

CANON REALIS WUX6500 PROJECTOR ROAD TEST

M. DAVID STONE, MAY 3, 2017



At its MSRP of \$5,879 plus the cost of a lens, the Canon REALiS WUX6500 Pro AV LCOS Projector is a solid value based strictly on its high res 1920x1200 image and its high brightness at 6500 ANSI Lumens with standard lens (brightness will vary based on the lens you select). Adding in its other features – and the fact that street price is usually lower than list price – makes it that much more impressive a value in today's market.

Going beyond auditoriums and auditorium-style rooms in higher-education, business and houses of worship, the WUX6500 is also designed for applications ranging from signs and displays in retail stores and museums to training and simulation applications that require multiple

projectors. For any of those applications – as well as others like sports bars – it offers a high res, bright image with vibrant color for graphics, nicely saturated color for photos, film, and video, and a six-axis color adjustment for fine tuning color.

The choice of lenses, with throw ratios from 0.80:1 to 6.94:1 offer tremendous flexibility for how far you can position the projector from the screen, while the H+V lens shift add flexibility for positioning it up, down, left, or right. Even better, the motorized zoom, lens shift, and focus working together with lens memory let you easily adjust image size and position for material in different aspect ratios for a constant image height setup.

For signs, displays, and simulation and training applications, the ability to mount the WUX6500 facing straight up or down adds still more flexibility for placement. The built-in edge blending adds support for large images using multiple projectors. And the almost non-existent 18 ms input lag means excellent response for real time training applications like flight simulations.

Taken together, the Canon WUX6500's high brightness, high resolution, top tier image quality, setup flexibility, and choice of lenses will make it the ideal pick in many cases, from auditorium-size rooms to sports bars to museum displays to simulations. That is more than enough to make it a solid value, earning our **Road Test Certified** award.

> What the CANON REALiS WUX6500 is Designed For:

It is ideal for:

- Auditoriums and auditorium-style classrooms and conference rooms in higher education, business, houses of worship, and elsewhere.

It is also good for:

- Displays, signs, sports bars, simulations, and training applications.
- Medical-related applications and education using the \$6,399 (MSRP) WUX6500 D, an essentially identical model with DICOM Simulation added for medical-related imaging.



> What the CANON REALiS WUX6500 Gives You:

- ✓ LCoS engine at 1920x1200 resolution with Canon's latest generation AISYS optical enhancement.
- ✓ Based on street prices, it is currently one of the least expensive projectors on the market for its resolution and brightness.
- ✓ Choice of five lenses: One fixed 0.80:1 throw ratio; four zooms that cover the entire throw ratio range from 1.00:1 to 6.94:1.
- ✓ Motorized zoom, focus, and H+V lens shift, with Lens Memory for saving and retrieving three sets of positions.
- ✓ Six-axis color adjust (RGBCMY) using Hue, Saturation, and Brightness for each.
- ✓ Four-corner correction and edge blending built in.
- ✓ 18 ms input lag: fast response for simulations and training apps.
- ✓ Side-by-side split-screen display.
- ✓ Broadcast mode over network: 1 PC to 12 projectors.
- ✓ Meeting and Classroom modes over network: Manage up to 10 PCs and 6 projectors, with input to each projector managed separately and a maximum of 4 PCs sharing their images on any projector at once.
- ✓ 3-year warranty with advanced exchange; 120 days for lamp.
- ✓ Supports Crestron Roomview, AMX, PJLink, and Extron.

Physical Attributes:

With the projector on a table, all ports are on the right side panel as viewed from behind. The power connector is near the back of the right side, a little closer to the bottom than the top, with the Kensington lock slot just below it. The security bar is at the bottom of the left side. The speaker is on the front panel, next to the intake vent. The exhaust vent is on the back panel.

> **OUR LAB TESTS – What the Meters Say:**

Brightness:

Our test unit was configured with the standard RS-IL01ST 1.5x zoom lens. The **Center Lumen** reading was **6525 lumens**, right on the money based on the official 6500 lumen spec. Measurements were taken with the lens set to its full wide angle position and using the HDMI port for input. Our ANSI lumen measurements for each color mode are listed here:

Canon REALiS WUX6500 ANSI Lumens with standard RS-IL01ST 1.5x Zoom Lens / HDMI Input

MODE	FULL POWER	POWER SAVER
Presentation	6166	4862
Vivid Photo	5605	4420
Photo/sRGB	5603	4418
Standard	5610	4423

Low Lamp Mode:

Power Saver mode measures 79% as bright as Full Power Mode.

Presentation Optimized Lumens:

For documents and graphic images, the aptly named Presentation mode without changes offers vibrant, saturated color. It even delivers good enough color accuracy for most presentations that include photos and video clips. Depending on the lens you choose, it will either exceed or come close to the rated 6500 lumens.

Video Optimized Lumens:

For film and video, a slightly tweaked VividPhoto color mode delivers color that's a close match to a calibrated projector we used for comparison. With standard lens it will exceed 5000 lumens.

Zoom Lens Effect on Brightness:

For the standard 1.5x-zoom lens the light is curtailed by 20% at the full telephoto setting compared with the full wide angle setting.

However, we also tested the optional short-throw 1.5x zoom lens, the **RS-IL05WZ**. At max wide angle it delivered 5929 ANSI lumens, or about 4% less than the standard lens. However at maximum telephoto it lost only 9% of its light output.

Brightness Uniformity:

At a solid 84% brightness uniformity, the change in brightness across the screen is gradual enough so we couldn't see any difference even with a solid white test image.

Input Lag:

The input lag is 18 ms in all predefined color modes, one of the fastest projectors we've seen.



> **Setting it Up**

Throw Distance:

With it's choice of five lenses, the WUX6500 offers extraordinary flexibility for throw distance. The lens we tested with offers a 1.5x zoom and a throw range for a 150-inch diagonal 16:10 image of roughly 15.7 to 23.75 feet. The four zoom lenses as a group increase the range to a minimum of 10.5 and maximum of 73.5 feet, with no gaps over the entire range. The Short Throw Fixed lens adds an 8.5 foot throw at the low end. The [Projection Calculator](#) will let you find the throw distance range for each lens at the image size you want.

Mounting the Lens Shift:

You can mount the WUX6500 in a ceiling mount, place it on a table or cart, or mount it vertically, facing straight up or down. Built in edge blending lets you create larger, multi-projector displays.

Canon's lens shift specifications are the same for all four zoom lenses. If the lens shift range is not sufficient to eliminate the need to tilt or swivel the projector, you can adjust for up to +/- 20 degrees for both vertical and horizontal keystone distortion as well as adjust each corner separately.

> **Canon REALiS WUX6500 Connection Panel**



Connection Panel Inputs:

- (1) 3.5mm stereo audio out
- (1) 3.5mm wired remote control
- (2) 3.5mm stereo audio in
- (1) USB A (reads files from USB memory keys)
- (1) DVI-I
- (1) VGA/Component video
- (1) HDMI
- (1) HDBaseT
- (1) RS-232 (for control)