



**Guangzhou Micro-shot Technology Co., Ltd**

**Inverted LED Fluorescence Attachment**

**MI-BG (U) -LED**

**MF52-N**

**User Manual**



**Website: [www.m-shot.com](http://www.m-shot.com)**

**Email: [sales@m-shot.com](mailto:sales@m-shot.com)**



**MI-BG(U)-LED Fluorescence Attachment**

## **Thank you for buying our product!**

This unit is a precision optical instrument. Our product has been design to provide the highest level of safety, however, improper operation or negligence in following the instructions in this manual may cause personal injuries and property losses. In order to ensure your safety, prolong the life of this unit and maintain it properly, please read this manual carefully before operating this unit.

---

### **Warning**

- Do not use or place the instrument in the place with high temperature, humidity or dust for a long time
- Suitable working temperature: 5 °C to 35 °C
- Suitable relative humidity 20% to 80% (25 °C)

Note: do not immerse the instrument in water or solvent

Note: do not place accessories not provided by our company in the frame body or other transmission parts



# Content

<b>I.Introduction.....</b>	<b>1</b>
<b>II.Main Specification.....</b>	<b>1</b>
<b>III. Name of components.....</b>	<b>2~3</b>
<b>IV. Installation guide.....</b>	<b>3~5</b>
<b>V.Notes.....</b>	<b>6</b>



## I .Introduction

The MSHOT MI-LED series LED fluorescence attachment takes us of long working life LED as light source, can easily expand an ordinary microscope of infinite optical system into an energy-saving, efficient, easy to operate and super long-life LED lighting fluorescence microscope and do not effect original bright field observation.

## II . Main Specification

### 1. Standard configuration

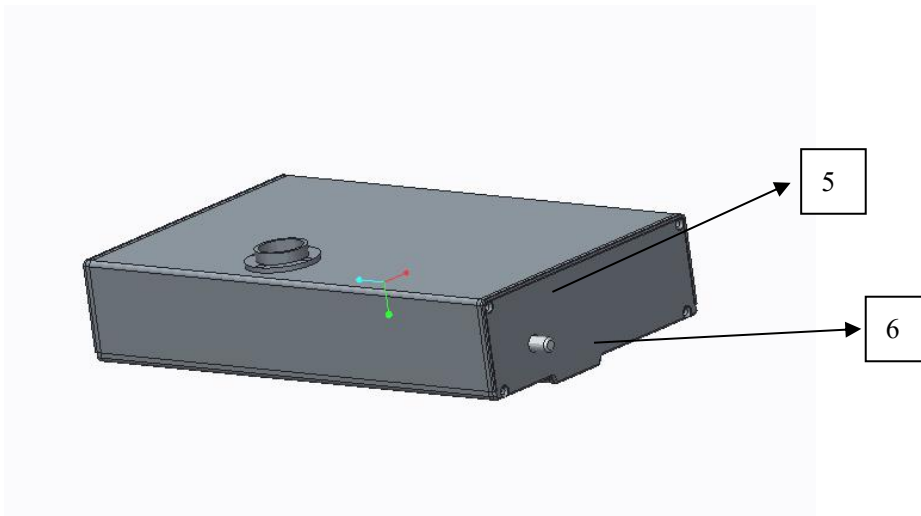
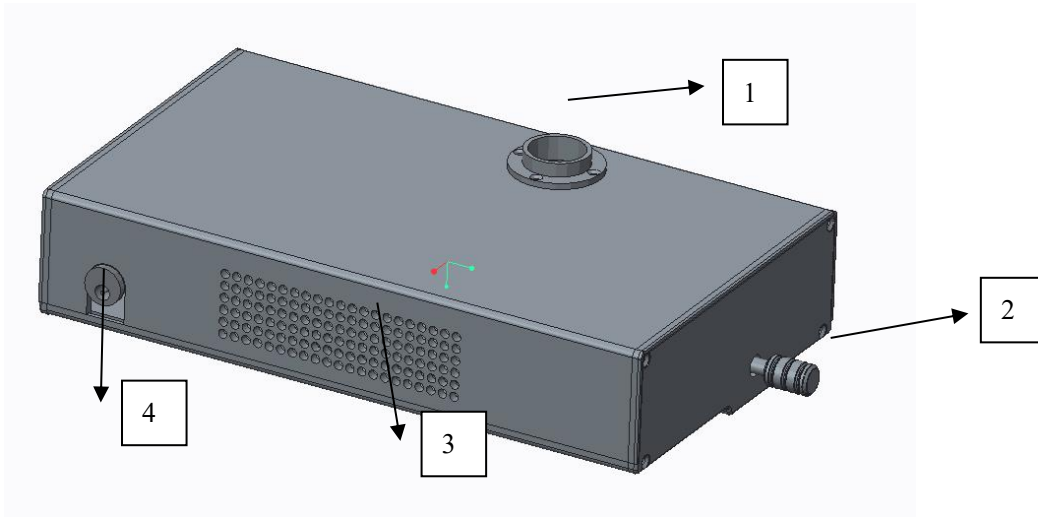
Excitation type	LED central wavelength	Excitation filter	Dichroic mirror	Emmision filter
Blue	470-475nm	450-490nm	505nm	515nmLP
Green	530-535nm	510-550nm	565nm	575nmLP
UV	365nm	330-380nm	400nm	420nmLP

### 2. Optional configuration

Excitation type	LED central wavelength	Excitation filter	Dichroic mirror	Emmision filter
UV(BP)	365nm	340-390nm	400nm	450/65nm
B(BP)	470-475nm	455-495nm	500nm	535/45nm
G(BP)	530-535nm	525/45nm	560nm	565-625nm

### III. Name of components

1. Fluorescence light path port    2. Fluorescence excitation changing lever    3. Heat dissipation hole  
4. Power supply port    5. Brightness control knob    6. Fluorescence attachment fixed slot



#### Function:

1. Fluorescence light path port——allow fluorescence light pass
2. Fluorescence excitation changing lever——can changing-over among BGU lights
3. Heat dissipation hole——reduce machine heating during working
4. Power supply port --used to connect power adapter



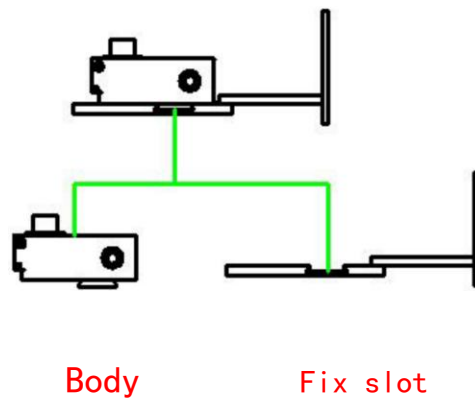
5. Brightness control knob--adjust fluorescence light source brightness

6. Fluorescence attachment fixed slot-- connect the fluorescence attachment to microscope

## IV. Installation guide

Takes use of one microscope as example:

1. Open package and take out the product as below, accessories includes attachment, power adapter and allen driver.



Push in the fix slot from side of the microscope bottom as image 01.

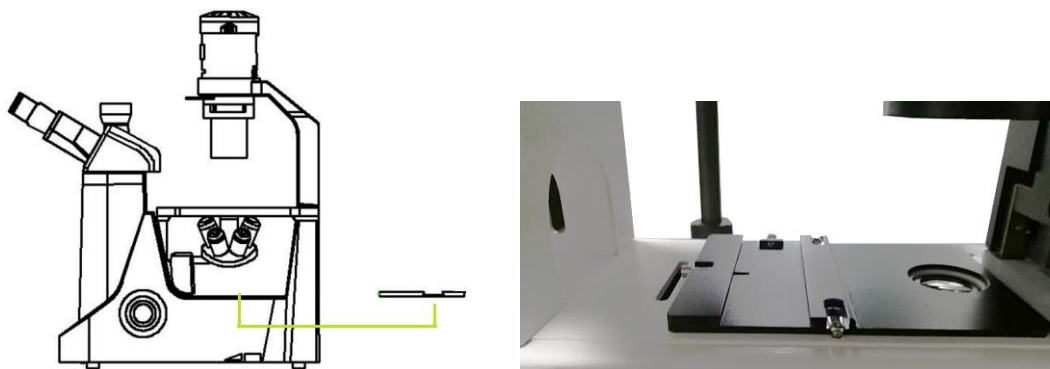


Image 01

2. Insert in the fluorescence attachment body along side of the slot slightly as image 02.

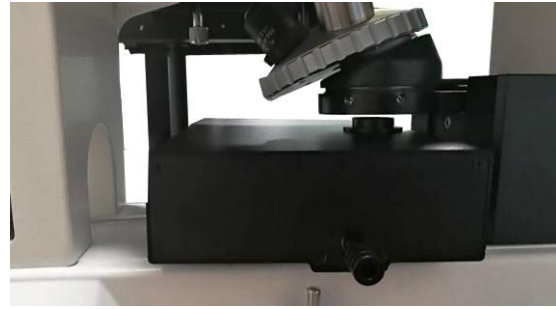
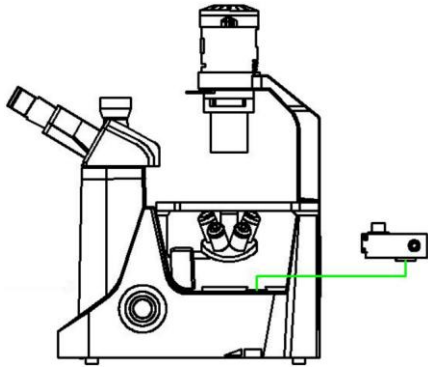


Image 02

3. Fix screw in the fluorescence attachment from back of the microscope with allen driver as image 03.

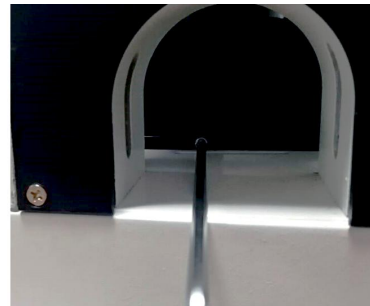
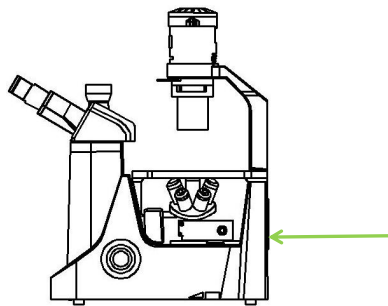


Image 03

4. If light center is not correct, can slight adjust screw on the side of the fluorescence attachment as image 04.



Image 04

5. Connect power adapter as image 05.



Image 05

6. Power on the fluorescence attachment and adjust brightness by control knob as image 06.

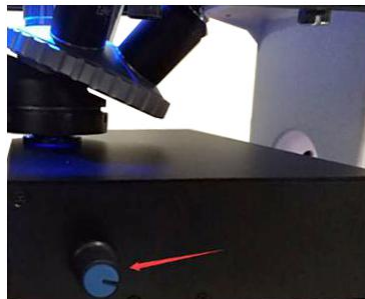


Image 06

7. Put on sample slide to observe as image 07.

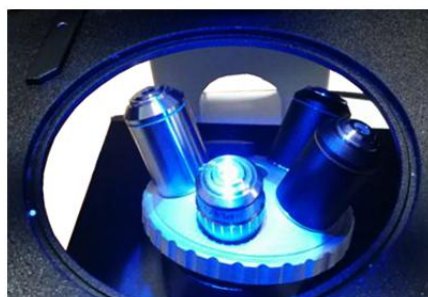


Image 07

## V. Notes

1. The brightness of the LED in the illuminator can be adjusted freely according to the observing sample fluorescence excitation intensity. Lower than the full load current is conducive to extending the service life of the LED lamp. If fluorescence brightness is allowed, it is recommended to adjust the brightness to use below the full load.
2. During fluorescence observation, the eyepiece shall not directly face the light or natural light, adjust the position of the condenser to the lowest level, and turn down the diaphragm of the condenser. If the stray light cannot be eliminated, block the upper end of the condenser with a non reflective black plate to prevent the reflection from interfering the observation.
3. In the fluorescence observation, avoid the sample fluorescence quenching caused by too long time lighting. The brightness can be adjusted to the lowest level or the power switch can be turned off directly during the observation gap.
4. When observing bright field, adjust the excitation block to the UV / O position, then turn off the power supply.
5. In the installation process, it is necessary to pay attention to the flatness of the attachment body and fix slot position, otherwise the uniformity of the light may be poor.
6. This power supply must strictly use 12V 2A special adapter, and the customer who uses other adapters and causes equipment damage shall bear the responsibility.