



## DreamLens Instruction Manual

### Design Page

The DreamLens Design Program allows complete flexibility in your design of DreamLens Vision Shaping Lenses. Because the DreamLens is distributed for a global market, different regions have different regulatory restrictions. Please check with your regulatory agency or your lab to determine what parameters are approved for your region.

**Basic Design:** The DreamLens Design Program utilizes the patient's topographical data to calculate the elevation of the cornea at specific distances and uses this data to design the lens. All that is required to design the basic DreamLens is the patient's Spherical correction at the spectacle plane, amount of myopia reduction needed and the Flat K reading from your topographer. These fields are highlighted in yellow. With the basic design you can expect over an 80% success rate with the first lens.

**Advanced Design:** When modifications to the basic design are required, the DreamLens Design Program provides the tools required. The "e" value can be added to further refine the elevation calculations, the steep K allows for toric designs and the adjust column modifies the individual zones. Over a 90% success rate can be achieved when these tools are utilized.

**General Ordering Procedure:** Enter the patient's name or ID number, Rx at the corneal plane, amount of myopia you like reduced, K readings from your topographer and "e" value if available. Select the desired material, color and lab from the dropdown lists. Make any modifications in the basic design and press

the “Calculate” button. The lens will be designed with the parameters shown. Review the data, add any comments in the fields located at the bottom of the form, and if correct, press the “Order” button. The design data will be sent to the lab and the database. A confirmation message will appear when the order has been sent. Your account information provided at registration is also included with the order.

**Design Modification:** The DreamLens Design Program allows unsurpassed freedom in the design of the DreamLens. Modifications can be made to suit your patient’s specific requirements. Below are listed some common changes that are made to the basic design.

**Target Power:** Normally the target power is the same as the sphere power to correct the full amount of myopia. If a patient is over corrected or under corrected, the target power can be modified to compensate for this. Monovision is another situation that requires the target power to be changed. If you want a +2.00 add, just reduce the amount of target power by +2.00. This will reduce the amount of correction by +2.00 and allow the patient to read with this eye. If the patient likes to read in bed before falling asleep, the lens power can be increased by +2.00 also to allow monovision with the lenses on the eye. If an increase in myopia is noticed during their annual visits, often the sphere power should be changed along with the target power when the increase is determined to be from an axial length increase.

**Diameter:** The default diameter is 10.6mm. This works for most patients. If your patient has small eyes and a smaller diameter is needed, check the diameter required. If the diameter is not listed, check the closest size and modify the zone widths in the widths column. It is suggest that the AC1 width not be changed and all changes are made in the AC2 width.

**Zone Widths:** Manually change the zone widths in the widths column. This will also change the diameter of the lens. The optical zone can be changed here. It is recommended that the optical zone remain between 5.8mm and 6.2mm.

**Zone Adjustments:** The adjustment column is where changes in the elevation of the lens are made. Changes are in mm so a 10um change would be 0.010mm. A plus will increase the elevation of the lens thereby tightening the fit of the lens. A minus value will loosen the lens. The AC2 is different. Here enter the amount flatter in diopters you would like the AC2 than AC1. The entered “e” value changes this value to loosen the lens for corneas that flatten more than normal.

**Toric:** Check the toric option to design a DreamLens with a toric fitting curve, AC1 and AC2. Toric lenses greatly increase the centering properties of the DreamLens and can also reduce greater amounts of astigmatism.

**Power Adjustment:** This is where you can change the power of the lens. Normally this is not needed because the patient is only wearing the lens during sleep.

**Trouble Shooting:** These buttons allow the most common problems to be corrected with a simple press of the button. Press the button for the problem encountered and the appropriate change will be made. Press the button again for additional correction. When you have the changes needed in

the adjustment column, press the “Calculate” button to redesign the lens. Pressing the troubleshooting button only shows the amount that will be changed; it does not recalculate the lens design.

**Custom Design:** The custom design overrides the calculate button changes and allows you to enter specific values. To activate this function, check the Custom Design box and press the “Calculate” button. You can now enter values for the lens independent of the design algorithms. Design changes are overridden in this mode. Please use this mode with caution!

**Comment Box:** Enter changes for the lens design not included in the fields. An example would be changes in the center thickness of the lens.

**E-Mail Comments:** Comments here will be in the body of the e-mail. Use this comment box for patient shipping instructions or questions on the order.

### **Calculators:**

**mm to Diopter:** In the design program, the “K” readings must be entered in diopters. This calculator converts mm to diopters and diopters to mm.

**Vertex Converter:** Simply enter the spectacle power in Diopters and the vertex distance and this calculator will convert the spectacle power to the power at the corneal plane. The default vertex distance is 12mm but can be changed when required.

**Aspheric/Sphere:** This calculator allows the conversion of an aspheric lens segment to a spherical segment with the same sag change.

**SAG converter:** The sag converter converts a change in curve segment from radius change to sag change. This is just the opposite of what the design program does.

## **History Page**

The history page tracks all orders placed using the design page. When the “Order” button is pressed on the design page, the parameters of the lens are recorded in the database and displayed on the history page. Your last order will appear first. To search for a patient, enter the patients name or a portion of the name, select the appropriate search function from the drop down list. The search function can be used for all fields. An example would be to see how many patients have an Rx over -4.00D or have cylinder over -2.00D. You can then see how successful these patients are and track the number of orders.

At the bottom of the page are the “Print” and “Troubleshoot/Re-Order” buttons. Press the “Print” button to print a hard copy of the design. Pressing the “Troubleshoot/Re-Order” button transfers the displayed lens parameters to the design page. Now you can reorder the lens if no changes are required or modify the design before reordering. When a pair of lenses is required and only one lens is displayed, press the “Troubleshoot/Re-Order” button to transfer the lens displayed and then go back to the history

page and display the other lens. You might have to do a search for the other eye. You now have a split screen where you can manually enter the Rx parameters from the second lens into the order page. Make sure any changes from the standard design are included when the parameters are manually transferred.

Thank you for choosing the DreamLens. Please send any questions or comments to [treim@dreamlens.com](mailto:treim@dreamlens.com).