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Commercia

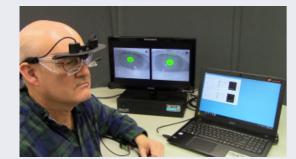
Lab Research

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# Medical Diagnostics/Impairment Testing

Measurements of eye movements and pupil size responses to various visual, pharmacological and mechanical stimuli can be used to assess many neurological and psychological conditions and help to diagnose disorders. ISCAN offers several head mounted and stand alone platforms to make these measurements at appropriate sample rates and resolutions as well as deliver stimuli to elicit the eye response, if necessary. Once a test is verified as effective, ISCAN can deliver customized production components to help realize a finished commercial product for our customers. Some test areas include concussion testing, autism and attentiveness testing/training, balance system and caloric testing, ophthalmic perimetry, early detection of multiple sclerosis, strabismus characterization, pharmaceutical testing, as well as "fitness-for-duty" alcohol, marijuana and other substance impairment testing.



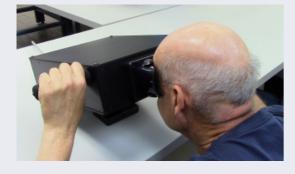
## DuoSight™ Binocular Head Mounted Eye Tracking Platform

The DuoSight platform (ETL500B) is a comfortable and easily adjustable head mounted configuration for collecting raw eye movement and pupil diameter data from both eyes simultaneously. The standard system operates at 60 Hz but can be ordered for operation at up to 500 Hz. The DuoSight-PT (ETL510B) is a similar system but with portable electronics and a laptop computer for data collection, running at 60 Hz. Monocular versions are also available.



#### StimuSight-LST™ Head Mounted Eye Tracking Platform with LED Stimuli

The StimuSight-LST platform (ETL520A) integrates monocular eye tracking with LED stimulus generation to elicit both pupil diameter and saccadic eye movement responses at a 120 Hz sample rate. The standard head mounted unit is lightweight and accommodates a wide range of subjects.



### StimuSight-SO™ Stand Alone Eye Tracking Platform with LED Stimuli

The StimuSight-SO platform (ETL420A) is a rugged stand alone platform that can be fixed to a horizontal surface. User subjects look into the unit where their eye is automatically tracked in coordination with saccade movement or pupil diameter change inducing LED stimuli at up to 120 Hz. This platform is used extensively in "fitness-for-duty" impairment testing.



#### StimuSight-HMD™ Head Mounted Eye Tracking Platform with Full HMD

The StimuSight-HMD platform (ETL530A) incorporates binocular eye tracking into a full-up head mounted display at sample rates of up to 240 Hz. The system is the ultimate choice for stimulus design flexibility and can be employed for countless diagnostic testing purposes. If needed, ISCAN can custom integrate the StimuSight eye tracking components into many commercially available HMDs.

MegaView-SR™ Remote Mounted Eye Point-of-Regard Tracking System

1st Place - 2014 Tech Briefs Create the Future Design Contest

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The MegaView-SR™ system (ETL340H-SR) is an excellent platform for assessing visual performance in a workstation context without subject contact. Appropriate image stimuli can be presented on the subject's workstation, while the MegaView system calculates and records precisely where the eyes are directed in display-oriented coordinates. This means that the data outputs can be directly matched to the displayed images for automated analysis. The highly engineered eye imaging package is able to automatically acquire, follow and track both of the subject's eyes within a 1 cu.ft. area and comfortable viewing range from the display.

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