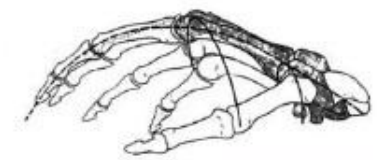
The conception of the OrthoMouse is strictly based in Medical Science, specifically in the so called “Position of function”.(*)

Why is the “Position of Function” relevant?

Raoul Tubiana, M.D., former president of the International Federation of Societies for Surgery of the Hand points out in his book, entitled The Hand, that: "Few concepts have been more useful in saving injured hands than that of the position of function."(**)

David Rempel, MD, states: “The extension/ flexion and ulnar/radial deviation postures associated with lowest carpal tunnel pressure can now be expanded to include a forearm rotation angle of 45º pronation and an MP (metacarpophalangeal) joint angle of 45º. This set of postures should be considered during the design of hand-intensive tasks and hand tools in order to minimize carpal tunnel pressure during repetitive activity. These postures can also assist in planning rehabilitation for patients with Carpal Tunnel Syndrome”.(***)

How does the OrthoMouse help your hand achieve the “Position of Function”?



The OrthoMouse is designed so that it supports the hand and fingers evenly while they adopt the correct and innocuous position – “the Position of Function” during the use of the OrthoMouse. Your hand Works and Rests (between periods of activity) in the “Position of Function”.

The thumb remains in “Opposition” to the other fingers permanently, which is the main exclusive characteristic of the human hand. John Napier, states: "Perhaps the most important movement of the human hand is opposition” (****). It allows control, sensibility and precision, since the fingers assume a position very similar to the one used during writing.

The thumb on the OrthoMouse is responsible for the scroll features – you move it up for scrolling upwards, down for scrolling downwards, and press the thumb mid button for the “scrolling click”.

WI-SE-ROLL

The happy scrolling!

Does it have different sizes? How do I know it will fit my hand?

Not all hands are alike. The OrthoMouse is adaptable to the size, shape and function of your hand and fingers by means of special adapters that are easy to exchange and are all included in the package. You choose and insert the adapter that fits your hand best and feels most comfortable among six possible shape configurations.

Additional special features:

Other features to be appreciated: the special "anti-skidding" texture, the scroll buttons with direct auctioning, the use of switches with lower mechanical resistance, the location of the optical sensor to allow precision with minimal “surface travel”.

OrthoMouse was Nominated for the “ERGOCUP” Award (7th Ergonomic Conference of Orlando) organized by Industrial Engineers Institute-USA and Won the “EXCELENCE IN R&D” Award Organized by Premio Editors.

This product is protected by the following patents:
Canada - No 2,347,082; USA - No. 6,300,941 and No.6, 532,002; Mexico - No. 226,639; Brazil - No. 5,901,042-8 and No 7,903,331; Argentina – No. 009,205 B4; Patents pending: ECC, Asia.

*"The term ‘position of function’ seems to have been used first by Kanavel (1925). This descriptive expression has been employed commonly and the concept it implies has been most useful in the prevention of numerous complications after immobilization of the hand.
The position of function has been described by Bunnell (1948) as follows: ‘The hand at rest assumes a certain position. This is largely the mid-position of the range of motion of each and every joint, including the wrist and rotation of the forearm. The muscles are all nicely balanced so that at their normal tone, when at rest, the position called the position of function is assumed...The forearm is half-way between pronation and supination. The wrist is in about 20º of dorsi-flexion and 10º of ulnar flexion. The fingers are slightly flexed in each of their joints, the index being flexed least and the little finger most. The thumb is forward from the hand in opposition and its joints are also partially flexed’ ... Each and every ‘position of function’ must endeavor to bring together a number of favorable conditions that are not always compatible with each other. They are those that place the joints in a position in which grasp is easy, in which stiffness is less likely to occur and finally, in which eventual stiffness, will permit preservation of movements of small amplitude, in a useful range.
In practice the term position of function, as it is commonly used, is applied equally to two very different situations (Beasley and Kester, 1979). On the hand, in a case of temporary immobilization, its main function is protection..."
**Raoul Tubiana. M.D, "The Hand", W. B. Saunders Company. Lib. of Cong. 80-27141. Vol. II, chapter 53, pg. 494, 1985.

***David Rempel, MD, Joel M. Bach, PhD, Richmond, CA, Leonard Gordon, MD, Yuen So, MD, PhD, San Francisco, CA. “Effects of forearm Pronation/Supination on Carpal Tunnel Pressure.” Journal of Hand Surgery 1998, 23A: pg. 38.

****"Perhaps the most important movement of the human hand is opposition. The movement of the thumb underlies all the skilled procedures of which the hand is capable.
The hand without a thumb is at worst, nothing but an animated fish-slice and at best a pair of forceps whose points don't meet properly.
Without the thumb, the hand is put back 60 million years in evolutionary terms to a stage when the thumb had no independent movement and was just another digit. One cannot emphasize enough the importance of finger-thumb opposition for human emergence from a relatively undistinguished primate background. Through natural selection, it promoted the adoption of the upright posture and bipedal walking, tool-using and tool-making that, in turn, led to enlargement of the brain through a positive feed-back mechanism. In this sense it was probably the single most crucial adaptation in our evolutionary history... Opposition is a movement by which the pulp surface of the thumb is placed squarely in contact with – or diametrically opposite to – the terminal pads of one or all of the remaining digits.”(John Napier. Hands , Chapter. three “Function of the hand". Opposition. pg.55. Princeton University Press. 1993)

Technical Data

5 buttons
Optical technology 800DPI
USB interface
Ultra-flexible 6 ft cord (1.8 m)
6 different shape configurations
Plug & Play

Height: 65mm; (2.56 inches)
Width: 82mm; (3.23 inches)
Length with the short prolonger: 113mm; (4.45 inches)
Length with the medium prolonger: 121mm;(4.76 inches)
Length with the long prolonger: 136mm; (5.35 inches)
Coating: engineering plastic
Class 1 LED Product

This product uses a LED which is classed as Class 1 according to international standard IEC 825-1:1993

Operating Systems Compatibility.

Microsoft Windows: 7 / Vista / XP / 2000 / Me / 98 SE / NT 4.0 SP6
Macintosh: Mac OS X 10.1.x to 10.3 or newer; Mac OS 8.6 to 9.X
Linux: Kernel 2.4 or better, with USB support

1 Year Warranty

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Technical and Ergonomic Support.

Please email to: contact@orthovia.com