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1080P FOR PENNIES

*At a mere $4,495, **Mitsubishi's HC5000** is the least expensive 1080p projector available. How does it look?*

Savvy shoppers know not to jump into the next-generation pool too quickly, as this year's early adopters all too often become next year's remorseful owners. They are surely wary of the new crop of 1080p projectors, which are among the first to convey the full resolution of which high-definition video is capable. But they will be shocked to learn that it makes no sense to wait for affordable 1080p projection—because it's already here, in the form of Mitsubishi's $4,495 HC5000 1080p LCD projector. It's no web-merchant cheapie, though—Mitsubishi equipped it with motorized optics and one of the top "super deinterlacer" chips, the Silicon Optix Realta HQV.

The motorized optics turn the often tedious installation chore into a breeze, providing both horizontal and vertical lens shift as well as focus and zoom. The range of the vertical lens shift is quite generous, which allows for shelf mounting at the back of the room, as well as ceiling-mount positioning well above the height of the top of the screen. Calling up the various motorized lens functions also activates a sharply defined single-pixel-width green crosshatch test pattern that lets me dial in the optimum height and lateral positioning in under a minute.

BY DAVID BIRCH-JONES • PHOTOGRAPHY BY CORDERO STUDIOS

Despite its shockingly affordable price, the HC5000 is not without luxuries. One is motorized optics, which allow you or your installer to adjust focus, zoom, and lens shift from the remote control.

Calling up the setup menu provides me with sensibly named color-temperature choices, including an only slightly reddish Warm setting, a neutral-looking Medium setting, and two very bluish Cool and High Bright settings. A quick run-through of some of my favorite high-def scenes stored on my DVR's hard drive tells me that Medium is the choice for realistic color rendition, and the owner's manual indicates that choice provides the optimum 6,500 degrees Kelvin color temperature.

Prior to verifying this claim with my color analyzer, I settle in and watch the *Over The Hedge* DVD. After this enthralling, sophisticated animated movie finishes, I wonder out loud how I could possibly justify the need for HD DVD, as the upconversion from my DVD player's 480i output to 1080p is flawless. At least some credit surely goes to the Silicon Optix Realta chip.

A few days later, the color analyzer indeed confirms that the projector's Medium temperature setting is quite close to the mark, coming in at around 6,900 degrees Kelvin in the middle of the gray scale and hardly wavering from that at the darkest and brightest ends. The "User" setting lets me fine-tune the gray scale even further, bringing me closer still to the 6,500-degree ideal. While any good display can benefit from calibration, I do have to say that, assuming a color-neutral screen material, the HC5000's factory color-temperature performance at the Medium setting is entirely satisfactory.

I do like the three dedicated picture memory buttons on the remote control, as well as the discrete power on and off buttons. While the projector does feature a pair of tiny power and status LEDs on its top panel, no such indicators adorn the front panel. If the projector is shelf-mounted, turning it on becomes a test of faith, as the HC5000 produces no indication that it is going through its start-up sequence until the warm-up screen appears. The fan noise is an innocuous, gentle whisper.

The projector's light output can easily accommodate up to an 8-foot-wide gray screen, or a white screen up to 10 feet wide. At the standard lamp setting on a moderately sized gray screen, the HC5000's 20 footlamberts provide a lot of brightness but not at the expense of washed-out dark grays. While the dark grays and blacks are not quite as deep as those of the better DLP projectors, the performance is still quite good. I try the automatic iris function, which varies light output according to a scene's overall brightness, but it produces jarring brightness changes that lag the action somewhat.

From a colorimetry standpoint, the HC5000 scores very well, providing near-ideal primary (red, green, and blue) and secondary (cyan, yellow, and magenta) color points. The projector properly deinterlaces 1080i test patterns, with no doubling or smearing of fine details. The only test that causes the HC5000 to stumble is a difficult alternating on-off 1080p single-pixel pattern that showed evidence of ringing (a failure to transition quickly from dark to light at the edges of on-screen objects), but the effect is mild, and imperceptible with actual programs. The colorful detail of the aquatic wildlife in a Discovery HD program shimmers against the backdrop of deep blue ocean, with no banding or gradation artifacts to muddy things up, and no cartoonish embellishment of color.

It appears that Mitsubishi's product planners are themselves smart shoppers, and know full well the recipe for a winning combination of great performance and affordable price. No need to wait any longer for affordable 1080p projection.

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DESCRIPTION

LCD front projector for tabletop/shelf use or ceiling mounting (with optional mount); requires separate screen

DISPLAY CAPABILITIES

Widescreen LCD panels operate in 4:3 and 16:9 modes. Accepts 720-line and 1080-line progressive HDTV, 1080-line interlaced HDTV, 480-line progressive and 480-line interlaced signals, plus RGB SXGA computer video

RESOLUTION

1920 x 1080 pixels

CONNECTIONS

Component video input, S-video input, composite video input, HDMI digital video input, DVI-D digital video input, computer-style DB-15 video input (serves as a second component input with suitable breakout adapter); 12-volt trigger port, RS-232 serial port

DIMENSIONS

5.2 x 13.2 x 13.9 inches (hwd)

PRICE/CONTACT

PRICE: $4,495

CONTACT: mitsubishi-hometheater.com, 888.307.0349