# Alpaca V2 Switch Review

-ThereminGoat, 12/6/2020

If you've been following my content, reviews, scorecards, or rants for some time now, you'll know that I've never quite been one for ceremony or tradition. I post at odd times, review things that I personally find interesting, and will just upload photos of my switch collection whenever I feel motivated enough to do such rather than doing any of these things in semi-coherent fashion. Keeping in line with this chaotic mess, I've realized that I've completely forgotten that my first switch review that I had ever written took place on September 26<sup>th</sup> of 2019, making the ThicThock Marshmallow review now officially 1.25 years old. Good luck finding a set of birthday candles to celebrate that one.

As I look back at that review, as well as other famous early ones such as the Stealios Controversy document from late December 2019, I can't help but recognize how much has changed with the reviews in this time. Aside the fact that I can now actually write significantly better, I've expanded my reach and scope of reviews allowing me to put out opinions on over 75 different mechanical keyboard switches which would have seemed damn near impossible this time a year ago. However, as we move forward into "Year 2" of reviews, know that I will continue to try and improve aspects of this site, my reviews, etc. as much as I can so hopefully this years' content looks leagues behind where I will be next year.

On that note specifically, some soon-to-come quality of life improvements will be arriving to the reviews and website later this month via way of a lightbox for taking better quality photographs of switches. I've recently updated my photo-taking device of my own accord and the supporters over at my Patreon have helped me to purchase a lightbox to even better improve upon my content in a way that I've wanted to for some time now. While I've never wanted nor expected anything in return for the reviews that I do put out, their generosity last month is already going to pay off in tangible ways and I hope that their continued generosity will only further better the quality of the site as a whole. If you would like to show support and help tangibly improve the website/reviews in the future, please check out my Patreon page linked in the photo below to donate whatever you feel like is reasonable.



# Select a membership level



Figure 1: Give money to a barnyard animal to help support his Chinese plastic addiction.

To cap off this long-winded introduction section while still harking back to how long the reviews have been going on, one of the earliest 'big' reviews that I had ever posted was my Silent Alpaca switch review. While certainly not my largest review now, it still drives considerable traffic given that 'Alpaca' is one of my largest search terms on my website to date. With the recent release of a 'new and improved' Alpaca V2 switch a month or so ago, and not nearly as many reviews about them being posted, I feel like this is a good opportunity to fill the Alpaca-sized hole missing from my reviews and to give the people what they want.

# **Switch Background**

Even though Alpaca V2 switches are only roughly a month old now at the time of writing this review, I don't think the background of them could really be covered in good faith without going all the way back to December of 2019 to discuss the first Alpaca switches.

First released in early December of 2019, Alpaca switches were among the first 'custom colorways' to be produced from the Durock/JWK factory following the Stealios Controversy. While several different switches had been announced or produced up to this point such as Okomochi V1s, Pinoko V1s, and Keebwerk's Tacit switches, these were the first to see customer's hands that were themed after a keycap set like so many JWK 'recolors' today. Narrowly beating out Koala switches, which were initially designed to match with Biip's then-upcoming keycap set of ePBT Extended 2048, the Alpacas were a linear switch colored to match Minterly's SA Bliss keycap set with an opaque grey housing and soft pink stem.



**Figure 2:** Render of SA Bliss, a set designed by Minterly and the theme inspiration for Alpaca switches.

Coming with 62g gold plated springs at a price of \$0.55 per switch, the Alpaca V1s sold incredibly well in their first release, selling out in under a week's time. Growing in popularity alongside the demand for more JWK/Durock switches, the Alpaca switches have remained a popular in-demand linear switch option for almost an entire year now, frequently selling out restocks at the same price point that they had initially sold at. While already touted as extremely good in quality for the price of the switches, demand saw the introduction of an Alpaca V2 in November of 2020, which were produced from entirely new molds for the top housing, bottom housing, *and* stem. Additionally, differences in lubrication patterns in the stems were marketed, and will be discussed below in the review of the switches

specifically. Currently, the Alpaca V2s are still being sold on PrimeKB for the same \$0.55 per switch price that the initial Alpaca switches were.



Figure 3: Convenient text break in the form of a pile of Alpaca V2 switches.

As an interesting historical note in addition to what has been stated above, a fairly noticeable amount of attention has been drawn to Alpaca switches in new-to-the-hobby individuals via way of popular streamers such as Taeha, Minterly, Apiary, etc. While this in itself is not a bad thing, as I think many newer individuals should be exposed to the general quality of JWK switches, this has certainly caused the spread of a large swathe of misinformation surrounding Alpaca switches in general. In order to help remedy this, I'm going to discuss the two largest pieces of misinformation surrounding the historical context of Alpaca switches:

# -1. "Alpacas were the first Durock switch."

Aside the fact that this statement completely ignores the presence of the Stealios controversy, as well as the Geekmaker switches that even came before that, Alpacas were not the first switches (nor linear switches) to be produced by Durock/JWK once they became known. Okomochi V1 and Pinoko V1 switches, for example, were custom-colored Durock switches that were not only produced but shipped before the first run of Alpaca switches had commenced. Additionally, making this point even funnier, is that these weren't even the first Durock switches that PrimeKB, the original runner of the Alpaca switches, had sold on their store. A few weeks to a month prior to running Alpacas, PrimeKB began offering three tactile switches in varying weights/colorways at the same price point as Alpacas and are still available to this day.

### -2. "Every linear switch that JWK/Durock produces is just an Alpaca clone/recolor"

While a proper rebuttal to this point, alone, could take several pages for me to write, I'm going to try and keep it fairly brief and mention three instances where this is already provably false. First of all, this is certainly untrue with respect to C3 Equalz Tangerine V2s, as these have their own molds and production line at JWK, as per statements made by both C3 and TKC. Secondly, this is untrue as HHHH's H1 switches were reportedly produced with 'tweaked/changed' molds from the standard Durock/JWK mold offerings. Thirdly this is untrue for Novelkeys' Silk and Dry switches, as they have their own production molds as is evident by the difference in raised nameplates. I will choose to cut the rebuttal to this point here even though there are plenty of examples that not all JWK/Durock switches are just 'recolors/clones' of other switches, much less Alpacas.

# **Alpaca V2 Switch Performance**

Due to the fact that I did not publish a review for the Alpaca V1 switches before, I will be sure to make note of the differences between the V1 and V2 in this section.

## Appearance

Much like the Bliss keycap colorway that the original Alpacas were modeled after, both the V1 and V2 Alpacas feature a dark grey, opaque top housing made of polycarbonate with an equally colored bottom housing made out of nylon. The stems in these switches are a light shade of pink and sit on top of 62g, gold plated springs. While one would expect that the V2 switches be outwardly identical looking to the V1s as supposedly only molds were changed, the V2s actually feature a slightly darker housing color, closer to a dark grey finish than the fairly neutral grey of the V1s, which can be seen below.

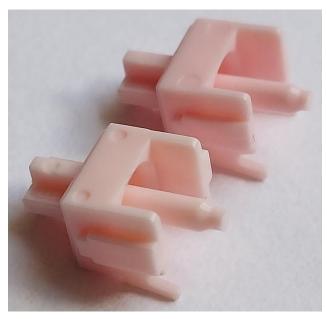


Figure 4: Housing color comparison shot with Alpaca V1s on the left and Alpaca V2s on the right.

In order to help verify the claims that new top housing, bottom housing, and stem molds were used in the production of the V2 switches, I chose to open and further inspect the switches in a piece-by-piece fashion to see if there were noticeable mold differences. Looking first at the stems, it is definitely easy to tell that these come from different molds based on two distinctive features. First, looking at the bottom of the slide rails on the Alpaca V2s, they feature a slight inward taper towards the end of the stem whereas the Alpaca V1s feature a completely vertical, straight slider edge. The other point of note that differentiates the stems of the Alpaca V1s and V2s are the mold circles on the back plate of the switch. In the Alpaca V1 stems, these holes were seemingly smaller diameter and located more towards the top of this region whereas in the Alpaca V2s, these are situated much lower on the back plate and slightly differently sized.

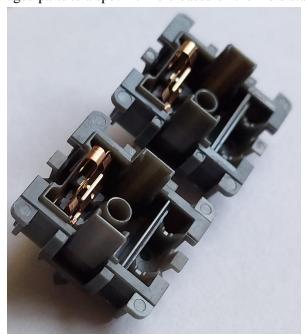


**Figure 5:** Comparison of the tapered slide rails on Alpaca V2s (Top) and normal slide rails on Alpaca V1s (Bottom).

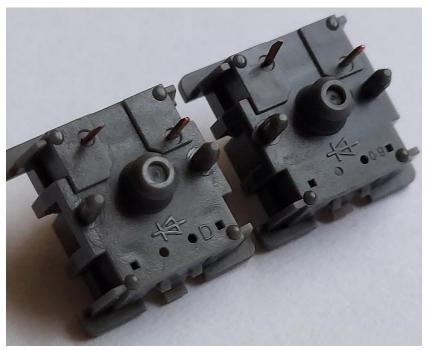


**Figure 6:** Comparison of backplate mold indents on Alpaca V2s (Top) and Alpaca V1s (Bottom).

Moving onto the bottom housings, its fairly evident that the V1 and V2 Alpacas share different molds much like the stems. Taking a look again at two points of evidence, the first noticeable difference is that the N/S/E/W edges of the bottom housing of the V2 switches now feature mold circles whereas the V1 bottom housings only had these mold circles on the corners. Looking at the underside of the bottom housings, we are able to note the mold stamps between the LED pins and can see that V1s featured a single character alphabetic system whereas the new molds feature a double character numeric system for identification. In case you are unfamiliar with the exact purpose of this feature, its so that the factory can trace back consistently damaged parts to a specific mold based on the mold stamps on the defective parts.



**Figure 7:** Comparison of mold indents on bottom housings of Alpaca V2s (Top) and Alpaca V1s (Bottom). Note the extra circles on the edges of the V2 housings.



**Figure 8:** Comparison of mold markings on bottom housings of Alpaca V1s (Left) and Alpaca V2s (Right).

Of all three components, the top housings were the hardest to differentiate based on appearance, though there is one very noticeable feature worth pointing out. In the new V2 Alpacas, the guide rails where the slide rails of the stem sit are actually ever so slightly deeper than that of the V1 Alpacas. If I had a set of digital calipers on me right now, then I would measure it. Since I do not, though that will have to wait to be purchased until next month's Patreon donations are in.

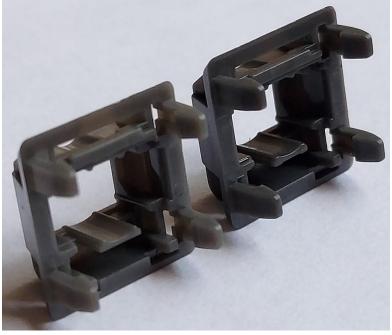


Figure 9: Comparison of top housing slider rails in Alpaca V1s (Left) and Alpaca V2s (Right).

#### Push Feel

The push feel of the Alpaca V2 switches is honestly quite impressive even without regards being paid towards the context which they have arrived in. Of the small lot of these that I purchased to test out, they were all consistently and uniformly smooth throughout the entirety of the stroke and completely free from scratch. Rounding off both ends of the stroke of these switches, the bottoming and topping out feelings are fairly strong and solid, without giving much of the 'thin and plasticky' feeling that some newer JWK switches are quickly gaining a reputation for. Sure, the topping out does feel a bit thinner than that of the bottoming out due to the top housing being made out of polycarbonate instead of nylon, though it's definitely not as bad nor as noticeable as in other mixed-housing type JWK switches.

Putting this back into the context of being the updated version of the Alpaca switches, these newer V2 switches are even more impressive than just in a vacuum. While V1 Alpacas were fairly smooth on their own right, they did still have a slight amount of scratch that was noticeable which is now completely gone in the V2 versions. As well, the V1 Alpacas featured a *significantly* thinner, 'platicky' feeling top out than the V2s which wasn't nearly as noticeable until comparing the two switches side by side.

Based on the push feel comparisons in addition to the mountain of evidence of changes being made to molds based on the appearance section, it's pretty evident out of the gate that the Alpaca V2s are the 'new and improved' version of the V1 Alpacas. While the mold changes alone may have accounted for most of this performance upgrade, one thing worth noting here is that the large improvement to the smoothness of the switches may also be due to changes in the factory lubing of the V2 switches. While just the stem legs were lubed in the V1 Alpacas, V2 Alpacas now feature lubing on the legs *and* the slider rails, which effectively brings them on par for smoothness with V1 Alpaca switches that were opened and lubed by hand.

### Sound

Comparing the V1 and V2 Alpacas side by side, the sound only further reinforces the idea that the V2s are the 'new and improved' versions of the Alpaca switches. The V2 Alpacas have no scratch noise anywhere in the stroke with very solid and firm sounding bottoming and topping out sounds. While the bottoming out is much more muted than the topping out sound, and is nearly unnoticeable unless you type quite heavily, they both are still fairly solid and bass-y sounding on their own. Compared to the V1 Alpacas, these are noticeably deeper sounding and overall much more quiet, which seem to appeal well to the current community desire from linear switches.

# Wobble

Of all of the improved characteristics of the V2 Alpacas as compared to the V1 Alpacas, the wobble is the most similar trait that these switches share. Much to the V1 Alpaca's credit, there wasn't really all that much stem wobble to begin with in either direction. Thus, even though I do feel that the V2 Alpacas have marginally lesser N/S and E/W direction stem wobble, I really think that it is such a marginal difference that I may honestly be imagining it entirely. That, or the writing whiskey has really gotten to me this time around.

# **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 the Alpaca V2s to other linear switches in preparation for this writeup.



**Figure 10:** Switches for comparison. (L-R, Top-Bot: Gateron Milky Yellow, Tealio V2, Cherry MX Black, Novelkeys Cream, Lil' Tyke, C3 Equalz Tangerine V2 (62g))

#### Lil' Tykes

- The most immediately recognizable difference between the Lil Tykes and Alpaca is simply how loud the Lil Tykes are. The bottoming and especially the topping out noise are significantly louder with the Lil Tykes and they seem closer in sound to V1 Alpacas than V2 Alpacas.
- While there is a slight bit more N/S direction stem wobble in the Lil Tykes than the Alpaca V2s, the E/W direction stem wobble and lack of top housing wobble are for all intents and purposes identical.
- Even though the Alpaca V2 switches do feel a bit smoother in terms of overall stroke feel, these both are incredibly smooth linear switches and definitely on par with expectations for linears produced at JWK currently.

### Tealio V2

- While not overly noticeable, the Tealio V2 switches definitely do feel a bit scratchier when compared to the Alpaca V2 switches and have a subtle scratch sound to match it as well.
- Again, even though the N/S and E/W stem wobble on the Tealio V2 switches aren't necessarily bad in a vacuum, they do feel slightly worse than that of the Alpaca V2 switches.
- One interesting point of note is that even though I've described the bottoming out of the Alpaca V2s above as quite solid and thick feeling, they do feel a slight bit mushy when compared to a relatively hard and thick bottoming out feeling of the Tealio V2 switches.

# Cherry MX Black

- Of all of the switches on this list, the MX Blacks have the most similar feeling bottoming out in terms of solidness as the Alpaca V2s. Granted, this does make a bit more sense when you consider that both of these switches have bottom housings made out of Nylon.

- While stock Cherry MX Blacks definitely do have a significantly greater amount of scratch in both sound and feel as compared to the Alpaca V2s, properly tuned up and lubricated MX Blacks in my experience can definitely be on par in terms of feeling with the Alpaca V2 switches.
- There is a noticeably greater N/S and E/W stem wobble in the Cherry MX Blacks as compared to the Alpaca V2s, though unlike the smoothness this isn't something I think can necessarily be remedied as easily.

## Novelkeys Cream

- There is noticeably greater stem wobble in the E/W and especially the N/S directions of the Novelkeys Creams as compared to the Alpaca V2s.
- Both the topping and bottoming out feelings of the Novelkeys Creams are significantly thinner and less substantial than either the bottoming or topping out of the Alpaca V2s.
- As well, much like with the Cherry MX Blacks, there is a fair bit more scratch in the overall stroke of the stock Creams, though from experience I know that someone can lube these afterwards and get them to a comparable feeling to the Alpaca V2s.

# Milky Gateron Yellow

- The Milky Gateron Yellows have pretty identical N/S direction stem wobble though marginally greater E/W stem wobble than the Alpaca V2s.
- Both of these switches share the same 'muted' style bottoming out sound that is seemingly shared amongst opaque or translucent style bottom housings such as these.
- At high activation speeds, while the Gateron Yellows aren't necessarily very loud in their own right, they are a bit louder than the Alpaca V2 switches. In fact, I would go as far as to say that in terms of overall loudness, Milky Gateron Yellows sit in between Alpaca V1s and Alpaca V2s.

# C3 Tangerine V2 (62g)

- Of all the switches on this list, the Tangerine V2s are definitely the most similar in terms of smoothness and consistency of smoothness throughout the push feel.
- I will say though, the C3 Tangerines are both noticeably louder and have such a high-pitched topping out sound when compared next to the much quieter Alpaca V2s.
- While these two switches have nearly identical E/W stem wobble, there is marginally more wobble in the N/S direction of the Tangerine V2s.

#### **Scores and Statistics**

*Note* – These scores are not necessarily completely indicative of the nuanced review above. If you've skipped straight to this section, I can only recommend that you at least glance at the other sections above in order to get a stronger idea of my opinion about these switches.

Alpaca V2					
32	/35	Push Feel			
22	/25	Wobble			
9	/10	Sound			
16	/20	Context			
8	/10	Other			
87	/100	Total			

#### Push Feel

The only real detractor I can hold against this switch is the ever so slightly thinner topping out feeling due to a polycarbonate top housing. Other than that, these check all the boxes for a linear switch in terms of smoothness, consistency, and a deep, thick bottoming out feeling.

### Wobble

These are truly starting to push the bounds of stem wobble in terms of how absolutely little there can be. It's already at a state with the Alpaca V2s that it's virtually unnoticeable with keycaps on, but it could be just ever so slightly better. As well, the potential for these top housings to deform over time when opening and thus causing top housing wobble hurts the score just a bit.

#### Sound

These are currently near perfect in terms of what is wanted from a linear switch – they are free from noise in scratch and spring ping with a deep and muted bottoming out noise. If these were just ever so slightly deeper on the upstroke, they'd be perfect.

# Context

While the V2s are relatively new, they are an improvement upon and direct replacement of an already widely available, widely recognized, extremely well priced linear option from the current 'best in the game' for linear switches. You simply can't ask for much more other than time to further cement these as one of the best modern linear switches of all time.

#### Other

Only time can further drive up the historical importance and general community status of these switches. If the V2 Alpacas can generate the same staying power and consistency over 2021 like the V1s, this score can only go up.

### **Statistics**

Average Score		Alpaca V2				
25.2	/35	Push Feel	32	/35	Push Feel	
15.4	/25	Wobble	22	/25	Wobble	
5.9	/10	Sound	9	/10	Sound	
11.6	/20	Context	16	/20	Context	
5.9	/10	Other	8	/10	Other	
63.8	/100	Total	87	/100	Total	
Alpaca V2 Overall Rank		#1/45 (87/100)				
Alpaca V2 'Hard' Rank		#1/45 (63/70)				
Alpaca V2 'Soft' Rank			T-#1/45 (24/30)			

If you are looking at this statistics section for the first time and wondering where the hell are the other 45 switches that I've ranked are, or what 'hard' versus 'soft' ranks refer to specifically, I'd encourage you to head on over to my GitHub linked in the table above or at the links in the top right hand of this website to check out my database of scorecards as well as the 'Composite Score Sheet' which has a full listing of the rankings for each and every switch I've ranked thus far.

#### **Final Conclusions**

I'm going to be entirely honest with you and say that I did not anticipate that the Alpaca V2 switches would turn out this good. In fact, part of the reason I had staved off of doing any form of Alpaca review for the longest time is because I genuinely think that the Alpaca V1s were massively overhyped for the quality that they provided. Do not get me wrong, I think that Alpaca V1s were and are still great linear options, but not nearly as worth it as the V2 Alpacas. These are not the Alpacas that you have tried. These are not the Alpacas that everyone has been so hyped and talkative about for all of 2020. *These are better without a doubt*. The fact that there hasn't been more hype and discussion surrounding the release of these switches tells me that people haven't been buying them because they think are simply just a 'slightly better' version of the Alpacas they probably have hundreds of in a shoebox somewhere because they bought extras last time they were up for sale. These are more than that. I am genuinely impressed with how these switches turned out, and I absolutely cannot wait to see how long these things stay around and if they can improve even more on what they have already bettered.

## **Further Reading**

# PrimeKB Alpaca V2 Sales Page

Link: https://www.primekb.com/products/alpaca-linears

Wayback: https://web.archive.org/web/20201206020858/https://www.primekb.com/products/alpaca-

linears

### Daily Clack Alpaca V2 Sales Page

Link: https://dailyclack.com/products/alpaca-linear-switches

Wayback: https://web.archive.org/web/20201206020819/https://dailyclack.com/products/alpaca-linear-

switches

# PC Concepts Alpaca V2 Switch Sound Test and Unboxing

Link: https://www.youtube.com/watch?v=OZP6iOB6dcA&ab channel=PCConcepts

#### Toufusoup's Alpaca V2 Switches Test Video

Link: https://www.youtube.com/watch?v=5nXt043H8lU&ab channel=Toufusoup