HOME-CINEMA PROJECTOR

OPTOMA HD50

★★★★☆

£1,000 inc VAT • From www.richersounds.com

VERDICT

With its large lens and tiny chassis, the HD50 is a highly flexible projector that's far more portable than the competition

ONE OF THE advantages of choosing a projector with a large lens is that its throw ratio is often much higher than projectors with smaller lenses. You can position it further away from your projection surface while still producing a large image. Big lenses are often found in very expensive projectors that have large cases. What makes Optoma's HD50 so remarkable is that its huge lens is packed in a chassis measuring just 286x265x124mm, which is half the width of a typical high-end projector such as Epson's EH-TW6100. Despite its tiny dimensions, the projector still has a huge throw ratio of 1.39-2.09:1. This isn't far off that of the EH-TW6100, which is considerably larger and more expensive.

This makes the HD50 ideal for those who need a small projector. Its large throw ratio also makes it more adaptable to different room sizes, which is handy if you'll be using it in various rooms.

OVER THE RAINBOW

One reason why the HD50 is much cheaper than other large-lens projectors is its use of DLP technology. DLP uses a colour wheel to project images, which means you'll see a few rainbow effects crop up while watching films. Whether this bothers you will depend on how susceptible you are to the effect; we found it was noticeable during testing. It didn't make for uncomfortable viewing, though, and was more obvious when browsing through the projector's menu system. Still, we think the effect was more pronounced on the HD50 than Optoma's cheaper HD25-LV projector.

The HD50's bright 2,200 ANSI lumen lamp ensures it has plenty of brightness for all lighting conditions. Colours looked rich regardless of whether we had the lights on or off, and we were impressed with how much detail we saw in darker night scenes with the lights on. The HD50 has a 15 per cent vertical lens shift, so it's easier to adjust the height of an image if the projector is placed on a low table, for example.

You'll find a handful of menu buttons on top of the projector, but the comprehensive backlit remote control is much easier to use. Our review sample was a bit too responsive, though. Pressing the navigational buttons tended to jump two options instead of one, so we had to make sure we pressed the buttons lightly to select the right setting.

The HD50 has two HDMI inputs and a VGA input, along with composite and component inputs, a 3D-Sync port for Optoma's optional ZF2100 3D emitter system, a 12V trigger and an RS232 port for integrating the projector into a home automation system. There's also a USB service port and USB power port.

SETTING THE SCENE

The HD50 has a variety of picture modes, including Reference, Cinema, Vivid, Bright, Game, User and 3D, but nearly all looked the same. Reference was a fraction darker than the others, but only Bright produced any discernible difference, mainly due to its brighter colours and higher levels of contrast. All can be customised to your liking, though. Basic picture settings include brightness, contrast, colour, tint and sharpness.

There are plenty of advanced picture settings, too, including noise reduction, gamma, Brilliant Colour, Optoma's Pure Engine feature, dynamic black and several colour options. These include colour temperature, gamut coverage, individual colour values, RGB gain, RGB channel and colour space. All let you calibrate the HD50 right down to the finest detail.

Optoma's Pure Engine feature provides three additional settings to improve picture quality. The first is Ultra Detail, which supposedly helps images look sharper. We couldn't see any difference when watching our Blu-ray discs, but DVDs showed some improvement, particularly when we opted for the User setting in the Ultra Detail menu. Text and fine detail did look sharper up close, but we're not sure it makes enough of a difference to improve the projector's upscaling dramatically.

The second setting is PureColour, which makes colours appear richer and more vibrant. This had a more dramatic effect on colour reproduction, but made films look oversaturated if we increased it any higher than mid-way.

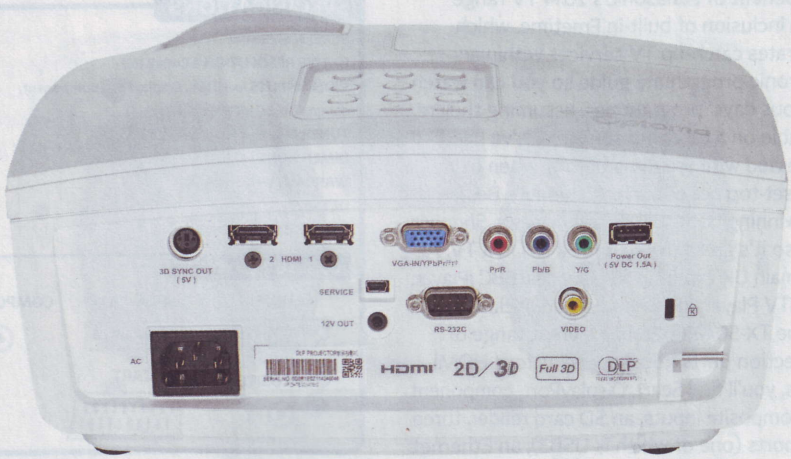
MOTION'S EDGE

PureMotion is Optoma's frame interpolation feature. We appreciated this feature the most, as leaving it turned off meant films could appear quite jerky during heated action sequences. Quick camera pans in *Star Trek* stuttered across the screen when we left PureMotion off. Setting it to Low helped smooth this over without making everything else appear too unnatural. Any higher, and the frames started to tear across the screen.

The HD50 can project films in 3D, but the projector doesn't come with 3D glasses; you must buy the glasses and 3D emitter system separately (Optoma ZF2100, £80 from *www.projectorplanet.co.uk*).

Optoma's HD50 is a great projector for use in a variety of rooms. It's a shame that it doesn't come with 3D glasses, but it still provides all the benefits of a high-end projector at a fraction of the price.

Katharine Byrne



SPECIFICATIONS

PROJECTOR TYPE DLP
NATIVE RESOLUTION 1,920x1,080
VIDEO INPUTS HDMI, VGA, composite, component, 3D-Sync, 12V trigger, RS232
LAMP LIFE 3,500h
LAMP BRIGHTNESS 2,220 lumen
SIZE 124x286x265mm
WEIGHT 3.8kg
WARRANTY Two-year RTB
DETAILS www.optoma.co.uk
PART CODE HD50