



**SHAW LENS™**  
patent pending

## FACT SHEET

The SHAW™ lens is different. It is the only truly binocular lens system available. The patent-pending, patient-centred methodology of the SHAW lens combines the physics of refractive optics with the physiology of the individual's binocular vision system. The SHAW lens solves aniseikonia.

### **What is aniseikonia?**

There are two types of aniseikonia – static aniseikonia, in which the size of an image is different in each eye, and dynamic aniseikonia, in which the eyes are forced to track vertically and laterally at different rates.

**Static aniseikonia** commonly occurs when a monocular approach is used for people who have different prescription strengths for each eye (anisometropia). A monocular approach results in different image sizes in each eye causing the brain to work to fuse these different-size images together.

**Dynamic aniseikonia** is the same concept as static aniseikonia, but with motion. If eyeglasses aren't made with the consideration of how the two eyes move together, oftentimes the eyes are forced to move at different rates both vertically and laterally.

Clinical experience has indicated that solving dynamic issues is the single most important aspect of patient comfort with a pair of glasses. Conventional lenses induce aniseikonia by the very nature of their monocular approach to lens design.

### **Why does aniseikonia matter?**

Aniseikonia can have a big impact on patient comfort. In dealing with the different sized images that the glasses make, the brain may try to adapt by fighting to focus all the time or by suppressing the image from one eye, or it may not adapt and instead react with headaches, vision distortion or other problems. Often a patient just stops wearing the glasses for any length of time.

Through our patented binocular optimization program, every SHAW lens is designed to effectively eliminate the difference in the size of images in each eye. This provides much better vision, depth perception and comfort in wearing glasses.

### **How does the SHAW lens control dynamic aniseikonia?**

By combining the motor fusion limits (as measured with Risley prisms), the frame dynamics and the prescription, the SHAW lens design software then uses ray tracing algorithms to design a lens that solves both the static and dynamic aniseikonia to within the patient's limits. It can also increase the binocular field of view.

### **Why do patients need to see an optometrist to purchase the SHAW lens?**

Only an optometrist can prescribe and sell a SHAW lens because only an optometrist can perform accurate vergence testing, and that's imperative to solving aniseikonia. Optometrists can download no obligation FREE software at [shawlens.com](http://shawlens.com).

**Is SHAW lens technology available from other lens suppliers?**

The SHAW lens is proprietary technology. We have dedicated specialty manufacturers that maintain an inventory of lens blanks with an extensive base curve range, and we update the SHAW lens software as new product becomes available. Our digital designs are selected from leading wave-front designers according to our extensive evaluation methods.

**Dr. Peter Shaw** Developer of the SHAW lens

Dr. Shaw has been a member of the College of Optometrists of Ontario since 1978. In addition to running a thriving practice, Dr. Shaw is a former Chief of Low Vision, Vision Institute of Canada, has served on many Ministry of Health committees, co-founded the Scarborough Low Vision Centre at Scarborough General Hospital, and was made an Adjunct Associate Professor (Research) at the University of Waterloo in recognition of his work on aniseikonia.

Over his 30 years in primary care and vision rehabilitation, Dr. Shaw has successively developed and experimented with approaches to lens design to help his patients cope with vision-limiting impairments. The SHAW lens is a result of those years of experience.