



User Manual

MF-LED

Epi-LED Fluorescent Illumination



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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.

MSHOT MF-UV-LED Epi-LED fluorescent illumination is used for upgrading upright infinity optical microscope to epi-fluorescent functional, it has UV LED excitation, without affecting the bright field observation. LED as light source has a long working life, energy-efficient and easy to operate. MF-UV-LED, not only can match with MSHOT microscope, also can match with Olympus, Nikon, Leica, Zeiss microscope and other major brands.

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A. Standard Specification

Mode	Color	LED central wavelength	Excitation filter	Dichroic mirror	Emission filter
MF-UV-LED	UV	365nm	330-380nm	>400nm	>420nm

B. Component parts

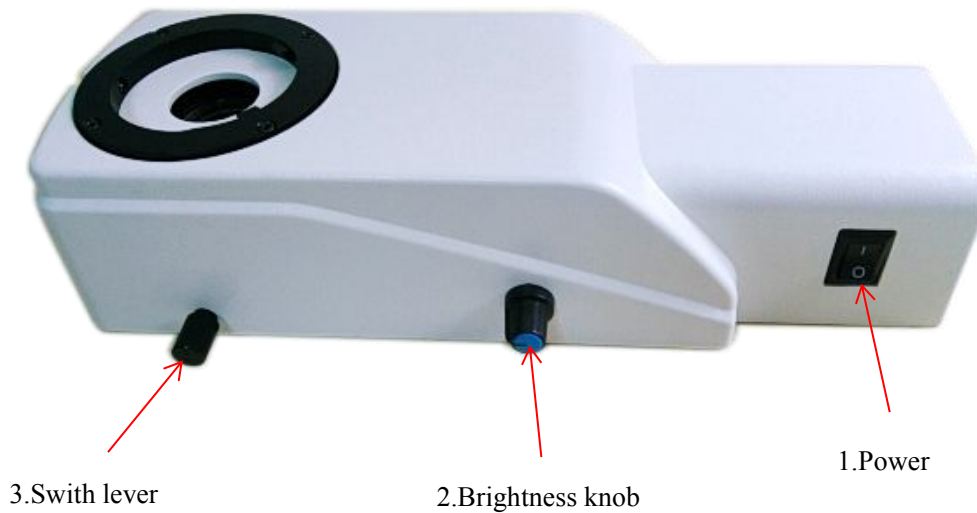


Figure 01

Function description

1. Switch lever—Used to switch between observation mode of bright field and fluorescence. Push in to get fluorescence observation, pull out to get bright field observation.
2. Brightness knob— Used to continuously adjust brightness of the fluorescent illumination.
3. Power—Used control electrical power.

C. Installation Guide

To match with different brand microscope, please make sure your microscope brand can connect with the illuminator.

Take Nikon E100 as sample to introduce how to install the LED epi-fluorescence illumination.

1. Unpack and take out appropriate accessories includes epi-fluorescence illumination body, power adapter, screwdriver. Then remove the microscope observation tube. As shown in Figure 02.



Figure 02

2. Take out the fixed screw on Nikon E100 body first (As shown in Figure 03). Then place the illuminator stably on the microscope body, then take use of match size screwdriver to fix the interset screw of illumiantion (As shown in Figure 04). At last, mount on eyepiece tube.



Figure 03



Figure 04



Well done

3. Plug in power adapter to the DC block at the back of LED light box. Get it power on and start to enjoy (Adjust steps, please consider D.Using guide).

D. Using guide

1. Push in switch lever and block light rod, put a white paper on the stage of microscope, turn microscope objective to 10X.
2. Find power button, turn on power, push in switch lever. There will be a circular light spot appears on the white paper. Observing light spot on the white paper,if it is not round shape, then adjust the switching lever and block light rod until

it is round shape.

3. Switching the objective magnification, observe the shape of light spot under different magnification objective to make sure all light spot are in round shape.

4. Adjust the brightness knob to get a comfortable fluorescent brightness you like.

5. When users would like to get bright field observation, power off the LED light source first, then pull out the switch lever to the limitation.

E. Attention

1. LED brightness can be adjusted freely according to the degree of difficulty of the sample was observed, generally brightness adjust to the extent of 80% is good to use, also less than full load current can prolong the service life of LED lamp.

2. When doing fluorescence observation, block transmitted light illumination condenser lens with non-reflective black small plate, to prevent interference with reflective light. Or you can adjust the position of the condenser up and down of the transmitted light illumination system, you can find an optimal position. As shown in Figure 08.



Figure 08

3. In the fluorescence observation, avoid prolonged sample illumination lead fluorescence quenching, during observation gap you can directly turn off the light.