



NHT loudspeaker systems are

designed to deliver refined, musical
sound from attractive and affordable
packages. Our efforts are guided by

the study of human hearing and
are optimized for real-world use
combining state-of-the-art engineering
and sensible design.

### Cabinet Technology

Angled shaped cabinets, while making technical sense, pose significant problems in manufacturing. NHT has developed proprietary milling techniques that allow us to manufacture enclosures employing quality materials, yet at a great value. All speakers are constructed with MDF (Medium Density Fiberboard) and laminated internally and externally. This provides structural integrity, durability and aides sonic performance.



# Focused Image Geometry

NHT's trademark, Focused Image Geometry, determines the exact angles which define our cabinets and the sound radiation of the loud-speaker system. This proprietary technology offers four key sonic benefits over more traditional designs:

Time Intensity Balance: Time-intensity trading is provided by crossing the radiating axis of the left and right speakers, and carefully controlling their radiation patterns. This stabilizes stereo image float for a wider range of listening positions.

Directed Radiation: By directing sound into the listening area and away from room boundaries, and by controlling off-axis radiation, Focused Image Geometry reduces the audible effect of the listening room to provide increased accuracy. This also allows excellent results in less than optimal placement situations.

Internal Wave Loss: Non-parallel surfaces reduce the formation of internal standing waves which improves midrange smoothness and clarity. The woofer's rear wave must pass through a great deal of absorbent material, and cannot exit back through the woofer cone, reducing midrange "combing" and improving transient response.

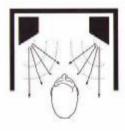
Minimum I.A.C.C.: Reducing the Inter-Aural Cross-Correlation of a stereo signal improves imaging and soundstage presentation. By adjusting the vector azimuth angle from which the speaker signal arrives at the listener's head, the imaging is precisely localized, creating a 3-dimensional soundstage that extends well beyond the speaker boundaries.

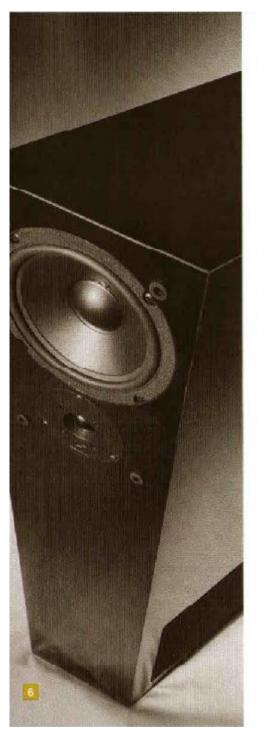
## Driver Design

All NHT drivers are designed using proprietary computer-aided technology. The response characteristics and radiation patterns are designed into the driver, reducing the reltance on complex crossover networks. This assures that over time, the product you buy will perform at the same level as the original design.

## Quality Assurance

Each NHT loudspeaker undergoes a battery of computerized and human listening tests prior to shipping. This extra care in the manufacturing process ensures that the response of the system compares accurately to its tonal standard retained in our design laboratory.





## Model 2.5

The NHT Model 2.5 tower loudspeaker represents a unique approach to 3-way design. By integrating the components and design principles of NHT's critically acclaimed bookshelf speakers with a built-in subwoofer, the elegant 2.5 delivers the clarity and precision of the finest 2-way designs along with the dynamic range of much larger loudspeaker systems.

Inside the Model 2.5 cabinet are two chambers. The midrange and high frequency drivers are housed in a separate sealed enclosure, incorporating the components used in our renowned 1.3A bookshelf speaker. Borrowing technology employed in our flagship Model 3.3, an 8" long-throw subwoofer is mounted on the side of the cabinet for more consistent bass loading. The upper drivers are located on a minimum baffle to precisely control radiation patterns and to minimize diffraction. Capable of resolving subtle musical detail, the model 2.5 delivers tonal neutrality and precise imaging combined with extended bass response and power handling.



NHT and The San Francisco Symphony
NHI products such as SuperZeros and
the 3.3's, are used in some of the finest
recording studios and symphony balls.





Model 2.5

### Model 1.3A

The critically acclaimed Model 1.3A is NHT's premium bookshelf loudspeaker. Designed for the discriminating listener, the 1.3A offers a spacious, three-dimensional soundstage and unsurpassed musicality, as well as deep, rich bass seldom associated with compact systems.

The 1.3A employs the finest quality components, manufactured to exacting standards. The result is a system that achieves a level of performance matched only by the most expensive 2-way designs, bringing recordings to life with breathtaking vividness, detail and natural acoustic ambiance.

#### Model 1.1

Renowned for its musical performance, the Model 1.1 is also designed for flexibility. Employing NHT's Focused Image Geometry, the 1.1 reproduces music as the artist intended; providing a live sound, with accurate localization and proper separation of instruments and vocals.

The compact, angled cabinet lends itself to a wide variety of placement options and still delivers great stereo sound to a broad listening area. In addition, the Model 1.1 is magnetically shielded making it an ideal foundation for a home theater sound system.

## SuperZero

The award-winning SuperZero brings a new level of sophistication to miniature loudspeaker performance. Using advanced computer-aided design techniques, the SuperZero delivers astonishing clarity and a remarkable spaciousnes which belie its size and price.

An ideal choice for those with limited space, the SuperZero can be combined with NHT's SWIP powered subwoofer for a full-range system. Magnetically shielded, the SuperZero is wellsuited for smaller home theater systems providing a sonically-balanced soundfield and excellent dynamic range.



Model 1.3A



Model I.1



SuperZero



**NHT Speaker Stands** 

### Model 3.3

- Cabinel construction: 1" medium density fiber board; internally braced in 4 locations, separate enclosure
- Components: Drivers and crossover are sorted and computer-matched to within 0.3dB.
   Mirror image speaker pairs are then sonically matched to within 0.3dB. A permanent record for each loudspeaker is kept on file at NHT.
- Woofer: 12" polymer cone in 70 liter acoustic suspension enclosure; 12dB/octave LP @ 100Hz
- Mid-Bass: 6.5" polymer cone in 10 liter acoustic suspension enclosure; 12dB/octave
   HP @ 100Hz, 12dB/octave LP @ 320Hz
- Upper-Mid: 4" polymer cone in 3 liter antimodal enclosure; 12dB/octave HP @ 320Hz, 18dB/octave LP @ 3.5KHz; impedance compensation
- Tweeter: 1" fluid-damped, aluminum dome; 18dB/octave HP @ 3.5KHz, impedance compensation
- Crossover: Top quality, 2% tolerance lowdistortion components; minimal topology, soldered internal wiring; 2 terminal, bi-ampable with passive network remaining in-circuit
- System type: 4-way optimal radiation loudspeaker, acoustic suspension design
- In-room response: 1 meter; 23Hz to 26KHz, +/-2dB, typical; In-room low frequency cut off; 22Hz @-3dB
- Sensitivity: 87dB SPL @ 2.83V/M
- Impedance: 6 ohm nom., 4.3 ohm min.
- Recommended amplifier power: 30W to 300W per channel; 1000W peak input
- Dimensions: 42"H x 7"W x 31"D
- · Weight: 123 lbs. each
- Finish: Black high pressure laminate

### Model 2.5

- . Description: 3-way, vented design
- Drivers: 8" long-throw subwoofer, 6.5" polypropylene midrange, and 1" soft-dome, fluid-cooled tweeter
- Crossover: 3 1KHz, 12dB/octave with damping compensation; 80Hz, hybrid 6-12dB/octave
- Response: 30Hz 25KHz +/-3dB
- . Sensitivity: 86dB @ 2.83V/M
- Impedance: 6 ohms nom., 3.4 ohms min.
- . Power: 35w/ch min., 200w/ch max.
- \*Dimensions: 38"H x 7"W x 15.5"D
- · Weight: 45 lbs, each
- · Finish: High gloss black laminate

## Model 1.3A

- · Description: 2-way, acoustic suspension design
- Drivers: 6.5" woofer and 1" soft-dome, fluid-cooled tweeter
- Grassover: 3.1KHz, 12dB/octave with damping compensation
- Response: 53Hz 25KHz +/-3dB
- Sensitivity: 86dB @ 2.83V/M
- impedance: 8 ohms nom., 5.2 ohms min.
- . Power: 20w/ch min., 150w/ch max.
- . Dimensions: 16.5°H x 7°W x 10°D
- · Weight: 15 lbs. each
- Finish: High gloss black laminate

### Model 1.1

- · Description: 2-way, acoustic suspension design
- Drivers: 6.5" woofer and 1" soft-dome, fluid-cooled tweeter, video shielded drivers
- Crossover: 3.2KHz, 6dB/octave
- Response: 63Hz 25KHz +/-3dB
- . Sensitivity: 88dB @ 2.83V/M
- Impedance: 8 ohms nom., 5.6 ohms min.
- . Power: 15w/ch min., 150w/ch max.
- \*Dimensions: 12"H x 7"W x 10"D
- · Weight: 12 lbs. each
- Finish: High gloss black or white laminate and real oakwood veneer

### SuperZero

- Description: 2-way, acoustic suspension design
- Drivers: 4.5" woofer and 1" soft-dome, fluid-cooled tweeter, video shielded drivers
- . Grossover: 2.2KHz, 6-12dB/octave
- Response: 85Hz 25KHz +/-3dB
- Sensitivity; 86dB @ 2.83V/M
- •Impedance: 8 ohms nom., 7.5 ohms min.
- . Power: 15w/ch min., 100w/ch max.
- \*Dimensions: 9"H x 5.5"W x 5"D
- Weight: 5.5 lbs each
- Finish: High gloss black or white laminate and real oakwood veneer

#### 1.1 iw

- Description: 2-way, in-wall design.
- Drivers: 6.5" woofer and 1" soft-dome, fluid-cooled tweeter
- Crossover: 2.8KHz, 6-12dB/octave with damping compensation
- Response: 55Hz 20KHz +/-3dB
- Sensitivity: 88dB @ 2.83V/M
- •Impedance: 8 ohms nom., 5.5 ohms min.
- . Power: 10w/ch min., 100w/ch max.
- Dimensions: 12.25"H x 8.5"W



- . Description: 3-way, vented design
- Drivers: 10" long-throw subwoofer, 2-5.25" midrange, and 1" soft-dome, fluid-cooled tweeter, video shielded drivers (upper portion only)
- Grossover: Video mode: 12dB/octave HP/LP @ 125Hz, 6dB/octave HP/LP @ 5.5KHz
   Audio mode: 12dB/octave HP/LP @ 125Hz, 12dB/octave HP/LP @ 2.3KHz
- Response: 25Hz 21KHz +/-3dB
- . Sensitivity: 88dB @ 2.83V/M
- Impedance: 6 ohms nom., 4 ohms min.
- . Power: 50w/ch min., 250w/ch max.
- •Dimensions: 48"H x 7.75"W x 18"D
- · Weight: 66 lbs. each
- . Finish: High gloss black laminate

### VS-2

- Description: 2-way, acoustic suspension design
- Drivers: 2-5.25" woofers and 1" soft-dome, fluid-cooled tweeter, video shielded drivers
- . Crossover: 2.3KHz, 12dB/octave
- Response: 75Hz 21KHz +/-3dB
- . Sensitivity: 88dB @ 2.83V/M
- impedance: 8 ohms nom., 5.6 ohms min.
- . Power: 20w/ch min., 150w/ch max.
- Dimensions: 7.75"H x 19"W x 8"D
- · Weight: 17 lbs. each.
- Finish: High gloss black laminate

#### SW3P

- Description: 2-piece, 250W mono amplifier, sealed design 12", high-excursion, polypropylene woofer
- Crossover: LP continuously variable between 35Hz-150Hz, 18dB/octave, HP selectable @ 65, 80, 100, 125, and 150Hz, 12dB/octave
- Response: 23Hz selectable, +/-3dB
- Dimensions: 19"H x 19"W x 19"D
- · Weight: 100 lbs. system
- . Finish: High gloss black laminate

## VT-1A

- . Description: 2-way satellite towers
- Drivers: 2-4.5" woofers and 1" soft-dome, fluid-cooled tweeter, video shielded drivers
- · Crossover:
  - Video mode: 12dB/octave LP/HP @ 2.8KHz Audio mode: 12dB/octave LP @ 110Hz, 12dB/octave LP/HP @ 3KHz
- Response: 65Hz 21KHz +/-3dB
- . Sensitivity: 90dB @ 2.83V/M
- •Impedance: 8 ohms nom., 5 ohms min.
- . Power: 15w/ch min., 150w/ch max.
- Dimensions: 40"H x 5.5"W x 5.5"D
- · Weight: 24 lbs. each
- · Finish: High gloss black or white laminate

### VT-IC

- . Description: 2-way, acoustic suspension design
- Drivers: 2-4.5" woofers and 1" soft-dome, fluid-cooled tweeter; video shielded drivers
- Crossover: 2.8KHz, 12dB/octave
- Response: 95Hz 21KHz +/-3dB
- . Sensitivity: 90dB @ 2.83V/M
- Impedance: 8 ohms nom., 5 ohms min.
- Power: 15w/ch min., 120w/ch max.
  Dimensions: 5.5"H x 22"W x 9"D
- · Weight: 16 lbs. each
- . Finish: High gloss black or white laminate

### 1.1C

- Description: 2-way, acoustic suspension, center channel
- Drivers: 6.5" woofer and 1"soft-dome, fluid-cooled tweeter, video shielded drivers
- . Crossover: 3.2KHz. 6dB/octave
- Response: 63Hz 25KHz +/-3dB
- . Sensitivity: 88dB @ 2.83V/M
- · Impedance: 8 ohms nom., 5.6 ohms min.
- . Power: 15w/ch min., 150w/ch max.
- Dimensions: 12"H x 7"W x 8"D
- · Weight: 12 lbs. each
- . Finish: High gloss black or white laminate

# HDP-1

- Description: 2-way, hybrid di-pole, surround channel
- Drivers: 4.5" woofer and 2-3" mid-tweeters
- . Crossover: 400Hz, 6dB/octave
- Response: 105Hz 10KHz +/-3dB
- . Sensitivity: 86dB @ 2.83V/M
- •Impedance: 8 ohms nom., 4.4 ohms min.
- . Power: 10w/ch min., 100w/ch max.
- Dimensions: 9.25"H x 5.75"W x 5.75"D
- · Weight: 7 lbs. each
- Finish: High gloss black or white laminate

### EVV/21

- Description: 2-piece, 80W mono amplifier, vented design 10", high-excursion, polypropylene woofer, LP continuously variable between 35Hz-150Hz.12dB/octave, High and low level inputs, high level outputs
- Response: 25Hz selectable, +/-3dB
- Dimensions: 16"H x 16"W x 16"D
- Weight: 62 lbs. system
- Finish: High gloss black or white laminate and real oakwood veneer

#### SW1P

- Discription: 2-piece, 60W mono amplifier, vented design 8", high-excursion woofer, LP continuously variable between 50Hz-200Hz, 12dB/octave, high and low level inputs, high level outputs
- Response: 35Hz selectable, +/-3dB
- Dimensions: 11.75"H x 16"W x 11.75"D
- · Weight: 42 lbs. system
- Finish: High gloss black or white laminate and real oakwood veneer

### Home Theater Systems

NHT provides an innovative approach to home theater, offering systems designed to deliver superh performance for video sound without sacrificing accurate music reproduction. Our systems are designed with the future in mind. As surround sound technology evolves from pro-logic to multi-channet, digital sound, our home theater systems are designed to deliver the kind of state-of-the-art performance that makes motion pictures come alive in the comfort of your home.

#### User Selectable Performance

NHT offers two tower loudspeakers, the VT-2 and VT-1A, which are switchable to maximize their performance for both audio and video playback. Using an unprecedented approach to crossover design, the "switch" alters the radiation patterns of the system. In the video mode, the soundfield broadens horizontally, effectively blurring the image. This creates an ambiant soundfield without producing the unpleasant sense of separation between the sound and the television screen. In the audio mode, the system's polar response is optimized to provide pinpoint imaging appropriate for music playback.

#### Matched Systems

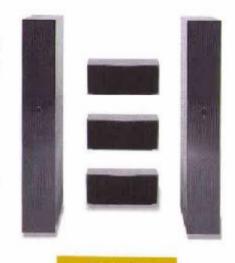
A seamless, coherent soundfield is the hallmark of great home theater. The center channel speaker is the most critical component of any home theater system. It handles up to 75% of the video sound and almost all of the dialogue. NHT offers a selection of center channel loudspeakers perfectly matched to the front left and right speakers, providing a seamless sonic presentation as sounds pan across the front three-channels.

Each home theater system installation presents different challenges for proper surround channel applications. For pro-logic systems, the best choice for the rear channel is NHT's HDP-1 dipolar system which produces a diffuse sound that does not detract attention from the front channels.

As discrete, multi-channel sources become more widely available, the desired surround sound speaker will be the same as those used for the front and center speakers. Anticipating the advent of better surround sound technologies, NHT offers a selection of matched loudspeaker systems that will perform this function flawlessly.

## System Dynamics

Much of the impact, mood and special sonic effects in a movie sound track are generated by low frequency information. Proper reproduction of bass is essential to obtain the realism from the surround experience. NHT offers three amplified subwoofers, from the powerful and state-of-the-art SW3P, to the compact and affordable SW1P, that meet virtually any room or system requirement. All NHT subwoofers provide controlled, low distortion bass powered by an external amplifier which allows flexibility in placement and access.



VT-2 System



VT-IA System

## VT-2 Reference Audio/Video System

The VI-2 and VS-2 represent NHT's reference audio/video system. These products offer the video enthusiast tremendous flexibility for implementing a no-holds-barred home theater system that is fully compatible with pro-logic, and digital, multichannel technology. Optimized for both audiophile and video performance, the VI-2 and VS-2 embody significant design advances that set them apart from traditional home theater systems.

## Coherent Array

Both the VT-2 and VS-2 utilize a unique design which incorporates multiple drivers which are required to deliver dynamic and realistic sound pressure levels over a wide frequency range.

Traditionally, the physical separation of the drivers on the baffle made it difficult to create an integrated soundstage especially for different listening positions. NHT's Coherent Array design minimizes the space between radiators while maintaining high power output. The result is dramatically reduced wave interference and seamless, broad dispersion.

## VT-2 Tower Speaker

The VT-2, a technological relative of NHTs Model 3.3, is designed for the best possible sound reproduction of either movie or music source material. Incorporating an easily accessible switch on the front panel, the VT-2 offers the user the ability to select between pin-point imaging for music playback and more diffuse ambiance for video soundtracks.

Employing NHT's Coherent Array technology, the four driver system is designed to effortlestly reproduce the dynamic range of today's digital recordings. In addition, each tower incorporates an integral 10" long throw subwoofer which may be separately amplified. With bass response to 25th, the VI-2 makes the use of a separate subwoofer a choice rather than a necessity

#### VS-2 Satellite

With performance characterized by wide dispersion and uniform frequency response, the video shielded VS-2 provides state-of-the-art center channel performance. Most center channel speakers create acute wave interference problems due to their horizontal driver layout, NHT's Coherent Array design incorporates closely spaced drivers and the speaker baffle into a single assembly to ensure optimal alignment.

The VS-2 employs the identical driver configuration as the VI-2 tower, making it a perfectly matched rear channel speaker for digital, multi-channel systems.



VT-2



# VT-1A Audio/Video System

NHT's VT-1A system was designed as a practical answer for those desiring a complete home entertainment system capable of excellent music and movie sound reproduction.

The compact VT-1A system is equally at home with both large or small video systems. The cabinet size and configuration afford flexibility of placement, and the spacious and ambiant soundfield brings life-like realism to the home theater experience.

# VT-1A Tower Speaker

NHT's VT-1A tower employs a user-selectable switch on the front panel similar to the switch found on the VT-2. In the audio mode, the VT-1A recreates a 3-dimensional soundstage with proper localization and a focused stereo image. In the video mode, the VT-1A's horizontal radiation pattern is maximized to provide a broad, seamless soundfield to all listening positions.

The midrange reproduction is specifically optimized for dialogue providing improved clarity of both the spoken-word and subtle surround effects. While NHT recommends the use of a subwoofer to maximize its performance, the VT-IA utilizes a unique proprietary technology, called "Tuned Column Loading", which delivers smooth, tight bass from a relatively small enclosure.

# VT-1C Center Channel Speaker

Employing the same drivers as the VT-1A tower loudspeaker, the VT-1C center channel speaker is sonically matched to create a seamless soundfield across the 3 front-channels. The VT-1C is magnetically shielded so that it can be placed in close proximity to the television for proper dialogue localization. While diminutive in size, the VT-1C reproduces dialogue with remarkable clarity and offers excellent dynamic range.



VT-IA



## SW3P

NHT's highest performance subwoofer, the SW3P employs the same 12" long-throw woofer used in our flagship Model 3.3. Utilizing a true acoustic suspension design, the SW3P is capable of producing extended bass response to 23Hz with high output and low distortion.

This high quality subwoofer system boasts a 250 watt, class G external amplifier. Designed for compatibility and flexibility, the system features line level inputs and outputs with a 5 point adjustable high pass filter, a continuously variable low pass crossover network, and an adjustable phase switch.

### SW2P

With high output capabilities and well controlled response, NITI's highly acclaimed SW2P powered subwoofer system offers excellent bass response.

The SW2P employs a 10°, high-excursion, woofer in a vented enclosure and a separate high power monaural amplifier, capable of reproducing bass down to 25Hz. In addition to delivering 80 wats of clean power, the SW2P accepts both high and low level inputs, high level outputs for use with satellite speakers and features a continuously-adjustable, active crossover.

### SWIP

Compact and affordable, the award winning SWIP powered subwoofer system provides similar high output and low distortion bass performance as NHT's larger models.

Utilizing an 8" long-throw woofer powered by an external 60 watt monaural subwoofer amplifier, the SW1P produces bass down to 35Hz from an enclosure that will easily fit inside a cabinet or on a shelf. The SW1P is designed to mate perfectly with NHT's SuperZero speakers, creating a truly audiophile grade music or home theater system.







SWIP