Optoma wxga projector manual

It is clear who the Optoma UHD50X projector is mainly aimed at. First feature mentioned: The world's first 240Hz movie game projector. Since the movie only works at one-tenth of that frequency, it is a game that stands out feature. But there are also many movie-friendly attributes like support for HDR 10 and HLG (Hybrid Gamma magazine). Let's look at both sides of this DLP projector. Price and availability Of UHD50X is available in the US and Australia, where it sells for about $1599/AU$3,199 respectively. As is often the case with Optoma projectors, this device is sold under a completely different name in the UK and Europe - there, it can be found as Optoma UHD42 and priced at approximately 1,199 pounds /1,499.Apart from the number of models, UHD50X and UHD42 are completely identical. The best projectors you can get right nowEquipmentThe Optoma UHD50X is the UltraHD 4K DLP projector. It uses a 1080p Digital Micromirror device with a four-way pixel shift to generate a true 3840 by 2,160 pixels. Optoma estimates its brightness at a very high 3400 lumens and contrast ratio at also a very high 500,000:1. The lamp is designed for up to 15,000 hours of life, depending on the mode you use, although the still impressive 10,000 hours available in standard brightness. There are two HDMI inputs along with D-SUB15 for analog video. The projector has a ten watt amplifier and a built-in speaker, so there's also analog audio input, along with outputs - analog and optical digital - so the projector can offload audio for more competent external speakers. One of the HDMI inputs meets HDMI 1.4 standards, which is 1080p. Another HDMI 2.0 with HDCP2.2 support. Apparently, it also supports MHL 2.1 - a way to connect Android phones. Most importantly, it supports signals up to 2160p60 and 1080p120. And if you turn on the advanced game mode, it can handle up to 1080p240. The lens has a scale range of 1.3:1 along with a vertical lens shift. For a diagonal of 100 inches (2.54 meters) 16:9 the projector must be at an altitude of 2.68 to 3.52 meters from the screen. (image credit: The future) PerformanceWe will get into that 240Hz thing for gamers later. First, let's take a look at Optoma UHD50X as a home theater projector. In this feature, it has a fairly basic set of features. It doesn't offer things like smoothing the movement. But if you turn on Dynamic Black (it's off by default), the dark scenes are impressive and the black is beautifully deep. Without its inclusion, the black levels were a little cloudy and rather uneven, with a brighter patch showing the bottom of the image (with a projector running in desktop mode). We used the meter and found that the brightest section was getting about 1500 suites, while the boring corner was treated to only about 800 suites. This difference was imperceptible with bright material on the Screen. Does this projector deliver real UltraHD resolution? In fact, he did. Our test pattern showed a clear delineation of its lines and spaces, each taking only one UHD pixel width or height. And there was a bright projector. Even under the full brilliance of the two fluorescent pipes of our office the picture was bold, clear and colorful. When we turned off the lights, even more so. You can customize the colors to make them more accurate - or to your liking - if you like. But out of the box, the color settings were very good. There's also a picture setting for those who find themselves resorting to projecting to the wall of their home. If it's not exactly white, the Wall Color mode adjusts the picture to a more accurate result on surfaces that are blackboard, light yellow, light green, light blue, pink and gray. It soon became clear that the intertwined content of 50Hz, both for 1080i50 and 576i50, was simply supposed to be a projector to be video sources. No attempt was made to locate the contents, according to the film. While it was adaptive motion - the still parts of the frame were duly woven together to deliver full resolution - for moving sections of the image, a simple bob was used. Bob-style deinterlacing takes the first frame field and displays it as a full frame for 1/50th of a second, then a second field frame and then repeated for subsequent frames. This has spawned visible artifacts, especially on things like thinly carved lines. We recommend that you feed the projector progressive content scan only. It also seemed that the projector was locked up to a 60Hz output - or a whole multiple of 60 Hz PAL-style 50Hz from UK, Australia and Europe DVDs and broadcast TV juddered noticeably from the 50-to-60Hz conversion. What's even more surprising is the 24fps content on Blu-ray and UltraHD Blu-ray is also juddered (less obvious) due to the conversion to the 60fps output. As we'll see, this projector does support 120Hz signals, so we'd think that 24fps things could be displayed at 120 Hz - each frame repeated five times - for a smoother movement. And the last thing on image quality: the test models on the Sony UltraHD Blu-ray (click in 7669 on your PLAYER's UHD remote when the disc is in the main menu) showed a smooth release of black to white, not limited to just 256 levels of 8-bit signal. The projector works well with HDR signals. The best portable projectorsBest business projectors (Image credit: Future)TimingSo, how fast is this projector? This is a very important thing for gamers. Most action games of any kind rely on quick reflexes. A college student usually has a reaction time of 200 to 250 milliseconds. If the display adds an extra 120ms - not at all unusual for a 4K TV in normal viewing mode - he or she Get shot or run into the race car barriers much more than they should. Computer monitor monitor usually get this delay up to about 30ms for 1080p60 signals. This projector promises 23.8ms for these signals. This time - the delay between the display device receiving the signal and its appearance on the screen - we call the delay or delay. We use gizmos we bought from the UK a few years ago to check the display delay. It has an HDMI output through which it pumps out the signal in 1080p60 format. There is no choice in the format. It flashes three white boxes on the screen in the top left corner, middle left and bottom left. You place its sensor over the light (face to the screen, if it's a TV, in front of the projector, if that's what you're using), and the signal shows a delay in milliseconds.

It is simple, elegant and, like all dimensions, must be taken with incredulity. Is the device well calibrated? Does it work properly? We used the gadget to measure the delay with three image settings. First in the standard Cinema image mode, then in Games mode. The improved game mode is a separate setting, so we left the projector in Games mode and included an extended game mode for the final measurement. There were two unexpected aspects to the reported results. The first is that the projector is measured almost by the same latency at the top, middle and bottom of the screen. Almost everything we measure has a noticeable discrepancy, up to 7 milliseconds between the upper and middle, and again between the middle and bottom. Why? For video works at 60 frames per second, the time between the beginning of each frame and the next is 16.7 ms. A computer monitor usually simply transfers content as it is edited to the dashboard. Thus, each frame is drawn on the screen, from top to bottom, using most of these 16.7 m. With the TV, the entire frame usually accumulates in memory, so that it can be processed and then released on the display panel. This transition from memory to panel also takes time. But as far as we could work, the timing was the same for all three positions with this projector. This suggests that the transfer of data from processing memory to the display engine is very fast. Yes, it was another strange thing. When we measured the delay in Cinema mode, starting with the middle position, the delay was about 55 m, then 54.9, then 54.8 and so on, decreasing by 1ms at a pace of just over two seconds in a step. He got everything down to a mere 41.3ms then the next step took him on... 57.9ms. And step-by-step cuts resumed, again bottoming at 41.3m before ticking again to 57.9ms. The results were similar to the usual 'Game' image mode. When we turned on Advanced Game Mode, the delay started somewhere around 25 milliseconds, and then it ticked more and more - yes, it went the other way - about 1ms per second of the past measurement time it got to 28.8ms. And then it ticked up to 24.7m, and resumed the gradual ticking over, over and over again. So why? Did our gizmo play? We tested it on our computer monitor and it was rock steady on one figure. We tried the TV and again, it was steady on one digit. We went back to the Optoma projector and it kept ticking up or down depending on whether the Improved Game was off or off. We really don't think that if you play you will notice any practical difference between 24.7ms and 28.8ms. None between one and 23.8ms that Optoma promises 1080p60 signals. For UltraHD at 60 Hz it promises 25.8ms. For 1080p120 it says 18.2ms and for 1080p240, 15.7ms. We couldn't verify any of these others. The fact is that the Optoma UHD50X projector has an extremely low latency mode that will maximize performance for gamers. For comparison: that 24.7 m to 28.8 m at the top, middle and bottom of the screen compares quite well to 21.4 m (above), 28.4 m (medium) and 35.5 m (bottom) that we measured on our regular display monitor. And that's pretty much right through. And while we couldn't verify the delay with the high upgrade speed, we plugged our computer's graphics card into the projector and were able to confirm that it actually supports 1080p120 and 1080p240. Note that this does not mean that you will receive 120 or 240 animated frames per second from your games. This is the speed of the upgrade. The actual frame rate will depend on the performance of the computer and graphics card rendering. The best gaming PC available (Image credit: Future)The ultimate verdict Of THE UHD50X (known as UHD42 in the UK and Europe) is an UltraHD projector that is very clearly targeted at gamers - and it really does deliver what they need. The performance of the movie is a bit of a pulled judder, however, especially with PAL (UK/AS/EU) sources. But with most UltraHD Blu-ray and regular Blu-ray content, the results were very good, with sharp, detailed images and strong color performance. How to build a cheap gaming PC that doesn't suck suck