### **Technical Support**

Contact Analytik Jena's offices using the contact information shown below with any questions regarding this product. A Returned Goods Authorization number (RGA) must be obtained from AJ prior to returning any item to AJ.

#### **Corporate Headquarters:**

Analytik Jena US 2066 W. 11th Street, Upland, CA 91786

Telephone: (909) 946-3197 Fax: (909) 946-3597 www.us.analytik-jena.com

### Warranty

# REGISTER YOUR MINI UV LAMP WARRANTY ONLINE AT HTTP://UVP.COM/REGISTER/

**LIMITED WARRANTY**: Al's quality instruments are quaranteed to be free of defects in materials, workmanship, and manufacture for one (1) year from date of purchase. Transilluminators are similarly warranted for two (2) years from the date of purchase. Consumable and disposable products, including, but not limited to lamps or light tubes, filters, or rechargeable batteries are quaranteed to be free from defects in manufacture and materials for ninety (90) days from date of purchase. If equipment failure or malfunction occurs during the warranty period. Al shall examine the inoperative equipment and have the option of repairing or replacing any part(s) which, in the sole and absolute discretion of AJ, were originally defective or became so under conditions of normal usage and service. No warranty shall apply to any instrument, or part thereof, that has been subject to accident, negligence, alteration, abuse or misuse by the end user. Moreover, AJ makes no warranties whatsoever with respect to parts not supplied by AJ or that have been installed, used and/or serviced other than in strict compliance with the instructions appearing in this installation and instruction manual. In no event shall AJ be responsible to the end-user for any incidental or consequential damages, whether foreseeable or not, including but not limited to property damage, inability to use equipment, loss of business, loss of profits, or inconvenience arising out of or connected with the use of instruments produced by AJ. Nor is AJ liable or responsible for any personal injuries occurring as a result of the use, misuse, installation and/or servicing of equipment. Representations and warranties made by any person, including dealers and representatives of AI which are inconsistent or in conflict with the terms of this warranty (including but not limited to the limitations of the liability of AJ as set forth above), shall not be binding upon All unless reduced to writing and approved by an expressly authorized representative of Al. THIS WARRANTY IS EXPRESSED IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON UVP'S PART AND UVP NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR UVP ANY OTHER LIABILITIES IN CONNECTION WITH THE SALE OF THE SAID PRODUCTS.



# Blak-Ray® and Mineralight® Mini UV Lamps

# User's Guide



UVL-4 | UVG-4 | UVSL-14P



Blak-Ray® and Mineralight® are Registered Trademarks of Analytik Jena

#### Introduction

Ultraviolet light is electromagnetic radiation in the segment of the spectrum between X-rays and visible light, approximately 180nm to 400nm. It differs from visible light in that its wavelengths are too short to be seen by the human eye.

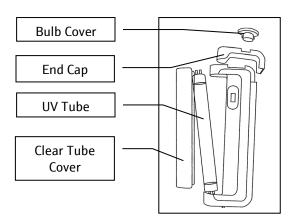
UV-A, or longwave radiation, is 315nm and above. UV-B, or midrange radiation, is 280nm-315nm. UV-C, or shortwave radiation, is 280nm and below.

When UV radiation falls upon phosphors, it causes the phosphors to emit specific radiation. This is known as fluorescence. In some materials, the fluorescence lingers on and slowly disappears after the UV source is removed. This phenomenon is known as phosphorescence.

**CAUTION:** SHORTWAVE UV IS HARMFUL TO THE EYES AND SKIN. PROPER PROTECTION MUST BE WORN WHEN OPERATING A LAMP EMITTING SHORTWAVE UV.

## **Tube Replacement**

- 1. Remove the batteries prior to replacing the tube.
- 2. Pull off the circular bulb cover and end cap on the end of the unit, followed by the clear tube cover.
- 3. Gently twist the tube by the base to release the tube.
- 4. Replace with a 4 watt longwave tube.
- 5. Replace the clear cover.
- 6. Reconnect the end cap and bulb cover back into position.



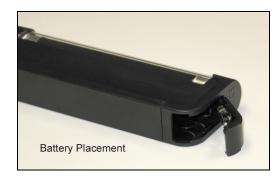
**CAUTION**: DO NOT EXPOSE EYES OR SKIN TO SHORTWAVE ULTRAVIOLET LIGHT, AS RAYS MAY BURN UNPROTECTED EYES OR SKIN (UVG-4, UVSL-14P). UV BLOCKING EYEWEAR IS RECOMMENDED.

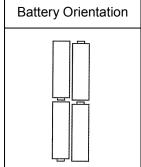
Replacement Parts	Part Number
365nm UV (for UVL-4)	34-0010-01
254nm UV (for UVG-4)	34-0003-01
254/365nm UV (for UVSL-14P)	34-0004-01
Spectacles	98-0002-01
Goggles	98-0002-02

# **Battery Replacement**

The UVL-4, UVG-4 and UVSL-14P all operate on four (4) standard AA batteries. Some alkaline batteries with test strips are slightly larger than standard batteries and may cause a tight fit. Recommended batteries for use in the Mini UV Lamps are Eveready Classic and Rayovac without test strips.

**To replace the batteries:** Press the center of the battery housing closure toward the back of the lamp and slide the hinged door forward and up. Insert the 4 AA batteries, orienting the batteries as indicated below. Close the door.





**Battery Replacement (UVL-4 Shown)** 

**NOTE:** Remove the batteries if the unit is to be stored for more than a few months without use.