

Congratulations on your purchase of the NHT VT-1A audio/video loudspeaker system and the VT-1C center channel speaker. The NHT VT-1A video tower speaker and the VT-1C were designed to meet the demands of today's audio/video systems.

The VT-1C center channel was designed to precisely match the sonic performance of the VT-1A creating a perfectly seamless front sound stage for a theater-quality experience in your home.

The VT-1A has a switch on the front baffle that changes between audio and video mode. In video mode, the speaker provides a broad, spacious sound field, excellent dynamic range and remarkable intelligibility. In audio mode, the speaker becomes a 3-way system, providing listeners with pin point imaging and accurate sound stage. It extends bass response to 50Hz, making it suitable for use as a high quality full range tower speaker system. Combined with the matching VT-1C center channel speaker, SW2P powered subwoofer and HDP-1 surround speakers, the VT-1A will dramatically enhance the video experience.

Please take a few minutes to read through this owner's manual prior to installing your loudspeakers. The information provided will help you to obtain maximum performance from your home theater system. If at any time during the installation or operation of your new speakers you have questions or need assistance, please call your NHT Dealer or our Toll-Free Customer Hotline at:

**1-800-NHT-9993**

### Model VT-1A Specifications

- **System Type:** 2-way, vented design
- **Crossover:** *Video Mode:* 12dB/octave LP/HP @ 2.8KHz  
*Audio Mode:* 12dB/octave LP @ 110Hz  
12dB/octave LP/HP @ 3KHz
- **Response:** *Video:* 65Hz - 21KHz, +/- 3dB  
*Audio:* 50Hz - 21KHz, +/- 3dB
- **Sensitivity and Power Rating:**  
*Video:* 90dB (2.83V at 1M)  
*Audio:* 87dB (2.83V at 1M)  
15w minimum, 150w maximum
- **Impedance:** 8 ohms nominal, 5 ohms minimum
- **Driver Complement:** 2-4.5" woofers,  
1" fluid cooled soft dome tweeter,  
video shielded drivers
- **Inputs:** 5-way binding posts
- **Weight:** 24 lbs. each
- **Dimensions:** 40"H x 5.5"W x 5.5"D
- **Finish:** Gloss black or white, high pressure laminate

### Model VT-1C Specifications

- **System Type:** 2-way, acoustic suspension
- **Crossover:** 12dB/octave @ 2.8KHz
- **Response:** 95Hz - 21KHz, +/- 3dB
- **Sensitivity and Power Rating:** 90dB (2.83V at 1M),  
15w minimum, 150w maximum
- **Impedance:** 8 ohms nominal, 5 ohms minimum
- **Driver Complement:** 2-4.5" woofers,  
1" fluid-cooled soft dome tweeter,  
video shielded drivers
- **Inputs:** 5-way binding posts
- **Weight:** 16 lbs. each
- **Dimensions:** 5.5"H x 22"W x 9"D
- **Finish:** Gloss black or white, high pressure laminate

Specifications are subject to change without notice, in accordance with our policy of continuously upgrading the performance of our products.

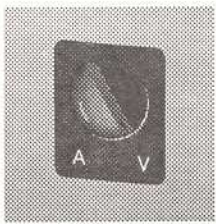
## ■ Design Goals

All NHT speakers are designed to deliver exceptional sound reproduction from attractive and affordable packages. Our efforts are guided by the study of human hearing and are optimized for real world use. The VT-1A continues this tradition of sonic value. Reflecting our extensive research into the requirements of true audio/video sound, the VT-1A departs from conventional loudspeaker design theory in important areas.

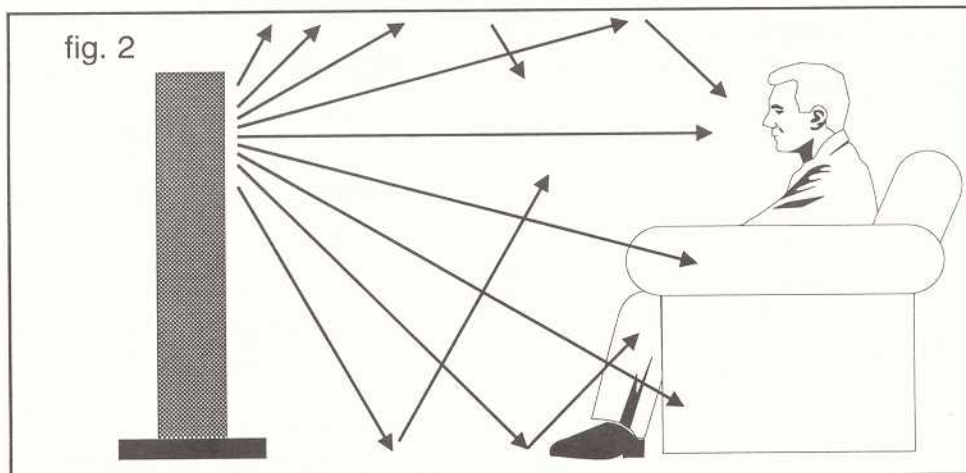
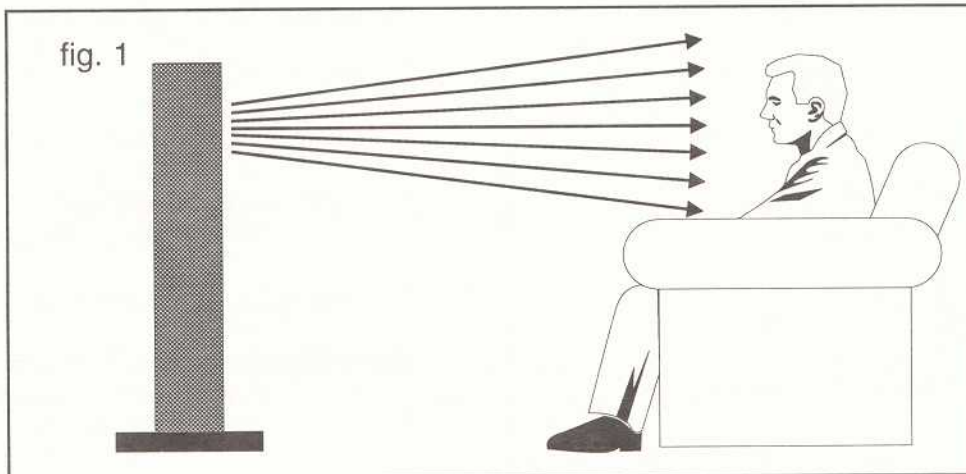
## ■ Tuned Column Loading

The VT-1A features a unique technology we call "Tuned Column Loading," or TCL. TCL combines the best attributes of vented and sealed systems. The speaker behaves like a vented design down to low bass tuning frequencies, offering relatively high sensitivity and extended bass response in a slim enclosure. Below that frequency point, due to unique interactions between internal damping and cabinet geometry, the speaker behaves like a sealed system offering high power handling and low distortion.

## ■ Audio/Video Switch



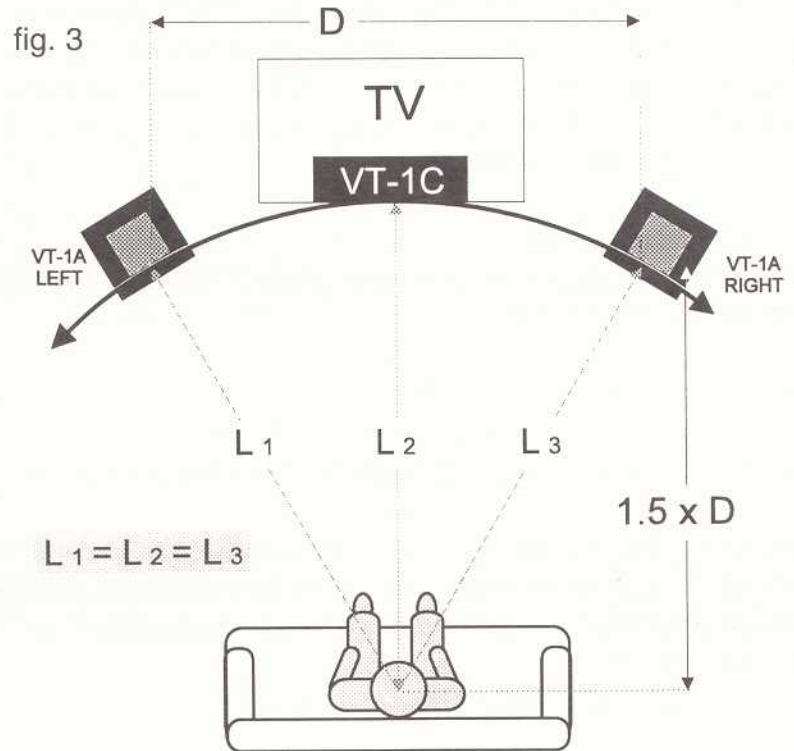
Different parameters apply when designing loudspeakers for either music or for home theater. With two dedicated crossover circuits, vertical polar patterns and crossover points are precisely controlled, enabling the speaker to perform optimally for both audio or video soundtracks. In "audio mode", the radiation pattern is narrow to provide the imaging characteristics which distinguish audiophile-grade loudspeaker designs (see fig. 1) In "video" mode, the radiation pattern is wide with the rich ambience appropriate for surround sound (see fig. 2).



## ■ Installation

The VT-1A speakers are packaged with the base removed for safe shipment. To attach the base, carefully turn the VT-1A upside down on a soft surface to avoid scratching the finish. Align the two holes in the base with the two holes in the bottom of the speaker and fasten together with the furniture screws provided.

The small footprint of the VT-1A allows for flexible placement without impairing performance. Best results will be achieved by placing each VT-1A speaker a few feet away from the TV and in an arc that keeps the VT-1As and the matching center channel speaker, VT-1C, equally distanced from the viewer. For a starting point, look at fig. 3 and get out a tape measure. The distance between the listener and the center of the speaker plane should be about 1.5 times the distance between the speakers. This configuration puts the listener in the center of the stereo image. The VT-1C should be placed so it is approximately at the same height as the VT-1As. This could put the VT-1C above or below your TV. The VT-1C carton contains four adhesive-backed, clear rubber feet. These will protect the finish of the speaker and the TV (or shelf) and should be placed on the bottom of the speaker in each corner.



Experimentation is the key to finding the best arrangement in your particular listening environment. Small changes in speaker position can sometimes have a significant effect on the sound. For example, moving the speakers nearer to a corner will tend to increase their bass output. Room furnishings also play an important role in absorbing and reflecting sound waves. If you are willing to spend some time, you can fine-tune the performance of your system.

## ■ Operation

Your speakers require minimal maintenance under normal use. The cabinet may be cleaned using a damp cloth or a mild, non-abrasive cleaner. Do not attempt to clean the actual drivers. The Model VT-1A and VT-1C were designed to handle a wide range of listening levels, but every speaker has limits. It is important to use common sense and listen for signs of possible distress from the speakers. Noticeable distortion or harsh breakup is an indication that either your amplifier or your speakers are running beyond their capacity, and the volume should be decreased. If you can feel any heat emanating from the front of the woofer or tweeter, reduce the level immediately. Speaker damage most often occurs from sustained high volume levels, not from transient sounds or brief musical peaks. Excessive boosting of bass, treble or equalizer controls can worsen the problem, and is not recommended.