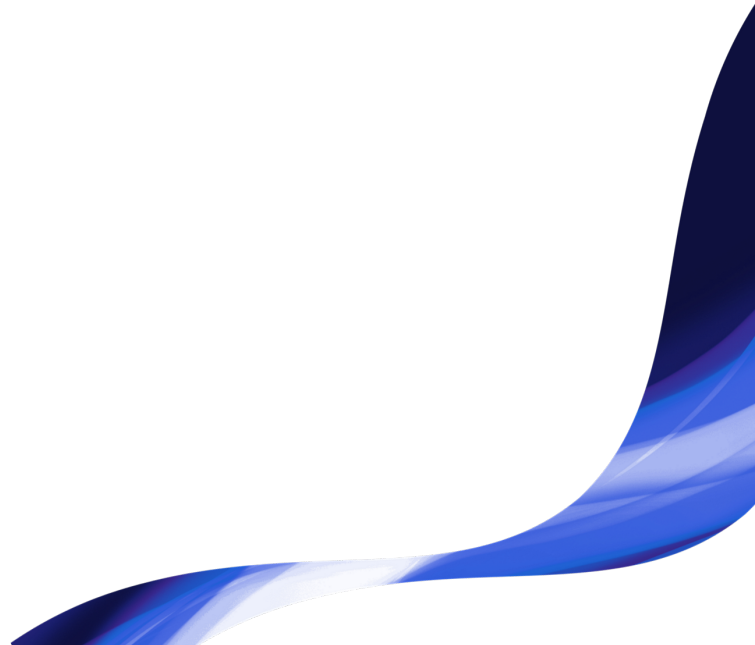




Tobii Pro Spectrum

Product Description



Tobii Pro Spectrum Product Description

v 2.9

November 2023

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Please visit [Tobii Connect](#) for updated versions of this document.

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1 Introduction

Tobii Pro Spectrum is an advanced, high-frequency eye tracking platform, intended for extensive studies into human behavior and the mechanics of eye movements.

The eye tracker's design allows the subject to move naturally during recording while still maintaining high accuracy and precision. This means that eye movements such as saccades and short fixations can be studied without using a chin rest.

Tobii Pro Spectrum delivers superior eye tracking through high-quality hardware components as well as fine-tuned algorithms that work in a variety of conditions (dark or bright environments, during head movements) resulting in excellent eye tracking quality over the entire screen. This eye tracker can be used in various setups, either with an attached monitor or in standalone form to perform eye tracking with physical objects.

In 2022, Tobii introduced eye tracking modes so that researchers can choose between human and nonhuman primate modes. Read more about [Nonhuman primate modes](#).

1.1 Application areas

Tobii Pro Spectrum is suitable for use in areas such as:

- Neuroscience studies - for example those combining eye tracking and EEG data
- Ophthalmology studies - for example those where a large freedom of head movement is needed
- Reading studies - for example those where large freedom of movement is important
- Psychology research - for instance in developmental psychology and psycholinguistics
- Tests requiring a latency of less than 5 ms - for example, in gaze-contingency studies
- Nonhuman primate studies
- Research investigating blinks and eye closure dynamics, based on raw pupil and eye openness signal data (for example, constriction/dilation velocity, lid closure rate and acceleration)

1.2 Product versions

Tobii Pro Spectrum is available in three product versions: 1200 Hz, 600 Hz, and 300 Hz. The values denote the eye tracker's maximum sampling frequency, but it can be used at lower settings as well. The 600 Hz and 300 Hz versions can be upgraded to a faster version. For more information, contact your sales representative or visit Tobii [online](#).

1.3 Tobii Pro Eye Tracker Manager

Tobii Pro Eye Tracker Manager is free software available on [Tobii Connect](#).

Tobii Pro Eye Tracker Manager helps you manage your Tobii Pro eye tracker. It lets you see which eye tracker firmware and software versions you are running and also facilitates updates (where applicable). It provides:

- Drivers and Firmware installation or updates
- Display setup
- Eye tracker frequency
- Eye tracking mode selection
- Positioning guide
- User calibration
- Gaze visualization¹
- Eye images²
- Get diagnostics³



References in product documentation to Tobii Pro Eye Tracker Manager refer to the latest version available on Tobii's website.

1.4 Additional software options

Tobii Pro Lab	Tobii Pro Lab is a comprehensive research software platform for eye tracking designed to meet the highest demands on different research scenarios with exact timing accuracy. This software offers an efficient workflow, making it easy to design experiments, record data, analyze and visualize eye tracking data, and to sync this data with other biometric data streams.
Tobii Pro SDK	Tobii Pro SDK offers a broad set of tools that makes it simple to develop a variety of niche applications or scripts across multiple platforms, using a wide range of programming languages. This SDK gives the researcher access to the full set of relevant gaze data streams, such as 3D eye coordinates, raw data, pupil data, etc.
Third-party software	This term refers to any application built on Tobii Pro SDK.

¹Gaze visualization in Tobii Pro Eye Tracker Manager lets you quickly evaluate the quality of the eye tracking data. The Gaze visualization overlaps data only on the Tobii Pro Eye Tracker Manager screen while Tobii Pro Eye Tracker Manager is open.

²Applicable when Tobii Pro Eye Tracker Manager is used with eye trackers that support eye images (Tobii Pro Spectrum and Tobii Pro Fusion).

³Get diagnostics button enables you to collect an encrypted blob file with full frame images and eye tracker logs to send to Customer Care for assistance with troubleshooting.

2 What's in the Tobii Pro Spectrum box

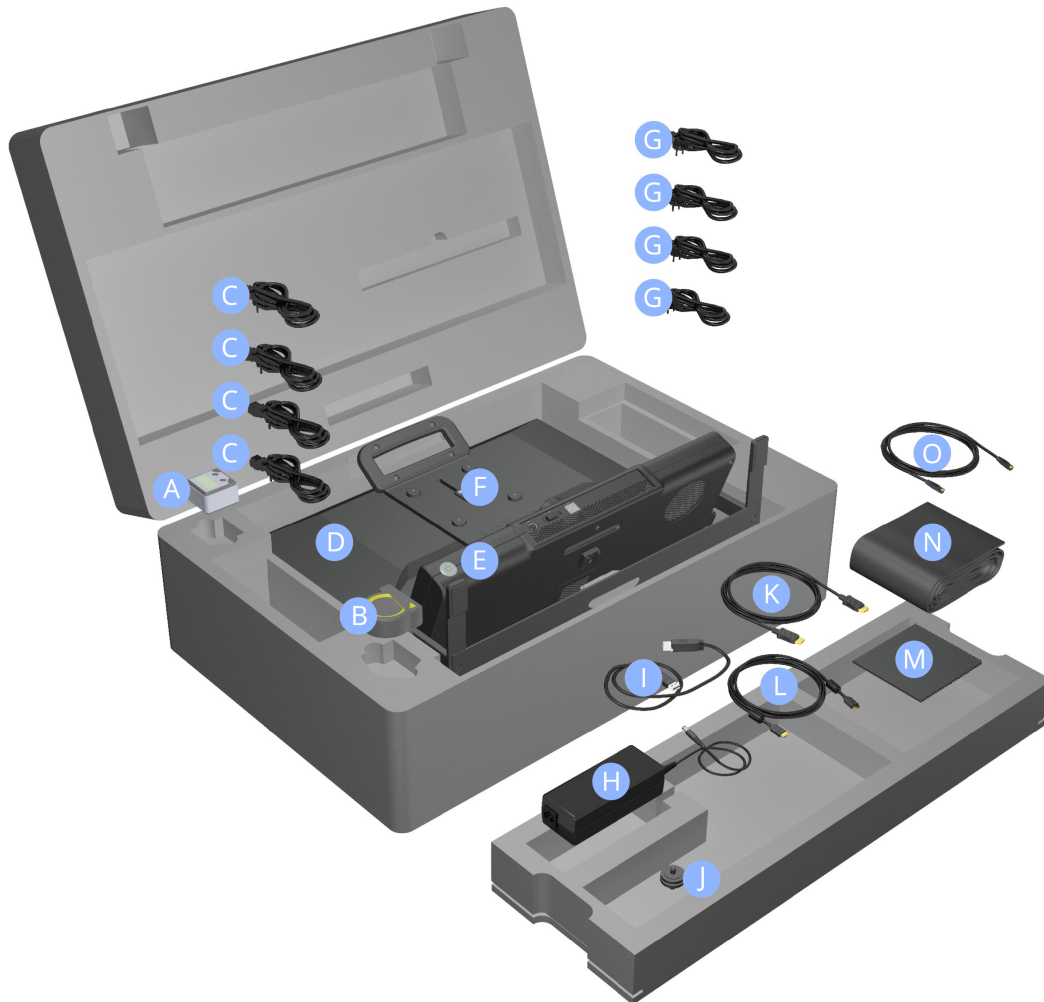


Figure 1. The contents of the Tobii Pro Spectrum box.

A. Angle meter	I. USB cable for connection between the PC and the monitor's integrated USB hub
B. Measuring tape	J. Cold shoe for mounting of a user camera
C. Power cables for monitor *	K. DisplayPort cable
D. Monitor	L. HDMI cable
E. Eye tracker	M. Cleaning cloth
F. Monitor mounting bracket	N. Fabric cord sleeve for collecting the cables
G. Power cables for eye tracker *	O. Ethernet cable
H. Power adaptor for eye tracker	

* UK, US, EU, and Aus/China

3 Technical specifications

For definitions of terms used in the tables below, see the [eye tracker glossary](#) on Tobii Connect.

3.1 Eye tracking specifications

The characteristics of the gaze data from an eye tracker are described in terms of accuracy and precision. For more details, take the *Accuracy and precision* course in [Tobii Academy](#). See notes below.



For more information about output data and the supplementary data stream, please read the [Tobii Pro SDK documentation](#).

Eye tracking technique	Video-based pupil and corneal reflection eye tracking with dark and bright pupil illumination modes. Two cameras capture stereo images of both eyes for robust, accurate measurement of eye gaze and eye position in 3D space, as well as pupil diameter.
Eye tracking mode	Tobii Pro Spectrum has four different eye tracking modes for different groups of primate species: <ul style="list-style-type: none"> • Human • Great ape • Monkey • Small monkey For details, see Nonhuman primate modes .
Sampling frequency	60 Hz, 120 Hz, 150 Hz, 300 Hz, 600 Hz, or 1200 Hz (max. frequency depends on hardware version)
Precision ¹	Head supported² 0.01° RMS in optimal conditions (applying Savitzky-Golay filtering, settings listed in the test report) 0.06° RMS in optimal conditions (raw signal) Head free-to-move³ 0.02° RMS (applying Savitzky-Golay filtering, settings listed in the test report) 0.08° RMS (raw signal)
Accuracy ¹	Head supported² Down to 0.15° P ₅₀ : 0.30° (P ₂₅ : 0.23° - P ₇₅ : 0.41°) Head free-to-move³ Down to 0.17° P ₅₀ : 0.43° (P ₂₅ : 0.32° - P ₇₅ : 0.6°)
Binocular eye tracking	Yes

Eye tracker latency	Mean latency < 2 ms at 1200Hz (SD < 0.2 ms) ⁴
Blink recovery time	1 frame (immediate)
Gaze recovery time	Less than 150 ms
Data sample output	Timestamp, Gaze origin, Gaze point, Pupil diameter
Eye openness data stream	Eye openness stream has the same frequency as frequency selected for the gaze stream and will have the same timestamps. Eye openness data is provided in millimeters, for each eye individually.
Eye image data stream	Eye image stream frequency is approximately 10 Hz (one image with both eyes). Zoomed-in eye images available in tracking mode. Full-frame camera images are available in gaze recovery mode.
TTL input stream	8-bit timestamped data (256 event codes) Event driven detection with a timestamp accuracy of 50 µs
Tracker and client time synchronization	Integrated between the eye tracker time domain and the client computer time domain with an accuracy of 100 µs
User calibration	Binocular, Monocular

¹ Tobii uses an extensive test method to measure and report performance and quality of data with human participants. Please download the [test report](#) for more detailed information. To learn more about nonhuman primate data quality, please contact your Sales representative.

² Head supported specs are measured with 20 participants under optimal conditions and chinrest. Values represent the average for the entire screen area. Download [Tobii Pro Spectrum Laboratory Metrics Test Report](#) to read the full report.


³ Head free-to-move specs are measured with a sample of 400+ participants without any head restriction. The setup and test environment are selected to represent normal usage and illustrate the performance of the eye tracker with a variety of participants and for the entire screen area.

⁴ Visit [Tobii Connect](#) for more information on how to optimize your Tobii Pro Spectrum setup. Note: FW v.2.2.3 and Pro SDK v.1.9 or later are required to obtain the stated performance.

3.2 Setup

For definitions, see the [Tobii eye tracker glossary](#) on Tobii Connect.

Head movement tolerance	Excellent; Dual-camera system, with more images than a one camera system, gives a more accurate data calculation and the best level of precision and robustness for head movement.
Operating distance (mounted on screen)	55 cm to 75 cm (22" to 30") from the eye tracker
Freedom of head movement (width × height)	<i>Freedom of head movement at 65 cm distance</i> 34 cm × 26 cm (13.5" × 10")
	<i>Freedom of head movement at 75 cm distance</i> 42 cm × 26 cm (16.5" × 10")
Optimal screen size	Up to 24" (16:9 aspect ratio)

Recommended monitor	Supplied 23.8" monitor
Tracker setup options	 <p>Eye tracker mounted on a tripod, allows for even larger screens or physical objects to be tracked.</p>
Participant setup	Very simple and easy. Typically, less than 1 minute.

3.3 Software and framework compatibility

Software and framework compatibility	Tobii Pro Lab Tobii Pro Eye Tracker Manager Tobii Pro SDK Any application built on the Tobii Pro SDK
Operating system	Windows, macOS, Linux

3.4 Hardware versions

300 Hz
600 Hz
1200 Hz

3.5 Tobii Pro Spectrum eye tracker specifications

Tobii Pro Spectrum is an integrated eye tracker with a removable 23.8" monitor. Removing the monitor transforms the integrated eye tracker into a standalone eye tracker.

Eye tracker

Dimensions (L × H × W)	55 × 18 × 6 (22" × 7" × 2") The eye tracker is mounted on a stand, which raises it from the surface by 9 cm (approximately 4").
------------------------	--

Weight	5.1 kg (11.4 lbs.) With the power supply unit, the weight is 5.7 kg (12.9 lbs.)
Connectors	TTL input: 8-bit (DB-9 connector) Communication: Ethernet (RJ-45 connector) Power supply: 24 VDC (5.5 mm connector)
Data processing	Fully embedded data processing
Eye tracking cameras	2
Illuminators	Dark pupil illumination modules Bright pupil illumination modules
User camera mount	Standard 1/4" thread
Power Consumption	Typical power consumption: 60 W Max. rated power consumption: 96 W
Power Options	Input: 100-240 VAC 50/60 Hz Max. rated power consumption: 120 W No load power consumption: <0.15 W Energy efficient level: VI Complies with EISA 2007/DoE, NRCAN, AU/NZ MEPS, EU ErP and CoC Version 5

Monitor

Monitor model name	EIZO FlexScan EV2451
Panel type	IPS, LED backlight
Screen size (diagonal)	23.8"
Weight	3.8 kg (8.4 lbs), incl. mounting
Aspect ratio	16:9
Resolution	1920 × 1080 pixels
Screen response time	5 ms (gray-to-gray)
Connectors	DVI VGA HDMI Display port 1 port for monitor control (USB 3.0) 2-port USB hub (USB 3.0) C13 power connector Audio input connector: 3.5 mm Headphone jack: 3.5 mm
Built in speakers	1.0 W + 1.0 W

Power supply	100-240 VAC 50/60 Hz
Power	<p>Maximum rated power consumption: 42 W</p> <p>Typical power consumption: 13 W</p> <p>Power save Mode: 0.5 W</p> <p>Power Management: Power Save (VESA DPM, Display Port- Rev 1.1a, and DVI DMPM)</p>

4 Display settings



Figure 2. Display options for Tobii Pro Spectrum.

1. Tobii Pro Spectrum shown as delivered with the monitor mounted on the eye tracker.
2. Tobii Pro Spectrum as a standalone eye tracker without the monitor.
3. Eye tracker and monitor together on a VESA 100x100 mount.
4. Standalone with monitor.



You can use the eye tracker with another monitor, but it is not recommended. For more information, read [Recommended monitor](#).

5 Safety

5.1 Mounting warning



Tobii Pro Spectrum should be mounted according to the instructions of the approved mounts used. Tobii AB or its agents are not liable for damage or injuries to a person or its property due to Tobii Pro Spectrum falling from a mounted configuration. The mounting of Tobii Pro Spectrum is done entirely at the user's own risk.

5.2 Emergency warning



Tobii Pro Spectrum is to be used for data collection purposes only. Be aware that due to the low, but possible risk of failure or distraction, Tobii Pro Spectrum should not be relied upon or used in dangerous or otherwise critical situations.

5.3 Infrared warning



When activated, Tobii Pro Spectrum emits pulsed infrared (IR) light. Certain medical devices are susceptible to disturbance by IR light and/or radiation. Do not use Tobii Pro Spectrum when in the vicinity of such susceptible medical devices as their accuracy or proper functionality could be inhibited.

5.4 Epilepsy warning



Some people with photosensitive epilepsy are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns in everyday life. This may happen even if the person has no medical history of epilepsy or has never had any epileptic seizures.

A person with photosensitive epilepsy would also be likely to have problems with TV screens, some arcade games, and flickering fluorescent bulbs. Such people may have a seizure while watching certain images or patterns on a monitor, or even when exposed to the light sources of an eye tracker. It is estimated that about 3-5% of people with epilepsy have this type of photosensitive epilepsy. Many people with photosensitive epilepsy experience an “aura” or feel odd sensations before the seizure occurs. If you feel odd during use, move your eyes away from the eye tracker.

5.5 Child safety



Tobii Pro Spectrum is an advanced computer system and electronic device. As such it is composed of numerous separate, assembled parts. In the hands of a child certain of these parts have the possibility of being separated from the device, possibly constituting a choking hazard or another danger to the child.

Young children should not have access to, or use, the device without parental or guardian supervision.

5.6 Do not open Tobii Pro Spectrum



Non-compliance will result in loss of Warranty! There are no user serviceable components inside. Contact Tobii Customer Care if your Tobii Pro Spectrum is not working properly.

5.7 Environment



Tobii Pro Spectrum is designed for use in dry indoor environments. Avoid any exposure to direct sunlight as this will affect eye tracking quality and longer exposure can overheat the equipment. Avoid exposure to any liquids, gels, moist, rain, sweat or other damp materials or environments. Do not use the eye tracker near water - the device is not water resistant.


Keep the eye tracker in a clean and dust free environment. When using the equipment take adequate precautions against dust and dirt.

Do not place or use the equipment in places subject to extreme temperatures and humidity, such as on top of and or near a heating element, in a hot or damp room, or in a hot automobile in the sun.

6 Compliance Information

6.1 EU Compliance

6.1.1 CE statement

 Tobii Pro Spectrum is CE-marked, certifying compliance with the essential requirements for health, safety, and environmental protection requirements for the European Single Market. Tobii Pro Spectrum complies with the following directives:

- 2014/35/EU (LVD) – Low Voltage Directive.
- 2014/30/EU (EMC) – Electromagnetic Compatibility Directive.
- 2011/65/EU (RoHS) – Restriction of Hazardous Substances Directive.

6.1.2 Other EU directives and regulations

Tobii AB and Tobii Pro Spectrum comply with the essential requirements of the following EU directives and regulations:

- 2012/19/EU (WEEE) – Waste Electrical and Electronic Equipment Directive.
- 1907/2006 EC (REACH) – Registration, Evaluation, Authorization and Restriction of Chemicals.

Furthermore, Tobii AB complies with applicable parts of the Directive 94/62/EC on packaging and packaging waste.

Manufacturer Contact Information

Tobii AB
Karlsrovägen 2D
S-182 53 Danderyd, Sweden

6.2 UKCA Statement



Tobii Pro Spectrum is UKCA-marked, certifying compliance with the essential requirements for health, safety, and environmental protection requirements for the GB market. Tobii Pro Spectrum complies with the following statutory instruments:

- The Electrical Equipment (Safety) Regulations 2016. UK Statutory Instruments 2016 No. 1101.
- The Electromagnetic Compatibility Regulations 2016. UK Statutory Instruments 2016 No. 1091.
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. UK Statutory Instruments 2012 No. 3032.

6.2.1 Other UK Legislation

Tobii AB and Tobii Pro Spectrum comply with the essential requirements of the UK regulations regarding WEEE, REACH, packaging and packaging waste.

UK Importer Contact Information

Tobii UK Limited

1st Floor, Advantage House, 87 Castle Street

RG1 7SN Reading, United Kingdom

6.3 FCC interference statement

Tobii Pro Spectrum has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Tobii Pro Spectrum generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If Tobii Pro Spectrum does cause harmful interference to radio or television reception, which can be determined by turning Tobii Pro Spectrum off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between Tobii Pro Spectrum and receiver.
- Connect Tobii Pro Spectrum into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifications not expressly approved by Tobii AB could void the user's authority to operate Tobii Pro Spectrum under FCC rules.

U.S. Responsible Party Contact Information

Tobii Technology, Inc.

12007 Sunrise Valley Dr # 400

Reston, VA 20191, USA

6.4 ISED statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

6.5 NRTL listed



Tobii Pro Spectrum head unit is ETL Listed. Control number 5001591.

6.6 Australia and New Zealand compliance



Tobii Pro Spectrum is registered in the Australian National Equipment Registration System.

Tobii Pro Spectrum is RCM-marked which signifies compliance with the Australian and New Zealand product safety requirement for electrical and electronic equipment according to EESS and radio communication and electromagnetic compatibility according to ACMA.

6.7 Korea compliance



Tobii Pro Spectrum is KC-marked which signifies compliance with Korea's product safety requirements for electrical and electronic equipment.

Certificate number:
R-REI-TBI-ProSpec

6.8 Safety compliance

Tobii Pro Spectrum complies with the following standards:

- EN IEC 62471:2008, Photobiological safety of lamps and lamp systems.
- EN 62368-1:2014 +A11, Audio/video, information and communication technology equipment - Part 1: Safety requirements.
- IEC 62368-1:2018, Audio/video, information and communication technology equipment - Part 1: Safety requirements.
Including national deviations for European Group, Australia, New Zealand, China, Japan, USA, and Canada.
- UL 62368-1: 2019 Ed.3+R:22Oct2021, CSA C22.2#62368-1:2019 Ed.3 + U1, Audio/video, information and communication technology equipment - Part 1: Safety requirements.

6.9 EMC compliance

Tobii Pro Spectrum complies with the following standards:

- EN 55032:2015/A11, Electromagnetic compatibility of multimedia equipment - Emission requirements.

- EN 55035:2017/A11, Electromagnetic compatibility of multimedia equipment - Immunity requirements.
- FCC 47 CFR Part 15, Subpart B, Class B.
- ICES-003 Issue 7 Class B, Information Technology Equipment (including Digital Apparatus).
- CISPR32:2015, Electromagnetic compatibility of multimedia equipment - Emission requirements (International standard accepted in AS/NZS and Japan).
- KN32, Electromagnetic interference prevention test for multimedia equipment.
- KN35, Electromagnetic wave immunity test for multimedia devices.
- EN 61000-3-2:2014, Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase).
- EN 61000-3-3:2013, Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.

6.10 RoHS compliance

RoHS compliance for Tobii Pro Spectrum is achieved by following the standard:

- EN IEC 63000: 2018, Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances.

6.11 Waste disposal and recycling

Tobii AB is committed to reducing the environmental impact of our products throughout their life-cycle, from manufacturing to use and disposal. We are a member of various compliance schemes for collection, recycling and re-using of electronic waste, batteries, and packaging of our products.



Tobii Pro Spectrum is marked with the crossed-out wheeled bin symbol, which indicates that it must not be disposed of with household waste. You can return your used Tobii Pro Spectrum to one of the municipality's recycling centers free of charge.

Due to the size of the eye tracker, Tobii Pro Spectrum is eligible for Tobii's Take-back program. We encourage our Tobii Pro Spectrum customers to arrange recycling with a local recycling partner, to avoid emission from transport.

For more information about the WEEE directive and recycling at Tobii AB, please visit: [How we run our business](#)

or



7 Product care and liability

7.1 Transportation and storage

Before storage or shipping, disconnect all cables and use the travel case and packaging materials provided.

For transportation and storage, the recommended range for temperature and humidity for the device is as follows:

- **Temperature:** -40°C to 70°C (-40°F to 158°F)
- **Humidity:** 20% to 95% (no condensation on the device)



Tobii Pro Spectrum is not waterproof or water resistant. The device should not be kept in excessively humid, damp or wet conditions. Do not submerge the device in water or in any other liquid. Be careful not to spill liquids on the device.

7.2 Cleaning

Before cleaning Tobii Pro Spectrum, unplug all cables. Use a soft, slightly damp, lint-free cloth. Avoid getting moisture in openings on the device. Don't use window cleaners, household cleaners, aerosol sprays, solvents, alcohol, ammonia, or abrasives to clean the device.



Keep in mind that scratches on the front surface of the eye tracker may cause impaired eye tracking performance.

7.3 Disinfection

The surfaces of Tobii Pro Spectrum can be cleaned with Isopropyl alcohol using a moist, soft, lint-free, non-scratching cloth. Do not let liquid Isopropyl alcohol enter into the unit. Be careful not to scratch the front filter surface as it is part of the optical system and scratches will reduce the product's performance.

7.4 Disposal of the eye tracker

Do not dispose of your Tobii Pro eye tracker in general household or office garbage receptacles. Follow your local regulations for the proper disposal of electrical and electronic equipment.

7.5 Limitation of liability

Except where prohibited by law, Tobii AB is not liable for any loss or damage arising from the use or misuse of a Tobii eye tracker or the mounting plate, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence, or strict liability.

Appendix A Nonhuman primate modes

Tobii worked closely with primate labs around the world to develop new image collections to train our systems and continually develop our software. By capturing eye movements while untrained and with naturalistic head movement, primates can choose for themselves whether to interact with the screen or not during an eye tracking study. The improved calibration process makes it easier to calibrate energetic participants.

Tobii Pro Spectrum has different eye tracking modes for different groups of nonhuman primate species, due to differences in physical appearance (facial and eye features). Each eye tracking mode was developed using data from the respective species or group of species.

A1 Great ape

The following species are currently supported by Tobii Pro Spectrum:

- **Chimpanzee** (*Pan troglodytes*) - adults
- **Bonobo** (*Pan paniscus*) - adults
- **Gorilla** (*Gorilla gorilla*) - adults
- **Orangutang** (*Pongo abelii*) - adults

A2 Monkey

The following species are currently supported by Tobii Pro Spectrum:

- **Rhesus macaque** (*Macaca mulatta*) - adults and infants
- **Long-tail macaque** (*Macaca fascicularis*) - adults

A3 Small monkey

Tobii Pro Spectrum is tailored for the following species:

- **Common marmoset** (*Callithrix jacchus*) - adults
- **Rhesus macaque** (*Macaca mulatta*) - infants

Appendix B Recommended monitor

Tobii Pro Spectrum is supplied with a thoroughly tested and approved 23.8" 16:9 LCD monitor. Our recommendation is to use this monitor, which has been tested for weight, dimension and center of gravity for the system set up with the eye tracker unit and screen mounting solution. If you need to use a different monitor, we recommend that you choose a black monitor without any colored décor elements and that the screen bezel is as slim/thin as possible. No connections or buttons should be located underneath the monitor as this could interfere with the mounting of the eye tracker. The monitor must be equipped with a standard 100 x 100 mm VESA mounting interface on the back and it should not weigh more than the supplied monitor.



The eye tracker has undergone tipping tests with the supplied monitor attached. If you choose to use a different monitor, Tobii cannot guarantee the safety of such a combination and you will use it at your own risk.

Appendix C Limitations and considerations

C1 Intended use



Tobii Pro eye trackers are intended to be used in research activities about human behavior including eye movements, in a dry and dust free indoor environment. The product should only be used as described in this User Manual. Please read the User Manual and other supplied documentation thoroughly before using the product.

C2 Light conditions



We recommend that eye tracking studies be performed in a controlled environment. Sunlight should be avoided since it contains high levels of infrared light which will interfere with the eye tracker system. Sunlight affects eye tracking performance severely and longer exposure can overheat the eye tracker. This eye tracker is not designed for exposure to (direct) sunlight. Eye tracking generally does not work in strong direct sunlight.

Shielding the eye tracker adequately from the sun may prevent sunlight from interfering with eye tracking.

C3 Eyelashes



Long eyelashes can be obstructive when the participant's eyes are less open, especially if the participant is wearing mascara. In rare cases, eyelashes may completely block the view of the participant's pupils, making eye tracking impossible.

C4 Droopy eyelids



Droopy eyelids or otherwise obstructive eyelids can block the view of the participant's pupils. In rare cases, such eyelids may completely block the view of the participant's pupils, making eye tracking impossible.

Appendix D Customer Care, training, and warranty

D1 Customer Care

For technical issues, please contact Tobii Customer Care via [Tobii Connect](#). To receive assistance as quickly as possible, make sure you have access to your eye tracker and, if possible, to an internet connection. You should also be able to supply the serial number of the eye tracker, which you can find on the back or bottom of the device.

D1.1 Get help

Many questions can be answered by visiting Tobii Connect. It contains the latest information about contacting Customer Care, helpful articles and FAQs, links to downloads, and much more. Log in or register to see information about your account and to reach Customer Care on [Tobii Connect](#).

D2 Training and education services

If you are new to eye tracking, or want to extend your knowledge about eye tracking research, sign up for one of our online sessions, onsite trainings, Tobii Academy, and more on [Training and education services](#).

D3 Warranty information

Read more online about [Tobii limited warranty and Tobii Care](#) (PDF download).



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Support for your Tobii product

Get help

Visit [Tobii Connect](#) for help with your Tobii device. It contains the latest information about contacting Customer Care, documentation, courses, articles, and more.

Contact your solution consultant or reseller

For questions or issues with your product, contact your Tobii sales representative or authorized reseller for assistance. They are most familiar with your personal setup and can help you with tips and product training.