Liquid Image Corporation

THE MRG2

HEAD MOUNTED DISPLAY

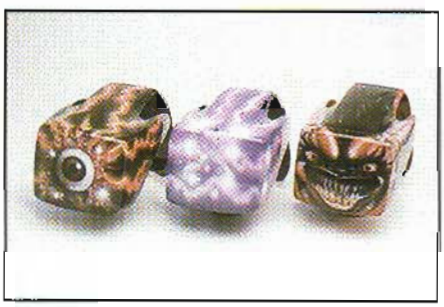
1994 **WINNER** OF THE MECKLER MARKET IMPACT AWARD

"The MRG2 HMD is the VR - industry workhorse - designed for rugged use and real work applications. Moreover, the Liquid Image team is professional, customer oriented and committed to advancing the art of immersive display technology."

Jack Skully
Vice President
Ascension Technology Corp.

Options

- Your HMD can be uniquely styled with custom decals, silk-screening and air-brushing.
- A wide range of microphones can be internally mounted.
- A Holographic Diffuser specifically designed for the MRG2 can be installed.
- Specialized service and supply agreements available.
- We can provide you with a virtually indestructible carrying case.



"In a product category where everyone is racing for technological superiority, we feel that your features of ruggedness and appearance are extremely innovative.

... Beyond that, your company, with its strong attention to your customers, sets a high standard for the industry ... one which I wish other companies would strive for."

Randy T. Sprout
Horizon Entertainment

The MRG2 was designed for active, energetic and high volume environments. The technical capabilities of this HMD have been utilized by clients whose applications range from arcade entertainment to military simulation and also university research.

This industry-wide recognition has earned the Liquid Image MRG2 the 1994 Meckler Award for Market Impact.

Image courtesy of Department of National Defence - Defence and Civil Institute of Environmental Medicine

"...the technology is now advanced enough to be put to practical application by affording a low-cost, portable alternative to conventional display technologies for simulator training.

The MRG2 performed excellently, without fault, during our trials."

Lochlan E. Magee, Ph.D.
National Defence
Defence and Civil Institute
of Environmental Medicine

Specifications

Field of View:	84 deg Horizontal, 65 deg Vertical
Resolution:	240 x 720 (172,800 Display Dots)
Display:	Single Full Colour, Active Matrix LCD
Video Signal:	Composite or Analog RGB
Input Signal:	NTSC or PAL

(Detailed technical specifications are available upon request)

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Printed in Canada on Recycled paper

First came

VIRTUAL REALITY

Virtual reality, or VR as it's commonly known, envelops you in an artificial world, one that "feels" real and responds to body movements similar to the way the real world does. Through the miracle of VR technology, computer hardware, image projection and sound systems are combined with computer software to create an artificial world with the sensations of realistic, three-dimensional space. VR systems immerse you in the sights and sounds of the computer-generated world known as *Cyberspace*.

The most powerful VR effect is created through the use of a head-mounted display (HMD). However, HMDs have been known for discomfort, weight, and displays which lack picture quality, resolution and wide field of view. *Until now...*

Now, there's

MIRAGE

MIRAGE *was developed with the user in mind,* solving many of the problems that currently plague HMDs. Mirage is a biocular HMD that uses a 5.7"(14.5cm) diagonal, thin-film transistor (TFT), active matrix LCD display. This new display, produced by the experts at Sharp, boasts ***the best picture available*** in an LCD screen of this size and weight. With a resolution of 240 x 720 pixels, using over 16 million colours, its picture quality is greater than anything in its class. The revolutionary new active matrix system eliminates all the "ghosting" effects, flicker, and striping that appear on passive matrix LCDs. And Mirage's ***new cold cathode backlight***—which lasts twice as long as hot cathode backlights—reduces the frequency of breakdowns and maintenance common with other LCD displays.

With Mirage, there's no need to purchase additional expensive add-ons like other companies require to operate their systems—everything you need to operate the Mirage is included in its price. This new-generation HMD boasts ***a custom-built control module*** that accepts video and audio inputs from a host of different sources. The Mirage control module allows RGB or composite signals conforming to the NTSC standard to be input, and then outputs the signal to the HMD and an external monitor or projection system for public viewing. Mirage's ***Sony digital headphones*** ensure high-quality audio output. A PAL version of the Mirage is also available.

Mirage's ***ergonomically-designed shell*** enhances user performance, with a field of view exceeding 110°, a product weight significantly lighter than other comparable HMDs, and ***a simple slip-on, slip-off design***. This unique Mirage HMD feature increases productivity in the entertainment market, and facilitates use by researchers and developers.

These features, coupled with Liquid Image Corporation's committment to leadership in customer service and quality, make Mirage the smart choice for discriminating VR enthusiasts. We offer prompt delivery door-to-door, and competitive pricing that includes all taxes, delivery, duty, and broker's fees. With all these advantages, and a one year warranty on parts and labor, it's plain to see that Liquid Image Corporation is prepared to serve your business.

If you want the best HMD available for under $10,000 U.S., this is it!

MIRAGE

HEAD-MOUNTED DISPLAY

SPECIFICATIONS

General:	Biocular, self-adjusting, lightweight HMD
Display:	Full color TFT–LTD display (16.5 million colors); Pixel count: 240×720 (V×H); Dot pitch: 0.365mm x 0.158mm (V×H); Color pixel arrangement: RGB Delta; Response time: 80 msec.; Contrast ratio: 30:1; Display dots: 172,800
Optics:	Clear proprietary lens
Field of View:	Approximately 110°
Video Signal:	Composite/analog RGB
Audio:	Sony stereo headphones built-in; model # MDRV200 digital
Position Sensing:	Accomodates the Ascension Bird, 3-space Fastrak (mounting provisions only; contact the factory for other options.)
Power Supply:	120/230 volt AC to 12 volt DC
Fit Adjustment:	None; totally self-adjusting. Ratchet system for fitting children (optional)
Cable Length:	3 meters (approx. 10 feet)
Input Signal:	NTSC (PAL option available)
Control Module:	Allows for composite or analog RGB signal; Allows for video pass-through so that an external monitor can be hooked up for external viewing

OPTIONS

Positional Tracking:	Ascension Bird (pre-mounted); Ascension Flock of Birds (one pre-mounted)
Mirage Add-on Features:	Head-mounted microphone; Cable extensions (up to 25 feet); Control module and display for PAL video standard

For further information, please contact:

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Printed in Canada