NIDEK

REFRACTOR
RT-6100

Frequently asked questions

Q-How do I measure PD and BVD measurements?
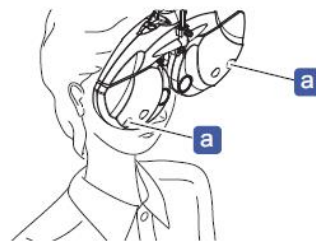
A- <u>PD</u>
By pressing the PD field on the RT-6100 screen the light will come on and the graticules will be displayed in the eyepieces. Monocular and binocular measurements can be inserted.

A- <u>BVD</u>

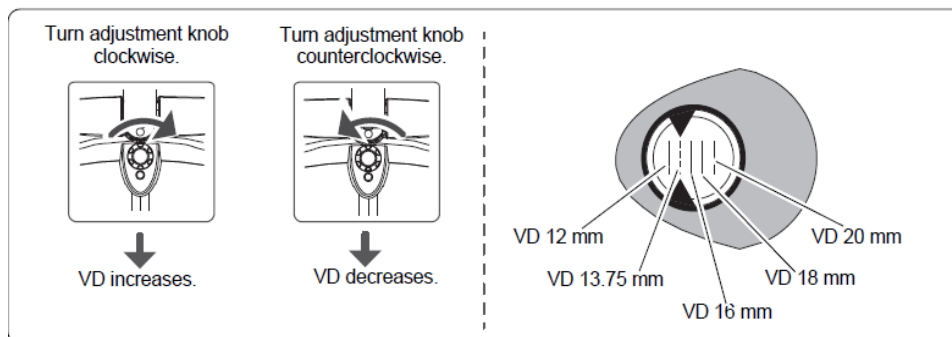Look through the VD check windows **a** from the front to check the vertex distance.

If the VD check windows are viewed at an angle, the vertex distance cannot be checked correctly. The following is the figure that the VD check windows are viewed from the front.

- The circle in the front **b** and the circle in the back **c** look concentric.

- The triangles in the front **d** and the upper and lower solid lines in the back **e** look overlapping.

Align the patient's corneal vertex to the desired marking with the forehead rest adjustment knob.
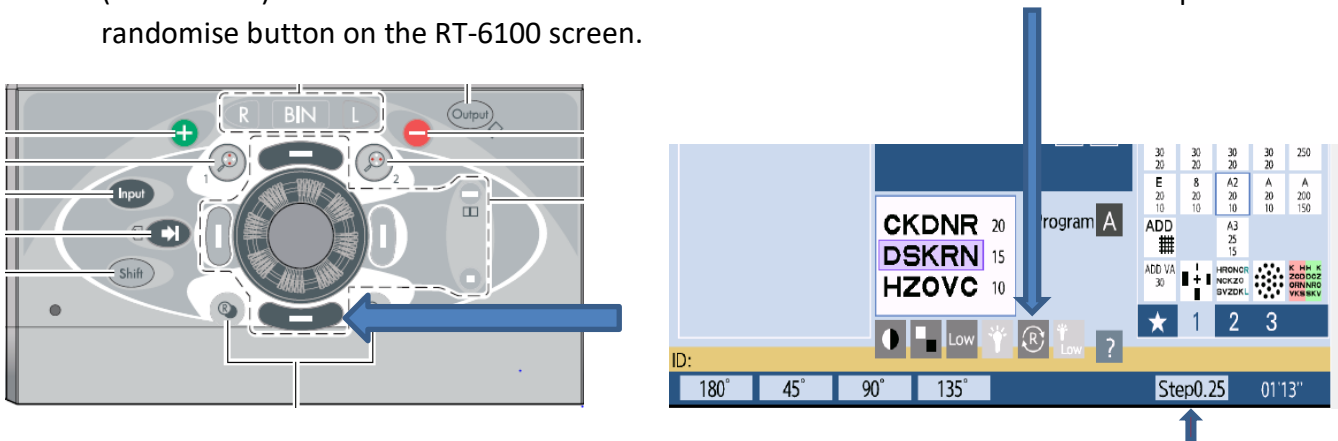
Turn adjustment knob clockwise.

Turn adjustment knob counterclockwise.

VD increases.

VD decreases.

VD 12 mm
VD 13.75 mm
VD 16 mm
VD 18 mm
VD 20 mm

The BVD is set to 12mm when the headrest is in the original position.

Q-How do I know if the patient is in the correct position?

A- The blue light on the phoropter will be lit when the patient moves away. The light will be extinguished when the patient is in position with their head pushing against the forehead rest.

Q- Can I randomise the letters displayed to the patient?

A- Yes, masking a single letter or row of letters by pressing the button indicated by the arrow below (on screen 1) this will isolate these letters from the rest of the chart. To randomise press the randomise button on the RT-6100 screen.

Q-How do I use the cross cyl dot test?

A- When you press the X-cyl dot test the RT-6100 automatically goes into cyl mode.
    There are 2 different ways of confirming the cyl.

1) There is 2 dot patterns presented simulteously where you have to refine until equally clear, this is the AUTO mode.

2) There is only one dot pattern presented where you use the 'flipper' buttons to refine asking which is clearer, 'one or two'. This is the most commonly used. If this is your preferred test you can press the button on the screen (shown by the arrow above pointing to Step0.25) which changes it between AUTO mode 1 and 2 or you can choose to set it as a default by selecting MENU-SETTINGS-PARAMETERS-XC – select either -0.25 or -0.50.

3) You can use any screen you wish by selecting as above, pressing axis/cyl on RT-6100 then presenting '1 or 2' options.

Press ⊞ to present the Dots chart.

The device enters AXIS mode.
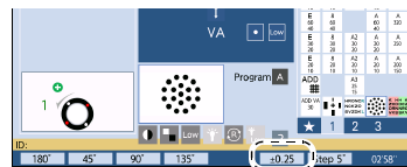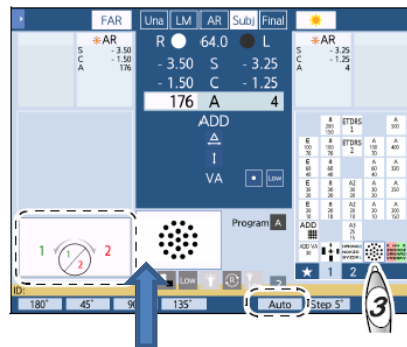
The cross cylinder lens is placed.

Refine the cylinder axis until Chart 1 and Chart 2 appear equally clear.

● When the parameter "Cross cylinder(XC) test" is set to [Auto]:

Chart 1 and Chart 2 are presented at the same time. The position of each chart is displayed in the operation message field.

● When the parameter "Cross cylinder(XC) test" is set to [±0.25] or [±0.50]

Present Chart 1 by pressing 🔍₁ and Chart 2 by pressing 🔍₂, then ask the patient which is clearer.
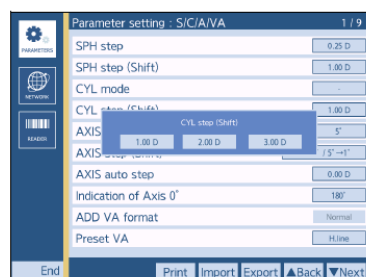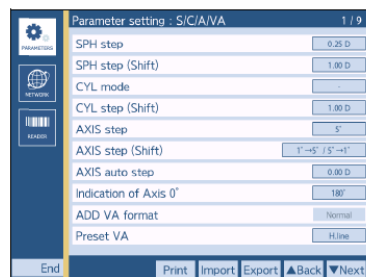
Adjust the following as necessary.

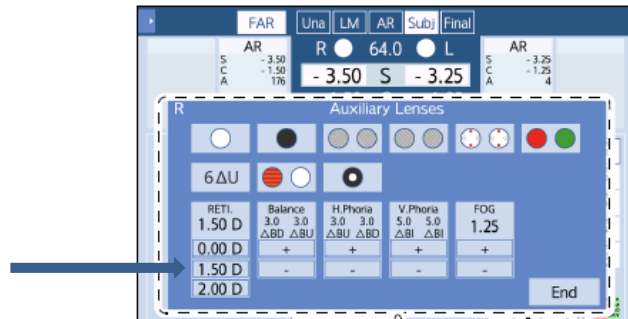| Chart 1 appears clearer.	Turn the dial counterclockwise by one step or press ➕.
Chart 2 appears clearer.	Turn the dial clockwise by one step or press ➖.

Q-Can I change the power steps for sphere and cylinder powers?

A- Yes, this is possible by changing parameters found in settings. Press the arrow at the top left of the screen which will display a screen, press SETTINGS- PARAMETERS- from here you can change to your preferred steps. By default, they are set to 0.25D steps and 1.00D steps using the 'SHIFT' button.

Q- Can I do retinoscopy with the RT6100?

A- Yes, select R or L aperture button on the RT6100 screen, this displays a range of auxillary lenses. From here you can select the retinoscopy working lens you desire.

Q-How do I fog one eye for binocular balancing?

A- When one eye is occluded, press the aperture, select fogging lens option. Then select other eye to swap fogging lens.

Q-Is there a +1.00 blur test?

A- Not specifically, however if you hold SHIFT while turning the central dial, it will change by 1D steps which can be presented to the patient as a +1.00 blur effect.

Q- How do I remove prism effect?

A- By pressing the Prism button on the screen it will alternate between selecting prism and removing all prism.

Q- How do I remove the near add?

A- By pressing the ADD button it will alternate between selecting the near ADD or removing the near ADD.

Q- Where can I find the Amsler chart?

A- Press the arrow at the top left of the screen, this displays the side menu. Select Amsler grid. The patient can draw their vision pattern on the screen with the touch pen provided.
Once complete this image can be exported if this function has been configured.
To EXPORT- External Output Function is set to (TO BE USED) the image is captured and exported in the bmp file format.

Q-When using the Maddox Rod test can the streak be brighter?

A- Unfortunately, no. The brightness of the streak it determined by the light source creating the streak.

Q- On the reading chart, how are the letters measured?

A- There are a number of tests on the Near chart, but they are not measure in N-point notation. You can use a conversion chart or use your hand held reading chart at a measured working distance in front of the RT6100 near chart (see workflow guide).
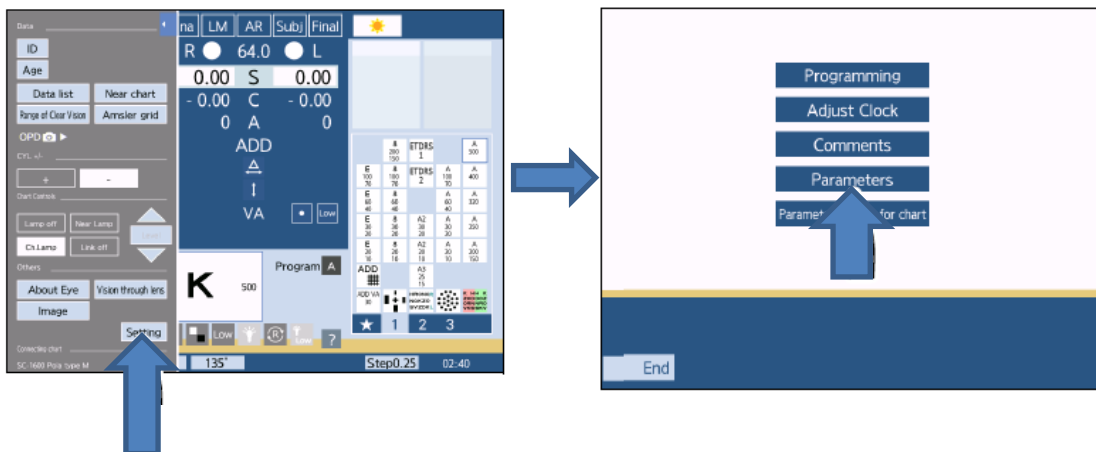
Q- I am unsure of what some tests do?

A- There is a '**?**' button which is really useful for explaining how to perform the tests when you are navigating the screen.

Q- How do I clear the screen in preparation for my next patient?

A- Hold SHIFT button and press OUTPUT.

Q-How do I change settings?

A- To change settings go into the side menu -SETTINGS- here you will find parameter settings.

Q- Why is there different tests available depending on which room I am testing in?

A- Some tests and functions vary depending on which type of chart the RT-6100 is connected to.