



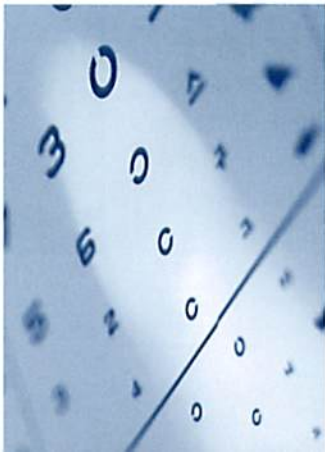
THE
LOW VISION
CENTERS OF INDIANA

A DIVISION OF THE EYE ASSOCIATES GROUP, LLC

LOW VISION EYEWEAR

the best
technologies

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www.eyessociates.com

Low Vision EYEWEAR

the best technologies

Selected by the Doctors of the Low Vision Centers of Indiana

Our doctors are among the most experienced in the world in prescribing eyewear for the low vision patient. Today, a wide range of new and exciting low vision eyewear options are available to aid activities such as reading, driving and viewing television. Better cosmetics and the arrival of auto-focusing eyewear are among the new innovations.



Low Vision Reading Eyewear

Prismatic Microscopic Reading Eyewear

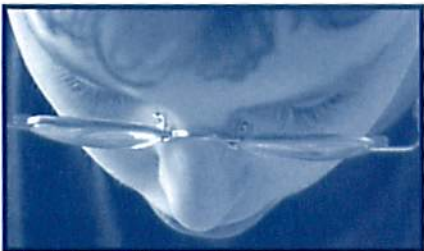


Prismatic Microscopic Reading Systems are high power reading glasses that include a strong prism component that allows both eyes to work comfortably together at close distances. These systems come in powers of 1.3X to 4X power. These systems are best for patients with vision from 20/60 to 20/200.



Noves Diffraction Reading Microscopes

Noves Reading Microscopes are unlike any other, because they do not use curved optics to create power. Instead, they use revolutionary diffraction optics. This allows them to be very thin and thus highly cosmetic. They are available in both high power monocular and binocular corrections with base-in prism. They can be helpful in patients from 20/60 to 20/300.



The New Thinner Noves



Thicker Traditional Eyewear

Low Vision Executive Bifocal

High Add Executive Bifocals provide a wide field of view in powers of 4 to 16 diopters. They are created by fusing two separate lenses into a bifocal correction. By fusing two different lenses together, the reading portion can contain high amounts of base-in prism needed to improve vision and comfort. This system works well for patients with a range of vision from 20/60 to 20/280.



UniVision Microscope Bifocal

The UniVision Microscopic Bifocal is a single lens microscope that is attached in our laboratory to the front of single vision glasses to form a microscopic bifocal. The UniVision lens is a small acrylic lens, which is about the size of a quarter and has an excellent cosmetic appearance. UniVision microscopic

bifocals are available in powers of 2X to 10X magnification. Our doctors have used these systems for patients with vision of 20/80 to 20/280.

Type R Microscopic Bifocal

The Type R Microscopic Bifocal was invented by the late Dr. William Feinbloom, America's foremost pioneer in low vision eyewear. The

Designs for Vision Type R Microscopic Bifocal provides excellent reading optics in magnification powers of 2X to 10X. The cosmetic appearance is good. These systems require a close working distance for reading, but the quality of the image is outstanding. Our doctors have prescribed this system for patients with vision ranging between 20/60 to 20/600.

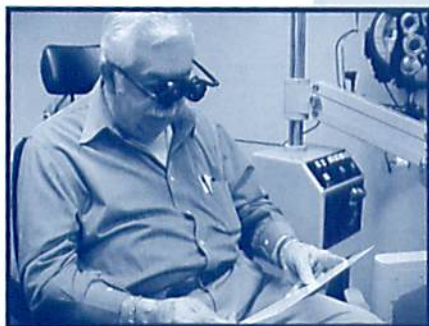


Wide Angle Microscopic Reading Eyewear

Wide Angle Microscopic eyewear is used for patients with severe vision loss. They are made in powers of 10X – 20X powers, but require a very close working distance for reading. They are worn only for reading. They are helpful for patients with severe vision loss with visual acuities from 20/300 to 20/800.



Near Beecher



The amazing Beecher Mirage system has been modified to create the Near Beecher, a dedicated near vision system that allows both eyes to see together at selected distances of 10 to 17 inches.

The tubes of the Near Beecher are angled inward to allow both eyes to aim at the same spot when looking up close. Additional lens powers have been added to the objective lenses to focus accurately at near. The Near Beecher allows a longer and more natural working distance. It is also helpful at the computer. It is most helpful for patients with vision from 20/60 to 20/400.

Ziess G1.8



Carl Zeiss Inc. is one of the world's foremost makers of fine optical instruments. Many of the surgical microscopes used by eye surgeons are made by Zeiss. The Zeiss G1.8 is a low powered telescopic system with an exceptionally wide field of view. It is excellent for viewing



television. The Zeiss spectacles can be prescribed for one or both eyes.

This telescopic system has a Galilean design and magnification of 1.8X, therefore additional lenses can be clipped on to the system for activities like sewing or reading. Additionally, bifocal near caps allow the patient to see at distance through the top and at a selected near distance through the bottom of the scope. This system is most effective for vision from 20/60 to 20/400.

Low Vision **BIOPTIC** eyewear

Ocutech Vision Enhancing System® (VES®-II)



The Ocutech Vision Enhancing System® (VES®-II) is an innovative low vision bioptic telescopic system for the visually impaired, which was developed and tested with funding from the National Eye Institute. It comes in 3X, 4X and 6X powers. However, the 4X is the primary power recommended by our doctors. It can be focused for distance and as close as twelve inches. The National Eye Institute study found excellent patient acceptance of this system.



Ocutech VES® Systems are appropriate for a variety of bioptic telescope applications for near, intermediate and far distances, and for a full range of visual activities. It has become a common system we use for bioptic drivers. This system work bests for patients with 20/80 to 20/280.



Beecher Mirage

The Beecher Mirage was developed by the late Dr. Beecher, a world renowned ornithologist from the University of Chicago. It is a lightweight head-borne binocular system available in powers of 4X, 5.5X, 7X and 8X. The system weighs 3.5 ounces and is easily focused for distances from about seven feet to infinity. The expanded field of view and brightness of this optical system make the Beecher excellent for television viewing by patients with loss from macular degeneration. Patients generally report better appearance of colors in television viewing.



A near cap can be attached to one objective lens to allow the Beecher to focus at closer distances such as to see a computer screen. The most common uses of the Beecher Mirage are television viewing, viewing religious services, viewing sports events and driving. Beechers may be used for bioptic driving in some states including Indiana. For driving, we mount the Beecher Mirage over the bridge of the eyeglass frame. Patients in the range of about 20/80 to 20/800 may benefit from a Beecher system.

Autofocus BIOPTIC eyewear

Ocutech VES AutoFocus



The Ocutech Vision Enhancing System-Autofocus (VES-AF) is the first auto focus telescope system designed specifically for the visually impaired. The Ocutech VES-AF provides immediate and continuously clear 4X magnified vision from 12 inches to infinity. With this device, a visually impaired person can move his or her head, shift attention from a book to a person as easily and as



naturally as a normally sighted individual. Ocutech systems have been featured on such television news outlets as PBS, CNN, NBC, ABC and FOX. It has also received coverage in many newspapers and in magazines such as the *New York Times*, *Popular Science* and *Popular Mechanics*. Our



doctors were among the first to prescribe this new technology.

Computer controlled infrared technology electro-measures the focusing distance many times per second while another computer controls a miniature motor that moves the focusing lens to the proper position. Special software helps to ensure that the focus is prompt, accurate, and stable. The Ocutech VES-AF makes it easier for the visually impaired to see the blackboard in school, signs while traveling, computer screens at work and home, packages, labels and signs while shopping, and people at a distance, as well as many other applications. The VES-AF can be used for bioptic driving in many states, but the auto focus is set for distance (past 20 feet) then turned off since the active infrared focus would be affected by the windshield. Best results are found in patients with vision of 20/300 or better.

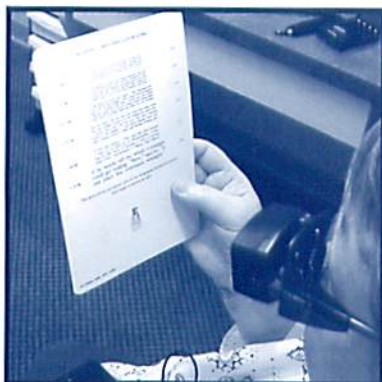


EyeFINE Autofocus Eyewear (Autofocus Overview)

Our doctors fit the first US patient in September of 2003 at the Low Vision Center of Indianapolis. EyeFINE is a revolutionary new low vision aid that merges modern autofocus camera technology with eyewear. The inspiration for eyeFINE began 30 years ago with an idea by Toshinori Tsuchiya, M.D., an ophthalmologist at Miyazaki Chuou Eye Hospital in Japan.

With eyeFINE, many low vision patients can read, watch TV, view

their computer screens, watch sporting events or religious services and do many other things. EyeFINE's autofocus technology will instantly focus wherever the patient looks. The wider field, bright image and instant focus of the



eyeFINE makes this system easy to use. It has a 16.4 degree field of view.

At distance, it provides 3.5X magnification, and at near, it provides 4.7X magnification. It can focus from 12 inches to infinity. EyeFINE's power pack contains four AA nickel-hydride rechargeable batteries which can provide up to 8 hours of use. EyeFINE works well for patients with visual acuities from 20/100 to 20/400.



JORDY

JORDY is a revolutionary head worn, portable, lightweight video magnification system that is battery operated and has been designed for people with active lifestyles. It enables patients to read, write and enjoy TV, movies and hobbies again. It can be used for many other activities including working with your hands, and playing cards.



JORDY can also be placed in a stand and used as a conventional color or black and white CCTV system for reading and writing as well. A tiny chip in the JORDY captures images in the system and presents them up to 25X larger to the patient through tiny liquid crystal displays in the headset. It has a full color display plus two additional levels of contrast. It can function on direct current or by battery.

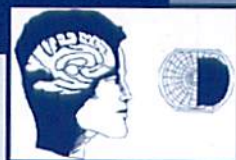


Our doctors were among the first to fit this revolutionary system and helped to introduce the JORDY to other doctors in the United States. CBS Evening News with Dan Rather featured one of our original JORDY patients. Since JORDY can magnify 26X, many patients with severe vision loss may benefit from the JORDY. JORDY has been used effectively by patients with visual acuities from 20/100 to 20/2000.



Eyewear ^{for} VISUAL FIELD LOSS and Double Vision

Gottlieb Visual Field Awareness System for Homonymous Hemianopsia



While various types of prisms and mirrors have been used for over eighty years for hemianopsia patients, it was not until the late 1980s that the revolutionary Gottlieb Visual Field Awareness System improved the way we treat this problem. Patients find they can walk about without fear of running into objects. We find their confidence in independent travel increased greatly. The system is fit on the eyewear lens on the side of the visual field loss. Our doctors have prescribed this system for patients from around the world. It is recommended for patients with

homonymous hemianopsia, but our doctors have also found it helpful in patients with tunnel vision.



The Gottlieb lens has been used in combination with therapy and behind-the-wheel driver's training to help some hemianoptic patients return to driving. Visual

field requirements may vary with each state. Indiana law does allow driving with a homonymous hemianopsia.

Harvard's EP-Horizontal Lens for Homonymous Hemianopsia



The EP-Horizontal Lens is a new system to aid patients with a homonymous hemianopsia, a loss of vision to one side in both eyes, usually caused by stroke, traumatic

brain injury or brain tumors. The lens was invented by Dr. Eli Peli, senior scientist at Harvard University's Schepens Eye Research

Institute. Our doctors have been part of the Harvard research study on this device. It is used to improve mobility in patients with homonymous hemianopsia.



Tunnel Vision Eyewear

Our doctors work with tunnel vision problems from retinitis pigmentosa and other diseases. Our doctors may use prism, reverse telescopes or combine both into one pair of eyeglasses. Patients may function better during walking by being better able to avoid obstacles.



These systems are commonly used when the visual field has declined to less than 20 degrees. Reverse telescopes work better with visual acuities of 20/80 or better. Prism field expanders can be used in cases of poorer visual acuity and visual field loss.



Mins Lens for Double Vision

A new lens is now helping to eliminate double vision while maintaining a good cosmetic appearance for patients. Developed in Asia, this unique lens allows us to block the vision in one eye while maintaining a very good cosmetic appearance. A special surface on the Mins lens blocks incoming vision while allowing the image of the eye to still be seen by others looking at the patient, thus creating a more normal cosmetic appearance.



The most common form of double vision is caused when the two eyes do not point at the same object. In adults, a variety of neurological problems including brain injury and stroke may lead to double vision. When prism, orthoptic therapy or surgery cannot resolve the double vision, occlusion of one eye may be required. In the past, patients had to use black "pirate" patches, tape or filter materials to block their vision. These often had a poor appearance, and the tape or filter did not last. The Mins lens is ideal for individuals with double vision that is not resolved by surgery, prisms or orthoptic therapy.



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