220 Hz/440Hz Headlock Eystracker system(Binocular 양안)

Now you have the option of a head fixed *ViewPoint EyeTracker* ® system running at 220 Hz/400Hz. Calibration is performed with respect to a computer screen or projector display.

- Use with your own method of head stabilization or alternatively with our NEW *Ultra Precision Head Positioner*.
- The 90 Hz system is USB based and so can be run on a lap top computer.
- Can be supplied with different lens options to suit your required camera to eye working distance.

Item	Specs
Tracking Method	Infrared video. Dark pupil. Monocular or binocular options.
Software	PC desk top or lap top
Measurement principle	The user can select between three methods: Pupil only, corneal reflection only, or both together.
Accuracy*	Approximately 0.25° - 1.0° visual arc
Spatial resolution*	Approximately 0.15° visual arc
Temporal resolution	220fps, 400fps
Pupil size resolution	Measures pupil height and width to better than 0.03 mm instantaneous (no averaging).
Calibration	ViewPoint starts in a roughly calibrated state that is adequate for determining screen quadrants or other relative movement measurement such as objective preference-of-looking tasks. For accurate position of gaze, calibration is required only once per subject. New subject setup time between 1-5 minutes. Calibration settings can be stored and reused each time a subject returns. Easy Slip Correction feature and re-presentation of stray calibration points.

Auto threshold	The program scans over the video image for the pupil and / or for the corneal reflection. The luminance threshold for discriminating these can be adjusted. The auto threshold feature provides good threshold levels automatically. Little or no manual adjustment required.
Blink suppression	Automatic blink detection and suppression.
Data recorded	Eye data: X, Y position of gaze, pupil height and width, ocular torsion, delta time, total time, and regions of interest (ROI). Asynchronous records include: State transition markers, key presses, data from other programs. Data is stored in ASCII files.
Real-time communication	Same computer: Software Developers Kit (SDK) supplies everything you need for seamless interface between ViewPoint and your program. This includes: DLL with shared memory, .h and .lib files plus sample source code written in C Language. Serial port: Sends eye data packets and asynchronous packets equivalent to information in ASCII data files at rates of up to 56K. Receive real time data from other programs and store it asynchronously into data files. AnalogOut option: Selectable unipolar or bipolar voltage ranges: +/- 10, 5, 2.5 Selectable data items: position of gaze (x,y), pupil (h,w), velocity (dx,dy), and raw pupil, glint or vector data. TTL capabilities. 2 or 4 channel options. TTL in/out option: Eight TTL input channels are interfaced to place marker codes into the ViewPoint data file or to trigger instructions. Eight TTL output channels that can indicate for example when the position of gaze is inside ViewPoint region of interest areas ROI-0 to ROI-7. Ethernet: full real-time synchronization across machines via the ethernet.
Real-time display	Gaze position and fixation duration displayed over scene image as the subject views it. Real-time pen plots of X and Y position of gaze, velocity, ocular torsion, pupil width and pupil aspect ratio etc.