



Ophthalmic Surgical Training Models

## SimulEYE Small Pupil

### SET-UP:

Operating microscope

Flat, smooth working surface for the suction cup to stabilize the SimulEYE device

3.0 mm keratome for the main incision

1.0 mm side port blade if needed

Viscoelastic of choice -- either a cohesive or a dispersive viscoelastic along the lines of ProVisc or Viscoat should be fine. Avoid the really heavy viscoelastics like Healon 5 or GV. KY jelly is a readily available and acceptable alternative to viscoelastic.

### DISASSEMBLY:

The latest generation of SimulEYE Small Pupil is designed to be even longer lasting and more resilient. Care must still be taken to maintain the device. The red film will now remain adherent to the eye and seals the polymer even when the cornea and the notched ring are removed. To disassemble and clean the SimulEYE device, simply remove all of the anterior pieces including the cornea/notched ring complex and the gray iris membrane. It is best to leave the cornea attached to the notched ring.

### CLEANING:

Once the anterior parts have been disassembled, first wipe away any residual viscoelastic or other debris. Wash the parts gently with warm water and soap to remove the viscoelastic and then allow the parts to dry. Use a lint free cloth to dry the parts if desired.

## RE-ASSEMBLY:

If the cornea and notched ring were separated, start by attaching the cornea cap to the notched ring and make sure that they are securely connected. Hold the cornea/ring complex upside down and lay the gray iris/pupil template inside the notched ring. While holding this whole complex in the upside down orientation, attach the remainder of the device by inverting it and placing the red film into the ring against the gray iris membrane. The pieces should join together securely and will create a seal so that viscoelastic will not escape around the edges. Make sure that the pupil looks round (not oval or distorted) and that the gray iris/pupil template is resting flat on the red anterior capsule film.

## STORAGE:

After use and before storage the SimulEYE device should be disassembled, cleaned and re-assembled as described above. Be sure to place the device **FLAT ON IT'S SIDE** in the storage container to protect and preserve the shape of the cornea and the suction cup base. Store the SimulEYE device in a room temperature environment and avoid hot or cold environments.

## TIPS FOR USE:

3.0 mm incision or larger with extra viscoelastic coming out of the incision so the inserter slides in and out easily.

Slightly elevate the iris off of the anterior capsule using viscoelastic.

## DO NOT USE FOR CAPSULORHEXIS.

There is a separate version of SimulEYE known as SimuloRhexis which is specifically for practicing capsulorhexis. The anterior capsule film on SimulEYE Small Pupil was specifically designed to be much stronger in order to last through multiple attempts with iris expansion devices and does not provide a realistic simulation of the capsulorhexis technique.

## TROUBLE SHOOTING:

A tight incision may cause the insertion device to hang up on the cornea or fold it inward which will introduce air bubbles. A 3mm incision is recommended.

Applying more viscoelastic so that it is coming out of the incision for greater lubrication or simply enlarging the incision may help.

Bubbles may be moved out of the surgical field with additional viscoelastic agent.

If the suction cup is unscrewed from the eye (ideally this should not be done) simply screw it back in gently until resistance is encountered.

The exterior of the cornea may become dusty or dirty. Gently wash it with warm water and a mild soap such as dish soap.

## INSPECTING FOR DAMAGE:

Once familiar with SimulEYE, it should be readily apparent if there is sufficient damage which would warrant disposal. A torn, damaged or distorted anterior capsule, iris or cornea that can not be fixed by disassembling and reassembling the device would require disposal.

For any questions or further information, please visit [www.SimulEYE.com](http://www.SimulEYE.com)