CyberEye™
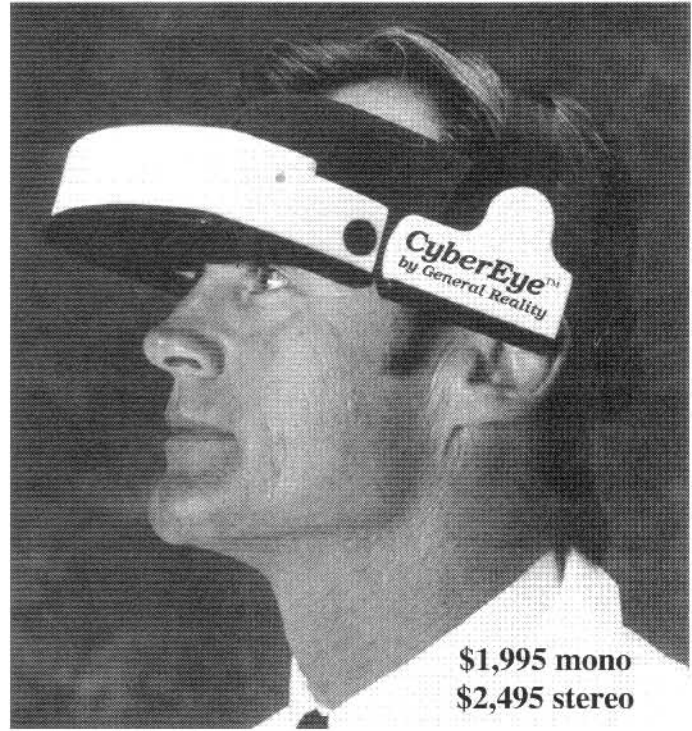## by General Reality

Model 100 & Stereo 100S
Head-Mounted Display
for Professional Applications

CyberEye is the unique patent-pending HMD designed for comfortable extended wear in professional applications ranging from minimally-invasive surgery to virtual reality content development.

$1,995 mono
$2,495 stereo

CyberEye was not designed for video games, where weight and optical performance can be sacrificed for a few short minutes of deep immersion in an indestructible helmet. Instead, CyberEye provides crisp, undistorted images equivalent to a 7-foot-wide TV screen just 12 feet away, in a device weighing less than a pound. CyberEye's eight individual adjustment points support a wide range of user requirements, including eyeglasses, full immersion, and simultaneous immersive/desktop work. All at a price that finally makes real-world applications a real possibility.
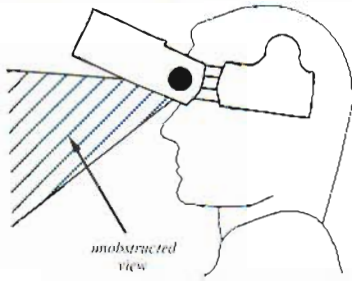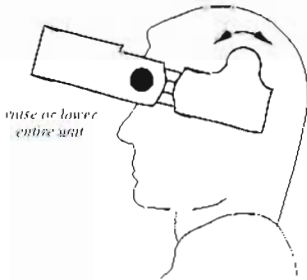
Applications

Virtual Reality - develop better tools or entertainment content faster with CyberEye by glancing up from your desktop to see your synthetic world instantly. Or, look up for a CAD walk through.

Inspection and Maintenance - view camera, borescope, ultrasound, or infrared thermographer output anywhere, without carrying a bulky monitor that washes out in the sun.

Surgery and Microscopic Assembly - avoid cervical spine ailments and loss of eye-hand coordination caused by turning to view stationary video monitors.

Disability Reduction - display lecture text to hearing-impaired audience members, or enlarge computer text for the visually impaired.

Portable Theater - plug into your camcorder and press "play" for an awesome home theatre anywhere you go. Press "record", and you have the most convenient viewfinder imaginable.

Security - monitor remote cameras continuously while "making the rounds", or watch covertly without a bright monitor attracting attention.

More - headtracker options let you slave a remote camera's bearing to your line of sight, or navigate around a large projected schematic without using your hands. What's your application?
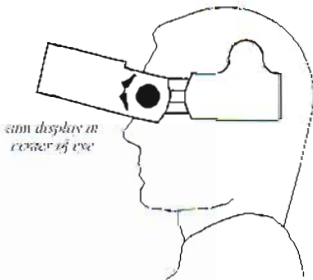
HOW CyberEye WORKS

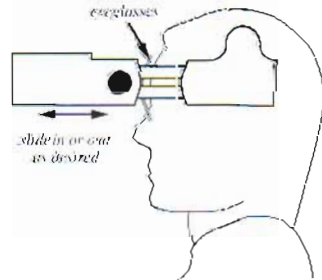Patent-pending design allows you to glance up into display, or look out for an unobstructed view of the work at hand.

unobstructed view

Raise or lower display at the rear pivot to adjust between immersive and non-immersive viewing, or to tip entire unit out of the way.

raise or lower entire unit

Once positioned according to your needs, tilt the display at the front pivot to aim image at the center of your eye. This minimizes fatigue.

aim display in center of eye

Slide the display module in and out to accommodate glasses and adjust level of immersion.

eyeglasses

slide in or out as desired

VISUAL PERFORMANCE SPECIFICATIONS

- Display Type: Dual active matrix LCD
- Contrast Ratio: 100:1
- Resolution: 420 x 230 (96,600) pixels per eye (triad)
- Field Of View: 22.5° H x 16.8° V (27.5° diag.)
- Pixel Size: Approx. 3.2 arc min.
- Apparent Image Distance: Adjustable from ten feet to infinity
- Image Size: Equivalent to 7 ft. wide at 12 ft. away
- Input Signal: NTSC (2 NTSC inputs for stereo model)
- Input Connectors: RCA plug(s) and BNC plug(s)
- Optical Adjustments: Focus & interpupillary spacing
  Brightness (push-button on beltpack)

AUDIO PERFORMANCE SPECIFICATIONS

- Earphone Type: Dual in-ear stereo privacy buds
- Frequency Response: 20hz - 20khz
- Distortion: <3% THD @ 1W max.
- Signal To Noise: 60db, with 30db channel separation
- Connections: Dual RCA plugs
- Adjustments: Volume & mute (buttons on beltpack)

TRACKER SPECIFICATIONS (OPTIONAL)

- Tracking Method: Electronic compass plus tilt sensor
- Degrees of Freedom: 3 (bearing, pitch, and roll)
- Tracking Sample Rate: 8hz (latency <150msec.)
- Accuracy: ±0.5° RMS heading; ±0.2° tilt
- Resolution: 0.1° heading; 0.2° tilt
- Repeatability: ±0.1° heading; 0.2° tilt
- Operating Range: 360° horizontal; ±25° tilt
- Tracking Data Output: ASCII into RS-232C serial port
- Drivers Available: World Tool Kit, VREAM, mouse, etc.

MECHANICAL/OTHER SPECIFICATIONS

- Weight: 14 oz eyewear (+2 oz for tracker)
  8oz beltpack (Stereo:16oz)
- Operating Temperature: 0 to +120 degrees F
- Storage Temperature: 0 to +158 degrees F
- Power Adaptor: UL approved, Class 2, 7.5V/0.9A max.
- Power Consumption: 1.4W @ 7.5 volts DC
- Warranty: Limited warranty, 90-day parts & labor
- Accessories Provided: 1.5 meter RCAx3 audio/video cable
  "Y" connector for mono video w/100S

OPTIONAL ACCESSORIES

- Rugged, padded travel case w/ lock & shoulder strap
- Wireless kit: video & tracker sender/ receiver + rechargeable battery
- High-performance VGA/NTSC or RGB/NTSC converter
- System integration including stereoscopic video cards, software, etc.

Please Contact:

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