

Thriller!



A compact double-story townhouse in Cape Town may seem an unlikely setting for a top-end, fully THX-compliant home theatre.

However, as it turns out, the system under scrutiny is an excellent example of intelligent planning, and careful system design and installation, within the restrictions of an existing space — and without the luxury of structural modifications, or even building a dedicated room from scratch.

The system was conceived and designed by Igshaan Safodien of *Signals Audio Visual*, who also happens to be an accredited THX video calibrator.

The owner is a movie buff and a self-confessed European art movie enthusiast. The challenge was to design and install a system able to recreate a realistic, full-

impact cinema experience, with an equal emphasis on superior image quality, and on sonic impact and accuracy.

In fact, the owner wanted the system to eclipse the typical commercial cinema experience, and instead to recreate the visual and sonic excellence provided by a movie mastering studio in the context of the existing open-plan lounge.

Must-have requirements included the ability to reproduce a true 2.35:1 cinemascope image, as opposed to the mostly adopted 16:9 format, and a sound system fully compliant with the latest THX performance standard to ensure cinema-compliant dynamic range and impact.

All of this sounds a like a tall order, given the space constraints of the lounge area — but as our images show, the result is aesthetically pleasing and perfectly integrated with the structure and layout

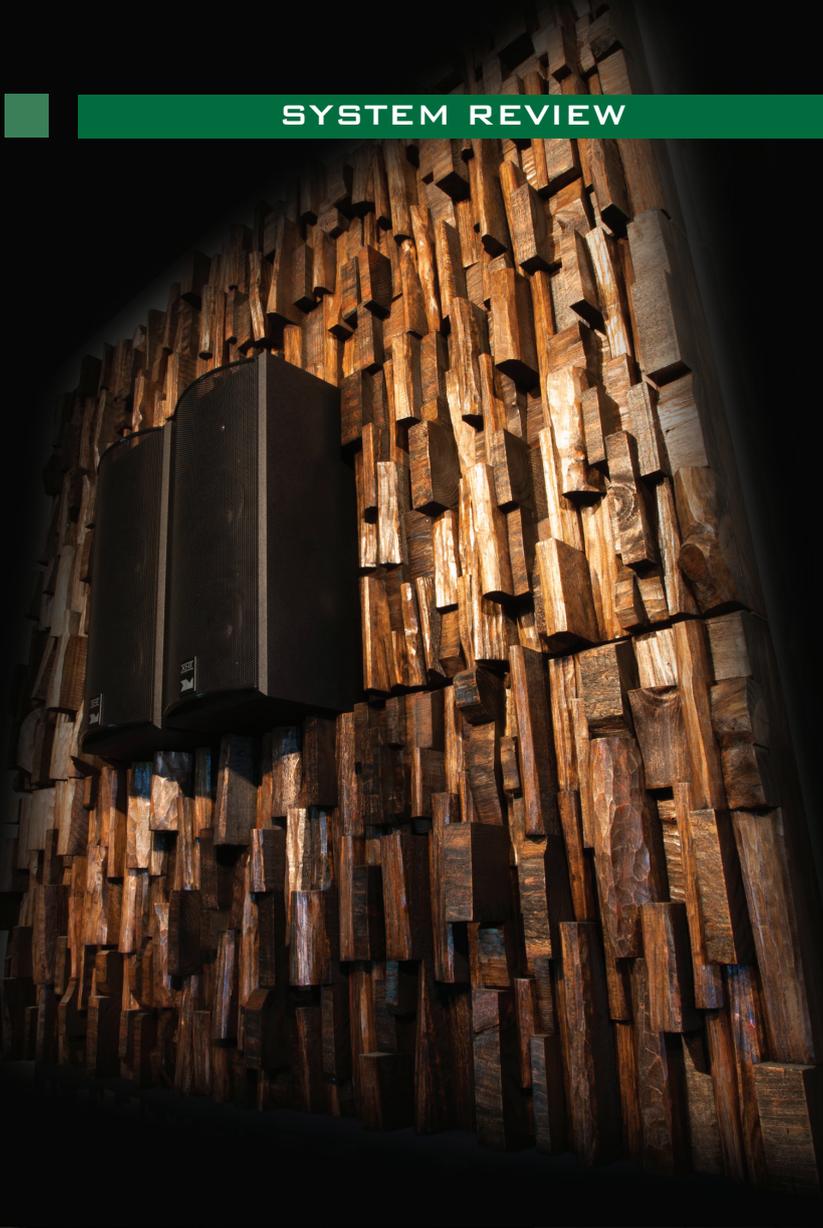
of the room. As we'll see, even those aesthetic elements play a part in the performance of the system.

To deliver the combination of large image size and 2.35:1 aspect ratio, a projector-based solution was the only option. To house a big enough screen, a custom-built wall unit was designed and constructed to fill the 'dead' space under the stairs leading to the upper floor.

This allowed for the L-shaped lounge suite against the opposite wall to be retained for seating, while the projector was suspended from the solid slab roof, almost directly above the seating position.

The wall unit features real-wood finishes to suit the room décor, and offers space for the amplification and source components. But the real trick is the use of an OS Soundmat THX acoustically transparent screen. The 100-inch (that's

Premium home theatre systems require large rooms, cinema-style seating and a battery of electronics, right? Wrong! This home theatre, neatly integrated with the lounge section of an open-plan ground floor in a compact townhouse, keeps its highly discerning movie buff and music lover owner smiling — and with good reason!



2.54 metres!) screen is not only expansive, but also allows the main front loudspeakers to be located behind it.

The result is a clutter-free, elegant appearance with all the floor space retained. At the same time, the speakers are perfectly located to allow exact sonic alignment with the on-screen image, ensuring very precise, very realistic staging and imaging.

The OS Soundmat uses a woven rather than a micro-perforated screen material that is said to allow an unhindered, truly sonically transparent passage of the sound from the loudspeakers. In this application, it clips into the wall unit, and is thus easily removed to gain access to the loudspeakers behind it.

The cavity behind the screen is home to no less than five loudspeakers — three identical MK Sound MPS 2510P active

monitors in a left/centre/right configuration, and a pair of Xavian XN270 two-way monitors, which are independently linked to the owner's separate stereo system.

Before we discuss the speakers in more detail, let's look at the way the cavity behind the screen has been treated. The entire space is lined with Corning glass-fibre batting for effective sound absorption. Black fabric has been used to cover the yellow batting, which darkens the cavity, to the benefit of the contrast ratio achieved by the projection screen.

The glass fibre's highly efficient sound absorption properties have a significantly positive impact on the overall acoustics of the room, as it slows down the reverberation time of the room as a whole, benefiting its acoustic properties.

I mentioned earlier that the room's

modern, clean aesthetics aren't just for show: it turns out that the contemporary grey hue chosen for the walls and ceiling was specifically chosen to allow perfect greyscale calibration with on-screen images. The finish is matt to prevent reflections, and when the room is darkened, this also benefits the dynamic range of the picture on screen.

Delivering that picture is a JVC DLA-X70R 3D-capable projector, fitted with a Panamorph A480SYS anamorphic lens kit. The latter is necessary to accurately convert and scale the image to a cinema-correct 2.35:1 aspect ratio.

The JVC is one of the most highly regarded 3D-capable projectors in its class, offering zoom and both horizontal and vertical lens shift to ensure perfect projector-to-screen alignment. A powerful 220 watt UHP lamp provides bright



picture quality, and it is fully THX 3D Display certified.

However, the real appeal of the JVC is its 4K upscaling capability, offering up to 3 840 x 2 160 resolution from compatible 2D signals. Another highlight is the native contrast ratio of 80 000:1, resulting in the kind of inky blacks and crisp whites usually almost out of the question in projector terms.

Okay, back to those loudspeakers. They may be compact, but the MK Sound monitors are not only active, but also THX PM3 certified for professional use. In fact, as Safodien points out, these monitors are typically used as critical monitors in film studios during the actual mastering process – but they work a charm in this home theatre system, thanks to their penchant for extended dynamics, precision and control.



This trio of pro monitors is supported by a pair of MK Sound S150T tripole surround speakers, located high up – literally against the ceiling – on either side of the comfortable sofa. A monopole dipole hybrid, this speaker has a pair of 83 mm polypropylene drivers on the front baffle, but joined by another two identical units, one on each side panel, operating in a typical dipole configuration. Combined, the three arrays produce a trio of sound planes for even and effective dispersion and seamless staging.

Twin MK Sound LCR750s do duty as back surrounds, located on the back wall behind the sofa, and surrounded by an array of imported Olga sound absorption panels. Safodien points out that these panels aren't only acoustically effective, but also provide a visually attractive solution.

But what about the all-important bottom-end? Well, that's the job of the MK Sound MX350 THX active subwoofer. With its dual 300 mm long-throw drivers, it's more than up to the challenge of pumping out deep, clean, glass-rattling sub-bass.

Remember, though, that the system resides in a double-story townhouse, with neighbours, so the sub has been located on a base consisting of two pieces of foam separated by a section of superwood to prevent resonances and mechanical vibrations. It has the added advantage of boosting low-frequency



impact and precision.

Driving all of this is an interesting combination of AV processor and power amplifiers. At the heart of it all is an Integra DHC-80.3 AV processor. THX compliant, the 7.1 device offers all the latest surround sound codecs, and passes on native video via HDMI to the JVC DLA-X70R for upscaling.

Of course, the front speaker array behind the screen is fully active, and thus needs no external muscle, so the front, centre and right channel line-level feeds go directly to the monitors via TAG McLaren Audio balanced interlinks.

A pair of TAG McLaren Audio 250x2R monoblocks is used to drive the rear surrounds and the back surrounds. Speaker cable is Supra Classic.

Safodien selected the highly popular Cambridge Audio Azur 751D Blu-ray player as the core source component for the system. The unit was specifically chosen for its superior audio performance, and for the fact that it offers 2.35:1 aspect ratio playback with Constant Image Height, as well as a host of other unique features, designed to optimise and customise video signal delivery – clearly vital for its application here.

Accessories include a PS Audio P1000 Powerplant for system power regeneration, used in conjunction with Furutech FP-3TS20 power cables. A Blue Jeans Belden Series 1 HDMI cable delivers the video signal to the JVC projector.



VITAL STATS

The entire installation is thoughtfully and thoroughly executed, with a strong emphasis on functionality and performance, but never at the expense of aesthetic appeal. All of which is great: but how does the system perform?

Inception, the visually spectacular futuristic thriller starring a resolute Leonardo di Caprio in the leading role, proved to be a perfect foil for the system. I've only seen this movie in the context of 16:9 aspect ratio LCD and plasma displays, so watching it on the mammoth screen, in a super-wide aspect ratio, was quite an experience.

Of particular note was the brightness and superior colour saturation achieved by the JVC projector and the OS Soundmat screen: the hues were vividly represented, and the projector's renowned reputation for exceptional dynamic range was clearly demonstrated here.

However, in my opinion, the most impressive aspect of the system's visual delivery was the resolution: big-screen renditions often suffer from grain or focus issues, and I was concerned that the limited size of the room, and the large screen expanse, would create that uncomfortable feeling of sitting too close to a big screen.

However, the image delivered here was crisply focussed and seamless, with a total absence of grain – quite remarkable given the viewing distance (about 4m) and the screen size. *Inception* includes several astounding visual effects where landscapes invert or shift, which can be complicated to follow (and to render) but the system was well up to the task, and there were no motion-induced artefacts or distortions.

The car chase, with its heavy-calibre gunshots and crashes, provided an excellent demonstration of the system's sonic capabilities. My overall impression was of a system with ample headroom, and loads of authority.

Safodien admits that the subwoofer has to be turned down after hours, despite being located on an isolated base, as the

IMAGE	..... JVC DLA-X70R projector 4K 3D-capable projector
	..... Panamorph A480SYS Anamorphic Lens Kit
	..... OS Soundmat THX acoustic transparent screen, 100-inch aspect ratio 2.35:1 with deluxe velvet frame
SOURCE	..... Cambridge Audio Azur 751BD Blu-ray player
	..... Denon 3800 Blu-ray player
PROCESSING AND AMPLIFICATION	..... Integra DHC-80.3 AV processor
	..... 2x TAG McLaren Audio 250x2R monoblock power amplifiers
LOUDSPEAKERS	..... LFR: 3x MK MPS2510P THX PM3-certified professional active monitors
	..... Surround: 2x MK S150T tripoles
	..... Surround Back: 2x MK LCR750
CABLING AND ACCESSORIES	..... PS Audio P1000 Power Plant
	..... 3x TAG McLaren Audio balanced XLR interconnects linked to active MPS2510Ps
	..... 2x PS Audio Statement and Prelude mains cables
	..... Supra Classic speaker cable
	..... Nordost subwoofer cable
	..... Blue Jeans and Monster HDMI cables
INSTALLATION	..... Design and calibration: Igshaan Safodien, Signals AV
	..... Installation: Shafiek Majiet, Revelation Audio
	..... Cabinet: Libra Joiners
	..... Blinds: Culemborg Flooring
SYSTEM VALUE Approx. R673 000, excluding installation, custom cabinet and blinds
EQUIPMENT SUPPLIED BY	Signals Audio Visual 021-703-7114
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neighbours end up having to share the extreme bottom-end delivery the system is capable of!

Importantly, the bass is never allowed to overwhelm the overall sound, but provides the kind of rock-solid, punch-in-the-gut bottom end that makes every on-screen episode seem tangibly real. This is a system that achieves exceptional precision, but without losing the vital character and tonal texture that distinguishes the merely analytical from the ultimately involving. In home theatre

terms, the midrange plays an almost disproportionately important role, because it is the prime carrier of vocals and dialogue.

The system's treatment of voices and dialogue was among the best I've heard: clear and unequivocal, but always contextually precise and believable, and with a richness that added to the authenticity of the movie experience.

I usually find that AV systems err on the bright side of clear, perhaps because the finer spatial detail, which is so vital to creating an accurate surround stage,



end up being overemphasised in the final mix. The system set-up here found a pleasing balance between this detail delivery and a smooth, seamless tonality that never sounded fatiguing, even at higher listening levels.

It also seemed to me that the acoustics of the room achieved just the right combination of inertness and natural reverb to allow the sound to 'live' and seem natural, while avoiding any resonances, peaks or dips.

Avatar provided an opportunity to experience the 3D capability of the JVC projector, and the results were again impressive – a truly immersive visual experience that easily eclipses that offered by 3D experience in commercial cinemas, specifically because of the richness of the tonal hues, the fine

focus of the images, and the ability to seamlessly render action sequences.

I could go on describing the system's quite superb qualities, but I've already run out of space. Suffice it to say that brief sequences of the broody, ominous *The Dark Knight*, and Diana Krall's *Quiet Nights* concert in Rio only served to further underline the system's overall breadth of talent.

This is a system that would live up to even the most fastidious movie fan's expectations, in both sonic and visual terms. I'm sure that it's also adept in musical terms, even for two-channel material.

However, the presence of a dedicated two-channel system (with a Linn LP12 record deck front-end!) suggests that the owner prefers his music treated sepa-

rately, provided by Naim amplification, a Naim HDX music server and the Xavian speakers already mentioned.

Of course, there are limitations here: the compact space and lounge-style seating mean that this is not a cinema experience that can be shared by more than five or six people at a time. And the visual excellence on offer can only be achieved with the room thoroughly darkened, necessitating the use of block-out blinds.

However, taking into account that the system's elevated levels of cinema performance have been achieved in a space that still serves as a normal lounge, this has to be one of the most enjoyable and entertaining AV systems I've had the pleasure of experiencing.

Deon Schoeman

