

# CIRRUS™ HD-OCT Scan Acquisition Quick Reference Guide

Model 5000


This guide is an overview of scan acquisition for scans available\* with CIRRUS HD-OCT software version 8.0. See the *CIRRUS HD-OCT Instructions for Use* for safe and effective operation.

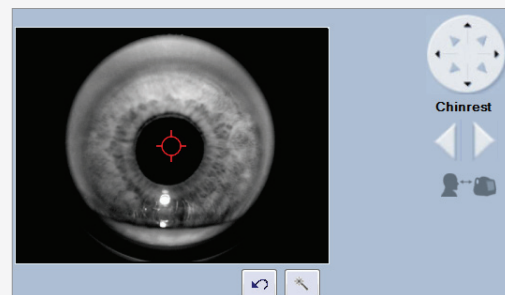
## 1. Find the pupil and focus the image in the iris viewport.

Adjust table height.


Place patient's chin in the left chin cup (marked blue) to scan the right eye or the right chin cup (marked white) to scan the left eye. Patient's forehead should make contact with the headrest. Adjust the chinrest height to align the canthus marker with the patient's eye.

Adjust the patient position to find the iris and pupil. Use the chinrest controls or click on the pupil in the iris viewport. Instruct the patient to move with the chinrest. The patient should not hold on to instrument. Click within the center of the pupil for final alignment.

Use  to obtain a clear focus on the iris. This helps the system set the position for the OCT scan.



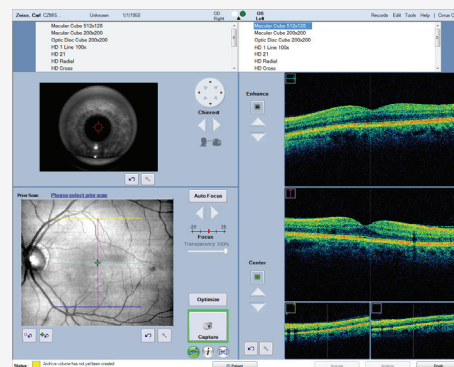
## Advanced Tips

- Click on the  icon to adjust the brightness, contrast, and illumination. Lowering the illumination may increase pupil size.
- The mouse scroll wheel can be used to make fine changes to the iris image in/out adjustment.
- During subsequent steps, monitor: 1) the patient's head to ensure they maintain contact with the headrest and, 2) the position of the red scan circle in the pupil to ensure it remains within the pupil.



## 2. Make adjustments for optimal fundus and B-scan images.

Click on **Auto Focus**. Instruct patient to move with the chinrest, fixate on the target and to not blink while this function runs. Adjust manually if necessary. Proper focus can increase the signal for the OCT scans and improve ability to track.


Click on **Optimize** to center and enhance the B-scan images. To sharpen the fundus image, mouse over the fundus image and click on the wand that appears in the upper right corner to perform auto B/C.



### Performing a scan with FastTrac™

- When the border around the **Capture** button is green, you are ready to acquire the scan with FastTrac. If the border is red, further actions can be taken:
- Center the scan with the **Center** controls or hold **Shift** and roll the mouse wheel.
- Click **Auto Focus** or manually adjust focus to sharpen fundus image quality.
- Change the prior scan or disable **Track to Prior** button  for this scan.
- You can turn off tracking by clicking the FastTrac button .

## Advanced Tips

- The B-scan images should show a range of colors. Faint green B-scans indicate that the signal is low.
- To modify brightness or contrast for either the B-scans or fundus images, click  near the image of interest and adjust the controls. Note: The setting changes made for the B-scans here will persist for future scans.
- If the OCT image appears inverted, click the **Center** up/down buttons several times until the image flips and is centered in the window.
- Center the B-scan images and ensure all B-scan images are not too high or too low. This could result in missing data in the scan.
- For highly myopic patients it may be necessary to click the **Auto Focus** button a second time.
- Moving the scan in the pupil in the iris viewport can help if: 1) there are media opacities, 2) the OCT B-scans appear tilted.
- Instead of using **Auto Focus**, enter spherical equivalent information on the patient demographic page for CIRRUS to pre-focus to this value.
- When tracking on the macula with patients with tilted retinas, you can improve success using tracking by turning off the system's center position monitoring. Click on the wand next to the bottom B-scan, then in the dialog box, uncheck **Monitor Z position**.

\*Scans and features described in this Quick Guide may be licensed options that are not available in all markets and, when available, may not be installed on all site instruments. If you do not have a scan or feature and want to purchase it, contact ZEISS. In the U.S.A., call 1-877-486-7473; outside the U.S.A., contact your local ZEISS distributor.

### 3. Capture the fundus image and high-density scan.

When the fundus image and B-scans are optimized, tell the patient to blink once or twice. Then tell the patient to open wide and maintain focus on the center of the green fixation target.

Click **Capture**.

Avoid a patient blink right at the moment you intend to click **Capture**.

If tracking is on, you can tell the patient to blink naturally during the scan.

If tracking is off, remind the patient to avoid blinking and to focus on the target until the capture is completed.

**FastTrac Scan in Progress Screen.** When FastTrac is interrupted, the progress bars turn red and processing stops. Click **Cancel** to return to the Acquire Screen to make adjustments to center the scan, focus the fundus or iris images, or turn off FastTrac for a non-tracked scan.

### 4. Review the captured scan, then save or try again.

On the Review screen, evaluate the B-scan quality and the Signal Strength (6 or greater). Check that the OCT B-scans are approximately centered in the windows without missing data.

If scan quality, position, or eye movements are unacceptable, click **Try Again** to retake the scan.

Adjust brightness and contrast by right clicking on the fundus or OCT image. The B/C values set on the review screen are saved and used for analysis for this scan only.

Click **Save**.

If you perform another scan on the same eye, the patient can stay positioned. Otherwise, the patient should sit back.

### Add a Smart HD Scan

With the Smart HD scan workflow, you can automatically track HD scans to the fovea.

Acquire a Macular Cube 512x128 or Macular Cube 200x200 scan. Auto FoveaFinder™ automatically locates the fovea. Alternately, target a specific region of interest with a Smart HD scan by moving the slice navigators.

On the Review screen, click the **Save and Add Smart HD Scan** button. The Macular Cube scan is automatically saved and an HD scan is initiated and tracked to the fovea location.

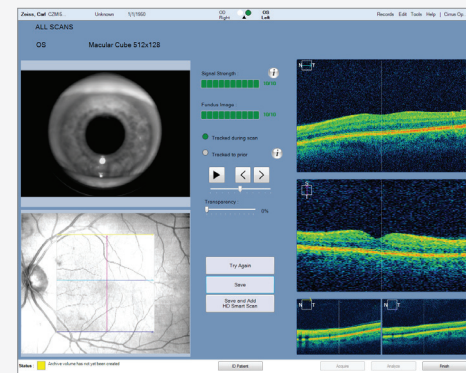
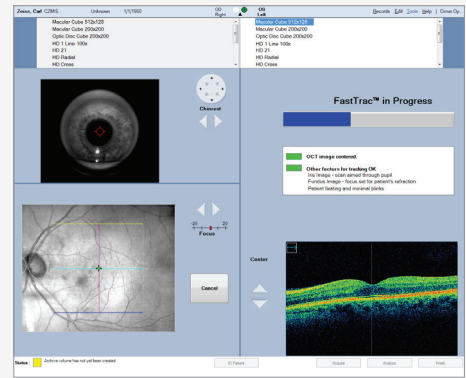
On the Acquire screen, click **Capture**, and then on the Review screen, click **Save**.

Note: To make adjustments to line spacing, rotation, or length of the Smart HD scan, first turn off **Track to Prior**, make adjustments, and then turn **Track to Prior** back on before clicking **Capture**.

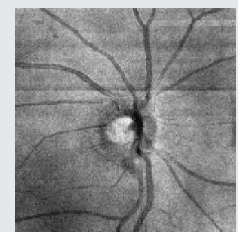
Note: The last Smart HD scan used for the Smart HD scan workflow becomes the default scan.

### Advanced Tips

- Examine the high definition en face scan closely for any subtle eye movement. Also slide the **Transparency** control back and forth to compare the images. If noteworthy movement is detected, click **Try Again**.
- If the next scan will be on the other eye, choose the scan pattern for that eye before the patient returns their head to the appropriate chin cup and headrest. This can help avoid contact with the patient's nose.
- During a scan with FastTrac, individual B-scans in a cube may be acquired at slightly different positions, resulting in horizontal lines or bands on the fundus image. If there are no saccades, a scan with bands in the OCT fundus should be acceptable for analysis.
- Smart HD Scans automatically find the fovea based on the Macular Cube scan information. You can also use the Macular Cube to target a specific feature for a Smart HD Scan.



Example: Saccades (vessel mismatch)



Example: Banding (no vessel mismatch)