

THE Sweetest SYSTEM

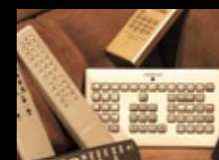
Ashley Kramer is a man on a noble mission: to find the world's best home theatre

Some home theatre systems arrive in a bulky box. They fit in the back of the car and they offer the family exactly what they want: simple surround sound with more impact than the piddly TV speakers can generate.

Other theatres are more serious, using multichannel home theatre receivers and at least five speakers plus a subwoofer and a big screen TV. The performance generally increases with the price, but so does the complexity and the challenge of getting everything into the lounge before significant others put their feet down.

Then there are the full-blown home cinemas, owned by enthusiasts who believe that a theatre should be more than surround sound and a screen. These rare people have dedicated home theatre rooms and extremely supportive or at least tolerant partners. They're focused on the performance of the theatre and its appearance, expecting it to feel and sound like a real cinema. Some are totally into the sonic and visual experience, which takes priority over the look and feel of the room. Others want the theatre to blow people away before anything's even switched on.

Here we have two very different theatres: one is probably the most expensive in New Zealand, the other surely among the flashiest and best designed.



Theatre 1: The Big Kahuna

If this theatre looks familiar, that's because you've seen parts of it before. We covered it more than three years ago when it was the most expensive hi-fi system in New Zealand. It still is, as far as we know. Funnily enough, it's also our most expensive home theatre. That's what happens when you base your system on speakers that cost more than a quarter of a million dollars and then proceed to add a truckload of equally high-end components from there.

That's what Neville did, and while the room is biased towards two-channel audio, it's also a devastatingly effective theatre. At 9 x 7m with a three-metre ceiling, it's big enough to accommodate any equipment that takes Neville's fancy.

The room started off as a bedroom but was then custom designed around the monster Von Schweikert VR11 loudspeakers, which dominate the room to the point where everything else looks tame. At more than two metres tall and close to 300kg a piece, the VR11s are about as mighty as speakers get, so you'd be forgiven for barely noticing the Von Schweikert LCR70hse centre speaker and the VR7 surrounds.

The VR11s are capable of going loud with a low-powered amplifier. However, in the spirit of overkill, they're powered by the biggest, baddest valve amplifiers available today: VTL's Reference Siegfried valve monoblocks. Neville wanted power to burn, effortless dynamics and the ability to pressurize the room with sound. He's got it in spades because each 80kg chunk of metal can crank out up to 600 watts into the VR11s.

There's no subwoofer, which isn't really a surprise since the VR11s pack two 15-inch woofers a side, each driven by its own 1000-watt Class-D amplifier. To put that into perspective, consider that they're only mildly down at 10Hz – in other words they're still pumping out serious bass well below the magical 20Hz level. The VR11s also happen to have four 8.5-inch mid-bass drivers, two 7-inch midrange drivers, plus two tweeters and two supertweeters – per side.



The rest of the components in the system are world class, with a Meridian 800 DVD player, Accuphase vx700 pre/processor and dx600 power amplifier for the centre and rear channels. A VTL tl7.5mk2 valve preamp runs the big Siegfrieds. You wouldn't even register the JVC DLA-HD750 D-ILA projector or Stewart Filmscreen screen because they're both housed in matching trapdoor drop-down systems, completely hidden when not in use.

This theatre hasn't been subjected to the machinations of an interior designer. Anything that isn't orientated at performance has no place here, so instead the room has recently had a full acoustic treatment by Rives Audio, designed to correct over-damped acoustics.

An initial briefing with Neville clarified the aesthetic considerations and fixed what could be moved. Then a detailed plan and photos were submitted to Rives Audio, along with an incredibly complete series of acoustic measurements, made using a specially calibrated measurement system. Rives applied computer modelling to the room based on the measurements, photos and plans before completing a full room treatment plan.

The suggested treatments were implemented, the room retested and fine tuned where necessary. Then the system was tuned to the room, with final setup performed by ear, which is still the way to get the best results once everything else is in place.

The final result is a textbook room response, which has pleased Neville no end. He's more into music concerts and videos than movies, and the theatre excels with these as much as it does with stereo playback.

It would be easy to sink this amount of money into a boat or fancy car, but I daresay Neville gets far more enjoyment every year from his theatre. It's about as high impact as anyone could imagine, both visually and sonically, but there's always someone who's gone bigger.

The future of HT

The hottest technology in home theatre this year is 3D. While many Kiwis will have their eyes on TVs in the 50-inch range, if you've got more space, you might consider waiting for the bigger 3D panels that will get here at some point – the bigger the display, the more pronounced the 3D experience. Panasonic demonstrated a 152-inch 3D monster at CES earlier this year; it had a 4096 x 2160 resolution and a contrast ratio in the 5,000,000:1 range. There's no price yet but if you have to ask... Panasonic already has a 65-inch 3D plasma and other manufacturers are showing off bigger (but still real world) 3D sets. LG had a 72-inch panel at CES and Visio is selling a 70-inch number in the USA. In the projection space, full HD 3D projectors have been announced by manufacturers including LG and JVC. When you'll be able to stroll into a local AV store and pop one under your arm one is uncertain, as is the price point, but they will be premium options, much like the higher end JVC D-ILA units. There are 4K projectors already available (4096 x 2400 or 4096 x 2160 resolution) but they're not exactly inexpensive, being orientated towards professional or retail environments. If you absolutely insist, you can own one (Jeremy Kipnis runs four of them in his bigger cinema - see p42).



Theatre 2: The Style Council

The interior design of this Hamilton theatre has obviously been carefully considered, because visually, it's a stunner. With tiered seating, integrated décor and lighting, it's impossible to be anything but impressed.

As good as it looks, a lot of thought has been put into performance and useability, which were priorities long before the project started. The room was custom designed, with a blend of soft and reflective surfaces to ensure a good balance of absorbed and reflected sound. The sound proofing aspect has been balanced against the need for sound extraction. There isn't too much leakage to other areas of the house, yet the room doesn't sound muddy and overloaded because of excess retained sonic energy.

It's been designed for good audio and video performance from all of the seats, but the sweet spot is right where the owner sits. Factors such as clear line of sight, reflections, refractions, distances and speaker angles are all optimised for that specific position. The video system has been calibrated to the same standard applied in mastering studios so that images are displayed exactly as intended.

The electronics are based around a full Jamo THX D7 7.2 system. The wall-mounted Jamo speakers are deceptively demure compared with the big floorstanders expected in a theatre like this, but they can pressurise a room like you wouldn't believe, especially with the big subs on hand. Amplification is provided by an Adcom GFA7707 200-watt seven-channel power amplifier and a GTP870 pre/processor. Sources are a Pioneer Blu-ray player, MySkyHDi and an Apple TV. The full HD picture comes from a Barco Blackwing 2 projector shining onto a Screen Technics screen; the cabling is predominantly upmarket Analysis Plus.



To make sure the bass is at an appropriately earthshaking level, two Clark Synthesis Tactile Sound systems are installed, one in each plinth. It's the same technology used to enhance theme park rides and military simulators. Transducers powered by 200W monoblock amps shake the plinths and seating during a movie, which adds an entirely new dimension to the theatre experience; feeling the room move makes it that much more real.

So this theatre looks and performs brilliantly. But wait, there's more. There's plenty of smart automation hidden behind the scenes, controlled by a Vantage Controls wireless colour touchscreen. The automation starts from the moment someone enters the room: pressure detectors in the floor are triggered and the system starts up a 'welcome' lighting scene.

The system is fully programmed with single-push tasks. For example, if the owner wants to watch a Blu-ray disc, he just hits 'Watch Blu-ray' on the touchscreen. The curtains close, the lighting slowly dims and the projector, amplifiers and Blu-ray player are turned on with the correct settings for best Blu-ray performance. The drawer of the Pioneer player even pops open to await a disc and the touchscreen shows specific Blu-ray commands. When someone hits play, the lights dim down to off. Every other function is similarly automated, with each customised to suit the individual activity.

If anyone gets up while a movie is playing, the pressure sensors detect it and automatically raise the tread lighting to illuminate the way out without disturbing anyone else. If a movie is paused or stopped, the lights are brightened just enough to take a phone call or read a DVD cover. When the theatre system is turned off, the lighting gently raises back to the welcome scene; if it's dark outside the curtains stay closed, if it's light, they open. There's full two-way feedback to the touchscreen, allowing the owner to browse album cover art. He can also access stored music and video content, the internet, climate control and security systems, cameras and curtains.

This kind of theatre room can be set up with enough desire (or a modest lottery win) but the next one on show takes more determination – and cash.



The Godzilla of home theatres

Neville's Von Schweikert-equipped home theatre is a deeply impressive system but in the grand scheme of things, it's not a first-class player. There are home theatres out there with so much money behind them that they leave impressive far behind and head quickly into unbelievable. What's a lot of money? Try \$8.8 million. That's how much US film and music producer Jeremy Kipnis has invested into his home theatre (it's actually a 'screening room').

It's an 8.8-channel system that happens to use more than a mere eight speakers or eight subwoofers. There are 35 amplifiers powering eight massive Snell THX Music & Cinema Reference Towers with MuRata super tweeters, 3 Snell THX Music & Cinema Reference LCR-2800 Centre speakers and 10 Snell A7 Illusion Reference full-range speakers. In addition, the system has 16 Snell subwoofers, each with an 18-inch woofer to make sure the bass gets down to a flat 10Hz and fills the cavernous room with ease. The screen is 5.4 x 3m and the projectors are from Meridian (4096 x 2400p) and Sony (4096 x 2160p in 3D), with a backup 1920 x 1080p Sony thrown in for good measure.

Of course, there are more sources and video processors than you'll find on eBay on a good day. There are vibration reduction systems, high-end AV racks, huge isolation transformers and even identical lengths of balanced Cardas cable for every component, so not a single detail has been missed.

The room itself covers more than 200 square metres and is a custom-built double-story concert hall with a vaulted ceiling. It features non-parallel surfaces all round, noise isolation systems and acoustic treatments.

The truly mind boggling part is that this is Kipnis' Cinema Beta. His Cinema Alpha is bigger, bolder and better, not to mention more expensive. However, it is a 135-seat screening room with four Sony 4K projectors calibrated to combine into an 8192 x 4320 picture. That's 35 million pixels, which makes your 'full HD' TV and its two million pixels look anaemic.

Cinema Alpha isn't exactly a home theatre but even so, who knows if Cinema Beta is actually the biggest and best, or the most expensive theatre? Between the private island types who own 300 Rolls Royces and the even richer ones we never hear about, there are some transcendently wealthy individuals out there. There may well be a secret bunker somewhere with enough components to power a third world country and a screen that makes a bona fide cinema look small.

