

Projector Hire – DLP vs. LCD

When you're hiring a data projector for your presentation you will often come across a decision to be made – that is DLP or LCD projector. The differences are in many cases extremely technical, and the layman may end up more confused than ever! We have put together a very brief summary of what you need to know when hiring a projector.

DLP or Digital Light Processor is a new technology which allows a much smaller projector to be made. So if portability is important, for example if you are going on a plane with the projector, then it may pay to look at DLP. The DLP chips themselves are made by US company Texas Instruments, and they have been aggressively marketing the concept for some years. This gives them a perceived advantage over the LCD manufacturers who are all competing against each other.

The new breed of LCD (Liquid Crystal Display) projectors is however fighting back on the size front with the introduction of a new smaller panel, allowing manufacturers to create higher resolution portable projectors.

Both camps claim issues occur with the opposition:

DLP sometimes suffers from the 'rainbow effect' where the picture appears as a rainbow briefly noticeable when changing focus from one part of the screen to another. It appears as a secondary image that appears at the viewer's peripheral vision and is generally noticeable when shifting focus from a high contrast area or bright object. This does not appear in "3 chip" DLP projectors, but these tend to be very high end projectors in terms of price.

LCD sometimes suffers from what is called "screen door" effect, meaning the picture is pixilated and appears as if you're watching TV through a screen door. Again the newer LCD projectors have improved the aperture ratio to address this and it is much less of an issue than before. Similarly DLP projectors used to claim a much higher contrast ratio – i.e. blacks were much blacker than LCD; but some of the latest LCD models achieve a 6000:1 ratio, matching the best DLP ones.

Both types are going through constant changes and improvements, to the point where one cannot be said to have an overwhelming advantage over the other.