

Product Spotlight

Script – New Media Optics, Space, Screen, Zoom

1. Welcome to this course about 3 new lenses that address the way we use our eyes with electronic media.

My name is Mark Mattison-Shupnick, Director Education at Jobson Medical Information LLC. I'm your instructor.

2. This is an ABO approved course, approved for 1 credit hour.

The format is an e-learning module i.e., a narrated and interactive course with slides that describes New Media Optics lenses... branded as iD Space, iD Screen and iD Zoom.

3. Navigating this course is easy; many of you are already familiar with them. If so, just click next. If not,

1. Are the slide Titles
2. Click on the tab Notes and you can read along with the narration
3. Is the Slide itself
4. Adjusts the Volume
5. Is Pause or Go
6. Shows slide and narration Progress
7. Allows you to Review the slide again
8. Goes back to the Previous slide
9. Move to the Next slide
10. Contains a downloadable copy of the script and reference charts for your office

4. Been to college lately? In colleges these days – this is a familiar scene. No longer do students take notes using pen and paper but instead in front of a screen at various distances throughout the day. Great image but what does it make you think about?

Look at the desk's position and therefore the distance from the users eyes. In this situation, screen distance is actually pretty uniform.

5. From Newseek, another screen interaction. Walking while using a cellphone for texting or watching a video or on Facebook... it changes the way that we walk, the pace, awareness. I love it – the warning is “walk in the lane at your own risk.”

The point of these two photos is that we spend significant time on electronic screens as you know, but the distances at which they're used and the letter sizes vary considerably.

What's the effect?

And, you're no different... In an optical office, there also can be significant screen time. What are the results of all of this time on-screen and, at different distances?

6. Did you know that 65% of Americans report experiencing symptoms of digital eyestrain.

27% of Americans do not know computer eyewear can protect against digital eyestrain (DES) as reported by the Vision Council's Digital Eyestrain Report 2016

7. In fact, given the time that everyone spends on computers and new media, I suggest that New Media Eyewear is the consumer's primary pair of glasses.

Or, to look at it another way – the primary pair should be one designed to best work for computers and new media devices like smartphones and tablets.

8. This product spotlight describes HOYA iD Space, HOYA iD Screen and HOYA iD Zoom

9. Eyewear, particularly their lenses are a bridge between a patients' needs, the technology that satisfies it and the wearing experience.

iD Space, iD Screen and iD Zoom are 3 new indoor solutions tailored to individual working and wearing conditions. They are ideal for new media use anywhere, anytime and of course we should say, any device.

10. Here's what we mean.

The choice is easy for the ECP and for the patient to understand – what will you be doing (hint – look at the icons)

First, iD Space is designed for the vision required for meetings, smartphones/tablets, computer and the eye/distance demands of shopping.... Since New Media lenses are progressive, while iD Space is designed to include reading its focus (no pun intended) is mid-range and vision out to 20 feet. i.e., distance.

Look at the picture, everything is clear.

11. When a clear, far mid-range, to near vision is needed, iD Screen is perfect. Think of those that work in stores and offices.

It provides clear vision for television, tablet, computer or multiple monitors and gaming. There isn't a clear, far, distance vision like iD Space. From a design perspective though, since the range of clear vision distances is less, the widths of clear vision are wider.

12. Last is iD Zoom, a lens designed for computer distances, all the tasks that you might do in the area of your desk, for smartphones and tablets. This means that those folks sitting on the other side of the office are somewhat blurred through your lenses. However, like iD Screen, the range of power is less again and the result is very, very wide reading and mid-range vision.

And, don't forget a blue-violet wavelength light attenuator like Recharge. That's a given today with new media lenses.

13. Now back to the details about each lens, then a chart about the range of clear vision.

iD Space is ideal for people performing activities where the primary focus is further than a computer screen, while still having crystal clear vision on the screen.

14. iD Screen is the best choice for people that require maximum clarity at intermediate and far intermediateideal for computer work and work with dual monitors.

Look at the left image, clear vision at the monitor and actually out to at least 5 feet depending on add power.

The right image shows that reading and the monitor is clear.

15. iD Zoom produces the widest areas of clear vision for reading and for intermediate.

That's perfect for those patients that require high levels of concentration at close range... providing the widest possible near area, while still being able to view clearly at intermediate monitor distances.

16. Easy ways to remember?

iD Space has an emphasis on distance in addition to reading and intermediate

iD Screen emphasizes intermediate

iD Zoom emphasizes near

17. Technical facts are required for your better knowledge of the lens' construction.

1. Lenses are produced with iD FreeForm Design Technology.

The iD, Integrated Design Technology applies power distribution and design management to both sides of the lens to create a unique result. Like other HOYA iD progressives, the vertical progressive component on the front manages corridor length for easy viewing far to near, the back component manages width, here a unique

application to deliver the far thru intermediate to near vision specific in a lens designed for new media.

The double side surfacing uses all the degrees of freedom of design and manufacturing to create the resulting lens.

That means that the progressive components have been divided over the front and back surface. A lens has two sides and HOYA takes advantage of both!

18. Next, the lens can be personalized with individual wearing values or parameters.

That means corridors can be customized as well as the fitting values of vertex, tilt and wrap. Since no two people are alike, and to ensure that these lenses are available from you unlike can be made from others, especially online.

19. These new lenses are enhanced with Binocular Harmonization Technology (BHT) This is a new HOYA technology where the resulting prismatic effects are managed for a better view binocularly. It is technically calculated for each eye.

In this way, the two eyes work together.

20. The final overall design and small changes to the off center powers are verified with a Binocular Eye Model. This is a patented 5-step verification model.

After all, precise vision isn't a guess!

21. These new media lenses are also Personalized...

First, the iD software engine, using the fitting height and the lens design chosen, determines the corridor length.

The resulting lenses are produced with corridors from 18 to 24 mm in 1 mm steps.

22. In addition modern freeform lenses can be personalized using the lens' back vertex distance, pantoscopic tilt and wrap angle so that the lens' periphery is corrected for the way the lens is worn.

This makes, with Binocular Harmonization, a lens whose clear fields of vision are customized for the widest and clearest binocular vision in the HOYA category of new media lenses.

23. Now that also means that frame size has a set of recommendations to best take advantage of the technologies.

First, there is a bias towards a larger frame... makes sense doesn't it t have enough lens area for the most utility.

There should be at least 18mm from pupil to frame bottom, 10-12mm above. That means that the minimum "B" measurement of the frame is 28 to 30mm.

24. That's the fit up and down but what is the real range of these lenses?

The range of clear vision is dependent on add power and your choice with the patient about the best design. So, it makes sense to know the ranges that are possible - this table describes exactly what you and most importantly the patient can expect.

Look at the arrows - these are the ranges for iD Zoom.

Clear vision starts at 40cm (16 inches) if that was the tested reading card distance and prescribed add.

Depending on add power, the range of clear vision is different. That's because of the progressive power change and the patient's accommodative reserve.

A +2.50 add wearer sees clearly to read at 40cm and clearly out to 1 meter, the dark blue bar.

A +1.75 add wearer sees clearly from 40cm to about 1.5 meters (16 inches to just under 5 feet)

A +1.00 add wearer sees clearly from 40cm to 2.5 meters (16 inches to just over 8 feet)

So, knowing add power and patient need makes your recommendation of design more exacting – patients will appreciate the your attention to this detail.

See the tape measure in the upper right corner? – Using one is a good idea to help illustrate with the patient their expectations of clear vision.

25. iD Screen provides increased range and you actually may find this a good solution when patients can't decide.

The +2.50, 1.75 and 1.00 add wearers have ranges of clear distances of 16 inches (40cm) to 6.5, 8.5 and about 15 feet respectively.

26. Now, look at the ranges of iD Space.

iD Space increases the range of all adds +2.50, +1.75 and +1.00 add wearers to 20 feet from clear reading at 16 inches (40cm). Wow.

This lens is designed for reading but also clear distance vision. That means that it's still not a traditional progressive but instead one that provides more reading and intermediate width, yet with some distance vision.

What is changing here, as we said, is that the widths of the reading and intermediates are reduced as the ranges of distance are increased, the width of the zones are decreased.

Understand?

27. These new lenses are very sophisticated inside so that takes care of the patient in new ways.

Like modern progressives, the inset i.e., the horizontal position of the near, varies depending on the power of the lens at near and at full range distance, position of wear and Binocular Harmonization technology.

Next, the amount of addition power, at the fitting point, is dependent on the design chosen.

It can be up to 40% of the add for the iD Space and iD Screen lenses, 50% for iD Zoom. That's logical when one thinks about the range of powers by add power.

28. These are power profile graphs of the +2.50D add power of the 3 lens designs.

Look at the shapes of the blue, green and red lines. Look at blue line, now the red... Blue is iD Space and it shows more of a change of power, left to right and over a more of the lens' vertical distance, top to bottom when compared to red, iD Zoom.

The green, iD Screen, is somewhere in between. See it?

29. Now I've added back top and bottom of a frame so you can imagine the power changing from lens top to bottom.

From a design point of view, on the left in the text box, **Zoom** and **Screen** assume that intermediate is viewed with a slight downward glance, 2.5 mm below from Fitting Point.

On the right, the reading area starts about 10mm below the Fitting Point

HOYA has tested the way that these lenses are used and placed the right power at logical points.

30. This corresponds directly to the ink marks and engravings. The distances above and below the fitting point as well as the location of where to check lens power.

It's straight forward.

31. The use, by the eyes, of two lenses, especially when the Rx is different in each eye causes dissimilar images in size, shape or position. Binocular Harmonization Technology™ optimizes the design of the two lenses and improves binocular perception by considering the prism effects.

A Full Binocular Eye Model verifies the performance in each of the 3 designs available for the individual's personal vision lifestyle.

Fitting provides either the default called Easy Fit or you can choose from 7 different corridors. And, fit with default vertex, tilt or wrap or specify the POW values.

Lenses are fit to pupil center and you use the normal progressive lens prescription.

Just like a progressive – that means that no adjustment of the fit or placement is needed other than the way that you would normally fit a progressive.

32. These are the approximate maps of each of the designs at a 20mm corridor, +2.50 add lens. ID Space has the most range of clear vision, iD Zoom the widest field of clear view. Change one and the other changes. However, since there is no full distance power zone like a progressive, in all cases the near and intermediate are wider than a general purpose progressive.

Again, look at the graphs below and you see the change of power is over a larger range in Space, less in Screen and least in Zoom.

33. Fitting to the patient's position of wear values includes vertex distances from 7 to 25mm, Pantoscopic angles of 0 to 25 degrees and wrap values to 15 degrees.

If POW values are not supplied, the default fitting is used that is the average fitting of eyewear i.e., 12.3mm vertex, 8.3 degrees of tilt and 4.4 degrees of wrap.

34. Checking the Rx uses this Centration Chart. It also defines the engravings for lenses P, S and C for Space, Screen and Zoom, the lens material index and the location of the power in the distance and near checking circles.

The illustration on the right shows the locations of the engravings and the variable vertical path of the power ranges. With this illustration, you can appreciate why a larger "B" measurement frame benefits the wearer. Remember, 18mm is required below the fitting cross and 10-12 above.

Look at the illustration again.

35. So, that leaves us with the decision about how to choose the right patient's lens choice.

1. Find the preferred indoor work or hobby, then the RANGE of distances i.e., from near to how far away in approximate distances – far, far mid-range, mid-range, near – what are the distances for which clear vision will make a difference?
2. Understand the horizontal clear vision requirements... two monitors for example, is it mid-range or near where they need the most width???
3. Then recommend the best-suited design

If you are presbyopic, imagine yourself and the way that you work – which lens would make the biggest difference for you?

36. Let's list the patient benefits.

There are 3 different design options for optimizing the required distance and visual field.

Each of the designs enhances the visual field whatever the corridor length.

Binocular Harmonization Technology™ is used to best balance the two lenses for supreme visual comfort

Order lenses either using the default Easy Fit and individual POW parameters

37. Here are some pearls that HOYA has learned for iD Space, iD Screen and iD Zoom lenses.

1. Select and bias toward a larger frame, there's just more reading and mid-range utility
2. Use easy corridor i.e., allow the HOYA lab to specify the corridor length unless you are replicating a particular patient need
3. Discuss how far the patient needs to see at distance with indoor lenses... that starts the decision making process
4. Knowing the frequency spent at each distance helps refine which design
5. From experience, iD Screen will be the predominant choice

38. Availability

From this table you can see that you can offer all the kinds of benefits of thinness and lightness, all with 100% UV protection for any prescription you might encounter.

Plastic, Phoenix/Trivex material, Phoenix Sensity Grey and Brown for those that read/work outdoors, 1.6 and 1.67 high index...

39. In summary – what did we learn?

First, it is an opportunity to tailor lenses to our patient's new media lifestyle. That means we should offer comfort with ergonomic office lenses

That, of course, includes added blue light protection

Using these lenses differentiates your office with advanced lens technology and helps to overcome the Internet barrage of optical shopping

This increases sales of multiple pairs and there are additional profit opportunities using Hoya 2nd pair program

40. Congratulations on completing this product spotlight course on New Media Optics Lenses.

Click on the exam if you are in Empower U, the HOYA learning website and complete the 20-question test. Download and print your certificate.

For ABO credit, log into your account at the Opticianry Study Center at 2020mag.com/CE, review the questions and take the exam.

Jobson notifies ABO directly of your pass (80 percent or greater) there's nothing more for you to do. Thanks again