ecoVis Krypton Light Source

Installation and Operation Manual

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Offices:

Ocean Optics, Inc. World Headquarters
830 Douglas Ave., Dunedin, FL, USA 34698
Phone 727.733.2447
Fax 727.733.3962
8 a.m.– 6 p.m. (Mon-Fri) ET

Ocean Optics Germany
Maybachstraße 11, D73760, Ostfildern, Germany
Phone +49 (0)711 34 16 96-0
Fax +49 (0)711 34 16 96-85

E-mail:
Info@OceanOptics.com (General sales inquiries)
Orders@OceanOptics.com (Questions about orders)
TechSupport@OceanOptics.com (Technical support)

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Important Safety Notices

1. Read all instructions before attempting to operate the light source.
2. Before using the light source and the AC-adaptor for the first time check for transport damage.
3. Do not use the unit if it is damaged in any way. Contact your dealer for repair or replacement information.
4. The lamp, and especially the light bulb, could be hot.

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About This Manual

Document Purpose and Intended Audience

This document provides you with an installation section to get your system up and running.

What's New in this Document

This version of the *EcoVis Krypton Light Source Installation and Operation Manual* updates the product specifications.

Document Summary

Chapter	Description
Chapter 1: *Setup*	Contains a list of package contents and unpacking instructions.
Chapter 2: *ecoVis Specifications*	Contains operating environment specifications, as well as other physical details of the product.
Appendix A: *Bulb Replacement*	Provides instructions for changing the bulb.

Product-Related Documentation

You can access documentation for Ocean Optics products by visiting our website at **http://www.oceanoptics.com**. Select *Technical → Operating Instructions*, then choose the appropriate document from the available drop-down lists. Or, use the **Search by Model Number** field at the bottom of the web page.

You can also access operating instructions for Ocean Optics products on the *Software and Technical Resources* CD included with the system.

Engineering-level documentation is located on our website at *Technical → Engineering Docs.*

Upgrades

Occasionally, you may find that you need Ocean Optics to make a change or an upgrade to your system. To facilitate these changes, you must first contact Customer Support and obtain a Return Merchandise Authorization (RMA) number. Please contact Ocean Optics for specific instructions when returning a product.

Chapter 1

Setup

Overview

EcoVis is a compact, low-voltage Krypton light source (400-2500 nm) with built-in cuvette holder that's ideal for basic lab measurements in teaching labs and other research environments. The EcoVis has a rugged solid alloy housing that helps to dissipate heat and in-line fiber ports for absorbance and fluorescence measurements.

EcoVis is small (95 mm x 50 mm and weighs 265 g), making it attractive for labs where space is at a premium. The light source has an integrated cuvette holder with 1 cm pathlength and a versatile chromium-plated reflective insert that increases the output for fluorescence, holds the cuvette securely in place and can be adjusted through 90º to block the light path for dark measurements.

EcoVis is designed for absorbance and fluorescence of cuvette-based samples. Its rugged housing and simple design make it useful for teaching labs and setups where basic absorbance and fluorescence measurements are performed routinely.

ecoVis Light Source

Setup Instructions

The following sections provide instructions on unpacking and setting up your ecoVis Light Source.

Before using the ecoVis for the first time, check for transport damage. Be sure to adhere to all warnings on the unit and in this manual.

Unpacking the ecoVis

► ***Procedure***

1. Unpack your lamp assembly carefully. Although the lamp is rigidly mounted, dropping this instrument can cause permanent damage.

2. Inspect the outside of the instrument and make sure that there is no damage. Do not use the instrument if damage is present. Contact your dealer for repair or replacement information, if necessary.

3. Use this instrument in a clean laboratory environment.

Contents

Your ecoVis package should contain the following:

- ecoVis Light Source
- Multi-plug AC-adaptor 3.5 Vdc output
- Hexagon socket screw key (Allen wrench) SW 1.3

Chapter 2

ecoVis Specifications

This section provides information on the operating environment, physical controls, and dimensions of the ecoVis.

Specifications	Criteria
Wavelength Range	400 – 2500 nm
Drift	< 0.5 % per hour
Time to Stabilize	Approximately 10 minutes
Power Supply Input	100-240 V / 50-60 Hz / 150 mA
Power Supply Output	3.5 Vdc / 1100 mA
Bulb Lifetime	2000 hours
Color Temerature	2400K
Characteristic	focused / SMA905 connector
Cuvette Holder Path Length	10 mm
Cuvette Holder z Dimension	15 mm
Temperature Housing Environment	 42 °C @ 25 °C ambient 5°C – 35°C
Humidity	5 - 95% at 40°C
Lamp Power	1.3 W
Weight	272 g (0.6 lbs.)
Dimensions	50 mm x 95 mm

Parts List

Description	Part Number
Krypton Light Source, passive cooled	EcoVis
Krypton spare bulb	Eco-Vis-B

Appendix A

Bulb Replacement

Overview

The following sections provide instructions on changing the krypton bulb in the ecoVis. To order replacement bulbs for the ecoVis, order item number ECOVIS-B.

Note

Do not directly touch the glass of the bulb with your fingers. Use a cloth or gloves with a surface which is free of grease and sweat.

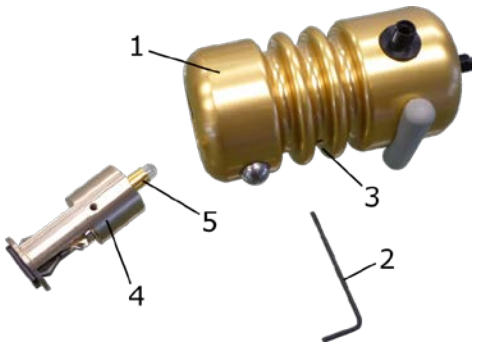
Replacing the Bulb

WARNING

The lamp and especially the light bulb could be hot. Wait until the ecoVis has cooled down to ambient temperature before attempting to change the bulb.

► *Procedure*

1. Unplug the AC adapter from the ecoVis.
2. Use the Allen wrench to loosen the stud screw from the bottom of the ecoVis.



1 – ecoVis housing

2 – Allen wrench SW 1.3

3 – stud screw

4 – Cylinder with DC socket

5 – bulb with thread (ECOVIS-B)

3. On the back of the ecoVis, pull out the cylinder with the DC socket and the bulb.

Note

The cylinder will slide out by itself if you loosened the screw and tilt the ecoVis.

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4. To remove the bulb from the cylinder, unscrew out the bulb in a counter-clockwise direction.

5. Insert the new bulb and screw it in in a clockwise direction into the cylinder.
6. Push in the cylinder back in the housing. There is a furrow on the cylinder for the right orientation while pushing the cylinder in.
7. Affix the cylinder by screwing in the stud screw.

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