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Accutome Connect: A-Scan
1. Insert probe through the hole on the top of the immersion shell. Do not push the probe past the scored line.

2. Gently twist the screw on the side of the shell, locking the probe into position. Do not over tighten.

**Note:** It is important that the probe does not pass the etched line in the immersion shell. If the probe is placed too far into the shell, you risk missing part of the cornea spike.
A-Scan New Exam

- To begin a new exam, click the **New Patient** button and fill in the appropriate fields for patient information. Once the appropriate fields have been filled, select the A-Scan icon.
Measurement Screen

- After entering the measurement screen, make sure all desired settings are selected, such as capture mode, immersion/contact, eye type, OD/OS, and Gain.
- The red triangles at the bottom of the screen mark the different sections of the eye.
- There are two control tabs used to navigate between Measurement and IOL Calculation Modes.
Scan Alignment

- Proper scan alignment: All spikes must be present and reach top of screen.
Scan Alignment

- The most common errors are a weakened posterior lens or retina spike. If these spikes are weakened or do not reach the top of the screen, a slight adjustment to the immersion shell or patient fixation is needed.
Scan Alignment

- A missing sclera spike indicates the probe is aimed into the optic nerve.
- If getting an optic nerve shot, the shell should be adjusted inferior and temporally. An optic nerve scan where the sclera spike is not present will produce an erroneously long measurement.
• Increasing the gain amplifies the echoes on the display screen. More gain is required for denser cataracts.
• When gain is too high, the scan becomes oversaturated resulting in a shorter than actual axial length.
• To increase the gain, simply turn the knob on the screen with the mouse. Default gain should be around 67 dB.
• Psuedophakic eyes will need the gain to be turned down to reduce noise produced from the intraocular lens.
Gates

- Gates are used by the software to detect and identify the different spikes in the waveform used to make the measurement. The gates are the dotted lines on the screen, and the markers (red triangles on the base line) mark the identified spike and point of measurement. In order to adjust the gates, simply “click and drag” the gate to the appropriate position– the red marker will move accordingly.
• Selecting Report under the measurement tab, will generate a 2 page A-Scan report. One page for OD, one for OS. This report will show all 5 scan waveforms for each eye.
IOL Calculation

Select the IOL Calculation tab to enter the calculation screen

Add, Edit, or Delete Lenses/Lens Groups

Switch between different lens groups

AXL – Axial Length, K1, K2, and Post-Op target

Select desired formula for calculation

Select report to generate a 1 page calculations printout
Sample of IOL Calculations Report

### OD Factors

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### Accutome A-Scan Plus

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| DF | 1.00 | 1.00 | 1.00 | 1.00 |
| IS | 3.00 | 3.00 | 3.00 | 3.00 |
| AC | 1.00 | 1.00 | 1.00 | 1.00 |
| Type | 1.00 | 1.00 | 1.00 | 1.00 |
| Total | 1.00 | 1.00 | 1.00 | 1.00 |
Accutome Connect: B-Scan
B-Scan New Exam

- To begin a new exam, click the **New Patient** button and fill in the appropriate fields for patient information. When starting a B-Scan exam, make sure appropriate sequence is selected. Once the appropriate fields have been filled, select the B-Scan icon.
Probe Alignment

Vertical Slice

Horizontal Slice

Accutome logo indicates direction of probe oscillation and the top of the screen

Start/Stop Button
Scan Screen

- Orientation dial used to label probe position (optional).
- Adjust gain while scanning
- Take multiple video loops of different positions
- Cine Buffer shows a progress bar when probe is running
- Select eye OD/OS
- Zoom
- Zoom Reset
- A-Vector
- Comment
Scan Screen

Play, Pause, and review the selected view frame by frame.

Measure Tab: 6 lines, 2 area, and 2 angle calipers with 2 arrows
Reporting

- Once all snapshots are taken, select the Report icon.
Your snapshots will appear at the top of the screen.

Hold down the “Ctrl” or “Shift” key on your keyboard and click on the snapshots you wish to include in your report. Once selected, click “Preview”.

Report Options:

- Preview - brings up the report page as it will look with selected snapshots.
- Save - saves the report in the folder designated in Setup: General.
- Review - brings up a list of all of the reports saved for the selected patient.
- Print – prints the selected scan.
- Export to DICOM - the selected report exports to the DICOM location designated in Setup: General/DICOM Servers.
Image Options

- View Selected Icon - brings up a larger version of the selected snapshot.
- Delete Selected Images – deletes selected snapshots.
- Export Selected to DICOM – send the selected image to the DICOM location designated in Setup: General / DICOM Servers.
- Done - will bring you back to the scan window.
Accutome Connect: UBM
Probe Alignment

Vertical Slice

Marker
Probe

Horizontal Slice

Marker
Probe

Accutome logo indicates direction of probe oscillation

Start/Stop Button
To begin a new exam click the **New Patient** button and fill in the appropriate fields for **patient information**. When starting a UBM exam, make sure appropriate Sequence is selected. Once the appropriate fields have been filled, select the UBM icon to begin the UBM mode.
Scan Screen

- Orientation dial used to label probe position (optional).
- Adjust gain while scanning
- Take multiple video loops of different positions
- Cine Buffer shows a progress bar when probe is running
- Select eye OD/OS
- Zoom
- Zoom Reset
- A-Vector
- Comment
- UBM Focal Guide
Scan Screen

**Measure Tab:**
- 6 lines, 2 area, and 2 angle calipers with 2 arrows

**Play, Pause, and review the selected view frame by frame.**

**Snapshot**  **Report**  **Print**  **Save**  **Edit**  **Settings**
Reporting

• Once all snapshots are taken, select the **Report** icon. Selecting this button brings up a screen showing small versions of all of the snapshots which are stored for the patient selected.
Reporting

Report Options:

• Your snapshots will appear at the top of the screen.
• Hold down the “Ctrl” or “Shift” key on your keyboard and click on the snapshots you wish to include in your report. Once selected, click “Preview”.

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- Export Selected to DICOM – send the selected image to the DICOM location designated in Setup: General / DICOM Servers.
- Done - will bring you back to the scan window.
B-Scan/UBM Recording Feature
Convert Completed Scans

After scans are taken, they can be reviewed and converted into .MP4 or .AVI format.

Step 1: Select desired video from “All Views” field

Step 2: Select the “Advanced” tab then “Recording” tab

Step 3: Select “Record Selected View”
Convert Completed Scans

Step 4: The scan will play through once and the software will convert the video loop into .AVI or .MP4 videos.

Converted videos can be viewed by selecting the “Open Recordings Folder” icon.
Using Recording Feature During Live Scan

To take a video of a scan in progress, first set up the recording options within the Advanced Tab of the B-Scan or UBM Scan mode.

Step 1: Select the Advanced Tab

Step 2: Set Start Delay

Step 3: Set Max Length of Video Recording

*Set Start Delay - this delay will allow you to begin recording after a length of time set. It will provide time to get the probe into the correct position before the recording begins.

*Set Max Length of video - set the max amount of time you would like the recording to be (up to 5 minutes - 300 seconds)
Using Recording Feature During Live Scan

Step 4: Hit Start Button or F5 to begin recording

Step 5: Scan desired positions. Press Stop or F5 to stop recording

Step 6: Video Recordings can be opened and reviewed by using Open Recordings Folder