

Obsidian Switch Review

-ThereminGoat, 06/30/2020

The day is *finally* here. After several long months of waiting and pacing around my apartment and only my apartment because of coronavirus, I've finally gotten ahold of the last two of 43 Studios' switches that he has released. (Of course, between the time of me ordering these and then them finally getting here, I was greeted with 43's announcement of his 5th switch in his repertoire, which will only render this completed set feeling ever so slightly more empty.) While I am beyond happy to have received both the Obsidians and the Nanas, I have been anticipating the Obsidians more so purely due to the review of the H1s I had done awhile ago, as well as my discussion on the brief skirmish that ensued between these similar switches. Thus, while this is effectively a stand-alone review of the Obsidian switches, it is going to be drawing heavy comparisons between them and H1s as they were the main competition for these switches.

Switch Background

In order to not reinvent the wheel entirely here, I'm going to suggest before delving into a brief background of these switches that you check out my article 'H1s, Obsidians, and More Switch Drama' as it covers much more in depth both the history of Obsidians and their competition with the H1 switch. That being said, Obsidians were the 4th (and at the time final) switch design released by 43 Studios and were to be an all-black Linear switch from JWK with heavy inspiration from (the meme of) Vintage Cherry Blacks. Since 43 Studios is a small operation operating mainly through ZFrontier and QQ groupbuy setups, these were only aimed at being a Chinese exclusive release. That is not to say, however, that these may not see a western release in the future, as Rara switches were designed by 43 Studios and featured on Drop some months ago.

Featuring some renders and artsy photographs of plain, all-black switches, the initial ZFrontier posting for the Obsidian switches listed these as linear switches featuring Nylon housings with a POM stem and a spring weighted at 62g of bottom out force. Originally selling for 3.3 Yuan (or \$0.47) each, the groupbuy for these switches took place in a private QQ server between January 14th and February 14th of 2020. According to the meager translation scraps that I was able to pull out from the initial sales page, the response was quite good with some comment edited into the post indicating a selling out of an MOQ within only two days' time.

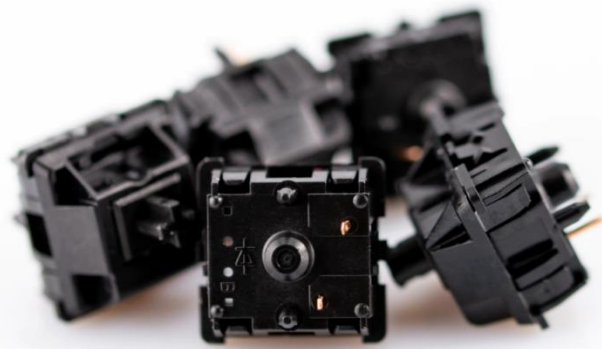


Figure 1: If only I could take switch photos as artsy as this one.

Obsidian Switch Performance

Appearance

Honestly, this has got to be one of the absolute easiest sections to write out of nearly any review that I've ever completed. These all-black switches do in fact feature an all-black housing which has a sort of glossy, reflective shine to the top housing as well as the sides of the bottom housing. The very bottom of the switch features a slightly more matte finish, but still does reflect light quite a bit. The fact that the housings on the Obsidians are purportedly to have been made of Nylon would make sense from previous personal experience, as Alpaca bottom housings are also reported to have been made of Nylon and feature a similar sheen and smoothness to the surface, though this is purely subjective speculation at best.

While the appearance of these switches is pretty much identical to the H1s in terms of color, sheen and smoothness, the glaringly obvious difference with the Obsidians is the nameplate. While it isn't a particularly fancy or striking font, the Obsidians feature a nameplate that says '43 Studio', making it the first of their switches to feature this logo on it. Personally, as a collector, I absolutely love when I get to see new nameplates on switches and I think this appearance of a new logo makes me beyond excited to see what 43 Studios will do in the future, much like my excitement when I saw the 'Equalz' nameplates on the C³ Equalz Tangerine V2s, or the 'ThicThock' nameplates on the Marshmallow switches.



Figure 2: Comic Sans be damned, at least it turned out better looking than the Geekmaker switch tops.

Push Feel

As with most linear switches that have come out of JWK since their spike in popularity, the Obsidians are no exception to the continued excellency surrounding their factory lubed linear switches. The mild factory lubing that was applied left negligible levels of scratch to the stroke, and the batch of switches I've had were consistently smooth across the entirety of the stroke. With respect to the smoothness, these definitely come as the third switch I've ever suggested *might not* need lubing by hand upon receipt – with the first two being the H1s and C3 Equalz Tangerine V2s.

While the smoothness of these switches is quite comparable to the H1 switches, the bottom and topping out during the actuations are where some differences are able to be seen. Unlike the H1s, which featured a pretty solid, thick, and 'cushioned' feelings to the bottoming out and return of the stem throughout a keystroke, the Obsidian switches don't quite match this. While the bottom out of these switches is a bit lighter and more hollow, the collision of the stem with the top housing is significantly

lighter and more plasticky than in the H1 switches. However, upon swapping both the H1s and Obsidian switches into identical spring weights, this issue disappeared immediately, lending to the idea that the difference in bottoming out and topping out feelings are merely the result of a difference in spring weight. (For those who do not remember, H1s have a 78g bottom out force whereas Obsidians have a 62g bottom out force.)

Sound

The sound section is almost an identical mirror of the push feel section in terms of response of the Obsidian switches. The most obvious feature, or lack thereof, is that there is no scratching sound or roughness to these switches throughout any point of the stroke. Obsidians, however, do suffer a fair bit when it comes to the topping out sound, much like they do in feel. While the bottoming out sound is only marginally higher pitched and louder than an H1, the topping out noise is substantially louder and sounds quite rough on the ears. Again, this appears to be a result of the material of the Obsidian housing combined with the spring weight, as swapping it to a higher spring weight drastically reduces this issue.

As well, while I am not the most familiar with their usage, as per my commentary in my last review about filming switch top housings, these may be one of the cases where people would drastically improve their experience by filming switches. I would imagine films that come a bit thicker, or made out of a gasket material like the Deskeys films, could easily reduce this relatively high-pitched sound that I imagine few people would find pleasant.

Wobble

The wobble on the Obsidian switches are honestly one of its best features, with the N/S stem wobble having only a barely perceptible wobble and the E/W stem wobble having virtually none whatsoever. This N/S wobble, in fact, is within the margin of error to be noticed at all with keycaps placed on top of it. Without much surprise, all things considered, the stem wobble on these switches are a lot better than the H1s, and due to the fact that the new nameplate on the Obsidians likely required an entirely new top housing mold to be made. While the H1s don't feature a significant amount of stem wobble on their own, it is much more noticeable when compared side by side to an Obsidian switch.

While I've only previously focused on stem wobble in my reviews up to this point, I think it may be worthwhile to start mentioning if any top housing wobble is noticed out of the gate in response to my switch top document that I had posted earlier on in June. As for the Obsidians, there is no top housing wobble whatsoever, and again comes as no surprise if the assumption is made that a new top housing mold was needed in order to get the brand-new nameplate. However, the H1s do not quite appear to have the same fate. Upon retesting these switches, I found that there is a minor amount of wobble in the E/W direction in the top housings of the H1s, which could easily be exasperated if they were opened one or more times in order to do modifications like lubing, spring swapping, etc.

Other

Just as a general point of note, I always recommend that my reviews or any of my documents should be taken with a grain of salt purely because preference is king in this hobby. While I would like to think I have developed some taste over my time of collecting all of these switches, I am well aware that my taste may not match yours or even another large collector's. That being said, I tend to have a bit of a personal bias, currently, toward heavier linear switches as I've been using 70g linears lately and have been considering bumping upwards towards the 85g – 90g range. Even though the Obsidians are definitely well below this range, and thus make H1s more in line with my recent tastes, I've tried to review these switches with inflicting as little of that bias as possible.

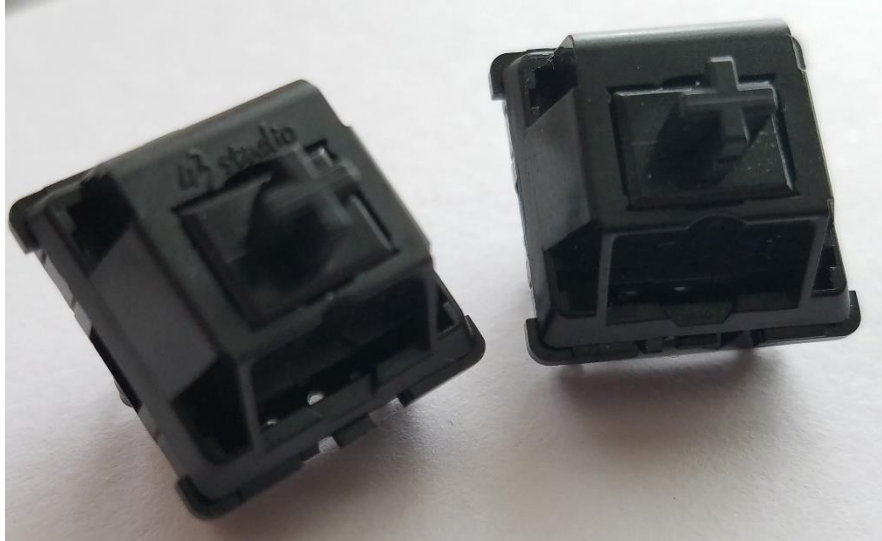


Figure 3: Weight difference aside, going with one or the other could definitely break a build theme.

Comparison Notes to Other Notable Linear Switches:

Note – These are not aimed at being comprehensive comparisons between all factors of these switches as this would simply be too long for this writeup. These are little notes of interest I generated when comparing these pieces to the Obsidians side by side. (As well, I should mention that these are the same set of switches I reviewed the H1s next to in case you want to compare my feelings side by side.)



Figure 4: Switches for comparison. (L-R, Top-Bot: Gateron FF Cheese, Cherry MX Vintage Black, Mauve, Gateron RGB Yellow, and Tealio V2)

Cherry MX Vintage Black:

- Much like when comparing MX Vintage Blacks to any modern JWK/Durock linear, the Vintage Blacks definitely have a much more noticeable scratch in terms of both sound and feel.
- The MX Vintage Blacks definitely do suffer more in the E/W direction in terms of stem wobble as compared to the Obsidians but are better with respect to the N/S direction.
- Overall, the sound in terms of bottoming out and topping out of the Cherry MX Blacks is not only significantly deeper and more solid than the Obsidians but feels more so than any switch on this comparison list.

Gateron RGB Yellow:

- While the Obsidian switches are most certainly cheap at the baseline \$0.47 per switch groupbuy price discussed above, Gateron Yellows (of any type really) are and will likely always be the pinnacle of budget linear options.
- The topping out sound of these Gateron RGB Yellows is actually fairly close to the pitch and tone of the Obsidians, but it is ever so slightly more muted in terms of volume.
- Even though it is relatively marginal at best, the stem wobble in the Gateron RGB Yellows is a bit more in both the N/S and E/W directions than the Obsidian switches.

Tealios V2:

- While it really wasn't discussed above, there is no spring ping in the Obsidians at all. The reason I didn't include this up there in the sound discussion was because I hadn't even thought to review such until I compared them to the Tealios V2 which have a rather noticeable spring ping to them.
- In terms of switch feel, the Tealios V2 aren't too far off in terms smoothness from the Obsidians, much like how they feel against H1s now, but they still are not quite up to par to these two.
- While not necessarily louder or at a different pitch than the Obsidians, the bottoming out and topping out sounds of the Tealios V2 feel a bit sharper, and less drawn out than the Obsidian switches.

Mauve:

- While the Mauves are only marginally greater in terms of bottoming out spring weight (65g vs. 62g), these as a whole feel like a much more sturdy and solid sounding and feeling switch. That is not to say that the Obsidians are bad compared to them, by any stretch of the imagination, but rather they might not be as suited for certain board types or design goals.
- There is a much more noticeable stem wobble in both the N/S and E/W directions in the Mauve switches as compared to the Obsidians.
- As just an interesting point of note, and to also further push my personal agenda of claiming that we absolutely need scientific testing in order to determine switch material compositions, both the Mauves and Obsidians are reported as having Nylon housings. However, even on blind testing I can tell them apart as the Mauve top housings feel significantly smoother, interestingly enough.

Gateron FF Cheese:

- Purely on a name to name basis, while the Obsidians are much more accurate simply in terms of how they look, the FF Cheese switches absolutely smash the name category.
- Much like with any Gateron milky housing, the FF Cheese have a much deeper and more solid sound than the Obsidians, but not nearly quite as bass heavy as compared to something like the Cherry MX Black switches.
- There is a small, but noticeable amount of scratch in the FF Cheese switches, both in terms of sound and feel, as compared to the Obsidian switches.

Final Conclusions

To be entirely honest, the results of the Obsidian switches – and especially when compared to the H1 switches – are quite surprising to me. I would not have imagined, even with the earlier drama surrounding them that these would have come out nearly as close to each other in terms of performance. While the H1s are more widely available and more suited to my own personal preferences, I think that the Obsidians ever so slightly take a bit of an edge in my book purely because of the better tolerances in the top housing in terms of performance (and the sweet, sweet nameplate). Things like spring weights or sound can always be modified through aftermarket swapping or the introduction of films, though things like stem wobble in the top housing don't currently have an easy way of being fixed.

That being said, I don't think that either of these options are leaps and bounds better than the other one. While I still anticipate seeing a lot of people using H1s in the future simply because of how readily available they are as a linear option to the western markets, I would also imagine that if the Obsidian switches were more widely available that they too would see usage from people who are more a fan of lighter linear switches out of the box.

Further Reading

[43 Studios' Original Obsidian IC Post](https://www.zfrontier.com/post/detail/18102)

Link: <https://www.zfrontier.com/post/detail/18102>

Wayback: <https://web.archive.org/save/https://www.zfrontier.com/post/detail/18102>

[43 Studios' ZFrontier Profile](https://www.zfrontier.com/user/home/2547918)

Link: <https://www.zfrontier.com/user/home/2547918>