bScope

fluorescence attachment

bscope®

euromex
microscopes holland

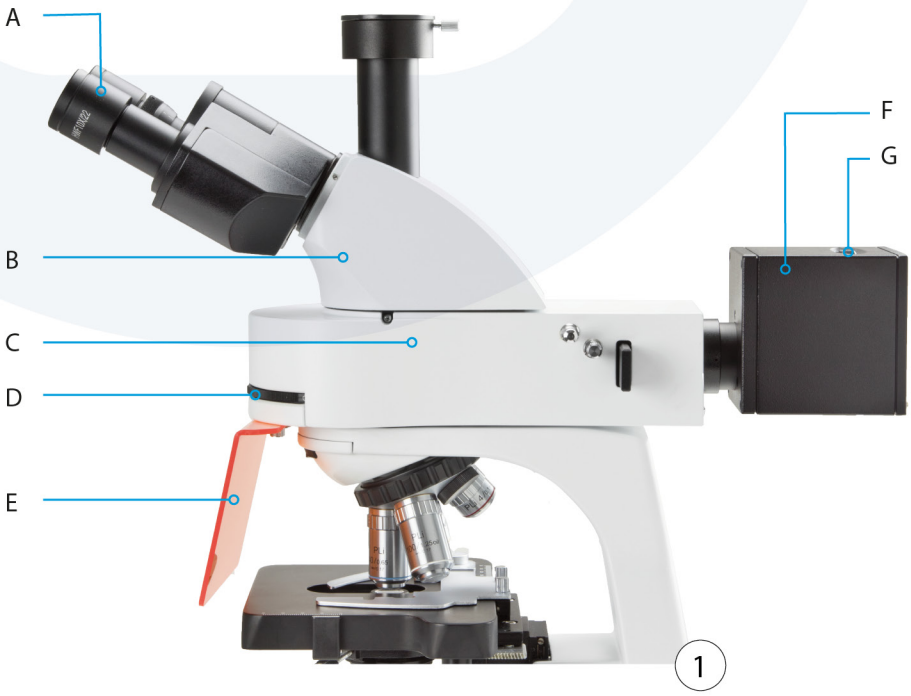
user manual

v.425371

Contents

1.0 Installation of the fluorescence illuminator and microscope head

Most parts are already mounted on the microscope. Only two parts are packed separately. The microscope head (B) and the fluorescence illuminator (F)



A. Eyepieces
B. Microscope head
C. Fluorescence attachment
D. Turret for fluorescence filters
E. Protection screen
F. Fluorescence illuminator
G. Turret for LEDs

1.1 Installation steps

- Take the microscope with fluorescence attachment, fluorescence illuminator and head from its packaging
- Place the head on the fluorescence attachment and fasten the screw (on the right side of the microscope) with a hexagon wrench
- Install the eyepieces into the eyepiece tubes if these are not already installed (fig 1, A)
- Mount the fluorescence illuminator to the back of the fluorescence attachment and fasten the screw with a hexagon wrench
- Plug the power cord into the power supply, but don't turn it on yet

2.0 Operation of reflected illumination system (LED fluorescence unit)

To get the best result when observing with fluorescence please pay attention to the following:

1. Select the fluorescence filter that matches the fluorochrome and fluorescent characteristic
2. No autofluorescence specimen or device should be in the optical system, such as the cedar immersion liquid wich has cyan autofluorescence
3. Always turn off the transmitted illumination before turning on the reflected illumination system

2.1 Set and adjust the fluorescence unit

The most important part of the unit is the fluorescence filters assembly. There are four fluorescence filters, Blue, Green, Violet and Ultraviolet, mounted in the turret (fig. 1, D) and are indicated as B, G, V and UV on the turret. There is also a brightfield option and it is indicated as 0 on the turret

The fluorescence filters in the turret correspond with the LEDs in the fluorescence illuminator (see table). There is a turret (fig. 1, G) on top of the fluorescence illuminator and has the same indication of B, G, V and UV as the turret for the fluorescence filters

Fluorescence filters	LED light source
B	B
G	G
V	V
UV	UV

When selecting the filter, turn the turret (D) to the correct filter and choose the corresponding LED by turning the turret on the illuminator(G)

Remark: For brightfield observation please choose position 0 on the turret (D) and switch off the fluorescence illuminator and turn on the transmitted illumination

2.2 Operation of the field diaphragm

The field diaphragm has been pre-centered and is ready to use, but due to possible vibration or inclination during transport it may deviate, therefore always double check

If it is not pre-centered, then please follow the following steps:

1. Use objective 10x
2. Push in the field diaphragm switch (the one in the front, (fig.2, A), a light spot will be visible in the field of view
3. Adjust the centering if the light spot deviates from the center of the view of view (fig. 3, a) by using the adjustment screws behind the field diaphragm switch (fig. 2, B). The light spot should be centered as shown in fig. 3, b
4. Pull out the switch so that the image fills the field of view as shown in fig. 3, c