Measuring Progressive Eyeglasses

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1.0 Introduction

Kendall Optometry Ministries, Inc (KOM) owns two different models of digital lensmeters. They are documented in these 2 KOM manuals: 1) Operating the Reichert LensChek Lensmeter and 2) Operating the Reichert AL200 Lensmeter. Refer to these manuals for further details.

Those who use these instruments very skillfully measure single vision and BiFocal eyeglasses but frequently some have problems measuring progressive eyeglasses. The purpose of this document is to describe a procedure which will improve the accuracy of those measurements. Here is a picture of the two different lensmeters:

![Reichert AL200](image1)
![Reichert LensChek](image2)

To summarize this document

For accurate measurement of progressive eyeglasses, make the first measurement (for distance) a little less than 1/3 of the way down the glass (point 1 below). Make the second measurement (for the Add) as near the bottom of the lens as possible but in the direction of the nose (Point 2 below).

![Eye diagram](image3)

Read on for further details.
2.0 The procedure

Below is a pair of progressive eyeglasses when viewed from the front.

They look very much like single vision eyeglasses and that is what many people assume that they are. However, if you hold a pair of these eyeglasses in front of a progressive identification chart like you see to the right, you will see the below.

Notice how the lines are further apart at the bottom than at the top. This is due to the additional magnification that progressive have at the bottom of the lens. This magnification is called the ADD for ADDed power.
Here is a picture of the progressive glasses again:

After you have used the progressive identification chart and you are sure your glasses are progressive, you will need to set your instrument up for measuring this type of eyeglasses. Follow the instructions below based upon your model of instrument.

Reichert LensChek

Progressive selection is made.

Push here to select the symbol showing to the left of the button.

Reichert AL200

The symbol showing over the button is the setting to be chosen next. The current setting display is single vision now and progressive next. In this example depressing the button once will cause the progressive setting to be chosen and the display will change to be like what is shown in the middle of the next page.
Looking at the below picture of glasses, position your lensmeter so that the hole (see below) in the boot is at the circled position (depending upon which lens that you are measuring). Notice this is a little less than 1/3 of the way down the pair of glasses. This is the place where most people will look through the lens at a distance. You will see the below pictures on the two lensmeters:

You may have to move the glasses left and right to get the above display. Refer to the LensChek or AL-200 manual for further details.

After you get the above reading on the LensChek you must set the Distance/Add to Add as shown below:

The switchover to measure Add is automatic on this unit.
Look at the pair of glasses again.

To measure the Add you will need to lift the glasses OFF of the platform and move them in the direction of the arrow so that the light beam is positioned as shown in the bottom circle (point 2). Move it as close to the frame as possible to get the maximum Add. Follow the direction of the instrument as to how much to the left and to the right you will need to move. You will be moving the light beam down and slightly toward the nosepiece.

Depending upon the instrument, you will see the above. To record the Add, press the Memorize button that is on the top of both instruments.

At this time you have measured one eye. Follow the same procedure to measure the other eye.

**In summary**

For accurate measurement of progressive eyeglasses, make the first measurement (for distance) a little less than 1/3 of the way down the glass. Make the second measurement (for the Add) as near the bottom of the lens as possible but in the direction of the nose.