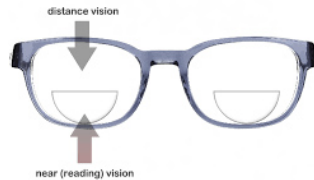


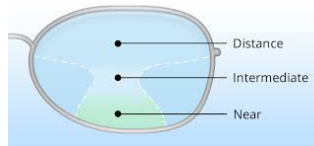
Progressive Eye Glasses

A common question we're asked is "what are progressive (multifocal) eye glasses?" Another is "why can't I get used to the [progressive] glasses? These are best answered by starting with what are progressives and how they differ from traditional bifocals glasses.

Traditional bifocals are easier to explain. Bifocals are a distance prescription (distance is beyond 6 feet or so) with small windows at the bottom that are focused at about 16 inches. The limitation of this style is only one near distance is in focus. Speedometers in your car and store shelves beyond arm's length, while shopping, are not in sharp focus. To read the labels on these shelves, you must get close and look through the bottom window.



Progressive glasses, on the other hand, besides having distance vision, offer a range of near vision, continuously varying from distance through intermediate (2 to 3 feet away) to near (16 inches). Since our eyes converge (come together) when we read, progressives have a v-shaped, near channel, which our eyes naturally follow as we look at near objects.



These ranges are much more convenient than the two found in bifocal glasses. However with their convenience come some potential problems. Think of progressives like a Swiss-army knife: they do many things well, are convenient, but not as perfect as single vision lenses.

To answer the question about getting used to progressives, there are two basic issues: incorrect usage and mis-made glasses. The first is not uncommon. Many adults get their first pair of glasses in their forties, and since they've never worn glasses before, find the various distortions annoying. Most of these distortions, such as noticing the edge of the frames, will go away (be suppressed) after a few days of use.

But one aspect needs discussion, and that is the matter of moving one's head. People who've never worn glasses tend to be "eye turners". That is, when they look from something within arm's length that is straight ahead to another object a few inches to the side of center, they move their eyes, not so much their head. However, with progressive glasses, the close focus section is located towards the lower center of each lens. If you look towards the outer edges of the lens, things will be blurred. This requires those of us who use progressives to become "head turners".

By turning our heads, we keep the central, v-shaped near channels pointed at what we're reading. We need to modify our behavior when using progressives. In other words, we need to use the tool as it was designed, not as we wish.

However, if the lenses were not properly made, no matter how we attempt to use progressive glasses, they will never work well. The three most common mistakes we see are incorrect prescriptions, truncated adds and mis-aligned near channels. (A fourth mistake, a change in lens base curve is beyond this FAQ.)

Incorrect prescriptions are fairly obvious: one or both eyes cannot clearly see at distance. The fix is to re-make the lens or lenses (or possibly re-check the refraction, the process of determining the correct lens power).

The next problem, “truncated adds”, means that the lowest portion of the near channel has been trimmed off, preventing the wearer from seeing at the nearest reading range. A common comment when this has happened is “the distance vision is great but I can’t read with these glasses”. A typical culprit for this problem is an eyeglass frame that is vertically too short (the height of the lens). While single vision glasses can have very small frames, progressives need a larger frame to get the entire near channel properly located. If the progressive lens is placed into a smaller frame, something must be trimmed away, and it’s usually the bottom (the closest reader range) that gets the axe. To avoid this problem, we recommend a frame whose height is no less than 35mm.

The other common problem is mis-aligned near channels. If the pupillary distance (PD) is not correctly placed onto the progressives, both eyes cannot see clearly at close distances at the same time. Our brain will typically align our dominant eye, leaving the other eye blurry. The complaint is that things just aren’t so sharp when reading, or difficulty doing near tasks that require 3-dimensional clarity. The only fix is to re-make the lenses. No amount of wear-time will allow you to adapt to them.

You should test your progressives before you leave the store to check the PD alignment. You should do the following. Put on the new glasses, close your left eye, and then look at a target that is about 2 feet in front of you. While keeping left eye closed, slightly move your head (literally only a few millimeters), up and down and side to side, until the target is sharpest. Then, without moving your head or the target, close the just tested right eye and open the left eye. If you have to rotate your head left or right (again only a few millimeters) to get better sharpness, the PD is not correct and one or both lenses need to be re-made. If you are uncertain, repeat starting the opposite eye. If you are still uncertain, the PD is probably close enough and not a concern.

There are occasionally other optical issues people can notice with any style of lens. For example, if the base curve of the lens is changed, the glasses may feel strange even though the prescription is correct. Additionally, if the lens material is changed from what a person is used to wearing, there may be distortions, such as near the edges of the frame, that give difficulties to the wearer. A simple recommendation is try to keep the same lens material and base curve as previous lenses, whenever possible.