

EQUIPMENT REVIEWS **audio**video R E V O L U T I O N™

manufacturer:	Sony
model:	VPL VW50 "Pearl" SXRD 1080p Video Projector
category:	Video (Projectors, Processors, etc....)
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reviewed by:	Andrew Robinson

Sony VPL VW50 "Pearl" SXRD 1080p Video Projector

Introduction

The performance increase of home video products over the past three years, paired with precipitous price drops, is nothing short of unprecedented. 50-inch HDTVs that only a few years ago cost \$20,000 today cost less than \$2,000. Never before have we seen video technology get so good so fast and for so little money. Companies like Vizio have gone from no-name brands to literally billion-dollar ventures today, providing consumers with access to HDTV video that can be the core of a truly respectable home theater at Costco prices.

Not to be outdone, Sony has stepped into the fray of incredibly powerful video with their Pearl projector that at last fall's CEDIA trade show threw the world of consumer video projectors on its ass. This \$4,999 projector drew attention from reviewers, dealers and competitors alike with its bright image, 1080p resolution, slick aesthetic and amazingly low price tag.

Before I get into the nitty gritty, I need to point out that if the projector's model name, VPL-VW50, seems a bit odd or dare I say pedestrian, it's because of the fact that most folks have come to call the VW50 by its code name: the Pearl. What makes the Pearl so special? For starters, it is a sight to behold; it's simply stunning to look at, with its opalescent white top and graphite colored sides. The Pearl is rather large by most front-projection standards, measuring 15-and-a-half inches wide by seven inches tall and 18-and-a-half inches deep. The Pearl is also quite heavy, weighing in at a hair over 24 pounds. The Pearl is rather unassuming in terms of flaunting its technology. In fact, aside from its center-mounted lens, the rest of the Pearl's casing is virtually void of any hi-fi paraphernalia.



The Pearl's inputs are located on the right side (looking from the front) of the projector, tucked neatly back (or behind, depending on how you mount the projector) and somewhat out view, furthering its sexy industrial design. Turning my attention to the Pearl's inputs, I was pleased to find a barrage of options, most impressive being not one but two 1080p-capable HDMI inputs. The Pearl also has a PC monitor input, as well as single S-Video, composite video and component video inputs. The Pearl has a trigger input, which can be used in conjunction with your motorized projection screen, as well as a RS-232 port for third-party control support from the likes of Crestron or AMX. The Pearl's detachable power cord receptacle is located towards the backside of the projector to keep it clear of your video connections, as well as hidden out of view. The Pearl's manual controls rest above its input connections. However, the Pearl was clearly designed to be calibrated and operated via remote, which I'll get into later.

Under the hood, the Pearl boasts some rather impressive specs. For starters, the Pearl is a true 1080p projector, with a native resolution of 1920 by 1080 produced by its three HD SXRD panels. For those of you new to SXRD (Silicon Crystal Reflective Display), it is essentially Sony's adaptation of LCD technology. It's not a true LCD design in that SXRD is "reflective" (much like DLP and LCoS), with light "sandwiched" between liquid crystal panels, whereas in a true LCD design, light is passed through the liquid crystal panels directly. This "reflective" approach helps the Pearl to use its lamp more efficiently, resulting in higher contrast numbers and light output.

The Pearl also supports standard-definition resolutions (480/60i, 575/50i, 480/60p, 575/50p), as well as other high-definition formats (720/60p, 720/50p, 1080/60i, 1080/50i, 1080/24p, 1080/60p). However, its 1080p capabilities are reserved for its HDMI inputs. The Pearl has a reported contrast ratio of 15,000:1, with a maximum light output of 1,200 ANSI lumens. The total contrast ratio and light output is achieved when the projector is set to dynamic, with its Advanced Iris feature engaged but, once calibrated for optimum picture quality you can expect those stats to decrease significantly. Still, the Pearl should produce one hell of an image on any reasonably-sized screen (roughly 120 inches diagonal) in a darkened environment, specs be damned.

Which brings me to the remote. While ISF calibrator and fellow AVRev.com writer Kevin Miller generally praises Sony remotes, I have not previously shared his enthusiasm. In this case, the Pearl's remote is rather good. It is simple as simple does and performs what is asked of it with relative ease. It features full backlighting, albeit with the press of a button, and is easy enough to navigate without having to concentrate too hard. The Pearl is sometimes sluggish to respond to the remote's signal, but this is a minor annoyance compared to my past experience with other Sony remotes. The design team gets a pat on the back from this picky editor.



Set-up

This past holiday season, I bought a new house and immediately began the ever-stressful process of renovating it. At the heart of my reno is my new state-of-the-art dedicated home theater. While construction has been anything but smooth, due mainly in part to the truly incompetent national chain Empire Today, which I hired to do my flooring, the ordeal is nearing its end, giving me time to spend with my new video projector.

In the past, I've been a bigger is better sort of guy when it came to screens. However, after spending some time with Kevin Miller, I've changed my tune a bit. In reality, your projector is only as good as your screen and, if you go too large, you won't be getting all of the performance you paid for. So, with Kevin's guidance, I settled on a 92-inch diagonal screen from Screen Research. Screen Research, for those of you who may not know, is a Parisian company specializing in THX and ISF-certified, acoustically transparent projection screens. Acoustically transparent screens are nothing new. However, Screen Research's take on them is a bit different in that they use a proprietary woven technique and material unlike the competition's micro-perforated designs. The layout of my room was going to necessitate my center speaker being installed in-wall and behind the screen and their system fit my needs for picture quality and sonic transparency amazingly well.

I mounted the Sony Pearl about 12 feet back from my screen, using a universal ceiling mount from Sanus. The Sony Pearl has a pretty generous vertical lens shift, which allows it to be mounted fairly close to the ceiling without having to use a great deal of keystone to correct for the angle, although it has zero horizontal lens shift. The Pearl's lack of horizontal lens shift isn't a deal-breaker here, but it does mean you have to pay attention to insure that the Sony's lens falls dead center on your screen.

Once the Pearl is mounted, you can use the remote to better dial in the image through the use of several Tron-like green grids. I found this part of the installation rather tedious, since the Pearl is sluggish to respond to the remote's commands. You end up having to calibrate by anticipating the remote's timing, then by being able to make exacting moves. This is especially bad when you're trying to focus the projector. I can't say for sure how many four-letter words were spewed out during this process, but it was enough to best my 3,000 word quota. If you're at all uncertain or nervous about what I've just said, then you should consider allowing your local Sony dealer to install your projector for you.

Once I had the Pearl mounted, I connected it to my Meridian G68 controller via a set of component video cables from Ultralink. I let the G68 do all of the video switching between my Dish Network HD receiver, Toshiba HD DVD player and Meridian G98 transport. I connected my Sony BD-1 Blu-ray player with Ultralink's HDMI cable directly to the Pearl to better take advantage of its 1080p capabilities. As for speakers, I went with my new Meridian in-walls (review coming soon) with the low bass being handled by my ever-ready LFM-1 Plus subwoofer from Outlaw Audio. All cabling came by way of Ultralink and XLO.

With my system in place, I began the calibration process. I cued up Digital Video Essentials and began going through the Pearl's video controls to better enhance the video experience. Out of the box, the Pearl is very impressive with its rich, detailed blacks and vibrant colors. However, as you begin to calibrate the Pearl, it becomes apparent that the projector is way too bright and has a distinct blue shift throughout its color pallet. This is easy enough to fix with little effort, thanks to the Pearl's stellar menu layout and control options. In about an hour, I was able to achieve a beautifully accurate image.

Movies And Television

I kicked off my evaluation of the Pearl with the Rose Bowl match-up between USC and Michigan (ABC HD). Say what you want about the BCS or the pairing of these two teams: nothing could take away from the stellar picture quality of the HD presentation. In a recent conversation with AVRev.com publisher Jerry Del Colliano, he admitted that he'd rather stay home and watch USC games than go to the games themselves, due to the excellent quality of today's HD sports coverage and the image he can get on a nine-foot screen with his Meridian MF1 three-chip D-ILA projector and Faroudja video processor.



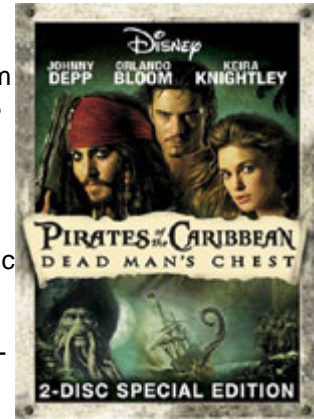
After my time spent watching the game on the Pearl at one-eighth of the price of the AVRev.com reference video system, I'd have to agree. The color rendering was punchy and vibrant, yet accurate and true to life. The Pearl's ability to resolve and track the subtle details in varying shades of color was awe-inspiring. The image was lifelike in its three-dimensionality, with terrific edge detail and appropriate sharpness. As impressive as the color was, it was the Pearl's low-level detail, mainly in the blacks, that showed off all that the Pearl had to offer. The darker blue hues of the Michigan players' uniforms never became flat or one-dimensional. At times, the darker hues were richer and more enticing than the Trojans' own scarlet red. The Pearl's image was as free from digital and motion artifacts as any projector I've seen at or above its price point.



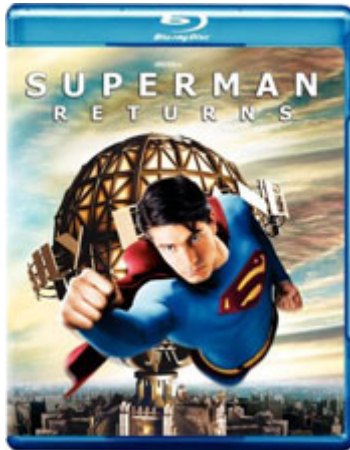
At half-time, I jumped over to catch a bit of Discovery HD's marathon of their beautifully shot series Discovery Atlas: Brazil (Discovery HD Theater). The phrase "looking through a window" gets used a lot when describing a lot of today's high-end HD displays. Well, the Pearl isn't a window to the image, because windows are often dirty and have a layer of film or grime that keep them from being crystal clear. Therefore, the Pearl's image is not like a window so much as it is the event. Having never been to Brazil myself, I'd have to say the Pearl's presentation of the vibrant country is second only to being there. The show's many city shots were jaw-droppingly beautiful. The decaying ancient buildings, with their striking, unique architectural details, were something to behold, going far beyond just looking old. Each of the buildings' weathered facades told a story as individual as a human fingerprint and were portrayed without incident through the Pearl's exceptional optics.

Again, the Pearl's ability to portray depth came closer to the feeling of being there than that of any other projector I've seen, ever. The show's colors were even more vibrant and rich when compared to the Rose Bowl. To say Discovery has mastered the art of HD would be an understatement. HD can prove harsh on the "beautiful people," but in the documentary realm, the harshness only adds to the drama, and the Pearl dished out the drama in spades. Moving beyond the descriptive, the Pearl is the first projector I've come across that speaks to the heart of the visual event, in the sense that it appeals to me on an emotional level more than an analytical one. I've never in my years of writing ever referred to a video product in this way before. The Pearl is that good.

Next, I went for some more traditional DVD flair with *Pirates of the Caribbean: Dead Man's Chest* (Walt Disney Home Entertainment). With my Meridian G98 transport set to 480i, I braced myself for a disappointment from the world of standard definition, yet I was pleasantly surprised. Now the G98 is one hell of a DVD player, but the Pearl is no slouch, either. The lower resolution of DVD was not as dramatic a difference from HD as I had anticipated, which is a tremendous endorsement for why a Meridian DVD player should be considered for your reference system if you have a top-performing projector. The Pearl-Meridian combo handled the film's many epic sequences with grace and composure.



While HD may have it over film in a lot of ways, it can still appear a bit hyper-real, or what I like to describe as "glassy." Well, *Pirates* is an excellent film-based transfer and it comes with a greater sense of lifelike realism. The colors, while not as punchy, had even greater sense of depth and dimension. The black level detail was superb, especially in the masts and hull of the *Black Pearl*. Edge fidelity and detail were out of this world and no scene showed this more than when we see Davy Jones' ship, the *Flying Dutchman*, for the first time. If I was one of the wizards at ILM (Industrial Light and Magic), I'd want everyone to have a Pearl in their home so that all my hours and late nights spent texture-mapping the many CG elements in the film were not lost to poor displays. I've never seen a film as richly detailed and nuanced as *Pirates* and, thanks to the Pearl, I felt as if I didn't miss a thing. DVD video was simply riveting on the Sony Pearl paired with the Meridian G98 DVD player.



I saved the best for last, and ended my evaluation of the Pearl with the Blu-ray transfer of *Superman Returns* (Warner Home Video). With everything set to 1080p, I was ready to rock. From the start, Superman didn't disappoint. The first scene that caught my eye was when Lex Luthor (Kevin Spacey) discovers Superman's Arctic hideout for the first time. I've spoken a lot about the Pearl's black level detail and color saturation, so I'll part with that and speak to its white levels. All too often displays, especially projectors, are calibrated, or should I say not calibrated, to take advantage of the lighter elements or white levels of the image. Well, during the hideout scene, the Pearl's white values were pristine and well-defined, with terrific edge fidelity completely void of blooming or pixilation. I've spoken about the Pearl's ability to resolve minute details in subtle color variations. The same holds true for shades of white. The Pearl's gray scale rendering throughout the darks is equaled in its ability to resolve and render the lights with comparable precision. The reflections that occurred between each of the crystals were distinct and could be easily traced to their sources when the image was paused. The level of detail during the first cave scene is what HD, more specifically 1080p, is all about.

Skipping ahead to the plane sequence, I was treated to an action smorgasbord unlike anything I've seen before. This sequence has it all, beautiful blue vistas, deep space, fire, rapid camera shifts, the works, and the Pearl didn't trip up nor even bat an eye. Sony touts their dynamic iris technology a lot with their projectors and I experimented with it with varying results. Lesser dynamic iris can sometimes cause eye-jarring shifts that are anything but natural as the projector attempts to better juggle between extreme darkness and light. The Pearl doesn't fall into this camp at all and, when implemented properly, benefits the image and, more importantly, the perceived contrast. I must say this, though: the difference between having the feature active or inactive isn't as great as I would've thought. However, I did leave it on for the duration of my review.

Back to the action, the Pearl was able to track it accurately and display it fully and faithfully. The baseball stadium at the end of the dramatic sequence is as captivating as any moment that comes before it. In standard definition, the sold-out crowd would've been but a blur, but the wide shot revealed individuals with unique fashion sense and personalities. I could even read a few t-shirts here and there from my favorite seat on my sofa; to call the Pearl a detail whore might sound mean if it wasn't so true.

Downside

While I think the Sony Pearl is nothing short of a marvel in terms of performance, there were a few areas, mainly in ergonomics, that keep it from being the absolute best component ever sold to the world of home theater. For starters, the lack of any sort of manual lens adjustment is a major omission, compared to other projectors in the Sony's class both above and below its price point. Lacking the ability to focus the projector is beyond a pain in the butt when setting it up. If your system engineers have everything mapped out perfectly for your installation, then maybe it's no big deal, but I think we all live more in the real world than a perfect world. Focus and other screen adjustments are many times quite helpful.



Next is the issue of fan noise. The Pearl is quieter than my old Panasonic LCD projector, but it is by no means silent. Those mounting or placing the Pearl in open view need to be aware that the projector will emit a slight whirring noise that is audible during quiet passages. If you can swing it, I would recommend a hush box of some sort to combat the issue.

Like all HD displays these days, the issue of standard definition keeps coming up and the Pearl is not exempt from this issue at all. While the Pearl is simply stunning with HD material and rather impressive even with DVD, it can't turn water into wine and standard-definition material often looks average compared to the outrageously good video you see from DVD, HDTV broadcasts and 1080p HD disc formats such as Blu-ray. There are a few work-arounds: the easiest, perhaps, is watching only HD content, but this is not necessarily practical. I would suggest adding an external scaler, such as DVDO's VP50, to aide in spicing up less than stellar standard-definition programming.

Conclusion

The gauntlet has been thrown down, the line drawn in the sand, and there is no turning back. The Sony Pearl is all that and more and I'm here to say to the competition, you've been warned. While I like Sony's code name of choice (Pearl), I feel perhaps, a new name might be in order. I would be so bold as to call it "The Bar," for it is. The Pearl is the new benchmark for its price point and beyond. It is the best projector real money can buy, and while I don't want to get into the habit of proverbially calling the Super Bowl in week one, I will say that I'm confident I've just spent time with AVRev.com's 2007 product of the year. How confident am I that this projector is an incredible value? I bought one.