Consumer’s Guide to Ocutech® Bioptic Telescopes

Part 3 of 3

By Henry A. Greene, OD, FAAO
Co-founder, President
OCUTECH, Inc.
Thank you for visiting Ocutech’s Consumer Bioptic Guide.

Part 1 explored what bioptics are, how they are used, and whether they might be right for you. Part 2 explained how bioptics are prescribed, the range of Ocutech’s bioptic products and the benefit of Autofocusing.

Our final section, Part 3, provides answers to frequently asked questions about how to choose the best product for the user, and also about how bioptics may enable a visually impaired individual to be eligible to drive.

Question:

Ocutech makes four different 3x telescopes—the VES K, VES Explorer, VES Mini and the VES Falcon. Which should I choose?

Answer:

The VES K and the VES Explorer have identical optics—your decision is solely a function of which design is more appealing to you. The VES-K is wider (right to left) than the Explorer. When one dips their head to look through the telescope eyepiece, the VES-K case can block the other eye which may make it easier for you to sight through the telescope. This may be helpful for individuals who must use their non-dominant eye when looking through the telescope.

Question:

What is the difference between the VES Mini and the VES-K or Explorer? And what sets it apart from the 3x Falcon Autofocus?

Answer:

The VES Mini has a slightly wider field of view than does the VES-K or Explorer. It is inserted into the eyeglass lens (carrier lens) and must be positioned perfectly when ordered. If the telescope needs to be repositioned, a new eyeglass lens may need to be ordered, and updating eyeglass prescriptions in the future will require a remake of the system.

The Mini can be prescribed for both eyes that may make it more appealing to some individuals because of the slightly wider fields of view, however each telescope will need to be focused individually to be clear at different distances. Also if a binocular system is ordered and aligned for distance-seeing, when looking at close distances you will only be able to use one side of the device, because otherwise you will see double.

The 3x Falcon Autofocus bioptic has the same bright, wide field optics as the Mini, and of course it focuses to almost any distance almost immediately. If you’ll need to look at a lot of different distances, need to work at close distances for extended periods of time, or need your hands free for other activities, the Falcon may be ideal for you.

Question:

Ocutech manufactures 4 telescopes in a 4x power—The VES-K, Explorer, Sport-II, and Falcon. How do I choose which of these to consider?

Answer:

As with the 3x versions, the 4x VES K and the 4x VES Explorer have identical optics—your decision is solely a function of which design is more
appealing to you. The VES-K is wider (right to left) than the Explorer. When one dips their head to look through the eyepiece, the VES-K case can block the other eye which may make it easier for you to see through the telescope. This may be helpful for individuals who must use their non-dominant eye when looking through the telescope.

The **VES-Sport II** has a larger entrance window and larger front (objective) lens and hence the telescope image will be slightly brighter than with the VES K or Explorer. The horizontal field of view of the VES K, Explorer and Sport-II telescopes are all the same at 12.5 degrees. The vertical field of the Sport II and Falcon is slightly wider than the Explorer or K. The Sport is larger in physical size and for children, small adults, and individuals with a narrow pupillary distance (how far the eyes are apart) it may appear to be overly large, and hence the Explorer may be preferred for cosmetic reasons. Individuals with genetic visual disorders such as albinism, nystagmus, achromatopsia, and rod-cone disorders, who often favor lower illumination, may prefer the Explorer or K.

Here’s a photo that shows the comparison of size between the VES Sport-II (top) and the VES Explorer (bottom):

The 4x Falcon Autofocus bioptic has the same bright, wide field optics of the 4x VES-Sport II, and of course it focuses to almost any distance virtually immediately. If you’ll need to look at a lot of different distances, need to work at close distances for extended periods of time, or need your hands free for other activities, the Falcon may be ideal for you.

**Question:**

*How do bioptics work for driving?*

**Answer:**

Most states in the US and several countries allow individuals with visual impairments to obtain a restricted driver’s license while using a bioptic telescope, when without it they would otherwise be ineligible. The laws and regulations vary from state-to-state and by country. These regulations usually relate to one’s best-corrected vision with conventional eyeglass lenses (or contacts) if beneficial, the driver’s visual field (the width of your side vision) using only regular eyeglasses or contacts (if needed), and your vision through the telescope. You cannot use the telescope to pass the vision test to receive an unrestricted driver’s
license—the license is based upon your vision using your conventional eyeglasses or contacts if they are helpful. Some states have limits on the type and power of the telescope, whether it can be prescribed to only one or both eyes, and whether it can be focusable. The state may also restrict individuals to speed limits, time of day driving, and sometimes even distance from home limitations.

A bioptic telescope is intended to help you be a safer driver on the road—to avoid obstacles, see traffic, signals, signs and pedestrians. It will allow you to see further up the road which will give you more time to make the proper driving adjustments to keep you and others safe. They are used in a similar fashion as the car’s mirrors and only for brief periods of time. One does not look through the telescope all the time while driving—studies show they are only used about 1-2% of the time. That means that 98% of the time you are driving looking through the regular eyeglass (carrier) lenses. So, you must be a competent driver without the telescope—a bioptic cannot make an incompetent driver safe, but it can make a competent driver a safer driver!

Obtaining a bioptic will not automatically make you eligible for a special driver’s license. To pursue a bioptic driving license you really need to visit a low vision expert in your state to ‘hold your hand’ through the process.

Read more about bioptic driving at: https://ocutech.com/driving-with-bioptics/

Ocutech frequently receives requests from individuals seeking advice about which Ocutech bioptic might be best for them. Certainly, the final decision should be based upon the recommendations of a low vision specialist after testing and evaluation of our devices. Our hope is that the information in these Ocutech Consumer Guides will help you begin to identify an appropriate Ocutech product as well as determine the likelihood of a favorable prognosis to benefiting from the device.

Thanks for reading!

I hope this discussion has been helpful. I invite you to visit the Ocutech website (www.ocutech.com) for more information on Ocutech products, general information and helpful videos.

And as always, we invite your questions, suggestions and feedback.

Henry A Greene, OD, FAAO
Co-founder and President
OCUTECH, Inc.