ThicThock Marshmallow Switch Review

-ThereminGoat, 11/26/2019

Who Am I?

For those of you who are unaware, my name is ThereminGoat and I am a switch collector in the mechanical keyboard with one of the largest collections that we know of. To date, I have a bit over 500 unique pieces in my collection, ranging from vintage Alps such as my Bamboo Neon Green and Striped Amber to modern pieces including a nearly* complete set of all of Zeal's switches ever sold as well as a complete Panda/Panda clone tester set with a bit of extra fun stuff. While I obviously collect quite a lot, my niche within collecting is in pre-production prototypes and samples of switches, which I have more than I care to admit. This is obvious what has brought about this review months before the Marshmallow's release.

Additionally, I'm also an admin for a Switch Collecting discord, which can be found through the main Mechanical Keyboards invite page. I am always willing to entertain DMs as well as people dropping into the server to ask questions as I simply can't spend enough time talking about switches. As well, in shameless plug fashion, if you have any unique or interesting switches you think I might want to add to my collection *please* reach out to me either on Reddit or Discord whenever. (u/ThereminGoat, ThereminGoat#2561)

ThicThock and My Experience:

While ThicThock is gaining a massive following with its recent groupbuys and sales it is conducting, I was extremely lucky to be pointed in their direction before their website was even established as it currently is. I stumbled across them as a result of their first switch groupbuy attempt, which involved Clear GSUS switches that ultimately did not work out due to unforeseen errors. While an unceremonious start to groupbuy sales for a company, I was immediately impressed with how it was handled by Jeffccy, who is the figurehead at large of the company

Throughout the entire cancellation process, Jeffccy was extremely vocal in both apologies as well as updates letting people know to the day when their money would show up. Additionally, and much to my surprise, they went even above and beyond this already fantastic response and emailed out all GB investors with a long apology *as well as* a discount code for any future purchases. Simply put, this caught my eye immediately as it appeared this was being treated with much more care and concern than I had seen prior from other vendors.

Since this first cancel, though, the company culture and support surrounding Jeffccy as well as ThicThock has only grown exponentially. Jeffccy is literally always reachable by DMs and plays an extremely active role in their discord server, actively taking into consideration any and all opinions and criticisms. As well, the website and Discord have seen a massive spike in quality since my first interactions with them. The website quality is top notch and easily navigable, while the Discord is homey and has a very welcoming atmosphere by all involved there. As well, there is a bit of fun that goes down on the ThicThock Discord surrounding a certain *whimsical* creature and a cult that surrounds it – it is absolutely worth a check out.

The Marshmallow Switch

Background:

The Marshmallow is the first switch to officially go on sale through the ThicThock company and has had promises of being an extremely interesting and unique new offer within the field of switches. Coming from JWK, the same factory which produced T1s and the (in)famous Durock brand of switches, these

were stated as being completely separate of the T1/Durock line and were completely manufactured, designed, and even prototyped from the ground up free from influence of these switches.

The switches, themselves, are made of a "custom" nylon housing with POM Stems, which are of course marketed for their self-lubricating nature over time. (This was most famously introduced under Novelkeys Cream V1/V2 Switch). Starting with an actuation force of 50g (1.4 mm actuation distance), the springs inside the switches bottom out at 68g, acting as progressively linear over the entire stroke of the switch. These gold plated 'ThicThock MP (Magically Progressive)' springs are also available for purchase through the company separate of the switches themselves. As well, in large part due to community desire and push during the prototyping phases, *no* factory lubrication was included in the switches with the intent to allow the buyer to tune the switches as they see fit.

Packaging:

Upon receiving my Beta-Phase prototypes, I was blown away upon opening the package and seeing how the Marshmallows were packed. Immediately noticeable is the chromatic foil bag with one clear side that the switches as well as the goodies are packed in. Absolutely stunning bag right out the gate. As well, and aside the switches, there were two extra goodies in the bag. The first was a sticker much in the vein of the 'Winthea-esque' switch art in which a lovable army of anthropomorphic marshmallows are surrounding a drawing of the switch. The second, and much more noticeable treat, was a ThicThock business card. The business card was thick with matte black in gold lettering and had a beautiful weight and heft to it. As well, the business card was sprayed with a sweet perfume that still strongly hits you days after opening the package for the first time. Aside the actual switches itself, this is an incredibly wonderful surprise of a touch and is some of the finest packaging I've ever seen for switches.



Figure 1: Picture of packaging and extras that are delivered with each purchase of switches.

Switch Performance Review:

Appearance:

Upon initial appearance, the switch appears to be a beautiful off-white with purple tinted housing and a nice, light pink stem. Comparing these to the chosen Pantone reference colors of 7443 C and 1895 C, the housing and stem colors appear slightly lighter in real life, but not strikingly different than the refence. As well, its worth noting here that the housing exterior surface definitely has a lighter/softer feel to the custom nylon choice than other switches.





Figure 2: Chosen Pantone reference colors with release pictures of Alpha-Phase prototypes.

Push Feel:

Trying the actual switch mechanism, the stroke starts out quite close to the 50g actuation force and takes a relatively sharp turn toward the 68g bottom out force as the end of the stroke is reached. The distance between the activation point and the bottom out force, though, progresses quite well in terms of force and doesn't feel excessive or jarring. The stroke is nice and linear and has a slight bit of friction due to the unlubed nature of the switches, but nothing unexpected in the least.

Sound:

The sound of these switches is by far one of the most impressive aspects of their performance to me. While there is the baseline friction sound due to the lack of lube within the switch, there is absolutely no scratch nor spring pinging noticed no matter how hard the switch is activated. In fact, I attempted during my testing to give it some rather sharp blows to attempt to hear a ping from the spring but I could not get it to do such.

Wobble:

There is virtually no E/W wobble but there is a minor N/S wobble to the switches. While testing the switch activation with caps on, however, this wobble was undetectable. The only way that this may even be noticed if you are attempting to rock the caps on top of the switches side to side without actually activating them.

Other:

The only other noteworthy point from the switches' performance is that I noticed that the top housing appeared to sit a bit loosely on the switches for all of the prototypes that I received. While this didn't appear to negatively affect my performance in hand, it is likely that if these were to go in a build that they would benefit from switch films which would entirely eliminate this issue. As well, any lube that would normally be used in linear switches that's relatively thin would be an excellent fit for these switches. While I am slightly biased in liking 205g0, it is likely that a good range of thin lubes would work well to improve these switches further. Given the only issues I've noted with this may be slightly wobbly top housings (which are on prototype piece nonetheless), I think these are an excellent entry into the market not only for ThicThock as a company, but for a lot of people looking for a high end linear switch at a reasonable starting price of \$0.55/piece.

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 Marshmallows side by side.

Cherry MX Black:

- Compared to Marshmallows, MX Blacks have a much deeper sound compared to the light and airy vibe of the Marshmallows. I suspect that this is due to a difference in material thickness and quality.
- Unlubed MX Black switches do have a small amount of scratch.
- MX Blacks have slightly less N/S wobble but a comparative amount of E/W wobble in the stems.

Gateron Inks:

- Gateron Ink switches, unlubed, have a slight pinging sound from the spring whereas Marshmallows do not. Note, this is subject to change as Novelkeys has noted that they are completing retooling on Ink switches here in the near future to change some unstated aspects.
- Ink top housings have an ever so slightly rougher finish to them than the nylon Marshmallow housings.
- Much like MX Blacks, there is slightly less N/S wobble in these pieces than the Marshmallows.
- I'd argue these are similar quality pieces on an absolute scale, but provide very different vibes in terms of overall build and board feel.

C³ Tangerine V1.5s, Black Bottom:

- C³ Tangerines have significantly greater scratch and spring ping than Marshmallow switches.
- These switches have comparable wobble to Marshmallows, both N/S as well as E/W.
- The clear top housings have probably the roughest grit finish of any on this list, and it is extremely more noticeable when compared to the smoother nylon of the Marshmallow housings.

Geekmaker Pinks:

- These themselves have no ping and only a very very minor amount of scratch noise in the stroke compared to Marshmallow switches.
 - The noise of the scratch may be amplified by the difference in housing material but I am overall unsure about this and am only speculating.
- These have both significantly higher N/S and E/W wobble than Marshmallows.

Tealios V2:

- Tealios, as a switch, do have a slight ping noise on harsher strokes as well as a slight scratch sound
- These have significantly reduced N/S wobble than Marshmallow switches.
- The sound on these switches is much more blunt and direct sounding than Marshmallows.

Novelkeys Cream V2:

- These have exponentially more scratch in the unlubed stroke than pretty much any other switch on this list.
- As well, the thick housings tends to produce a much deeper sound and thus feel 'heavier' on the ears than Marshmallows.

Alpacas:

- Have similar wobble to Marshmallow switches, both N/S as well as E/W
- Similar sound in terms of no scratch as well as lack of ping from the spring

- Housing has roughly the same grain or grit as the Marshmallow switches, but it is obvious that the housing is made out of a thicker or not as soft material.
 - o This in turn tends to lead to them having a slightly deeper sound than Marshmallows.

ThicThock Contact Information / Further Reading

Website Link:

https://thicthock.com/

ThicThock Instagram:

https://www.instagram.com/thicthock/

Discord Invite Link:

https://discord.gg/WanWQtR

Marshmallow Purchase Link:

https://thicthock.com/collections/switch/products/thic-thock-marshmallow-pre-order

ThicThock Marshmallow Switch IC (Geekhack):

https://geekhack.org/index.php?topic=102902.0

ThicThock Marshmallow Switch GB (Geekhack):

https://geekhack.org/index.php?topic=103431.0

TopClack Marshmallow First Impressions by Quakemz:

https://topclack.com/textclack/2019/10/26/thic-thock-marhsmallow-switches-first-impressions-by-quakemz

^{**}General Side note regarding the Marshmallow switches – they do not in fact taste like Marshmallows.