Focal accuracy, efficient energy delivery for anterior and posterior YAG treatments

LASER FLOATER TREATMENT
CAPSULOTOMY
IRIDOTOMY

Helping the world see clearly
Widen your treatment horizons

If you’re seeking to broaden the range of treatment solutions you can offer using leading-edge YAG laser technology that’s proven to the highest level of performance, Ultra Q Reflex™ from Ellex is the option that’s right for you.

Ultra Q Reflex™ is the platform that enables you to perform the full range of anterior and posterior YAG laser procedures, including Laser Floater Treatment, capsulotomy and iridotomy procedures to the highest standards of safety, accuracy and efficacy.

Three treatment modalities

Choose Ultra Q Reflex™, and you can select from three treatment modalities, which comprise:

- LASER FLOATER TREATMENT (LFT) (POSTERIOR MEMBRANECTOMY)
- CAPSULOTOMY
- IRIDOTOMY
Ultra Q Reflex™ — proven technology, optimal results

**Floaters**  
**best ever visualization**

Ultra Q Reflex™ features Ellex’s proprietary Reflex Technology™. It’s technology that optimizes visualization in both on-axis and off-axis modes through True Coaxial Illumination. It also encompasses titratable illumination, which means that you’re able to accurately visualize floaters and opacities across a number of illumination settings, and to assess their position relative to the lens or retina.

**YAG**  
**low energy, high efficiency**

Ultra Q Reflex’s YAG mode features an Ultra Gaussian beam profile and fast rise time. That means you can perform capsulotomies and iridotomies at lower, more efficient energy levels*. With less energy delivered into the eye, you’ll be able to carry out capsulotomies with all types of IOLs and with significantly less risk of lens pitting.

*Based on system performance testing.  
Data on file. Ellex Medical.
An optimized optical system, which includes True Coaxial Illumination – TCI™ – ensures superior visualization in both the anterior and posterior segments.

For Laser Floater Treatment, the Reflex™ illumination mirror ensures that the laser beam is never obstructed – minimizing the risk of under- or over-dosing the energy, ensuring that the desired therapeutic effect is achieved.
A powerful solution for symptomatic floaters

Use Ultra Q Reflex™ to perform Laser Floater Treatment, and you’ll be able to deploy a minimally invasive procedure that offers the potential to improve your patient’s visual functionality by alleviating their perception of eye floaters.

It’s a powerful solution that can transform the quality of life for many patients who find the condition debilitating.

Treat with greater accuracy

Employing Ellex’s proprietary Reflex Technology™, Ultra Q Reflex™ allows you to move effortlessly between on-axis and off-axis viewing and provides the highest levels of visualization accuracy and illumination to treat floaters from the posterior to the anterior vitreous, whilst maintaining the spatial context necessary to maximize safe, effective treatment of symptomatic floaters.
True coaxial illumination

The effectiveness of Laser Floater Treatment (LFT) has been transformed through the development of Ellex’s Reflex Technology™ platform, which includes True Coaxial Illumination — TCI™ — for on- and off-axis viewing, a precise aiming beam, and a superior energy beam profile — all within a unique slit lamp illumination tower design that converges and focuses your sight line, target illumination and treatment beam into one optical path.

Full visualization from the cornea to the retina

TCI™ is at the heart of Ultra Q Reflex™. It’s technology that provides a full view from the cornea to the retina and much-needed spatial context. The ability to titrate the TCI™ system in both on-axis and off-axis visualization permits a multitude of potential illumination settings.

Images courtesy of Karl Brasse, MD, MRCOphth

LFT, Ellex: pre-treatment

LFT, Ellex: post-treatment
Accurate, effective capsulotomy

Choose Ultra Q Reflex™ and you’ll secure new levels of accuracy in capsulotomy — a perfectly centered, precise capsulotomy that will not affect the tension of the bag and the position of the IOL in the visual axis.

It’s accuracy that minimizes fringes and tags and prevents lens damage — even if the lack of a ridge makes the capsule adhere to the optic.

Precision in incision

Ellex’s unique laser cavity delivers a four nanosecond Ultra Gaussian pulse at high peak power and can typically achieve the industry’s lowest energy optical breakdown at 1.8 mJ in air*. This allows the energy to form a tight plasma ball, and results in less energy dispersion into surrounding tissue. This makes possible a tissue incision technique that deploys a smaller shockwave, which delivers superior treatment precision and maximizes procedure efficacy.

* Average performance only. Based on system performance testing. Data on file. Ellex Medical.
IOL-friendly photodisruption

Featuring an Ultra Gaussian beam profile, Ultra Q Reflex™ focuses more energy into the center of the beam profile to deliver greater energy density — reducing the energy needed to effectively perform capsulotomy and consequently greatly reducing the risk of lens pitting.

Prevent post-capsulotomy floaters

The benefits of Ellex’s proprietary Reflex Technology™ extend beyond the safe treatment of floaters. Employing TCI™ to identify capsular fragments, Ultra Q Reflex™ can be used to vaporize broken pieces of the fragment and help prevent the common problem of sudden floater development after capsulotomy.

Images courtesy of Karl Brasse, MD, MRCOphth
What physicians are saying about Ellex technology

“Modern laser floater treatment is a different procedure. It is not the same procedure as in past years. Earlier attempts at treating floaters were not always positive, because the technology was not optimized for the procedure.”

KARL BRASSE, MD
NETHERLANDS

“When it comes to the treatment of floaters, precise spatial context is critical. To achieve this, both off-axis and on-axis illumination is required. This ensures that when a surgeon looks into an eye, he or she can clearly establish where the lens, floater and retina lie in relation to the floater and to each other.”

PAUL I. SINGH, MD
USA

“With Ellex’s refined YAG laser technology I can place laser pulses in a precise and controlled fashion that I have not seen with other lasers. Also, the system requires much lower energy for procedures than previous YAG lasers I have used.”

KARL STONECIPHER, MD
USA
### Specifications

<table>
<thead>
<tr>
<th>Laser Source</th>
<th>Q-switched Nd:YAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>1064 nm</td>
</tr>
<tr>
<td>Energy</td>
<td>0.3 to 10 mJ per pulse, continuously variable</td>
</tr>
<tr>
<td>Pulse Duration</td>
<td>4 ns</td>
</tr>
<tr>
<td>Burst Mode</td>
<td>1, 2 and 3 pulses per burst, selectable</td>
</tr>
<tr>
<td>Spot Size</td>
<td>8 μm</td>
</tr>
<tr>
<td>Offset (Anterior and Posterior)</td>
<td>0, ± 100 to ± 500 μm, continuously variable</td>
</tr>
<tr>
<td>Illumination</td>
<td>True Coaxial Illumination™ (Reflex Technology™)</td>
</tr>
<tr>
<td>Cone Angle</td>
<td>16 degrees</td>
</tr>
<tr>
<td>Aiming Beam</td>
<td>red 635 nm or green 515 nm, adjustable intensity</td>
</tr>
<tr>
<td>Repetition Rate</td>
<td>up to 3 Hertz</td>
</tr>
<tr>
<td>Magnification</td>
<td>optimized for enhanced anterior segment visualization</td>
</tr>
<tr>
<td>Cooling</td>
<td>air cooled</td>
</tr>
<tr>
<td>Electrical Requirements</td>
<td>100–240 VAC, 50/60 Hz, 500 VA</td>
</tr>
<tr>
<td>Weight</td>
<td>30 kg, 66 lbs (laser only)</td>
</tr>
<tr>
<td>Dimensions (HxWxD)</td>
<td>57 x 75 x 44 cm, 23 x 30 x 18 inches (laser only)</td>
</tr>
<tr>
<td>Standard Accessories</td>
<td>Total Solution™ tables, remote display, safety glasses, laser safety sign, dust cover</td>
</tr>
<tr>
<td>Optional Accessories</td>
<td>Footswitch, five-position magnification changer, beam splitter, co-observation tube, “C” mount camera adapter, video camera adapter, tonometer mount, capsulotomy, iridotomy and vitreolysis laser lenses</td>
</tr>
</tbody>
</table>

*Specifications are subject to change without notice*
Find out how Ultra Q Reflex™ will help you set new standards in Laser Floater Treatment, capsulotomy and iridotomy.

Contact us now to schedule a demonstration

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Helping the world see clearly