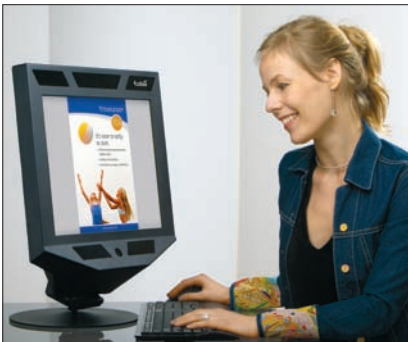




Eye tracking solutions for psychology and vision research

- Fully automatic eye tracking
- Completely non-intrusive
- High tracking quality
- Flexible analysis tools
- Dedicated infant features

Understand and analyze human behavior and visual attention using eye tracking



Testing with stimuli presented on a computer screen



Testing with stimuli presented on a projection screen or television



Testing with eye tracking relative to physical scenes and physical objects

Fully automatic eye tracking

- True ease of operation makes it possible to setup and execute tests without extensive eye tracking experience
- Automatic and robust tracking saves lots of time when conducting studies
- Extremely easy calibration makes each test quick to setup

Completely non-intrusive

- Great tolerance to head-motion removes all need for chin-rests and other restraints
- Completely natural environment for subjects minimizes experimental effects
- Long studies can be performed without fatigue for the subject or reduced quality of data

Very high tracking quality

- Highly accurate eye tracking and head-motion compensation provides reliable, high quality data
- High tracking ability allows you to automatically track nearly all subjects
- High reliability and validity coding provide very low loss of data
- Binocular tracking enables measurement of divergence, and provides even more reliable and accurate data through data redundancy and binocular averaging

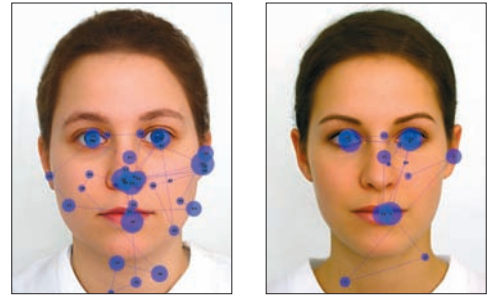
Tobii eye tracking systems have quickly become the leading state of the art solution for remote eye tracking, providing unsurpassed testing efficiency and tracking quality.

Flexible analysis tools

- Stimuli generation tools allow you to quickly create slideshows, moving stimuli, capture external video and study web pages etc
- Various export and data filtering options enable data abstraction and filtering, without removing flexibility or access to raw data
- Powerful visualization and statistics tools allow for effective qualitative and quantitative analysis
- Simple programming and plug-in interfaces enable integration with custom stimuli generation and analysis routines
- Built-in integration to other software packages, such as E-Prime, Noldus Observer and Mangold Interact provide additional stimulus generation and analysis capabilities

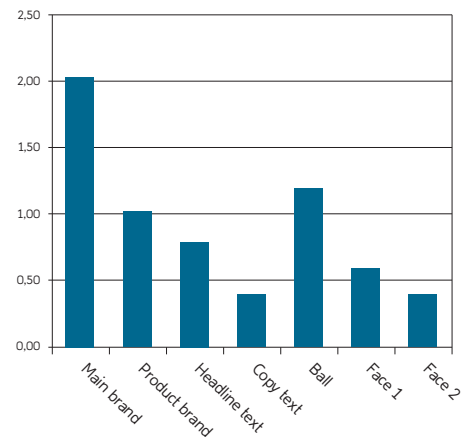
Dedicated infant features

- Customized calibration routines for babies and other low-attention subjects
- Large tolerance to head-motion enables eye tracking of subjects who cannot be fixed
- Easy set up of highly attention grabbing stimuli containing video and audio



Scanpath comparison between images of two faces

Gaze time statistics



Tobii eye trackers are used in hundreds of leading research labs world-wide, in domains such as developmental psychology, human-computer interaction, neuro physiology, industrial design and ophthalmology.

"We use several Tobii eye trackers in our eye tracking course at Clemson. The Tobii really allows a large amount of head-movement, and it does a very good, robust job of tracking the user's eyes. Since the system is so "plug and play", all of my students can easily use the system for their projects. In my experience, it is also easy to write custom programs for the tracker."

*Andrew Duchowski, Assoc Professor of Computer Science
CLEMSON UNIVERSITY*

"We have spent a lot of time setting up other eye trackers to work with babies in our infant lab. With the Tobii, calibration and recording is much more straight-forward than anything else we have seen. We have collected large volumes of very high quality data using our Tobii systems. This has enabled us to obtain research results in infant studies that would have been extremely time-consuming or even impossible using traditional eye tracking systems."

*Claes von Hofsten - Professor of Psychology
UPPSALA UNIVERSITY*

"We are very impressed with the tracking robustness, the high accuracy and the excellent linearity across the entire screen of the Tobii. Also, Tobii have been very responsive and professional in supporting our needs."

*Jan Ygge - Professor in Pediatric Ophthalmology
KAROLINSKA INSTITUTET*

"A consortium of researchers who study cognitive and language development in human infants has been working closely with the technical staff at Tobii and collectively we have purchased eight Tobii 1750 systems. Our experience is that the system offers extraordinary ease of use with infants and young children, especially for calibration and data analyses."

*Richard Aslin - Professor of Brain and Cognitive Sciences, Director, Rochester Center for Brain Imaging, University of Rochester
UNIVERSITY OF ROCHESTER*

Tobii 1750 Eye Tracker

Eye tracker integrated in a 17" monitor.
Ideal for testing with images, web pages
and movies



Tobii 2150 Eye tracker

Eye tracker integrated in a 21" monitor. For
testing where larger screen is important



Tobii x50 Eye Tracker

Stand-alone device, for eye tracking relative
to any monitor, projection screen or physical
scene



| | | | |
|--------------------------|-----------------------------|-------------------------------|----------------------|
| Accuracy | 0.5° | 0.5° | 0.5° |
| Drift | < 1 degree | < 1 degree | < 1 degree |
| Freedom of head-movement | 30 x 16 x 20 cm | 35 x 20 x 32 cm | 30 x 16 x 20 cm |
| Binocular tracking | Yes | Yes | Yes |
| Data rate | 50 Hz | 50 Hz | 50 Hz |
| TFT Display | 17" TFT, 1280 x 1024 pixels | 21.3" TFT, 1600 x 1200 pixels | |
| Connectors | Firewire, USB, VGA, Power | Firewire, USB, VGA, Power | Firewire, USB, Power |
| Weight | ~10 kg (22 lbs) | ~10 kg (22 lbs) | ~3 kg (7 lbs) |

ClearView analysis software

ClearView provides time- and cost effective studies of behaviour, combined with flexibility. At the heart of ClearView is the capability to setup, record and analyse studies with multiple test subjects, multiple tests per subject, multiple stimuli per study and multiple data analysis tools.

Powerful visualization and analysis tools

- Static and dynamic plots of fixations and scan paths
- Hotspot visualization for multiple subject aggregation
- Integrated area-of-interest analysis
- Various data filtering tools and statistics charts

Quick setup of a range of different stimuli

- Images, slideshows and Movies
- External video and Scene camera
- Dynamically moving bitmaps
- Web sites with automatic compensation for scrolling, frames and pop-up windows

Records much more than gaze data

- Video of screen contents
- Web page scrolling and page transitions
- Mouse clicks and key presses
- Video capture from external VCR, scene camera etc
- User camera and user audio
- External events and triggers

Flexible export and integration with other software

- Export various data to text files in different combinations
- Builtin integration with E-Prime, Noldus Observer and Mangold Interact

Multiple calibration routines

- Fully automatic for normal vision subjects
- Specific routines for babies
- Flexible for low-vision subjects

Tobii Software Development Kit

The Tobii Software Development Kit (Tobii SDK) is an easy to use yet powerful kit for development of application software that controls and retrieves real-time data from the Tobii eye trackers. This is useful for building highly customized experimental routines as well as many varieties of interaction applications based on eye tracking.

The Tobii SDK contains the following elements:

- Application programming interfaces (API)
 - Tobii Eye Tracker Components API (ActiveX components)
 - Tobii Eye Tracker Low Level API (low level interface)
 - ClearView Trigger API (Active X components + low level interface)
- Numerous code samples in C#, VB6 and C++
- An extensive developer's Guide