QUICK START - PERFORM STS EXAMS



CAUTION

1 PROBE CALIBRATION

Probe calibration should systematically be checked. If not, the warning message **"Probe Checking NOT Approved"** appears in the exam screen.
This message can also appear after calibration if the value is not in the required value interval.

STS Check

If needed,
perform an UBM probe check.

2 STS PARAMETERS AND TOOLS

For STS measurements, the probe position is set to Axial by default.

The probe must be used only with removable windows and scleral shell for STS measurement.

ClearScan is not allowed for STS measurement, because the ClearScan risks altering measurement precision.

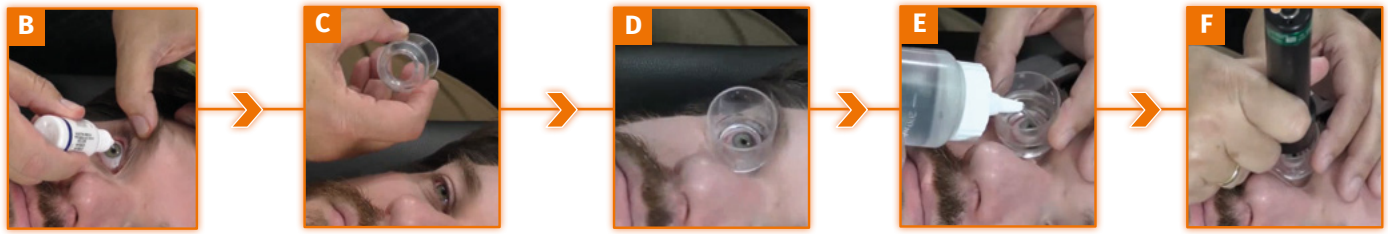




1 ACCESS STS EXAM SCREEN

> Start a New Session.
> Select the LIN 50 MHz probe. Lin50
> Select the mode depending the axial length of the eye:
Lens mode is recommended by default.
> Select the STS option to display the STS measurement table at the bottom acquisition screen. STS
> Make the measurement in the horizontal meridian.

2 AUTOMATIC STS DETECTION USING THE SCLERAL SHELL



The patient must be in reclined position on the examination bed:

A. Use a probe equipped with removable window.

B. Instill anesthetics drops to the eye.

C. Put some ophthalmic gel on the edge of the shell.

D. Position the scleral shell on the patient eye. The scleral shell must be centered on the pupil.

E. Fill the scleral shell with physiological serum.

F. Insert the probe in the scleral shell.

CAUTION Applying excessive pressure on the eye will cause discomfort to the patient.

G. To maintain a stable eye position, make sure the patient is looking at a fixation point on the ceiling.
When using a laser pointer, the point must be fixed and in the eye axis.

H. Center the probe in the scleral shell to get a centered image in the exam screen.

I. To obtain automatic measurements, position the probe in the axis of the eye and with the correct height in the scleral shell.



3 AUTOMATIC STS DETECTION

Green Lines

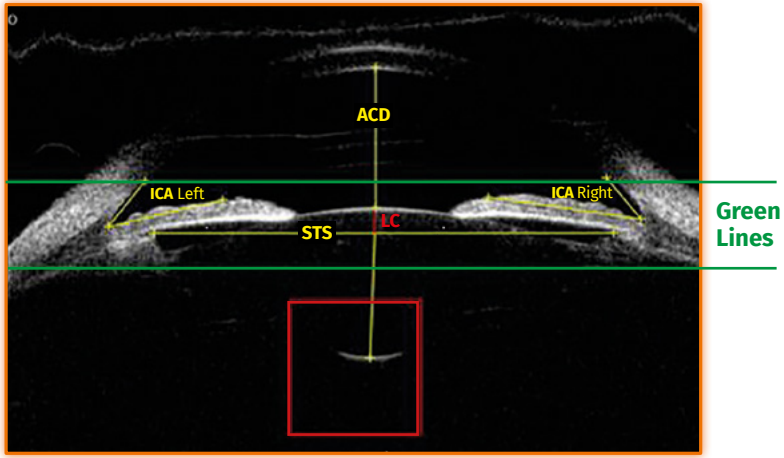
The highest image quality lies between the 2 green lines, where:

- Intensity of the echoes is maximum,

- Echoes are best separated and thus obtain optimal measurement accuracy.

It is necessary to display the iris between the 2 green lines, in the best horizontal position.

> Adjust the inclination of the probe looking for perpendicularity, so that the iris and sulcus on both sides are in a horizontal position and centered between both green lines.



Red Square

The posterior lens within the red square is the first criteria to start the automatic STS measurement detection.

> Adjust the height of the probe in the eye cup to display the posterior lens capsule in the red square.

4 STS RESULTS TABLE

> **LED indicators for anatomical landmarks**

The 7 LED indicators correspond to anatomical landmarks checked by the system during the image and measurements acquisition.
At the beginning of the examination, all LEDS are turned off: none of the criteria required to trigger an automatic STS measurement has yet been filled.



To trigger an automatic measurement, all LEDS must successively have turned on from left to right. When all criteria are turned on simultaneously, the automatic measurement is acquired and listed in the STS results table. For each measurement, a beep sound is emitted.



Ignore Include	mm	STS	LC	ACD	ICA Left	ICA Right
	m/s	1550	1641	1532	(°)	(°)
	2	11.96	0.52	3.10	0.00	0.00
	3	11.92	0.52	3.11	0.00	0.00
	4	11.92	0.56	3.11	0.00	0.00
Avg		11.97	0.52	3.11	0.00	0.00
Min		11.79	0.48	3.10	0.00	0.00
Max		12.17	0.57	3.11	0.00	0.00
Std. Dev.		0.10	0.03	0.00	0.00	0.00

The STS results table can list between 1 and 10 measurements:

- **STS:** Sulcus-To-Sulcus in mm
- **LC:** Lens Curvature in mm to measure the distance between the Anterior Lens and the STS measurement. A red line in the image identifies the LC length.
- **ACD:** Anterior Chamber Depth in mm. A yellow line between the posterior cornea and the anterior lens identifies the ACD length.
- **ICA**: Irido-Cornea Angles measurement (default value is 0°).

The lines corresponding to the minimum and maximum STS measurements are automatically ignored. They are not included in the average (Avg) and Standard Deviation (Std. Dev.) lines.

Actions in the results table:

> Standard deviation should be under 0.10 for each column.

> Use the Ignore/Include checkbox to determine whether a line is included in or excluded from the calculation.

> To delete a line, right-click on it. Also it is possible to adjust manually.

> Use the Eraser to clear all measurements.