



madVR Labs Introduces Another Industry first, with NLS+

We are excited to share with you that the new non-linear stretch (NLS+) feature is now available!

What is non-linear stretch?

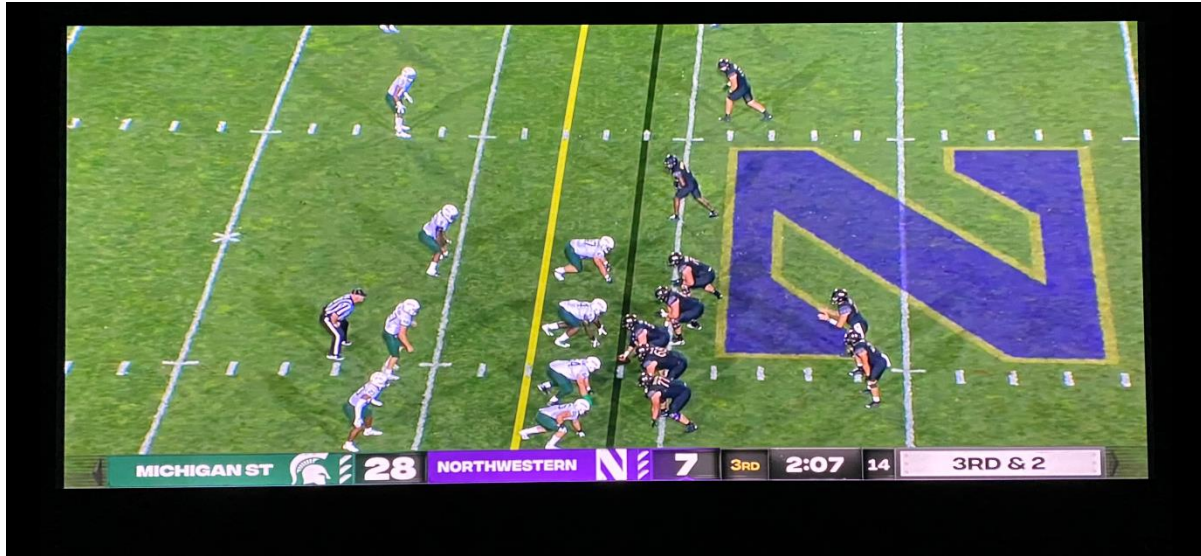
Non-linear stretch is used to fill a scope screen so there are no black bars when watching content with a smaller aspect ratio. For instance, you can use NLS+ to remove the vertical black bars when watching 16:9 content on a 2.40 screen.

How about an example?

You got it. In the first image, 16:9 content is shown on a 2.37 aspect ratio screen. Notice the black bars on the side (which appear here as a very dark grey, so you may have to look carefully).



Now let's look at this same image, but with NLS+ engaged.



Looks great, but how does NLS+ look in motion?

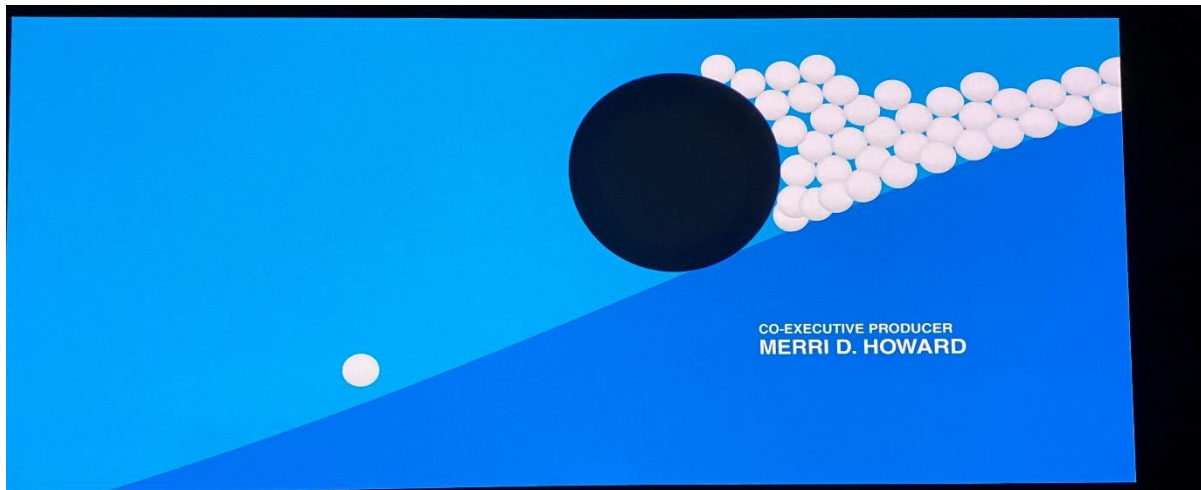
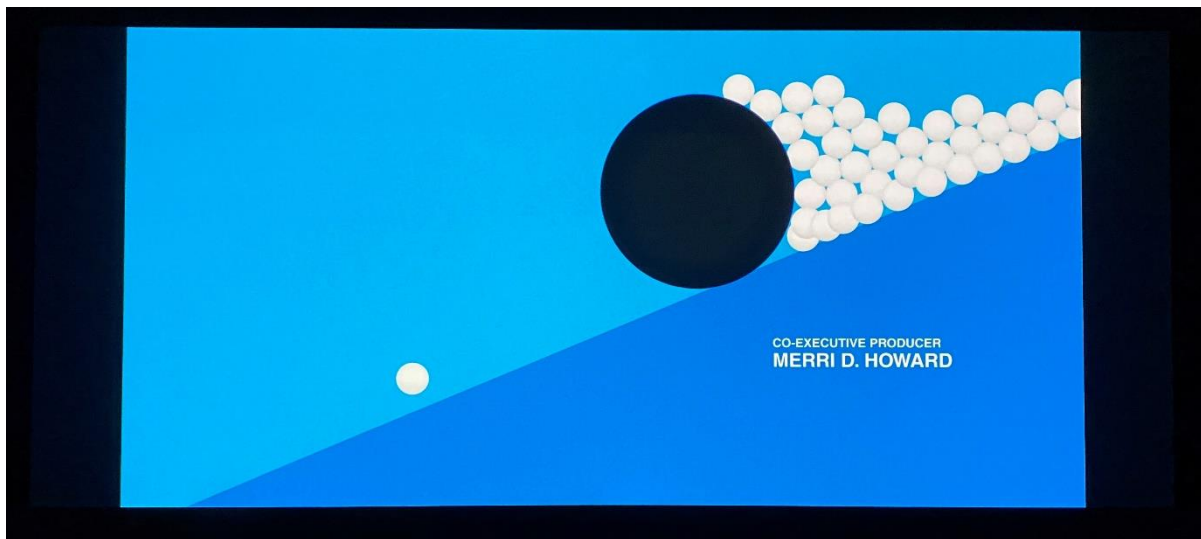
Well, glad you asked. How about some baseball with fast motion and panning? Click below and give it a try (30 MB download). Please pardon the way the video is narrower on the top than bottom - this is just due to the camera angle when recording.

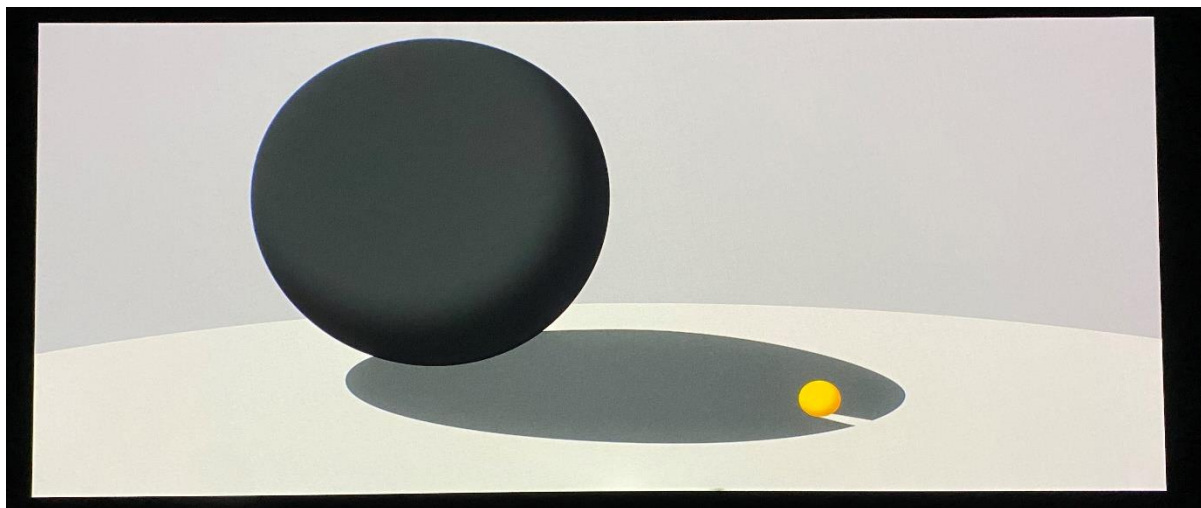
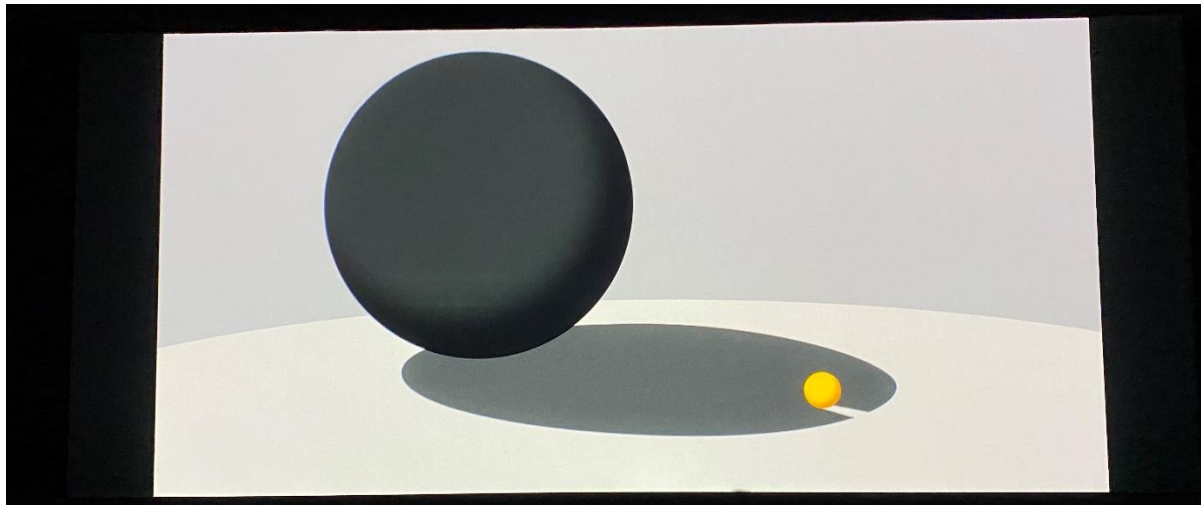


So, what's the secret??

NLS+ is the first non-linear stretch algorithm to combine horizontal expansion with vertical compression. This innovation (yet another madVR Labs industry first) "shares the load" for the stretch both horizontally and vertically, resulting in a more natural looking stretched image than may be achieved otherwise.

Here are some more examples of NLS+. Note that these images have been cropped to fit this email better, but not otherwise modified. Again, please look hard to spot the black bars, which closely blend in with the email background. Also note that the slant of the images is just from the camera being off axis. These pics were taken casually, just for fun, to show you some more examples of NLS+ in action.





Is NLS+ right for everyone?

NLS+ was one of the most asked for and anticipated Envy features over the past year, and the preliminary feedback has been outstanding. That said, some people prefer viewing the original, non-stretched content, with the full black bars. Even within madVR Labs, we have different thoughts on it.

So for the purists out there, please note we are not advocating that NLS+ is for everyone. Rather, if you're in the camp that really enjoys such a feature, you now have yet another fun and exciting way to get even more enjoyment out of your Envy!

And since NLS+ is subject to such personal taste, we provide many easy-to-use settings to adjust the amount and type of stretch and/or zoom. So, whether you prefer no stretch, a little stretch or want to go wild, you can set things exactly as you prefer.

Likewise, NLS+ is new to us too, and we continue to look for ways to *squeeze* even more out of it (see what we did there?).

How do I try NLS+?

Well, first you will need an Envy. :) If you don't already have one, [visit our website](#) and click the Where to Buy button. Go to the Firmware Configuration menu and choose either Test Builds or Experimental Builds for the Build Type. Download the latest Envy firmware version shown there.

Then go to the new "Custom Zoom" page in the Settings menu while viewing 16:9 content and play with the controls. It's self-explanatory, but there's always the in-menu context sensitive help to guide you.

After experimenting there, head to the new "Custom Zoom Configuration" page in the Configuration menu. It offers the same settings as above, but with options for each possible aspect ratio (14 different ones!). Envy even provides test images for each AR, so you don't have to find content in every AR to configure each one.

We hope you enjoyed learning about NLS+. If you've found this interesting, please share this email with a friend. Stay tuned for more exciting announcements from madVR Labs. Thank you for your interest in the madVR Envy.

Additional Resources

See the [NLS+ Setup Guide](#) for more information on this exciting topic.