# **Keebwerk Tacit Switch Review**

-ThereminGoat, 07/12/2020

Somehow even with coronavirus still drastically modifying nearly every aspect of life in the US, keyboards included, each passing week seems to get filled more and more with new stuff as we adapt to a 'new normal'. Switches, especially, have been quite busy this week with the Dogikon groupbuy, announcement of a new Novelkeys/JWK switch line, Gazzew getting new nameplates for his switches, and physical samples of *both* Lil Tykes and Bushi switches finally being teased. It's all almost been overwhelming as I've been super excited to see all of these things finally make the progress that I feel they've deserved for some time.

That also being said, my personal life has been quite hectic over the last week. Way back in the Novelkeys Cream From the Vault review, I discussed an upcoming internship that I would have sometime in this summer. Well, unceremoniously, that time is Monday, July 13<sup>th</sup>. Starting on Monday, I begin a minimum three weeks-worth of internship that has 84 hour work weeks (12 hr days by 7 days a week) and will be in a yet unknown major city in the US. Thus, the website and articles are definitely going to have to be a bit different and likely won't feature some of the newest stuff that



**Figure 1:** Might as well just wire transfer my checks to Mike at Novelkeys for these.

I have coming in in the mail. While I am upset that I won't be able to fly home from work and tear open all of my fun new switches I have coming in the mail in the coming weeks, this internship is definitely going to be able to help me further fuel this addiction as well as the other obvious career benefits.

Thus, in order to hopefully reduce the number of switches that I am going to be bringing with me for my flight (because I most certainly will be bringing some anyhow), I am linking just below this paragraph a Google form in a similar vein to how I collected data for the Switch Tops review. Rather than collecting hard data or asking pointed questions, though, I wanted to open the floor to let you ask any questions you have had of me regarding switches, keyboards, the hobby, etc, and I will format some of these best or most common questions in a 'Ask the Goat' style post for the next document. I am super excited to see some of the questions that will be sent my way and hope that I can help clear up some common questions from the community at large.

Question and Answer Google Form: https://forms.gle/TTbJvm3DEtdD22LL8

# **Switch Background**

While I was nearly as excited to receive these as I was the 43 Studios Obsidian switches, the Keebwerk Tacits have a much more complicated background, both objectively and in my opinion. Around September of 2019, Keebwerk, a small mechanical keyboard company based out Germany, quietly announced their plans for a yet unnamed 'Wasabi Green' colored silent tactile to be designed and released as their first switch. Attached to this original notice to the community was a render of three opaque white housing switches with a light green stem closest only to a MOD-SH colored stem at the time. Past this render, the only details shared were that there were plans to have two different spring weights upon release — one at 55g and 67g and were to be manufactured by Durock/JWK.



Figure 2: Original Keebwerk Tacit switch render from late 2019.

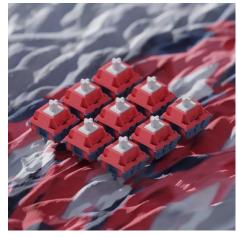
After this initial tease in early September, very little news was shared regarding these switches until December of 2019. This small update consisted of a slightly expanded list of specifications – now boasting a 3.8 mm actuation travel distance with a listed 'Pre-Travel' of 2 mm. While normally 'pretravel' is used colloquially to refer to the short linear travel distance prior to a tactile bump in highly tactile switches, it appears that this phrasing was used to refer to something else I can't quite figure out, as the production run of these switches did *not* feature a pretravel as is commonly referred to. After this post, the relative radio silence continued with no real form of advertising or strong updates until the switches effectively launched on sale on January 16<sup>th</sup> of 2020.

The initial sale of Keebwerk Tacits, however, hadn't fallen quite in line with the sparse announcements that had lead up to its initial release. The big differences between the initially announced plans and final product included a housing color change from opaque white to clear and a complete removal of the 55g weighting option. Regardless of these changes, the initial sale took off with advertised 9000 switches at a price of roughly €1 (or \$1.13) per switch and quite limited shipping options. While shipping options have expanded since the initial release to include the United States and North America at quite high prices (akin to DHL pricing of about \$15 shipping per package), the first week of release saw no shipping option outside of Europe or the UK through which to buy these switches. Needless to say, this mixed with the complete lack of advertising of these switches did not lead to the best initial sales numbers for a switch sale.

In addition to the poor availability around the world, high cost, relative lack of community awareness, there were yet further issues that did not cause the North American and US communities to look favorably upon these switches. Aside a mildly tarnished reputation due to the, at the time, poor handling of the Nano Slider macropads offered on their website, it was discovered at some point near the initial sale date that Keebwerk had struck a contract with Durock/JWK to be the only company to have silent tactiles made in their facility for an entire year. This exclusivity agreement with one of the most popular switch makers at the time and quite weak follow through on the part of Keebwerk did not sit well with many in the community, myself included. Since the initial sale, the distaste for this contract has only grown with the announcement of three different switches – Bushi, Kakktus, and Kakko – all coming from Keebwerk and all being effectively just recolors of their silent tactile switch. The first of these recolors, as

well, used the name of an already existing switch being produced and was acknowledged and subsequently disregarded by Keebwerk when it was addressed to them by the community.

Switch background aside, the community opinion surrounding Keebwerk and especially the Tacit switches has not really improved with time, and by and large these switches see very little discussion in the more western markets even as Durock/JWK has become a household name and is absolutely dominating the market. Personally, I have a strong distaste for the handling of this sale and these switches, in general, though I am choosing to review them as they may provide some insight to what Durock/JWK can bring to the silent tactile game once the contract with Keebwerk expires.



**Figure 3:** Image of the Keebwerk 'Bushi' switches released in mid-2020.

### **Tacit Switch Performance**

## **Appearance**

The appearance of these switches, overall, are not anything spectacular nor forgettable and sit at as mildly attention grabbing. Featuring an entirely clear housing, the light, 'wasabi inspired' green stem can be seen donning black silencing pads on both of the slide rails. While there aren't many switches which closely match this same light green color as the stem of the Tacit switches, the closest approximation I can think of are the MOD-SH switches which were sold on Originative roughly three years ago. As an interesting side note, as well, the black color of the silencing pads was not specifically requested by Keebwerk, and is rather an in-house standard option from JWK/Durock based on the appearance of these same black silencing pads in the switch samples that were sent to Optic Boards during the planning of the Ghost silent linear switch groupbuy.



**Figure 4:** Picture of Durock factory sample for the Ghost silent linear switch (left) and Keebwerk Tacit switch (right).

While entirely personal preference, I honestly think that the originally rendered, all white switch housings would have made these switches 'pop' and stand out much more than the all-clear housings do. Aside being a much more unique color combination than the go-to scheme for classic Zeal switches, the

opaque white top housings would certainly have made the 'Keebwerk' nameplate stand out much more than it does on the current switch.

## Push Feel

The actual push feel of the Tacit switches is one of the few aspects of the switch that I truly feel like delivers on its design intent. Having an extremely early tactile bump, these switches boast almost no pretravel, in the commonly used sense, and have a surprisingly balanced linear portion post-bump. Normally with switches that have such quick and early tactile bumps, there is an almost noticeable post bump linear 'hang time' until bottom out is reached, but these switches surprisingly don't seem to suffer from this point. The bump, as well, is not sharp, but it is quick and definitely rounded out to give a decently smooth feeling throughout the otherwise more forceful bump.

In addition to delivering on the actual tactile bump, which is honestly not quite so surprising given the history of excellent tactile switches by both JWK and Durock, the bottoming out and topping out sections of the stroke are quite nice as well. Normally, people are often scared off by the concept of 'Silent' switches as the rubber silencing pads can produce a 'mushy' or 'softened' feeling that doesn't quite sit right on the finger tips at either end of the stroke. While there is definitely a softened contact between the stem and housing at either end of the stroke, this is by no means mushy and has quite the same muted feeling as the tactile bump has. Even through these softened ends and muted tactile bump, these switches are still distinctively tactile and while maybe not as crisp as their louder counterparts, they still do very much have a tactile feel that some silent tactiles don't quite live up to.

#### Sound

Being 'Silent Tactile' switches, sound was obviously among the most important of design features when it came to the development of these switches. First and foremost, the bottoming out and topping out sounds of the stroke are nearly silent in their own right, and produce only the faintest of low-volume bumps when activated at quite fast speeds. In fact, the only truly noticeable sound from these switches is a slightly snappy scratch sound of the legs dragging across the leaf in order to produce the tactile bump. While this could normally be reduced in linear switches that feature that same leg-leaf scratch with a small amount of lube on the leaf contacts, doing such with any tactile switch will only dampen or even kill the tactile feeling. Thus, the only noticeable sound from these switches is merely a necessary evil of the design choice, rather than from a lack of factory follow through or design oversight.

To yet again shill for the original, opaque white housings, I feel that these switches may have further benefited from their first rendered design, as opaque housings can be made out of more robust plastics that tend mute sound a bit better. Be it a bit anecdotal, I've always kept in mind that opaque housings tend to block sound better than clear or translucent housings based on the common switch plastic materials used in opaque versus non-opaque designs. Then again, that is just a loose anecdote, at best.

### Wobble

As time has progressed since the Stealios controversy, JWK and Durock have only truly improved upon all objective metrics of their switches, and especially regarding stem wobble and top housing wobble. Be it that these were designed, or at least suggested quite soon after the controversy versus some of the more popular options as of the time of writing this article, the wobble of the Tacits definitely does make sense within the time frame of their release. The stem wobble, both in the N/S and E/W direction of these switches is nearly negligible, with an ever so slightly greater N/S wobble than E/W. However, both of these are almost completely unnoticeable with most common keycap heights. Unfortunately, though, this switch does suffer from the early JWK/Durock switch wobble when it comes to top housings. While it isn't the most noticeably wobbly switch that they have produced, the top

housing of the Tacits do have a noticeable play to it in both directions that would lead to my strong recommendation of the usage of films if these were to go into a build.

#### Other

Unlike most 'other' sections I've written in reviews past – I want to specifically focus on two features/details about the Tacits that are otherwise understated elsewhere or just not discussed at all. First of all, I truly dislike the name of 'Tacit' when they had an easy shoe-in of a name with 'Wasabis' or 'Wasabi switches' as this was the term used to describe their stem color in the earliest of their announcements. While I get that 'Tacit', by definition, better fits the vibe of a *silent* tactile switch, it definitely doesn't do justice to memory and longevity of the name in the slew of switches being released.

Secondly, and even more importantly, is the price of these switches. Initially releasing back in January of 2020 at the greater than \$1 per switch price, they have not dropped or changed the prices at all since the initial release. While many people are concerned that this bodes poorly for the future of switches in this hobby, as it may encourage other sellers to release switches at this price point in the future, I honestly think that is not an issue at all. The reason I don't share this concern is that I am almost certain that this egregiously high sales price for an under-advertised, unproven product from an otherwise under-reliable, small keyboard company did more harm in the release of these switches than good. I don't think these switches are good at the price range that they are currently still at, and I would imagine that an uptick in popularity of the JWK/Durock silent tactile genre will only occur once the prices drop from Keebwerk, themselves, or more likely when their contract expires and more designs are released.

## **Comparison Notes to Other Notable Silent Tactile 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 Tacits side by side.



**Figure 5:** Switches for comparison. (L-R, Top-Bot: Aliaz 70g, Zilent V2 67g, Everglide Oreo, Outemu U4 Silent Tactile 68g, Massdrop x Invyr Holy Panda, Gateron Silent Brown)

### Aliaz 70g

- With respect to the tactile bump of the Aliaz switches, these almost feel as if they have an 'inverted stroke' as compared to the Tacits, in which the tactile bump is near the very end of the switches after a long linear pretravel.
- The Aliaz switches of all weights, including the 70g weight, have a significantly smaller, less sharp tactile bump than the Tacit switches.
- Unlike the Tacits, under moderate to heavy activation speeds, the Aliaz switches feature a minor bit of spring ping that does deter from their 'silent' nature.

### Zilent V2 67g

- While the similarly weighted Zilent V2 features a slightly stronger tactile bump than the Tacit switches, I would imagine that with closed eyes many people would identify the Tacit bump as belonging to one of the Zilent switches, either V1 or V2.
- The same aforementioned leaf-stem leg scratch is noticeable in the Zilent like the Tacit, though it is much more noticeable in the Zilent than the Tacit under higher activation speeds.
- The Zilent has significantly more stem wobble in both directions as compared to the Tacit, though there is appreciably greater E/W wobble in the Zilent.

### Outemu U4 Silent Tactile 68g

- As compared to the Aliaz and the Tacit switch, these have the 'mid-ground' tactile bump, which occurs roughly between 40% and 50% of the way through the stroke as compared to the very beginning or very end.
- While the DIY nature of the Outemu stuff sold by Gazzew leads to the stock comparison of these stems to the Tacits as having significantly more scratch, following the lubrication guide that Gazzew recommends produces an equally smooth and quite similar sounding silent tactile switch.
- The No-Slot top of the U4 Silent Tactile switch lends itself to noticeably decreased wobble in both the stem *and* the top housing as compared to the Tacit switch.

### Gateron Silent Brown

- While inherently weaker of a tactile bump than pretty much any other tactile switch out there, silent or otherwise, the Gateron Silent Browns *are* marginally more quiet than the Tacits as they don't suffer from that same leaf-leg scratch at the tactile event.
- That being said, the Gateron Silent Browns are objectively a worse option when compared next to the Tacits in nearly every other metric, with the exception of top housing wobble as the Gateron Silent Brown has none.
- I mean, I pretty much just couldn't think of another 'common' silent tactile switch to throw into this list for comparisons' sake except this one.

While I am aware that the next two options are not silent tactile switches, I chose to include them in the comparison list as they provide a well liked and understood tactile bump for comparisons' sake as well as familiar options that are currently on the market as of the writing of this article.

#### Invyr x Massdrop Holy Panda

- Both these and the Tacits have the same immediate, high strength tactile bump to them followed out by a well-balanced post-bump keystroke.
- While the Holy Pandas are much snappier, both in terms of tactile bump and in terms of sound, the Tacits do feel exactly like what you would imagine when you would think of a 'silenced' Holy Panda switch.
- While there is obviously less top housing wobble on the Holy Pandas as compared to the Tacits, they also have significantly greater wobble in the N/S direction as compared to the Tacits, which almost borders on that 'noticeable depending on keycap type' realm.

## Everglide Oreo

- These are honestly the most similar to the Tacits out of any switch on this list in terms of the location, snap, and length of the tactile bump. If you like the feeling of the Everglide Oreo switches, I have little doubt that you would enjoy the Tacits as a silent tactile switch.
- The stem wobble in both the N/S and E/W directions of the Everglide Oreos is quite similar to that of the Tacit switches.
- While this is a bit nit-picky, even for me and my reviews, I feel as if the Everglide Oreo is a bit more 'rattle-y' in terms of the downstroke and it lends itself to a slightly worse push feel and noticeably worse sound.

#### **Final Conclusions**

Living up to my own personal expectations I've had of JWK and Durock since they have begun more rapidly expanding their grasp on the popular switch market here in the western part of the world, I can honestly say I am pleasantly surprised with how these turned out. Setting aside the obvious issue with the wobbly top housings that have since been improved in their switches since the release of the Tacits, these switches really do hit right into an idealized zone of what someone would want out of a silent tactile switch. While many people may still prefer the strength of the tactile bump in Zilents, which are currently still the top of the line for silent tactile switches, I think those seeking a less harsh, more mid-ground option would not only be interested in the Tacits, but should be extremely curious as to what Durock/JWK will make in the silent tactile genre once their exclusivity contract is up with Keebwerk.

Now, given the context in which these switches are sold rather than judging solely on their own merits, I absolutely do not think they are worth it. The insanely high price relative to other offerings from JWK and Durock as well as the exclusivity contract only signal to me that Keebwerk invested in this switch purely as a cash-grab, rather than in genuine interest of making or improving a good product. As well, I truly think they did a pretty poor job at that with a lack of marketing, relative inaccessibility, and not even so much as a single switch tossed to a reviewer in the realm of TopClack to do a review and hopefully garner up some more attention. While I have been a slightly more harsh critic of Keebwerk's decisions surrounding these choices in the past, I can simply say that while I like these switches enough to consider using them if I were to find a build that would benefit from silent tactile switches, I simply will not buy them at that price nor from Keebwerk. I can only hope that the future of Durock/JWK silent tactiles is better than this.

# **Further Reading**

# Keebwerk Tacit Sales Page

Link: https://www.keebwerk.com/product/tacit-wasabi-switch/

Wayback: https://web.archive.org/web/20200712013901/https://www.keebwerk.com/product/tacit-

wasabi-switch/

### Keebwerk Tacit Announcements Page

Link: https://www.keebwerk.com/keebwerk-tacit-switch/

Wayback: https://web.archive.org/web/20200712013957/https://www.keebwerk.com/keebwerk-tacit-

switch/

# Keebwerk Bushi Sales Page

Link: https://www.keebwerk.com/product/bushi-switch/

Wayback: https://web.archive.org/web/20200712014039/https://www.keebwerk.com/product/bushi-

switch/

### Geekhack Tacit Discussion Thread

Link: https://geekhack.org/index.php?topic=104306.0

Wayback: https://web.archive.org/web/20200712014118/https://geekhack.org/index.php?topic=104306.0

### Switches.mx Keebwerk Tacit Page

Link: https://switches.mx/keebwerk-tacit

Wayback: https://web.archive.org/web/20200712014153/https://switches.mx/keebwerk-tacit

# Christopher Janzen's Tacit vs. Zilent Sound Test

Link: https://www.youtube.com/watch?v=R0jhReG\_trQ

# Prime Keyboard's Tacit Silent Tactile Sound Test

Link: https://www.youtube.com/watch?v=sec1T65zx2M