

SIM2 C3X LITE ♦ £11,000 (approx) ♦ 01825 750850 ♦ www.sim2.co.uk

# Three-chip DLP hero

Martin Pipe is seduced by the UK's most affordable 3-chip DLP projector. That's still eleven grand, but it's worth every penny...

**A**s a technology, DLP has much going for it in performance terms – particularly as far as greyscale and black level are concerned. But conventional single-chip DLP projectors can't match arch-rival LCD for colour reproduction, and frequently suffer from the characteristic 'rainbow effect'.

However, 3-chip DLP projectors give fine pictures with excellent colour reproduction and complete freedom from the rainbow effect – but at a price; early units didn't leave you with much change from 25k. All credit, then, to SIM2 – which has just released a 3-chip DLP projector with a price tag of £10,995. Still not cheap, but a viable proposition for the serious enthusiast.

## Grand designs

SIM2's Grand Cinema C3X 'Lite' is the entry-level model of this new 'budget' 3-chip range. All are based around a trio of HD2+ DMDs, enhanced by Dark Chip 3 (DC3) for improved blacks. The native resolution of these chips is

1280 x 720, making the C3X models ready for High-Definition Sky. At the top of the range is the C3X Link, which employs a separate video processor linked to the projector via an optical cable. The standard C3X claims a higher contrast ratio than the C3X Lite, thanks to a more powerful lamp and refined optical path, but in other respects is identical.

With its elegant curves and glossy finish, the Lite is up to SIM2's usual high standard. It's also smaller than other DLP 3-chips, occupying much the same volume as a standard single-chip unit. SIM2 reputedly spent \$5m developing the C3X range, a proportion of which went into designing the advanced thermal management needed to achieve this. The Lite certainly runs cool and quietly – the lack of a colour wheel and 150W projection bulb help here.

A serious projector demands serious optics, and the C3X doesn't disappoint. There's a choice of two lenses, both of which are custom-made for SIM2 in Japan. When you order the projector, you can specify throw ratios of 2.0-3.0:1 (long-throw lens, standard) or 1.5-2.0:1 (short-throw lens, special order).

Interestingly, there's no iris control – used by some manufacturers to improve black performance

at the expense of brightness. The reason for its exclusion, according to SIM2's UK boss Alan Roser, is that the use of irises also adversely affects image 'depth'. There is, however, a low-power 'eco-mode' that will improve black levels in darkened rooms.

## Features

Connectivity wise, the Lite is well-specified. In addition to composite, S-video, VGA (RGB-HV) and HD Ready component analogue inputs is an HDMI v.1.1 input for digital sources. All can be re-named in the onscreen menus to identify the connected kit.

An odd fixture is an optical digital output, which contains any digital audio that happens to be present on the HDMI input. I'm not exactly sure

## LAB REPORT

	Excellent	Good	Average	Poor
Colour	✓			
Black level	✓			
Contrast	✓			
Resolution	✓			

Tried & Tested



### RATINGS

**Highs:** Detail; dynamic range; colour rendition; great design  
**Lows:** Not the smoothest user interface, ruthless with poor source material

Brightness	★★★★½
Clarity	★★★★★
Features	★★★★★
<b>OVERALL</b>	★★★★★

## DLPProjector



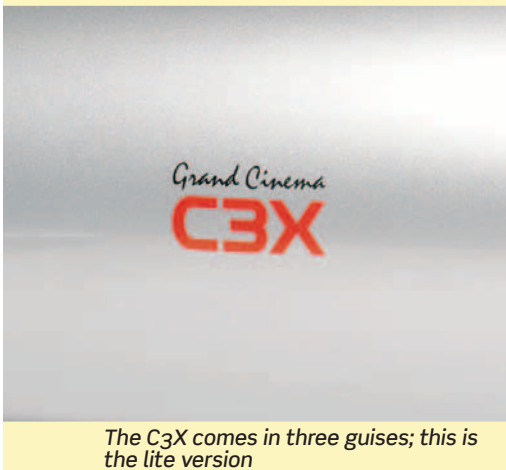
Buyers can specify a special-order short throw lens for smaller rooms



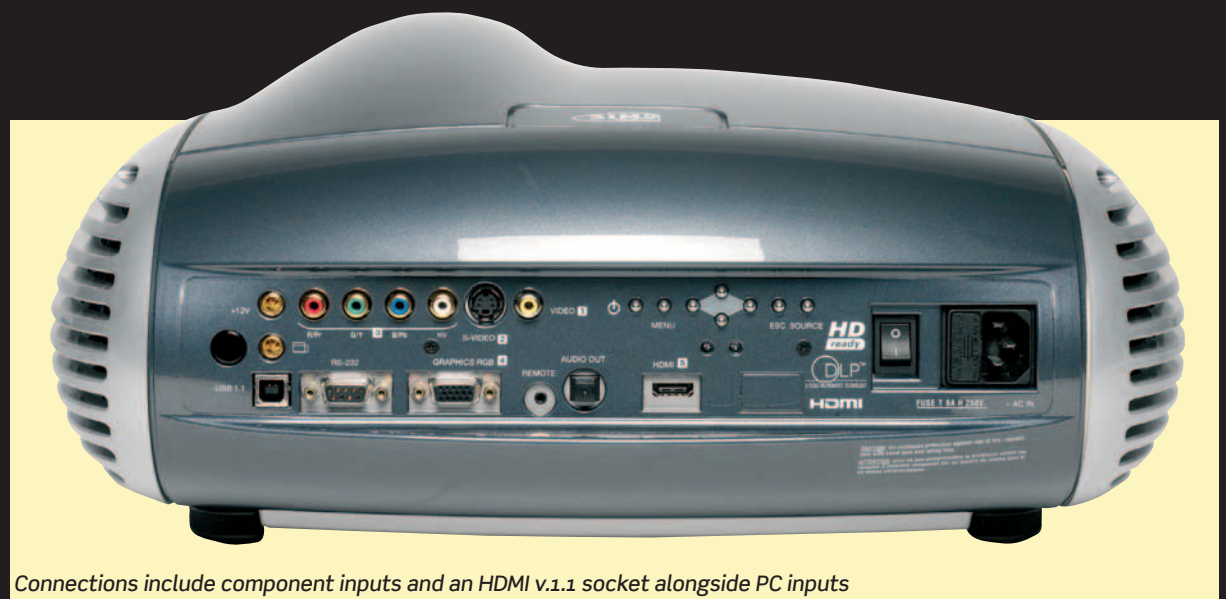
The chassis is remarkably compact and quiet in operation



This remote is backlit but our reviewer found it irksome to use



The C3X comes in three guises; this is the lite version



Connections include component inputs and an HDMI v.1.1 socket alongside PC inputs

### 'The 3-chip approach, plus SIM2's careful optical design, results in reference-standard visuals'

who will use this, but it is apparently a condition of the HDMI licence! There are also two 12-volt triggers for operating peripherals like screens, plus RS232 and USB ports for remote control and firmware upgrades.

Configuration menus are comprehensive and sensibly organised. Initial setup functions include orientation (rear-/front-projection and ceiling mounting are catered for), keystone correction (digital rather than optical), lens-shift, focus and zoom.

A series of onboard test patterns are provided for initial calibration, although professional installers will no doubt prefer to use their own signal sources. The Lite makes careful provision for alignment of colour-temperature and gamma-curve. As a result, installers can calibrate this projector to ISF standards for the most accurate results.

More familiar parameters such as brightness, contrast, sharpness, tint (NTSC), noise reduction, flesh-tone correction, deinterlacing mode and colour saturation can be memorised for each input.

There are a total of eight aspect ratios to choose from, three of which are user-definable with control over width/height. Presets include 4:3, 16:9 anamorphic, letterbox expansion and 'pixel-to-pixel' (i.e. no scaling).

#### Awesome performance

The Lite gives some of the best pictures I've yet seen from a DLP projector. The 3-chip approach, plus SIM2's careful

optical design, results in reference-standard visuals. The TI chipper that drives the DMDs may be 8-bit, yet there's no 'haloing' – just a visual palette that stuns with its true-to-lifeness. No convergence errors were noted, and so the three DMDs are clearly aligned to near-perfection.

Both DVDs and HD material demonstrate superb resolution, with fine textures standing out, especially if an HDMI (or, to a slightly lesser extent, component) feed is used. It was easy to discriminate between foreground and background details, such is the depth of the image. 60Hz material also proves that the onboard Faroudja DCI deinterlacer does a fair job with pull-down correction, but some off-board scalars can fare better in this respect.

Predictably, the Lite tends to exacerbate the limitations of poor-quality material like low-bitrate digital TV (it's amazing what passes for 'broadcast quality' nowadays). Colours and dynamics may still impress, but movement disappears into a blur of macroblocking and edge fizz. 'Filter' and 'noise reduction' options in the menu settings can reduce, but not eliminate, such visual nasties. Given that digital TV is here to stay, SIM2 should consider implementing some kind of block noise reduction system similar to that found in Sony products. Otherwise, you'll have to rely on an external processor to remove the worst of these anomalies.

#### Conclusion

Overall, this is a truly excellent product from the 'Ferrari' of projector manufacturers. In performance terms, it sits up there with the best of the high-end breeds, including the SXRD Sony VPL VW-100, but has a far smaller form factor. Track down a demo today ■

### SPECIFICATIONS

ITEM	SUPPORT	DETAILS
HD Ready	○	Meets all elements of the specification
Progressive scan	○	480p, 576p and 720p supported
Composite	○	1 phono input
S-video	○	1 input
Component video	○	1 input (will also support RGB/composite)
HDMI/DVI	○	1 HDMI
PC input	○	1 D-Sub 15-pin ('VGA', RGB/HV)
Resolution		1280 x 720
Brightness		1800 ANSI lumens
Contrast		5500:1 (full on/full off)
Dimensions		435(w) x 190(h) x 430(d)mm
Weight		11kg
Also featuring		
'ALPHA' optical path; 8 aspect ratios (2 definable); 3 memories per input type (75 in all); gamma and colour temperature adjustments; 2x definable function keys; phase; 50 - 250in. picture size (diagonal); PAL/NTSC3.58/NTSC4.43/SECAM standard-def support; digital keystone correction; choice of short-throw or long-throw lenses; optical digital output; control via RS232/serial		