



# Your Guide to the Peli Lens

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Fitting and Training Patients  
with Peripheral Prisms



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# Introduction

Welcome to the wonderful world of visual field expansion! At Chadwick Optical, we're devoted to helping homonymous hemianopia patients (and anyone else who's living with field loss) increase their visual awareness as much as possible.

## **CALL US. EMAIL US. CONTACT US. Let's Get This Right!**

This guide is designed to assist you in serving your patients. If it's not doing that for you, contact us. This technology can be super confusing. We live it and we love to help you help your patients. We're just a phone call away. **Seriously...call us if you need help.** Or shoot us an email if that's preferred.

- Website: [ChadwickOptical.com](http://ChadwickOptical.com)
- Phone: 800-410-1618
- Email: [csr@chadwickoptical.com](mailto:csr@chadwickoptical.com)

## An Overview of the Peli Lens

The Peli Lens is based on optical principles that are hundreds of years old being applied in a new way as we begin to understand visual processing on a deeper level.

The Peli Lens has been tested in multiple clinical trials for over 20 years and in each case it has been scientifically proven as effective for patients with homonymous hemianopia. Using peripheral prisms, these patients experience measurable and verifiable visual field expansion of up to 30 degrees at primary gaze without undesirable double vision. In many states, this expansion enables patients to meet the visual field requirements for driving.

Want more info on the Peli Lens and how it works? Visit [ChadwickOptical.com/Peli](http://ChadwickOptical.com/Peli)



## The Peli Lens Process

This guide follows the Peli Lens process we've established to make it as quick and easy as possible for your patients to get the maximum field expansion possible.

Here's a high-level overview of the process. Each step is explained in detail in its relevant section within this guide.

### Step 1: Determine Peli Lens is the Solution

If your patient suffers from bilateral visual field loss, the Peli Lens will likely help them regain some lost vision.

### Step 2: Demonstrate the Peli Lens

Using our Peli Evaluation Kit (PEK), show your patient the Peli Lens in-office to demonstrate its benefits.

### Step 3: Fit Training Prisms

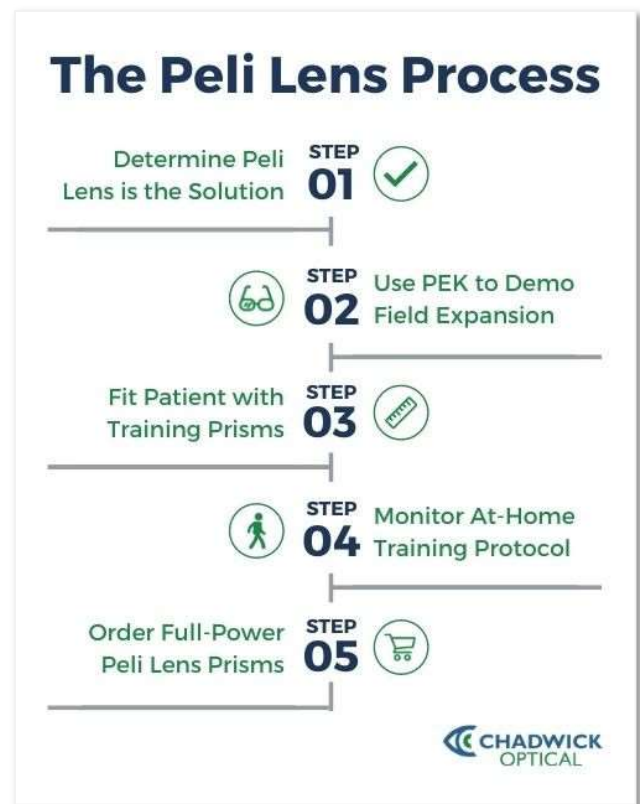
Training prisms are an effective way for your patients to try the concept in real life for a 4-to-6 week trial period.

### Step 4: Begin Training Prism Protocol

During the trial period, patients train at home to help them integrate the benefits of the prisms into their everyday life.

### Step 5: Order the Full-Power Peli Lens

The full-power Peli Lens offers nearly double the field expansion and is far more durable than training prisms.



## Step 1: Determine the Viability of the Peli Lens for Your Patient

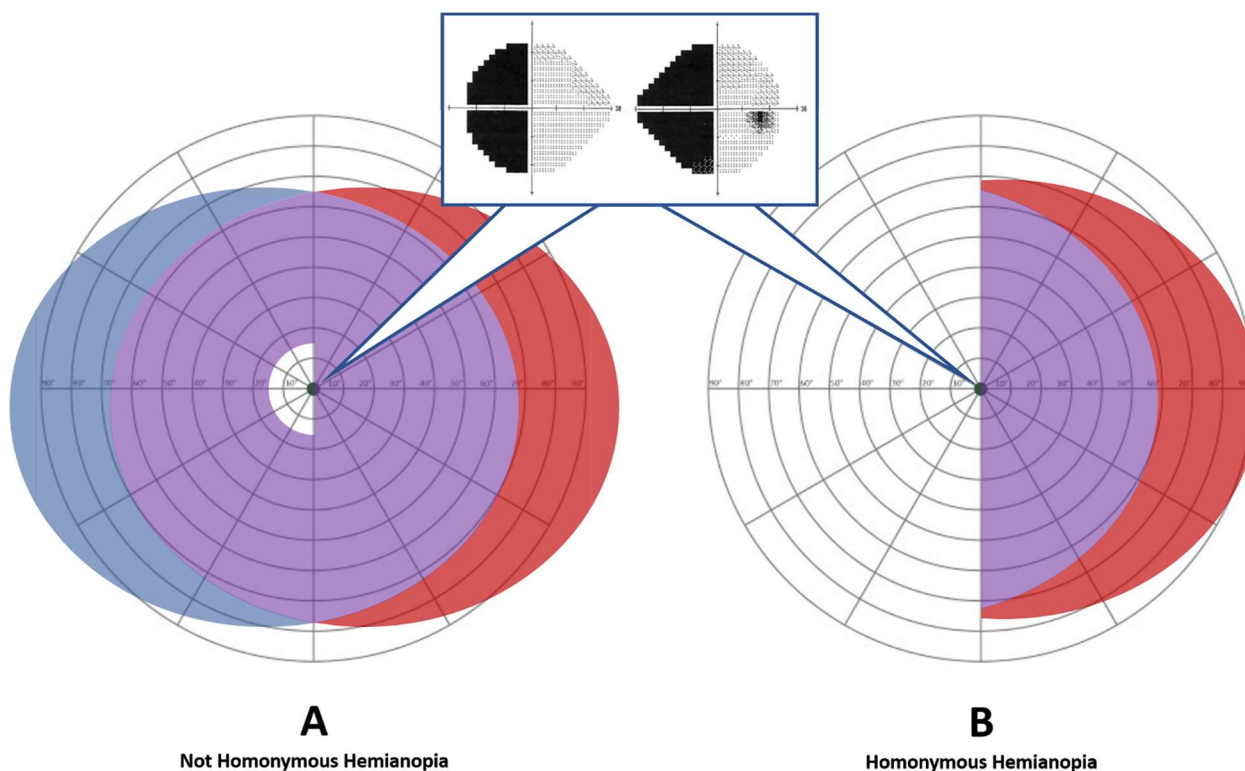
While the Peli Lens is designed for homonymous hemianopia, a diagnosis of homonymous hemianopsia can look different from patient to patient.

The Peli Lens can potentially help when a patient is blind in the exact same section of visual field on **both** eyes.

In addition to whatever visual field results you have in front of you, we recommend you perform a quick monocular confrontation field to help discover any inconsistencies in the machine assessment.

A visual field test can be inefficient in diagnosing bilateral field defects in two different ways:

1. 15-2, 24-2, and 30-2 measure a very small section of the entire visual field
2. Binocular fields like the Estermann don't tell you **which** eye is seeing what



Visual field tests cover a very small area of the total vision. Confrontation fields are important to help you get the full picture of a patient's field. While the visual field report in black and white is a textbook homonymous hemianopia, in reality, it could be A - Not Homonymous Hemianopia or B - Full Homonymous Hemianopia. The Peli Lens would work brilliantly for patient B but wouldn't work at all for patient A unless it was modified.

This guide is designed to walk you through the fitting for a homonymous hemianopia. If you're presented with a unique case, [contact us to discuss alternative fitting strategies](#).

## Step 2: Demonstrate the Peli Lens

Demonstrating the Peli Lens is the second step in the process of helping your patient find a permanent solution for missing peripheral vision.

This step is best performed using **Chadwick Optical's Peli Evaluation Kit (PEK)**. We designed our PEK to be a dynamic tool that allows you to test full-powered Peli Lens peripheral prisms on patients suffering from left or right homonymous hemianopia.



The PEK contains:

- **Horizontal Lens** that offers more awareness slightly above or below your patient's midline, helping with mobility
- **Oblique Lens** that offers more awareness along your patient's midline, helping with both driving and mobility
- **Fitover frame** that allows you to test either lens type on your patient's right or left eye without requiring them to remove their glasses (it also works for patients who don't wear prescription glasses)
- **Training Prism Kit** to fit your first patient with training prisms



Some doctors prefer to demonstrate the Peli Lens concept with training prisms affixed to a fitover or a clip-on. While these methods don't show the patient the full effect and image brightness of the Peli Lens, they are affordable and useful.

This guide assumes you have the PEK. If this is not the case and you would like to remedy that, visit [ChadwickOptical.com/PEK](https://ChadwickOptical.com/PEK) to order your very own Peli Evaluation Kit.

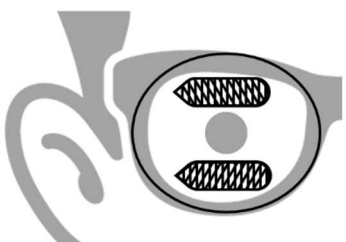
## Tips for Demonstrating

Before you get started demonstrating the Peli Lens to your patient, here are a few tips.

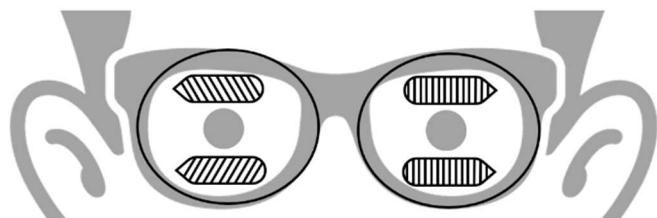
**Tip #1:** Test prism with the base out on the side with the temporal defect. Doing otherwise renders the effect of the prism completely useless. (Rare exceptions may apply)

- Only use one magnetic lens at a time.
- Don't stack oblique and horizontal lenses on top of each other.
- Don't place one lens over each of your patient's eyes.

DO NOT STACK LENSES



DO NOT USE TWO LENSES AT ONCE



**Tip #2:** Use horizontal for mobility or oblique for driving and mobility.

- When in doubt, go oblique.

**Tip #3:** Demonstrate the lens in multiple scenarios so you can maximize the opportunity for your patient to detect contrast and motion through prisms. The more situations you can provide for your patients to test the prisms, the better.

Demonstration should happen in a well-lit area and should attempt to cover as many of the following circumstances as possible:

- |   |                                    |
|---|------------------------------------|
| <input type="checkbox"/> Seated         | <input type="checkbox"/> Standing  |
| <input type="checkbox"/> Standing Still | <input type="checkbox"/> Walking   |
| <input type="checkbox"/> Indoor         | <input type="checkbox"/> Outdoor   |
| <input type="checkbox"/> In-Office      | <input type="checkbox"/> Exam Lane |
| <input type="checkbox"/> Stairs         |                                    |

**Tip #4:** Demonstrate the Subjective Benefit of the Prisms

While very useful, field expansion can be quite subtle.

Anybody who has ever done a refraction and has said “1...or 2” understands the immense value of subjective assessment in vision. Showing your patient the before and after effect of the Peli Lens using the PEK allows them to notice how the prisms pick up motion and contrast from their blind field.

It’s valuable to quickly and repeatedly show the patient the difference between their normal vision, the horizontal prisms, and the oblique prisms.

Allow the patient to subjectively assess the value of the field expansion by removing and replacing the prism at least 5 separate times during the demonstration.

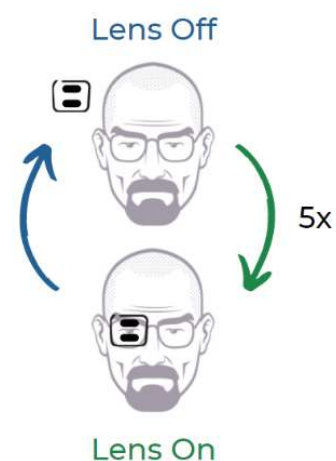
### Demonstrating Process

The PEK should be worn over glasses. If your patient does not wear glasses or your patient’s glasses don’t allow for proper prism placement, you or the patient may need to hold the PEK fitover to position it correctly over the patient’s eye.

Look at your patient at eye level. Position the lens or have the patient modify their head position so that your patient’s pupil is centered vertically between the prisms.



### Subjective Assessment



## Guidelines for Using the Peli Lens with Your Patient

It is very important that your patient looks **between** the prisms to get the benefits of the expanded visual field. Looking directly through the prism will cause undesirable double vision.

The Peli Lens is rooted in proven ophthalmic principles that guarantee they will bring information from a patient's blind area to the seeing area when prisms are placed correctly.

While most patients will recognize the expanded field, some patients may lack the cognitive ability to recognize expanded field. In following with emerging best practices at stroke rehab centers, we recommend that you proceed with training prisms even if your patient does not report significant visual field expansion during the in-office demonstration. We've found that oftentimes, the loved ones of the patient may notice the subtle benefits of field expansion more than the patient does.

### Step 3: Fit Training Prisms

Fitting training prisms will give your patient awareness of their missing visual field. This awareness can be helpful in a number of day-to-day situations.

Your confidence is contagious. You are fitting your patient with the absolute best solution available for their condition. Patient success can vary significantly based on the demeanor and confidence of the prescriber. If you're not feeling confident in the solution, we're not doing our job. Let us know how we can instill in you the same verve for the Peli Lens we have.

Below are the fitting guidelines we've worked and reworked over the last two decades based on doctor and patient input. However, from time-to-time a unique case may arise or you may have questions about how to best serve your patients with the Peli Lens. If you're encountering a case that's challenging, give us a call.

For standard cases, we recommend following the steps sequentially as presented. Each step is important - deviation from this fitting methodology can drastically reduce the efficacy of training prisms.

What you'll need:

- ☐ Glasses (not the patient's everyday glasses) or a fitover
- ☐ A Training Prism kit
- ☐ A place to record measurements

#### **Step 1: Observe your patient's normal head posture and walking stance**

The Peli Lens should not require postural changes for use. Observe your patient's normal posture to establish a baseline to compare against later.



Observing your patient's normal gait and posture allows you to ensure that training prisms do not change how they move or navigate their surroundings.

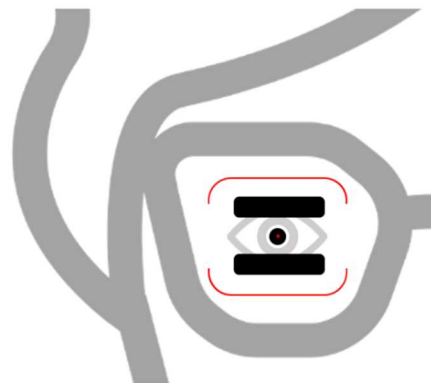
## **Step 2: Place the fitting template onto the patient's glasses or fitovers**

The fitting template establishes the optimal position for prisms. This step can also help minimize the impact of the prisms on your patient's gait.

Occluding your patient's opposite eye as described in this step is important because the effect of the prisms without occlusion can be subtle. Occlusion will provide an exaggerated effect of the prism location on gait so it can be addressed as needed.

- Place the template on the eye with the temporal field defect (left hemi = left eye, right hemi = right eye).
- Place an occluder on the opposite eye. If you do not have an occluder, you can use the yellow cling provided with the fitting kit.
- Position the red dot in the center of the template directly over the patient's pupil. If the black part of the template overlaps the frame rim, adjust the frame and re-apply template to reduce or eliminate overlap.
- Have your patient walk around again to ensure that the template has not changed their gait. If your patient's gait changed because of the template, adjust the template's placement accordingly.

### **CORRECT TEMPLATE PLACEMENT**



## **Step 3: Place the prisms**

The base's orientation is incredibly important when placing prisms. The arrow of the cut prisms should be pointing temporally, toward your patient's ear and away from their nose.

Prisms adhere best to concave surfaces, so be sure to put the prisms on the eye-ward surface of the lens to prevent accidental dislodging.

### **For horizontal prisms**

- On the rear surface of the lens, firmly place the Peli press-on prisms, with pointed end towards temple, directly over the black portions of the template.



*Left Hemi*

*Right Hemi*

### **FOR OBLIQUE PRISMS**

- On the rear surface of the lens, firmly place the Peli press-on prisms, with pointed end towards temple, directly over the black portions of the template.
- Top Prism: 30° Base Out & Base Down - More Out than Down
- Bottom Prism: 30° angle Base Out & Base Up - More Out than Up
- Note: While oblique prisms were originally designed for driving, they're also useful for mobility. They do provide slightly less horizontal expansion than the horizontal prisms.



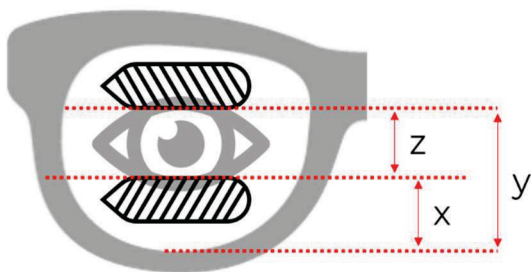
- For both prism types, follow these instructions to finish placing the prisms:
  - Verify that there is 12mm of separation between the prisms.
  - If prisms overlap the edge of the frame, trim off the excess from the training prisms.
  - Remove template.

### **STEP 4: VERIFY PLACEMENT**

Put the glasses back on your patient to verify placement of the prisms.

Make sure the prism location does not affect your patient's head posture or gait.

- Record the final fitting positions using this information:



$$Y - X = Z \text{ or } X + Z = Y$$

\_\_\_\_\_: X = Lower Height (measurement from top of bottom prism to bottom of lens)

\_\_\_\_\_: Y = Upper Height (measurement from bottom of top prism to bottom of lens)

\_\_\_\_\_: Z = Separation (measurement from bottom of top prism to top of bottom prism)

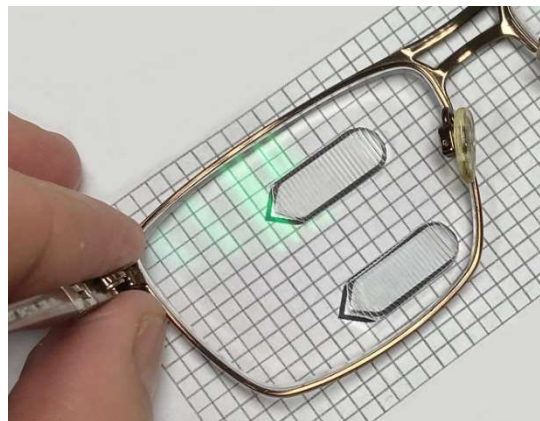
- Remove the marks, occluder and press any air bubbles out of the temporary prisms. For longer-term adhesion, reapply the prisms under running water.
- Return glasses to your patient.

## Step 5: Lens Tracing

We recommend doing a tracing of the Peli Lens placement over your patient's glasses using the designated location in the patient brochure (which is available at [ChadwickOptical.com/Peli](http://ChadwickOptical.com/Peli) or at the end of this document). This will enable your patient to reattach the prisms if they fall off or become dislodged.

To perform a lens tracing:

1. Ensure training prisms are properly fitted to your patient's glasses.
2. Cross out the side of the tracing area that does not apply to your patient.
3. Place glasses lens down onto the tracing area.
4. Line up the affixed training prisms on your patient's glasses with the prism outlines on the tracing area. Make sure the arrows align and face the same direction.
5. While the lens is properly placed, make a rough tracing of the frame onto the tracing area.
6. Be sure to indicate whether your patient is using horizontal or oblique prisms.



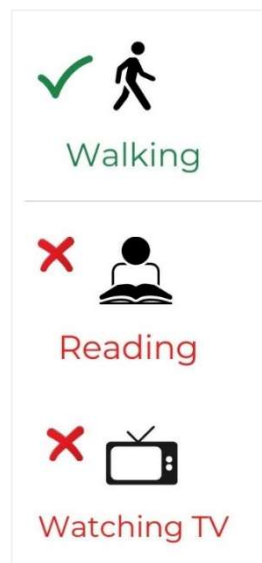
Your patient is now ready to begin the training protocol.

For more information on advanced fitting strategies, [visit this page](#).

## Defining the Scope of Use

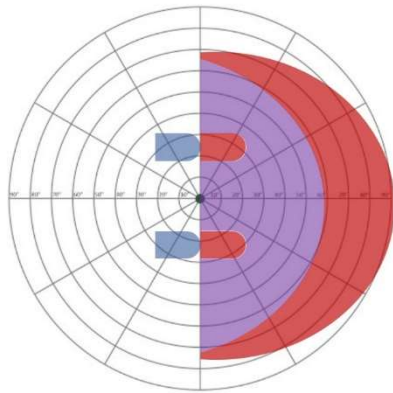
The Peli Lens is not designed for full-time wear. Peripheral prisms are helpful for mobility but are not helpful for other activities like reading or watching tv. Make sure your patient is aware of the conditions in which the prisms will be helpful and the conditions in which they won't.

Because the Peli Lens is designed for use in certain situations involving mobility, peripheral prisms should not be placed onto your patient's everyday glasses. During the training period, you can place the prisms on an old pair of glasses or an inexpensive fitover. After the training period, we recommend our SLAM single-lens clip-on (or a similar removable device). You can read more about prescription options in the section of this guide on ordering the Peli Lens or by visiting [ChadwickOptical.com/Peli](http://ChadwickOptical.com/Peli).



## Step 4: Begin Peli Lens Training Protocol

**How Expanded Vision  
Appears on Visual Field Plot**



**How Expanded Vision  
Appears to Your Patient**



A patient does not need to be cognitively aware to experience visual field expansion. The moment a patient puts on the Peli Lens, their visual field is expanded. A number of stroke rehab centers fit patients with peripheral prisms immediately to help them in their recovery process.

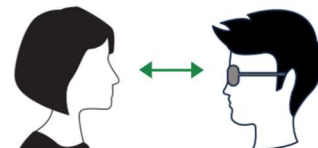
Patients with adequate cognitive awareness can achieve higher level benefits through training. Regularly performing the recommended exercises will lead to improved locational accuracy and reaction speed. A pilot study done at Schepens Eye Research Institute showed patients to be 95% accurate in distinguishing image location after six hours of training.

After you demonstrate these exercises, patients should practice them at home for a minimum of 20 minutes per day throughout the 4-6 week trial period.

### Exercise 1 - Turn and Look Training

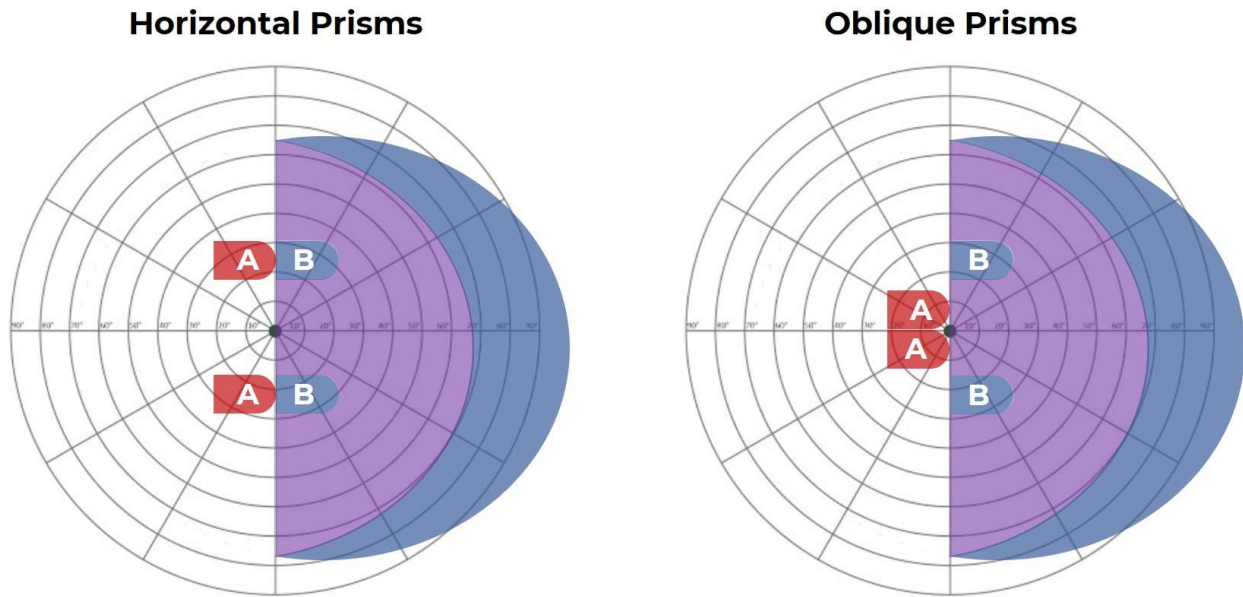
Turn and look training helps the patient differentiate between where an object appears versus where it actually is.

Face your patient at a distance of two to three feet. If there's a significant height disparity, rectify it by sitting or having them sit so that your faces are roughly parallel.



Instruct your patient to focus on your nose. As the patient is looking at your nose, wave your hand in their blind field. When the patient sees your hand, tell them to point to it and then find your hand in central vision. Oftentimes, the patient will point to your face because that's where they see the image of your hand in their visual field.

For horizontal prisms, the expanded field will be slightly above and below the midline. For oblique prisms, the expanded field will be along the midline.



Patient sees information from space A in space B.

Bring your fingers from the outside and into their field. When your patient reports that they see your fingers, ask them to turn their head and find your fingers in space through the prism-free portion of the lens.

Repeat this exercise about 60 times in various high and low positions to test the field expansion offered by both the top and bottom prisms.

## Exercise 2 - Reach and Touch Training

Reach and touch training helps improve hand-eye coordination.

While your patient is fixating on your nose, reach your hand into their blind side and instruct your patient to touch your hand as they detect it through the prism.

Once the patient has mastered this in your office, they should continue to practice it at home so they become accustomed to the difference in where objects appear and where they actually are.

In a vision therapy or occupational therapy setting, many doctors or therapists will set up a reach and touch program on a Sanet Vision Integrator or similar reach/touch device. This may be a useful avenue for helping your patient become accustomed to the Peli Lens.



Caution! While performing this training exercise, your hand often appears in close proximity to your face; it would behoove you to stand back so you do not get smacked.

Repeat this about 60 times **testing both the top and bottom prisms**.

## Exercise 3 - Walking

Prisms are for mobility so it's important that you help your patient learn how to use the Peli Lens while mobile. Make sure you escort your patient through this portion of training.

Before beginning the training walk, instruct your patient to turn their head/eyes to look at any objects they detect while moving, looking through the prism-free portion of the lens.

Begin with an empty hallway or other clear space and allow your patient to practice walking. As they become accustomed to the prisms, move to an area with progressively more obstacles to navigate so that they can learn how to avoid impediments to mobility.

If possible, help your patient practice ascending and descending stairs. This should be very similar to what first-time bifocal wearers experience. Make sure your patient looks through the prism-free portion of the lens or under the bottom prism and not through the prisms themselves. Your patient should also use handrails whenever possible.

## At the End of the Fitting Appointment

### Checklist

- ☐ Schedule a follow up with the patient 4-6 weeks out to fit them with the Peli SLAM (Single Lens Attached by Magnets) or other full-power solution
- ☐ Make sure the patient has the patient brochure filled with info about at home training. If you need some, download it here: [ChadwickOptical.com/Peli](http://ChadwickOptical.com/Peli)
- ☐ Make sure the patient knows to do training at home for 20 mins a day
- ☐ Trace the lens and record measurements on the provided insert or print the last two pages of this guide. It's a good idea for both you and your patient to keep a copy of these measurements.

In this section, we've done our best to clearly describe training with the Peli Lens. However, words and pictures can only do so much to effectively convey what you need to know. That's why we've developed videos and other supporting materials. You can find those at our Peli Lens resource center: [ChadwickOptical.com/Peli](http://ChadwickOptical.com/Peli)

If you need additional assistance, please don't hesitate to contact us. We love helping people use the Peli Lens and are always happy to help out. You can reach us here:

- Website: [ChadwickOptical.com](http://ChadwickOptical.com)
- Phone: 800-410-1618
- Email: [csr@chadwickoptical.com](mailto:csr@chadwickoptical.com)

## Step 5: Order Full-Power Peli Lens using SLAM Technology

Once your patient has successfully completed a 4 to 6-week trial period with training prisms, we recommend moving to the best option for long-term use: full-power Peli Lens prisms.

Full-power prisms offer increased field expansion in a more durable, resilient, and effective form than temporary prisms.

### SLAM Technology

Chadwick's patent-pending SLAM (single lens attached by magnets) technology uses two or three small magnets embedded on the side of the lens for attachment. This makes it easy for your patients to use the Peli Lens in situations where they need field expansion (like driving or shopping) and to remove the lens when it's not needed.

SLAM technology offers the possibility of attaching other optical accessories directly to glasses. Stay tuned as we unveil more SLAM solutions.



### The Peli Lens using SLAM Technology

After decades of putting permanent Peli Lens prisms into every frame and lens imaginable, we developed a single lens solution that gives your patient the ease and convenience they need to use Peli Lens prisms on their terms.



Here are some of the benefits of the Peli Lens SLAM:

- **Staying Power:** the single lens stays on the frame despite heavy shaking so your patients can use it without fear that it will become dislodged
- **Durability:** designed to be durable and long-lasting, the single lens can be used for years to come despite changes to your patient's prescription
- **Comfort:** the single lens weighs less than other available options, making it a more comfortable choice for patients with sensitivity to heavier optics
- **Portability:** the single lens is compact and easy for your patient to carry in their pocket or purse. It even comes with a single lens case for maximum convenience.
- **Ease of Use:** even patients with limited dexterity can use this lens because of its unique design

While we only need magnets on one side, some patients may prefer we add magnets to both sides for symmetry. We can add these at no additional charge.

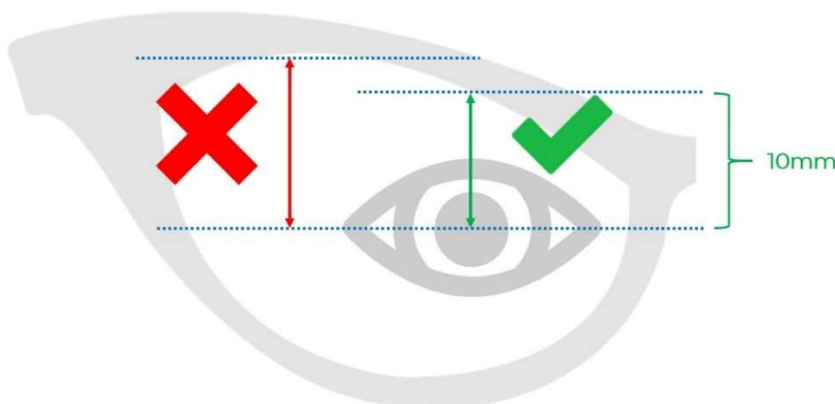
We recommend our SLAM for most patients but we can embed Peli Lens peripheral prisms into nearly any lens. If you determine your patient needs a different solution, just let us know.

For more information on the SLAM, visit [ChadwickOptical.com/Peli-SLAM](https://ChadwickOptical.com/Peli-SLAM).

## Frame Selection

When selecting a frame, make sure it is large enough to accommodate the SLAM lens. In order for the lens to fit properly, there must be a minimum of 10mm of clearance directly above the pupil.

### Measuring a Frame for SLAM Compatibility



Contact us if you need help finding a prescription option for your patient.

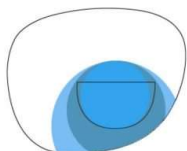
- Website: [ChadwickOptical.com](https://ChadwickOptical.com)
- Phone: 800-410-1618
- Email: [csr@chadwickoptical.com](mailto:csr@chadwickoptical.com)

# Want More Chadwick in Your Life?

Check out our solutions for patients with unique optical needs.

## Medical Tints & Filters

Our extensive tint library lets us match nearly any tint you can conjure up - we can also help you find the best one for your patient. Learn more at [ChadwickOptical.com/Tints](https://ChadwickOptical.com/Tints)



## Specialty RXs

We're known as the "anything lab" not just because we can do just about anything but because we're willing to try - if you have a unique case or a patient who needs something custom, [let us know](#).

## Low Vision Products

From illuminated hand and stand magnifiers to glare assessment kits, we offer a full suite of products for low vision patients. You can add low vision devices to your Chadwick Optical order or order directly from our low vision website at [TechOpticsInternational.com](https://TechOpticsInternational.com).



## Contact Us

Contact us if you need help finding a solution option for your patient.

- Website: [ChadwickOptical.com](https://ChadwickOptical.com)
- Phone: 800-410-1618
- Email: [csr@chadwickoptical.com](mailto:csr@chadwickoptical.com)

