

EYETRACKER

Cybernet's **EyeTracker System** reproduces an image of the real world marked by the user's gaze location. The EyeTracker also provides a means to observe the pupil with a sophisticated system at a low cost. The head mounted eye tracker works with the supplied Unixbased computer system to bring you a customizable and easy to use graphic interface. Its lightweight head piece allows extended usage with physical convenience.

WHAT'S INCLUDED

The system consists of two lightweight head-mounted cameras (color scene and monochrome), power supply, an eight-foot cable to allow user mobility, and a Unix-based computer complete with a 15" color monitor and video frame grabber. In addition, each eye tracking system includes software capabilities that can customize the formatting of data output. Left, right, or dual eye tracking is available.

How it Works

Using reflection and video capture technology, infrared (IR) light safely illuminates the dark pupil as the monochrome eye camera captures the corneal reflection. The Unix workstation reads the reflection to produce the glint measurements while the computer monitor displays a real-time scene of the eye's field of vision. With accuracy within 1 degree of visual angle, the glint marks the pupil's gaze point on the screen.

POTENTIAL USES

Cybernet's EyeTracker allows hands-free control of computer interface systems and eliminates the need for a mouse or joystick. Furthermore, it allows you to run experiments remotely by linking together other Windows based computers to the central Unix station. The numerous configuration possibilities give more flexibility for research such as human-operator performance assessment and psycho-physiological studies.

