

Choose the Best Light Touch Switch for Your Design

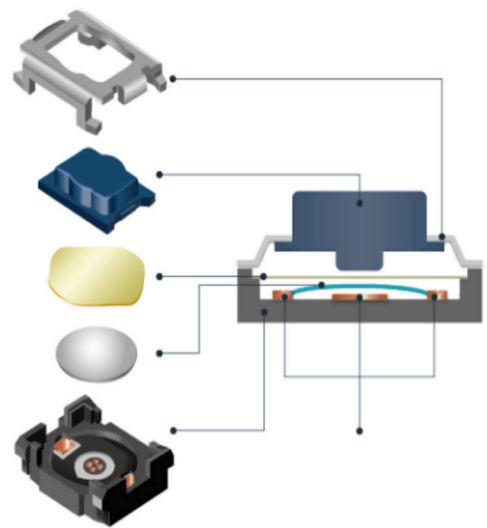
Panasonic has extensive experience in designing and optimizing Light Touch Switches.

When you're researching switches for your application, refer to the following design factors and recommendations to consider to ensure the option you choose is best suited to your device.

Switch Types

Panasonic offers an array of Light Touch Switches in various direction, push position and size types to give you flexibility in your design process. Side push switches are available in SMD type, half dive and edge mount types. Panasonic also offers some of the world's smallest top push and side push type switches for all your compact designs.

Once you've determined the type of switch you want, you'll want to make sure it has the appropriate tactile feel, push force and travel for the application it is serving. Let's start with travel and click ratios.



Travel and Click Ratios

The click ratio of a switch refers to the relationship between the switch's actuation force (the force users need to exert on the switch for it to be recognized) and travel (the distance users experience before contact is made).

A high ratio gives you a crisper switch feel while a short travel distance allows the switch to respond quickly. These two features are ideal for portable consumer devices like smartphones or wearable technologies that need to respond quickly to the user's touch.

In contrast, designers regularly use switches with lower click ratios and longer travel distances for automotive applications, since drivers wouldn't want to accidentally activate them while driving.

Click Sound Control

While click sound might appear at first glance to have little impact on overall performance, it is actually quite important and can add to or detract from the user's experience with your device. Sometimes it's better to have a highly audible click sound, while other designs will benefit from something a little more subtle. For reference, switches with a lower click ratio or lower push force also offer a lower click sound.

Longevity and Reliability

Switches allow users to activate and operate various electronics devices, so ensuring they offer high durability and leverage a long life cycle is crucial when selecting an option for your application. Several factors contribute to switch durability, and we'll go through a few of them.

Peel Off Strength

Peel off strength refers to the switch's ability to withstand impact. If the user drops your device, you don't want the switch to peel off the board. Notably, Panasonic switches offer the highest peel off strength in the industry, and there are several mounting constructions available to enhance this particular feature.

IP67 Rating

Ingress of contaminants is one of the main reasons behind key failure, so an important factor in switch longevity is its ability to withstand water ingress. Handheld electronics and wearables, for instance, are often exposed to some level of water, sunscreen or lotion. In these cases, switches should meet IP 67 standards for protection against dust and liquid infiltration. Unlike many IP67 tactile switches in the market, Panasonic's IP67 rated Light Touch Switches maintains the sharp, crisp tactile feel which customers prefer for these applications.

Panasonic has carefully fine-tuned their Light Touch Switches to deliver optimum performance for a number of end use cases – shop their product lineup on Arrow.com for some of the industry's most reliable, compact switches and keep the above factors in mind to accelerate your decision making process.

