



# Ocular Reichel-Mainster 1X Retina Laser Lens

	<b>Product Code</b>	<b>Static FOV</b>	<b>Dynamic FOV</b>	<b>Image Mag</b>	<b>Laser Spot Mag</b>	<b>Contact Diam</b>	<b>Lens Height</b>	<i>Designed with: Elias Reichel, M.D., Boston, MA Martin A. Mainster, Ph.D., M.D. Kansas City, KS</i>	
	<b>ORMR-1X</b>	102°	133°	.95x	1.05X	17mm	30mm		
	<b>*ORMR-1X-2</b>	102°	133°	.95x	1.05X	15.5mm	30mm		
	<b>**ORMR-1X-P</b>	98°	126°	1.08x	.93X	15mm	31mm		
	<b>CE</b>								

## Lens Design

- The Reichel-Mainster 1X Retina Lens has superior optical resolution for detecting subtle fundus details such as retinal thickening and serous detachments.
- Its high axial and lateral magnifications facilitate the diagnosis and treatment of macular and retinal vascular disorders.
- Its broad field of view provides versatility for focal, grid and panretinal photocoagulation.
- The Reichel-Mainster lens is ideal for transpupillary thermotherapy and photodynamic therapy and for treating choroidal neovascularization, diabetic retinopathy and retinal vascular occlusion.

\*No methylcellulose is required during routine eye examinations on the ORMR-1X-2 style.

\*\*Designed for use on pediatric patients and those with narrow palpebral fissures.

## Technique

- As with any indirect ophthalmoscopy contact lens, some time is needed to become familiar with the Reichel-Mainster retina lens. Suggestions for use are:
  - Use the slit lamp with its illumination and observation arms lined up so that illumination and observation are parallel.
  - Use a vertical slit beam with the illumination beam as narrow and short as possible to minimize back-scattered slit lamp light that can decrease image contrast.
  - Use slit lamp magnification between 5x and 12x.
  - Tilt the lens on the patient's cornea to select your viewing area and optimize image clarity and stereoscopic view.
  - Keep the front surface of the lens perpendicular to the viewing axis and the laser beam.
  - Have the patient turn their eye slightly for larger changes in viewing area location.
- Since this lens presents an image in air rather than within the lens, the slit lamp must be moved further back from the patient's eye, as compared with conventional lenses. It is sometimes helpful to start by using the lowest slit lamp magnification with the lens centered in the field of view. Then move the slit lamp away from the patient until the image is acquired.
- Restricted posterior movement of the older Zeiss 125 slit lamp requires the patient's forehead be moved backward from the headrest. This positioning may be achieved by placing a one inch thick sponge strip between the patient's forehead and the headrest.

## RETINA LENS COMPARISON CHART

Lens	PRP 165	Wide Field	PDT 1.6X	ProRetina 120 PB <sup>(3)</sup>	Reichel-Mainster 1X	Reichel-Mainster 2X	Pediatric Reichel-Mainster 1X	(Standard) Focal/ Grid <sup>(4)</sup>	High Mag	
<b>Static Field of View</b>	165°	118°	120°	120°	102°	117°	98°	90°	75°	
<b>Dynamic Field of View</b>	180°	127°	133°	136°	133°	142°	126°	121°	88°	
<b>Image Magnification</b>	.51x	.68x	.63x	.50x	.95x	.50x	1.08x	.96x	1.25x	
<b>Laser Spot Magnification Factor<sup>(2)</sup></b>	1.96X	1.50X	1.60X	2.00X	1.05X	2.00X	.93X	1.05X	.80X	
Retinal Disorder <sup>(1)</sup>	Procedure	+++ Optimal    ++ Very useful    + Useful    - Not useful								
NVD, NVE or NVI	PRP, Clear Media	+++	++	++	++	++	++	++	+	-
NVD, NVE or NVI	PRP, Vitreous Hemorrhage	++	+++	+++	+++	++	+++	++	+	-
Macular Edema	Focal + Grid	+	+	+	+	+++	++	+++	+++	++
CNV in ARMD or OHS	Focal	-	-	-	-	+++	-	+++	+++	+++
	PDT, TTT	+	+++	+++	+	+++	+++	+++	+++	+++
Retinal Holes	Peripheral	+++	+	+	+	+	+	+	-	-
ROP	Peripheral	-	-	-	-	-	-	+++	-	-

- (1) NVD, NVE, NVI: neovascularization - disc, retinal elsewhere, iris; CNV: choroidal neovascularization; ARMD: age-related macular degeneration; OHS: ocular histoplasmosis syndrome
- (2) Multiply the laser photocoagulator spot size setting by this magnification factor to calculate the retinal spot size produced by each lens. Note that "x" and "X" are used for image magnification and laser spot magnification, respectively.
- (3) The ProRetina's tubular design facilitates examination and treatment of patients with prominent brows. It also allows easy lens manipulation for examination and treatment of the retinal periphery.
- (4) Focal/Grid is the new name for the Mainster Standard.

### Cleaning

Rinse: Immediately upon removal from patient's eye, thoroughly rinse in cool or tepid water.

Wash: Place a few drops of mild soap on a moistened cotton ball. Gently clean with a circular motion.

Rinse: Thoroughly rinse in cool or tepid water, then dry carefully with a *non-linting* tissue.

Then: Proceed with either disinfection or sterilization instructions.

### Disinfecting

Soak In:	<b>GLUTARALDEHYDE</b>	<b>OR</b>	<b>BLEACH</b>
	2% or 3.4% aqueous solution		10% solution mixed at: 1 part bleach to 9 parts cool tepid water
	Temperature per manufacturer instructions		Recommended exposure time = 10 minutes
	Minimum exposure time = 20 minutes		
<b>CAUTION</b> To avoid damage to the lens, do not exceed recommended exposure time.			
Then:	Rinse lens <i>thoroughly</i> to remove disinfection solution. 3 cycles of 1 minute, with cool or tepid water is recommended. Dry carefully and place in a dry storage case.		
NOTE	This lens is known to be compatible with: Asepti-Wipe, Cavi-cide, Cidex, Cidex OPA, DisCide Wipe, Enviro-cide, H <sub>2</sub> O <sub>2</sub> - 3%, and Opti-Cide.		
<b>CAUTION</b>	<b>If used on an ulcerated cornea, lens must be <i>STERILIZED</i> before next procedure.</b>		

### Sterilizing

AUTOCLAVE	STERRAD	STERIS SYSTEM 1	ETO	ETO Parameters		
No	No	YES	YES	Minimum Time	Temperature	Aeration Time
		Per manufacturer instructions	See Right	1 hour	130°F (54°C)	12 hours
<b>WARNING</b>	<b>Never Steam Autoclave or Boil listed lenses. Never soak in Alcohol, Acetone or Other Solvents.</b>					

For information on compatibility with alternative product care methods, contact Customer Service.

