TOBII EYE TRACKER 4C

THIS IS HOW YOUR HEAD AND EYES GIVES GAMING A NEW MEANING
TOBII EYE TRACKER 4C

4C – THE GAME CHANGER

Once the computer becomes aware of you, it opens up a whole new type of interaction. With the release of Tobii Eye Tracker 4C, Tobii takes another giant step forward in eye tracking technology for gaming.

The Tobii Eye Tracker 4C is the first PC gaming device to provide head and eye tracking functionality simultaneously. It also sets a new standard for eye tracking devices, thanks to its new Tobii EyeChip.

Gaming is at its best when it provokes flow. No matter where you are physically, in your mind you are deep into a dark jungle, searching for a lost pyramid / far out in another galaxy, trying to outthink your evil enemies in the space trade / running through bombed-out ruins in your WWII outfit / driving a huge truck down a highway ... You’re somewhere, but in your mind, you’re definitely not in front of a computer screen.

A shortcut to flow
The Tobii Eye Tracker helps you get into the flow by adding effects, removing disturbances and letting you interact with the computer in a natural and effortless way. It’s yours to consciously manage, as you use your gaze to aim, pick from a menu or select objects to interact with.

But there’s much more to it than that. The information it provides to the computer can be used to actively tailor the game. For example, depending on where you look, characters or even the environment itself can react to your gaze, light can change and much more.

Already, with games like Tom Clancy’s Ghost Recon Wildlands, Dying Light: The Following and Elite Dangerous, plenty of gamers have seen how the added functionality of a Tobii Eye Tracker controller improves their experience. And with its all-new head tracking feature, the Tobii Eye Tracker 4C makes even more immersive gaming possible.

Your head matters
The head tracking functionality means that the tracker detects not only your eye movements, but also how you move your head. Movement data can be used to actively control the game, but it can also be used by the computer as input for making pre-programmed events happen and for other features in the game.

Tobii EyeChip is the difference
The many improvements with the new eye tracker were made possible by the new Tobii EyeChip, the world’s first application-specific integrated circuit (ASIC) developed specifically for eye tracking.

Some stats that changed between the 1st and 2nd generation of eye trackers thanks to the EyeChip are:

- Power consumption: Went from 4.5W down to 1.5W
- CPU Load reduction: Went from 10% down to 1%
- Data transfer: Went from 2GB/s down to 100KB/s
- USB 3.0 connectivity to USB 2.0 connectivity
- Simultaneous Eye and Head Tracking

Log in with a glance
The Tobii Eye Tracker 4C is the first eye tracking device certified for Windows Hello Login. This makes it possible to log on to your computer by just being in front of it. Besides logging on, the Tobii Eye Tracker allows users to interact with their computer using their gaze in different ways (see next page for details). If you have a supported version of Windows, the Tobii Eye Tracker core software will automatically download the Tobii Face Authentication plugin.

Next step in gaming
Tobii Eye Tracker 4C promises to bring you a new kind of gaming experience, no matter what kind of games you play. The Tobii Eye Tracker complements rather than replaces your traditional gaming inputs. It adds new input options and immersion scenarios. In some games, the deeper immersion and a more natural way of controlling the action is the point. In other games, where playing with a game pad is cumbersome or tedious, it lets you navigate simply with your gaze.

No matter the application, the Tobii Eye Tracker is a next step in gaming technology. Try it, and you’ll see for yourself.

SUPPORTED GAMES

Dying Light: The Following • Watch Dogs 2 • Steep • Rise of the Tomb Raider • Tom Clancy’s: The Division
• Shadow Tactics: Blades of the Shogun • Ziggurat
• Tom Clancy’s Ghost Recon Wildlands • theHunter: Call of the Wild • Farming Simulator 17 • Master of Orion
• Dishonored • Deus Ex: Mankind Divided • Among the Sleep • War for the Overworld • Monstrum • Aragami
• DayZ • Elite: Dangerous • Eurotruck Simulator 2 • Shelter 2 • Kong: Skull Island • The Solus Project • Warhammer Vermintide • Reflections • theHunter: Primal
• Glimpse of Fear • Iron Front: Liberation 1944 • IL-2
• Sturmovik: Battle of Stalingrad • MS Flight Simulator
• Project Root • Spectrophobia • Sun of Nor...

SEE MORE GAMES AT TOBIIGAMING.COM
5 EXPERIENCES, 32 FEATURES OF EYE TRACKING GAMING

NATURAL TARGETING
Aim and point with your eyes. These features bring a more natural interaction to computer games.
- Aim at Gaze
- Fire at Gaze
- Enemy Tagging
- Cover at Gaze
- Secondary Weapon at Gaze
- Select at Gaze
- Jump at Gaze
- Pick up at Gaze
- Throw at Gaze
- Teleport to Gaze

DIRECT INTERACTION
Interact with the game using just your gaze.
- Menu Navigation
- Wheel Menu
- Zoom at Gaze
- Center at Gaze
- Bungee Zoom
- Cursor Warp

IMMERSIVE GRAPHICS
Experience a more real-world feel when playing computer games.
- Clean UI
- Dynamic Light
- Dynamic Depth of Field
- Directional Sound
- Peripheral Effects
- Flashlight Control
- Foveated Rendering

INFINITE SCREEN
The game camera automatically adjusts to give you a wider view.
- Auto-turn
- Free View
- Extended View

AWARENESS
The world and things in it react to your presence.
- Environment Awareness
- Character Awareness
- Eye Contact
- Avatar Eye Movements
- Auto-pause
- Object Awareness

WINDS
NDS INTERACTION FEATURES
Apart from the Windows Hello Login functionality, the 4C allows users to interact with their computer using their gaze in different ways.

POWER
The computer can automatically sense if you are present in front of the screen or not, and it can take action based on this information.
- Dim brightness
- Turn off screen
- Go to sleep

MOUSE
Avoid long mouse movements and lower your mouse mileage with the Tobii Eye Tracker 4C.
- Warp on mouse move
- Mouse warp on click

TOUCHPAD
Click, scroll and zoom with the touchpad effortlessly wherever you’re looking on the screen.
- Touch at gaze
- Scroll at gaze
- Zoom at gaze

WINDOWS
Windows menus will become responsive to where you look.
- Application switcher
- Windows snap assist

HERE’S HOW HEAD & EYE TRACKING WORKS
An eye tracker is a hardware component that lets the computer keep track on where you look. This is done with the help of a combination of projectors and sensors.

Eye tracking has been used in professional contexts for many years. Only recently has the technology become available to a wider audience, as Tobii has developed mobile eye trackers for consumer use.

The Tobii Gaming initiative is about enhancing the gaming experience. The eye tracker makes the computer aware of you, thereby opening up a multitude of possibilities when it comes to creating immersive computer games.

1. An eye tracker consists of cameras, projectors and algorithms.
2. The projectors create a pattern of near-infrared light on the eyes.
3. The cameras take high-frame-rate images of the user’s eyes and their surface patterns.
4. The image-processing algorithms map specific details in the user’s eyes and reflection patterns.
5. Based on these details, mathematical algorithms calculate the eyes’ exact position and gaze point, for instance on a particular spot on the surface of a computer monitor.
THE SPECS

Size
17 × 15 × 335 mm
0.66 × 0.6 × 13.1 in

Max Screen Size
27 inches with 16:9
30 inches with 21:9

Tobii EyeChip
Yes

USB Cable Length
80 cm

Connectivity
USB 2.0 (integrated cord, USB 2.0 BC 1.2)

Head Tracking
Yes

OS Compatibility
Windows 7, 8.1 and 10
(64-bit only)

Power Consumption
1.5 Watt

USB Data Transfer Rate
100KB/s

Frequency
90 Hz

Illuminators
Near Infrared
(NIR 850nm) Only

Tracking Population
97%

System Performance
2.0 GHz Quad-Core
Intel i5 or i7, 8 GB RAM

Operating Distance
20–37” / 50–95 cm

Track Box Dimensions
16 × 12” / 40 × 30 cm
at 29.5” / 75 cm

IN THE BOX

1. Warranty and safety compliance documentation.
2. Two mounting brackets for installation. One to get started right away, one as a spare.
3. The Tobii Eye Tracker 4C with attached 80-cm USB 2.0 cable.
4. The installation guide with instructions on how to mount your Tobii Eye Tracker to a laptop or monitor.
5. Tobii Eye Tracker 4C box.

READ MORE AND ORDER YOUR EYE TRACKER

Get all the inside stuff on eye tracking gaming at
www.tobiigaming.com

Get in touch with Tobii at
www.tobii.com

Find a reseller
Tobiigaming.com/dealers/

Become a reseller
Email us at:
channelsales@tobii.com

Tobii Eye Tracker 4C product leaflet 201703