

# AT-2 High-Performance Bookshelf Loudspeaker

## Full-sized bass from a bookshelf speaker

Building on the incredible success of the highly-acclaimed AT-1, the compact AT-2 delivers a level of deep bass performance not previously attainable from a bookshelf-sized loudspeaker.

The AT-2's patent-pending H-PAS™ bass system (Hybrid Pressure Acceleration System) is the reason. It combines elements of several speaker technologies—bass reflex, acoustic suspension, inverse horn, and transmission line—in a unique configuration to deliver powerful low frequency response that breaks the “Iron Law” of loudspeaker acoustics: the notion that you couldn't have deep bass extension, good system sensitivity, and reasonable enclosure size all in one design. H-PAS changes all that.

### A Better Way to Generate Bass

Using a unique cabinet design, the elements of the combined speaker technologies are cascaded one to another in such a manner as to pressurize and accelerate the low frequency backwave as it travels through the cabinet.

The internal matrix of the cabinet captures the backwave of the driver below its resonance and pressurizes and accelerates it before it exits the vent. The internal workings of the cabinet are such that the low frequency efficiency of the system actually increases with decreasing frequency—exactly the opposite of conventional system behavior, where output below resonance drops rapidly. The cabinet produces a reciprocal output of the driver's natural roll-off, yielding flat acoustic response to well below that of conventional designs using like-sized drivers and cabinets.

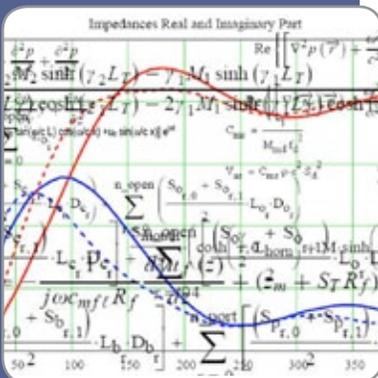
H-PAS does not require the use of special drivers, any kind of on-board electronics or outboard equalization. It is a purely passive system, completely compatible with all stereo amplifiers and AV receivers.

In addition, the low frequencies travel through an internal passive resonance/harmonic distortion line filter to further clarify the sound. As a result, the H-PAS design delivers extended deep bass, with high output levels, and exceptionally low harmonic distortion.

# H-PAS™



Internal H-PAS acceleration chambers



Proprietary H-PAS algorithms

# AT-2 High-Performance Bookshelf Loudspeaker



Patented H-PAS bass technology



Heavy-duty, bi-ampable 5-way binding posts



3-position High Frequency Energy switch with gold-plated contacts



Exceptionally advanced 1 1/8-inch Low-Resonance Tweeter (LRT™)



## Design Details

The AT-2 utilizes a 5 1/4-inch driver in an enclosure of approximately .6 cubic feet to produce bass that extends to 41 Hz (-3dB) at Sound Pressure Levels that exceed 103dB. Bass harmonic distortion is under 5 percent. Comparable performance in a conventionally-designed loudspeaker would require bass drivers of at least triple the size in an enclosure at least twice as large. The AT-2 also uses an exceptionally advanced 1 1/8-inch Low-Resonance Tweeter (LRT™) that affords a lower crossover frequency (2200 Hz) than is normal in a two-way system.

The result is exceptionally wide dispersion through the midrange without the upper-midrange "beaming" normally exhibited by woofers in a two-way speaker. The tweeter's oversized 4 mm textile surround—rarely, if ever, found in a tweeter—allows for long excursion and very high power handling. As innovative as the H-PAS design is in the bass region, the AT-2's tweeter is equally impressive in the higher ranges. This is a total loudspeaker system of amazing capability and accuracy.

All the crossover components are the very highest quality, and adhere to strict 1% value tolerances, to ensure the best sound possible.

## Finish and Features

The AT-2 is finished in a gloss black metal-flake paint, applied in a multi-coat process and hand polished for a luxurious appearance. A 3-position High Frequency Energy switch is included, as are high-quality dual 5-way binding posts, to allow for bi-amplified operation when ultimate performance is the goal. There is a 1/4"-20 threaded insert on the bottom panel for secure attachment to speaker stands.

## Specifications

AT-2	
<b>Type</b>	H-PAS Hybrid Pressure Acceleration System, 2-way
<b>Drivers</b>	Woofers 5 1/4" (135mm) long-excursion GLH* cone Tweeter 1 1/8" (28mm) low-resonance soft dome with 4mm oversize long-throw surround and integral back chamber/heatsink
<b>Frequency Response</b>	41-20kHz, +/-3dB
<b>Nominal Impedance</b>	6Ω
<b>Crossover Frequency</b>	2.2kHz
<b>Crossover Type</b>	Parallel, 2nd-order LP, 3rd-order HP
<b>Sensitivity</b>	88dB
<b>Recommended Amplifier Power</b>	20 - 150 Watts RMS
<b>Dimensions w/ grilles (W x H x D)</b>	8 7/8 x 15 5/8 x 12 5/8"
	227 x 397 x 321mm
<b>Weight (ea)</b>	23 lbs (10.4 kg) ea.

\*Graphite Loaded Homopolymer