iCare ST500

Quick Guide

icare

RX Only (U.S.)
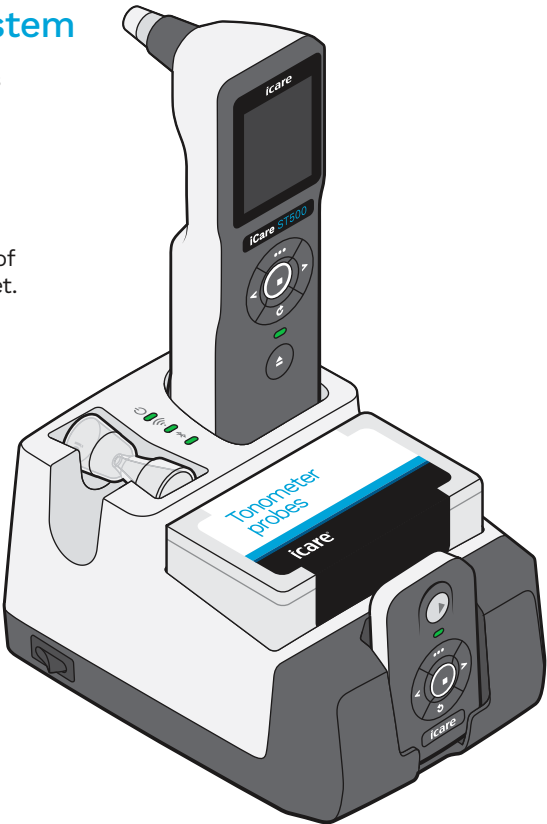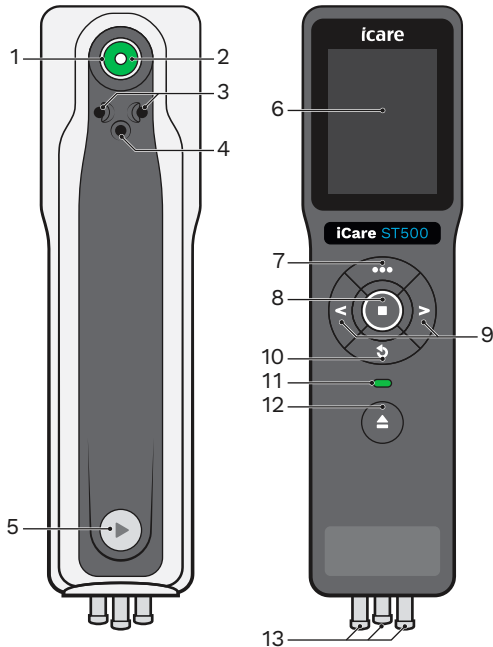
iCare ST500 tonometer system

The iCare ST500 tonometer system consists of the tonometer (TA04), cradle (TX02), remote control (TR01) and slit lamp adapter (TD01).

The iCare ST500 tonometer is a slit lamp tonometer based on the iCare rebound technology, which is compatible with most of the common slit lamp models on the market.

The ST500 SmartCradle is used to store the tonometer and accessories between uses and to charge the tonometer's battery.
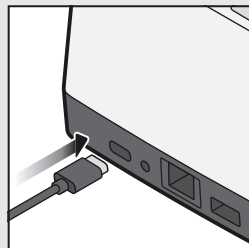
Parts of the tonometer

1. Probe base collar
2. Probe base light
3. Infrared LED transmitters
4. Infrared LED sensor
5. Measure button
6. Display
7. Option button
8. Select button
9. Navigation buttons
10. Return button
11. Status indicator light
12. Eject button
13. Mounting pins

Charge the tonometer battery

Charge the tonometer battery before taking a measurement. The tonometer's battery is charged in the cradle.

To charge the battery:

1. Make sure that the cradle is connected to a power supply and turned on.
2. Place the tonometer to the cradle. The tonometer's status indicator starts to flash.
3. The status indicator light turns off when the battery is full.
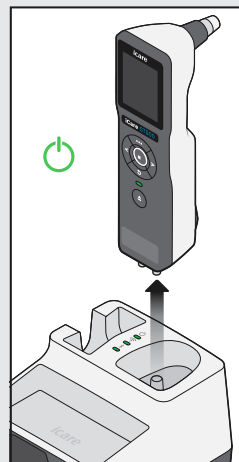4. Remove the device from the cradle.

Switch on the tonometer

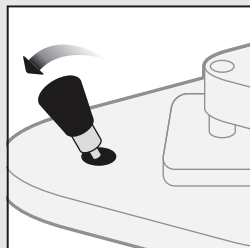Lift the tonometer from the cradle. The tonometer will turn on.

To turn on the tonometer manually:

1. Press ⊙ for 2 seconds. The device display turns on.
2. Press ⊙ again to enter the measurement mode. The text LOAD is shown on the display.

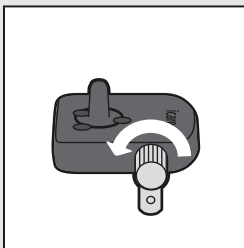Alternatively, press ▷ for 2 seconds. The device display turns on and the text LOAD is shown on the display.
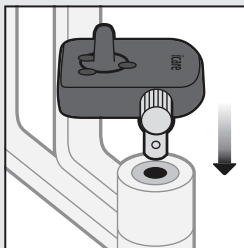

Attach the adapter to the slit lamp

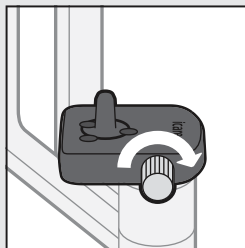
Step 1.
Move the slit lamp away from the head rest.

Step 2.
Loosen the adapter screw.

Step 3.
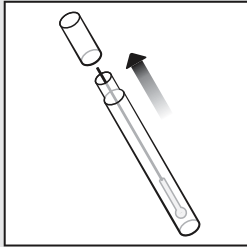Put the adapter to the rotation axis of the slit lamp and push it down.
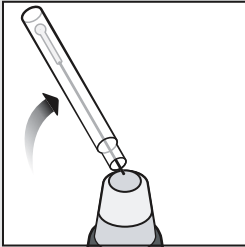
Step 4.
Tighten the screw.

Insert the probe

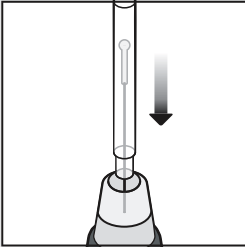## Without the probe applicator

Step 1.
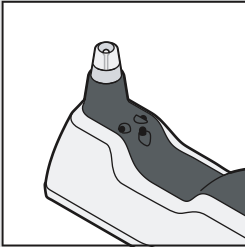Remove the probe container cap. Do not discard the container.

Step 2.
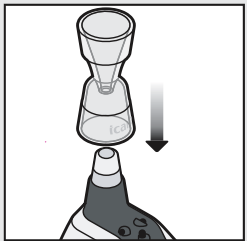Drop the probe into the probe base.

Step 3.
When the probe is successfully loaded, the light indicator in the probe base stops pulsating.

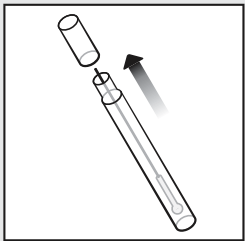**Step 4.**
The tonometer is ready to be attached to the slit lamp.
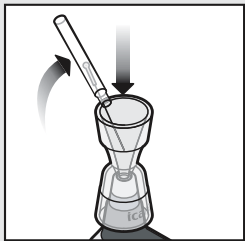
With the probe applicator

Step 1.
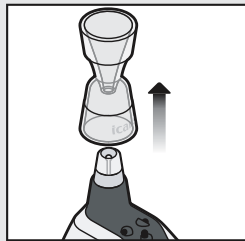Put the tonometer on a table.

Put the probe applicator on the tonometer.

Step 2.
Remove the probe container cap. Do not discard the container.

Step 3.
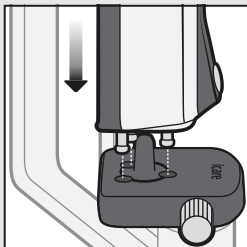Drop the probe to the applicator.

Step 4.
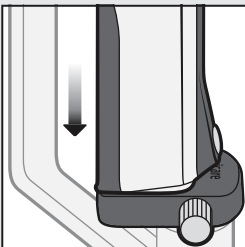When the probe is successfully loaded, the light indicator in the probe base stops pulsating.

Remove the probe applicator.

Attach the tonometer to the slit lamp

Step 1.
Make sure that the tonometer mounting pins are aligned with the adapter (two in the back, one in the front).
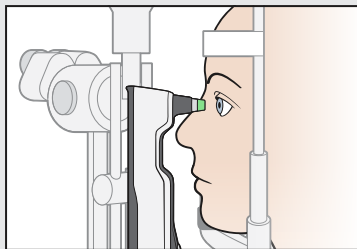
Step 2.
Push the tonometer mounting pins into the holes in the adapter. The tonometer clicks into place.
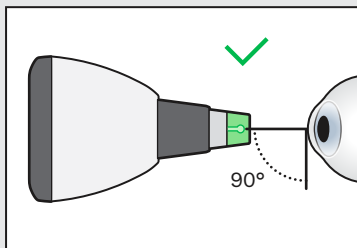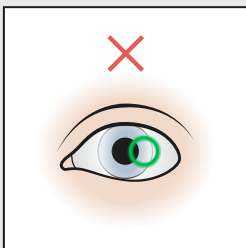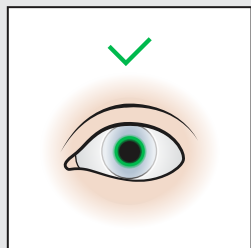
Correct measurement position

Step 1.

Ask the patient to put their face to the headrest. Move the tonometer in front of the eye that you want to measure.

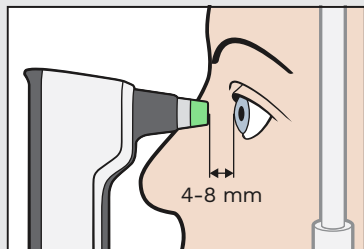The probe base light is green when the tonometer's angle is correct (+/-10 degrees from the horizontal axis).
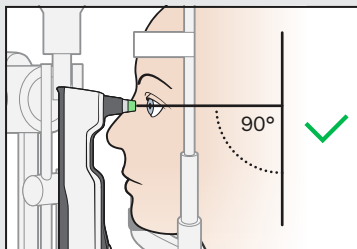
Step 2.

Adjust the height of the slit lamp.

Step 3.

Make sure that the probe is perpendicular to the center of the patient's cornea.

View from above

Step 4.

Adjust the distance between the tip of the probe and the patient's cornea. The distance should be 4-8 mm.
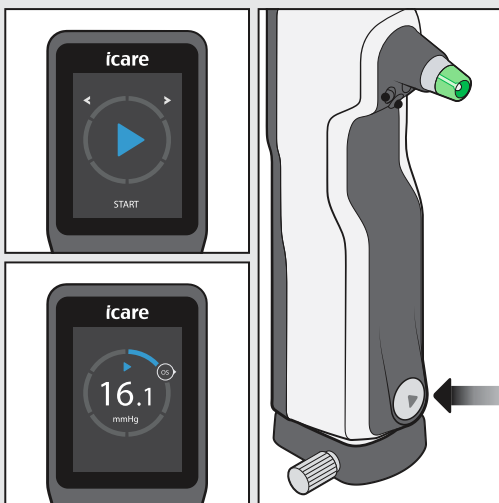
Step 5.

Lock the slit lamp when it is in the correct position.

⚠️ **WARNING!** The probe base collar must not touch the eye.

Take a measurement

1. Press ▶ on the device.
2. Take six measurements by pressing ▶ 6 times (Single mode) or by holding ▶ down until it has taken 6 measurements (Series mode).

3. When all six measurements have been taken, you hear a longer beep. You can see the result on the display. After a moment the display moves to **Session history**.
4. Move the slit lamp away from the patient before positioning it before the other eye. Press ▶ to measure the other eye.
5. When you want to end the measurement session, press ••• and then ⟨ ⟩ until you see END SESSION. Press ⏺ to end the session.

NOTE! You can also see END SESSION by pressing ↺.

If you hear two beeps during a measurement, there has been a measurement error. Press ▶ to acknowledge the error and continue measuring.

See the iCare ST500 Instruction Manual for further information on the error messages and corrective actions.

The tonometer includes automatic eye recognition to identify which eye, right or left, you are measuring.

If the automatic eye recognition does not recognize the eye, you can choose the correct eye after the measurement by pressing ⟨ ⟩ to choose the eye (right or left). Press ⏺ to confirm the eye.

Check the measurement result

Good measurement quality.
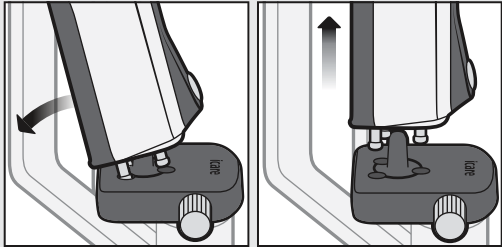

Acceptable measurement quality.

The variation between the measurements was too high. Repeat the measurement.
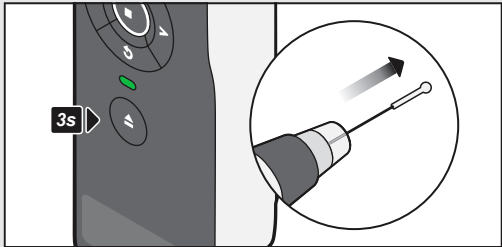

Session history shows the IOP result in mmHg, the time of the measurement, which eye (right or left) was measured, and the quality of the measurement.

Eject the probe and switch off the tonometer

When you have completed the session, remove the tonometer from the slit lamp adapter and eject the probe.

Tilt the tonometer backwards and pull up.

Press ⏏ for 3 seconds to eject the probe.

Press ⏻ for 3 seconds to switch off the tonometer.

Put the used probe back into the container. Dispose of the probe and container in a mixed waste bin.

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For further information,
read the instruction manual.

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