Switch:								Type:	
	Weight + Travel	Feel	Bottom-out	Downstroke sound	Upstroke sound	Thresholds	Descriptors		Overall
Quality	WEIGHT: LIGHT HEAVY TRAVEL:	IF LINEAR:  TEXTURED SMOOTH  IF TACTILE:  D  P	PADDED RIGID	PITCH: LOW HIGH VOLUME:	PITCH: LOW HIGH VOLUME:	SPRING PING:  NOTICEABLE NOT NOTICEABLE  STEM WOBBLE:  NOTICEABLE NOT NOTICEABLE			/10
Notes	SHALLOW DEEP	_p		QUIET LOUD	QUIET LOUD	NOTICEABLE			
Sw	Switch:								
	Weight + Travel	Feel	Bottom-out	Downstroke sound	Upstroke sound	Thresholds	Descriptors		Overall
Quality	WEIGHT:  LIGHT HEAVY  TRAVEL:	IF LINEAR:  TEXTURED SMOOTH  IF TACTILE:  D  P	PADDED RIGID	PITCH: LOW HIGH VOLUME:	PITCH: LOW HIGH VOLUME:	SPRING PING:  NOTICEABLE NOT NOTICEABLE  STEM WOBBLE: NOTICEABLE NOT NOTICEABLE			/10
Notes	SHALLOW DEEP	□ P □ r		QUIET LOUD	QUIET LOUD				
Sw	ritch:							Туре:	
	Weight + Travel	Feel	Bottom-out	Downstroke sound	Upstroke sound	Thresholds	Descriptors		Overall
Quality	WEIGHT: LIGHT HEAVY TRAVEL:	IF LINEAR:  TEXTURED SMOOTH  IF TACTILE:  D  P	PADDED RIGID	PITCH: LOW HIGH VOLUME:	PITCH: LOW HIGH VOLUME:	SPRING PING:  NOTICEABLE NOT NOTICEABLE  STEM WOBBLE: NOTICEABLE NOT NOTICEABLE			/10
Notes	SHALLOW DEEP	□ P □ r		QUIET LOUD	QUIET LOUD				
Sw	ritch:							Type:	
Quality	Weight + Travel  WEIGHT: LIGHT HEAVY  TRAVEL: SHALLOW DEEP	Feel  IF LINEAR:  TEXTURED SMOOTH  IF TACTILE:  D P P r	Bottom-out	PITCH:	Upstroke sound  PITCH: LOW HIGH  VOLUME: LOUD	Thresholds  SPRING PING:  NOTICEABLE NOT NOTICEABLE  STEM WOBBLE:  NOTICEABLE NOTICEABLE	Descriptors		Overall / 10
Notes									
Sw	Switch:								
	Weight + Travel	Feel	Bottom-out	Downstroke sound	Upstroke sound	Thresholds	Descriptors		Overall
Quality	WEIGHT:  LIGHT HEAVY  TRAVEL:	IF LINEAR:  TEXTURED SMOOTH  IF TACTILE:  D  P	PADDED RIGID	PITCH: LOW HIGH VOLUME:	PITCH: LOW HIGH VOLUME:	SPRING PING:  NOTICEABLE NOT NOTICEABLE  STEM WOBBLE:  NOTICEABLE NOT NOTICEABLE			/10
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Notes	SHALLOW DEEP	□ P □ r		QUIET LOUD	QUIET LOUD	NOTICEABLE			

# Video version

Video version of the guide available here: <a href="https://youtu.be/KgdpGTxVfTs">https://youtu.be/KgdpGTxVfTs</a>

# On comparison

Comparison is absolutely essential to be able to develop your taste in switches and to really hone in on your preferences.

With a bunch of switches in front of you, you can test multiple hypotheses and run multiple experiments simultaneously. Comparison fast tracks the whole experimentation process. This way you should come to conclusions of what you like and what you don't like faster and perhaps more importantly, more accurately, than before.

# Criteria

Below are some guidelines to help you find the best switches for you. This list of criteria is not exhaustive. But, at the same time, you do not have to meticulously grade each switch by what's listed below either

The guidelines are more of a way to help you "work backwards." Feeling and hearing a switch yourself sufficiently guides you to your preferences. However, if you want to find out *why* you prefer one switch over another, the criteria below can help explain that.

# Travel distance

## How shallow/deep do you prefer to type?

- Total travel refers to the total distance that a key can be pressed down before it reaches the bottom.
  - Normal: 3.7mm 4mm
  - Speed switches (switches with shorter actuations): 3.5mm and below
- Pre-travel, on the other hand, refers to the distance between the key's resting position and the point at which the switch starts to actuate.
  - Usually, this is about half of the total travel
- If you like typing on a laptop, maybe you want something shallow. But if you really like the hearty depth, you'll prefer options with that full 4mm travel distance.



# Weight

## How light/heavy do you prefer to type?

- Weight dictates how much force you have to exert to facilitate a keystroke.
  - Actuation force is how much force you'll need to activate a key.
  - o Bottom-out is how much force you'll need to press all the way down.
- If you prefer to bottom-out, meaning you press harder than what is required to trigger a keystroke, then total travel and bottom-out force will be the stats to look out for. If you don't, pre-travel and actuation force are more relevant.

#### Bottom-out

# Do you prefer a softer or stiffer bottom-out? (Won't be applicable if you don't bottom-out when typing)

- When it comes to bottom-out, this may be an optional factor for you
- It can be rigid or it can be soft.
- The two sides of the spectrum are represented by silent switches vs. non-silent switches
- Silent switches, due to the padding they use to eliminate sound, feel more pillowy, and on the other end, bottoming-out on some switches will feel like tapping on a piece of marble
- But there are gradations between the two extremes. Depending on the type of plastic used, the bottom-out will feel either more rigid or that there's more give.

## Feel

When it comes to feel, we'll have to segment a little into the three major different switch types, which are linear, tactile, and clicky.

Linear switches: smoothness

#### Do you prefer a frictionless or textured smoothness?

The main draw of linear switches is its smooth, linear typing experience. But there are different characteristics of smoothness.

- On the linear side of things you'll have two extremes. One is this frictionless smoothness. Sort of like skating on a freshly cleaned ice rink.
- On the other hand we have this more textured type of smoothness. So it's going to feel more grainy.



• I think a pictorial sort of metaphor would be the clinical sharpness of a photo from a modern digital camera versus the nostalgic grainy look you get from a film camera.

Tactile switches: bumps

## How intense do you like your tactility?

If linear switches are about the smoothness, then tactile switches are about the bump you feel as you press down. Broadly speaking there are 4 types of tactile bumps.

D

- All bump
- No pre-travel
- The whole keystroke is all bump

Р

- No pre-travel
- Start off with bump
- Bump only goes halfway or 2/3rds way through the stroke
- Then there's post bump travel

р

- Pre-travel, or some lead-in, at the top
- Bump goes out only about halfway or 2/3rds of the way down the keystroke
- Then, there's some post-bump travel before you hit the bottom-out

r

- Can think of this as the lighter version of the "p" shaped tactility
- Little bit of pre-travel
- Then a very small bump
- Then a little bit of post bump travel

Clicky: clicky style

#### Do you prefer a more delicate or more substantial click?

Clicky switches are known for their crunchy feel.



There are two primary designs when it comes to clicky switches: click jackets and click bars

 Click jackets feel more delicate than the click bars, which feel chunkier and more substantial

## Sound

## Learn to break down the sound signature that a switch provides.

Now the sound around switches is a bit of a thorny issue. Sound is the most complicated factor because switches only play a part in the overall sound profile when typing on your keyboard.

- A switch's sound won't be constant. It's going to depend on context.
- But the thing is it's not really this black box either.
  - No matter what keyboard or keycaps you use the switches with, there's going to be some shared DNA

# Upstroke/downstroke sound

There are two aspects to sound:

#### Pitch

• How deep does it sound? Is it high or low pitched?

#### Volume

Volume asks, is it loud or is it quiet?

Distinguish between up and downstroke

- The thing about sound is that a switch can make noise both when pressing down and after letting go. So when talking about sound we have to distinguish between the downstroke and the upstroke.
- Normal switches will make switches both on the way up and on the way down
- Silent switches are fully silenced, so they make minimal noise both ways
- Semi-silent switches are more interesting. Only one of the {upstroke,downstroke}
   will be silenced



# **Flaws**

#### Which flaws are actually significant to you and which ones aren't?

Now, there are some flaws in switches that should be pointed out. Here, I'll just point out two that people talk about most.

# Spring ping

This metallic sound is generally considered to be undesirable because it interferes with the otherwise clean sound of the stem colliding with the housings.

#### Stem wobble

- The main concern here is "resting-state wobble"
- If you have bad resting state wobble, your lines on the keyboard aren't gonna be perfectly straight
  - If wobble is really bad, whenever you let go of a key, the stem slightly shifts a little

# Thresholds, not absolutes

• Different flaws are going to stick out more to different people. It's going to be your call at the end of the day.

# **Descriptors**

## Which words effectively sum up a switch?

• If one specific word pops into the back of your brain, write it down, keep it, grab it. It's really useful when that happens. But don't feel you have to get that specific for every single thing.

# Scoring

## Distilling everything down into a number.

- It's totally okay to just give a switch an emotional score.
- Here, I just want you to have somewhere to make a note of your favorites, for the things you didn't really care for, and for things in between.