

Lavender Switch Review

-ThereminGoat, 01/02/2021

*“Time flies like lightning.
Fruit flies like bananas.”
-Confucius (maybe)*

Without even a few more days' delay, I'm excited to present to everyone the first entirely too long switch review of 2021. Honestly, it is kind of hard to think that everything I've posted on the website, all of the scorecards I've written, and all of the wonderful people I've met and chatted with about switches has all come in just a short space of a single year known as 2020. Even though there were plenty of points where 2020 drug on like an absolute motherfucker for me and everyone else reading this right now, it's honestly incredible that we've moved on past it, at least symbolically. Depending on how hard some of us partied and drank for New Year's Eve, there's a fair chance that some of us still aren't quite physically past 2020 yet. Regardless of how you entered into the new year, though, I'm super thankful to you for visiting this review, skimming immediately past this section, and continuing to support me into a new year of content, switches, and addiction to switches.



Figure 1: Speaking of things we should be over by now... Seriously, these stopped making sense after 2010.

As we move on into 2021 though, I want to vaguely inform you all that I've got plans to continue to grow and expand upon my content past the normal long-winded switch reviews that you've all come to know and love. While old things such as mail day posts and social media engagement will hopefully continue to grow and further develop, I will be experimenting with new forms of content throughout the year to see how those turn out. One such example, already, is the Q&A story I did on Instagram the other week. Not only did it go insanely well from an engagement perspective, but I enjoyed the hell out of seeing all of your questions and will most definitely be doing them regularly throughout the year on a three week to monthly rotation. (This is the hint to go follow me on Instagram so you can be there for the next set of questions!). Another example of some changes-to-be will be seen in the review below in the form of a lightbox that my Patreon Patron's so graciously helped me be able to afford last month for better photo taking for the website. Even though I feel like I could sit here and go on with a whole list of small improvements I've made already and big plans that I want to act upon, I'm going to leave many of them a secret for now in the hopes that I can continue to keep switch reviews and content fresh and exciting for you guys throughout the year.

*As a small editorial note before I fully dive into a review of the switches: I apparently had no idea Lavender was not spelled 'Lavendar'. This was not a fun article for my backspace key.

Switch Background

Much in the same fashion as the previous switch review that I've done on the Durock POM housing linear switches, Lavenders are a the first Durock attempt at a new housing material in nylon and came about with little to no teasers or hints for the average consumer. Also like that review, I was super fortunate to be made aware of these switches well in advance thanks to some graciousness on part of Upas of Cannonkeys. Rather than comparing these prototype switches further down in the review for performance standards, given that these will not be the released forms of the switches, I'll only really be discussing them in passing with the occasional pretty filler picture to break up walls of text.



Figure 2: Strategic breaking of text as such.

First being announced by way of an email on December 6th of 2020, the Lavender switches made their debut on Cannonkeys' website on December 7th at 11 AM EST. At a sale price of \$0.65 per switch, they were sold in packs of 70, 90, or 110 only, falling into lockstep with other large vendors in moving away from the 10-switch pack sale style. Featuring 65g gold plated springs and the obvious implied smoothness and quality of the Durock name for linear switches, the biggest attraction to these switches for many people were the translucent lavender-colored housings made entirely out of nylon.* Much like with the POM housings recently teased, these were the first full-Nylon housings made and sold through Durock/JWK with the only other appearances of nylon being in bottom housings of various linears or in polycarbonate-nylon mixes.

The release of these switches, by all accounts, went fairly well and the switches seemingly picked up a lot of attention by the community at large based on their initial announcement. Even amidst some murmurings of concerns about whether or not the switches were made with nylon as advertised, the initial sales and commentary about these switches seemed rather good by all accounts. In addition to the still slowly growing opinions of the community, some folks interested in replicating these switches in a different color way have appeared to come to the discovery that Cannonkeys currently has some form of 'priority' when it comes to Durock nylon-housed switches for the time being. While this has neither been substantiated nor confirmed by Cannonkeys, this is among the rumors swirling about the switches at the time of writing this article.

In addition to the history up to this point about these switches, there were two more interesting historical points of note that I was unsure of how to fit into the review in any other fashion. First and foremost, these are the first 'custom-colored' Durock switches to be released and specifically sold by a company featuring 'DUROCK' nameplates. Previously up to this point, the Durock nameplate had only been reserved for switches bought directly from Durock via way of eastern markets. The second point of note about these switches is that the prototypes for them, which feature entirely clear housings, were first produced sometime back in June or July of 2020 based on their time of arrival to Upas. The prototypes came in both tactile (blue stem) and linear (pink stem) variants.

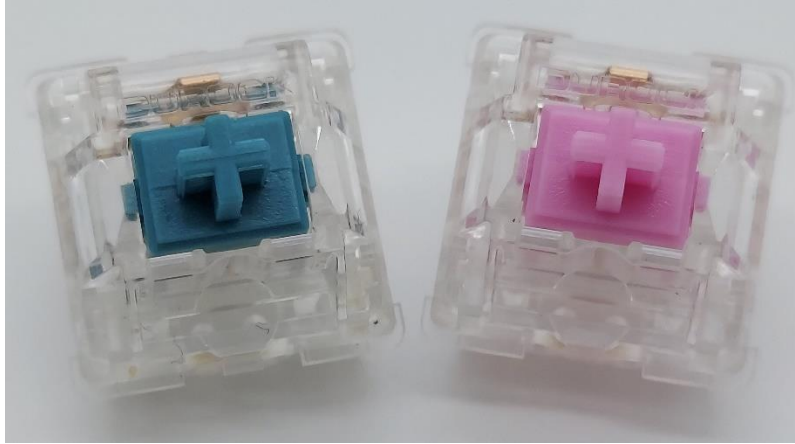


Figure 3: Deja Vu. (Durock Nylon housing tactile (Left) and linear (Right) prototypes.)

*Note: I am well aware that housing materials are still one of the least explored and scientifically verified marketing points of switches to date. I do not imagine that these are 100% pure, freshly squeezed from the Florida orchards nylon nor do I think they only have a trace amount of them in there. I would imagine, thus, that nylon constitutes the *large majority* of the components in this plastic.

Lavender Switch Performance

Appearance

At a very surface level, these switches have a relatively unique appearance with a light, translucent lavender colored top and bottom housing sporting a DUROCK nameplate. The stems of these switches have an off-white coloring to them reminiscent of the Novelkeys Cream switches but a more grey shifted off-white than the yellow, creamy like whiteness of the Cream switches. Inside, the switches have fairly expected internal appearance with 65g gold plated springs that don't have anything rather unexpected about them.

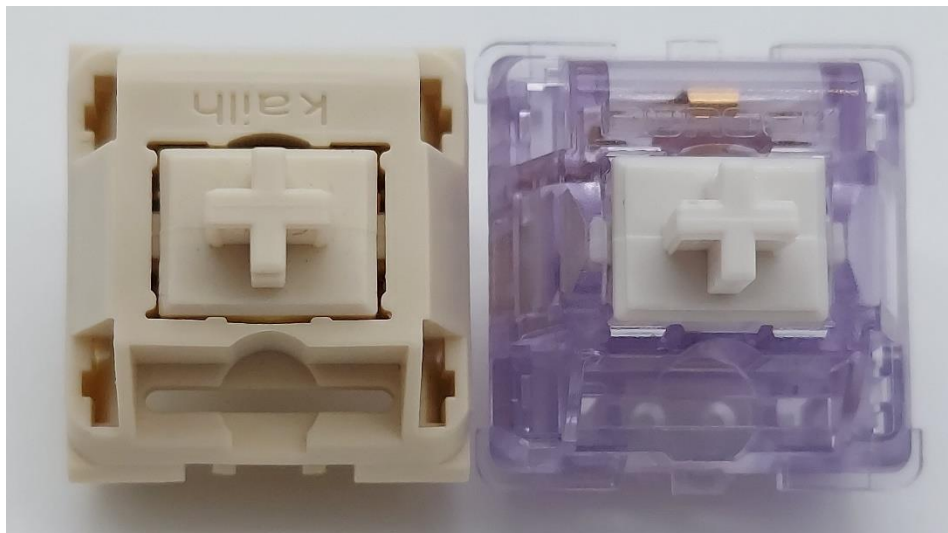


Figure 4: Color comparison of Novelkeys Cream (Left) and Lavender Stems (Right).

Past the pure aesthetic look of these switches, though, one of the more subtle marketing points by Cannonkeys was the claim that Durock created ‘entirely new molds’ for these switches. In order to determine exactly where these molds deviate from the V1 and V2 linear molds as discussed in my Alpaca V2 reviews, I’ve chosen to make comparisons for photo’s sake with the Durock POM switches as they have V2 mold characteristics and Alpaca V1s for similar reasons.

Starting first at the bottom housings of the switches, it is evident that the Lavenders do come from a different set of molds than V1s or V2s as they share some characteristics of both of these molds. Like the V2 molds, the bottom housings of the Lavenders feature the added mold circles around the upper lip of the bottom housing as well as the indentations at the bottom of the slide rails to change the true bottoming out feeling. As seen in other V2 molds, though more pronounced now due to the transparency of the housing, these indentations continue into small standout ridges that run the length of the PCB mount legs of the switches. Switching it up a bit though, these bottom housings have a single letter mold marking akin to V1 switches as well as a similar set of mold circles on the inner floor of the bottom housing that line up with V1 switches but not V2 switches. Thus, based on these combinations of similar mold characteristics, it appears as if these molds sit as a weird ‘in between’ V1 and V2 molds.

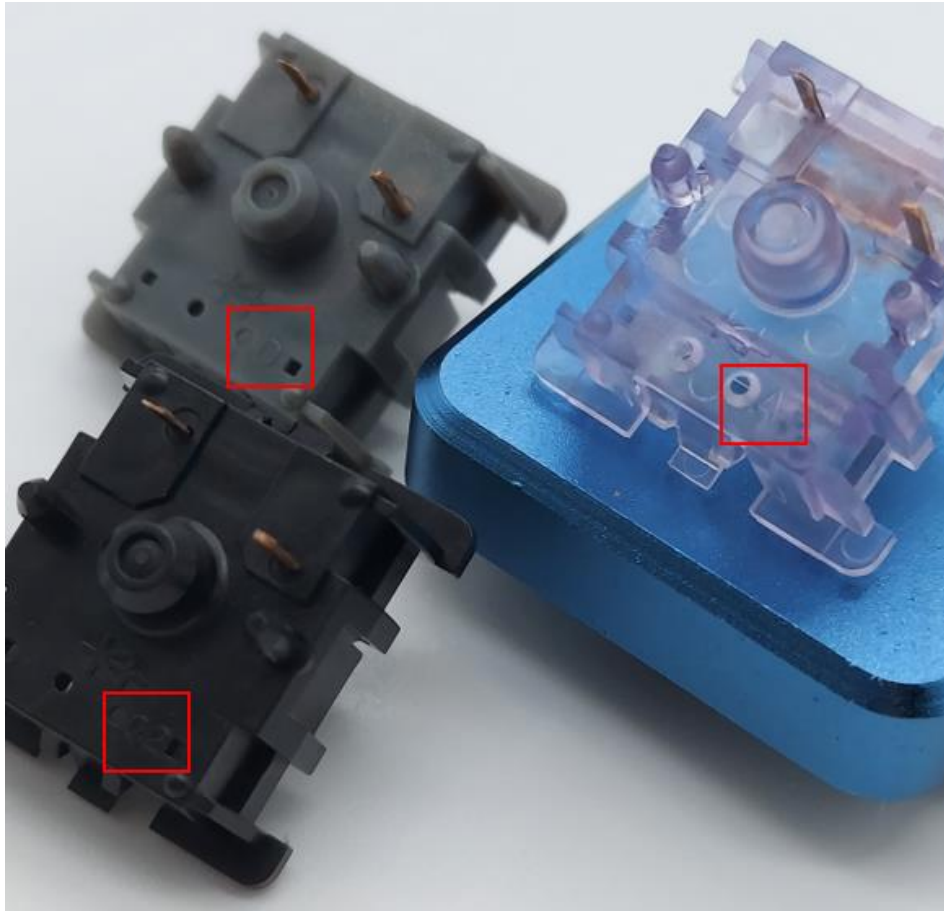


Figure 5: Mold numbering for bottom housings for Alpaca V1 (Grey), Durock POM Linear (Black), and Lavender (Purple).

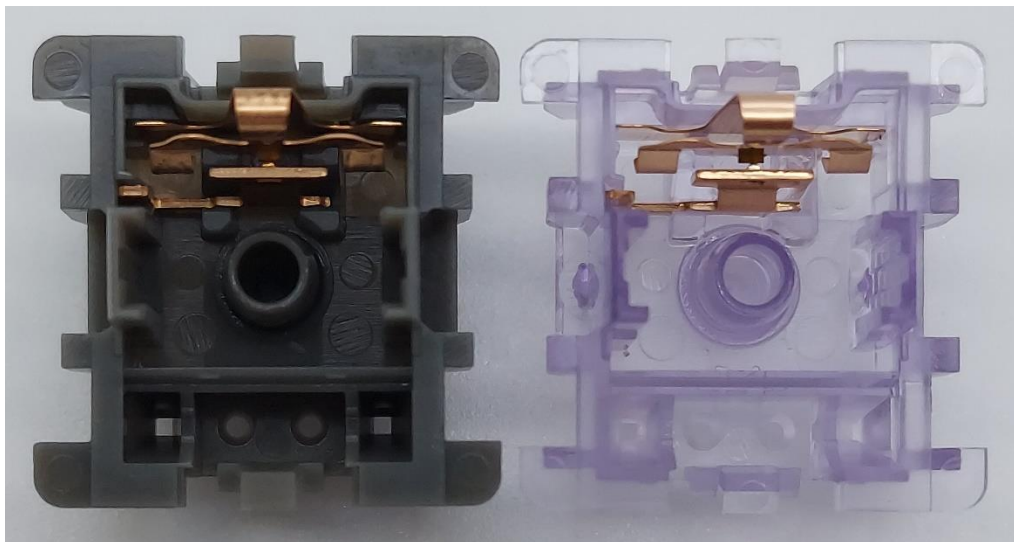


Figure 6: Comparison of mold circles for V1 molds (Left) and new Lavender molds (Right).

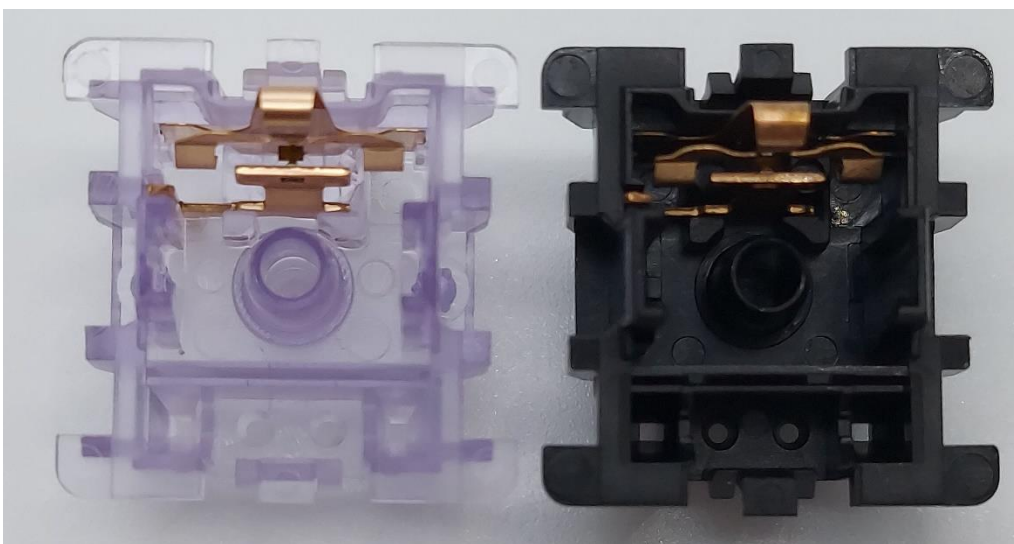


Figure 7: Comparison of mold circles for new Lavender molds (Left) and V2 molds (Right).

Looking next to the stems of these switches, they appear to be nearly identical to the V1 stem molds in the Alpaca V1 switches. The matching features between these stems include the non-tapered slide rails, identical mold circle patterns on the backplates of the switches, and the same SW-side-of-stem location of the mold letters on the stems.

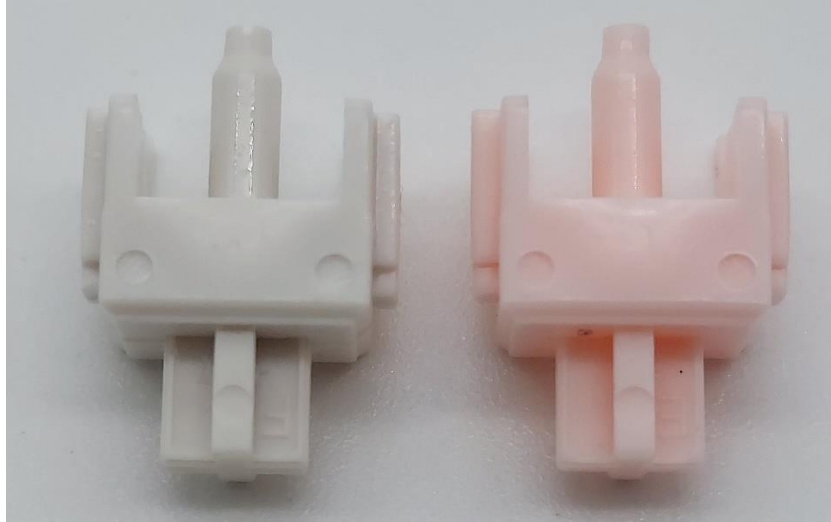


Figure 8: Comparison of mold circles and numbering for Lavender stems (Left) and Alpaca V1 stems (Right).

Much like the bottom housings for these switches, the top housings of the Lavender switches do feature a strange mix of features from V1 and V2 molds. The first and most obvious aspect of Lavender top housings is that they feature a much more prominent and deep-set slider rail groove like that of the V2 switches. Additionally, similar to the V2 top housings, these feature noticeably thinner plastic bridge between the LED channel on the front of the top housing and the inner hole for the stem. However, unlike both the V1 and V2 top housings these Lavender switches feature an entirely different mold numbering system. As seen below, the V1 top housings feature single letters on both sides of the internal structure behind the nameplates of the switches. The V2 top housings feature a single number on the left-hand side of the internal structure for mold markings. Unlike both of these, the Lavenders feature a single mold numbering on the right-hand side of the internal structure, signifying an entirely new mold due to the difference in location for part tracking.

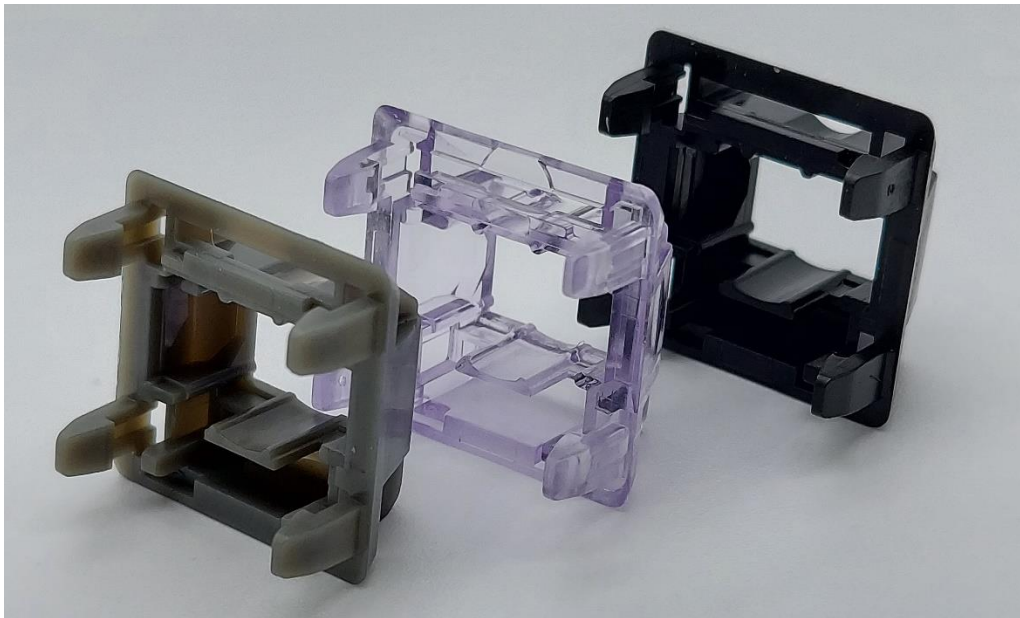


Figure 9: Comparison of top housing slider rails for V1 molds (Grey), new Lavender molds (Purple), and V2 molds (Black).



Figure 10: Comparison of top housing mold numbers for V1 molds (Grey), new Lavender molds (Purple), and V2 Molds (Black).

Thus, based on the analyses and comparisons of the Lavender switches to other known V1 and V2 molds, these switches definitely do feature new housing molds but retain the V1 stem mold design.

Push Feel

Before noting the actual push feel of these switches, it is worthwhile to discuss the fact that the Lavenders do come pre-lubed from the factory. As can be seen in the photos below, there was a fairly even covering of the factory lube across the entirety of the sides of the stems, including the slider rails, as well as on all sides of the legs of the stem. While I did only receive a few switches for testing for this review, the lubing does appear fairly consistent across the switches that I opened, though I'm uncertain of this across a build-quantity's worth switches.

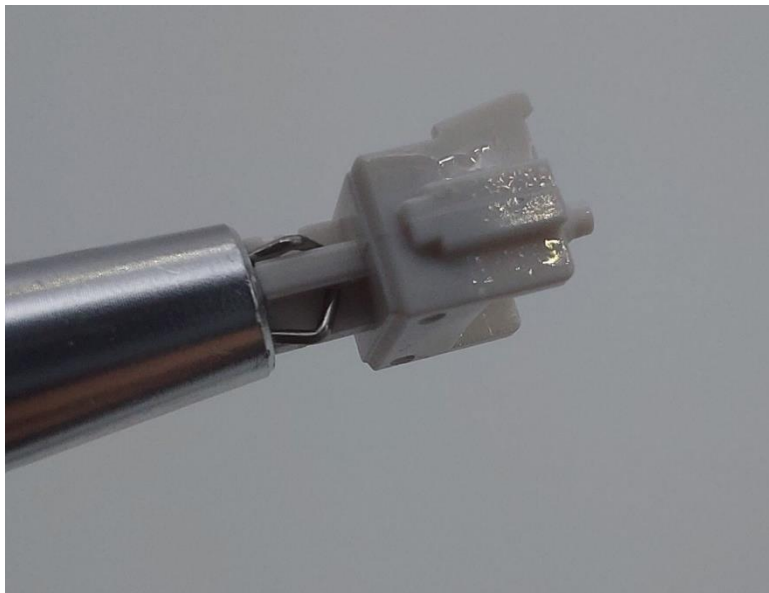


Figure 11: Picture of factory lube applied to stock Lavender switch.

That being said, the factory lubing on the switches does do quite a bit of leg work in smoothing the push feel of these switches. In the switches tested, there was no scratch present though they were not overlubed such as to make these switches feel absolutely frictionless ala Alpaca V2s. (If you've ever overlubed a switch intentionally before, you'll know that there is a difference between dry scratch, lubed with feeling still present, and lubed such that there is no friction whatsoever.) Additionally, the bottoming

and topping out of the Lavenders is fairly solid and thick feeling, which is one of the expected benefits of using nylon housings for switches.

Sound

When it comes to nylon housings, such as those in Cherry's switches, sound has always been one of the biggest appeals aside firmness in feeling. In general, nylon housings tend to produce deeper sounding, more base heavy, and more solid bottoming and topping out noises as compared to other housing materials like polycarbonate or UHMWPE. And to that end, the Lavenders do live up to that deep topping out sound expectation... sort of. While these definitely do have a deeper and more solid bottoming and topping out noise than other Durock/JWK switches as of recent, they still do not quite compare to something like Cherry in terms of depth of sound. As well, it should be noted that as par for the course with other JWK/Durock switches, the topping out of these switches is ever so slightly lighter and higher pitched than the bottoming out sound, though not nearly as drastically as in other recent releases.

Wobble

Being that the top housings of these switches more fall in line with the structure of the V2 top housings as noted above, the stem wobble of these switches definitely fall in line with expectations. These have extremely little and almost unnoticeable amounts of both N/S and E/W stem wobble. Unfortunately, though, these switches seem to uniformly struggle with some slight E/W top housing wobble. Even the unopened switches that I've tested out have an ever so slight plasticky and crunchy give to the E/W direction that I don't think will necessarily immediately impact performance, but may if they are opened more than once or twice in order to make modifications.

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 Lavenders to other linear switches in preparation for this writeup.



Figure 12: Switches for comparison. (L-R, Top-Bot: Alpaca V2, Cherry MX Black, Tealio V2, Novelkeys Silk Yellow V2, Novelkeys Cream, C3 Macho)

Alpaca V2

- Compared to the Lavenders, the topping out feeling of the Alpaca V2s is a bit more soft and cushioned-like in feeling. While not being necessarily a bad thing, the Lavenders have a bit more of a hard and striking type of collision with the top housing.
- As expected, the Alpaca V2s do feel significantly more lubed than the Lavenders and have a much more frictionless push feel to them.
- Also as expected, given similarly constructed top housings, the stem wobble in both N/S and E/W directions for both of these switches is nearly identical.

Cherry MX Black

- While stock, unlubed Cherry MX Blacks have a slightly harsher and more noticeable feeling top out in both sound and feel as compared to the Lavenders, even fairly average lubing skills can make the MX Blacks as good if not better in this respect.
- The depth and solidness of the bottom out of the MX Blacks and Lavenders is definitely comparable and supports the idea that both bottom housings are made out of primarily nylon.
- With respect to things like stem wobble and overall smoothness, it's not much of a competition stock versus stock, as Cherry switches are categorically outclassed by JWK/Durock switches based on this metric.

Tealio V2

- Compared next to the Lavenders, the Tealio V2s have a very loud, high pitched, and thin sounding topping out.
- Overall, the Tealio V2s have noticeably more stem wobble in both directions as compared to the Lavenders, though it is much larger in the N/S direction than in the E/W direction.
- Surprisingly, the general push feel smoothness and factory lubing feels comparable between these two switches. While I think the Lavenders are a hair smoother and have a bit less of a noticeability to their push feel, it is definitely closer to the Tealio V2s than not.

Novelkeys Silk Yellow V2

- In a directly opposite fashion to the last point about Tealio V2s, I do believe that the Silk Yellow V2s are ever so slightly smoother than the Lavender switches. (Note, if you've had a bad experience with the lubing of the Silk V1s, the Silk V2s are differentiated by noticeably improved factory lubing as per Novelkeys' marketing.)
- There is a substantially greater amount of stem wobble in the N/S and E/W directions of the Silk Yellow V2s than the Lavenders.
- While slightly deeper in sound than the Lavenders, the topping out sound of the Silk V2s is noticeably more plasticky and tacky.

Novelkeys Cream

- Much like with the Tealio V2s, when compared next to the Lavenders the Creams have a very loud, plasticky, and stiff sounding topping out feeling.
- Stem wobble between these two switches is fairly comparable in the E/W direction but the Creams have significantly more stem wobble in the N/S direction.
- While not necessarily the most noticeable in terms of feeling, the general roughness of the stock Novelkeys Creams as compared to the Lavenders is significantly more noticeable when comparing the sound of the two switches.

C3 Macho

- The polycarbonate top housings of the C3 Macho switches definitely make them have a much louder and higher pitched topping out and bottoming out sounds than that of the Lavenders.
- Unlike the Lavenders, there is absolutely no top housing wobble for the C3 Machos, which was a point of concern given rumors that tolerancing issues around the stems upon release called into question all tolerances of these switches.
- There is an ever so slight occasional spring ping in the C3 Machos that doesn't make an appearance in the Lavenders.

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.

Lavenders		
29	/35	Push Feel
20	/25	Wobble
7	/10	Sound
13	/20	Context
7	/10	Other
76	/100	Total

Push Feel

In terms of smoothness, these are among the top end of JWK/Durock's switches, though it doesn't quite live up to the reputation of other recent releases. As well, while having fairly solid and thick feeling contact with the housings, the failure to live up to expectations for topping out against a nylon top housing hurts this score ever so slightly.

Wobble

While the stem wobble is great and on par with expectations from Durock, a slight give in the E/W direction of the top housing is concerning with respect to top housing wobble.

Sound

Having a fairly quiet, yet solid sounding push feel and collisions with housings, the only reason this score isn't higher is due to the not quite perfect lubing and relatively thin sounding topping out for nylon switches.

Context

While these are trailblazing for Durock and come with a beautiful color scheme in design, the slightly higher-than-normal pricing for a JWK while being limited to large packs from Cannonkeys really doesn't make these interesting but not necessarily end-game nylon switches a bit hard to give more points to, contextually.

Other

Aside the fact that these use an odd combination of new and old molds from Durock, this definitely is an interesting exploration into nylon materials for housings and leaves some hope and promise that these will only further develop in future iterations into a much better switch.

Statistics

Average Score			Lavender		
25.3	/35	Push Feel	29	/35	Push Feel
15.6	/25	Wobble	20	/25	Wobble
5.9	/10	Sound	7	/10	Sound
11.6	/20	Context	13	/20	Context
5.9	/10	Other	7	/10	Other
64.4	/100	Total	76	/100	Total
Lavender Overall Rank			T-#7/47 (76/100)		
Lavender 'Hard' Rank			7/47 (56/70)		
Lavender 'Soft' Rank			T-#10/47 (20/30)		

If you are looking at this statistics section for the first time and wondering where the hell are the other 46 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'll be entirely honest in saying that when I first received the prototypes for these switches all the way back in 2020 that I was incredibly excited at the prospect of having full nylon Durock switches. To that end, I think that now finally sitting here with the actual release form of the switches rather than just the prototypes that I am just as satisfied with how these switches perform as when I had first tried the prototypes. They're fairly smooth, have a pretty great sounding bottoming and topping out as a translucent nylon switch, and are near perfect on the metric of stem wobble. To add onto that as well, I've really fallen in love with the look of these switches and genuinely am tempted to go about using them in a build sometime as I could picture them making great choices in a polycarbonate, FR4'd out keyboard of some form.

However, I would say that my overall excitement for these switches has definitely lost a bit of its edge, though not because of how they perform but rather the context that they are in. Fresh off of the heels of Alpaca V2s and fighting a hard pack of upcoming competition with Gazzew's releases as well as the Durock POM linear switches, I don't think these switches shine nearly as brightly as I once thought they would upon release. That being said, my personal excitement doesn't drive the community's choices at large regardless of what my ego may tell me. These very well could be an absolutely smashing success once some more reviews hit the social media pages, or people begin to fall in love with Durock nylon around Valentine's day. These may even go the route of Alpaca V2s and have an even *better* reception in

future iterations of switches. While I feel good enough about these switches in an overall perspective to want to use them in a personal build, they definitely do have their weak points and really only time can tell whether or not these switches become the newest things in nylon.

Further Reading

Cannonkeys' Lavender Sales Page

Link: <https://cannonkeys.com/products/lavender-linear-switch#:~:text=CannonKeys%20is%20pleased%20to%20offer,that%20the%20stem%20is%20POM.>

Wayback: <https://web.archive.org/web/20210102062323/https://cannonkeys.com/products/lavender-linear-switch>

DailyClacks' Lavender Sales Page

Link: <https://dailyclack.com/products/lavender-linear-switches>

Wayback: <https://web.archive.org/web/20210102062417/https://dailyclack.com/products/lavender-linear-switches>

PixelPusher's Keebtalk comments on Lavender switches

Link: <https://www.keebtalk.com/t/what-did-you-get-in-the-mail-today/1572/3569>

Wayback: <https://web.archive.org/web/20210102062457/https://www.keebtalk.com/t/what-did-you-get-in-the-mail-today/1572/3569>

Libby's Lavender switch sound test

Link: https://www.youtube.com/watch?v=ik2pX_yxFfg&ab_channel=Lippy