Laptop clip-on is on a mission to outdo mouse

August 15 2013, by Nancy Owano

(Phys.org) —Haptix is a newly announced gesture-based controller that launched this week on Kickstarter. Haptix looks like a sleek ice cream bar with its anodized bead-blasted aluminum casing. The Haptix is designed to transform tabletops and keyboards into tools that you use to interact with your computer. Basically, it wants to be the reason that

workers can finally say, without fear, goodbye mouse. The creators consider their device "Multitouch Reinvented." They say that it is as intuitive and natural as a multitouch screen, just without the actual screen. They have a point. This product is no Leap Motion me-too hiccup, but rather an attempt to create a practical alternative for people who work with spreadsheets, reports, and design projects where traditionally the mouse and keyboard have been thought to be the most practical tools to get the work done.

With Haptix, the option to clip the device on your laptop turns your keyboard into a multitouch tool with which you can control your computer entirely from your keyboard. (It automatically turns off when you type.) The device uses twin cameras to see what the user's hands are doing and turns actions into input signals. You can use your middle finger as the cursor, your index finger to left-click, and your ring finger to right-click.

People who are working with spreadsheets can use five-finger touch. Designers, artists and engineers can capture pen or brush strokes. A distinguishing feature about Haptix is hand comfort. The Haptix team is vocal about the fact that their product, in supporting 2D and 3D gestures, allows users to rest their hands while working, and in turn they can use the controller for extended periods without discomfort in the wrists.

Haptix has two CMOS image sensors that capture the position of your hands in 640x360 resolution, attached to a microcontroller. The device works with any lighting condition—making use of infrared if in the dark. Haptix connects to a computer through a USB 2.0 cable.

It supports a number of gesture types, including pinch to zoom, on flat surfaces, but gestures need to be performed within its field of vision. The Kickstarter prototype has a 120 degree field of view. The creators said they are in the middle of transitioning to better lenses with a 150

degree field of view.

The Haptix Touch creators are Darren Lim, CEO and Lai Xue. CTO. Haptix Touch is in San Francisco. They seek $100,000 to help fund manufacturing costs; the project will only be funded if at least $100,000 is pledged by September 13. They said the funding will go toward "refinement of the electronics and additional tooling for mass production." Haptix currently works with Windows and Ubuntu. Android and OS X support are in the works.

The retail price will be $70 but early birds can get a Haptix at $59. After that they cost $65. Haptix expects to ship to backers by February next year.

More information: www.kickstarter.com/projects/h … ultitouch-reinvented