

# IOLMaster™ Optical Coherence Biometry

Advancing Biometry. Enhancing Surgical Outcomes



EYE CARE  
ALLIANCE

1.800.320.2020  
www.eyecarealliance.com

# Mastering Performance and Simplicity

Combining performance with simplicity, the Zeiss IOLMaster sets new standards in patient care and practice efficiency. The IOLMaster is a one of a kind biometry device that quickly and accurately measures parameters for IOL implantation without ever touching the cornea. At the push of a button, axial length, corneal curvature, White-to-White and anterior chamber depth are quickly and precisely measured using this revolutionary, non-contact instrument. IOL calculation options are instantly available from the surgeon's personalized lens database.

Based on Partial Coherence Interferometry (PCI), the IOLMaster accurately measures axial length in just seconds. Corneal curvature is measured via an integrated auto keratometer and anterior chamber depth is measured using the lateral slit illumination principle. A crisp video image facilitates the objective and accurate horizontal White-to-White determination. The White-to-White result is required for an advanced IOL formula and useful in the sizing estimation of sulcus supported intraocular lenses. Using the IOLMaster, the physician can deliver spectacle freedom by achieving desired post-operative goals.

Simple to operate, the IOLMaster delivers reliable and repeatable results essentially independent of operator technique. An integrated Lens Constant Personalization Program efficiently optimizes IOL constants. The IOLMaster will revolutionize your practice efficiency and enhance your surgical outcomes.

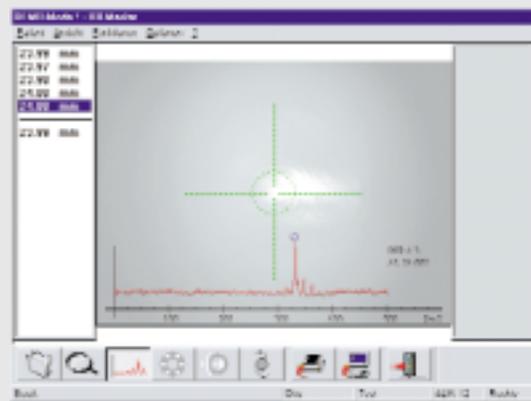
## Instrument Modes and Features

- Axial Length
- Corneal Curvature
- White-to-White (optional)
- Anterior Chamber Depth
- IOL Calculation
- Lens Constant Personalization
- Post Refractive Surgery Corneal Power Calculation (optional)

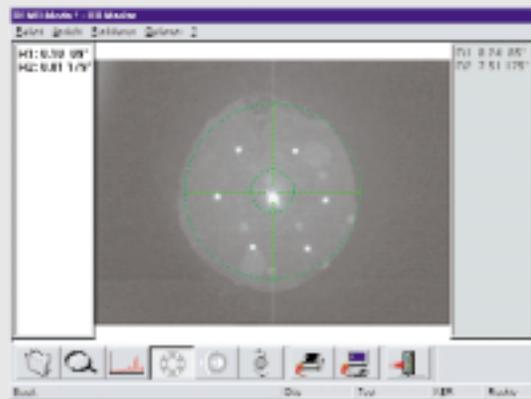
**"As far as I am aware, this is the most accurate biometric tool currently available for IOL calculation. Being non-contact, it is a major improvement in technician and patient friendliness"**

— R. Bruce Wallace III, M.D.

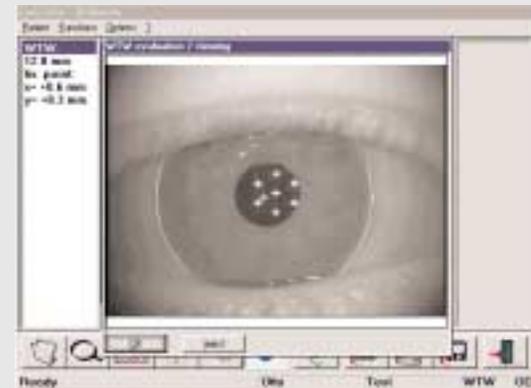
*Axial Length*



*Keratometry*



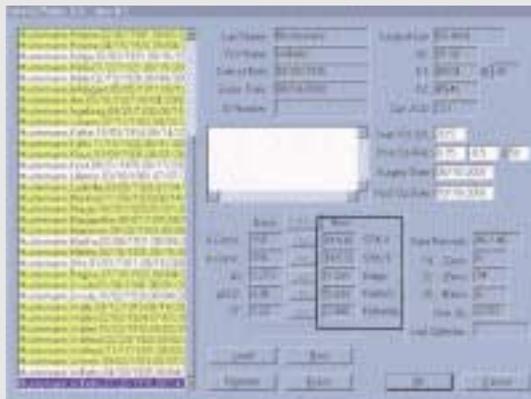
*White-to-White*



*ACD*



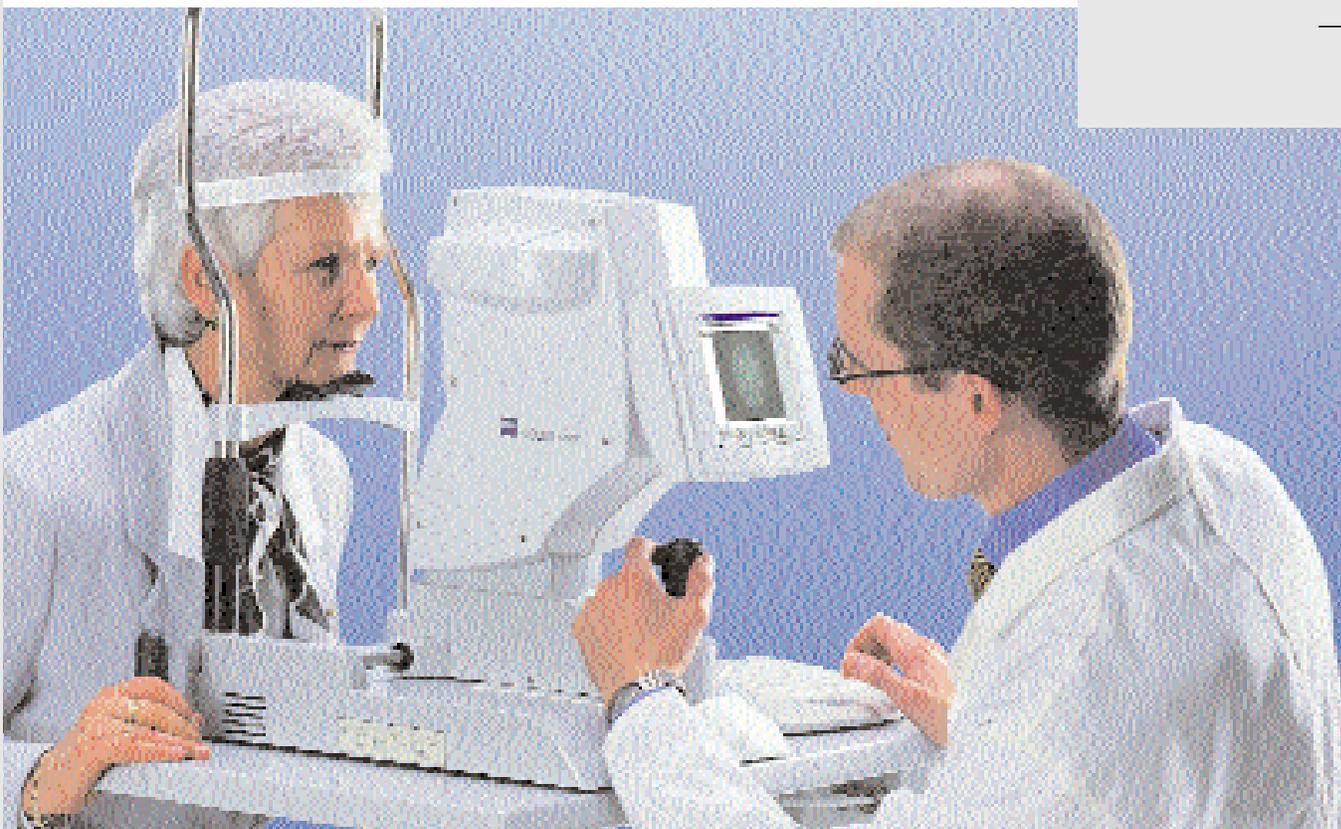
*Lens Constant Personalization*



# Benefits of NON-Contact Optical Coherence Biometry

"I believe the improvement in axial length measurements with IOLMaster's laser interferometry technique is the largest single step in accuracy since the A-scan was invented"

— Jack T. Holladay, M.D.



## Accuracy

- Precise axial length values are obtained along the visual axis on a range of eyes including high myopes, aphakes, pseudophakes and silicone filled eyes
- Reliable and repeatable readings independent of technician technique
- Integrated Lens Constant Personalization Software program for improved outcomes

## Improve Practice Efficiency

- Four measurements in one device reduces prep and exam time
- Rapid and simple IOL power calculation
- Measure both eyes within minutes

## Superior Ease-of-use

- Simple operation with minimal training
- Detects right/left eye automatically
- Intuitive and familiar Windows® interface
- Option of data transfer or printout
- No applanation

## Uncompromised Patient Care

- No anesthetic required
- Quick and easy procedure
- Non-contact technique precludes corneal lesions and transmission of infections

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Windows is a registered trademark of Microsoft Corporation.

"Zeiss' use of laser light to measure eye axial length is the most important, largest improvement in IOL Power Calculation since Ossoinig harnessed ultrasound in 1976"

— John Retzlaff, M.D.

# Technical data

## Measurement Modes

	Measurement Ranges	Resolution of Measurement
Axial Length	14 - 40 mm	0.01 mm
Corneal Curvature	33 - 67 D (5 - 10 mm)	0.01 mm
White-to-White (optional)	8 - 16 mm	0.10 mm
Anterior Chamber Depth	1.5 - 6.5 mm	0.01 mm

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Integrated IOL Formulas SRK II, SRK/T, Holladay, Hoffer Q, Haigis

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Integrated Lens Constant Personalization Software

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Post Refractive Surgery Corneal Power Calculation (optional)

Clinical History Method

Contact Lens Method

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Power Requirements 100 - 240 V  $\pm$ 10% (self-sensing)

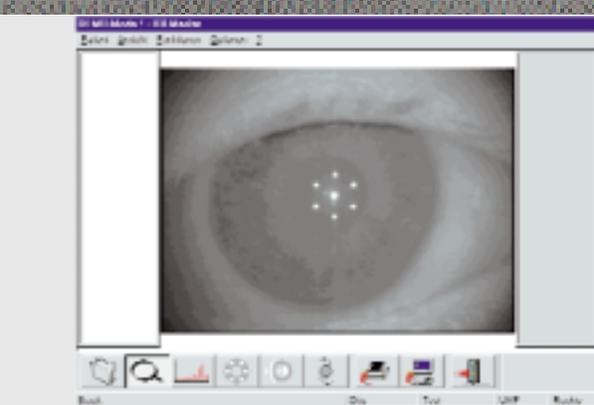
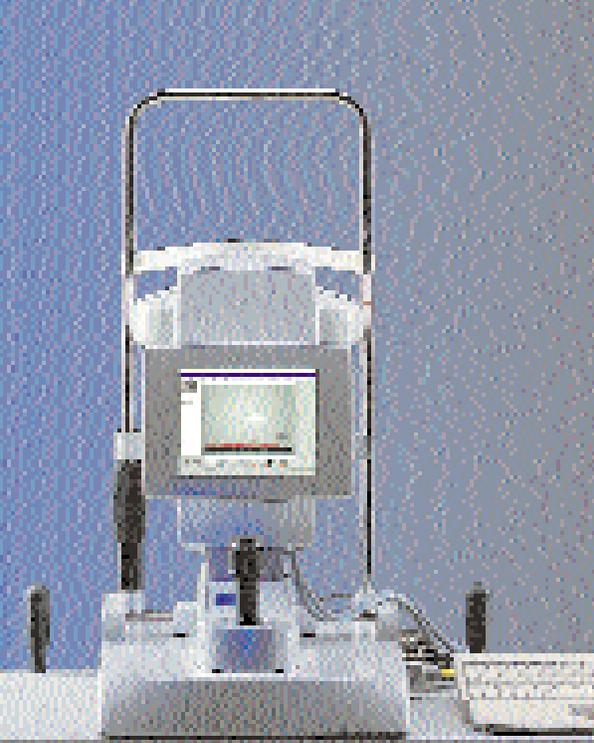
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Line Frequency 50 - 60 Hz

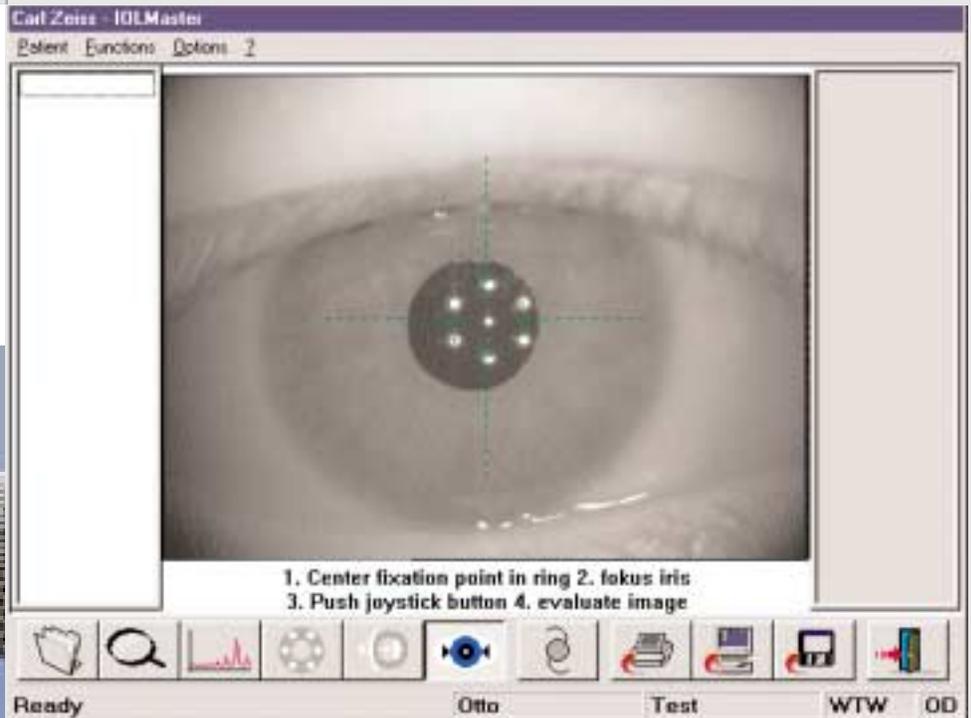
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Power Consumption max. 80 VA

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Overview



White-to-White

BIOL Rev C 15M 1001  
 Specifications subject to change.  
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