

# LDLS™ Laser-Driven Light Source

## EQ-1000 High Brightness DUV Light Source



### Operation Manual

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## Chapter 1

### GENERAL INFORMATION

#### Safety

#### WARNING

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This unit emits ultraviolet (UV) radiation that is harmful to humans when operated improperly. Make certain that the appropriate output beam shields and optics are in place prior to energizing the unit. All interlocks must be satisfied prior to operation; failure to do so may lead to hazardous conditions.

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#### CAUTION

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The EQ-1000 emits dangerous levels of UV radiation. Even short exposures to skin or eyes may cause burns. Ensure that only authorized personnel are in the vicinity of source during operation. Personnel in vicinity of operating source should wear protective eyewear, clothing, and gloves. Lighted UV warning lights and signs posted on doors to lab areas may help prevent accidental exposure.

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#### *General Precautions*

The output beam from the EQ-1000 should be blocked when not in use with an electronic shutter or other appropriate beam blocking device. Due to the absorption of the short wavelength light and the possibility of ozone production, the beam should always be either directly coupled to a fiber optic cable, or enclosed in an appropriate beam pipe, tube, or enclosed space. We suggest purging any beam transport space with dry Nitrogen gas, as this is also required for safe operation of the EQ-1000.

The source must be purged with dry nitrogen gas via the Nitrogen input 1/4" push-lock connector on the laser box. The nitrogen should have an inlet pressure of 20psig. The source

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