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In the complex world of sound reproduction, design simplicity is the foundation of excellence.

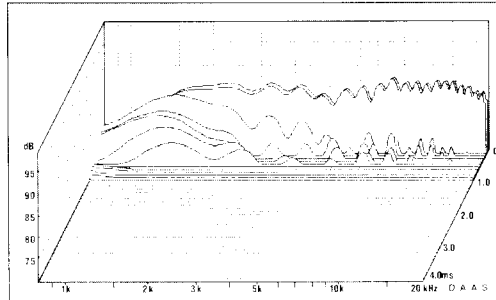
Loudspeakers are merely air pumps. The speaker with the greatest fidelity is the air pump producing the fewest errors (room interactions aside). Film drivers have the greatest potential for making the fewest errors.

With extremely low mass and driven over their entire diaphragm area, film drivers avoid the problems associated with their heavier cone and dome siblings. Not only do cones and domes have far greater mass, they have far less directly driven area (the apex of the cone and the perimeter of the dome) with which to achieve perfect control. Planar film drivers are also inherently phase coherent over their entire bandwidth whereas cones and domes have a built in phase "smear" due to their depth (or profile).

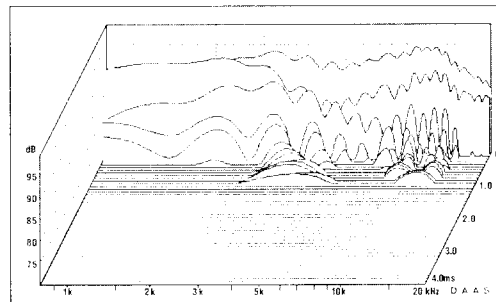
Newform Research Ribbons provide the openness, transparency, smooth frequency response and wide bandwidth necessary to form the foundation of a true high fidelity system be it 2 or 5 channels.

Why do Newform Ribbons compare so well to the classic electrostatic and ribbon designs? NFR Ribbons have very narrow, tightly suspended diaphragms that provide extremely good horizontal dispersion. As one of our kit customers in Colorado pointed out, "Newform Ribbons simply store less energy than any other design I have heard."

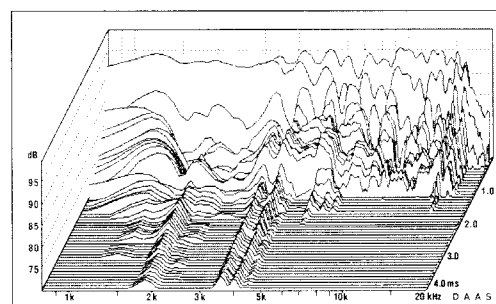
Cumulative spectral delay or "water-fall" plots indicate how quickly a speaker becomes quiet after it has reproduced a sound. The less energy a speaker stores, the more detail it can reveal.



The RS plot shows a great deal of "white space" indicating superior control which will result in more detail and clarity.



The dome smears its energy release over a slightly broader time window. Some inner detail of the music will be lost and the sound will be less transparent.



The cone tweeter plot shows the problems inherent in trying to control a large diaphragm with a small voice coil at high frequencies. Clarity, detail and transparency are severely reduced.

NEWFORM RESEARCH

is a manufacturer of Ribbon-based loudspeaker systems. We make finished systems, assist with custom designs and supply Ribbon drivers to hobbyists and OEM accounts around the world. Our focus is on practical excellence and simple design for the purpose of producing superb results in the listening room.

In the home over the next 5 years we will see the fusion of audio and video systems. Home theatre will simply be the main audio system whose use may or may not be accompanied by video. Our objective is to offer the highest standard of fidelity in an anti-obsolescent format: products which are state of the art from either a 2-channel or 5-channel perspective and scalable to allow for easy expansion.

The tallest, deepest and most focused soundstage in the business. Are we biased? Yes, but there is nothing else on the market which has the balance between height and small acoustic profile to produce this large and focused a soundstage. NHB invites full involvement with the music.



NHB represents a fusion of high end audio and video requirements. Soundstaging, dynamic range, transparency and smoothness combine for a world class loudspeaker system. As the **Audio Ideas Guide** noted:

"I was impressed by the great openness and immense dynamics this system could produce, with no colouration whatsoever in the Ribbon's response area above 1 kHz (below that it was more room-dependent) there was complete absence of any sense of compression or strain. ... the NHB system combines very high audio fidelity, including fabulous image depth, with the power handling (300 w/ch) and SPL capability (92 dB @1w, 1m) required for realistic soundtrack reproduction."

This narrow column is easily integrated into many different types of decor. The articulated arm brackets were designed for a specific purpose and are the most radical looking we have produced. If the Ribbon column is to remain stationary, the bracket can be made virtually invisible. This leaves you with unsurpassed soundstaging and transparency along with tremendous dynamic range in a footprint of 7" x 9", not including the sub-woofer.

When we began to develop our own Ribbon drivers (8", 15" and 30") in the late '80s we wanted to capture the musical characteristics which were so seductive in film drivers but in designs that would be easy to drive, easy to place and, above all, be reliable. Newform's totally rethought designs are mono-polar Ribbons with high impedance and extended bandwidth (approx. 1k to 20kHz in system). The entire driver is 3 1/4" wide by 2 1/4" deep and beveled at the front. The 1/4" wide diaphragm is within 1/8" of the front of the magnet structure giving it a very smooth dispersion pattern.

THE NEWFORM RIBBONS AND DOLBY AC-3

The Mono-polar Advantage

Dolby AC-3 (or 5+1) is the technology which will give a focused vision to both audio and home theatre providing a clear upgrade path that will reconnect the high end of audio with the mass market. AC-3 produces 5 full range, fully discreet channels plus a sub channel. AC-3 represents a move to full, high fidelity surround sound. The Dolby AC-3 spec is clearly intended for use with mono-pole speakers: The arrival of the back wave from a bi-polar speaker 5 to 15 milliseconds after the front wave will degrade the coherence of the soundfield and the source localization effect.

HIGH END AUDIO AND HOME THEATRE CONVERGE

Newform Modules are designed with the AC-3 environment in mind. Using a pair of R8-1s or R8-2s as the front left and right may make subwoofers unnecessary. Ideally, the speakers will be tall to match the size of our growing video screens, narrow, to minimize diffraction and minimize decor and placement problems. These systems must have very high definition to exploit the large improvements in recording and production techniques which are now broadly being implemented.

Precise time arrival, broad horizontal dispersion and transparency are the factors which contribute to a focused, coherent soundstage and true high fidelity. Newform Ribbon systems meet all of the sonic requirements demanded by both 2- and 5-channel formats. When building a system, it is of critical importance that the sonic signature and dispersion patterns of all speakers is consistent. With the uniformity of the Newform Ribbon speakers that is not an issue.

Chris Beeching (a prominent British reviewer for **HiFi NEWS AND RECORD REVIEW** and **Hi Fi CHOICE**):

"The Ribbons act like the very best electrostatics in terms of air and space. ... the Ribbons do have this ability to recreate the acoustic with uncanny ability. They must be one of the most musical speakers on the market today. In conclusion, it's such a good loudspeaker that it's price of around 1 800 pounds seems far too little. ... and there is little if anything to touch them in the sub-2 000 pound price bracket."

SENSIBLE SOUND (USA):

"The clarity of the Ribbons was immediately noticeable. The treble is clear and crisp, and remarkably unidirectional. The RS-1s imaged superbly, both with audio and video sources. ... especially with the centre channel turned off. The curve is remarkably flat. With my video system's subwoofers cut out, the train wreck from 'The Fugitive' was still visceral. Each instrument is placed just so, and clear as a bell. These are very competitive speakers and worth a close listen if you like jazz, classical and non-pounding rock. They are also a superb video speaker and compare very favourably with speakers costing many times their price."

KLANG UND TON (Germany):

"The frequency response of the Newform (R8) is from 1 000 Hz, very regular and off axis to 30 degrees, extraordinarily even. Standing unimpeded in free air, the Ribbon shines ... with a fantastic and stable soundstage."

SOUTH AFRICAN AUDIO SOCIETY:

"The Ribbon speakers themselves gave plenty of depth and were extremely smooth and laid-back. No harshness at all, rather an ultra-polite sound with plenty of detail, especially in orchestral music."

THE INNER EAR (Canada):

- Recommended List
Category A - RS-1

"Like its sibling (RS-2) it offers electrostatic-like detail, powerful bass and a clear midrange. ... the system is a music lover's delight."

FUTURE REVIEWS

A full review of the Ribbons is available in issue 102 of **THE ABSOLUTE SOUND (USA)**.

Since our Ribbon technology is unique, there is a demand from publications for review models. These reviews take from 4 to 12 months to appear in print, so we can not give any schedule for their appearance. Full reprints of our articles in **SPEAKER BUILDER** and **POSITIVE FEEDBACK** are available on request.

THE STANDING MODULES

The Modules are "decor friendly" with tall thin profiles. The grill hood is very easily removable for critical listening. The binding posts are now all-metal, gold-plated and the wire runs to the drivers are very short.

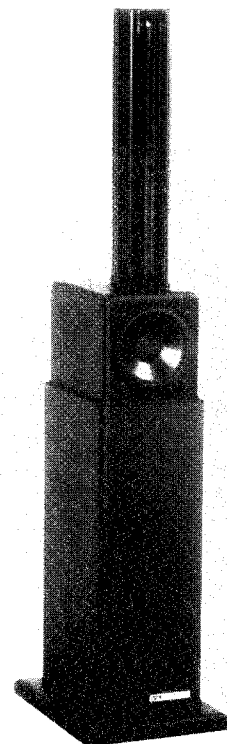
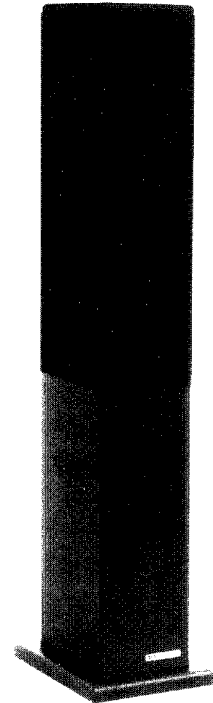
The Standing Modules will take either the R15 or R30. The larger bases are recommended with the R30.

If the future is Dolby AC-3 then the Modules will be an especially appropriate design. They have a minimal footprint yet produce a very tall soundstage and they can be instantly upgraded to the R30 from the R15.

GOLD STANDARD HIGH OUTPUT

The R30 will be released in a more advanced form. It will have even thicker walls, neodymium magnets, cast-and-machined alloy end caps and faceplates, silver Kimber wiring and all-metal binding posts. The entire gap will be machined to tight specifications and will be of a slightly different design that cannot be inexpensively produced. Tube

The Standing Modules: acoustically correct from the design stage. The Ribbons stand in free air above the mid-bass cabinet which is just wide enough to house the 5 1/4" driver. Diffraction is thereby minimized producing sharp soundstage focus and depth.



UPDATE

owners will like the 7Ω purely resistive load and 92 dB sensitivity. Last but not least, it will be triple gold-plated (not gold-flashed or anodized). It sounds expensive, and it is. These will be the best-sounding and the best-finished (not to mention by far the heaviest) high frequency drivers in the high fidelity world.

SETUP TIPS

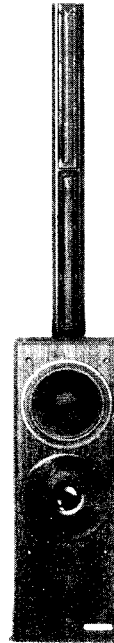
Take advantage of our factory support. We will help you with your design. Ask for the Room Optimization Form to help decide which system is best for you in your listening room.

- Allow 3 weeks for the Ribbons to break in. The soundstage will be there immediately; smoothness takes a bit of time.
- Try positioning the subwoofers behind or beside or just in front of the listening seat. This will put you in the near field which can largely eliminate room modes.
- Never plan to put speakers right beside a TV. Magnetic shielding is never totally effective. All Newform speakers should be safe a foot or more from any TV but if you have them that close, the screen will produce strong reflections. When setting up, treat the TV screen as you would a large glass window. Get as far away as you can.
- Isolate the Ribbon from the vibrations from the enclosure and bracket.

Image focus will improve. Any current Newform owners wishing to try a small isolation kit should phone for a free upgrade.

R8-1-30

Newform Ribbons have crossover points at between 1k and 1.5kHz. This allows elegantly simple configurations. The most elegant configuration is the two-way. Using an 8" or smaller bass driver from 1kHz down, the crossover is composed of only 3 elements. Bass extension is strong and tight to below 33Hz. A subwoofer is generally not required.



The R8-1-30 is an extremely neutral system competing with larger Ribbons and electrostatics many times its price. It offers soundstaging, smoothness and definition that few speakers can match and is satisfying at high or low levels. The new granite port mass loads the front baffle and minimizes turbulence at the port mouth.

Easy to drive and set up, the R8-1-30 will bring the same fidelity and involvement to video as it does to pure audio.

MODEL	DESCRIPTION	LIST PRICE	DELIVERED DIRECT
R5-2	dual 5" woofers, R8	US \$ 995 pair	US \$ 587
R8-1	single 8", R15	1,695 pair	998
R8-1-30	single 8", R30	2,095 pair	1,236
R8-2	dual 8", R30	2,295 pair	1,354
Module 8	single 5" mid-bass, R8	895 pair	528
Module 15	floor standing, 5" mid-bass, R15	1,595 pair	945
Module 30	floor standing, 5" mid-bass, R30	1,995 pair	1,160
Sub 1	dual voice coil 8"	595 each	351
No Holds Barred	dual R30, dual 5" mid-bass plus dual Sub 1s per side custom system with custom brackets	7,995 pair	4,717
R8	Ribbon, 8", wire connect	330 pair	270
R15	Ribbon, 15", binding post connect	530 pair	460
R30	Ribbon, 30", binding post connect	880 pair	740
R30 Gold HO	R30 neodymium magnets, 92dB; triple gold-plated	3,800 pair	2,640

Warranty is 5 years parts and labour with 1-way shipping

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