Electron
Microscopy
Sciences

# **INSTRUCTIONAL MANUAL**

NIGHTSEA® Fluorescence Stereo Microscope Fluorescence Adapter



Electron Microscopy Sciences P.O. Box 550 1560 Industry Road Hatfield, PA 19440

TOLL FREE: 1-800-523-5874

TEL: 215-412-8400 WEB: <u>www.emsdiasum.com</u> FAX: 215-412-8450 EMAIL: <u>sgkcck@aol.com</u>

#### An introduction

The Stereo Microscope Fluorescence Adapter comes with:

- Barrier filter
- Light heads
- Flexible gooseneck lamp base with power supply
- Ring adapter for microscope
- Filter shield

## **Applications and uses**

- Shield
  - The viewing shield has a screw that protrudes a small distance, and a slot.
  - Insert the screw into the mating hole in the beveled surface on the front of the adapter and rotate the slot under the thumbscrew that comes with the adapter.
  - Tighten the thumbscrew just enough to secure the shield.
- Barrier filters
  - NIGHTSEA barrier 0 filters attach magnetically.
  - The mounting magnets are contained within the adapter.
  - Orient the filter so that the flat surface is facing up and place it underneath the adapter.
  - It should snap into place, and can be easily removed with a simple pull.
- Light head hanger kit
  - NIGHTSEA Light head hangers can be used with the SFA-Z-AD by means of the thumbscrews on the sides of the adapter.
  - Unscrew the thumbscrews so that the head is about 1/4" away from the body in order to provide adequate clearance.

The SFA-Z-AD allows you to use the NIGHTSEA Stereo Microscope Fluorescence Adapter with the Leica Model EZ4 Series, with or without an incorporated camera.



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#### Instructions

#### Attaching the microscope

- 1. Slip the elastic cord over the eyepieces.
- 2. Position the adapter squarely under the front of the microscope body.
- Move the elastic cord behind the zoom control knobs or the attached camera to add tension.

#### Mounting the illuminator

- 1. The light head plug has a BNC-type bayonet connector jack that mates with the plug on the end of the gooseneck.
- 2. Align the tabs on the jack with the slots on the plug. Insert and twist the jack relative to the plug.
- 3. The connector will seat firmly. Reverse the procedure to remove.

### Adapter

- 1. Attach the ring adapter to the underside of the stereo microscope barrel using the thumbscrews.
- 2. The bottom face of the adapter should be below the bottom edge of the barrel.

### Switching between color sets

- 1. If you have purchased more than one excitation/emission color set, you can switch between them in just seconds.
- 2. Remove the light head, barrier filter, and viewing shield and replace them with the corresponding elements of the new set.
- The elements of the excitation/emission light + filter combination are color coded for easy reference.
- 4. Refer to the specifications at the end of these instructions for details of the filter sets.

#### CAUTION

The SFA-Z-AD contains several small neodymium magnets. These are encapsulated with no risk of coming free. The strong magnetic field of neodymium magnets can damage a range of magnetic media if placed in close contact. NEVER allow neodymium magnets near a person with any kind of medical aid. The strong magnet can affect the operation of said devices.

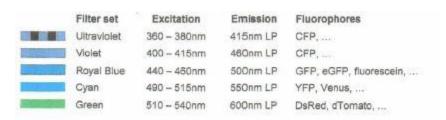
The light heads emit intense LED light. Users should avoid looking directly into the front of the light heads. The royal blue light heads in particular pose a risk of thermal damage and are classified as 'ANSI RG-3. Do not look at exposed lamps in operation as eye injury can result.

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## **Specifications**



Microscope mounting adapter - fits up to 67mm standard, other options available

Power supply - 90 - 240VAC, 50/60Hz

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For any questions or for ordering information, please contact Customer Service at 1-800-523-5874.

Thank you for choosing Electron Microscopy Sciences!

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