# **Prizmatix**

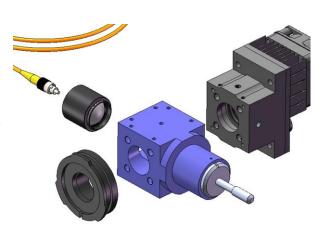
# **Beam Switcher**

# Versatile Accessory for Microscopy and Optogenetics Applications

### Introduction

The Beam Switcher accessory allows **LFDs** installed Prizmatix microscope to be used either for the microscope epi-fluorescence illumination or for illuminating via a fiberoptic Especially useful for in situ probe. Optogenetics studies, the Beam switcher saves cost and space, yet enables maximum flexibility in experiment design.

Alternatively, the Beam Switcher is useful for assembling White LED and single color LED at fluorescence microscopes. Please see below for application examples.



# **Key Features**

- Assembles directly on the microscope epi-fluorescence illumination port.
- Modular adapters for all major microscopes brands.
- Accepts all types of Prizmatix UHP-Mic-LED, VHP-Mic-LED, Mic-LED products.
- Accepts all types of multimode optical fibers.

## **Applications**

- Fluorescence microscopy
- Optogenetics

# **Specifications**

Wavelength range	nm	350 – 1100
Connector for Optical fiber		SMA / FC / ST
Adaptors to Microscope epi-		Olympus, Nikon, Zeiss or Leica
fluorescence illumination port		
Connection to Prizmatix LED heads		By 4 pin connection system
Connection to other systems		SM1 thread

 Main Office
 European Sales Office
 North America Sales Office

 Phone: +972-72-2500097
 Phone: +44-(0)77-9172-9592
 Phone: +1-(248)-436-8085

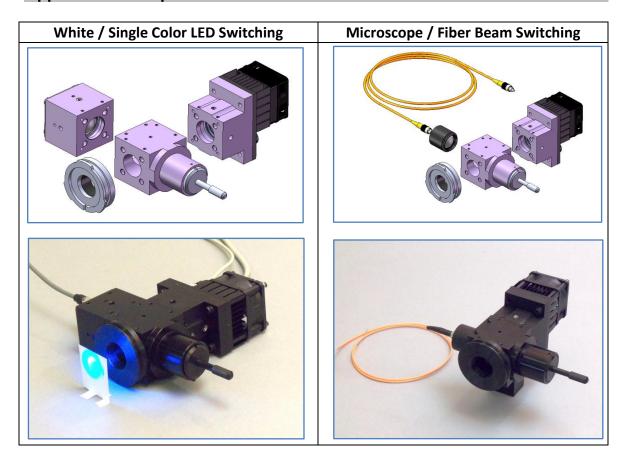
 Fax: +972-72-2500096
 Fax: +44-(0)20-7681-2977
 Fax: +1-(248)-281-5236

 sales@prizmatix.com
 sales.europe@prizmatix.com
 sales.usa@prizmatix.com

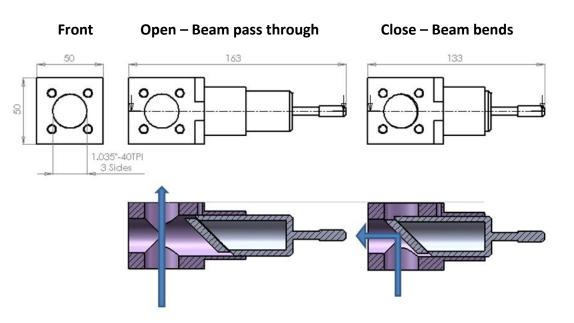
P.O.B. 4234 Modiin-Ilite 71919, Israel

# **Prizmatix**

# **Application Examples**



# **Mechanical Drawings**



**Main Office**Phone: +972-72-2500097
Fax: +972-72-2500096

sales@prizmatix.com

**European Sales Office** 

Phone: +44-(0)77-9172-9592 Fax: +44-(0)20-7681-2977

sales.europe@prizmatix.com

**North America Sales Office** 

Phone: +1-(248)-436-8085 Fax: +1-(248)-281-5236

matix.com sales.usa@prizmatix.com

P.O.B. 4234 Modiin-Ilite 71919, Israel

# **Prizmatix**

# **Optional Accessories**

### Filter Wheel:

The UHP-Mic-LED can equipped with a 6 positions filter wheel at the beam output. This accessory is especially useful for UHP-Mic-LED-White light source. Please see video clip <a href="http://www.youtube.com/watch?v=iv7dlwLHaUE&feature=plcp">http://www.youtube.com/watch?v=iv7dlwLHaUE&feature=plcp</a> at time 1:58 for detailes.

# **Fiber Coupler Adaptor:**

The UHP-Mic-LED can be easily changed from direct microscope coupling to fiber coupled LED configuration by means of Fiber Coupler Adaptor (SMA, CF or ST connector). This adaptor can be easily assembled by a user on the Mic-LED output. Please see video clip <a href="http://www.youtube.com/watch?v=iv7dlwLHaUE">http://www.youtube.com/watch?v=iv7dlwLHaUE</a> for more details.

### **Liquid Light Guide Adaptor:**

The Microscope-LED can be easily changed from direct microscope coupling to Liquid Light Gide coupled LED configuration by means of LLGA Adaptor. This adaptor can be easily assembled by a user on the Mic-LED output. Please see video clip <a href="http://www.youtube.com/watch?v=iv7dlwLHaUE">http://www.youtube.com/watch?v=iv7dlwLHaUE</a> for more details.

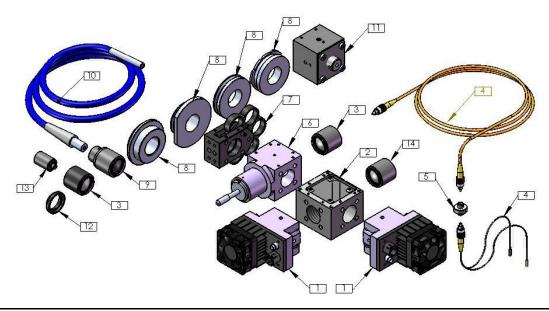
#### **Collimator:**

The output from optical fiber is divergent according to fiber NA. In order to reduce the divergence angle a collimator module can be used. Prizmatix collimator was especially designed to fit thick core high NA Polymer Optical Fibers. See more info at <a href="http://prizmatix.com/docs/collimator.cfm">http://prizmatix.com/docs/collimator.cfm</a>

### **Fiber Bundles:**

To combine outputs of multiple LEDs a Y-shaped fiber bundle with two or more input branches can be used. Prizmatix can help to configure and build custom fiber bundles for specific applications. See more info at:

http://prizmatix.com/docs/Custom Fiber Optic Assemblies.cfm



 Main Office
 European Sales Office

 Phone: +972-72-2500097
 Phone: +44-(0)77-9172-9592

 Fax: +972-72-2500096
 Fax: +44-(0)20-7681-2977

 sales@prizmatix.com
 sales.europe@prizmatix.com

North America Sales Office
Phone: +1-(248)-436-8085
Fax: +1-(248)-281-5236
sales.usa@prizmatix.com

P.O.B. 4234 Modiin-Ilite 71919, Israel