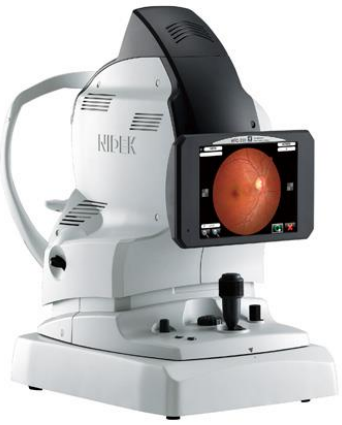
Nidek RSD 330/ AFC 330

Advanced Photography Guide



The Nidek RSD 330 OCT and AFC 330 contain the same photography system.

- 12-megapixel camera
- Fully automated and manual capabilities
- Adjustable flash levels
- Small pupil mode for image capture down to 3mm

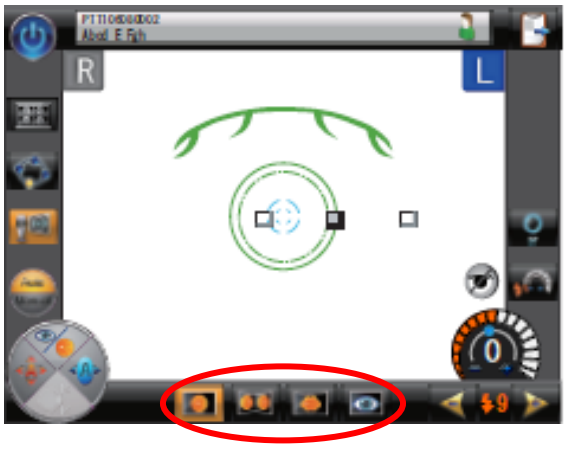
Both have four available photography modes.

Photography Modes:

- **Standard fundus photography**
- **Stereo photography**
- **Panoramic photography**
- **Anterior photography**

Accessing photography modes:

The different photography modes can be accessed using the ‘FC’ capture mode on the Nidek RSD 330 OCT.

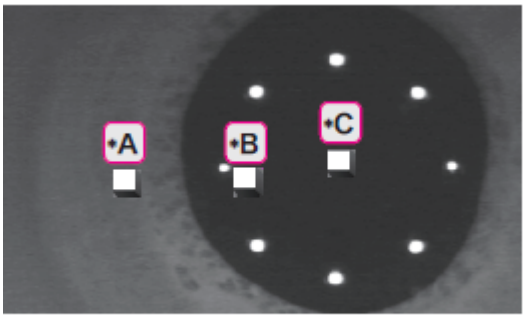


The different photography modes can be accessed at the bottom of the touch screen on the AFC 330.

Standard fundus photography:

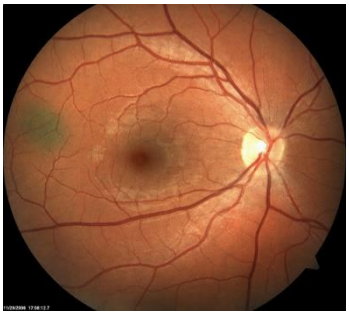
It is possible to capture standard fundus photographs at 3 pre-set patient fixations, using the Nidek RSD 330 and AFC 330.

The 3 fixation points allow the centration of different retinal features during image capture.



*A	Optic disc
*B	Intermediate area between the macula and optic disc Initial position of the Internal fixation lamp
*C	Macula

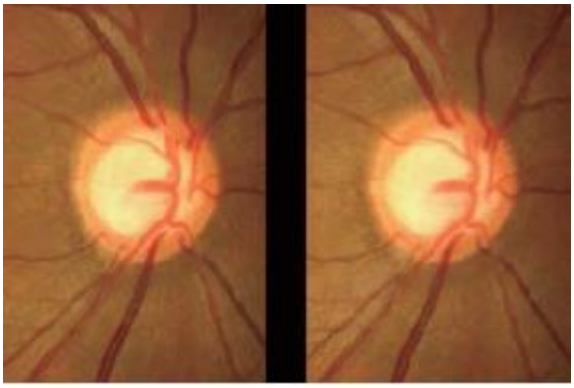
The chosen fixation point will be indicated in green.



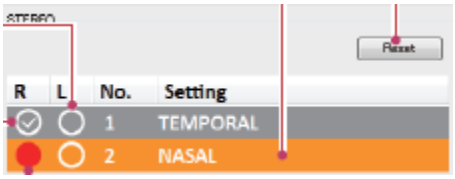
It is possible to use the touch screen of the device to manually move the fixation point to any preferred position. This feature can be used for single capture of images in peripheral location eg. Photography of a peripheral naevus.

Stereo photography:

The stereo photography mode can be used to capture stereoscopic images of the retina.



Two images are taken at 1mm intervals, nasally and temporally to the fovea.



Images can then be merged using Image Wizard programme built into the Navis-Ex software.

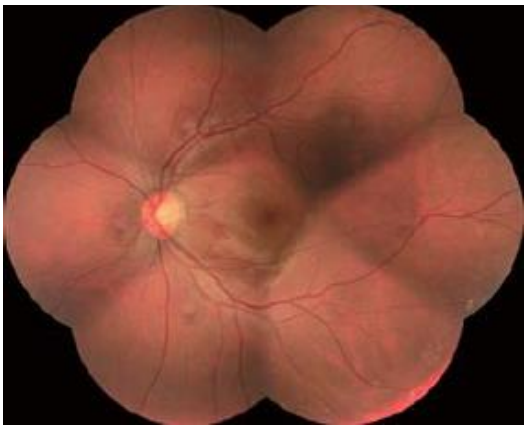
TIP! Analysis of a stereo image is only possible with a stereo viewer

Panoramic photography:

The panoramic photography mode can be used to automatically capture peripheral retinal images in 7 directions of patient gaze.

The **fixation spot** will automatically move, to capture an image in each direction of gaze. The patient should be advised to follow the fixation light. There will be a camera flash for every individual image captured.

Once all images have been captured, 'Image Wizard' can be used to align the images together.



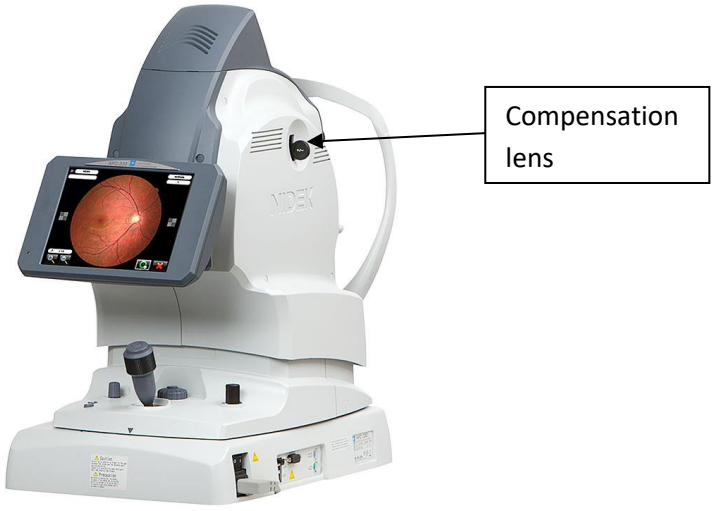
The final panoramic photo produced will provide a field of view of approximately 75-80 degrees (px pupil dependent).

TIP! Panoramic mode requires a dilated pupil

Anterior photography:

The Nidek RSD 330 and AFC 330 can be used to capture camera images of the anterior eye.

Before anterior image can be captured, anterior mode must be selected, and the compensation lens adjusted to the '+' position.



Anterior image capture is manual, with no automatic features available.

The joystick should be used to adjust camera position, and the capture button used when a clear image is seen on the touchscreen preview.

The final image can then be reviewed before saving.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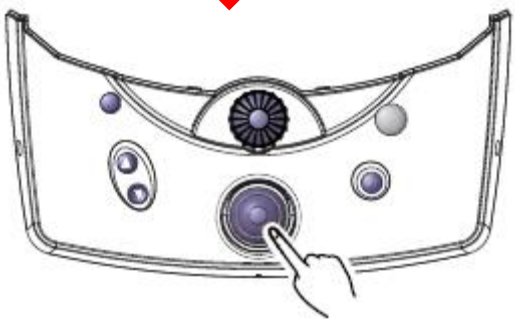


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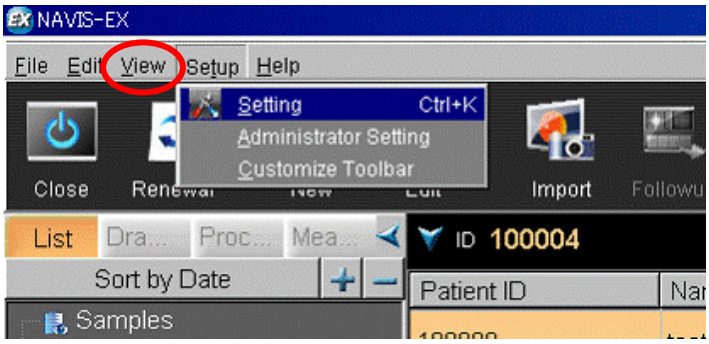
Image wizard:

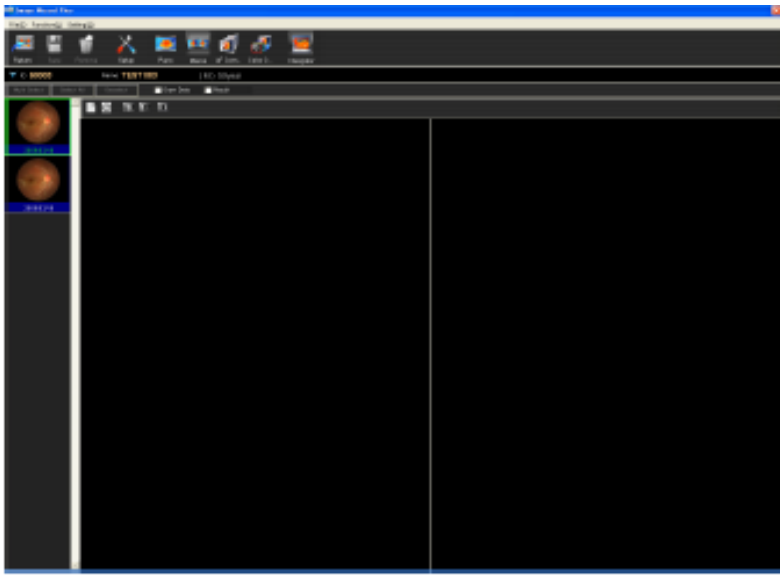
Image Wizard is a programme built into the Navis-Ex software, that can be used to view and manipulate camera images captured during any of the photography modes.

To enter the programme, 'Image wizard' should be selected from the 'View' dropdown menu.

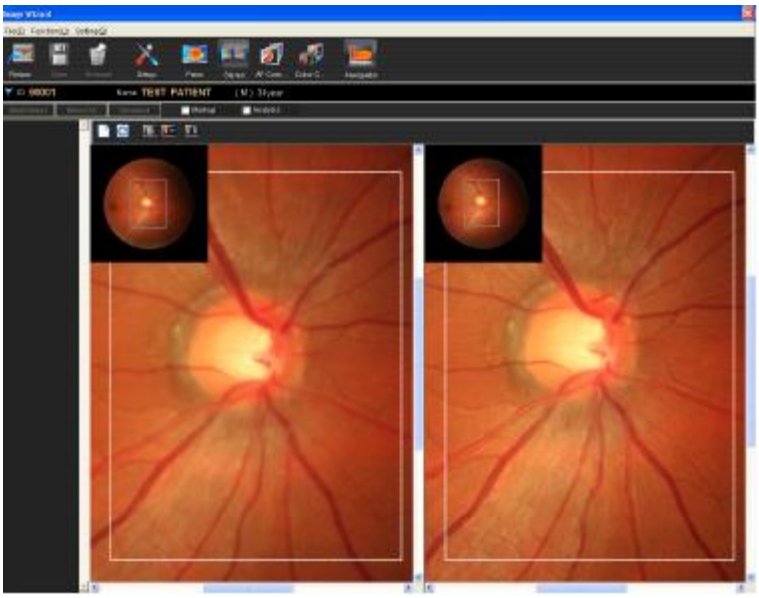


Stereo Photography:

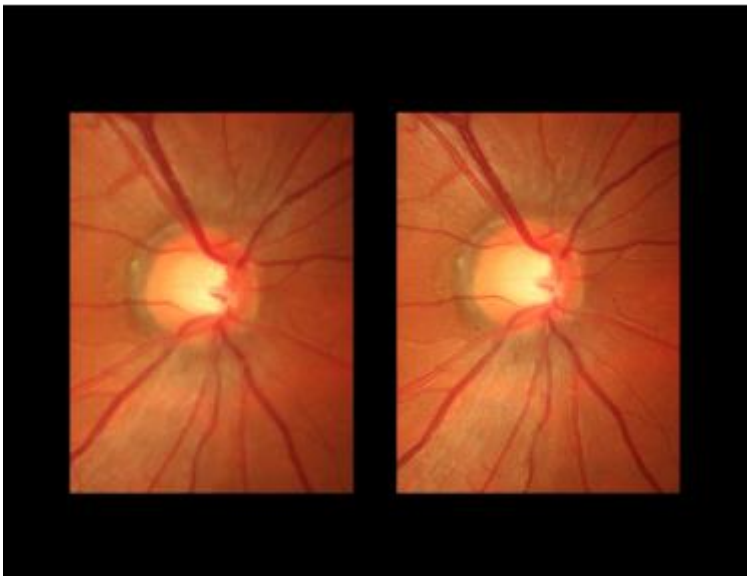
Image Wizard can be used to 'merge' temporal and nasal stereo images to provide a stereoscopic view.



Thumbnails can be selected for view and the position of image altered.

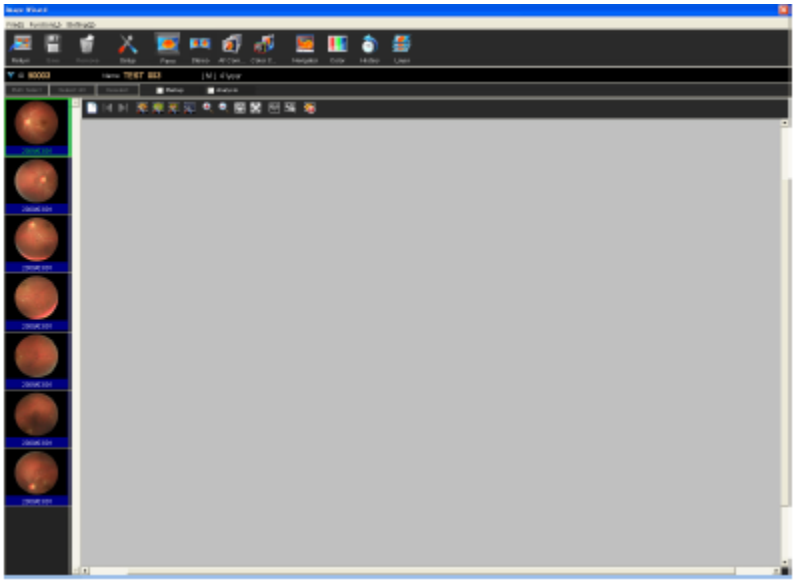


The final image can be viewed with a stereo viewer.



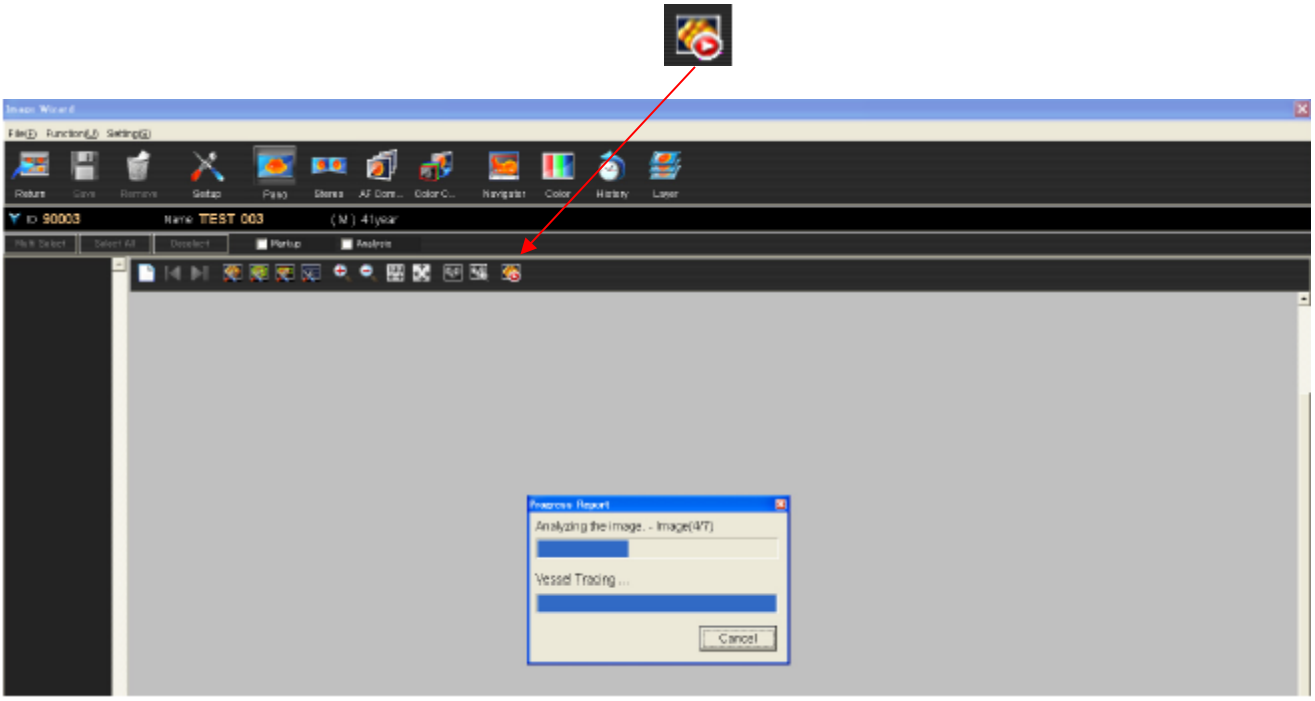
Panoramic Photography:

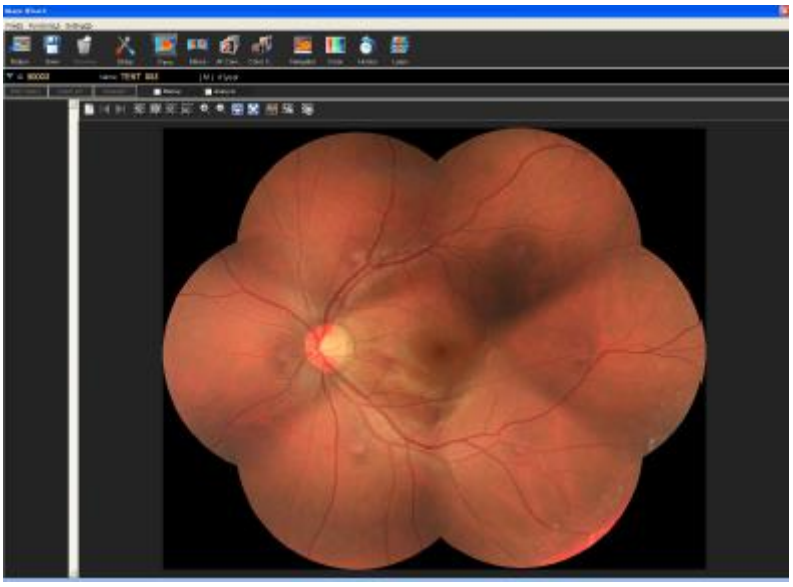
Image Wizard can be used to align peripheral fundus images captured using panoramic mode.



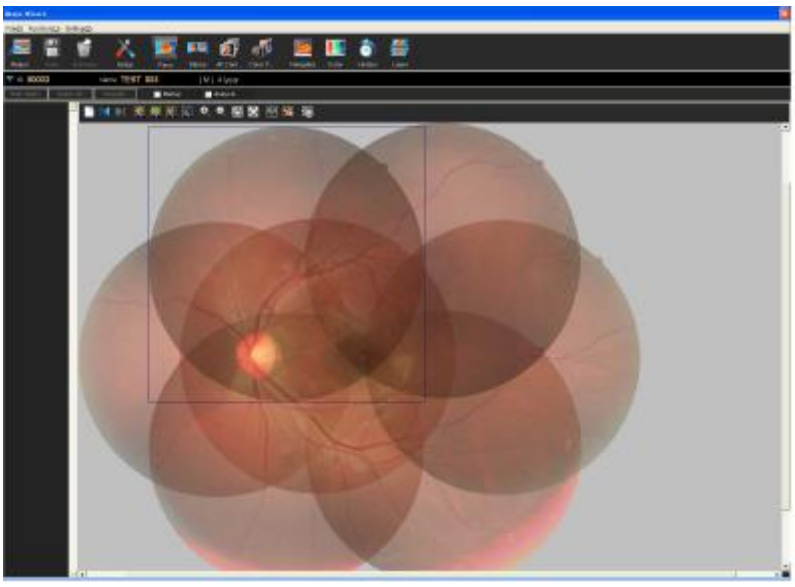
The captured image thumbnails can be viewed, and automatically or manually aligned to form a full peripheral view.

Automatic image alignment can be conducted by selecting the ‘Auto image’ icon.





The final image can be manually adjusted if automatic alignment is not accurate/possible.



TIP! Poor image quality will affect the accuracy of 'Auto image' alignment