Quick Tutorial: Image Acquisition



# **AULELIOU**





### Performing System Test

Every 24 hours a system test is required. It verifies that acquired parameters are accurate.



1 Attach the Test Target

- Move the camera backwards and remove the lens cap vertically.
- Attach the clean test target to the head rest and position it facing the camera.

Kg. Perform System Test

- Align the circle on the camera image to the center (dot) by moving the camera until it turns green.
- Center the line on the square in the **OCT** section image by moving the camera back and forth until both turn green.
- Press the joystick button, wait until all 6 steps are done and tap **OK** to confirm the test has been completed successfully.

If the system test failed: Clean the test target and repeat the system test by touching Repeat. If it fails multiple times, contact your Heidelberg Engineering partner.

#### F. **General Settings**

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# Standard Tabs on the Touch Screen



General Fixation settings Tracking

Switch tracking on and off by touching Disable/Start tracking e.g. to capture peripheral structures.

ANTERION®



### **Performing an Acquisition**



- Adjust the table height and then the chin rest to align the patient's eyes with the head rest markers.
- Select the desired application by touching the appropriate icon:





- Aligning the Camera Image
- Move the camera towards the eye and align it until the iris is visible.
- Turn the joystick until both the circle and the cross are aligned and appear green.
- Adjust the focus so that the internal fixation target is as sharp as possible (approx. spherical equivalent).



#### 🕌 Aligning the OCT Section Image

Move the camera back and forth so that the cornea and the corneal reflex are within the dashed box.





Image acceptably aligned



#### Aquiring the Image

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- Ask the patient to blink and hold the eyes wide open during the acquisition. Assist carefully, if the patient cannot open the eye wide enough.
- Start the acquisition by pressing the joystick button.

Practice safe handling of ANTERION's basic functions both in acquisition and analysis by the help of 1:1 simulations.





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# Cornea App

# **Checking Examination Quality**

Immediately after the examination process is completed, a quality check page automatically appears. The examination results are displayed according to the App.

#### Corneal Topography

Check the tomographic data and maps for adequate results and missing information.



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#### Camera Image

- Make sure the reflection points are sharply displayed with a round shape and build a circle.
- The pupil and white-to-white boundaries should be acceptably segmented.

#### 0CT Section Images

- A symbol in the upper left corner shows the scan direction.
- Review the segmentation of the OCT section images.
   Reexamine the patient if corneal boundaries are not acceptably segmented.



#### Acquisition Quality Details

- Click **Show details** to display detailed acquisition quality results.
- If a parameter appears yellow or red, this can be due to:
  Motion: The corneal vertex was not aligned or moved too much.
  Fixation: The patient did not fixate properly.

**Tear film and lid**: The corneal reflexes were compromised because of blinking or eyes were not open wide enough, dry eyes, or corneal irregularities.

# Metrics App

# **Checking Examination Quality**



- Check OCT section images.
- Select an OCT section image for a larger view. Review visibility of relevant anatomic structures, e.g. scleral spur and anterior chamber recess.



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Check acquisition quality.









## **Default Scan Patterns**

Choose one of 4 customizable scan patterns.



# **Customizing Scan Parameters**



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- Change desired scan parameters.
- Save scan pattern as a preset:
  - The Last used button is only available after the first image acquisition of the current session.
  - To save the defined scan settings, tap and hold Custom 1, 2 or 3. To overwrite a pattern, repeat the procedure.



#### Position the scan:



By default, scan patterns are centered on the eye's corneal vertex. To use an offcentered scan, touch **Center**. The button turns black (inactive) and it is possible to move the scan pattern. If you want to rotate the scan, touch **Rotate**.

### **Paracentral Structures**



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# Editing Eye Status

OS - Eye	e status		General	
Cornea	No surgery		Fixation settings	
	Phakic	-	Tracking	
Lens	make		• Eye status	
	Vitreous only			
Vitreous				

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- Select Eye status tab.
- Open the drop-down lists and select the respective status.
- Touch Save.

# **Extended Axial Eye Length**

If an extended axial eye length is detected, proceed as follows:

Move the camera backwards so that the cornea and corneal reflex are within the dashed box.

Aquire a second image by pressing the joystick button.



# **Checking Examination Quality**



 Check camera image.
 Check OCT section image.
 Check aquisition quality details.
 Check corneal topography.
 Check axial length graph: If the intensity peak does not represent the RPE, repeat the examination or adjust it manually in the viewer.

