

## H6HSCN Optics

## Chinrest Mounted Eye Tracking System



The H6HSCN module connects to the EYE-TRAC®6 Control unit providing a versatile high speed chinrest mounted eye tracker. The small multiple speed camera tracks at 120, 240 or 360 Hz. The chinrest optics are mounted on an adjustable chinrest that can be easily clamped to any stable surface. Chinrest mounted optics are recommended in situations where the subject's head movement can be restricted.

### The many advantages of the H6HSCN chinrest mounted solution are :

- A comfortable but secure adjustable chinrest.
- A flexible choice of methods for capturing the scene image including a chinrest mounted scene camera or a scan converter (from computer image).

- Constant visual feedback throughout entire tracking sessions.
- Automated features with manual overrides for challenging participants.
- A method for directing the eye image to the camera with a small monocular beam splitter



mounted to a flexible boom arm, providing the adjustability needed to capture a wide variety of participants over multiple viewing areas and conditions.

- A software Development Kit (SDK), which provides access to the eye tracker controller port, serial out port and to data files recorded by the ASL interface program.

- A standard 15 foot cable connecting the optics to the control unit, with custom configuration available up to 50 feet.

The eye tracker provides constant feedback indicators superimposed on both the eye and scene images, allowing the operator to monitor the status and quality of the measurement.

The gaze point can be displayed as a cursor or a cross hairs on the scene image. A videotape or digital recording of the scene image can be created as a permanent record.

Recorded data include time, horizontal and vertical eye position in relation to the head, and pupil diameter. External events-marks can be recorded along with eye tracking data.

Data recorded with the EYE-TRAC®6 operating software automatically includes participant calibration data as well as all eye tracker set-up, parameter, and configuration information. Descriptive user information can also be entered.



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## Optional Equipment

The H6HSCN Optics is part of the ASL EYE-TRAC®6 Series. The ASL EYE-TRAC®6 Series offers the most eye tracking configuration options. This provides the greatest flexibility for your research requirements today and tomorrow.

- The H6HSCN Optics can be configured with flexible light-weight headband or with two optics modules for binocular tracking.
- New optics can be added at any time.
- System components and software can be shared among collaborators for greater allocation of time, funding, and resources.



\*All eye camera optics are configurable with control unit

H6HSCN optics can be configured with a laptop or desktop PC.

## Chinrest Measurements

Chin cup position is adjustable, as well as the base of the chin rest. The chinrest measurements are the following:

- The distance between the table and the base of the chin cup holder can be adjusted between 6.5" and 10.25"
- The distance between the table and the chin cup can be adjusted between 10.75" and 16.25"
- The width between the forehead chinrest ears is 10" wide.
- The depth on the forehead chinrest is 8"
- The adjustable table mount will attach to any support with a thickness of 2" or less.

## Training & Technical Support

ASL is committed to assisting researchers before, during and after the eye tracking data acquisition.

Unlimited technical support and free access to updates on the interface software are available at all times. Multiple licenses of the interface program are available at no additional charge.

We offer free scheduled training at our Bedford, MA (Boston) location for the life of the equipment. On site training is also available. Please check out our website for upcoming training sessions.

# Data Analysis Tools

## ASL Results

A comprehensive eye tracking data analysis package is available with each EYE-TRAC®6 series. ASL Results quickly reduces raw data to user definable fixations and matches those fixations with Areas of Interest (AOI). Includes several statistical parameters as well as creative meaningful visualization of data including heatmaps

## Gaze Tracker

Gazetracker 8.0's user interface includes:

- Time line view– Superimposes a variety of information, including Look Zones, website entrance and exit, input events and pupil data onto a single graph
- Spotlight– The inverse of a heat map bringing increased clarity where users focus the most attention

## Interact

INTERACT 8-ASL Edition streamlines frame by frame video analysis providing meaningful eye tracking data. This software solution is consistent with ASL's commitment to expand and enhance the use of eye tracking.

## Technical Specs

Sampling rate:	120/240/360Hz
Measurement Method:	Pupil-cornea reflection Pupil only.
Accuracy:	0.5° Visual Angle
Resolution:	.0.10° Visual Angle
Visual Range:	50° horizontal 40° vertical
Real Time	
Data Outputs:	X and Y gaze coordinates Horizontal and vertical pupil measurements Two analog outputs One video output
Distance from participant to control unit:	Standard 15 foot cable from control unit to head mounted optics. Custom lengths are available