

Scrolling functionality compared.



SteelSeries prime+



Logitech G502

Although these two computer mice are gaming mice, it is also important that they are comfortable to use for ordinary computer tasks. Logitech has invested especially much in trying to be a leader regarding scrolling. Expensive hardware has been the tool, see:

https://www.logitech.com/images/pdf/articles/eng/MicroGear_Innovation_Brief.pdf

It is the point of view here, that similar or even better functionality can be achieved by inexpensive software combined with an ordinary scroll wheel.

We divide scrolling in short, medium long and very long scrolling. For short or slow scrolling a click-to-click mode is the most comfortable to use and most scroll wheels has this as standard. For very long scrolling Logitech uses so called free wheel scrolling. This is in principle simple but it requires a metal wheel with a moment of inertia that cannot be achieved with a plastic wheel and it also requires wheel bearings with very low friction. Shifting between the click-to-click mode and free wheel mode can on Logitech G502 be made by a click key on the top of the mouse. On other Logitech mice such as MX Master 3 it can also be achieved by a flick to the wheel. It returns to click-to-click mode when the scrolling has stopped. The mechanism (as described by Logitech) which performs the switch between the two modes is very complicated. A software solution (*Auto-scroll*) that can perform fast scrolling is on the other hand available on most computer mice by a click with the scroll wheel.

Most scrolling is short and medium long scrolling. In medium long scrolling one will prefer to be able to scroll faster than is normally possible with a standard scroll wheel. It is also preferable, that one does not need to perform any action before the last can be achieved. With the app *ErgonomicScrollApplication* installed both of these properties are obtained with a standard scroll wheel (as on the SteelSeries mouse). With the app installed you do not need to perform repetitive finger lifting when scrolling in the same direction. This ensures that you can scroll fast in a continuous easily controllable way. Besides very fast scrolling medium fast scrolling can with the Logitech mouse be achieved by switching to free wheel scrolling. However staying in free wheel mode is not a good option as in short scrolling click-to-click scrolling is preferable. So one has to constantly switch between these two modes either as with the Logitech G502 by means of the top key or as with MX Master 3 by performing a flick to the wheel. The last method does however not work as well for medium long scrolling as it does for very long scrolling. It is difficult to control how long the scrolling due to the flicks will be. This is in contrast to the smooth, fast and easily controllable scrolling with *ErgonomicScrollApplication* installed.

In conclusion: *Auto-scroll* together with *ErgonomicScrollApplication* makes scrolling functionality on par with or better than scrolling based on complicated and expensive free wheel solution.

homepage: <https://www.ergonomicscrollapplication.com>