



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

# **MZX - BG (V)-LED**

**Stereo Fluorescence module  
user's Guide**

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## Thank you very much for purchasing our products

This instrument is a precision optical instrument. In order to ensure the service life of the instrument and correct daily maintenance,

Before using this instrument, please read this manual carefully.

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### Warn

\* Do not place the instrument in a hot, humid or dusty place for a long time

\* Working temperature  $5^{\circ}\text{C}$  to  $35^{\circ}\text{C}$

\* Humidity 20% to 80% (  $25^{\circ}\text{C}$  )

**Note:** Do not immerse the instrument in water or solvents.

**Note:** Do not place accessories not provided by our company in the frame or other transmission parts.

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## I . Introduction

Micro-shot LED Epi-fluorescence ( polychromatic ) illuminator MZX-LED , using a long service life led As an illumination source, it can easily transform an ordinary microscope with an infinity optical system into an energy-saving , efficient, easy-to-operate and ultra-long-life microscope. LED epi-fluorescence microscope increases the brightness of the image without affecting bright field observation. Add fluorescence observation function. MZX-LED The series of products can not only match Guangzhou Micro-shot's own brand microscopes, but also It can be adapted to microscopes with Galileo optical systems from four major brands.

## II . The main parameters

### 1. Basic parameters

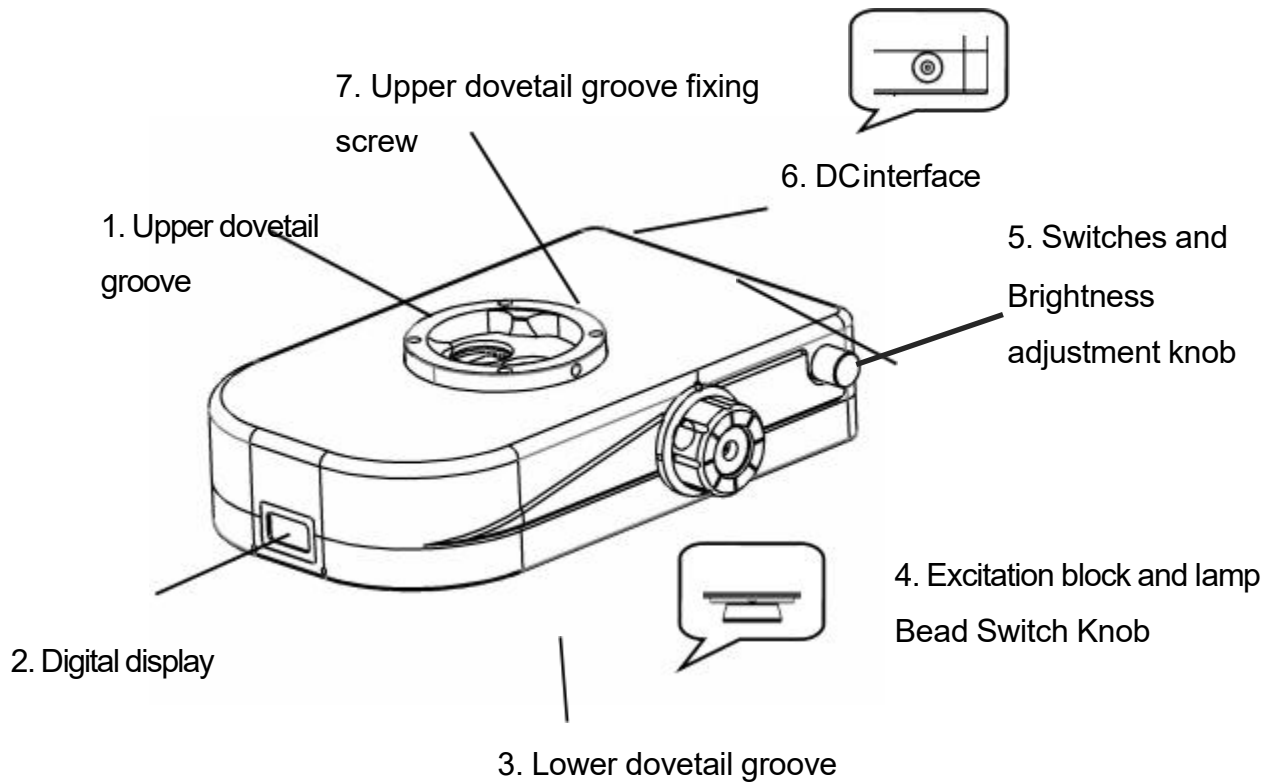
Excitation type	led Central wavelength	Excitation filter	Beamsplitter	Emission filter
B	470-475nm	470/40 nm	505 nm	535/40 nm
G	530-535nm	530/40 nm	565 nm	605/55 nm
V	395-400nm	405/30 nm	440 nm	450nm LP

**\* Y channel EX 560/40nm and V channel band-pass filter is optional**

### III. Part Name

1. Upper dovetail groove of fluorescence module 2. Digital display screen 3. Lower dovetail groove 4. Excitation block and lamp bead switching knob 5 .

Switch and brightness adjustment knob 6 、 DC interface 7 , Upper dovetail groove fixing screw



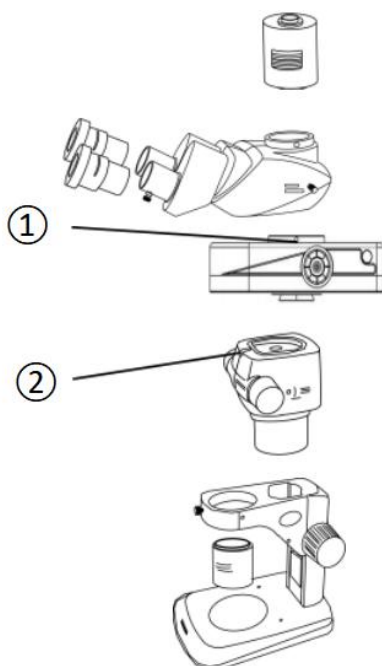
## **Function description :**

- 1: Dovetail groove on the fluorescence module - the position of the fluorescence module to fix the trinocular head;
- 2: Digital display screen logo - mshot logo is displayed after power on , channel and brightness percentage;
- 3: Dovetail groove under the fluorescence module - the position where the fluorescence module fixes the microscope host;
- 4: Excitation block and lamp bead switching knob - can switch B , G , V excitation block and lamp beads;
- 5 , mark5: Switch and brightness adjustment knob - press to turn the module on and off, rotate to control the brightness;
- 6: DC interface, power adapter power jack - used to power the fluorescent module;
- 7 : Upper dovetail groove fixing screw——Fixing screws for fixing the module and trinocular head.

## IV. Installation Instructions

Guangzhou Micro-shot MZX - LED The three-color fluorescence series can be matched with some domestic microscopes and imported Olympus microscopes Microscope, MZX81 is the host.

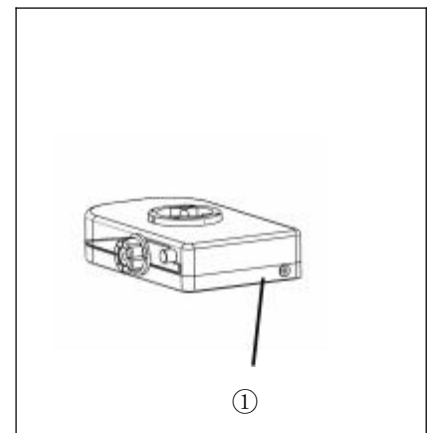
### 1 .Installation method:



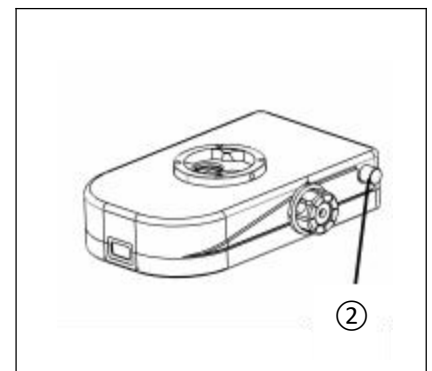
As shown in the figure above, separate the microscope trinocular head from the body, install the fluorescence module in the middle, and then  
Tighten the screws in ① and ②

## 2. Operation method

1) Connect the power adapter ①, the digital display will display mshot and off;

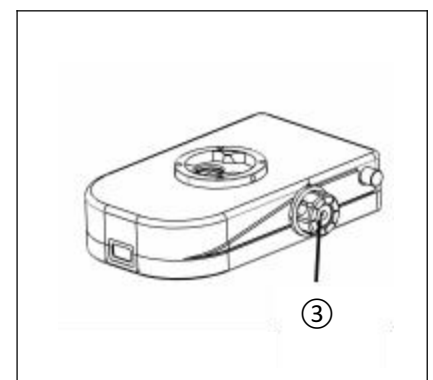


2) Click the brightness adjustment knob to turn on the module ②, and the digital display will display mshot, E----, indicates that the module has been turned on;



3) Rotate the excitation block and lamp bead switching knob ③ to select the channel to be observed.

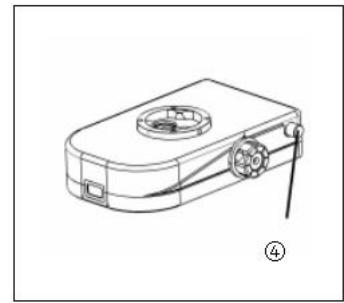
channel, the digital display will display the corresponding channel letters, such as B, G, V;





4) Adjust the brightness knob ④, select appropriate servation  
brightness for observation.

The display shows brightness values, such as 50%;



**Attention:**

1. Illuminator led The brightness can be freely adjusted according to the difficulty of the sample excitation; usually, lower than full load current is beneficial to extend the t LED lamp beads ; if allowed, it is recommended to adjust the brightness to full

Download the following for use.

2. During fluorescence observation, the eyepiece cannot be directly facing the light

or natural light; the base for placing the sample should be non-reflective. Black board, smooth white board or transparent glass board cannot be used to prevent reflection and interference with observation;

3. During fluorescence observation, avoid prolonged illumination which may cause fluorescence quenching of the sample. The brightness can be adjusted during observation intervals.

Set the light to the lowest setting or turn off the power switch directly, and adjust the brightness when you need to observe.

4. In bright field observation, adjust the excitation block to Set to E gear, and then turn off the power of the fluorescent module;

5. During the installation process, be sure to pay attention to the flatness of the module position, otherwise the uniformity of the light may change.

Difference;

6. This power supply must be used strictly 12V2A Dedicated adapter for customers who use other adapters and cause damage to their equipment You must bear your own responsibility.

