



Ocular Mainster High Magnification Laser Lens

	Product Code CE	Static FOV	Dynamic FOV	Image Mag	Laser Spot Mag	Contact Diam	Lens Height	<i>Designed with: Martin A. Mainster, Ph.D., M.D. Kansas City, KS</i>	
	OMRA-HM	75°	88°	1.25x	.80X	15.5mm	27.5mm		
	OMRA-HM-2	75°	88°	1.25x	.80X	12.0mm	26.5mm		

Lens Design

- § The Mainster High Magnification Laser Lens offers 34% greater magnification and twice the field of view of a Goldmann flat contact lens.
- § The magnified image provides the highest available retinal clarity for detecting macular problems such as diabetic retinal thickening.
- § Facilitates location of subtle vascular landmarks during macular photocoagulation, fine details that may be apparent angiographically, but hard to find without superior magnification in the lower contrast ophthalmoscopic image.
- § Offers a magnified stereoscopic view of the optic disc of approximately 43° for managing glaucoma patients.
- § No methylcellulose is required during routine eye examinations on the OMRA-HM-2 style.

Technique

- § As with any indirect ophthalmoscopy contact lens, some time is needed to become familiar. 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.

RETINA LENS COMPARISON CHART

Lens	PRP 165	Wide Field	PDT 1.6X	ProRetina 120 PB ⁽³⁾	Reichel-Mainster 1X	Reichel-Mainster 2X	(Standard) Focal/ Grid ⁽⁴⁾	High Mag	
Static Field of View	165°	118°	120°	120°	102°	117°	90°	75°	
Dynamic Field of View	180°	127°	133°	136°	133°	142°	121°	88°	
Image Magnification	.51x	.68x	.63x	.50x	.95x	.50x	.96x	1.25x	
Laser Spot Magnification Factor⁽²⁾	1.96X	1.50X	1.60X	2.00X	1.05X	2.00X	1.05X	.80X	
Retinal Disorder⁽¹⁾	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	+++	+	+	+	+	+	-	-

⁽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:	GLUTARALDEHYDE	OR	BLEACH
	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		
CAUTION <i>To avoid damage to the lens, do not exceed recommended exposure time.</i>			
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 ₂ O ₂ - 3%, and Opti-Cide		
CAUTION <i>If used on an ulcerated cornea, lens must be STERILIZED before next procedure.</i>			

Sterilizing

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

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

