## Christie LW41: Bright, High Quality, Widescre Conference Room Projector

Marc Davidson, December 5, 2012 **ProjectorCentral.com** 





Intended Use: Business

#### **Christie LWU505**



2000:1 Contrast Ratio 4000 Lumens Street Price: n/a If nothing else, the LCD-based **Christie LW41** proves that portability, like beauty, is in the eye of the beholder. Christie refers to it as a full-featured portable. But even though it weighs only 10.6 pounds, it's not all that easy to carry with you. At 4.6" x 15.8" x 12.5" (HWD), it's more than a little bulky, making it less suited for portable use than for permanent installation or moving from room to room on a cart.

The other part of the description -- that it's full featured -- gets no argument. Along with it's 1280x800 resolution and its 4000 lumen rating, the LW41 offers a 1.7x zoom lens, both vertical and horizontal lens shift (although the amount of lens shift is minimal), and lots of connectors, including HDMI and a set of 5 BNCs (common on professional video equipment). Another key strength is its excellent data image quality combined with better than average video quality for a data projector.

As you might expect, all of these features translate to a high price, at \$4,995 list, with government and education discounts available. What really matters, however, is that the LW41 offers a reasonable balance of image quality, brightness, features, and price, with the high price ultimately a matter of getting what you pay for, and having to pay for what you get.

### **Strong Points**

**Excellent data image quality.** The LW41 scored notably well for data image quality. It even did well with color-related issues using its brightest preset, which is unusual for any projector. Colors were vibrant and fully saturated with all preset modes, and color balance was good, with suitably neutral grays at all levels, with most presets, including Normal, which was the brightest on my tests.

The only two presets with color balance issues were Daytime mode, with a green tint at some shades of gray, and Cinema, with slightly brown tints at some shades of gray and slightly pink tints at others. As a practical matter, this isn't an issue, since you have an assortment of other presets to choose from.

More important than color issues for most data applications, is that the LW41 offers sharp focus, with crisp, easily readable text at sizes as small as 7 points in my tests. In addition, it synced well enough with a VGA connection for the image to be almost as rock solid as with a digital HDMI connection, even with images that tend to cause pixel jitter.

**Better than par video quality.** Video quality for the LW41 is best described as better than par for a data projector, but not by a lot. The 1280x800 native resolution translates into 720p HD for video signals, complete with a native widescreen aspect ratio. Beyond that, the projector did a good job with shadow detail and skin tones; I didn't see any motion artifacts; and because it's LCD-based, there's no danger of seeing the rainbow artifacts that are common with DLP projectors.

The bad news is that I saw an annoying level of posterization in scenes that tend to cause the problem, and the level of noise in unbroken areas was hard to ignore in some clips. Colors also had the dull, flat look that goes with a low contrast ratio, although the problem was not as extreme as with some data projectors. Overall, the quality is good enough to let you watch a full-length movie comfortably, but that's a fairly low bar.

**Zoom lens.** With its 1.7x manual zoom lens, the LW41 gives you lots of flexibility in projector placement. For example, you can get a 120" diagonal image by placing the projector anywhere from 13 to almost 22 feet from the screen. (You can use our Calculator Pro to find LW41 throw distances for your screen size. In my tests, the

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**Lens shift.** The LW41 also offers a modest lens shift to add flexibility in positioning the projector left and right or up and down relative to the screen. By my measurements, the vertical lens shift is plus or minus about 13% of the screen height from the center position. The horizontal shift is about 5% left and right of the screen width from the center position.

Neither of these is a lot compared with the lens shift in some other projectors, but any lens shift is a lot better than having none at all. There is the minor annoyance in this case of having to use a screwdriver to turn the controls, but once you've set it properly in a permanent installation you should never have to do it again.

**Long lamp life.** Christie rates the LW41's lamp life at 3000 hours in Normal lamp mode and 5000 hours in Eco mode, compared with as little as 2000 hours for some projectors. At \$525 list per lamp (but available on the Web for as low as \$340), the long life helps out a bit with the total cost of ownership.

**Three-year warranty.** The three-year warranty for the LW41 is longer than many projectors offer, making it a welcome extra. The lamp warranty is only one year or 500 hours, whichever comes first, but even that's longer than the 90 days that you get with many projectors.

**Surprisingly good audio quality.** The LW41's 16-watt mono speaker offers better sound quality than most projectors and is loud enough to fill a large conference room or classroom. All of the dialog in my tests was easily understandable, including some quietly spoken lines that all but disappear with most projectors. If you need still better quality, higher volume, or stereo, you can plug an external sound system into the audio output.

### **Test Results and Connectivity**

**Bright image with a wide range of brightness levels.** Using the LW41's brightest preset and full wide angle setting for the lens, I measured the brightness at 3511 lumens, a solid 88% of the 4000 lumen rating. Other presets ranged as low as 2184 lumens for Whiteboard mode, with most falling between 2868 lumens and 3500 lumens. The zoom setting drops the brightness noticeably, but less than you might expect, to 2816 lumens with the brightest preset at the full telephoto setting.

For smaller screen sizes or lower levels of ambient light, Eco mode lowers the brightness significantly. With the brightest preset and full wide angle setting, I measured it at 2177 lumens, a 38% drop.

**Excellent brightness uniformity.** The LW41 also scored well on brightness uniformity, although not as well as the 85% score would suggest. The shading from the brightest area in the center to slightly cool spots in the corners changed over a short enough distance to be noticeable with a solid white screen. However, the difference was impossible to see with the screen broken up by text or graphics.

**Extensive connectivity choices.** The back panel includes just about any connector you're likely to need:

1 HDMI

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Performance \*\*\*\* Features Ease of Use Value **食食動**金 1 set of 5 BNC (for RGB or component)

1 VGA IN (for RGB or component)

1 3-RCA component

1 S-video

1 RCA composite

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1 USB A (for directly reading files from USB

1 VGA OUT (monitor loop-through)

1 USB B (settable for direct USB display or mouse control from remote)

1 LAN (for image data and network control)

2 Stereo mini plugs (can set to pair with any video input)

1 RCA stereo IN (can set to pair with any video input)

1 Microphone mini plug input

1 RCA stereo OUT

1 RS-232 (for external control)

1 mini plug for wired remote control





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