

Making Your Tech “Fit” Things in Your Hands

Author: Debra Carlson, Technical Advisor, CVC Computer Club, CO
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cvc.computer.club (at) gmail.com

Last quarter we talked about monitors. Now we will talk about Things in your hands.

Do you have hand, shoulder or neck pain while and after using your computer? Spend hours online without moving? Taking breaks is helpful, of course. Having good habits can help avoid some potentially debilitating conditions:

- Carpal tunnel syndrome happens when pressure on the inner wrist makes the median nerve swell causing numbness, tingling, pain, and weakness.
- “Mouse shoulder” (pain in shoulder, upper arm and forearm) can happen when time is spent slouching while moving the hand. It leads to muscle strain of the shoulder girdle or the spine itself.
- A mouse that fits the hand poorly can also cause thumb tendinitis.

Computer peripheral manufacturers mention three mouse grip styles: palm grip, claw grip, and tip grip.

1. The palm style mimics holding the mouse like a doorknob. Most of the palm / finger surfaces are in contact with the mouse and most of the hand's weight lies on it. Mice built for palm grip are big, wide, have a “hump” on the back, and an area to rest the middle or ring finger.

2. The claw grip arches the hand -- only the fingertips and a small part of the palm contact the mouse. It takes less hand weight to “flick the mouse” making it easy to change the cursor's aim. The hump on the mouse back is smaller, and the mouse is smaller than one built for palm grip.

3. Tip grip is “all” fingertip. No part of the palm touches the mouse. It's faster and more agile than claw grip, but also more tiring. Making small adjustments on the screen such as photo edits, can be tough because the mouse moves so quickly. These are small, like “travel” mice. If not from overuse, pain often comes from using a mouse that, because of mis-sizing, requires an awkward grip or too much pressure to click.



So, what can be done to minimize problems –

1. Figure out your grip type and buy the right mouse for it. If you can, go to a store and “try” some mice. If that isn't practical, pay careful attention to the size on the description

-- and its relationship to your hand size. Don't wait until you hurt to start using a mouse correctly or to find a mouse that fits your grip style.

2. When you're using a computer, keep the mouse a little above elbow height with your wrists relatively straight.

3. Take frequent breaks to avoid repetitive stress injuries. Also ... Trackball, vertical mice, trackpads, and even some mice shaped like larger pens are made. Consider how you use your mouse and, if you have pain, consider one of these options as well. There will be a learning curve ... and, yes, these do cost more. It could well be worth the savings on pain relievers.



Another alternative is the touch pad. There is a learning curve associated with this, but some find it more comfortable. Capacitive touch and other peculiarities of smartphones / tablets that make finger temperature or humidity a factor do not impact desktop or laptop touchpads. Worth a mention if you are looking for a new mouse – cordless is nice, but it is possible to have increased latency (time lag) between mouse movement and the time the cursor moves on the screen.

- Spending a bit more when buying a Bluetooth mouse can increase quality / decrease latency.
- Making sure your mouse battery is not depleted also helps performance. “Wired” mice take power from the host machine, so this is only a consideration with wireless mice. Most mice are now optical, meaning they use light rather than a ball for movement. They do not require a mouse pad (the old “ball” mice often did to ensure consistent surface) but can react differently when placed on more reflective surfaces. If your cursor seems to be “jumpy”, try putting a clean sheet of paper under it to mute some of the reflection.

Mouse choice, as with all input devices (keyboards, microphones, etc.) is very personalized. Don't believe it when someone says, “anything works”. It's your comfort that counts.

Next quarter we will discuss: Cords, Voice, Sound, and other hazards.

