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Panamorph CineVista Anamorphic Lens Reviewed

By: Andrew Robinson, *March 4, 2013*

There's one trait more Hollywood blockbusters have in common with each other than any other, and that is their use of the aspect ratio widely known as 2.35:1 or anamorphic (though 2.40:1 is also common). 2.35:1 content is easily identified by its wider than 16:9 field of view, resulting in black bars top and bottom when viewed on today's HDTV and/or 16:9 projection screens. Similar to what we saw when we had to endure bars with 16:9 content upon our old 4:3 displays, we suffer the same fate with 2.35:1/2.40:1 on today's modern 16:9 displays. The 2.35:1/2.40:1 aspect ratio came to be as a result of filmmakers wanting to create a grander scope, one that possessed far more horizontal area (33 percent more) than mere 35mm film could muster on its own. They did this by optically "squeezing" the wider image onto a standard 35mm frame of film using special lenses. Subsequently, when playing back that same footage, one needed to employ an anamorphic lens in order to see the imagery in its proper form. Failure to do so would result in an elongated image, which I'm sure many of you have seen once or twice at your local multiplex.

While 2.35:1/2.40:1 works and looks good in your local cinema, it's a different beast in the home. You see, in most theater situations, the audience is only there to see one film, meaning it can be anamorphic or what have you without causing a lot of stress. However, our home systems are often charged with having to showcase a myriad of content, all with varying aspect ratios. This is why 16:9 is largely accepted as the standard, for it can easily accommodate virtually every format we have or enjoy today with little editorializing - provided you're okay with black bars top and bottom when viewing anamorphic content. There are purists out there who believe that black bars top and bottom are not only unnecessary, but wasteful. And they're right.

Because our content is brought to us in 16:9, whether it was originally shot that way or not, means that useable resolution is quite literally wasted when viewing 2.35:1 or 2.40:1 content on 16:9 displays, be they HDTV or projection. While HDTVs are (largely) stuck with black bars, it is possible to enjoy the full anamorphic experience via a front projection setup in one's own home. All you need is an anamorphic lens or, more specifically, an anamorphic lens attachment. That's where companies like Panamorph come in. Panamorph has been making anamorphic lens attachments for home theater projectors since the days of 4:3. Their newest lens, the CineVista, is aimed bringing the concept of anamorphic front projection to the masses by offering this luxury at a lower price. Historically, if you wanted to put an anamorphic lens in front of your beloved projector, the associated costs were, well, prohibitive. Bulky optics mated to motorized sleds could cost tens of thousands of dollars, making true anamorphic viewing a bit of a wealthy indulgence.

The CineVista lens is hoping to change the paradigm. Straight away, its suggested retail price of $1,795 is a step in the right direction. Throw in the universal mount and the price increases to only $1,995. Not bad, considering you can pair the CineVista lens with a sub-$2,000 projector, such as an **Optoma HD33**, plus **an inexpensive 2.35:1 or 2.40:1 aspect ratio screen** and be in blockbuster heaven for well under $5,000. That's insane, when you think about it, for the last anamorphic lens attachment that I used (but didn't review) retailed for over $10,000 just for the lens - the mount and such were optional extras. Not only is the CineVista lens more affordable, it's readily available, as it is sold direct via Panamorph's own website, as well as through select dealers.

The lens itself is very well crafted and its construction is extremely solid. It measures four inches tall by five-and-a-half inches long and five inches wide. It's hefty, too, at four pounds. The CineVista's all-aluminum housing is finished in black, though it has a slight brushed texture. The matching (but not included) universal mount is made from the same materials (sans the optics) and measures two-and-a-half inches tall by nearly 16 inches long and seven inches wide. It too is rather stout, weighing about as much as the lens at just over four pounds. The mount is designed to work with many of today's universal projector mounts, such as those offered by Chief and OmniMount. The lens itself is a horizontal expansion lens which utilizes glass (as opposed to plastic) optics for a more professional visual presentation.

One of the benefits of employing an anamorphic lens, as opposed to using a different type of lens or relying on lens memory, is that you can use your projector's full resolution, meaning all 1,920 x 1,080 of its pixels. This is done in the projector by selecting its anamorphic-compliant picture mode, typically labeled "anamorphic" or perhaps "letterbox." This effectively eliminates the black bars by stretching the onscreen action vertically. Projecting that now-stretched image through a horizontal expansion anamorphic lens, such as the CineVista, returns things to normal - sans black bars, of course. The only other thing you'll need is a native 2.35:1 or 2.40:1 screen. One drawback to employing such a setup is that, when the time comes to watch 16:9 content, you're forced to give up some horizontal resolution, as you must then set your projector to output 4:3 in order for 16:9 content to display correctly. This means your horizontal resolution for 16:9 content, when viewed through an anamorphic lens such as the CineVista, is cut to 1,440 rather than the full 1,920. You'll also be treated to black bars, only they'll be located along the left and right sides of your screen, rather than top and bottom. If you're a dedicated cinephile, these occurrences may be few and far between, but not all films are shot using the 2.35:1/2.40:1 aspect ratio, so the CineVista lens won't be of use 100 percent of the time.

Recently, there have been some developments aimed at bringing viewers the grandeur of anamorphic viewing without incurring a lot of the costs and/or headaches. Lens memory is one such development. The problem with lens memory is that it still doesn't solve the black bar problem, as it doesn't utilize all your projector's pixels. Lens memory merely zooms the image out far enough so that any unwanted bars simply fall above or below your screen's viewable real estate. Unless the area above and below your screen is treated (think black paint or fabric), you're basically calling for light leakage and potential reflections to now interfere with the visual presentation. This and lens memory systems are somewhat sluggish in their operation and not

exactly perfect every time, in my personal experience. Another supposed cure-all for the anamorphic problem is **light-rejecting screens**. Many believe that negative gain screens, what with their gray screen color, give off the appearance of auto-masking screens when presented with projected black bars. This is partially true, though this fails to address the issue of wasted pixels. The only way to get the true anamorphic experience is to use an anamorphic lens. Plain and simple.

In terms of performance, setting up and utilizing the CineVista lens is relatively easy. Due to circumstances outside of my control, I ended up not using the CineVista mount; instead, I opted for a table-mounted solution, which worked well. Straight away, I wanted to see if there was any dramatic light loss as a result of having the CineVista lens in the light path - there was not, at least not enough that I felt it was an issue. However, claims that watching 2.35:1/2.40:1 content via a proper anamorphic setup will result in a brighter experience than one without seem a little optimistic. While I get the concept that using your projector's whole panel results in more light, variables like the CineVista lens itself, plus your projector's distance and zoom, create a push, if you will. I suppose in certain instances there would be an increase in light output, but in my setup, there was none, so I can't say definitively one way or the other. The CineVista lens didn't cost my projector any light output, which was really my chief concern. Some anamorphic lenses, especially those of the budget variety, can cause some chromatic aberrations at the edges. The CineVista is guilty of this, as such aberrations can be observed on simple test patterns and/or when viewing static text. However, when actual content is playing, the errors are all but invisible. Additionally, some three-chip projectors have settings now that help curb such negative effects, making it, again, a relative non-issue. There was some subtle pincushion distortion present along the bottom, but nothing too distracting. When all is said and done, the CineVista provides for true 2.35:1 or 2.40:1 viewing with few real-world drawbacks, resulting in an image that is decidedly more cinematic and sharp as a tack.

High Points

The CineVista's build quality is first-rate and its price to performance ratio is unmatched among its peers.
The matching CineVista mount is rather ingenious in its design and should mate well to a wide variety of universal projector mounts.
The CineVista does not cost your projector any of its valuable light output, nor does its presence seem to negatively affect the image in any way.
Focus and sharpness seem unaffected by the CineVista's presence, provided you've installed it correctly.
For true 2.35:1/2.40:1 viewing on a budget, I can think of few lenses that do it better than the CineVista.

Low Points

The CineVista lens, unlike other Panamorph lenses, does suffer from some chromatic aberrations, though at this price point, certain concessions had to be made with the optics. Happily, any aberrations don't seem to mar the appearance of real content.
The CineVista lens is but one part of a larger setup in order to view anamorphic content properly, meaning it's not the only cost you'll incur, as you will also need to invest in a 2.35:1/2.40:1 screen.
When viewing native 16:9 content, you're forced to give up some horizontal

resolution due to the lens' horizontal expansion configuration, meaning 1,920 pixels becomes 1,440.
With several films now employing **variable aspect ratios**, i.e. 16:9 and 2.35:1 in the same film, anamorphic attachments such as the CineVista are not ideal, as they cannot transition between the two aspect ratios easily or instantly.

Competition and Comparisons
Panamorph is arguably the biggest name in anamorphic optics as it pertains to the home theater market. It's not the only game in town, though the company is arguably the most accessible, meaning it offers anamorphic products at virtually every price point that are compatible with most modern front projectors. Schneider is another company that makes anamorphic lenses, though it tends to skew more high end, as in costing more. For more on anamorphic lenses and front projectors, please visit **Home Theater Review's Front Projector page**.

Conclusion
I'm a huge fan of anamorphic imagery. I love it and I find that my affinity for it grows the further down the digital road we go. There is just something about the 2.35:1 or 2.40:1 aspect ratio that I find more appealing and thus more cinematic - but that's just me. It should therefore come as no surprise that I'm a fan of Panamorph, as well as its new CineVista lens. That being said it, isn't perfect, nor is it for everyone and/or every home theater. But if you've ever thought about and/or wanted to experience true 2.35:1/2.40:1 viewing in your own home, the barrier to entry just got a whole lot lower.