

Lens distance

The Rift S allows for roughly a centimeter and a half of movement. This movement locked to the entire display area in relation to the halo. You can not move the lenses independently. If you wear glasses or prefer the lenses farther away from your eyes you will likely end up with a looser fit that has a significantly larger nose gap.

Like with most Halo designs I found I was always trying to push the headset closer to my eyes and could never get it somewhere satisfactory.

Resolution and Refresh Rate (The Screen)

The S has a slightly higher resolution than the base Rift. 1280 x 1440 vs 1200 x 1080. While this does reduce the screen door effect drastically, it's still not a great resolution. Smaller text is still difficult to read and distant objects are still fairly blurry. A definite improvement over the original Rift but a far cry from the standard for premium HMDs 1440 x 1600.

Even the cheaper WMR HMDS boast slightly better resolutions at 1440 x 1440.

As far as the Refresh Rate goes, Oculus deemed it necessary to reduce the refresh rate down to 80 Hz from the standard 90 Hz. I am generally fine. I have an iron stomach. For those sensitive to sim sickness this might be an issue. The 10 FPS won't necessarily be obvious to the naked eye but it's possible this may decrease the threshold for what someone can comfortably play.

Overall, the headset doesn't look bad. It's a step up from the Rift but could have been considerably better. I don't understand some of the decisions that were made here.

God Rays

With all of the screen changes how are the god rays? Better. I didn't experience any god rays while I was playing. Big improvement here.

The Sweet Spot

The sweet spot is decently sized. You're still going to need to wiggle the headset around a bit when you put it on. I don't think we're getting away from this any time soon with any headset. The Rift S did seem fairly forgiving when it came to the sweet spot though.

IPD

Can't leave off IPD out of this discussion.

MasterShadowToday at 2:06 AM

The lack of support for any IPD outside of the range of 58 to 72 or the ability to physically move the lenses may be a bit of an eyesore for some users. I personally am a 69.2 IPD. Going back to the sweet spot topic I don't feel like this majorly impacted my ability to sit inside the sweet spot. IPDs that are closer to the edge of that range may have different results but if you're within the 58 - 72 I think you should be fine.

Audio

As far as the audio goes, the headphones have been removed in favor of a speaker system and an audio jack. I've heard the quality is pretty poor, however I can't really comment myself as I

used an external headset. I would be perfectly happy if all future HMDs dropped any audio support or at least offered a cheaper model without integrated audio. To me, it just causes issues when the software tries to switch over to the headset audio. I don't want it and I don't need it. It's just another setting I have to remember to adjust and another point of failure. I know I'm likely in the minority here but I just don't care about the lackluster integrated audio when I already have a decent wireless headset. I'm fairly certain a good portion of VR enthusiasts will likely also have a preferred audio headset. Let's make this optional already...

Fit and Comfort

I found the headset to be surprisingly comfortable even on extended 4+ hour play sessions. The foam on the face guard and the strap snugly grip your face without being too forceful. There's a sweet spot here as well where the strap is tight enough to not fly off your head with sudden movements but not so tight as to be painful. My first instinct was to over tighten it a bit so it doesn't fall off. It would be nice if the face plate was easier to replace with a fresh one. After a couple hours of Beat Saber... Well you know how a sweaty mask feels... If playing with friends then you'd better be really close friends...

MasterShadowToday at 3:27 AM

The Cable

The cable is reasonably long at 5 meters. It reaches pretty much end to end of my large play space though it does pull at my head in the back corners. A wireless upgrade would definitely set this headset apart from the competition.

MasterShadowToday at 3:34 AM

The Controllers

For the most part the controllers are effectively the same as the original Rift controllers. The primary change is that the orientation of the tracking ring has been adjusted. I found that this adjustment made the controllers very top heavy and more awkward to grip correctly as the controllers wanted to rest in my hands with the ring pointed down.

As a person with larger hands, I've always felt the Oculus controllers were extremely small and fragile feeling.

Their small size leads to a very uncomfortable grip when playing games that use the grip button in such a way that you don't necessarily want to be pressing it a lot. Swinging the controller around while only being able to really grip it with your ring and pinky fingers isn't the most comfortable experience.

I also found it somewhat difficult in games like Beat Saber to really find a good spot to grip the top of the controller. They reduced the size of the thumbstick area and as a result there's really no place to put your thumb that doesn't have buttons.

I'm still not the biggest fan of these guys

Tracking

And we've finally come to tracking. The thing that makes this headset worth while. Goodbye endless hours of camera setup every time you pull out the Rift! The Rift S's inside out tracking system is the best I've gotten my hands on. It has it's flaws. For example the data pad in

Onward would be difficult to access. We've seen other Rift S users struggle to place a backpack on their back in A Township Tale due to the players head occluding the controller before it's in the appropriate position. Any controller interaction behind the body is going to suffer considerably.

The only other exceptions that I've found where either when the controllers were extremely close together or close to the headset. You may encounter some drift in these situations but it was relatively minor.

If you're a big VR shooter fan, you may also have issues with occlusion when using a two handed rifle weapon if the first controller occludes the second or when using rifle stocks.

Not quite related to tracking but still in the realm of the controllers. I did note some input lag with the controllers. Anywhere from a split second up to nearly a half a second of input lag from when I pressed/released a button to when that action actually happened.

It was most noticeable in Orbus when playing the Scoundrel and performing flick shots and also while casting my line while fishing. In both scenarios that fraction of a second in put lag is extremely noticeable and it's no exaggeration to say it completely ruins the experience. Not being able to land your trick shots significantly reduces your DPS as a Scoundrel and while fishing you go from being able to cast across to the other end of the pond to a pathetic cast that just falls to your feet and does nothing but eat durability from your lure. This needs to be addressed ASAP as I will refuse to play any games that require precise button pressing/releasing with the Rift S in this state.

Setup

The setup for the Rift S was surprisingly easy the first go around. I plugged in the DP and USB cables and it was instantly recognized by the Oculus software. Something I can't say about my CV1 which was very picky about when it wanted to be recognized. The guardian setup is fairly simple though I would love to see some parity with Steam VRs advanced mode where I can set hard lines rather than draw out shaky hand outlines that may or may not be where I think they are.

If that's where things ended then we'd be great. However, out of 6 days of using the Rift I had to redo Guardian setup 4 times for various reasons, One of which was Oculus thinking the guardian bounds were rotated 45 degrees and shifted to the left about 10 feet (which put half the bounds outside my house...) Another time I simply walked into my room one morning and Oculus was in the middle of room setup. Sometime during the night it decided to wake up and fire off the Guardian setup without any input from me. These issues seemed fairly common place while I was using the headset somewhat nullifying the primary feature of this headset which for me is the fact that I shouldn't have to go through camera setup each time I want to use the headset.

Other issues:

While using the headset there were several instances of something I'm calling BLOD or Black Lenses of Death. Now, what happens during a BLOD is that when you fire up a game, you can

see that the headset is tracking correctly via the mirror window. You move the headset and the mirror window... mirrors... that movement. Ok, headset is tracking. When you put the headset on however the lenses are dark. Not just that they are only displaying black, they are completely shut off and powered down. The lenses have died and kinda like a BSOD, a BLOD was only resolved by rebooting the computer, nothing else seemed effective.

This happened to me twice out of my 6 days of gaming.

The Oculus software has also caused several other issues with my flat monitors. I really dislike the flickering that happens when Oculus is started and closed. This can screw with my window setup and is likely a combination of Oculus and Windows 10. I still don't like it.

I also had several instances of my main monitor starting to flicker until it locked up after starting the Oculus software.

The hardware is good, the software and the general Oculus experience I could absolutely do without as it's caused me nothing but problems and brings nothing to the table that Steam VR doesn't have and equal or better features.

Overall the headset itself, for the price point, is a decent headset. It's a reasonable successor to the original Rift. A few questionable decisions such as the refresh rate, audio downgrade or software IPD features make it less of a clear cut upgrade but it still edges out as a better buy for anyone new to VR. If you already have an OG Rift I would wait on an actual Rift 2 or upgrade to one of the other premium headsets rather than side-grade to the Rift S unless you're extremely frustrated by the camera setup process.