

- For the first time, a **new cutting-edge eye tracking device** can objectively and accurately measure the degree of **eye misalignment at all distances: the neurolens Measurement Device.**
- These unique measurements led to the creation of a new **contoured prism lens design**, known as **neurolenses.**
- neurolenses are the **first and only prescription lenses** that add a **contoured prism** to bring the eyes into alignment, relieving the **headaches, neck/shoulder pain and eyestrain** that many patients experience when using digital devices, reading or doing detail work.

## What the neurolens Measurement Device Does:



- During the neurolens eye-tracking measurement, patients focus on a single point while a dynamic display of rotating planets and stars activate **peripheral and central vision** to measure distance and near eye alignment.

- The neurolens device measures eye misalignment by providing a real-life **simulation** of how the eyes work together to see at distance and near.



Near (50 cm)



Far (6 meters, simulating optical infinity)

- The device evaluates peripheral and central vision to provide a comprehensive assessment of the patient's eye alignment and synchronization.
- Measurements are calculated to the **one-hundredth of a prism diopter.**
- Results provide a **prescriptive range for neurolenses.**

## Trigeminal Dysphoria

- **Trigeminal Dysphoria** is a visually induced condition resulting from a misalignment in the visual system that causes stimulation of the trigeminal nerve, triggering patient symptoms.

## Symptoms

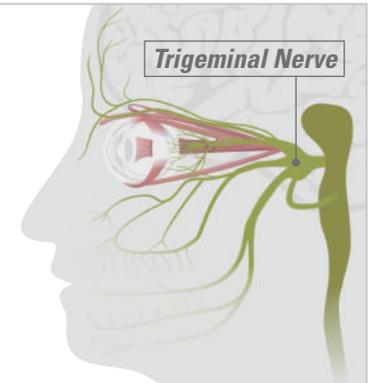
Results from a series of clinical studies on headache patients revealed that symptomatic patients shared a common trait: **a misalignment in their vision** that caused specific symptoms.

**Most common symptoms related to use of digital devices, reading or doing detail work.**<sup>5</sup>

<b>53%</b> Tired Eyes	<b>37%</b> Dry Eyes
<b>50%</b> Neck Pain/Stiffness	<b>36%</b> Headaches
<b>42%</b> Light Sensitivity	<b>18%</b> Dizziness
<b>42%</b> Discomfort at Computer	

## The Eye-Brain Connection

- The trigeminal nerve is the largest and most complex nerve connected to the brain, **sending sensations to the head, eyes, neck and shoulders.**
- It is well documented that proprioceptive fibers innervating the extraocular muscles provide afferent feedback to the brain about the location of each eye. This feedback is required to **avoid binocular misalignments.**
- These proprioceptive signals are transmitted through the ophthalmic branch of the trigeminal nerve, which is responsible for **detecting sensation and reporting pain.**
- When the eyes are not aligned, the visual system must work constantly to compensate for the misalignment.
- This plays a large role in the **overstimulation of the trigeminal nerve**, resulting in symptoms associated with **Trigeminal Dysphoria.**



## Addressing Eye Misalignment at All Distances in One Lens

### The neuroLens Difference



- Traditional lenses don't address eye misalignment
- With the advent of digital lens design and manufacturing, neuroLenses have created a new spectacle lens category: **contoured prism**.
- Much like the advance from bifocals to progressive-addition lenses, neuroLenses transform and optimize the benefits of standard prism with a proprietary, **contoured prism** design to address eye misalignment at all distances.
- The proprietary neuroLens **contoured prism** provides effortless eye alignment at **all distances** by gradually increasing the prism from distance to near.

### Why A Contoured Prism?

- With our increasingly digital lifestyle we are placing new demands on our visual system that traditional lenses can't fully address.
- 90% of patients experience a larger misalignment at the computer and near distances than they do when viewing at far.
- neuroLenses proprietary **contoured prism** design takes the patients dynamic eye alignment into account by gradually increasing the prism power from the distance to near.
- Addressing eye misalignment at all distances relieves the headaches, neck tension, and eye strain that many patients experience when using digital devices, reading, or doing detail work.

**56%**  
of patients  
report  
**3+ symptoms**<sup>5</sup>



**9 out of 10 people**  
prescribed neuroLenses  
have found symptom relief.<sup>8</sup>

**90%**

*of patients have a larger misalignment at near than at distance.*<sup>7</sup>

**86%**

*of patients suffering from Computer Vision Syndrome reported their symptoms were substantially reduced.*<sup>8</sup>

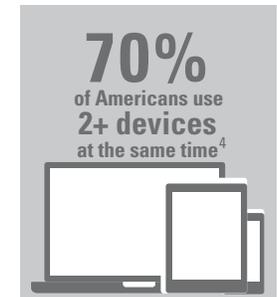
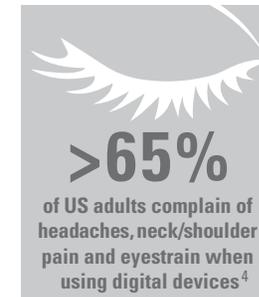
**81.6%**

*of chronic headache sufferers reported a reduction in symptoms after 90 days of wearing neuroLenses.*<sup>9</sup>

**73%**

*of people who purchased neuroLenses reported that their symptoms were "reduced substantially" or "basically gone" after 45 days.*<sup>10</sup>

### Digital Device Overload



1. American Optometric Association (AOA Clinical Care Group). The Effects of Computer Use on Eye Health and Vision. April 1997.

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7. Indiana University School of Optometry. Cross-Coupling of Accommodation and Convergence (AC/A and CA/C). Oculomotor Functions & Neurology.

8. Data on file, eyeBrain Medical.

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11. Digre, K. More Than Meets the Eye: The Eye and Migraine—What You Need to Know. Journal of Neuro-Ophthalmology. Vol. 38, No. 2. June 2018.