

NEWFORM RESEARCH

This update's review and owner's comment content has been trimmed to allow for the many topics below.

NEW TECHNOLOGY RIBBONS FOR THE FINEST HIGH END IN AUDIO.

DETAIL • TRANSPARENCY • SOUNDSTAGING • DYNAMICS

JM Notes on visit to CES

Newform showed at the CES by way of supplying loudspeakers and room setup to Harris Semiconductor for their rollout of class D amplifiers based on their class D chip. This technology is going to revolutionize audio in the home. How? By driving the size and power consumption down, allowing direct digital inputs and lowering costs, Harris now has the products which will enable a cascading series of breakthroughs to change the face of audio by delivering a vastly superior musical experience at a much lower price in much more convenient packages.

Harris set up at the MGM, an off-site location, and demoed their chip technology to a heady procession of home entertainment corporate heavyweights. Class D in the past has had the reputation for poor sound quality due to noise, glare and harshness. Using the R645s in a large room (18' x 40') Harris made the point that smoothness, transparency and great soundstaging can be had in very cheap, very small, very efficient (93%) amplifier modules. Almost no press made it to the Harris demo since they had not arranged media visits but I am sure the next show will see a great deal of coverage of this spawning-of-a-new-age technology.

High end audio continues to wither on the vine if the shows at Alexis Park or THE (The High End) Show were any indication. Light crowds visiting displays that had little new to offer.

The main exception was the TACT audio display which demonstrated the potential of the both digital amplifiers and the direct digital chain with room compensation. The sound from the TACT was the best I had ever heard in a show demonstration.

It was superb in every respect.

Deep tight bass with incredible pitch definition, rock solid soundstage and detailed highs with no glare whatsoever.

All this in a room that has to be considered very poor. In fact, some manufacturers have shown in these rooms (the two story ones) only with static displays since the acoustic problems are too great to deal with.

The TACT with it's room correction shone through all of these imitations. What were we hearing? A direct digital feed to the amp from the CD player with timing clock feedback so there was effectively zero jitter. The signal arrived in near perfect shape in the amp where it was amplified in one gain stage. Next, active room correction took the excellent signal and corrected it for room anomalies (of which there must have been plenty). Also, we were listening in the near field.

Lars Risbo, (of Taccota Technology) the TACT designer, returned with us from the Alexis Park to the Harris demo room and had a good listen. I think he enjoyed himself and quickly identified the clarity of the digital sound. Except for soundstage and high end transparency, our (Harris/Newform) sound was not as good as that of the TACT demo but we were operating from a 3 year old Sony carousel CD player with no D to A conversion and no room correction. The point of the demo was to illustrate that the class D chip technology is now mature enough for market. Believe me folks, it has arrived!

How good is the Harris chip compared to the TACT amplifier? I doubt you could tell the difference once you run digital feeds direct into the Harris in a good room setup. Certainly the TACT vs Spectron comparisons are very close and I know the Harris/Spectron differences are wafer

thin. In any event, we hope to have our development system running in several months and I expect nothing short of superb results.

The TACT is a flagship design and sells for \$7000 US plus room correction. The Harris class D modules will go into amplifiers of many kinds all with prices vastly under \$7000.

We also used in our demo a Quad Sub (4 x 10" Peerless) designed by Newform and built by StudioLab. It worked very well and showed off the potential of the design. Some other subs used throughout the 4 day show to make the various sub manufacturers feel more at home.

I heard the Sony Super Audio CD (SACD) system presented by Dan Anagnos (Chief Audio Designer) and it again was excellent. However, it is now clear that the main fidelity payoff is going to be delivered by the direct digital chain as opposed to superior media. Even 16 bit discs sounded just great in the TACT demo. The Sony system is more logical since it offers complete forward and backward compatibility with CD players but please audio industry Gods, we don't need another standard, much less a format war!! Solve this behind closed doors! THE (The High End) Show, the offsite counter CES show, was very well organized with many good exhibitors. Attendance was weak however.

If CES could gracefully hand off the high end part of the Las Vegas convention to a group like THE Show, costs would drop and service would improve. CES must find highenders more trouble than they are worth anyway. Better demo rooms and lower costs would certainly benefit the many small high end companies who feel it is necessary to demonstrate at this show.



R58

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There is certainly going to be an explosion of digital products in the near future all to the benefit of the music lover. I fear, however, that only a very few high end companies will have something to offer in this new era. Passion won't be enough.

One final note on the many rooms I listened in. Since I am used to the height of the soundstage our Ribbons produce it was somewhat alarming to listen to the knee level soundstage being produced by many systems. This is especially disconcerting when there is a large video screen involved and you have to look up at the display and listen down to the speakers. Height does make a difference.

Diffraction Revisited

Any carefully designed loudspeaker system deals with the critical issue of diffraction. Diffraction is constituted by the anomalies created as the waveform moves away from the diaphragm and across the baffle and into the room.

Diffraction treatment can be seen in conventional systems from Wharfedale, KEF on the low end to Waveform with their egg enclosure and the B&W Nautilus (\$40,000) in the high end. The Newform Ribbon has the lowest diffraction and baffle bounce of any driver on the planet due to its very narrow (3 1/4") acoustic profile and heavy front bevels. Our mid-bass enclosures are as narrow as possible with radiused corners to minimize diffraction and baffle bounce.

These factors are the reasons our speakers look so different and why, when the music starts playing, they disappear better than any box loudspeaker on the planet.

Value vs Cost

The benefits of New Technology Sold Factory Direct

The high end industry is continuing to undergo many changes. At the retail level, high end dealers are continuing to disappear while custom installers are thriving. People are looking for verifiable performance, not fads.

The dealers are being hurt by a changing market and by being undercut by mailorder operations. In many cases, it doesn't pay them to demonstrate product to individuals who aren't doing business with them already. This

corrosive atmosphere is clearly leading to a mutual loss of confidence in the dealer / high end manufacturers relationship. With the decline of Asia as a vital market, these manufacturers are urgently looking for more stable, expanding channels of distribution. Many are examining direct sales and we at Newform have been asked by many companies recently about the ins and outs of this approach.

Some are putting a toe in the water of factory direct sales with refurbished, cosmetically damaged or low end product sold over the web.

However, the reality is that you either sell through dealers or you sell direct. You can't do both effectively and responsibly.

Newform Research is very small but very healthy. We spend far more on product development than we do on advertising and promotion.

This is possible for a direct sales manufacturer but not for dealer based distribution. We price our product on a cost up basis not on a list price down basis. The list prices we show in our price list and in the various audio equipment directories ("Almanacs" for you, AIG) are strictly nominal. In fact, if we had to sell product through a dealer network (never mind a dealer/distributor network) our list prices would have to jump substantially above those listed on the last page to allow for heavier promotion, bad debts (a biggie) and wildly extended payment times.

An indication of how the true factory direct cost structure stacks up against that of normal retail distribution can be seen clearly in our models using the renowned ScanSpeak 8545 carbon fibre pulp cone mid-bass. There are virtually no systems using this superb driver listing below \$3000 per pair. Even at much higher prices the high frequency driver is an off-the-shelf dome (although almost certainly of very high quality). Contrast this with the R630 which costs \$1516 per pair delivered and includes a very large and very expensive 30" Ribbon.

You will continue to see many small companies adopting the factory direct approach. Some larger companies will attempt the conversion as well but it is a lot harder to grow down than it is to grow up. The high end audio

industry is continuing to live in interesting times but we feel that whatever may happen, the flight to value will continue.

Check our website for a list of factory direct manufacturers. Look under Hot Audio Trends.

The New 1 year 100% Trade-in Upgrade Policy

Concerned that you might not end up with the right loudspeaker? Maybe you are buying too much speaker, maybe not enough. Maybe its just plain not appropriate anymore. What about the cost of upgrading? To take some of the worry and risk out of buying loudspeakers, Newform is offering a 1 year 100% trade-in policy. If you buy a Newform product and decide you want to step up, Newform will apply 100% of the original purchase price to the new speakers. A \$50 handling fee applies and you must pay return freight on your trade-ins.

This can apply to any product except bare Ribbons and kits. All shipping, taxes, duties etc. are included as usual.

This will allow audiophiles to buy the minimum they think they might need and upgrade if they feel they need to do so up to a year later. Since Newform owners tend to hold on to their speakers for a long time, depreciation is not really a big issue here. The upgrade policy is designed to make sure you settle down painlessly with the right speaker for the long haul.

Recent Review Summary

Soundstage, April 1997
R8-1-30, Spectron Doug
Schneider www.sstage.com

This ribbon's sound is exceptionally transparent, revealing, with wonderful body and weight. There is an incredible amount of detail and a fabulous sense of transparency. At the same time, this ribbon retains its composure and unlike other ribbons I have heard is never, never, never harsh.

If it sounds as though I am raving, it is because I am. The ribbon has extremely good horizontal dispersion resulting in good off-axis performance. As well, they handle a lot of power and are capable of producing near ear-splitting volume levels. Where many speakers begin to choke, the Newforms begin to sing... the R8-1-30 captures and conveys



NHB 45

the "soul" of the music. As well, with the detailed yet non-fatiguing nature of this speaker, they were ideal for overall voice reproduction. The R8-1-30s are some of the best speakers for home theatre that I can think of at anywhere near this price. The result was thrilling. Furthermore, I felt no need for a subwoofer at any time.

Starry Eyed ... The R8-1-30 offers aspects of performance that outclass many speakers near this price. As previously noted, the high level of performance is mainly due to the ribbon unit. Within the ribbon's range, the speaker compares to other speakers costing upward of two, three, or four thousand dollars. The performance in the lower frequencies is very good, but not outstanding in the same way and is more in line with speakers selling in the sub-\$2000 range. Taken as an overall package, the R8-1-30 is a star performer. At \$1236 the R8-1-30 represents superb musical value and is simply a steal for someone contemplating setting up an outstanding music/home theatre system.

Audio Ideas Guide, Spring, 1997, R8-1-30 x 4 in home theatre, Andrew Marshall, Canada

The R8-1-30 achieves a superb +/- 2dB tolerance between 40 and 10,000 Hz. The 30" Ribbon is as well a behaved treble reproducer as I have seen. A pair of these speakers can form the acoustic end of a very fine high end audio system, and a quartet, well, they make up as good a home theatre system as I've ever heard. These speakers will handle power like few others, the ribbon having tremendous dynamics and no breakup modes whatsoever.

Because of excellent lateral dispersion, the individual speakers tend to disappear, but very exact imaging is provided by each line source. The other aspect of the Newform ribbon that should be emphasized is its speed: the dynamic capabilities are lead by extraordinary transient capacity. I've lived with the Newform quartet now for a couple of months, and have come to appreciate their honesty; next to them most other home theatre systems are decidedly coloured sonically. It took living with and then measuring the R8-1-30 for me to objectively realize how really

good these speakers are and how superbly well suited they are for high end home theatre systems. Simply put, reference quality.

Soundstage, Montreal Audio Show Report - No Holds Barred Doug Schneider www.sstage.com

The Newform ribbon is one of the finest midrange/tweeter ribbon drivers I have ever heard. It is exceptionally detailed, yet smooth, with excellent dispersion characteristics. The NHB sound at the show was very detailed with an excellent soundstage. Newform Research deal only factory direct which makes their speaker prices very competitive.

John had things very well balanced and the system was sounding very natural with the ribbons, dynamic modules and subs integrating seamlessly. Speaker placement must be a breeze with these because I was getting good imaging from just about anywhere I stood.

Speaker Builder, No Holds Barred Winter, 1998, Robert Greene, Joe D' Appolito USA

But not only do the NHBs present a large, expansive, seemingly unlimited sound picture, they also produce unusually real-seeming instrumental or vocal images. The whole effect is startlingly convincing. And none of the astronomically priced box speakers I know of do any better, nor even as well. It won't be easy to go back to box loudspeakers. The song may be over but the soundstage lingers on.

Newform Comments on the Reviews

The themes running through all of the above reviews are detail, transparency and soundstaging. The reviewers comment on these qualities not just in relation to similarly priced loudspeakers but in absolute terms. The R830 review by Andrew Marshall is important because it finally addresses the advantages of our Ribbon design in a surround sound application. The Speaker Builder article by Robert Greene looks beyond the loudspeaker system (NHB) to the presentation of musical space and is a flat out endorsement of our Ribbon technology as the best there is for soundstage (stereo) and soundfield (surround sound) creation.

Some Recent Owner Comments

I also want to thank you again for your patient advice regarding my hifi setup.

www.Utah

Perfect seamless soundstage. Depth is excellent. For the \$1000 price tag, I cannot remember hearing anything better. (Mod 30s) C.N. AOL

Your speakers continue to amaze me and are a constant joy for me every time I am listening to them, even one of my daughters has hooked up to good music because of them. (R830)

Y.S. Israel

Well, I have had my Mod 30s for almost 2 weeks, I can honestly say I love them. I would say the performance is more accurate, more 3 dimensional and more live sounding. Close your eyes, for results your eyes will not allow your brain to believe, you can picture the players assembled with the singer out in front, as it should be.

D.F. British Columbia

I have enjoyed these speakers very much. Their spatial presentation is unsurpassed in my experience. (Mod 15s)

D.F. Oregon

Summary? They sound wonderful. I'm looking forward to having a long, listening relationship with them. (R630s)

S.B. Indiana

The sound is simply fantastic. I don't have the vocabulary of some audiophiles to describe all the qualities of my new sound but I can tell you it's a great satisfaction. Thank you for those superb speakers. (R630)

A.H. Quebec

Now that the ScanSpeak has begun to break in, the results are VERY GOOD. The soundstaging is wonderful and I am most pleased. Thanks for a fine and reasonably priced speaker. (R630)

D.S. Idaho

I am more than satisfied. The timbre is silvery in the highs and objective like Jean Rampal's flute in the high register. When I was listening to Beethoven's Appassionata, I found the reproduction was as good as when I was using Austrian made AKG K270 Studio headphones. (R5-2) T.D.L. California



R645

I have finally completed my setup of my Mod 30s and am amazed at the soundstaging of the Ribbons. They are awesome. Overall, these have to be the best value speakers on the market.

M.K. Utah

As for my speakers, they continue to be wonderful. Soundstaging and treble transparency are pretty much the best I've ever heard. They can take a considerable pounding as well as I've discovered lately with the downstairs apartment vacant for the past several weeks. (R630)

M.A. Ontario

I have finally built your R830s. They are wonderful!

M.S.T. Switzerland

I wholeheartedly believe your speakers are an incredible value and am very impressed with the service you provide.

T.H. San Francisco

I have them (custom Mod 30s with Focal mid-bass) where my old speakers were and they image very well. They are superb speakers and an incredible bargain. Thank you very much for your willingness to do a custom job for me. I'm delighted.

G.H. Los Angeles

My R30 Ribbons work great. The speakers I've designed with your Ribbons create unfathomable sound. I am awestruck and mesmerized by the clarity and depth. (R30 with Seas Excel magnesium 6 1/2")

J.P. Illinois

Another testimonial that counts is the used speaker market place. Try buying a used pair of Newforms. It is next to impossible because there are hundreds of owners out there who feel no need to sell. Find out why they feel they can't improve on their Newform Ribbons even in a world of changing formats and higher resolution sources.

Note: We are now shipping all of our systems with Nordost Flatline Gold interconnects from the cabinet top binding posts to the Ribbon.

New Models

R645 is essentially a beefed up R630 with no loss of refinement. It has proven to be more popular than anticipated and we have been shipping to backorder all of 1998. Taller, more sensitive and more dynamic with greater bass impact, the R645 will light up larger rooms than the R630 is capable of.

R530. When we heard about the new ScanSpeak W15 Revelator 5" mid-bass, we knew it had some great possibilities. Start with a resonance of 28Hz!?! Add an x-max of 7mm and you have a 5" with the bass capabilities of most 7 inchers. Plus it is a groundbreaking design and, audio performance aside, qualifies as industrial art. It is also priced like art but add the R30 and you have a loudspeaker which makes very few mistakes indeed.

R58 uses the ScanSpeak 5" with the R8 for a superb small monitor which can be used as a centre channel if you absolutely feel you need one.

No Holds Barred 45 is more practical version of NHB Essential with superior drivers (the R45 and SS W15). This results in superior sound quality, and the flexibility of a much lower crossover point. To a sub (40-50HZ)

FAQs and Tips

Which amp works best with Newform Ribbons?

The Spectron is still number 1 to our ears but you don't have to spend a lot to get great sound. There are a lot of really good amps out there and an increasing number of them are in surround sound receivers that don't necessarily cost a fortune. Read "Future Trends" below.

Can I use Newform Ribbons to replace the tweeters and mid-range on my 15 year old JBL/Infinity/much loved favourite?

It is better to start from scratch than butcher a working loudspeaker which will prove problematic in level matching, crossover points and dispersion patterns. Several people have added our Ribbons to Magneplanars and have been very happy but to take full advantage of the Ribbons' capabilities, they should be used in fresh, simple designs. The R5, because of its baffle mount capability is the most likely candidate to be used in a surgical upgrade.

How does the centre channel issue stand now with the discrete formats Dolby Digital and DTS?

The jury is out on the necessity of a centre channel whereas with Pro Logic it was a firm NO! Since you can always add a centre channel speaker if you feel you need it,

don't order it now. With the soundstaging capability of our Ribbons, there is a good chance you won't ever feel the need for one. Some decoders do not have a "Phantom" setting but mix the signal when the centre channel is switched off, which is the same thing. The more people experiment with DD and DTS, the more the word is coming back that the centre channel is still a detriment to the soundfield.

Some processors (early B&K for instance) don't provide centre channel mixing when the CC is turned off in DTS mode. New Yamaha models, among others, do do mixing with DTS and the results are as excellent as with Dolby Digital or Pro Logic.

Before you buy a processor or a processing DVD player, confirm how it handles the centre channel in both Dolby Digital and DTS formats.

Hopefully, all processor manufacturers will produce a high quality phantom mode in their units for both Dolby Digital and DTS. We are thinking of organizing a "national burn your centre channel day". (symbolically speaking, of course). Sign up now!

Just in case, however, we will have the R58 in the late fall for a superb answer to a question that never should have been asked. Note that the new digital TV conversion processors offered by Mitsubishi and Panasonic sit on top of the TV leaving no room for the centre channel. Poor planning, but indicative of how unimportant the centre channel is in the grand scheme of things. As well, find me a loudspeaker designer who thinks centre channels deserve to exist and I will show you a marketing zombie. OK, maybe we've beaten up the hapless centre channel enough for one update.

Some kit builders are using dipole Ribbons for home theatre by putting a back on them to turn them into monopoles.

While putting a back on a dipole will turn it into a monopole, it won't necessarily be a good monopole. Our advice (biased as it is) is to use something that was designed from the start as a monopole.

Note: Our Ribbons are easily wall mountable given their 2 1/4" depth.



R530

Is it safe to buy anything now without it becoming obsolete in 6 months?

With the Sony/Philips bitstream high end audio standard several years away from any possibility of large scale software availability, a good DVD player with 10 bit video, Dolby Digital processor, master volume control and a 96/24 DAC is a safe bet. A good sub, Newform loudspeakers, (there might be some bias here) and good but not extremely expensive amps are also relatively safe. Poor investments at this point would have to be anything which is in the digital domain now or is about to be encroached upon by digital. In the digital realm, price collapses and obsolescence are virtually guaranteed on a yearly basis. Think very carefully before buying any CD player, DAC or expensive processor. Very high end amps will probably depreciate very quickly over the next 3 - 4 years.

Future Home Entertainment Trends

Over the past 3 years, there has been a trend away from full frequency speakers to speakers that can hand off to subs gracefully. Over the past 12 months, this trend has turned into a stampede.

Audiophiles have embraced subs in a big way now that there are numerous good subs on the market and an increasing number of pure audio systems are being expanded to do home theatre as well.

This trend explains why the R630 has now become our best selling model. Incredible transparency might also have something to do with it. The R645s have also moved ahead of the R830. The R830, however, remains as the one step solution for many people and it also has lately been put to use as rear speakers making a rear sub unnecessary.

Simpler, Better, Cheaper

DVD players are taking the position of the Swiss army knife of the audio world thanks to the digital onslaught. Many DVD players now have 96/24 DACs in them and when playing a CD produce the fidelity expected from a \$5000 level CD transport/DAC combination of 2 years ago. Not only that, some units are coming with Dolby Digital and DTS processors built in.

Cutting to the chase, all you need with one of these fully equipped units are volume control, power amplifiers and speakers.

Processors? Gone. Pre-amp? Gone. DAC? Gone. CD player? Gone. Also, obviously, they will play the higher quality format 96/24 discs. Not bad for \$500 and up (or maybe down in the next 6 months). This is consolidation of function, elevation of performance and compression of price at a breathtaking pace. Check the DVD page on our website and e-mail us with any hot tips of your own regarding DVD players with especially excellent audio output.

High End Audio Standards for DVD

High end DVD audio standard introduced by Sony at Stereophile Show in LA.

The high end audio standard (Super Audio CD) was introduced by Philips and Sony at the HiFi Show in Los Angeles in June. It impressed everyone as being an improvement but it was not the knockout some (including we at Newform) had hoped for. The question of 96/24 vs SACD as the next high end audio standard is moot. Both offer distinct improvements over the current CD standard of 44kHz, 16 bit (44/16) but these improvements are not eye-popping for experienced listeners and are likely to be very subtle for the vast majority of consumers.

Therefore, further splitting hairs by offering something that offers a slight improvement on a distinct improvement is unlikely to have the great body of consumers standing up and saluting. Forward and backward compatibility is the most critical question and this must be made 100% for any new standard. In other words, no matter what piece of gear the consumer has now or buys in the future, he must be able to play any current CD or future DVD audio disc on it.

If the new audio standards are not the quantum leap everyone has been hoping for, where and when is the next big improvement going to come from? Read on.

The Full Monty

The quantum leap is now on the horizon. In the digital realm, analog middlemen are going to be eliminated to the great benefit of fidelity.

There are three levels of audio system sophistication of interest to anyone reading this. The first level involves a largely analog signal path which either originates as analog in a turntable or as digital in a CD player and is converted (D to A) to an analog signal. It then goes through interconnects to the pre-amp, is processed and passed through interconnects to the amp where the signal goes through 2 to 4 gain stages and feedback loops emerging as a power signal passing through speaker cables and ends up in the loudspeakers.

It then passes through passive crossovers consisting of large inductors, capacitors and resistors. A higher level system uses bi-amping and electronic crossovers to replace the passive crossovers for distinctly superior results.

The third level, and the one that offers a quantum leap in fidelity is now starting to gel. It will take a digital signal right to the loudspeakers where it will be equalized and crossed over in the digital domain and then amplified in digital amplifiers, one for each transducer. The amp output will then travel between 10 and 20 inches along internal speaker wire until it reaches the actual loudspeaker driver.

In short, no losses, no distortions until the signal is turned into analog power within the digital amp. The digital amp, itself serving as the D to A converter will turn the signal into speaker driving current in a single gain stage as opposed to 2 to 4 gain stages in conventional amps. There are no negative feedback loops.

The following components and their noise, distortion and phase anomalies are thereby eliminated from the audio signal path:

- D to A converters
- pre-amps
- at least 2 sets of interconnects
- speaker cables
- passive or active crossovers
- 1 to 3 amplifier gain stages
- feed back loops

There is a vast improvement in the noise floor and in phase coherency. How important is this? In our own listening sessions and in discussions with others in the industry, it became very clear that the sound improvement is much greater than that achieved by going from 44kHz/16 bit CD to



R630



Module 30

either 96/24 or SACD. The higher resolution formats are distinctly better but you need a good system, well set up, to really appreciate the improvement.

The direct digital chain* will knock the socks off any listener, experienced or novice. Effective, affordable and seamless room equalization may not arrive for several years but it is coming as well.

**actually, if you compare the direct digital chain with the factory direct concept, there are quite a few similarities.*

Upgrading Newform loudspeakers when the time comes will be straight forward and we plan to offer kits for an easy conversion. Call or e-mail for details. A lot of heavy industry types are working on this so look for it to become commonplace in 2 to 3 years.

Newform hopes to offer a direct digital system (Level 2) by the end of the third quarter 1999. It won't be cheap (relative to the rest of our lineup) at a \$3800 per channel target price. But it includes an R645, quad subwoofer and 3 digital amplifiers, one for each Ribbon and mid-bass driver and subwoofer.

Considering that it replaces both preamp, power amp, interconnects and speaker cables, the cost is certainly in line with high quality components. The sound is not however. Our direct digital chain system obsoletes the current state of the art.

Even before then we hope to have a Level 1 system available which will consist of a single digital amp for each channel. The conventional passive crossover would still be used. The Level 1 will be easily upgradable to Level 2.

The Level 3 system will include active room equalization. Although there are components available to do this now, we feel it must be made more simple, more effective and a great deal cheaper before we can present it with our loudspeakers.

The bottom line is don't spend a great deal of money on amplifiers or pre-amps. Newform's all digital chain will be expensive when it first comes out but not as expensive as the very high end amps and pre-amps it makes obsolete.

Going all digital will eliminate a great many errors but it won't cure bad drivers and really bad installation. In a long discussion with the Scan Speakers engineers in Las Vegas it was felt that more emphasis than ever would be placed on driver quality as the last (analog) weak link in the audio chain. Obviously we feel Newform has a great deal to offer in this area.

New Literature

Our updated literature is out and it comes in two parts. The first is the 12 page design and application overview and the second is the 10 page product listing with the full current line-up.

Please call, e-mail or fax if you would like to receive the new literature.

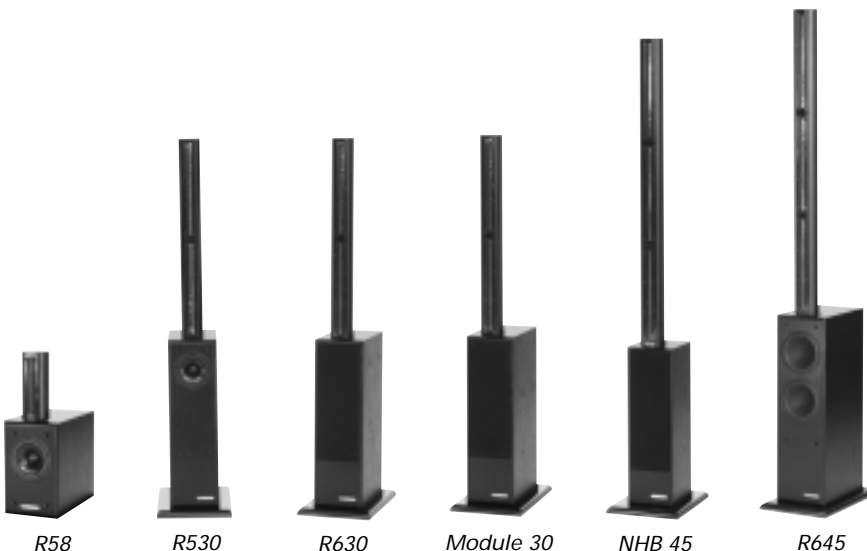
The Easiest Way to Place an Order

1. Contact us with a daytime or home phone number.
2. We will call you and discuss your application, your room and your musical tastes in depth.
3. Once the correct model has been identified, we take your order over the phone or it can be faxed to us.

DO NOT EMAIL YOUR

VISA OR MASTERCARD INFORMATION

Your delivery information is entered into our computer systems but your Visa or Mastercard info stays on paper only. It is therefore 100% secure from any kind of computer hacking or electronic mishap.



CURRENT PRICE LIST

Full Range	List Price per pair	Your Price Delivered
	\$US	\$US
R58	\$1595	\$910
R630	\$2695	\$1516
R645	\$3695	\$2265

Modules

R530	\$2295	\$1385
NHB Ultra	\$11995	\$6847
NHB 45	\$4195	\$2380

Ribbon Drivers (pairs)

R30	\$680
R45	\$1140

KITS - All kits contain Peerless or ScanSpeak mid-bass drivers, full crossovers, wiring and all hardware. You supply the enclosures and the grills.

KITS

Mod 30 in kit form	\$780
R630 kit	\$976
R645 kit	\$1570

Kits can be supplied in many different formats. What kind of project would you like to tackle?

All Prices/pr US\$ FOB Your Door Via UPS. There are no additional charges in the continental USA. Payment is by personal check, money order, wire transfer, Visa or Mastercard. For Canadians, add 30% + GST (+PST in Ontario). For overseas shipments, price includes 50% of air freight to the nearest international airport. Duties, custom charges and taxes are extra.

30 day, "Let's Make Sure" period. Offer applies only to systems not kits.

5 Year parts and labour warranty with 1 way shipping.

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