

New vision for DLP

Stunning looks and a Full HD chipset make this DLP projector a formidable new debut. **John Archer** takes a closer look at the £3,000 InFocus IN82



The rapid shift to affordable Full HD projectors, typified by a battalion (other collective nouns which might be appropriate include horde, mob, cineplex... suggestions on a postcard) of affordable LCD models, has clearly put pressure on the traditional mid-range PJ market, which is the accepted stomping ground for upscaling DLP models. After all, why pay more when you can get so much for less? DLP-inventor Texas Instruments, however, clearly believes that its technology still offers plenty of advantages over the

competition, which justifies a modest price premium. And in the shape of the InFocus IN82, typically priced around £3,000, its argument does indeed appear to be compelling.

Little black number

Despite being markedly bigger than the HD Ready InFocus IN78 that impressed so much back in HCC #142, this slick new PJ is still a looker. It employs a dramatic gloss black, prettily-curved chassis, that will definitely turn heads. Inventively, the main body of the projector sits on a

Model looks:

InFocus' IN82 employs a dramatic full-gloss chassis – shame it's not available in white...

ball-jointed foot, which allows you to manually rotate and tilt it to your heart's content. This makes it perhaps a tad easier to install in potentially awkward-shaped viewing rooms than 'normal' projectors.

The only slight niggle about this innovative design is that it's rather difficult to make small and precise movements with the ball joint. But this seems a relatively small price to pay for the flexibility it offers.

The IN82's connections include two 1080p/24-capable digital video inputs (one HDMI, one M1-DA



multipurpose job) both specified to the v1.3 standard, permitting compatibility with DeepColor sources such as PS3 games and AVCHD home-made HD movies

Also noteworthy on **the connections panel are 12V triggers for driving a motorised screen and triggering aspect ratio adjustments**, and an RS232 port, making the InFocus custom-install friendly.

The darkness

The chipset at the IN82's heart is a 1920 x 1080 DarkChip3, which combines with the projector's optical system to deliver a phenomenal claimed maximum brightness of 1,500 ANSI Lumens, and an even more remarkable potential contrast ratio of 12,000:1.

As you might expect, though, there's more to this 12,000:1 contrast figure than meets the eye, only made possible via a variable iris control. You can manually adjust the amount of light emitted through the lens in 12 selectable steps. The idea is that, in a suitably darkened room, you can sacrifice some of the lamp's brightness in return for deeper, more

natural black levels. This is a useful tool that other projector makers would do well to support.

Another key element in the IN82's picture make-up is its PixelWorks' 10bit DNX video processing engine – the same silicon that worked so well on the IN78, and which will hopefully adapt itself equally efficiently to the demands of Full HD resolution.

Other features well worth a mention include colour gamut adjustment; the facility to have the projector professionally calibrated by an Imaging Science Foundation (ISF) engineer; flesh tone calibration, black level calibration, and the software element of TI's BrilliantColor system for richer, more natural colours.

InFocus also claims that the IN82 sports D65 (video-optimised) colour calibration out-of-the-box. However, our Tech Labs actually measured it at 6,158K, not 6,500K – although it was quickly tweaked to an almost spot-on 6631K.

So, there's no shortage of picture enhancing technology onboard. But how does the PJ shape up in actual operation?

The IN82 certainly doles out instant eye-candy. An outstanding combination of vibrant colours and

AV/CV

Product:
A Full HD DLP projector with a specification which belies its price tag

Position:
The IN82 sits at the top of InFocus's current single-chip DLP range.

Peers:
BenQ W9000;
Panasonic PT-AE2000

extreme contrast are immediately attention grabbing. The model is also a bit of a light cannon; its images are eminently enjoyable to watch in even quite substantial ambient light. Darken the room to more naturalistic cinematic levels and the model also delivers deep, natural and punchy black levels.

During the opening shots of *Mr & Mrs Smith*, recorded in HD from Sky, the dynamic range between the almost total darkness of the psychiatrist's office behind our troubled marrieds and the almost spot-lit way they're shown in the foreground is really quite stunning.

Of course, the impact of this sterling brightness/contrast combination wouldn't be nearly so strong if the projector's black level wasn't on the money. There's real depth to the movies dark scenes (such as when the Smiths try to kill each other in their own home); even when using the iris at its maximum brightness setting.

In addition to the dynamic range of its images, there's also some outstanding sharpness and texture on show. The IN82's two-million pixel DMD (digital mirror device) reveals every stain, mark and wood grain in >

This Full HD PJ intends to lure buyers away from LCD rivals



