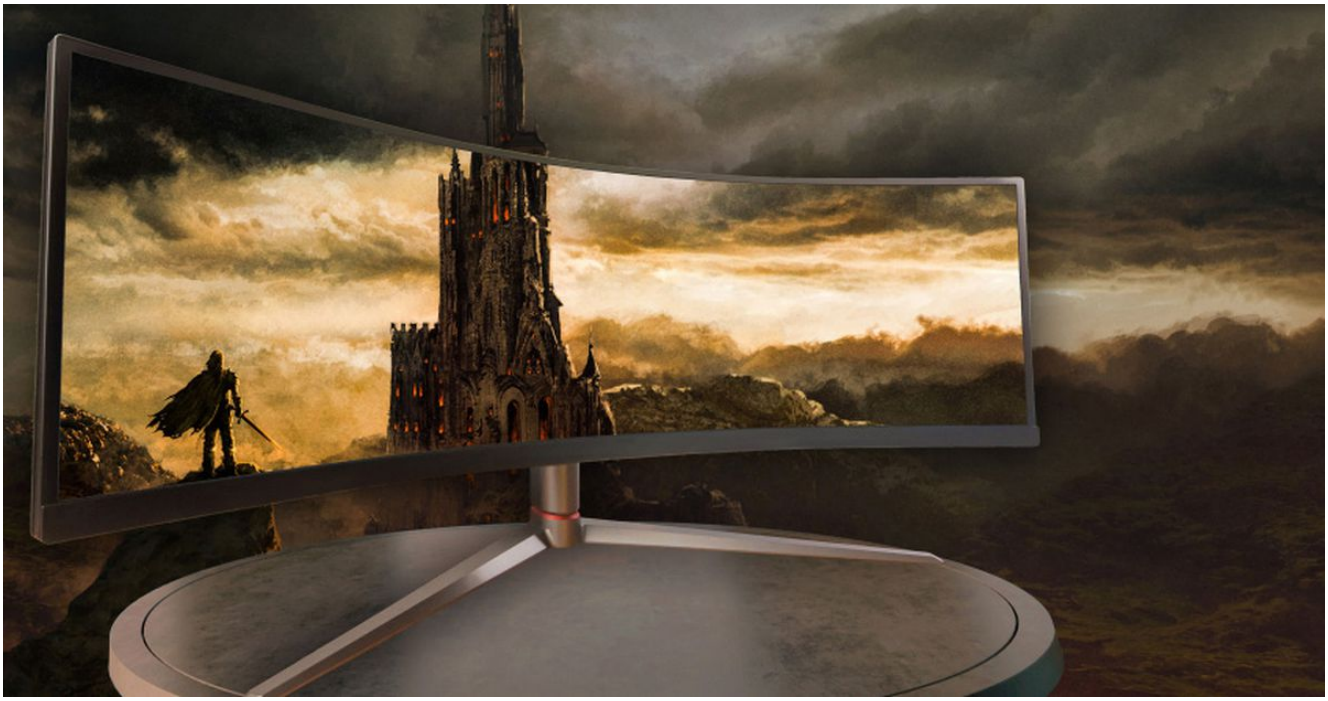
This massive ‘5K’ display with 360Hz could one day be yours



AU Optronics’ latest monitor panels include components that seemingly tick all the boxes for premium gaming displays. One is 49 inches corner to corner, has an ultrawide aspect ratio of 32:9, a “5K” resolution, and a refresh rate of 360Hz. It’s being shown off at the Touch Taiwan display trade show this week alongside a 540Hz panel that AUO claims is the highest refresh rate available on a gaming display.

Although AUO isn’t a household name in the world of gaming monitors, *TFTCentral* notes that it’s one of the industry’s major panel suppliers alongside LG Display. Although you’re unlikely to be buying an AUO-branded display anytime soon, the company’s announcements matter because they represent the kinds of components that’ll be available for manufacturers to use in the near future.

Let’s start with this “5K” display. As *TechPowerUp* points out, the “5K” spec actually refers to the horizontal resolution of

the panel, with a total resolution of 5120 x 1440. That’s the equivalent of having two 1440p displays next to one another, similar to what we saw in Samsung’s Odyssey Neo G9. The key improvement with AUO’s new panel, however, is that it supports refresh rates up to 360Hz, 120Hz higher than the 240Hz G9. In the future, you might not have to choose between having a massive ultrawide display or an incredibly high refresh rate; you can have both.

Other specs of the 49-inch ultrawide 5K 360Hz Curved Gaming Display include a claimed contrast ratio of 5000:1 from its VA panel, a curvature of R1000, a peak brightness of 600 nits, and 95 percent coverage of the DCI P3 color space. AUO is pitching this as a monitor for RTS players, which makes some sense given the problems you can run into playing many 3D games at these kinds of ultrawide resolutions. (My colleague Sean Hollister’s exhaustive review of the Odyssey G9 does a great job explaining the problem.)

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Alongside this new ultrawide panel, AUO is also showing off a far smaller 24-inch 1080p display that has a 540Hz refresh rate. AUO says that’s “the world’s highest refresh rate” on a monitor, though the Asus AW2524H gaming monitor announced at CES can be overclocked up to 540Hz from its 500Hz stock refresh rate. Either way, 540Hz is a ridiculously high refresh rate by the standards of the vast majority of modern monitors.

TechPowerUp reports that AUO’s 540Hz display is an E-TN panel, where “E” stands for “esports” and “TN” is one of the main kinds of LCD monitors. TN monitors are generally known for their responsiveness but suffer from poor viewing angles compared to IPS or VA displays. It’s unclear how an E-TN panel might differ from a regular TN model. The 540Hz display apparently has a response time under 1ms and a peak brightness

of 400 nits.

If you haven’t seen it, Linus Tech Tips did a great video recently that dug into whether it’s actually possible to discern the improvements offered by a 500Hz refresh rate and came away pretty skeptical. But even if the improvements of a 540Hz display are incredibly marginal, I’d be lying if I said there wasn’t a part of my nerd lizard brain that’s deeply soothed by seeing these kinds of numbers gradually tick up over time.

https://www.theverge.com/2023/4/20/23690881/au-optronics-5k-ultrawide-gaming-monitor-540hz-esports