

tobii dynavox

PCEye Mini

Unbeatable computer access
through gaze interaction



Power to be You



Unbeatable computer access through gaze interaction

The Tobii Dynavox PCEye Mini replaces the standard keyboard and mouse, allowing you to control your laptop or small screen desktop computer using only your eyes.

Unbeatable Computer Access

The PCEye Mini runs on standard laptops and small screen desktop Windows computers. It allows you to work with any application, but instead of using a standard keyboard and mouse, you control it using your eyes. You'll be able to surf the web, connect with friends online, use environmental controls and even make spreadsheets and documents.

Most robust and best performing eye tracker to date

Compared to its predecessor, the PCEye Mini is based on an additional five years of research and development as well as test data. This knowledge has been packaged as new patents, new eye models, higher robustness and the world's first eye tracking ASIC circuit, the Tobii EyeChip™.

User interface providing relaxed, precise and faster computer access

The PCEye Mini comes with two ways to control your computer: Mouse Emulation and Gaze Selection.

Mouse Emulation allows you to replace the traditional mouse cursor with your gaze. And with the two-step process of Gaze Selection, clicks are made intentionally and navigation is more intuitive, creating the most relaxed and natural computing environment.



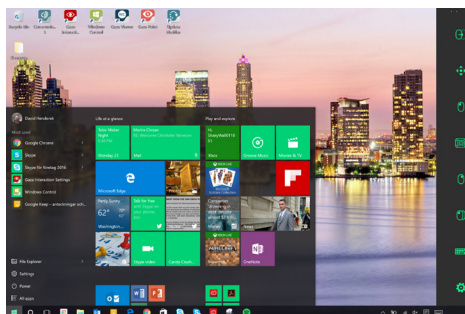
Ability to hit smaller targets – Gaze Selection has a unique zoom functionality that gives a virtually pixel-precise control. This pixel precision allows you to use applications that have not been specifically designed for gaze interaction, enabling full computer access that was previously only available with a traditional mouse.

Faster computer access – For users not able to operate a standard keyboard and mouse, eye interaction is simply the fastest way to use your computer. With Tobii Dynavox Gaze Selection, you

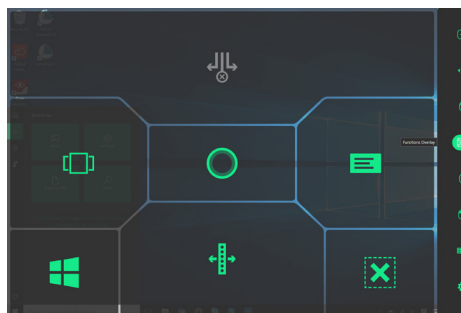
efficiently access all of the functions of your computer with fewer mistakes and clicks, and at higher speeds.

Integrated keyboard – Use the built in keyboard to write shorter texts or to enter a web address.

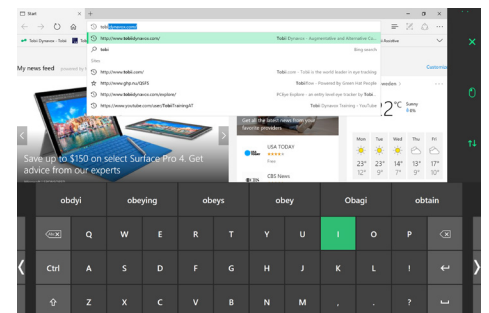
A solution for Augmentative and Alternative Communication (AAC) – You can run Tobii Dynavox Communicator or Compass with the PCEye Mini. These powerful software packages provide many options for more assisted communication, computer access and environmental control.



In Gaze Selection, the taskbar on the right lets you click, drag, scroll and more.



The Functions Overlay provides quick access to the main functions of Windows.



The built-in keyboard comes with Word Prediction and multiple languages.

Extreme portability

The PCEye Mini easily attaches and detaches from your desktop screen or laptop using a smart, seamless magnetic mounting bracket and USB connection. It is lightweight and small enough to be easily transported and used with different computers.

Scalable Flexibility

All eye interaction processing is done on the PCEye Mini itself with the latest Tobii EyeChip™, avoiding additional workload for your computer or tablet and ensuring maximum performance. This also means that you do not need the latest tablet, laptop or desktop computer in order to use gaze interaction as an access method.



Independence with the PCEye Mini

The Tobii Dynavox PCEye Mini provides the opportunity to interact with others, take control and live life to the fullest. It allows you to do what you want, when you want, without having to rely on others.

Express yourself more easily, creatively and independently – Artistic expression through eye control can be a healthy way to spend time, acquire new skills and promote creativity, all things that increase health and happiness. Some users of Gaze Interaction use the

technology to paint, write books, and run their businesses.

Independent recreation – Taking part in any type of recreation is a way to pass the time, have fun, learn, and stimulate your mind. Accessing a computer and the Internet through the PCEye Mini is one way to do it.

Control devices in your environment – Environmental control works by remotely controlling IR enabled devices, something that can be done using your Tobii Dynavox

PCEye Mini. With it, you can take control of things like lights, telephones, TVs, DVD players, toys and more, allowing you to regain much of your freedom and independence.

Greater possibilities for returning to the workplace – Individuals with ALS and other disabilities that inhibit the use of the hands or arms can remain in the workplace longer or even return to work using the PCEye Mini, allowing for completely hands-free computing.

Technical Specifications

Specifications	Tobii Dynavox PCEye Mini
Mounting	Magnetic mount as standard for laptop and desktop
Processing unit	Tobii EyeChip™ with fully embedded processing
Power	1.5W typical usage via single USB 2
Weight	59 g (2.1 oz)
Dimensions	170 mm × 18 mm × 13 mm 6.69" × 0.71" × 0.51"
System Requirements	USB 2.0 or higher, Operating System: Windows 7 Windows 8.1 Windows 10, 1 GHz, 2 cores, 2 GB RAM memory, Graphics 60 MB VRAM, Pixel shader 2.0 or higher, 450 MB free disk space for the installation of the PCEye Mini Software
Usage	
User distance	45 - 85 cm
Head movement box	>20x20 ellipse @ 45 cm
	>25x20 ellipse @ 50 cm
	>35x30 ellipse @ 65 cm
	>35x35 circle @ 80 cm
Performance	
User calibration (former tracking robustness)	>99 %
Detected gaze (interaction >30Hz)	98% for 95% of population**
Detected Gaze (raw data max frame rate)	90% for 95% of population**

Specifications	Tobii Dynavox PCEye Mini
Accuracy	< 0.3° ideal*
	<1.0° for 65% of population**
	<1.3° for 80% of population**
	<1.7° for 90% of population**
Precision (frame to frame)	< 0.1° ideal*
	<0.2° for 65% of population**
	<0.25° for 80% of population**
	<0.3° for 90% of population**
Recommended screen size at 55 cm (21.7") user distance	
Max head movement speed (eye position)	Up to 19"
Max head movement speed (gaze data)	40 cm/s
Max head tilt	10 cm/s
Data flow and data rate	
Frame rate	>20 degrees
Gaze latency	60 Hz
Gaze recovery	25 ms
	100 ms

* The "ideal" degree numbers are the previous standard of measuring accuracy and precision, both previously from Tobii and presently from all eye tracking competitors. Though "ideal" numbers are useful to get a general feel about comparative quality and performance, they are not applicable to real world usage in the same way as quantitative degree-of-accuracy and precision over percentage-of-population numbers based on extensive testing across representatives of the whole population.

** The degree-of-accuracy and precision over percentage-of-population numbers result from extensive testing across representatives of the whole population. We have made use of hundreds of thousands of diagnostic images and performed tests on approximately 800 individuals with different conditions, vision, ethnicities, everyday dust, smudges or blemishes around their eyes, with eyes out of focus, etc. This has resulted in a much more robust and high performance eye tracking experience and a much more realistic representation of true performance across the whole population, not just in a mathematically "ideal" scenario.

Find out more
For more information, to book a demo or to purchase the device online, please visit: www.tobiidynavox.com

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We believe that everyone has the right to live their life to the fullest. Wanting to help people do just that, we provide them with the tools to communicate, become independent and do what they once were able to do or never thought possible.