:	True Piano Cherry high gloss or True Piano Black high gloss
IP1 Isolation Platform	

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