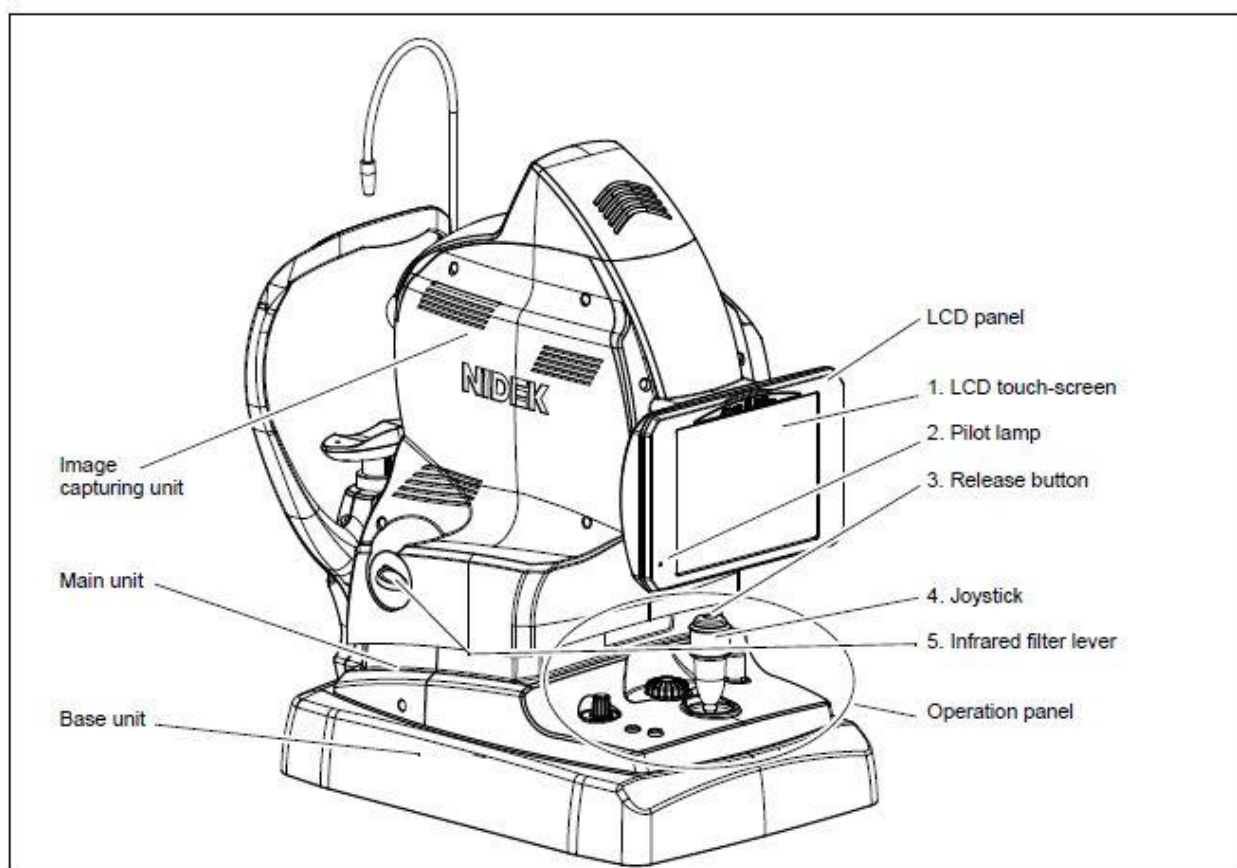




Nidek Non-Mydriatic Auto Fundus Camera (AFC-330) User Guide

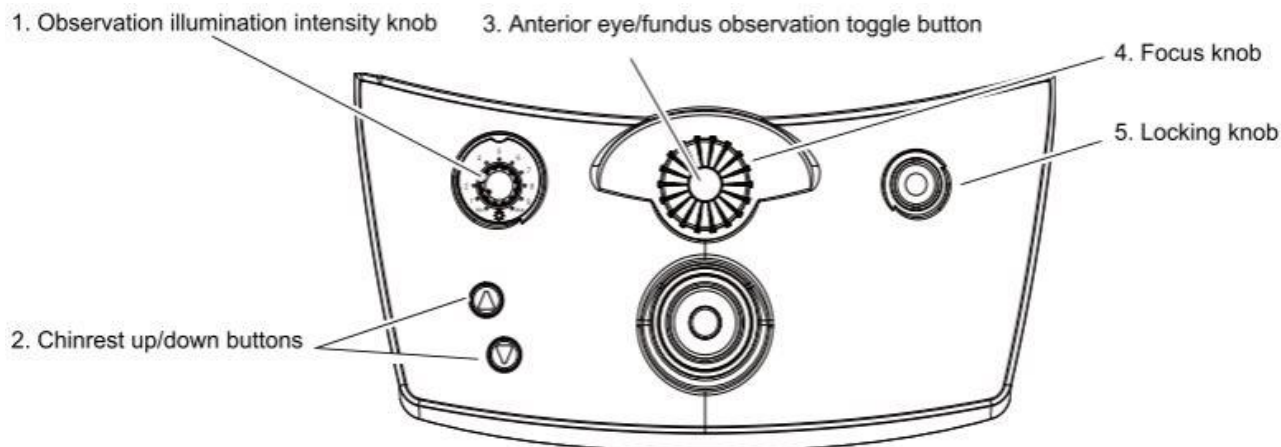
The AFC330 is NIDEK's fully automated non-mydratic fundus camera. The integrated 12MP camera and computer in one compact device, allow the capture of high quality images in a simple, easy to use automated process. The AFC330 can be used as a standalone device, or connect to an external PC to use NIDEK's NAVIS-EX software, or can integrate into various Practice management systems. It is fully diabetic screening accredited in the UK, and has the ability to produce Panoramic and anterior eye photos also.

NB This guide is intended to be used in conjunction with the Nidek AFC-330 Operators Manual and instructional videos.



The AFC-330 is powered on by the switch on the RHS of the base unit.

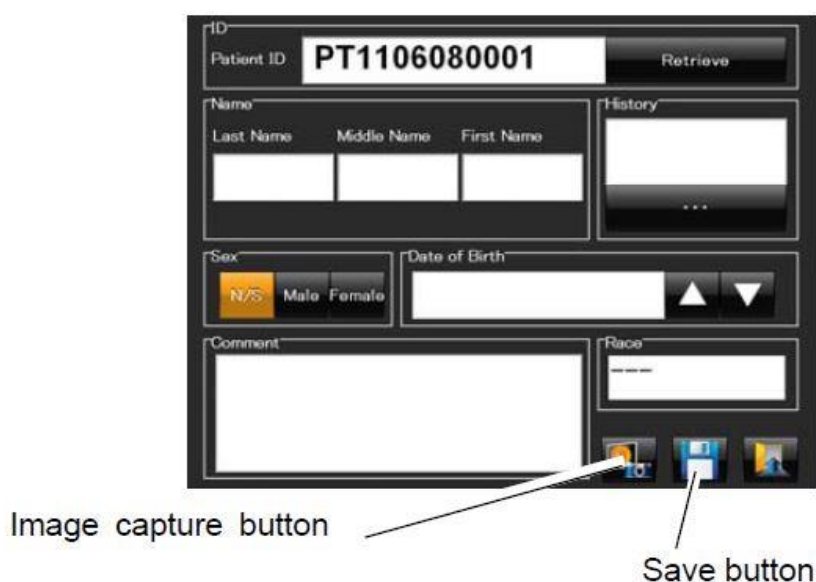
1. LCD touch-screen - 8.4-inch colour LCD touch-screen can be tilted at various angles
2. Pilot lamp – indicates when the device is switched on
3. Release / Capture button
4. Joystick - Tilting the joystick moves the image capturing unit to left, right, forward, and backward. Rotating the grip of the joystick moves the image capturing unit up and down.
5. Infrared filter lever - Used when cleaning the objective lens.



1. Observation illumination intensity knob – Normal use, approx. 2
2. Chinrest up / down buttons
3. Anterior eye / fundus observation toggle button - Pressed to manually toggle between the anterior eye observation and the fundus observation screens.
4. Focus knob - Turned to manually adjust the focus of the fundus image to be captured.
5. Locking knob - Used to lock the main unit to the base unit.


Inputting Patient details & capturing images

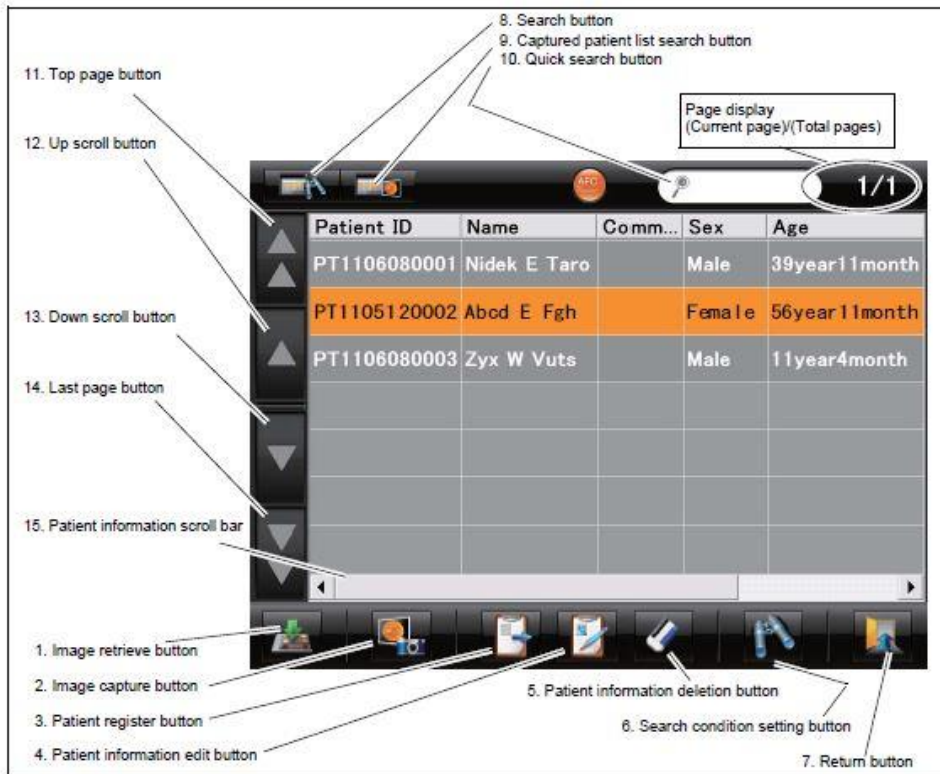
The AFC-330 can only capture photos once a Patient has been assigned. If the AFC-330 is being used as a stand-alone device, this is done via the Patient registration button (Clipboard) or the Patient list button if the Patient is already in the database.



[Patient information register screen]

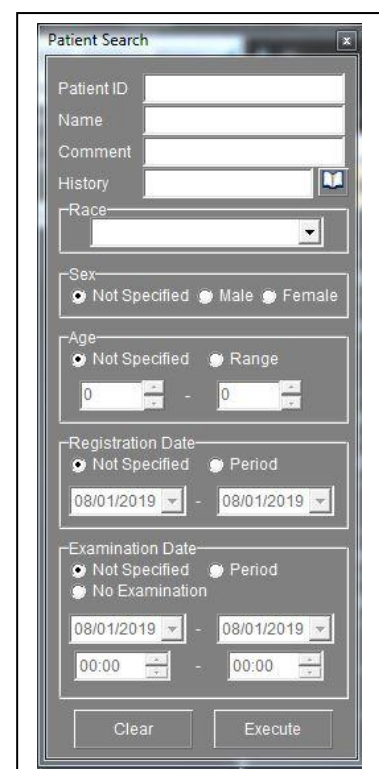
Pressing the patient list button  displays the screen shown below.

(When the Patient ID quick registration function is set to ON, the button changes to .)



It is then possible to input the Patient details such as Name, DOB, Gender, Race, etc. Pressing the image capture button will take you into capture mode.

If the AFC-330 is being used in conjunction with the NAVIS-EX software, New Patient information can be input via clicking the 'NEW' icon on the toolbar and existing Patients found by using the search box. To enter capture mode click capture on the toolbar.



Patient Search

Patient ID:

Name:

Comment:

History:

Race:

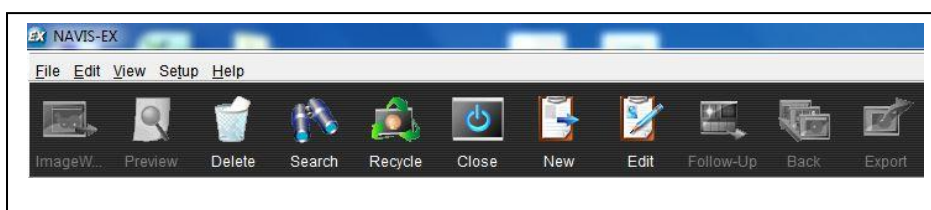
Sex: Not Specified Male Female

Age: Not Specified Range
 -

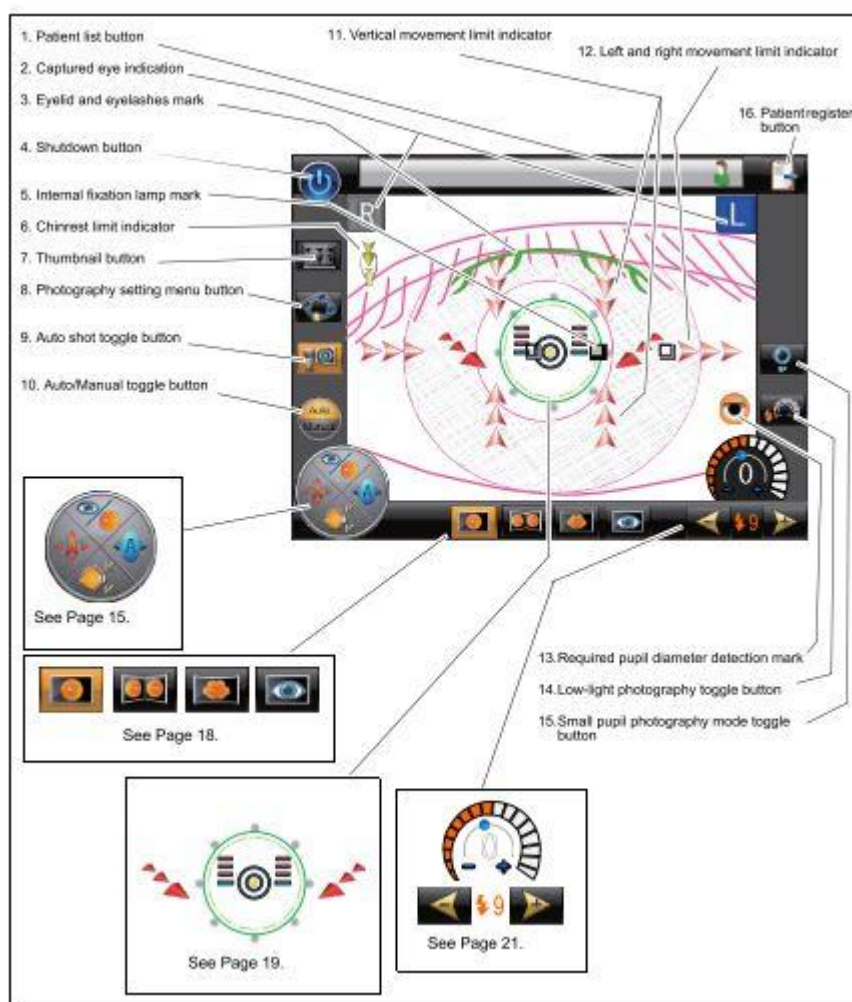
Registration Date: Not Specified Period
 -

Examination Date: Not Specified Period No Examination
 - -

Clear Execute



Select capture mode - single shot (default), Panoramic or anterior photo. In Auto mode the AFC-330 will track the patient's eye in 3 dimensions, switch to posterior view, focus and capture the image, any of these functions can be toggled on or off by pressing the desired button, or to turn off all automatic functions, toggling the AUTO / MANUAL button.



The Patient should be set up at the device in a comfortable manner. Adjust the chinrest height and table height (if applicable) to position the Patient's eyes level with the eye level marker on the headrest. The Patient should be advised not to talk or move their head greatly at this time.

The Patient should be instructed to fixate on the green lamp inside the AFC-330. The device should be moved closer slowly to the Patient's Right eye by moving the joystick and main unit so the two green rings on the screen act as a guide to position centrally on the pupil. Moving closer, green bars will appear in the lower portion of the green circles indicating the unit is close to the focussing point and must be moved slightly closer to the eye. If too close to the eye, pink bars are seen in the top portion of the circles indicating the main unit



should be moved slightly away from the eye. The AFC-330 should now 'take over' and perform the final positioning. At this point, it is advisable to release the joystick and main unit.

The AFC-330 will switch into fundus observation mode and capture of the image will occur automatically.

After capture, the image will be displayed. Press the GREEN circle to save the image, or press the RED cross to delete the image. Move across to the Left eye and perform the capture process again.

Once all images have been taken, the thumbnail screen will be displayed. All captured images will be available to be viewed. If connected to NAVIS-EX, the images will now be available in the Patient record.

Panoramic photography

A wider, panoramic composite of the fundus can be obtained by capturing different images of the fundus and using the NAVIS-EX software to stitch the images together.

Image capture occurs in the same way as for a single image, but after the first image is saved (green circle) the fixation will automatically move to the second position, then third, then forth, etc until all images have been captured.

Once all the images have been captured and saved, image wizard in NAVIS-EX will enable the creation of the panoramic composite photo.

Anterior photography

Images can be captured of the anterior eye also. There are no automatic features in anterior mode, instead the focusing and image capture is performed manually.

Position the Patient as before, then select anterior photography mode. On the AFC-330 screen, 'switch to the + compensation lens' will be displayed, which can be selected using the compensation lens paddle on the RHS of the main unit.

Move the main unit into the desired position and perform fine focussing with the joystick, moving in and out to bring the image into clear focus. Press the capture button to capture the image.



Shut down procedure

The AFC-330 has an integrated PC, and similar to a PC **MUST** be booted down rather than just switched off. Shutting down the unit incorrectly can cause damage to the device or loss of data.

On the main LCD screen of the unit, in the top LHS corner is the power button. Press this once and the shut-down procedure begins. After a short while, 'Please turn off power' appears onscreen – it is now safe to switch off the unit.

Place the lens cap over lens aperture and cover over to protect the unit.