LED Microprojectors

Will the future of projection technology be in your hands?

Text:/ Paul Newton

The TinyPro and Digishow handheld LED projectors are my first exposure to a technology that I see as being a major player in the future of projection. That said, this technology has a long, long way to go in a market driven by resolution and brightness.

Both are entry-level products aimed at the 'portable' consumer youth market. Designed to accompany iPods, iPhone, media players and PDAs, these LED projectors only weigh a couple of hundred grams and draw very little power. The main point of difference between the two under examination is portability.

The Digishow has a rechargeable internal battery while the TinyPro requires external power. The Digishow projector required less than four hours of charging and gave me two hours of projected image: just enough for a movie or a decent gaming session. Both units run almost silently.

UNDER THE MICROSCOPE

The Digishow projector comes with handy adjustable tripod legs for easy alignment. The TinyPro lacks a tripod, but is just as easy to setup. It's a simply matter of 'aim and focus' – these devices are literally plug'n play. Both projectors are truly handheld also – the Digishow is no larger than a decent-sized mobile phone and has a neat flat design. The TinyPro is a little different and has a more 'boxy' shape resembling a tape measure.

Signal-wise they both only accept standard NTSC or PAL video signals and display accurately across a 640x480 native panel. There's no way to display computer signals with these particular models. The signal input, for both models, is available via the twin RCA-to-3.5mm minijack.

Both projectors make an effort at providing audio, housing a single 0.5W speaker that's adequate considering the units' low operating volume. Unusually, the Digishow provides no audio volume adjustment.

Brightness is a bit of a drawback with both of these products. 10 ANSI lumens (count them: 10) results in the requirement for a totally black viewing environment to view the images properly. Even low ambient light caused major issues with a 500mm wide image. Nevertheless, a half a metre of image is quite big considering the amount of use they will get in kids bedrooms.

There is a complete absence of internal menu/operating system with both of these LED projectors – they both internally scale the signal to fill the panel. The TinyPro handled different aspect ratios better than the Digishow by letterboxing 16:9 content. The Digishow distorted the 16:9 content I sent it by stretching it vertically to fill the panel. Image adjustment is also non-existent: brightness, contrast, chroma are all preset. That said, the image was very well balanced and clean when viewed under the correct lighting conditions (ie. total darkness). Colour reproduction was accurate with sepia and warm coloured content being faithfully reproduced across both projectors. If I were to choose one of these based on quality of image the TinyPro would win hands down.

There is no zoom capability; the lenses on both units allow only focal adjustment. If you want a larger image, you need to position the projector further away from the screen. Projection distance ratio is around 2.5:1.

I see this style of product being a step in the right direction, environmentally, but you get what you pay for. The fact that you need to turn the lights out to use either of these products results in a further saving of electricity as well, so the benefits are two-fold. Power draw with AV products has always attracted negative attention – economical projectors are few and far between. It will be very interesting to see how this technology progresses over the years. The projection market is driven primarily by resolution and brightness – two features that both of these products lack. Development overseas has resulted in some models displaying up to 200 ANSI lumens, but power draw and weight are increased significantly to reach this brightness.

ONE TO WATCH

At around $400, I find them a little pricey, but these *are* projectors after all. My prediction? I reckon that every mobile phone will have one in five or 10 years. The kids will love them.

Tiny Pro

Digishow

Contact Details:

DigiShow available in late June.
www.digishow.com.au
Price: $399

Tiny Pro available from:
ExStream Vision
www.exstreamvision.com.au
Price: approx $369