

Sensel's pad can morph for artists, music makers, gamers

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An item on Kickstarter called the Sensel Morph looks as if it is perking people up—a glance over at the funding numbers tells you their goal is \$60,000 with 44 days to go. No sweat. Pledges so far have topped \$100,000 and items for earlybird pricing are gone. What's all the fuss about? They said that with their Morph device you invite new



possibilities in music, art, gaming, and beyond.

At Sensel, the company behind Morph, they believe they are developing the next generation of input devices. They are out to replace what they call the "archaic" keyboard and mouse with an interface that is upgradeable, customizable and all the while capturing the nuance and expression that our hands are capable of, said Ilya Rosenberg, Sensel <u>CEO</u>.

Aaron Zarraga, CTO, said "Our first product looks like a trackpad but we've actually packed 20,000 sensor elements into this form factor." And it's precise and accurate enough, he said, to even detect bristles from a paintbrush.

The company said the 20,000 individual sensor elements are at a spacing of 1.25mm. "We call them 'sensels' for short, hence the name of our company."

How can Sensel possibly fit 20,000 individual sensors into a compact device? The company said they worked with a material scientist "to custom-formulate a highly-tuned polymer layer which gives each individual sensor element the ability to sense force."

They said they also took advantage of advanced lithographic manufacturing processes similar to how circuit-boards and semiconductors are built.

This Mountain View, California, group have created a multi-touch input device sensitive to <u>pressure</u> and it enables users to interact with computers and programs in interesting ways.

"Imagine having your art tablet, music production controller, QWERTY



keyboard, <u>piano</u>, video game controller (and anything else your mind can fathom) all in one device. If you can imagine something so limitless without your brain imploding, you've imagined the Sensel Morph."



How it works: Various 3-dimensional tactile overlays are for use, all of which are automatically detected for the supported use case, from drawing canvas to drumpad. That is where the word "morph" comes in, changing over to another interface. The overlays contain magnets, making them easy to swap in and out.

David Lumb in *Fast Company* said that "seven total overlays include three musical pads—piano, general DJ layout, and percussion—along with QWERTY keyboard, graphic art, <u>game controller</u>, and a developer



overlay. An eighth overlay will be chosen by popular vote among Morph's Kickstarter <u>backers</u>."

The Morph, said the company, works out of the box. You can connect it to your computer via USB, to your iPad via Bluetooth or to Arduino via developer cables. They call it Morph for obvious reasons once you see what they have in their videos. Each overlay allows the device to morph into a new physical interface. They said they plan to ship in 2016.

As for battery life, they said the Morph will last for a week with regular use (a couple of hours a day), and for a month on standby.

The product is compatible with Linux, Mac OSx Windows 7,8, and 10 and iOS.





Pledge \$249 or more and you receive one Morph with a choice of three of the overlays. Estimated delivery is June 2016.

Rachel Metz in *MIT Technology Review* assessed the market opportunity for the Morph."While it may be tricky to convince the average person that he needs a gadget like the Morph, Sensel thinks it will appeal to a range of people who need fine-tuned <u>controls</u> for work on things like animation, video games, and music. The company also hopes people will come up with their own uses for it—they're planning to let users access software to customize new ones, and share them with others."

More information: <u>www.kickstarter.com/projects/1</u> ... -interactionevolved

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