DRI OCT Triton (plus)*

Quick Guide to OCT & Fundus Capture

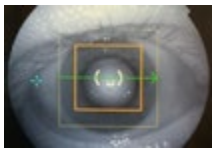
Register/Capture Procedure

Register new patient or select existing patient from the IMAGEnet 6 main screen.
If patient is NOT already in system, press New Patient, enter First/Last Name, Birthday and Patient ID
(If *Harmony is integrated, the patient is automatically available in the worklist.)

Position Patient

1. Make sure the patient is comfortable with their chin on the rest and their forehead against the band.
2. Adjust the chinrest height so the patient's eye is level with the canthus marker on the chinrest post.

Alignment and Capture

1 

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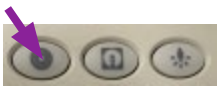
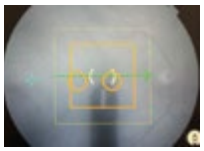
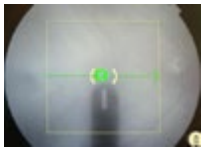
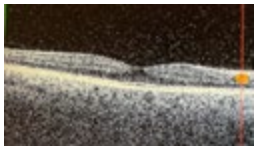
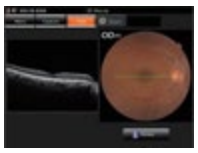
3 

4 

5 

6 

10 

1. Select preferred scan on Triton touch panel. Pull instrument back and instruct patient to look straight ahead. Move instrument in and use joystick for fine adjustment to centre the eye. Rotate to adjust vertical position.
2. Adjust the compensation lens for high prescriptions (-13D > +12D).
3. Slowly move instrument forward until retina first becomes visible on screen. Instruct patient to look at smallest green fixation target they can see. If the guides ( ) do not fall within the pupil, select small pupil diaphragm button on the device panel next to the joystick.
4. Move in further until two orange alignment spots and two vertical split lines become visible. For 3D Wide or 3D Disc scans, use the arrow buttons to adjust the fixation target position if the disc is not within the red box.
5. Move in until the two orange spots become one green spot within the guides ( ). Yellow indicates the instrument is too close.
6. Check tomogram is positioned in the upper third of the live (left) window. If not, use Z-position slider on Triton touch panel. If required, increase brightness of retinal view by touching + 
7. Triton autofocuses but the focusing dial also allows manual adjustment to align the vertical split lines. The focus dial is located below the compensation lens dial.
8. Select "Optimize" immediately prior to capture if the focus or Z-position has been adjusted.
9. Ask the patient to take a big blink, then press the capture button on top of the joystick. During the scan instruct the patient: **"Keep looking at the green light. Don't blink, don't move."**
10. After capture, a preview is shown - Confirm the preview to ensure the area of interest was captured and that the scan is good quality. If artifacts are seen, repeat scan.

*This is intended as a quick guide only and is not a replacement for the user manual. Please refer to the user manual and always read and follow the directions for use.

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OCT Scan Quality Troubleshooting

(segmentation and quantitative analysis require good scan quality)

Minimum Image Quality Value (IQV) of 40 is recommended for best results.

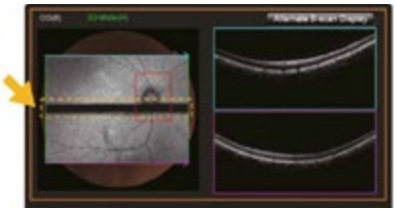
Global Weak Signal

Contrast is low as a whole and Image Quality Value (IQV) will be less than 40. Confirm the scan is properly focused and centred within the pupil. Ensure tear film is optimised and scan again. Patients with significant dry eye may benefit from instillation of artificial tear drops.

Local Weak Signal

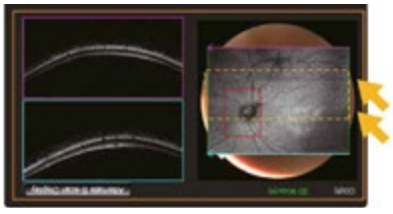
A local dark area is observed in the Live Fundus View (LFV) or projection image. To correct, ask the patient to look up and down, then rescan.

Blinking



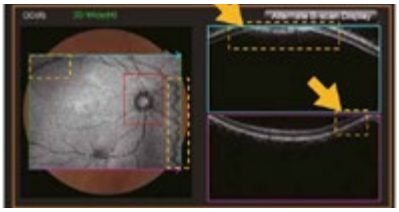
A dark band in the LFV, reflects a moment when the patient blinked and no signal was obtained. Select “SMART-Track” (automatically rescans areas of missing signal) and scan again, instructing patient to blink immediately prior to start of capture sequence.

Eye Movement



Eye movement is observed as discontinuity in blood vessels, and/or a light band across the image. Select “SMARTTrack” (automatically rescans areas of missing signal) and scan again, encouraging patient to fixate during scan. A different fixation target can help.

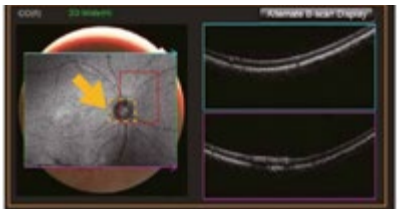
Clipping of the Scan



Clipping may be observed in the top and/or bottom scans in the B-scan images as a mirror effect, but also in the projection images.

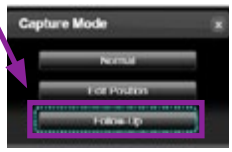
Reason: live scan is set too high or too low in the OCT window. More common in myopic eyes with steep retinas. Clipping affects comparison with the reference data. If clipping is seen within the central +/- 3mm B-scans of a 3D Wide scan or any B-scans within the 3D Macula/3D Disc, correct the height of the scan in the left window (Z-lock slider) and rescan.

Poor Fixation



For 3D Wide scan and 3D Disc scan, the optic disc of the patient should be within the red box to allow comparison with reference data. To correct, use the arrow buttons next to the joystick, to adjust the fixation target position to ensure the disc falls within the red box and rescan.

Follow-up Scans

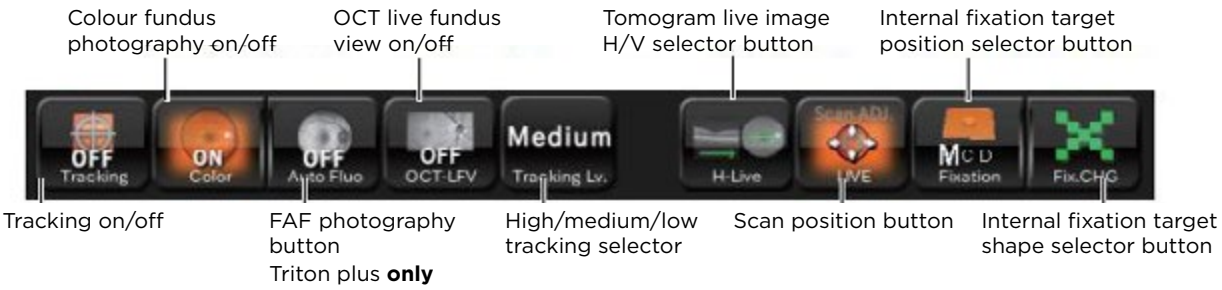


- From the reference image, click on the capture icon
- Choose “Follow-up”
- Press capture to start acquisition at the same location as the previous scan
- Images are automatically synchronized when viewed in IMAGEnet 6

Fundus Photo Mosaic

1. Select the Fundus Photo tab from the scan menu.
2. Click on the “PERI OFF” button to switch to “ON” (peripheral capture).
3. Starting with a central fixation, capture up to 9 images. The fixation automatically moves to the next position after each capture.
4. On the device computer, save acquisitions. 
5. In IMAGEnet 6, double click on any fundus photo thumbnail for that patient.
6. Select “Tool” and “Mosaic” at top right of colour photo display page.
7. Drag and drop images then launch and save again.

Touchscreen Buttons



Related Tips

IMAGEnet 6 Quick Merge Patient

IMAGEnet 6 Quick Tips

Harmony** Workflow

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Use **Topcon Harmony, the next-generation software application. Harmony allows you to connect all of your diagnostic instruments, regardless of manufacturer, in one secure, web-based platform, while providing a variety of features to fit your needs.

Topcon Triton Scan Types

Acquisition

Select your preferred scan from the Triton Touch Screen.
The scan type determines the report(s) available.

Macula Tab

- 3D Macula – 7 x 7 mm cube centered on the macula, for detailed macular viewing
- 3D Wide – 12 x 9 mm cube covering both the macula and disc. Also useful for general wellness screening
- Raster / 5 Line Cross / Line / Radial – Selection of averaged line scan patterns. Overlapping can be particularly useful for penetrating denser media opacities
- Dynamic Focus - Highly averaged, single line scan providing enhanced view of vitreous, retina and choroid
- FGA Mode (Fundus Guided Acquisition) – Position a line scan (single or group) over the area of interest, based on a reference photograph
- Fundus Photo (Macula) – Colour, Red Free, Autofluorescence**, Fluorescein Angiography**

Glaucoma Tab

- 3D Disc – Analysis of Retinal Nerve Fibre Layer 6 x 6 mm cube scan centered on the disc. Includes retinal nerve fibre layer analysis
- 3D Macula V – 7 x 7 mm cube scan centered on the macula, including ganglion cell layer analysis
- 3D Wide (H or V) - 12 x 9 mm cube covering the disc and macula. Includes ganglion cell and retinal nerve fibre layer analysis.
- Fundus Photo (Disc) - Colour, Red Free, Autofluorescence***, Fluorescein Angiography***
- Stereo Fundus – Stereo photo of optic disc (requires stereo viewer)

Anterior scan options and suggested uses

Only available with activation of anterior software and anterior lens attachment

Radial Anterior seg. 6mm – for central corneal thickness measurement, scleral lens clearance, etc.
Radial Anterior seg. 16mm, to assess wide area, e.g. for scleral lens fitting
Line Anterior seg. H or V 3 mm or 6 mm – single angle view
Line Anterior seg. H or V 16 mm – angle to angle view

OCT Angiography

Imaging of retinal vasculature without need for dye, through the imaging of moving red blood cells.

Only available with activation of OCTA software.

3x3, 4.5x4.5, 6x6, 9x9, 12x12 mm OCTA scan patterns are available.

Minimum Image Quality Value (IQV) of 40 is recommended for best results.
*** Autofluorescence and Fluorescein Angiography are only available with Triton Plus

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