

Getting the big picture

Max plays with a great CRT projector

By Max Christoffersen

Barco Cine 7 CRT video projector. \$25,500

I hadn't wanted night to come so bad as I did on December 8, 2000.

Earlier that day a Barco Cine 7 Projector arrived. It took most of the afternoon to have it professionally converged and set-up and then there was the wait for a nighttime showing of my favourite DVDs on one of the best CRT projectors available.

Waiting waiting waiting...

The word on the street suggested this was a real show stopper. Barco had only just updated their product line and this was one of the new



units in their Barco Cine range and one of the few in New Zealand.

As the name suggests, the Cine 7 is a projector designed for home theatre use. It uses tried and true CRTs (cathode ray tube) and is a compact design which would fit into most dedicated home theatre rooms (and bigger lounges).

It is among a class of similar 7" tube projectors produced from Sony, Vidikron, Runco and DWIN. But be warned, projector performance specs aren't a trust-worthy guide. As usual it's a numbers

game and only a first-hand test will confirm the real-world performance differences between them.

To try to answer some key per-

formance questions, the Cine 7 was set up on top of my custom coffee table (that houses my own projector) with the projector level with the bottom edge of my 100" 4:3 Draper screen. The Draper has a high 4:1 gain and after 8 years of viewing I am thoroughly familiar with its characteristics.

And the final piece of the projection puzzle: The Quadscan Pro line quadrupler would provide upscaled (line quadrupled) de-interlaced images from PAL and NTSC sources to the Barco.

The sources were a Toshiba 5109 DVD using component outputs and a Samsung 905 for PAL sources via S-Video and LD/VHS via composite. (The Barco has an option of a built in line quadrupler. It also features a built in auto-convergence function called 'Iris'.)

In all, some \$31K of projection equipment. It's a dirty job having the chore of using this equipment: but someone has to do it; and do it, I did!

Here's what I found.

Let me save you reading too much further: The Barco/Quadscan combination blew me away. It did so because it could produce vibrant, colourful images that were flicker free, rock-solid stable and with depth of field to die for. It had detail that made some images look real. There wasn't a scan line in sight and it was the best CRT projected image I have seen.

The Barco/Quad combination really put DVD playback into a new performance envelope. The difference between the Barco's image and others is the contrast ratio from the deep dark blacks (intro to *Toy Story 2*) to the bright whites (*Independence Day*). And that base of colour saturation was evident in many other scenes. It seemed to add dynamism to all the other colours, as if black was being done right and after that everything had body and substance and scene colour and impact was truly dynamic and exciting.

Colours were truly vibrant, the contrast ratio was extraordinary and the level of detail portrayed was exceptional. Shadow detail too was excellent - you could easily see the thread textures in dark business suits or the small background details on complex space scenes from films like *Starship Troopers*, or the mechanical detail inside the sub on *Das Boot*. Everything 'rang true' as if this is the way it should and would look like.

This effect was never better portrayed than on the introduction to *Toy Story 2*. The space scene is very deep black with only the stars as light sources. Then the credits role and the images of Buzz flying take over. The colours were bright and deep and edge definition was perfect. Anyone who saw this opening was impressed with the film-like nature of the images, from bright

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colour to crisp detail. It was mesmerising to see such large images with such clean definition and colour saturation with no motion artifacts.

Despite some (anticipated) ergonomic bugs with the Quadscan processor, it delivered more detail at XGA (1024x768) resolution than anything I had seen before. *A Bug's Life* had real image depth and the detail in the 'Where's My Food' scene made the locusts look like genuine works of computer art and truly menacing; close-ups of James Taylor on *Live at the Beacon* looked real, every pore on his face was clearly seen; Robert De Niro and Wesley Snipes in *The Fan* emerged from a murky background to look as close to film in the home as I have ever seen, while *Dark City* simply had more detail in a very dark film than I had ever noticed. *Armageddon's* deep blues and deep blacks highlighted the colour fidelity and *Shawshank Redemption's* leading characters in close-up looked as realistic as film.

A real surprise was that non-anamorphic discs, either PAL or NTSC, looked as good as their anamorphic counterparts! And despite its age, *Aliens* looked stunning with the metallic interior of the main set looking and feeling very claustrophobic with every scene oozing metallic, slimy detail: from deep black to bright light - it was all there.

In short, the Barco/Quad combination delivered film with all of its emotional and creative input intact. The images were clean and that was clear from the opening frames of the DVD FBI warning which was typified by very clear (no wavering) on-screen graphics. I shook my head several times finding it difficult to believe such image fidelity was possible

from a 7" CRT. This stopped looking like a typical TV image and became something else entirely!

Surprisingly the screen at 4:1 gain provided even greater dynamic contrasts and when using a lower gain screen I lost the dynamics I had become very accustomed to. So experiment with screen types, see what works and then try to arrive at a screen size that provides the best image quality. I suspect this projector could go to at least 100" wide and still be perfectly watchable!

But let me make a crucial point here. Why do we need a projector at all? Can't we just watch TV and enjoy it? Of course you can: I can enjoy *Toy Story 2* or *The Shawshank Redemption* on anything and enjoy it. But if you want a cinematic experience where sound and vision are integrated, there is really only way to achieve it; with the a projector capable of providing larger than life images (matching the larger than life soundtrack). Even the Editor, (a projector-agnostic), had to concede *Das Boot* via the Barco, was quite an intense and engaging experience.

Interestingly not everything looked great. *The Matrix* (Zone 1 version) looked grainy, some distant scenes lacked clear definition and other scenes showed some signs of typical artifacts (some 'jaggies' were evident when Neo becomes the pin-cushion and Don Felder's guitar strap became rainbow coloured on

Hell Freezes Over). Some distant shots seemed soft and lacking focus while others (Fleetwood Mac - *The Dance*) looked very ordinary.

The reason for these 'failures' is the Barco is better than the source material it was being fed! The soft images were showing exactly what was on the disc and the grain of *The Matrix* is there on small screen TV as much as large screen projection

and nothing can save the soft recording of *The Dance*. Like good audio, the Barco was showing 'warts and all' what was on the original recording. Garbage in = garbage out applies.

Quite aside from the quite brilliant images was the fact that in two weeks there was no convergence drift at all. And as a result of using a high gain screen I could back off the brightness and contrast buttons on the Barco remote to have satisfactory light levels at 60 for brightness and contrast verged on the high 80s. I could even read the manual and watch the screen with the room lights on!

On the down side, the fan noise was more than I could stand in its floor mount situation, but when housed in a ceiling mount with a hush box, the fans would be negligible.

But if you wanted to really show what it could do, play *Apollo 13*, *Starship Troopers*, *The Fan* or *A Bug's Life* and marvel at the focus, colour fidelity and pure dynamic impact of such large images brimming with detail.

After two weeks the lasting impression is that right now, the Barco has the lead in key performance areas and it will take some projector to surpass this very, very fine unit.

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