



Verdict ★★★★★★ Approx price **£800**

# Epson EMP-TW680

No nonsense LCD with good pictures for a great price

- ✚ Easy to set up, HD pictures are heavy on detail, natural colour palette
- ✖ Can't display full HD, average contrast ratio

AN OFTEN MESSY and expensive business, home cinema projection has been an enthusiasts-only zone in the UK until now. That could be about to change with the arrival of products such as Epson's TW680.

Sporting an HD Ready badge and costing around £800, this 3LCD projector is the company's foremost budget offering, although its TW700 sibling is now only £1,000. The price difference arises from the TW680's use of a slightly inferior lens, but for those after a cheap and simple HD set-up, there are few rivals.

The Epson may just be HD Ready, but its other vital statistics – a brightness of 1,600 ANSI lumens and contrast ratio of 10,000:1 – aren't half bad. The latter figure is of great importance because this company's projectors, and LCD technology in general, have long suffered from a lack of shadow detail in dark images. Epson is hoping its Dynamic Iris technology will solve this problem, as well as adding solidity to colours. Not that hues have been forgotten because the unit incorporates 10-bit processing as well as an array of preset colour modes.

These include a simple brightness booster that allows you to use the lightbox in daylight conditions, although you'll still need to wait until dusk for best results.

There are blackness adjusters – Theatre Blacks 1 and 2 – although we can't see why you'd want to view a movie with anything other than

## Features ★★★★★★

The TW680 might offer the most basic feature set of any projector that classes itself as 'home cinema', but it is surprisingly versatile.

The key limitation is its resolution. With 1,280 x 720 pixels, this projector is only fit for displaying the most basic high-definition format: 720p.

## The rivals

### /Epson EMP-TW700 ★★★★★

This keenly priced and versatile short-throw LCD projector suffers only from mediocre contrast levels. Reviewed: Issue 319

### /ViewSonic PJ258D ★★★★★

With a built-in iPod dock it's possible to watch movies on this little LCD projector, albeit in the most basic quality. Reviewed: Issue 321





## Ease of use ★★★★★

The TW680's simple set-up is at the core of this projector. With its 1.5x optical zoom, the lens is able to create a stunning 60in image from under two metres away, so images can be configured almost anywhere. The lens, while not the most advanced in terms of image quality, is certainly versatile.

Thanks to its extended horizontal lens shift, the image can be shifted 96 per cent up and down, and vertically 47 per cent left and right. In practical terms, this means you can position the machine on a table well to the side of the viewing area, and avoid the hum and heat of the projector. And while the unit does run hot, fan noise is minimal and never disrupts watching the movie.

## Picture ★★★★★

Danny Boyle's *Sunshine* on Blu-ray gets the best out of the TW680. Some shots of the sun's path across the Icarus' shields are simply sublime, with reds, yellows and oranges lending images an extraordinarily vivid colouring. Peak whites are similarly impressively pure, although the dreaded 'chicken wire' effect of the LCD panel's grid structure can suddenly become visible, albeit momentarily.

The level of detail apparent in close-up shots of crew members is almost enough to convince us that a 720p projector shouldn't be seen as a budget option just yet. While it doesn't bear comparison with a 1080p model, since a slight softness is discernible, the TW680 puts in a great HD performance.

The main problem lies with black levels. Contrast-heavy images from *Sunshine*, such as a vista over the huge Icarus payload, is left looking greyed-out while shots of deep space suffer from some noticeable picture

the deepest black levels possible. With that in mind, Epson has included its Cinema Filter to give further depth and additional contrast to the picture.

Another useful feature of the TW680 is its automatic selection of the aspect ratio depending on the source. An impressive variety of these can be accommodated via inputs supplied on the rear of the unit. The provision of two hi-def-

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capable inputs, one HDMI and one set of component video, is impressive on a budget projector, although the former is only present in its 1.2 version.

While a second HDMI would have been nice, especially for those with SkyHD and a blue laser player, the TW680 does cater for lovers of standard-definition. Rare on any projector, a Scart source can be hooked up via a simple included D4 adaptor, while there are also inputs for composite, S-video and a PC.

noise. It can leave shots that combine bright colours and blocks of darkness seeming a little unnatural and lacking in depth. However, attach a Xbox 360 and run *Burnout*, and colours leap out to such an extent that our complaints seem trivial.

## Value ★★★★★

Minor problems aside, the TW680 is a highly flexible and great value projector that will suit anyone after a simple HD Ready setup

## Fact file

- / 3LCD projector
- / 1,280 x 720 pixels
- / 10-bit colour processing
- / 10,000:1 contrast ratio
- / HDMI input



## Lab report

/ Time in Lab: 6 days  
/ Serial No: KD5F780748L

406mm



309mm

### Playback

Test  
Colour  
Black level  
Contrast  
Detail

### Rating



### Lab notes:

Generally impressive, the only minor flaw appears to be with the black levels

## Spec check

Type: LCD

Panel shape: 16:9

Resolution: 1,280 x 720

HD Ready: Yes

Quoted contrast ratio: 10,000:1

Quoted brightness:  
1,600 ANSI lumens

Throw ratio:  
60in image from 1.8m

Video formats:  
525i/p; 625i/p; 750p; 1125i

Dimensions:  
406(w) x 124(h) x 309(d)mm

Weight: 5.2kg

Other features:  
Keystone correction (to 15°);  
horizontal/vertical lens shift with

1.5x optical zoom; ceiling mount optional; 26dB noise;  
1,700/3,000 hours lamp life (normal/eco mode); 10-bit colour processing; colour modes (Dynamic, Living room, RGB, Natural, Theatre, Theatre Black 1/2); super white; 6 axis colour adjustment; sharpness adjuster

### Sockets:

Inputs: HDMI (version 1.2); component video; composite video; S-video; Scart (via supplied D4 adaptor); PC D-sub; RS232 port; 12V trigger

### Contact:

0800 220546  
www.epson.co.uk

## What Video & High-Definition TV We say

A great value projector that's as easy to set up as it is to enjoy, although it can't show full HD

