

## **Orbit Research Introduces the Graphiti® Interactive Tactile Graphic Display**

*The revolutionary graphic display for the blind is now available for ordering*

Anaheim, California – March 11, 2020 –

Orbit Research announced the launch of the Graphiti® Interactive Tactile Graphic Display today at the 35<sup>th</sup> annual CSUN Assistive Technology Conference.

Based on revolutionary Tactuator™ technology from Orbit Research, the Graphiti® represents a breakthrough in non-visual access to graphical information such as charts, drawings, flowcharts, floorplans, images and photographs, through an array of moving pins. The most unique feature of the technology is the ability to set each pin to different heights, which enables the display of topographical maps and other graphical elements such as shades and color represented as varying heights of pins that can be readily sensed by the user's fingers.

Connectable to computers, tablets, smartphones, or the Orion TI-84 Plus Talking Graphing Calculator via a USB port or Bluetooth, its open API allows developers to create apps on any platform to work with the Graphiti. Additionally, an HDMI port allows connection to any device with a video display output, making Graphiti an external tactile display monitor. This enables any device to connect seamlessly to Graphiti. The unit also includes a cursor pad for navigation, and an SD-card slot and USB port to load files for reading and editing in a standalone mode.

Graphiti also features a touch interface to enable the user to "draw" on the display; tracing a shape with a fingertip raises the pins along the path traced. The touch interface allows traditional forms of touch gesture commands such as swipe to scroll. In addition, it enables novel uses such as "pushing" or "nudging" an object on the display to physically move it. Multiple Graphiti units can be connected together to provide complete and immersive interactivity through touch – what is drawn on one unit appears instantly on the other units in tactile form.

The proprietary technology is fundamentally scalable and enables development of refreshable graphic displays of any size, at a fraction of the cost of graphic displays in the market today. The first model has 2,400 pins in an array of 60 x 40 pins and can be used in a portrait or landscape orientation. Each pin is independently addressable and can also be made to individually "blink" at configurable rates.

"We are tremendously excited about the opportunities Graphiti opens for the blind or visually impaired user. Our Orion family of talking scientific and graphing calculators enabled access to mainstream tools for STEM education for blind and visually impaired students. The Orbit Reader family of braille displays enables access to low-cost braille and literacy. We believe Graphiti will do for graphics what the Orbit Reader 20 did for braille." said Dr. Gina Spagnoli, Orbit Research's Founder. "The variable-height capability that our Tactuator technology enables will allow blind users to experience and interact with graphics and visual events like never before – live and in three dimensions, such as when they viewed the total solar eclipse of 2017 in real time on the Graphiti, making it a truly historic event. A blind user is now able to create graphics in digital form, enter them into a computing device, review and edit them, and exchange such graphics with others. To bring this revolutionary product to each and every blind person in the world, we are working with educational institutions and blindness organizations to reduce cost by increasing volumes, with the target of achieving a price point under \$5,000." she added.

With its ability to interface with computers and smartphones, the Graphiti provides instant tactile access to all forms of graphical information that is available on the internet. It also enables blind students to connect the Graphiti to any instrument that has a video output, including microscopes, telescopes, oscilloscopes and video cameras to provide a tactile depiction of the images and videos in real-time.

In the classroom, the Graphiti provides the ability to share textbooks with graphical material. It also enables blind students to actively participate in inclusive classrooms and for the first time, visualize the smartboards used in mainstream classrooms. It also allows maps and other diagrams to be labeled with braille text which can pop up dynamically when corresponding areas on the picture are touched.

Graphiti charts the path towards delivering such content instantly without the need for creating tactile graphics on paper. The product also comes with a software program for Windows that provides, for the very first time, a drawing program specifically designed for individuals who are blind and visually impaired.

Orbit Research is accepting orders now for the Graphiti. Visit [www.orbitresearch.com/product/graphiti](http://www.orbitresearch.com/product/graphiti) for more information and to place orders.

**About Orbit Research:**

Orbit Research develops and manufactures innovative and affordable products that enable an independent lifestyle for people who are blind or visually impaired. Founded with the mission to fulfill the urgent need for affordable assistive technology products, the company has introduced breakthrough products like the Orion family of accessible scientific and graphing calculators, the iBill Talking Banknote Identifier and the Orbit Reader 20 refreshable braille display that define the state-of-the-art in features, functionality, convenience and affordability. For more information, visit [www.orbitresearch.com](http://www.orbitresearch.com).

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